


PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

FISCAL YEAR ENDED

JUNE 30, 2014



A COMPONENT UNIT OF THE  
COMMONWEALTH OF PENNSYLVANIA

# **Pennsylvania Public School Employees' Retirement System**

(A Component Unit of the Commonwealth of Pennsylvania)

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## **Comprehensive Annual Financial Report** for the Fiscal Year Ended June 30, 2014

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***Chairman***  
***Board of Trustees***

**James M. Sando**  
***Vice Chairman***  
***Board of Trustees***

**Jeffrey B. Clay**  
***Executive Director***

*Report prepared by the Public School Employees' Retirement System staff*

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Harrisburg PA 17101-1905

**Letter of Transmittal**  
COMMONWEALTH OF PENNSYLVANIA  
**PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM**

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*Toll-Free - 1-888-773-7748  
(1-888-PSERS4U)  
Local - 717-787-8540  
Web Address: [www.psers.state.pa.us](http://www.psers.state.pa.us)*

October 31, 2014

The Honorable Thomas W. Corbett, Governor of Pennsylvania  
Members of the General Assembly  
Members of the Retirement System  
Members of the Boards of PSERS' Employers  
Pennsylvania Public School Employees' Retirement System Board of Trustees

Dear Governor Corbett, Legislators, Members, Employer Board members, and PSERS Board of Trustees:

We are pleased to present the ninety-fifth edition of the Comprehensive Annual Financial Report (CAFR) for the Pennsylvania Public School Employees' Retirement System (PSERS, System, or Fund) for the fiscal year ended June 30, 2014 (FY 2014). This report is intended to provide financial, investment, actuarial, and statistical information in a single publication.

The management of the System is solely responsible for the accuracy and completion of this report, pursuant to section 24 Pa.C.S. §8502(n) of the Public School Employees' Retirement Code (Retirement Code). The entire report can be downloaded from PSERS' website at [www.psers.state.pa.us](http://www.psers.state.pa.us).

The System was established on July 18, 1917 to provide retirement benefits to public school employees of the Commonwealth of Pennsylvania. The members eligible to participate in the System include all full-time public school employees, part-time hourly public school employees who render at least 500 hours of service in the school year, and part-time per diem public school employees who render at least 80 days of service in the school year in any of the 789 reporting entities in Pennsylvania. As of June 30, 2014, the System had over 263,000 active members with an estimated annualized active payroll of \$12.6 billion.

The annuitant membership at June 30, 2014 was comprised of approximately 214,000 retirees and beneficiaries who receive over \$450 million in pension and healthcare benefits each month. The average yearly benefit paid to annuitants is \$24,962. The average benefit payment for each benefit type, grouped by years of credited service, is detailed in the Statistical Section of this report.

The System is a governmental cost-sharing multi-employer defined benefit pension plan, to which all members and 789 reporting units contribute. PSERS is administered by a staff of 314. The System is headquartered in Harrisburg, Pennsylvania, and has eight field offices in strategic areas of the Commonwealth to enable direct contact with the membership and the System's employers.

PSERS was established by law as an independent administrative board directed by a governing board of trustees (Board) which exercises control and management of the System, including the investment of its assets. PSERS is considered a component unit of the Commonwealth of Pennsylvania as defined by the Governmental Accounting Standards Board (GASB). An annual audit of the System by an independent certified public accounting firm is required by the Retirement Code. PSERS has contracted with SB & Company, LLC for this audit of its financial statements and has received an unmodified opinion as evidenced in the Report of Independent Public Accountants in the Financial Section of this CAFR. An unmodified opinion means that PSERS' financial statements fairly present, in all material respects, its financial condition. In addition, no significant findings were noted during the audit and therefore, a management letter was not issued. This is the fifth consecutive year that a management letter was not issued by the independent public accountants and is reflective of the hard work and dedication of PSERS' staff to continue to improve the internal controls, operations, and efficiency of the System.

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## Economic Summary

Economically, the fiscal year that ended June 30, 2014 was characterized by positive gains in each of its four quarters. The positive gains were led by a strong performance in global equities, specifically U.S. equities. Domestically, the Federal Reserve (Fed) implemented a program of outright purchases of longer dated U.S. Treasuries in the amount of \$45 billion a month and mortgage-backed securities in the amount of \$40 billion in 2013. Given the improvement in economic growth and the unemployment rate, the Fed started tapering these purchases in December 2013 by \$10 billion per meeting and has signaled to the market that the asset purchase program will end in October 2014. U.S. economic activity as represented by the U.S. Gross Domestic Product (GDP) and the unemployment rate has been fairly strong during the past fiscal year. The U.S. real GDP increased in three of the four quarters for the fiscal year decreasing only in the winter due to a very cold and snowy climate that impeded economic activity. U.S. housing was strong, up 8.1% as measured by the S&P Case-Shiller 20-City Home Price Index. The official unemployment rate (otherwise known as the U3 unemployment rate) fell during the fiscal year from 7.6% as of June 2013 to 6.1% as of June 2014, approaching what the Fed would consider full employment. Internationally, the Chinese economy continued to be one of the stronger economies in the world. In Japan, the economy remained weak but showed signs of improvement. The Japan real GDP increased modestly over the past fiscal year. The Japanese policy of increasing monetary and fiscal stimulus has transformed years of deflation to inflation. The Eurozone economy during the past year remained very weak and on the verge of recession as fiscal and monetary conditions on the whole have not been loose enough to generate any real improvements in economic growth and employment. In summary, the equity markets led a strong performance year due to improved economies and monetary policies, highlighted by the U.S., China, and Japan economies. For FY 2014, PSERS' investment portfolio generated a time-weighted rate of return of 14.91%, which resulted in \$7.1 billion of net investment income. The total net assets of the System increased from \$49.3 billion to \$53.3 billion from July 1, 2013 to June 30, 2014. This increase was due in large part to net investment income plus member and employer contributions exceeding deductions for benefits and administrative expenses.

The Board has continued to fulfill its mission to maintain stability and the long-term optimum value of the Fund. This is evidenced in the long-term growth of the System's assets and the actuarial soundness of the Fund. The annualized time-weighted rate of return for the twenty-five year period ended June 30, 2014 was 8.70% and exceeded the Fund's long-term investment rate of return assumption during that time period. Of utmost importance to the Board is the assurance that the required reserves are available for payment of retirement benefits. PSERS has maintained its position among the top thirty largest pension systems in the nation.

## Status of Pension Funding Initiatives

The funding issue confronting PSERS represents the greatest challenge the System has faced in its history. While Act 120 of 2010 provided historic pension reform and made dramatic progress toward addressing the funding issue at PSERS, difficult budget issues remain for both the Commonwealth and school employers.

PSERS has long stated that three events must occur to resolve the funding issue at the System: (1) pension reform must take place, (2) PSERS' investments must perform as required, and (3) a large cash infusion must be obtained to pay off the existing debt (unfunded liability) that has already been incurred but not yet paid.

Two of those items have occurred and have begun to help resolve the funding issue. Significant pension reform was enacted in 2010 and PSERS' investments have performed as required.

Act 120 of 2010 has already provided significant pension reform. Act 120 reformed the benefit structure and actuarial and funding methodologies at PSERS. The Act 120 benefit reductions are projected to save over \$24.6 billion. Currently, the annual employer benefit cost for new members is less than 3.00% of payroll, which leaves very little to cut for additional meaningful benefit reform to occur.

As of June 30, 2014, approximately 14% or 38,000 of PSERS' active membership is under the new reduced benefit structure of Act 120. As the Act 120 membership grows, the annual savings from the lower Act 120 benefit cost structure will allow an increasing amount of employer contributions to pay down PSERS' existing unfunded liability. An estimated \$85 million is expected in cost savings during FY 2015 from the reduced Act 120 benefit tiers.

The funding issue has now become an appropriations issue for employers and the Commonwealth. The employers receive significant retirement funding support from the Commonwealth as detailed in the notes to the financial



## Introductory Section

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statements found in the Financial Section of this report. As mandated by Act 120, PSERS' employer contribution rate has increased from 5.64% on July 1, 2010 to 21.40% on July 1, 2014. Even with the recent increase in the employer contribution rates, an additional cash infusion and/or still higher employer contribution rates are necessary to pay down the "principal" of the existing debt in the System. Although there has been much discussion of additional pension reform as a solution to the funding issue, the impact of further benefit reductions for new members will only have a marginal impact on projected employer contribution rates. The primary question that needs to be addressed is how to pay for the higher employer contributions rates needed to reach the funding levels recommended by PSERS' actuary and begin to pay off the existing debt.

### **Pension Reform Update**

Significant discussion on additional pension reform continues to take place. Numerous pieces of pension reform legislation have already been introduced and debated by the General Assembly during the past two Legislative Sessions, and more are expected for the upcoming 2015-2016 Legislative Session. As of the date of this letter, no pension legislation beyond Act 120 of 2010 has been enacted.

For many years, PSERS has provided extensive, objective technical information and volumes of actuarial data to members of the General Assembly. We have accurately and professionally cost and drafted every piece of pension legislation brought to PSERS by the General Assembly, regardless of the impact on the structure of the System. While PSERS does not take a position on any legislation or support any specific policy on pension reform, PSERS takes its role in helping to resolve the pension funding issue very seriously. PSERS will continue to cooperate and provide information so effective pension policy decisions can be made.

## **Major Initiatives**

### **Budgetary and Financial Governance**

PSERS submits its administrative budget request to the Governor's Office of the Budget each October where it is reviewed and evaluated. Any changes proposed by the Governor's Budget Office are made and a final amount is provided to the Legislature, which passes the final budget and submits it to the Governor for his signing into law. The administrative budget is not funded from the Commonwealth's General Fund, rather from the earnings of the Fund itself. PSERS has annually underspent its approved budget, keeping more funds available to invest for PSERS' members.

PSERS continues to be prudent in its use of funds and managing its annual budget. In FY 2014, PSERS replaced individual desktop printers with shared Multi-Function Devices, saving the agency money on printing supplies. As of September 1, 2013, all new retirees are required to receive their monthly annuities by electronic funds transfer, saving PSERS their postage and Treasury processing fees each month. Working with its actuary, PSERS has utilized interactive models to bring a portion of its actuarial analysis in-house. This led to a meaningful reduction in actuarial fees in FY 2014 despite a large number of pension funding requests from the General Assembly. Other reductions were made to overtime, training, and electricity, all part of PSERS' ongoing efforts to control costs and improve operational efficiency.

PSERS participates in an independent, international benchmarking survey evaluating its costs and service performance in comparison to other similar public pension funds. Based on the most recent survey, PSERS had a 22% lower pension administration cost per member than the average cost for its peer group.

In addition, during FY 2014, PSERS continued its ongoing efforts to recover funds from securities class action litigation. The System received \$9.0 million in settlements from these cases in FY 2014.

### **Customer Service**

PSERS made enhancements to its call center operations and system, enabling staff to answer more than 23,000 additional telephone calls, with a total of 270,640 calls being answered, while simultaneously reducing the number of abandoned calls by nearly 5,000. In addition, PSERS made use of distance communication technology to provide a pilot program of educational webinars to a select group of members and to supply on-demand training to employers without requiring staff to travel.

The multi-year technology refresh effort to upgrade the System's entire core client-server based pension administration system continues. This mission critical system is used by PSERS' staff members and almost 800 employers to

execute PSERS' primary pension administration functions for its 500,000 members. These functions include but are not limited to: enrolling new members; processing membership class elections; reporting and processing employee and employer contribution data; processing member demographic, salary, and service data; processing purchase of service, multiple service, disability, retirement, and refund applications; processing death benefits; supporting the Health Options Program; processing premium assistance applications and payments; issuing benefit payments related to the above activities; calculating and posting interest and delinquencies, and payments and receipts related to the above activities; providing self-service functionality to PSERS' members via the internet; calculating, submitting, and reporting tax information and dollars to the Internal Revenue Service (IRS); and reporting information to PSERS' actuary.

This refresh from the existing "classic" version to a new "browser-based" version not only helps ensure the viability of PSERS' core pension administration system into the future, it provides an enhanced "baseline" platform with built-in features that will make future business process and member self-service enhancements much easier to implement.

As work to upgrade to the new browser-based system began, PSERS incorporated changes into the classic version of the system that were required to integrate the system with the Department of Treasury's new system. Additionally, final changes were made to the classic system that would carry PSERS through the next few years, as resources are directed towards the conversion to the new browser-based system.

#### **Act 120 of 2010 Implementation Update – Shared Risk**

The System implemented the "shared risk" provisions of Act 120. With a shared risk program, Class T-E and T-F members share some of the risk when investments underperform. The member contribution rate will stay within the specified range allotted for Class T-E and T-F, but could increase or decrease by 0.5% every three years based on investment performance. Since the Fund's 8.66% three year return through June 30, 2014 outperformed the investment performance hurdle mandated by Act 120, pending Board approval, the member rate will not change. The next investment performance measurement period for TE-TF members ends June 30, 2017.

### **Financial Highlights**

The fair value of the System's net assets totaled \$53.3 billion as of June 30, 2014. The System is the 19th largest state-sponsored public defined benefit pension fund in the nation and the 29th largest among public and corporate pension funds in the nation. More specific information on the System's assets is detailed in the Statements of Plan Net Position and Management's Discussion and Analysis included in the Financial Section of this report.

One of PSERS' mission critical objectives is the timely and accurate payment of benefits. In FY 2014, PSERS provided over \$6.4 billion in pension and healthcare benefits to its members.

The System's administrative budget request is appropriated by the Pennsylvania General Assembly and funded by the investment income of the System. For FY 2014, the appropriation was \$41.7 million.

### **Funding**

Funding is the process of specifically setting aside money for current and future use. Proper funding for a defined benefit pension plan entails an actuarial examination of the fund balances and liabilities to ensure money will be available for future and current benefit payments. The actuarial valuation measures the progress toward funding pension obligations of the System by comparing the actuarial assets to the actuarial liabilities of the System.

The results of PSERS' latest published actuarial valuation (as of June 30, 2013) indicated that the rates of contribution payable by the members and employers, when taken together with the current assets of the System, are adequate to fund the actuarial liabilities on account of all benefits payable under the System at that date. The funded status as of the latest actuarial valuation was 63.8%. Additional comparative information on the funded status of PSERS can be found in the Actuarial Section and in the Financial Section of this report.

### **Investments**

Over the past few years, PSERS' Board and investment staff made significant changes to the Fund's investment asset allocation, including further refining the Fund's investment strategy and increasing the diversification of the Fund's

## Introductory Section

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assets. In particular, PSERS actively reduced its risk profile by significantly decreasing its equity exposure and by moving portions of the Fund's assets into asset classes that are less correlated to the equity markets.

Income from the investment portfolio represents the major source of revenue to the System, accounting for 71% of total revenues over the twenty-year period from FY 1995 to FY 2014. During FY 2014, net investment income was \$7.1 billion. The investment portfolio, which is one part of the System's net assets, totaled \$52.9 billion, at fair value, as of June 30, 2014. For FY 2014, the time-weighted net rate of return on the System's investments was 14.91%.

The investment portfolio is well diversified to emphasize a long-term investment approach. The overall objective of the System is to provide benefits to its members through a carefully planned and well-executed investment program. The return objectives are to (i) realize a return that exceeds the Policy Index (the Policy Index is a custom benchmark, based on the Board-established asset allocation structure that seeks to generate a return that meets the actuarial rate of return assumption); and (ii) invest the assets to maximize returns for the level of risk taken. The risk objectives are to (i) diversify the assets of the System to minimize the risk of losses within any one asset class, investment type, industry or sector distribution, maturity date, or geographic location; and (ii) invest the assets so that the probability of investment losses (as measured by the Policy Index) in excess of 15.0% in any one year is no greater than 2.5% (or two standard deviations below the expected return). Additional information on the System's investments is contained in the Investment Section of this report.

### **Investment Fees and Active/Passive Investment Management at PSERS**

PSERS is aware of both return expectations and investment manager fees, but it also has other considerations to balance when investing its assets. PSERS constantly monitors investment risk and diversification, and cash flow needs. For over a decade, PSERS has been underfunded by school employers and the Commonwealth while member benefit payments have increased. PSERS' negative cash flow is much larger than the average for public pension funds. As the underfunding continues, PSERS must adjust the asset allocation and increase diversification to reduce investment risk as it has less assets to invest and is not able to withstand large market losses as easily.

PSERS uses both passive (index) and active investment managers. Internal investment staff is utilized to passively invest (index) a portion of PSERS' assets. Active external investment managers are hired to invest in certain limited asset classes. They are expected to produce returns above the standard index returns.

PSERS indexes approximately 90% of its U.S. equity exposure and 50% of its non-U.S. equity exposure as it is difficult to find active managers that can produce better performance than the index in these areas. PSERS uses active managers in a variety of asset classes, including private equity, private real estate, commodities, master limited partnerships, and absolute return. Active managers are utilized by PSERS with the expectation that they can provide net of fee returns in excess of passive indexing, provide diversification benefits which otherwise are not available through indexing, and/or represent areas of the market which provide attractive risk-adjusted returns that otherwise would not be accessible to PSERS.

From a historical total fund perspective, using active managers for a portion of PSERS' assets has been very beneficial for the Fund. From FY 2011 through FY 2014, PSERS has generated gross excess returns (returns above the index) of approximately \$6.1 billion from active management and paid approximately \$2.1 billion in total management fees and all other investment expenses netting a gain of \$4.0 billion. Without active management, PSERS' net investment income would have been \$4.0 billion lower.

### **Federal and State Tax Status**

The System is a qualified trust fund under Section 401(a) of the Internal Revenue Code (IRC). As a result of the qualified status, the trust fund is entitled to an exemption, under Section 501(a) of the IRC, from federal income taxation on its investment earnings. Additionally, contributions made on behalf of the active members are tax deferred under Section 414(h) of the IRC. The trust fund and any benefits accruing to the members of PSERS are exempt from Pennsylvania state and municipal taxes.

It should be noted that the IRS announced and initiated a renewed focus on the tax qualification of public pension funds in 2008. PSERS worked proactively, in conjunction with the State Employees' Retirement System, to address this IRS initiative.

In September of 2013, PSERS was notified by the IRS that their tax qualification status has been confirmed pending minor modifications to the Retirement Code. This most recent notification is set to expire on January 31, 2016.

### **Internal Controls and Reporting**

PSERS' management is responsible for and has implemented internal controls designed to provide reasonable assurances for the safeguarding of assets and the reliability of financial records.

This report has been prepared in accordance with accounting principles generally accepted in the United States of America. The System maintains a full accrual accounting system. More specific accounting information is detailed in the Summary of Significant Accounting Policies (Note 2) in the notes to the financial statements found in the Financial Section of this report.

A system of internal controls provides reasonable, but not absolute, assurance that assets are properly safeguarded and that financial statements are reliable. The concept of reasonable assurance recognizes that first, the cost of a control should not exceed the benefits likely to be derived, and second, the valuation of the cost and benefits requires estimates and judgments by management.

PSERS' management believes the internal accounting controls currently in place are adequate to meet the purpose for which they were intended and also believes the financial statements, supporting schedules, and statistical tables are fairly presented.

### **GASB Pension Accounting and Financial Reporting Project (Pension Project)**

In June 2012, the Governmental Accounting Standards Board (GASB) approved a pair of related Statements that reflect substantial changes to the accounting and financial reporting of pensions by state and local governments and pension plans. Statement No. 67, *Financial Reporting for Pension Plans*, addresses financial reporting for state and local government pension plans. Statement No. 68, *Accounting and Financial Reporting for Pensions*, establishes new accounting and financial reporting requirements for governments that provide their employees with pensions.

Statement No. 67 replaced the requirements of Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, for most public employee pension plans. Statement No. 68 replaces the requirements of Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers*, for most government employers. The new statements also replace the requirements of Statement No. 50, *Pension Disclosures*, for those governments and pension plans.

Statement No. 67 provides public employee pension plans such as PSERS guidance for financial reporting. Statement No. 67 significantly changed related financial reporting through note disclosures and new required supplementary information (RSI) schedules. These changes are necessary for government employers to comply with Statement No. 68.

PSERS adopted Statement No. 67 for the fiscal year ended June 30, 2014. An analysis of the major differences between Statement No. 67 and Statement No. 25 can be found in the Management's Discussion and Analysis, notes to the financial statements, and RSI found in the Financial Section of this report. PSERS will also post two schedules as recommended by the American Institute of Certified Public Accountants (AICPA) to the Employer page of PSERS' website. These two schedules, the Schedule of Employer Allocations, and the Schedule of Collective Pension Amounts, will further assist employers in implementing Statement No. 68.

Beginning in 2013, PSERS began an outreach effort to its employers. This mainly consisted of speaking at various conferences held by the Pennsylvania Association of School Business Officials (PASBO), Pennsylvania School Boards Association (PSBA), and the Pennsylvania Institute of Certified Public Accountants (PICPA). Additionally, PSERS has published articles in its Employer Bulletin, beginning with Volume 4 of 2014. These articles will continue with each Employer Bulletin issue through July of 2015.

### Professional Services

Professional consultants are appointed by the Board of Trustees to perform services essential to the efficient operation of the System. An annual audit by an independent certified public accounting firm and annual valuation by an actuarial consultant attest to the financial and actuarial soundness of PSERS. The investment performance of the System is reviewed by an investment evaluation firm on a quarterly basis. The consultants providing services to the System are listed in the Financial Section and Investment Section of this report.

### Other Information

In compliance with the Retirement Code, actuarial tables and the computational procedures used by the System in calculating annuities and other benefits were published in the *Pennsylvania Bulletin* (Vol. 31, No. 14). This information can be found at [www.pabulletin.com/secure/data/vol31/31-14/index.html](http://www.pabulletin.com/secure/data/vol31/31-14/index.html).

### System Awards

#### **Government Finance Officers Association of the United States and Canada Certificate of Achievement for Excellence in Financial Reporting**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PSERS for its Comprehensive Annual Financial Report for the fiscal year ended June 30, 2013. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report whose contents conform to program standards. Such a comprehensive annual financial report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year. PSERS has received a Certificate of Achievement for 31 consecutive years from FY 1983 to FY 2013. A photograph of this award appears in the Introductory Section of this report. Its attainment represents a significant accomplishment by the System, whose Office of Financial Management holds general responsibility for the compilation and validity of the financial data presented in the Comprehensive Annual Financial Report.

The System believes the current report continues to conform to the Certificate of Achievement program requirements and will be submitting this report to GFOA to determine eligibility for the 2014 certificate.

#### **Public Pension Coordinating Council Public Pension Standards Award**

The Public Pension Coordinating Council has awarded its Public Pension Standards Award to PSERS for 2013. This award is in recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

The Public Pension Coordinating Council was formed in 1990 to assist the public employee retirement community. The Council is composed of representatives from three national associations whose members are directly involved in the administration of public employee retirement systems: the National Association of State Retirement Administrators (NASRA); the National Conference on Public Employee Retirement Systems (NCPERS); and the National Council on Teacher Retirement (NCTR). A reproduction of this award appears in the Introductory Section.

#### **Private Equity Growth Capital Council Award**

PSERS ranked 10th in private equity returns for large U.S. public pension funds in the Private Equity Growth Capital Council (PEGCC) annual pension study. This ranking is part of the PEGCC's third annual pension study, which analyzes public pension fund investment in private equity by returns and allocations. The PEGCC's annual pension study is compiled using information from publicly available 2013 annual and quarterly financial reports from the 150 largest public pension funds as compiled by Bison ([www.bison.co](http://www.bison.co)). Bison is a financial technology company delivering software for analyzing private fund data.

The PEGCC is an advocacy, communications, and research organization established to develop, analyze, and distribute information about the private equity and growth capital investment industry and its contributions to the

national and global economy. Established in 2007 and formerly known as the Private Equity Council, the PEGCC is based in Washington, D.C.

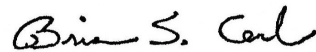
**Acknowledgements**

The preparation of this report reflects the combined efforts of PSERS' staff under the direction of the PSERS Board. It is intended to provide complete and reliable information in conformance with accepted standards and to document responsible stewardship of the System's assets.

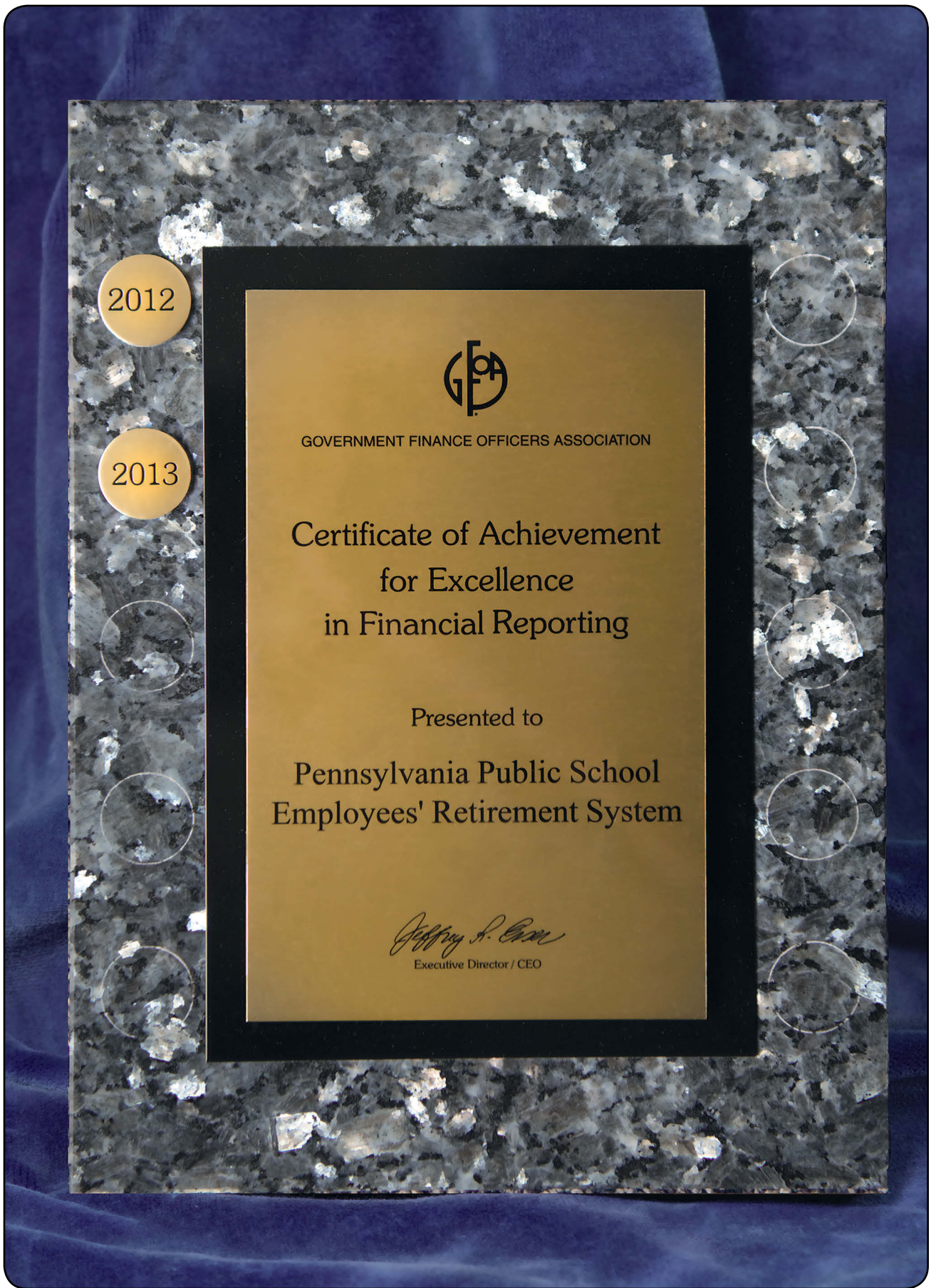
Respectfully submitted,



Jeffrey B. Clay  
Executive Director



Brian S. Carl, CPA, CTP  
Chief Financial Officer



2012

2013



GOVERNMENT FINANCE OFFICERS ASSOCIATION

Certificate of Achievement  
for Excellence  
in Financial Reporting

Presented to

Pennsylvania Public School  
Employees' Retirement System

A handwritten signature in black ink, reading "Jeffrey A. Carr".

Executive Director / CEO



Public Pension Coordinating Council

*Public Pension Standards Award  
For Funding and Administration  
2013*

Presented to

***Pennsylvania Public School 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)

A handwritten signature in black ink that reads "Alan H. Winkle". The signature is written in a cursive, flowing style.

Alan H. Winkle  
Program Administrator



## *Mission Statement*



*The Board of Trustees and the employees of the Public School Employees' Retirement System (System) serve the members and stakeholders of the System by:*

- Providing timely and accurate payment of benefits*
- Maintaining a financially sound System*
- Prudently investing the assets of the System*
- Clearly communicating members' and employers' rights and responsibilities, and*
- Effectively managing the resources of the System*

adopted 6/20/2008

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## Administrative Organization PSERS Board of Trustees



**Seated, front row:** Lisa Taglang, designee for Honorable Glen R. Grell; Susan C. Lemmo; Melva S. Vogler, Board Chairman; Deborah J. Beck; Bernard Gallagher, designee for Honorable Joseph F. Markosek

**Standing, second row:** Jeffrey B. Clay, PSERS' Executive Director, Board Secretary; Ambassador Martin J. Silverstein; Larry B. Breech; Frederick T. Berestecky; Anthony Mannino, designee for Honorable Lawrence M. Farnese; Craig Erdman, designee for Nathan G. Mains; James R. Biery; Honorable Patrick M. Browne

**Not pictured:** Dr. Carolyn C. Dumaresq; Honorable Robert M. McCord and James M. Sando

## PSERS Board of Trustees

**Acting Secretary of Education of the Commonwealth of Pennsylvania (ex officio)**

Dr. Carolyn C. Dumaresq

**Treasurer of the Commonwealth of Pennsylvania (ex officio)**

Honorable Robert M. McCord

**Executive Director of the Pennsylvania School Boards Association, Inc. (ex officio)**

Mr. Nathan G. Mains

**Two members appointed by the Governor of the Commonwealth of Pennsylvania for a term of three years**

Mr. James R. Biery (term expires 12/31/15)

Ambassador Martin J. Silverstein (term expires 12/31/14)

**Three members elected from among the Active Certified Contributors of the System for a term of three years**

Mr. Frederick T. Berestecky (term expires 12/31/16)

Ms. Susan C. Lemmo (term expires 12/31/15)

Mr. James M. Sando (term expires 12/31/17)

**One member elected from among the Active Non-Certified Contributors of the System for a term of three years**

Ms. Deborah J. Beck (term expires 12/31/15)

**One member elected from among the annuitants of the System for a term of three years**

Ms. Melva S. Vogler (term expires 12/31/16)

**One member elected by the members of Pennsylvania Public School Boards from among their number for a term of three years**

Mr. Larry B. Breech (term expires 12/31/17)

**Two members appointed by the Speaker of the House from the Pennsylvania House of Representatives, one representing the Majority Party and one representing the Minority Party**

Honorable Joseph F. Markosek (term expires 11/30/14)

Honorable Glen R. Grell (term expires 11/30/14)

**Two members appointed by the President Pro Tempore of the Pennsylvania Senate, one representing the Majority Party and one representing the Minority Party**

Honorable Lawrence M. Farnese (term expires 11/30/16)

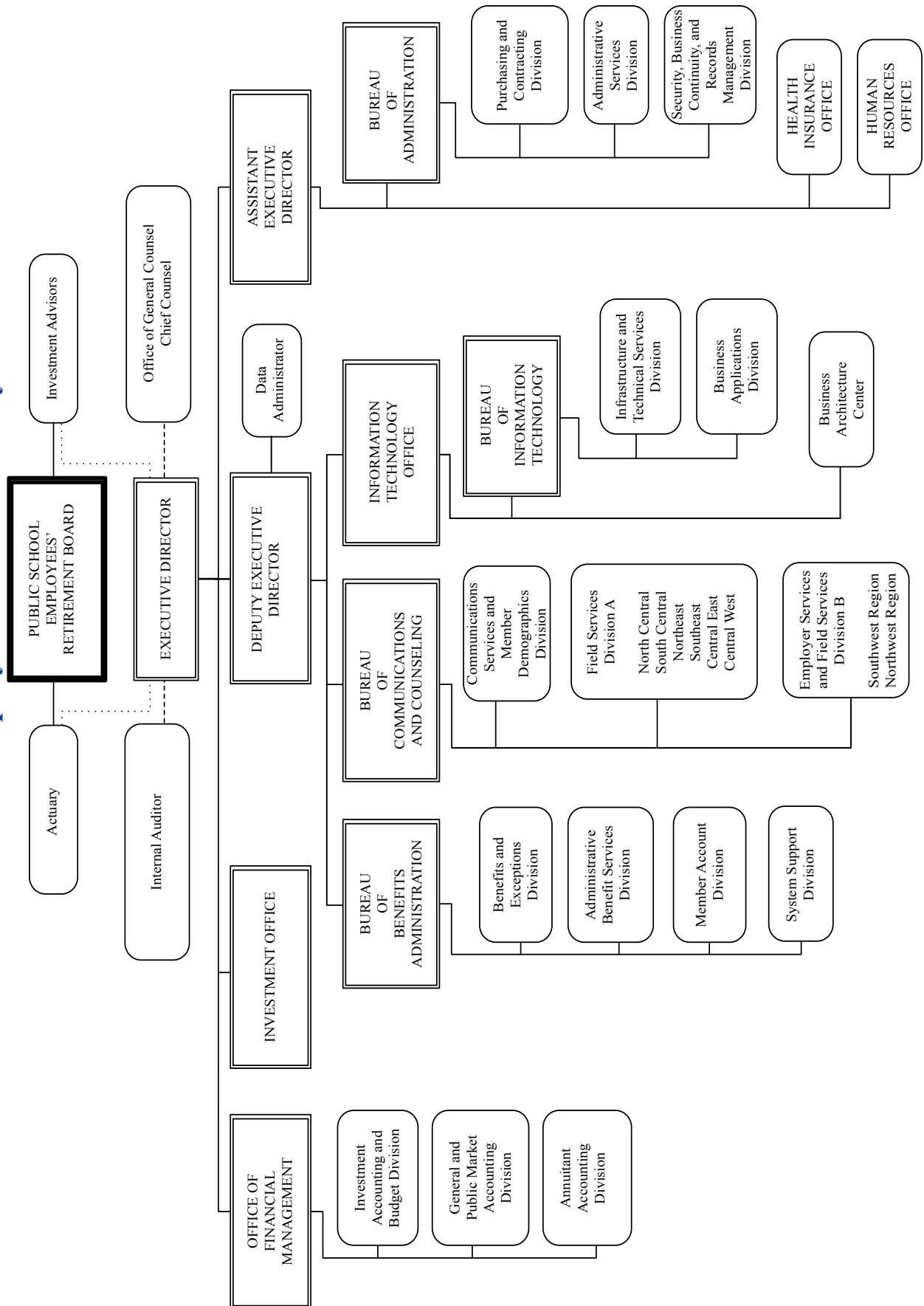
Honorable Patrick M. Browne (term expires 11/30/14)

## 2014 Board Committees

<p style="text-align: center;"><b>Appeals/Member Services</b></p> <p style="text-align: center;">Ms. Beck, Chair Mr. Biery, Vice Chair Mr. Berestecky Mr. Breech Senator Farnese Mr. Mains Mr. Sando</p>	<p style="text-align: center;"><b>Audit/Budget</b></p> <p style="text-align: center;">Mr. Berestecky, Chair Representative Grell, Vice Chair Ms. Lemmo Mr. Mains Representative Markosek Treasurer McCord Ambassador Silverstein</p>	<p style="text-align: center;"><b>Bylaws/Policy</b></p> <p style="text-align: center;">Mr. Mains, Chair Ms. Beck Mr. Biery Senator Browne Representative Grell Representative Markosek</p>
<p style="text-align: center;"><b>Corporate Governance</b></p> <p style="text-align: center;">Treasurer McCord, Chair Mr. Breech Senator Browne Representative Markosek Mr. Sando Ambassador Silverstein</p>	<p style="text-align: center;"><b>Elections</b></p> <p style="text-align: center;">Ambassador Silverstein, Chair Dr. Dumaresq Senator Farnese Ms. Lemmo Representative Markosek</p>	<p style="text-align: center;"><b>Finance</b></p> <p style="text-align: center;">Mr. Sando, Chair  Committee is comprised of all Board Members</p>
<p style="text-align: center;"><b>Health Care</b></p> <p style="text-align: center;">Ms. Lemmo, Chair Ms. Beck Mr. Berestecky Representative Grell Representative Markosek</p>	<p style="text-align: center;"><b>Personnel</b></p> <p style="text-align: center;">Representative Grell, Chair Treasurer McCord, Vice Chair Mr. Breech Senator Browne Mr. Mains Mr. Sando</p>	<p style="text-align: center;"><b>Technology Steering</b></p> <p style="text-align: center;">Senator Farnese, Chair Mr. Sando, Vice Chair Mr. Biery Dr. Dumaresq Ms. Lemmo Treasurer McCord</p>

NOTE: The chair of the Board of Trustees is a voting ex officio member of all Committees

# Organizational Chart of the Public School Employees' Retirement System



## Administrative Staff



James H. Grossman Jr.  
Chief Investment Officer



Jeffrey B. Clay  
Executive Director



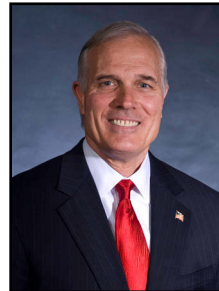
Terrill J. Sanchez  
Deputy Executive Director



Michele M. Ferencz  
Chief Counsel



Brian S. Carl  
Chief Financial Officer



Joseph E. Wasiak  
Assistant Executive Director



Richard R. Spinks  
Chief Technology Officer



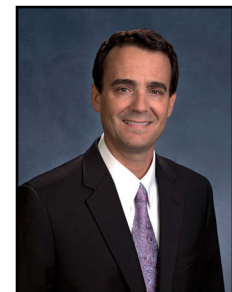
James F. Noone  
Director of Administration



Mark F. Schafer  
Director of Health  
Insurance



Eugene W. Robison  
Director of Communications  
and Counseling



Steven C. Goldstein  
Director of Information  
Technology



Tammy L. Meshey  
Director of Human  
Resources



Donald J. Halke, II  
Internal Auditor

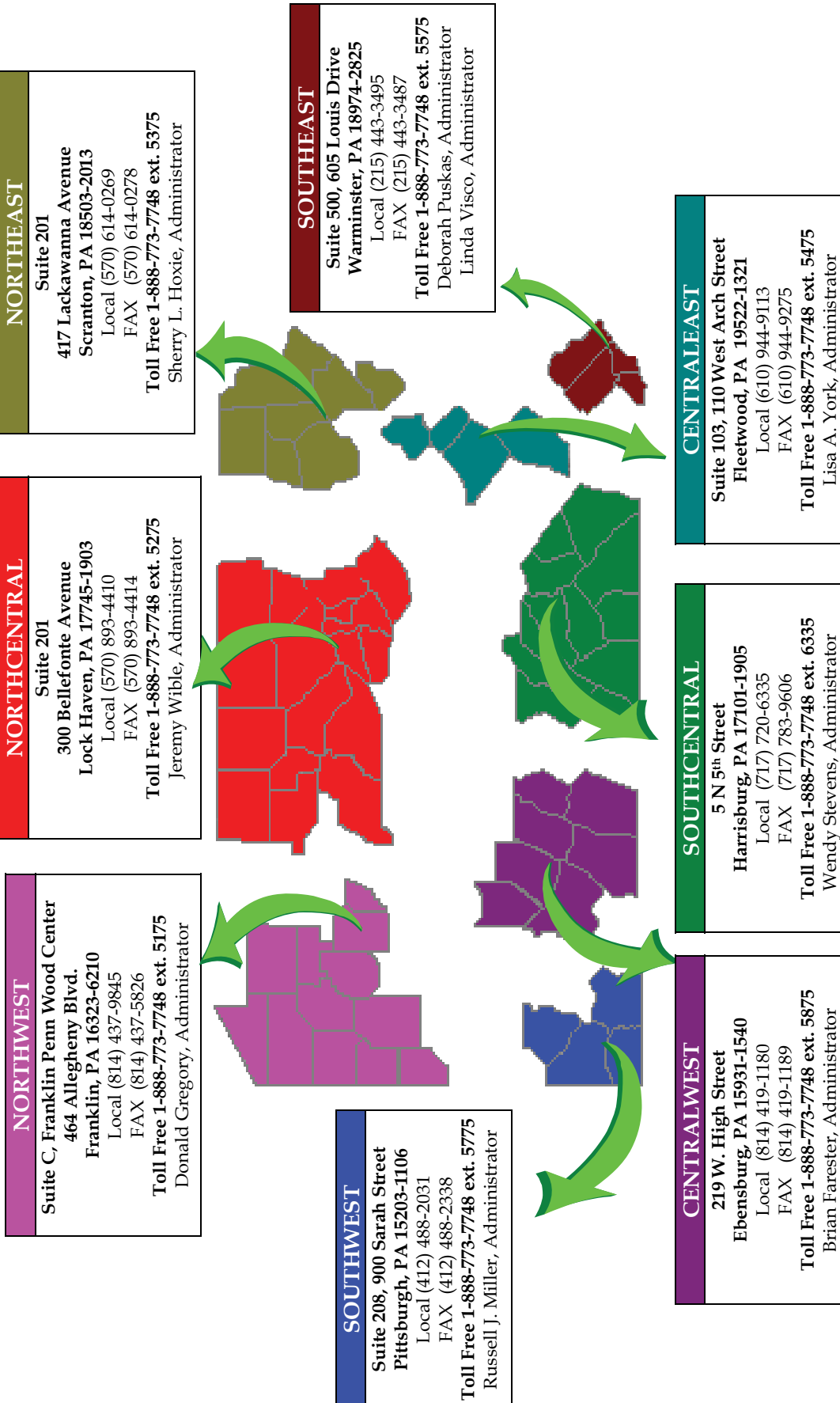


Francis J. Ryder  
Director of Government  
Relations



Evelyn M. Williams  
Press Secretary

**PSERS REGIONAL OFFICES**  
*Public School Employees' Retirement System of Pennsylvania*  
**PSERS FIELD SERVICES DIVISION**  
*Serving You in the 21<sup>st</sup> Century*



## PSERS Headquarters Building



The administrative headquarters of the Public School Employees' Retirement System (PSERS) is located at 5 North Fifth Street in downtown Harrisburg, Pennsylvania within the State Capitol complex. Regional field offices are also maintained in Ebensburg, Fleetwood, Franklin, Lock Haven, Harrisburg, Pittsburgh, Warminster and Scranton.

The headquarters building was constructed and first occupied by the Retirement System in 1987. It is the first time a building was constructed for PSERS use. It is owned by the Five North Fifth Street Corporation, a holding entity formed by PSERS, and is managed by Property Management Inc.





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## **Report of Independent Public Accountants**

The Board of Trustees of  
Pennsylvania Public School Employees' Retirement System  
Harrisburg, Pennsylvania

### **Report on the Financial Statements**

We have audited the accompanying basic financial statements of the Commonwealth of Pennsylvania Public School Employees' Retirement System (PSERS), as of June 30, 2014 and 2013, and for the years then ended, and the related notes to the financial statements, which collectively comprise PSERS' basic financial statements as listed in the table of contents.

### **Management's Responsibility for the Financial Statements**

PSERS' management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; 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.

### **Auditor's Responsibility**

Our responsibility is to express an opinion on the basic 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 audit to obtain reasonable assurance about whether the basic financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the basic financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the basic financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the basic 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 entity'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 basic financial statements.

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

### **Opinion**

In our opinion, the basic financial statements referred to above present fairly, in all material respects, the respective financial position of PSERS, as of June 30, 2014 and 2013, and the respective changes in its financial position thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America (GAAP).



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**Other Matters**

*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and Required Supplementary Schedule of Changes in the Employer Net Pension Liability, Schedule of Employer Net Pension Liability, Schedule of Employer Contributions, Schedule of Investment Returns, Schedule of Funding Progress and related notes to Required Supplementary Schedules 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 evidence sufficient to express an opinion or provide any assurance.

*Other Supplementary Information*

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise PSERS' basic financial statements. The Schedule of Operating Expenses, Summary of Investment Expenses, Schedule of Payments to Non-Investment Consultants and Schedule of Employer Contributions are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The 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 basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the basic financial statements as a whole.

The Introductory, Investment, Actuarial, and Statistical Sections as listed in the table of contents 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.

Hunt Valley, Maryland  
September 16, 2014

## Management's Discussion and Analysis

Management's Discussion and Analysis (MD&A) of the Commonwealth of Pennsylvania Public School Employees' Retirement System (PSERS, System, Fund) for the fiscal year ended June 30, 2014 (FY 2014) provides a narrative summary of PSERS' financial position and performance, including highlights and comparative data. The MD&A is presented as required supplementary information to the financial statements and should be read in conjunction with the financial statements, the notes to financial statements, and the supplementary schedules.

### Overview of Financial Statements

PSERS is primarily responsible for administering a defined benefit pension plan for public school employees in the Commonwealth of Pennsylvania. PSERS also administers two voluntary postemployment healthcare programs, the Health Insurance Premium Assistance Program (Premium Assistance) and the Health Options Program (HOP), for its annuitants. As part of the HOP, PSERS has an Employer/Union Direct Contract with the Centers for Medicare and Medicaid Services (CMS) to provide a Medicare Part D Prescription Drug Plan to participants. The financial statements present the financial position and activities for the pension plan and the two postemployment healthcare programs.

The **Statements of Plan Net Position** provide a snapshot of the financial position of PSERS at June 30, 2014, including comparative amounts for the prior year.

The **Statements of Changes in Plan Net Position** summarize PSERS' financial activities that occurred during the fiscal period from July 1, 2013 to June 30, 2014, including comparative amounts for the prior year.

The **Notes to Financial Statements** provide additional information that is essential for a full understanding of the financial statements. The notes are an integral part of the financial statements and include detailed information not readily evident in the basic financial statements such as accounting policies, plan membership and benefits, and summary disclosures of selected financial data.

The **Required Supplementary Schedules** immediately following the notes to financial statements provide five schedules illustrating the Changes in the Employer Net Pension Liability, Employer Net Pension Liability, Employer Contributions, Investment Returns, and Funding Progress.

The remaining supplementary schedules provide additional detailed information concerning the operating expenses, investment expenses, payments to non-investment

consultants, and the employer contributions. These schedules emphasize the long-term nature of the pension and premium assistance plans and show the progress of PSERS in accumulating assets sufficient to pay benefits when due. All of this supplementary information is considered useful in understanding and evaluating the financial activities of PSERS.

### Financial Highlights

- The time-weighted rate of return on investments was 14.91% for FY 2014, 7.96% for the fiscal year ended June 30, 2013 (FY 2013) and 3.43% for the fiscal year ended June 30, 2012 (FY 2012). A time-weighted rate of return considers investment performance of a hypothetical dollar invested from the beginning of an investment period to the period's end. The annualized rate of return for the three years ended June 30, 2014 was 8.66%, which exceeded the 7.5% actuarial investment rate of return assumption. Unless otherwise noted, all rates of return are net of fees.
- PSERS' total plan net position increased by \$4.0 billion from \$49.3 billion at June 30, 2013 to \$53.3 billion at June 30, 2014. This increase was due in large part to net investment income plus member and employer contributions exceeding deductions for benefits and administrative expenses. The change in total plan net position from June 30, 2012 to June 30, 2013 was an increase of \$500 million from \$48.8 billion at June 30, 2012 to \$49.3 billion at June 30, 2013. This increase was also due in large part to net investment income plus member and employer contributions exceeding deductions for benefits and administrative expenses.
- Total member pension contributions decreased from \$991.1 million in FY 2013 to \$966.9 million in FY 2014. The decrease was mainly due to a \$22.6 million decline in purchase of service contributions. Additionally, there was a slight reduction in member contributions from active member payroll. The portion of participant premiums for the HOP grew due to increased participation as well as ongoing health insurance rate increases.
- Total employer contributions increased from \$1.6 billion in FY 2013 to \$2.1 billion in FY 2014. This increase was primarily attributable to an increase in the total employer contribution rate from 12.36% in FY 2013 to 16.93% in FY 2014. This rate increase, as mandated by Act 120, was partially offset by a slight reduction in active member payroll. Total employer contributions increased from FY 2012 to FY 2013 which was attributable to an increase in the total employer contribution rate from 8.65% in FY 2012 to 12.36% in FY 2013. This rate increase, as mandated by Act 120, was partially offset by a 1% reduction in the active member payroll.

**Management’s Discussion and Analysis (continued)**

- Total PSERS’ benefit expense was steady at \$6.4 billion in FY 2013 and FY 2014. The average monthly benefit and the number of members receiving benefits increased in FY 2014. These increases were offset by a decrease in lump sum payments to new retirees. New retirements during FY 2014 decreased by approximately 21% from FY 2013. Total PSERS’ benefit expense increased by \$400 million from \$6.0 billion in FY 2012 to \$6.4 billion in FY 2013. This increase is attributable to the number of new retirements for the year, higher lump sum payments, an ongoing increase to the average monthly benefit, and the number of members receiving benefits. New retirements during FY 2013 outpaced those of FY 2012 by approximately 1%.
- Total PSERS’ administrative expenses increased from \$62.2 million for FY 2013 to \$66.7 million in FY 2014 mainly due to a rise in the administrative costs attributable to increased membership in the HOP. Total PSERS’ administrative expenses increased from \$56.5 million in FY 2012 to \$62.2 million for FY 2013 mainly due to an increase in the administrative

costs in the HOP from increasing enrollments and other information technology expenditures.

**GASB Standards**

In June 2012, the Governmental Accounting Standards Board (GASB) approved a Statement that reflects substantial changes to the accounting and financial reporting of pension plans. Statement No. 67, *Financial Reporting for Pension Plans*, addresses financial reporting for state and local government pension plans. Statement No. 67 replaces the requirements of Statement No. 25, *Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans*, for most public employee pension plans and replaces the requirements of Statement No. 50, *Pension Disclosures*, for those governments and public pension plans. Under Statement No. 67, an emphasis is put on accounting for pension plans whereas Statement No. 25 dealt more with funding pension plans.

A key change from Statement No. 25 to Statement No. 67 is the measurement of the liability. GASB 25 subtracts

**Analysis of Plan Net Position  
(Dollar Amounts in Thousands)**

<b>Summary of Plan Net Position</b>	<b>FY 2014</b>	<b>Increase (Decrease)</b>	<b>FY 2013</b>	<b>Increase (Decrease)</b>	<b>FY 2012</b>
<b>Assets:</b>					
Receivables	\$ 1,406,029	\$ 232,428	\$ 1,173,601	\$ (259,510)	\$ 1,433,111
Investments	52,928,107	3,393,700	49,534,407	993,558	48,540,849
Securities lending collateral pool	596,936	(18,223)	615,159	108,355	506,804
Capital assets	22,851	447	22,404	71	22,333
<b>Total Assets</b>	<b>54,953,923</b>	<b>3,608,352</b>	<b>51,345,571</b>	<b>842,474</b>	<b>50,503,097</b>
<b>Liabilities:</b>					
Payables and other liabilities	1,095,063	(359,652)	1,454,715	222,001	1,232,714
Obligations under securities lending	596,936	(18,223)	615,159	108,355	506,804
<b>Total Liabilities</b>	<b>1,691,999</b>	<b>(377,875)</b>	<b>2,069,874</b>	<b>330,356</b>	<b>1,739,518</b>
<b>Plan Net Position</b>	<b>\$ 53,261,924</b>	<b>\$ 3,986,227</b>	<b>\$ 49,275,697</b>	<b>\$ 512,118</b>	<b>\$ 48,763,579</b>

**Summary of Changes in Plan Net Position**

<b>Additions:</b>					
Contributions	\$ 3,076,878	\$ 530,713	\$ 2,546,165	\$ 507,351	\$ 2,038,814
Participant premiums and CMS	295,499	20,285	275,214	28,110	247,104
Net investment income	7,098,022	2,971,684	4,126,338	3,032,359	1,093,979
<b>Total Additions</b>	<b>10,470,399</b>	<b>3,522,682</b>	<b>6,947,717</b>	<b>3,567,820</b>	<b>3,379,897</b>
<b>Deductions:</b>					
Benefit expense	6,417,455	44,092	6,373,363	380,384	5,992,979
Administrative expenses	66,717	4,481	62,236	5,716	56,520
<b>Total Deductions</b>	<b>6,484,172</b>	<b>48,573</b>	<b>6,435,599</b>	<b>386,100</b>	<b>6,049,499</b>
<b>Changes in Plan Net Position</b>	<b>\$ 3,986,227</b>	<b>\$ 3,474,109</b>	<b>\$ 512,118</b>	<b>\$ 3,181,720</b>	<b>\$ (2,669,602)</b>

**Management’s Discussion and Analysis (continued)**

**As of June 30, 2013**

GASB 67 - Accounting Method		GASB 25 - Funding Method	
Total Pension Liability (TPL)	\$ 89,951,816	Actuarial Accrued Liability (AAL)	\$ 89,951,816
Fiduciary Net Position	49,015,561	Actuarial Value of Assets	57,353,262
Net Pension Liability (NPL)	40,936,255	Unfunded Actuarial Accrued Liability (UAAL)	32,598,554
Ratio - Fiduciary Net Position/TPL	54.5%	Funded Ratio	63.8%

the Actuarial Value of Assets from the Actuarial Accrued Liability to achieve the Unfunded Actuarial Accrued Liability. GASB 67 subtracts the Fiduciary Net Position from the Total Pension Liability to attain the Net Pension Liability. The major difference in the measurements is that GASB 25 allows for asset smoothing, whereas, GASB 67 uses the fair value of assets as of the measurement date. A chart illustrating the difference between the liability measurements as of June 30, 2013, the last measurement date GASB 25 information is available, is at the top of this page.

Value of Assets, which is smoothed, is larger than the Fiduciary Net Position. The Actuarial Value of Assets is larger as the impact of the FY 2009 Great Recession losses are not fully recognized. For funding purposes, PSERS smooths asset gains and losses over a 10-year period to reduce volatility.

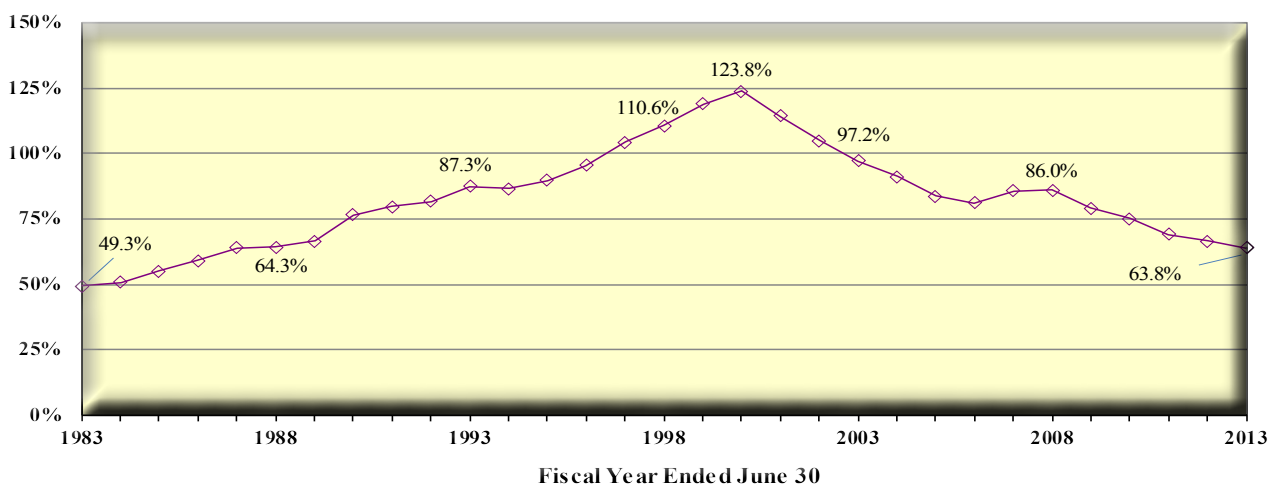
- Under GASB 25, PSERS’ funded ratio for the pension plan decreased from 66.3% at June 30, 2012 to 63.8% as of the latest actuarial valuation dated June 30, 2013. This decrease was primarily due to experience losses on investment assets and employer contributions that were less than the normal cost plus interest on the unfunded liability. This ratio is less volatile, as smoothing of the assets is used in the measurement.
- Under GASB 67, PSERS’ pension plan ratio of fiduciary net position to total pension liability, increased from 54.5% as of June 30, 2013 to 57.2% as of June 30, 2014. This increase is due to the increase in investment assets outpacing the increase in future benefits calculated in the Total Pension Liability. This ratio is more susceptible to volatility, as the fair value of assets is used in the measurement.
- The NPL is larger than the UAAL since the Actuarial

- GASB 67 separates the accounting for pensions from the funding provisions used for the actuarial valuation. GASB 67 has no impact on how pension plans are funded. The assumptions and methods used in the actuarial valuation to establish the employer contribution rate will not change as a result of its implementation.

**Funded Status**

PSERS uses an actuarial reserve type of funding that is financed by member contributions, employer contributions, and earnings from invested assets. A thirty-year history of PSERS’ funded status is shown at the bottom of this page. An independent actuarial valuation of PSERS’ actuarial assets and liabilities is performed annually. As part of this valuation, the progress toward funding pension obligations of PSERS is measured by comparing the actuarial value of assets to the actuarial accrued liability. This measurement is referred to as the funded ratio or funded status. The most recent actuarial valuation reports that PSERS’ pension is 63.8% funded as of June 30, 2013. The funded ratio decreased from 66.4% as of June 30, 2012 due to a decrease

**PSERS' Funding Ratio**  
**Funded Ratio = Actuarial Value of Assets / Actuarial Accrued Liability**





**Management’s Discussion and Analysis (continued)**

in the actuarial value of assets, which is based on a ten-year smoothing period, employer contributions below the annual required contribution (ARC), and an increase in the actuarial accrued liability.

The results of operations for FY 2014 will be reflected in the actuarial valuation for the year ended June 30, 2014. Due to the normal lag time for completion of the actuarial valuation, the resulting funded status will be available at the end of the 2014 calendar year and will be reported in the financial statements for the fiscal year ending June 30, 2015 (FY 2015). Based on the investment performance for the ten-year period ended June 30, 2014, which is below the investment rate of return assumption during that time period, and employer contributions below the ARC, the funded ratio at June 30, 2014 is expected to decrease. FY 2014 is the final year of a five-year transition from five-year to ten-year smoothing of actuarial assets.

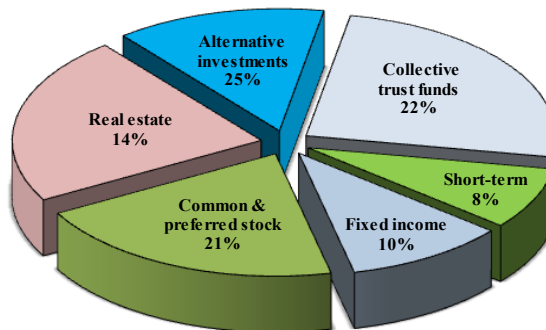
PSERS’ State Accumulation Account improved from June 30, 2013 to June 30, 2014 (See Note 3). The deficit decreased in FY 2014 as investment returns exceeding the return assumption were partially offset by employer contributions below the normal cost plus interest. Increased employer contributions, as mandated by Act 120, and investment earnings will be used to reduce the deficit in this account in the future.

**Investments**

PSERS is a long-term investor and manages the pension fund with long-term objectives in mind. A primary element of PSERS’ investment philosophy is diversification among various asset classes, which is the best way to achieve its goals. PSERS makes estimates of future long-term market returns and establishes an asset allocation plan taking into account the risk associated with each asset class as well as the financial objectives of the Fund.

Economically, the fiscal year that ended June 30, 2014 was characterized by positive gains in each of its four quarters. The positive gains were led by a strong performance in global equities, specifically U.S. equities. Domestically, the Federal Reserve (Fed) implemented a program of outright purchases of longer dated U.S. Treasuries in the amount of \$45 billion a month and mortgage-backed securities in the amount of \$40 billion in 2013. Given the improvement in economic growth and the unemployment rate, the Fed started tapering these purchases in December 2013 by \$10 billion per meeting and has signaled to the market that the asset purchase program will end in October 2014. U.S. economic activity as represented by the U.S. Gross Domestic Product (GDP) and the unemployment rate has been fairly strong during the past fiscal year. The U.S. real GDP increased in three of the four quarters for the fiscal year

**Asset Distribution  
June 30, 2014**



decreasing only in the winter due to a very cold and snowy climate that impeded economic activity. U.S. housing was strong, up 8.1% as measured by the S&P Case-Shiller 20-City Home Price Index. The official unemployment rate (otherwise known as the U3 unemployment rate) fell during the fiscal year from 7.6% as of June 2013 to 6.1% as of June 2014, approaching what the Fed would consider full employment. Internationally, the Chinese economy continued to be one of the stronger economies in the world. In Japan, the economy remained weak but showed signs of improvement. The Japan real GDP increased modestly over the past fiscal year. The Japanese policy of increasing monetary and fiscal stimulus has transformed years of deflation to inflation. The Eurozone economy during the past year remained very weak and on the verge of recession as fiscal and monetary conditions on the whole have not been loose enough to generate any real improvements in economic growth and employment. In summary, the equity markets led a strong performance year due to improved economies and monetary policies, highlighted by the U.S., China, and Japan economies.

For FY 2014, PSERS’ time-weighted rate of return on investments was 14.91% which exceeded PSERS’ total fund Policy Index of 12.05% for the same time period. The Policy Index is a custom benchmark, which is based on the Board-established asset allocation structure, that seeks to generate a return that meets the actuarial rate of return assumption. Net investment income of \$7.1 billion in FY 2014 increased from a net investment income of \$4.1 billion in FY 2013.

The time-weighted annualized rate of return over the past three- and five-year periods ended June 30, 2014 was 8.66% and 12.09%, respectively. The time-weighted returns for the three- and five-year periods exceeded the total fund Policy Index returns for those periods by 252 and 289 basis points, respectively. The annualized time-weighted rate of return for the ten- and twenty-five-year periods ended June 30, 2014 was 7.28% and 8.70%, respectively.

**Management's Discussion and Analysis (continued)**

PSERS' long-term actuarial investment rate of return assumption was 7.5% at June 30, 2014.

The asset distribution of PSERS' investment portfolio at June 30, 2014, 2013 and 2012, at fair value, and including postemployment healthcare assets, is presented in the chart on the top of the previous page and the table at the bottom of this page.

Short-term investments (cash and cash equivalents) increased by \$1.1 billion from \$3.2 billion at June 30, 2013 to \$4.3 billion at June 30, 2014. Due to a reallocation of exposure from other asset classes, PSERS increased its short-term investments during FY 2014. Fixed income investments decreased by \$0.3 billion from \$5.8 billion at June 30, 2013 to \$5.5 billion at June 30, 2014 mostly due to manager terminations and reallocation of exposure to other asset classes during FY 2014. Common and preferred stock investments increased by \$1.1 billion from \$9.8 billion at June 30, 2013 to \$10.9 billion at June 30, 2014. The rise in this asset category was mainly the result of strong returns for domestic equity, international equity, and master limited partnerships, as well as the continual reallocation of exposure from other asset classes to master limited partnerships. Collective trust funds rose by \$0.5 billion from \$11.3 billion at June 30, 2013 to \$11.8 billion at June 30, 2014 mostly due to strong investment performance. Real estate investments increased by \$0.4 billion from \$6.8 billion at June 30, 2013 to \$7.2 billion at June 30, 2014 due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings which exceeded significant partnership distributions. Alternative investments increased by \$0.6 billion from \$12.6 billion at June 30, 2013 to \$13.2 billion at June 30, 2014 due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings which exceeded significant partnership distributions.

Short-term investments (cash and cash equivalents) increased by \$600 million from \$2.6 billion at June 30, 2012 to \$3.2 billion at June 30, 2013. This asset class was underweighted at June 30, 2012 and overweighted at June 30, 2013 according to the asset allocation plans approved

by the Board. Due to a reallocation of exposure from investments, PSERS increased its short-term investments during FY 2013. Fixed income investments decreased by \$1.4 billion from \$7.2 billion at June 30, 2012 to \$5.8 billion at June 30, 2013 mostly due to manager terminations and reallocation of exposure to other asset classes during FY 2013. Common and preferred stock investments increased by \$400 million from \$9.4 billion at June 30, 2012 to \$9.8 billion at June 30, 2013. The rise in this asset category was mainly the result of strong returns for domestic equity, international equity, and master limited partnerships, as well as reallocation of exposure from other asset classes to master limited partnerships. Collective trust funds rose by \$800 million from \$10.5 billion at June 30, 2012 to \$11.3 billion at June 30, 2013 mostly due to a reallocation of exposure from other asset classes and an increase in investment income. Real estate investments increased by \$800 million from \$6.0 billion at June 30, 2012 to \$6.8 billion at June 30, 2013 due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings. Alternative investments decreased by \$300 million from \$12.9 billion at June 30, 2012 to \$12.6 billion at June 30, 2013 due to significant partnership distributions which exceeded contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings.

**Securities Lending**

The System experienced a significant increase in net income from securities lending activities from \$8.2 million in FY 2013 to \$18.6 million in FY 2014 due to a recovery from the lending agent of specific losses incurred during the market downturn in 2008.

<b>Asset Class</b>	<b>(Dollar Amounts in Thousands)</b>					
	<b>2014</b>	<b>%</b>	<b>2013</b>	<b>%</b>	<b>2012</b>	<b>%</b>
Short-term	\$ 4,331,188	8.2	\$ 3,242,139	6.5	\$ 2,649,495	5.5
Fixed income	5,532,214	10.4	5,828,418	11.8	7,207,558	14.8
Common and preferred stock	10,851,457	20.5	9,762,527	19.7	9,357,122	19.3
Collective trust funds	11,795,390	22.3	11,280,497	22.8	10,460,482	21.5
Real estate	7,230,493	13.7	6,797,535	13.7	6,003,753	12.4
Alternative investments	13,187,365	24.9	12,623,291	25.5	12,862,439	26.5
<b>Total</b>	<b>\$ 52,928,107</b>	<b>100.0</b>	<b>\$ 49,534,407</b>	<b>100.0</b>	<b>\$ 48,540,849</b>	<b>100.0</b>

**Management’s Discussion and Analysis (continued)**

**Contributions**

Employer contributions increased from \$1.6 billion in FY 2013 to \$2.1 billion in FY 2014 due to the increase in the total employer contribution rate from 12.36% in FY 2013 to 16.93% in FY 2014.

A thirty-year history of PSERS’ contribution rates is presented at the bottom of this page.

Total member contributions decreased from \$991.1 million in FY 2013 to \$966.9 million in FY 2014 due to a \$22.6 million decrease in purchase of service contributions and a slight decrease in active member payroll. These decreases were partially offset by a small increase in the average member contribution rate. The average member contribution rate for pension increased from 7.40% in FY 2013 to 7.43% in FY 2014. Total member contributions increased from \$952.9 million in FY 2012 to \$991.1 million in FY 2013 due to a \$40 million increase in purchase of service contributions and a small increase in the average member contribution rate. The average member contribution rate for pension increased from 7.37% in FY 2012 to 7.40% in FY 2013. These increases were partially offset by a 1% decrease in active member payroll.

As a result of an increase in member purchase of service contributions in the last quarter of FY 2013 to the last quarter of FY 2014, member contribution receivables increased from \$312.0 million at June 30, 2013 to \$314.7 million at June 30, 2014. The increase in the employer contribution

rate from FY 2013 to FY 2014, combined with an increase in employer purchase of service contributions, resulted in the employer contribution receivables rising from \$451.8 million at June 30, 2013 to \$624.3 million at June 30, 2014.

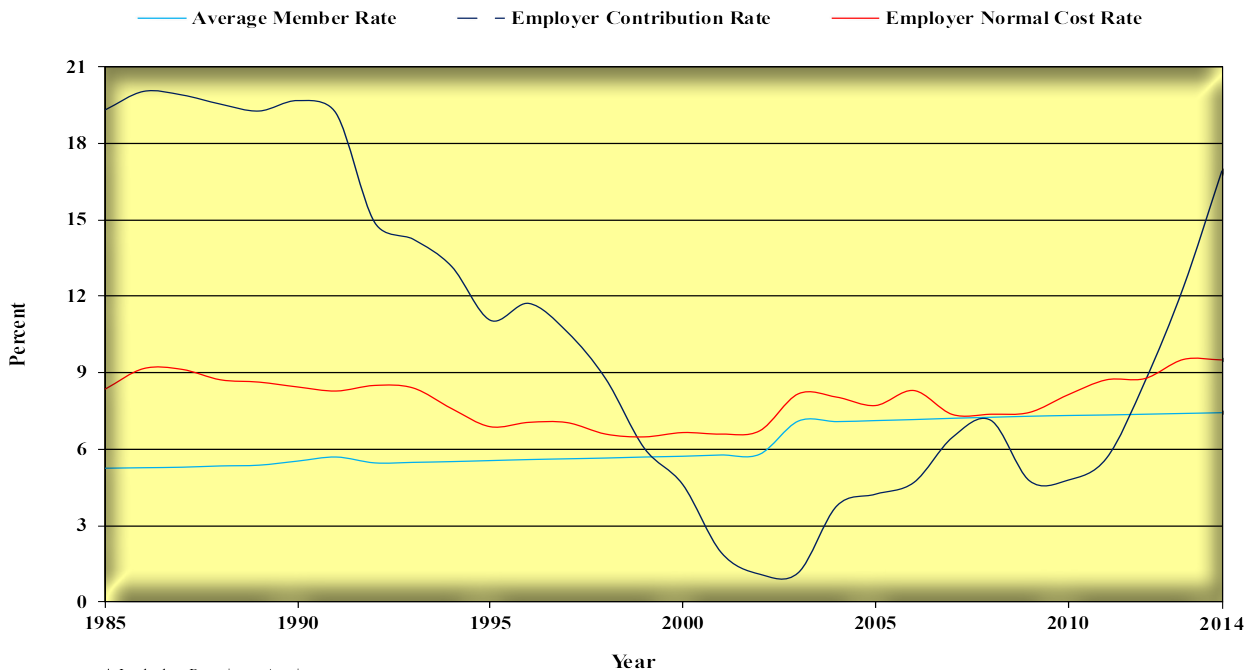
**Progress of Act 120**

On November 23, 2010, the Governor signed HB 2497 into law. The legislation is now known as Act 120 of 2010.

Act 120 preserves the benefits of existing members and includes a series of actuarial and funding changes to PSERS and benefit reductions for individuals who become new members of PSERS on or after July 1, 2011. The Act created two new membership classes, T-E and T-F. T-E and T-F members are “shared-risk,” meaning that their employee contributions can increase or decrease due to investment performance.

Act 120 has a projected net savings of \$1.38 billion through FY 2044 as the \$24.65 billion of projected savings from benefit reductions is offset by the \$23.27 billion cost of deferring contributions for budgetary purposes. Act 120 addressed the pending employer contribution rate spike projected for FY 2013 by smoothing the projected rate increases over a five- to nine-year time period. Instead of a large rate spike in one year, under Act 120, the employer contribution rate has increased steadily each year from the 5.64% in effect when Act 120 became law to the 16.93% rate in the FY 2014. During that time, PSERS’ ARC percentage

**History of PSERS’ Contribution Rates as a Percent of Payroll\***



\* Includes Premium Assistance

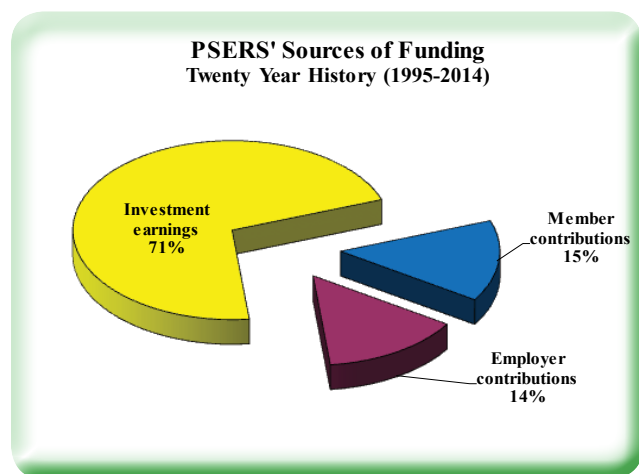
**Management’s Discussion and Analysis (continued)**

under GASB standards increased from 27% to 58% and is projected to continue to improve until the ARC reaches 100%.

As of June 30, 2014, there were over 38,000 T-E and T-F active members representing approximately 14% of all active members. The employer normal cost of Act 120 members is less than 3% of payroll which is over 65% less than the normal cost for pre-Act 120 members. As the percentage of T-E and T-F membership grows, the annual cost of benefits will decline steadily.

**Investment Income**

Net investment income increased from \$4.1 billion in FY 2013 to \$7.1 billion in FY 2014, which is consistent with the increase in the time-weighted investment rate of return from 7.96% for FY 2013 to 14.91% for FY 2014. Net investment income increased from \$1.1 billion in FY 2012 to \$4.1 billion in FY 2013, which is consistent with the increase in the investment rate of return from 3.43% for FY 2012 to 7.96% for FY 2013. As depicted in the following chart, investment earnings provided 71% of PSERS’ funding over the past 20 years. Net investment income also includes investment expenses as a deduction. The “Total PSERS’ Benefits and Expenses” section that follows includes an analysis of investment expenses.



**Total PSERS’ Benefits and Expenses**

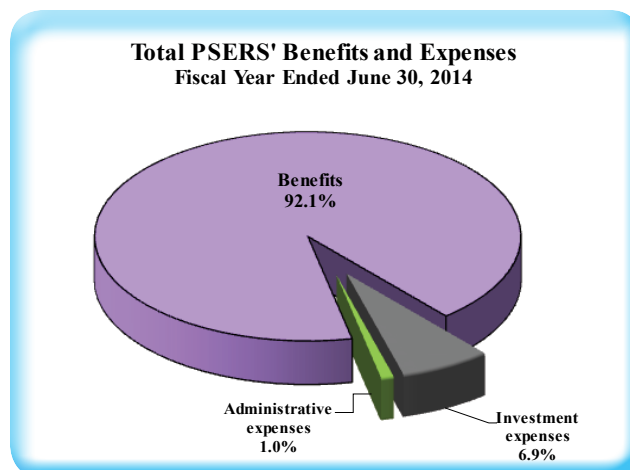
The primary source of expense during FY 2014 was for the payment of benefits approximating \$6.4 billion. The breakdown consisted of \$6.0 billion for Pension, \$104.2 million for Premium Assistance, and \$259.8 million for HOP benefits. The chart at the end of this page illustrates the significant portion of expenses attributable to benefit payments.

Total PSERS’ benefit expense increased from \$6.3 billion in FY 2013 to \$6.4 billion in FY 2014. The increase is attributable to an ongoing increase to the average monthly

benefit and an increase in the number of members receiving benefits. Fourth quarter retirements in FY 2014 were lower compared to the same period in FY 2013, resulting in a lower pension benefits payable figure at June 30, 2014 of \$531.6 million compared to \$747.6 million at June 30, 2013. New retirements during FY 2014 decreased by approximately 21% from FY 2013. Benefit expense increased from \$6.0 billion in FY 2012 to \$6.3 billion in FY 2013. The increase is attributable to higher lump sum payments as well as an ongoing increase to the average monthly benefit and an increase in the number of members receiving benefits.

Investment expenses decreased by \$75.4 million from \$557.6 million in FY 2013 to \$482.2 million in FY 2014 mainly due to a decrease in management fees in the collective trust fund and alternative investment asset classes. The fee decrease in the collective trust fund asset class is mainly attributable to higher performance fees due to the stronger performance this asset class had for FY 2013. The decrease in the alternative investment class is attributable to changes in fee structure brought on by partnerships maturing. Investment expenses increased by \$76.3 million from \$481.3 million in FY 2012 to \$557.6 million in FY 2013 mainly due to an increase in management fees in the collective trust fund and alternative investment asset classes. The rise in the collective trust fund asset class is mainly attributable to an increase in performance fees due to the strong performance this asset class had for FY 2013. The rise in the alternative investment class is attributable to new investments made in alternative investment partnerships during FY 2013.

Administrative expenses increased by \$4.5 million from \$62.2 million during FY 2013 compared to \$66.7 million during FY 2014 mainly due to a rise in the administrative costs attributable to increased membership in the HOP. Administrative expenses increased by \$5.7 million from \$56.5 million during FY 2012 compared to \$62.2 million during FY 2013 due to an increase in the administrative costs in the HOP from increasing enrollments and other information technology expenditures.



**Management’s Discussion and Analysis (continued)**

**Postemployment Healthcare**

PSERS administers two postemployment healthcare programs, the Health Insurance Premium Assistance Program (Premium Assistance) and the Health Options Program (HOP) for its annuitants. The following paragraphs and summary financial data provide supplementary information to the financial statements which contain the financial position and activities for the two postemployment healthcare programs.

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**Health Insurance Premium Assistance Program  
(Premium Assistance)**

**Financial Highlights**

- Total plan net position increased by \$11.7 million in FY 2014 due to an increase in employer contributions driven by the increase in the contribution rate from 0.86% for FY 2013 to 0.93% for the FY 2014. The change from June 30, 2012 to June 30, 2013 was an increase of \$6.6 million due to an increase in employer contributions driven by the increase in the contribution rate from .65% for FY 2012 to .86% for the FY 2013.
- Total receivables increased from \$38.2 million at June 30, 2013 to \$48.5 million at June 30, 2014 due to an increase in interfund receivables from pension and employer receivables.
- Investments increased from \$62.6 million at June 30, 2013 to \$64.1 million at June 30, 2014 mainly due to the increase in the contribution rate.

**Contributions**

Total employer contributions for Premium Assistance increased from \$108.7 million in FY 2013 to \$117.9 million in FY 2014 due to the increase in the employer contribution rate from FY 2013 to FY 2014. The contribution rate increased from 0.86% in FY 2013 to 0.93% in FY 2014.

**Investment Income**

Total investment income for Premium Assistance remained at \$0.1 million for FY 2014 and FY 2013 due to a continued period of low short-term interest rates.

**Benefits and Expenses**

Overall expenses for Premium Assistance increased from \$102.2 million in FY 2013 to \$106.2 million in FY 2014. This increase is primarily due to the increase in number of members receiving premium assistance benefits.

**Health Options Program (HOP)**

**Financial Highlights**

- Total plan net position increased by \$10.0 million in FY 2014. The change from June 30, 2012 to June 30, 2013 is also primarily due to the rise in premiums that outpaced the rise in expenses.
- Total receivables increased from \$23.0 million at June 30, 2013 to \$27.9 million at June 30, 2014. The increase is tied primarily to higher premiums due to an increase in participation in the HOP.
- Investments increased from \$175.7 million at June 30, 2013 to \$187.4 million at June 30, 2014 due to positive cash flow and increased participation, which increased premium revenues.
- Total liabilities increased 17% from \$38.9 million at June 30, 2013 to \$45.5 million at June 30, 2014. The increase is due to increased participation in the program and an increase in claims payable.

**Participant and CMS Premiums**

Total participant Centers for Medicare and Medicaid Services (CMS) premiums for HOP increased from \$275.2 million in FY 2013 to \$295.5 million in FY 2014. This increase is representative of the 8.1% increase in plan participation.

**Investment Income**

Investment income for HOP remained at \$0.2 million for FY 2013 and FY 2014 due to a continued period of low short-term interest rates.

**Benefits and Expenses**

Overall expenses for HOP increased from \$251.7 million in FY 2013 to \$285.7 million in FY 2014. This increase is primarily due to the increase in number of members enrolled in the HOP combined with an increase in the administrative costs.

## Management's Discussion and Analysis (continued)

**Premium Assistance****Summary of Plan Net Position**

(Dollar Amounts in Thousands)

	FY 2014	Increase (Decrease)	FY 2013	Increase (Decrease)	FY 2012
<b>Assets:</b>					
Receivables	\$ 48,502	\$ 10,292	\$ 38,210	\$ 9,108	\$ 29,102
Investments	64,099	1,522	62,577	(2,495)	65,072
<b>Total Assets</b>	<b>112,601</b>	<b>11,814</b>	<b>100,787</b>	<b>6,613</b>	<b>94,174</b>
<b>Liabilities:</b>					
Payables and other liabilities	541	103	438	17	421
<b>Total Liabilities</b>	<b>541</b>	<b>103</b>	<b>438</b>	<b>17</b>	<b>421</b>
<b>Plan Net Position</b>	<b>\$ 112,060</b>	<b>\$ 11,711</b>	<b>\$ 100,349</b>	<b>\$ 6,596</b>	<b>\$ 93,753</b>

**Summary of Changes in Plan Net Position**

	FY 2014	Increase (Decrease)	FY 2013	Increase (Decrease)	FY 2012
<b>Additions:</b>					
Contributions	\$ 117,868	\$ 9,192	\$ 108,676	\$ 27,333	\$ 81,343
Net investment income	70	(40)	110	(313)	423
<b>Total Additions</b>	<b>117,938</b>	<b>9,152</b>	<b>108,786</b>	<b>27,020</b>	<b>81,766</b>
<b>Deductions:</b>					
Benefit expenses	104,197	4,119	100,078	2,872	97,206
Administrative expenses	2,030	(82)	2,112	47	2,065
<b>Total Deductions</b>	<b>106,227</b>	<b>4,037</b>	<b>102,190</b>	<b>2,919</b>	<b>99,271</b>
<b>Changes in Plan Net Position</b>	<b>\$ 11,711</b>	<b>\$ 5,115</b>	<b>\$ 6,596</b>	<b>\$ 24,101</b>	<b>\$ (17,505)</b>

**Health Options Program****Summary of Plan Net Position**

(Dollar Amounts in Thousands)

	FY 2014	Increase (Decrease)	FY 2013	Increase (Decrease)	FY 2012
<b>Assets:</b>					
Receivables	\$ 27,864	\$ 4,821	\$ 23,043	\$ 6,230	\$ 16,813
Investments	187,403	11,713	175,690	17,905	157,785
<b>Total Assets</b>	<b>215,267</b>	<b>16,534</b>	<b>198,733</b>	<b>24,135</b>	<b>174,598</b>
<b>Liabilities:</b>					
Payables and other liabilities	45,518	6,572	38,946	378	38,568
<b>Total Liabilities</b>	<b>45,518</b>	<b>6,572</b>	<b>38,946</b>	<b>378</b>	<b>38,568</b>
<b>Plan Net Position</b>	<b>\$ 169,749</b>	<b>\$ 9,962</b>	<b>\$ 159,787</b>	<b>\$ 23,757</b>	<b>\$ 136,030</b>

**Summary of Changes in Plan Net Position**

	FY 2014	Increase (Decrease)	FY 2013	Increase (Decrease)	FY 2012
<b>Additions:</b>					
Participant and CMS premiums	\$ 295,499	\$ 20,285	\$ 275,214	\$ 28,110	\$ 247,104
Net investment income	191	(35)	226	(11)	237
<b>Total Additions</b>	<b>295,690</b>	<b>20,250</b>	<b>275,440</b>	<b>28,099</b>	<b>247,341</b>
<b>Deductions:</b>					
Benefit expenses	259,753	30,714	229,039	16,012	213,027
Administrative expenses	25,975	3,331	22,644	2,431	20,213
<b>Total Deductions</b>	<b>285,728</b>	<b>34,045</b>	<b>251,683</b>	<b>18,443</b>	<b>233,240</b>
<b>Changes in Plan Net Position</b>	<b>\$ 9,962</b>	<b>\$ (13,795)</b>	<b>\$ 23,757</b>	<b>\$ 9,656</b>	<b>\$ 14,101</b>

**Statements of Plan Net Position**  
**June 30, 2014 and 2013**  
(Dollar Amounts in Thousands)

	2014			
	Postemployment Healthcare			Totals
	Pension	Premium Assistance	Health Options Program	
<b>Assets:</b>				
Receivables:				
Members	\$ 310,305	\$ 4,395	\$ 31	\$ 314,731
Employers	590,953	33,352	-	624,305
Investment income	238,202	65	12	238,279
Investment proceeds	189,746	-	-	189,746
CMS Part D and prescriptions	-	-	27,793	27,793
Interfund	-	9,917	-	9,917
Miscellaneous	457	773	28	1,258
<b>Total Receivables</b>	<b>1,329,663</b>	<b>48,502</b>	<b>27,864</b>	<b>1,406,029</b>
Investments, at fair value:				
Short-term	4,079,686	64,099	187,403	4,331,188
Fixed income	5,532,214	-	-	5,532,214
Common and preferred stock	10,851,457	-	-	10,851,457
Collective trust funds	11,795,390	-	-	11,795,390
Real estate	7,230,493	-	-	7,230,493
Alternative investments	13,187,365	-	-	13,187,365
<b>Total Investments</b>	<b>52,676,605</b>	<b>64,099</b>	<b>187,403</b>	<b>52,928,107</b>
Securities lending collateral pool	596,936	-	-	596,936
Capital assets (net of accumulated depreciation \$24,080)	22,851	-	-	22,851
<b>Total Assets</b>	<b>54,626,055</b>	<b>112,601</b>	<b>215,267</b>	<b>54,953,923</b>
<b>Liabilities:</b>				
Accounts payable and accrued expenses	86,328	355	1,725	88,408
Benefits payable	531,621	186	21,531	553,338
Participant premium advances	-	-	22,262	22,262
Investment purchases and other liabilities	421,138	-	-	421,138
Obligations under securities lending	596,936	-	-	596,936
Interfund payable	9,917	-	-	9,917
<b>Total Liabilities</b>	<b>1,645,940</b>	<b>541</b>	<b>45,518</b>	<b>1,691,999</b>
<b>Net position held in trust for pension and postemployment healthcare benefits</b>	<b>\$ 52,980,115</b>	<b>\$ 112,060</b>	<b>\$ 169,749</b>	<b>\$ 53,261,924</b>

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

**Statements of Plan Net Position**  
**June 30, 2014 and 2013**  
(Dollar Amounts in Thousands)

	<b>2013</b>			
	Postemployment Healthcare			Totals
	Pension	Premium Assistance	Health Options Program	
<b>Assets:</b>				
Receivables:				
Members	\$ 306,802	\$ 5,197	\$ 26	\$ 312,025
Employers	421,104	30,685	-	451,789
Investment income	155,306	81	19	155,406
Investment proceeds	228,612	-	-	228,612
CMS Part D and prescriptions	-	-	22,849	22,849
Interfund	-	-	-	-
Miscellaneous	524	2,247	149	2,920
<b>Total Receivables</b>	<b>1,112,348</b>	<b>38,210</b>	<b>23,043</b>	<b>1,173,601</b>
Investments, at fair value:				
Short-term	3,003,872	62,577	175,690	3,242,139
Fixed income	5,828,418	-	-	5,828,418
Common and preferred stock	9,762,527	-	-	9,762,527
Collective trust funds	11,280,497	-	-	11,280,497
Real estate	6,797,535	-	-	6,797,535
Alternative investments	12,623,291	-	-	12,623,291
<b>Total Investments</b>	<b>49,296,140</b>	<b>62,577</b>	<b>175,690</b>	<b>49,534,407</b>
Securities lending collateral pool	615,159	-	-	615,159
Capital assets (net of accumulated depreciation \$22,127)	22,404	-	-	22,404
<b>Total Assets</b>	<b>51,046,051</b>	<b>100,787</b>	<b>198,733</b>	<b>51,345,571</b>
<b>Liabilities:</b>				
Accounts payable and accrued expenses	148,264	336	1,466	150,066
Benefits payable	747,575	102	17,094	764,771
Participant premium advances	-	-	20,386	20,386
Investment purchases and other liabilities	519,492	-	-	519,492
Obligations under securities lending	615,159	-	-	615,159
Interfund payable	-	-	-	-
<b>Total Liabilities</b>	<b>2,030,490</b>	<b>438</b>	<b>38,946</b>	<b>2,069,874</b>
<b>Net position held in trust for pension and postemployment healthcare benefits</b>	<b>\$ 49,015,561</b>	<b>\$ 100,349</b>	<b>\$ 159,787</b>	<b>\$ 49,275,697</b>

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



**Statements of Changes in Plan Net Position**  
**Years Ended June 30, 2014 and 2013**  
(Dollar Amounts in Thousands)

	2014			
	Postemployment Healthcare			Totals
	Pension	Premium Assistance	Health Options Program	
<b>Additions:</b>				
Contributions:				
Members	\$ 966,926	\$ -	\$ -	\$ 966,926
Employers	1,992,084	117,868	-	2,109,952
<b>Total contributions</b>	<b>2,959,010</b>	<b>117,868</b>	<b>-</b>	<b>3,076,878</b>
Participant premiums	-	-	257,740	257,740
Centers for Medicare & Medicaid Services premiums	-	-	37,759	37,759
Investment income:				
From investing activities:				
Net appreciation (depreciation) in fair value of investments	6,024,512	(651)	-	6,023,861
Short-term	7,695	816	191	8,702
Fixed income	220,447	-	-	220,447
Common and preferred stock	284,808	-	-	284,808
Collective trust funds	7,069	-	-	7,069
Real estate	374,076	-	-	374,076
Alternative investments	642,727	-	-	642,727
<b>Total investment activity income</b>	<b>7,561,334</b>	<b>165</b>	<b>191</b>	<b>7,561,690</b>
Investment expenses	(482,141)	(95)	-	(482,236)
<b>Net income from investing activities</b>	<b>7,079,193</b>	<b>70</b>	<b>191</b>	<b>7,079,454</b>
From securities lending activities:				
Securities lending income	19,859	-	-	19,859
Securities lending expense	(1,291)	-	-	(1,291)
<b>Net income from securities lending activities</b>	<b>18,568</b>	<b>-</b>	<b>-</b>	<b>18,568</b>
<b>Total net investment income</b>	<b>7,097,761</b>	<b>70</b>	<b>191</b>	<b>7,098,022</b>
<b>Total Additions</b>	<b>10,056,771</b>	<b>117,938</b>	<b>295,690</b>	<b>10,470,399</b>
<b>Deductions:</b>				
Benefits	6,028,795	104,197	259,753	6,392,745
Refunds of contributions	22,823	-	-	22,823
Net transfer to State Employees' Retirement System	1,887	-	-	1,887
Administrative expenses	38,712	2,030	25,975	66,717
<b>Total Deductions</b>	<b>6,092,217</b>	<b>106,227</b>	<b>285,728</b>	<b>6,484,172</b>
<b>Net increase</b>	<b>3,964,554</b>	<b>11,711</b>	<b>9,962</b>	<b>3,986,227</b>
<b>Net position held in trust for pension and postemployment healthcare benefits:</b>				
<b>Balance, beginning of year</b>	<b>49,015,561</b>	<b>100,349</b>	<b>159,787</b>	<b>49,275,697</b>
<b>Balance, end of year</b>	<b>\$ 52,980,115</b>	<b>\$ 112,060</b>	<b>\$ 169,749</b>	<b>\$ 53,261,924</b>

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

**Statements of Changes in Plan Net Position**  
**Years Ended June 30, 2014 and 2013**  
(Dollar Amounts in Thousands)

	<b>2013</b>			
	Postemployment Healthcare			Totals
	Pension	Premium Assistance	Health Options Program	
<b>Additions:</b>				
Contributions:				
Members	\$ 991,087	\$ -	\$ -	\$ 991,087
Employers	1,446,402	108,676	-	1,555,078
<b>Total contributions</b>	<b>2,437,489</b>	<b>108,676</b>	<b>-</b>	<b>2,546,165</b>
Participant premiums	-	-	234,516	234,516
Centers for Medicare & Medicaid Services premiums	-	-	40,698	40,698
Investment income:				
From investing activities:				
Net appreciation (depreciation) in fair value of investments	3,428,449	(1,140)	-	3,427,309
Short-term	7,758	1,306	226	9,290
Fixed income	228,760	-	-	228,760
Common and preferred stock	255,248	-	-	255,248
Collective trust funds	17,749	-	-	17,749
Real estate	251,742	-	-	251,742
Alternative investments	485,622	-	-	485,622
<b>Total investment activity income</b>	<b>4,675,328</b>	<b>166</b>	<b>226</b>	<b>4,675,720</b>
Investment expenses	(557,533)	(56)	-	(557,589)
<b>Net income from investing activities</b>	<b>4,117,795</b>	<b>110</b>	<b>226</b>	<b>4,118,131</b>
From securities lending activities:				
Securities lending income	9,541	-	-	9,541
Securities lending expense	(1,334)	-	-	(1,334)
<b>Net income from securities lending activities</b>	<b>8,207</b>	<b>-</b>	<b>-</b>	<b>8,207</b>
<b>Total net investment income</b>	<b>4,126,002</b>	<b>110</b>	<b>226</b>	<b>4,126,338</b>
<b>Total Additions</b>	<b>6,563,491</b>	<b>108,786</b>	<b>275,440</b>	<b>6,947,717</b>
<b>Deductions:</b>				
Benefits	6,016,892	100,078	229,039	6,346,009
Refunds of contributions	24,461	-	-	24,461
Net transfer to State Employees' Retirement System	2,893	-	-	2,893
Administrative expenses	37,480	2,112	22,644	62,236
<b>Total Deductions</b>	<b>6,081,726</b>	<b>102,190</b>	<b>251,683</b>	<b>6,435,599</b>
<b>Net increase</b>	<b>481,765</b>	<b>6,596</b>	<b>23,757</b>	<b>512,118</b>
<b>Net position held in trust for pension and postemployment healthcare benefits:</b>				
<b>Balance, beginning of year</b>	<b>48,533,796</b>	<b>93,753</b>	<b>136,030</b>	<b>48,763,579</b>
<b>Balance, end of year</b>	<b>\$ 49,015,561</b>	<b>\$ 100,349</b>	<b>\$ 159,787</b>	<b>\$ 49,275,697</b>

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

**Notes to Financial Statements**

**Years Ended June 30, 2014 and 2013**

**1. Organization and Description of the System**

**(A) Organization**

The System was established on July 18, 1917, under the provisions of Pamphlet Law 1043, No. 343 as a governmental cost-sharing multiple-employer plan that provides retirement allowances and other benefits to its members. Membership in the System is mandatory for nearly all qualifying public school employees in the Commonwealth of Pennsylvania (Commonwealth). As of June 30, 2014, there were 789 participating employers, generally school districts. Membership as of June 30, 2013, the most recent year for which actual amounts are available, is presented in the table at the bottom of this page.

The Public School Employees’ Retirement Board (Board) is established by state law as an independent administrative board of the Commonwealth. The Board exercises control and management of the System, including the investment of its assets. The Board has fifteen members including the Commonwealth’s Secretary of Education, the State Treasurer, the Executive Director of the Pennsylvania School Boards Association, two members appointed by the Governor, six elected members (three from among the System’s certified members, one from among the System’s noncertified members, one from among the System’s annuitants, and one from among school board members in Pennsylvania), two members from the Senate, and two members from the House of Representatives.

The State Treasurer is the custodian of the System’s fund. The retirement plan of the System is a contributory defined benefit plan for which the benefit payments to members and contribution provisions by employers and employees are specified in the Pennsylvania Public School Employees’ Retirement Code (Code). Changes in benefit and contribution provisions for the retirement plan must be made by legislation. Pursuant to state law, all legislative bills and amendments proposing to change the System’s retirement plan are to be accompanied with an actuarial note

prepared by an enrolled pension actuary from the Public Employee Retirement Commission providing an estimate of the cost and actuarial effect of the proposed change.

Based upon criterion of financial accountability as defined by governmental accounting standards, the System is considered a component unit of the Commonwealth of Pennsylvania financial reporting entity and is included in the Comprehensive Annual Financial Report of the Commonwealth of Pennsylvania.

**(B) Pension Plan**

**i. Pension Benefits**

Under the provisions of the 1975 revision of the Code by the Pennsylvania General Assembly, members are eligible for monthly retirement benefits upon reaching (a) age 62 with at least 1 year of credited service; (b) age 60 with 30 or more years of credited service; or (c) 35 or more years of service regardless of age. Act 120 of 2010 (Act 120) preserves the benefits of existing members and introduced benefit reductions for individuals who become new members on or after July 1, 2011. Act 120 created two new membership classes, Membership Class T-E (Class T-E) and Membership Class T-F (Class T-F). To qualify for normal retirement, Class T-E and Class T-F members must work until age 65 with a minimum of 3 years of service or attain a total combination of age and service that is equal to or greater than 92 with a minimum of 35 years of service. The Internal Revenue Code (IRC) limitation on the annual benefits for a defined benefit plan was \$210,000 for 2014 and \$205,000 for 2013.

Benefits are generally equal to 2% or 2.5%, depending upon membership class, of the member’s final average salary (as defined in the Code) multiplied by the number of years of credited service. For members whose membership started prior to July 1, 2011, after completion of five years of service, a member’s right to the defined benefits is vested and early retirement benefits may be elected. For Class

**Membership as of June 30, 2013**

Currently employed members:		
Vested	195,062	
Nonvested	72,366	
<b>Total currently employed members</b>		<b>267,428</b>
Retirees and beneficiaries currently receiving benefits	209,204	
Inactive members and vestees entitled to but not receiving benefits*	18,911	
<b>Total retirees and other members</b>		<b>228,115</b>
<b>Total number of members</b>		<b>495,543</b>

\*Does not include 109,739 inactive members who are no longer participating.

**Notes to Financial Statements (continued)****PSERS members whose membership started prior to July 1, 2011:**

Membership Class T-C	Active Members hired before July 22, 1983	5.25%
Membership Class T-C	Active Members hired on or after July 22, 1983	6.25%
Membership Class T-D	Active Members hired before July 22, 1983	6.50%
Membership Class T-D	Active Members hired on or after July 22, 1983	7.50%

**PSERS members whose membership started on or after July 1, 2011 (Act 120 members):**

Membership Class T-E*		7.50%
Membership Class T-F**		10.30%

\* Shared risk program could cause future contribution rates to fluctuate between 7.5% and 9.5%

\*\* Shared risk program could cause future contribution rates to fluctuate between 10.3% and 12.3%

T-E and Class T-F members, the right to benefits is vested after ten years of service. Active members may purchase credit for various types of school and non-school service on a lump-sum, installment purchase basis, or through an actuarially calculated benefit reduction. Class T-E and Class T-F members must purchase Non Qualifying Part Time service and most other types of non-school or non-state service credit at full actuarial cost. Class T-E and Class T-F members must purchase credit for Non Qualifying Part Time service within 365 days of enrollment in the system.

In addition to regular retirement benefits, the System also provides for disability retirement benefits and death benefits. Participants are eligible for disability retirement benefits after completion of five years of credited service. Such benefits are generally equal to 2% or 2.5%, depending upon membership class, of the member's final average salary (as defined in the Code) multiplied by the number of years of credited service, but not less than one-third of such salary nor greater than the benefit the member would have had at normal retirement age. Members over normal retirement age may apply for disability benefits.

Death benefits are payable upon the death of an active member who has reached age 62 with at least one year of credited service (age 65 with at least three years of credited service for Class T-E and Class T-F members) or who has at least five years of credited service (ten years for Class T-E and Class T-F members). Such benefits are actuarially equivalent to the benefit that would have been effective if the member had retired on the day before death. Benefits may be distributed for a deceased member by a nonspouse beneficiary via a direct trustee-to-trustee transfer to an Individual Retirement Account (IRA), which is treated as an inherited account.

Members with credited service in the Commonwealth of Pennsylvania State Employees' Retirement System (SERS) may elect to transfer service to the Public School Employees' Retirement System upon commencement of employment in the public school system. Similarly, a member with credited

service in the System may transfer such service to SERS upon becoming a member of that system.

All members are fully vested in their individual balance in the Members' Savings Account which is described in Note 3. All non-vested members may receive a refund of their individual balance of member contributions and interest from the Members' Savings Account upon termination of public school employment. Vested members who enrolled prior to July 1, 2011 may elect to receive a return of their accumulated contributions and interest upon their retirement which results in a reduced monthly annuity. Vested Class T-E and Class T-F members cannot withdraw their accumulated contributions and interest from the Members' Savings Account upon their retirement.

**ii. Contributions**

The contribution policy is set by the Code and requires contributions by active members, employers, and the Commonwealth. The System's funding policy provides for periodic employer and Commonwealth contributions at actuarially determined rates, expressed as a percentage of annual covered payroll, such that they, along with employee contributions and an actuarially determined rate of investment return, are adequate to accumulate assets to pay retirement benefits when due. Level percentage of payroll employer contribution rates are determined using the entry age normal actuarial funding method. This method determines the amount of contributions necessary to (1) fully fund all current costs, (also known as normal cost), which represents the estimated amount necessary to pay for the benefits earned by the employees during the current service year; and (2) liquidate the prior service cost for service earned prior to the current service year and subsequent benefit increases, which represents the amount necessary to fund accrued liabilities over the appropriate amortization periods.

Contribution rates for active members are set by law (redefined with the provisions of Act 9 of 2001 and Act

**Notes to Financial Statements (continued)**

120) and are dependent upon membership class. The contribution rates based on qualified member compensation for virtually all members are presented in the table at the top of the previous page. The IRC limitation on the annual compensation for a defined benefit plan was \$255,000 for 2013 and \$260,000 for 2014.

Active members who enrolled between July 1, 2001, the effective date of Act 9, and June 30, 2011 are Membership Class T-D (Class T-D). The contribution rates for all members in Class T-D were effective January 1, 2002. For Act 120 members, all new members automatically become Class T-E members. New members, however, have a one-time opportunity to elect Class T-F within 45 days of receiving written notification from PSERS. Failure to elect Class T-F at time of original eligibility will make the member ineligible for Class T-F forever. Act 120 introduced a shared risk program that could affect Class T-E and Class T-F members' contribution rates in future fiscal years. With the shared risk program Class T-E and Class T-F members benefit when investments of the fund are doing well and share some of the risk when investments underperform. The member contribution rate will stay within the specified range allotted for Class T-E or Class T-F; but could increase or decrease by .5% every three years starting July 1, 2015, dependent on investment performance of PSERS. The member contribution rate will never go below the base rate of 7.5% for Class T-E and 10.3% for Class T-F members, or above 9.5% for Class T-E and 12.3% for Class T-F members.

The total contribution rate for the employers and the Commonwealth was 16.93% and 12.36% (16.00% and 11.50% for pension component) of qualified compensation for the years ended June 30, 2014 and 2013, respectively.

Act 120 suppresses the employer contribution rate by using rate caps in future years to keep the rate from rising too high, too fast for budgetary purposes.

The rate caps limit the amount the pension component of the employer contribution rate can increase over the prior year's rate. For FY 2014 and thereafter, the rate can increase no more than 4.5% plus the premium assistance contribution rate.

The rate cap remains at 4.5% until the rate cap no longer applies, i.e., the rise in the employer contribution rate is less than the rate cap in effect at that time. Once the rate caps no longer apply, the employer normal cost becomes the contribution rate floor.

According to requirements established in Act 29 of 1994, the Commonwealth reimburses school entity employers a portion of the employer contributions paid to the System. All school entity employers are reimbursed by

the Commonwealth at least 50% of the total employer contributions based on the total contribution rate. The Commonwealth reimburses certain school entity employers at a rate greater than 50% based upon non-pension criteria which stipulate that the entity must have a Commonwealth Department of Education calculated Market Value/Personal Income Aid Ratio in excess of .5000. The Commonwealth remits 50% of the total employer contributions for employers other than school entities directly to the System. All contributions from employers and the Commonwealth are shown as employer contributions on the Statements of Changes in Plan Net Position.

**(C) Postemployment Healthcare Plans**

**i. Health Insurance Premium Assistance Program**

**(a) Premium Assistance Benefits**

The System provides a Health Insurance Premium Assistance Program (Premium Assistance) for all eligible annuitants who qualify and elect to participate. Under this program, employer contribution rates for Premium Assistance are established to provide reserves in the Health Insurance Account that are sufficient for the payment of Premium Assistance benefits for each succeeding year. Effective January 1, 2002, under the provisions of Act 9 of 2001, participating eligible annuitants are entitled to receive premium assistance payments equal to the lesser of \$100 per month or their out-of-pocket monthly health insurance premium. To receive premium assistance, eligible annuitants must obtain their health insurance through either their school employer or the PSERS' Health Options Program. As of June 30, 2014 there were no assumed future benefit increases to participating eligible annuitants in the Premium Assistance program.

**(b) Contributions**

A portion of each employer and Commonwealth contribution to the System is set aside for the funding of Premium Assistance. The Premium Assistance contribution rate is set at a level necessary to establish reserves sufficient to provide Premium Assistance payments for all participating eligible members for the subsequent fiscal year. The portion of the total contribution rate for employers and the Commonwealth used to fund Premium Assistance was 0.93% and 0.86% for the years ended June 30, 2014 and 2013, respectively.

## Notes to Financial Statements (continued)

### (c) Funding Status and Annual Required Contributions (ARC)

As of June 30, 2013, the most recent actuarial valuation, the plan was 7.2% funded. The actuarial accrued liability for benefits was \$1.385 billion, and the actuarial value of assets was \$100.3 million, resulting in an unfunded accrued liability of \$1.285 billion. The covered payroll of active members was \$12.6 billion and the ratio of the unfunded actuarial accrued liability to the covered payroll was 10.2%.

For fiscal year ended June 30, 2014, the ARC was \$121.3 million. The actual employer contributions for fiscal year ended June 30, 2014 was \$117.5 million resulting in a 97% contributed rate. The ratio of assets to Actuarial Accrued Liabilities (AAL) was 7.2%, 6.9%, and 8.3% for fiscal years ended June 30, 2013, 2012, and 2011, respectively. Assets have decreased in relation to AAL from fiscal year ended June 30, 2011 to 2012 and increased from fiscal year ended June 30, 2012 to 2013.

The Schedule of Funding Progress and the Schedule of Employer Contributions included as Required Supplementary Information following the notes to the financial statements provide multiple year presentations of funding status and ARC to illustrate their trends over time.

### (d) Actuarial Assumptions and Methods

The health insurance liability and funding provisions of the PSERS Code differ from the GASB disclosure requirements. As a result, there are different determinations of actuarial liability and contribution requirements for GASB accounting purposes and for Commonwealth funding purposes. For purposes of funding, the actuarial liability equals the assets in the Premium Assistance account, and the contribution required is the amount necessary to establish reserves sufficient to provide Premium Assistance payments to all participating eligible annuitants during the fiscal year that immediately follows the year the employer contribution is made. For GASB accounting purposes, the actuarial liability has been determined under the entry age normal actuarial cost method, and the ARC is equal to the entry age normal cost for health insurance plus an amount that will amortize the entry age unfunded actuarial liability for health insurance over a period of 30 years using level dollar open amortization. The entry age actuarial cost method was selected for this calculation because it meets the GASB parameters for determining actuarial liability and normal cost, and is the cost method specified by the PSERS Code for the PSERS pension plan.

Each annual actuarial valuation for Premium Assistance includes calculations that are based on the Premium Assistance benefits provided under the terms of the

substantive plan in effect at the time of each valuation. The valuations involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. The actuarial calculations for Premium Assistance reflect a long-term perspective. Actuarially determined amounts are subject to continual revision as results are compared to past expectations and new estimates are made about the future. Other significant actuarial assumptions employed by the actuary as of June 30, 2013, the date of the most recent actuarial valuation were:

- Investment return - 7.50%, includes inflation at 3.00%
- Salary increases - 5.50%, which reflects an allowance for inflation of 3.00%, real wage growth of 1%, and merit or seniority increases of 1.50%
- Multiple decrement tables - mortality, vesting, retirement age, and withdrawal estimates are based upon tables provided by the actuary

### ii. Health Options Program

The Health Options Program (HOP) is a PSERS-sponsored voluntary health insurance program for the sole benefit of annuitants of PSERS, spouses of annuitants, survivor annuitants and their dependents who participate in HOP. The HOP is funded exclusively by the premiums paid by its participants for the benefit coverage they elect. HOP offers several health plans. Participants may select among a self-funded Medicare supplement plan, two Medicare Rx plans, and multiple Medicare Advantage plans for those eligible for Medicare. Participants not eligible for Medicare have a choice of a self-funded high deductible indemnity plan and multiple managed care plans. Medicare Advantage and managed care plans are available to retirees residing in the plan's service area. The Medicare Advantage and managed care plans are provided by private insurance companies or managed care organizations and benefits are fully insured. The Medicare supplement and high deductible plans are self-funded and claims are adjudicated by a third party administrator. The Medicare Rx Options and the prescription drug benefit of the high deductible plan for those not eligible for Medicare are also self-funded and, HOP uses a pharmacy benefits manager to administer the benefits. Effective January 1, 2006, PSERS entered into an Employer/Union Entity contract with the Centers for Medicare and Medicaid Services (CMS) to operate a voluntary Medicare Prescription Drug Plan (PDP). Monthly premiums are received from CMS covering the 62,636 participants in the PDP. An independent actuarial consulting firm sets the rates for the self-funded benefits. The HOP maintains reserves for claims that are incurred but not reported (IBNR) and for claim fluctuation for the self-funded benefit plans. At June 30, 2014 and 2013 PSERS recorded \$16,308,000 and \$12,810,000, respectively, in IBNR. The IBNR is included in benefits payable. The

## Notes to Financial Statements (continued)

PSERS pension fund assets are not available to fund or satisfy obligations of the HOP.

### 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 recognized in the period for which employees' salaries are reported. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

The accounting and reporting policies of the System conform to accounting principles generally accepted in the United States of America (GAAP). The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of additions and deductions in plan net position during the reporting period. Actual results could differ from those estimates.

#### (B) Investments

The System's investments are reported at fair value. Fair value is the amount that the System 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. Short-term securities are carried at cost, which approximates fair value, unless they have published market prices or quotations from national securities exchanges or securities pricing services, in which case they are valued at the published market price. Fixed income securities and common and preferred stocks are generally valued based on published market prices and quotations from national securities exchanges or securities pricing services. Securities which are not traded on a national securities exchange are valued by the respective fund manager or other third parties based on similar sales.

Directly-owned real estate investments are primarily valued based on appraisals performed by independent appraisers and, for properties not appraised, the present value of the projected future net income stream is used. Real estate owned investments are reported net of related debt borrowed against the market value of the property. As of June 30, 2014 and 2013, \$132,000,000 in line of credit advances were netted against the related property

valuation. The line of credit balance is due on March 9, 2015. The line is payable at an interest rate equivalent to the lender's commercial paper rate plus 75 basis points and is collateralized by certain fixed income investments of the System.

For alternative investments, which include private equity, private debt, venture capital and equity real estate investments where no readily ascertainable market value exists, management, in consultation with the general partner and investment advisors, has determined the fair values for the individual investments based upon the partnership's most recent available financial information. Futures contracts, foreign exchange contracts, and options are marked-to-market daily based on published market prices and quotations from national securities exchanges or securities pricing services. The changes in market value are recognized as part of net appreciation/depreciation in the fair value of investments. Initial margin requirements for such financial instruments are provided by investment securities pledged as collateral or by cash.

Collective trust fund investments (CTF) consist primarily of domestic and international institutional funds. The funds generally do not pay interest or dividends to shareholders and reinvest all income earned on securities held by the fund. The fair value of CTF is based on the reported share value of the respective fund. CTF are managed by state chartered banks for which various state banking departments have regulatory oversight and investment advisors for which regulatory agencies such as the Securities and Exchange Commission have regulatory oversight. Investments that are not subject to this oversight are subject to annual independent audits.

In accordance with PSERS' investment guidelines, cash collateral from securities loaned is invested in one of two collateral investment pools, the first of which is denominated in U.S. dollars (USD) and the second in Euros. The USD pool is invested entirely in overnight repurchase agreements carried at amortized cost which approximates fair value. The Euro pool is invested in asset-backed floating rate notes which are marked-to-market daily based on published market prices and quotations from national securities exchanges or securities pricing services. In addition to the floating rate notes, the Euro pool is invested in repurchase agreements.

Investment expenses consist of investment manager fees and those administrative expenses directly related to the System's investment operations. Unsettled investment sales are reported as investment proceeds receivable and unsettled investment purchases are included in investment purchases and other liabilities.

## Notes to Financial Statements (continued)

### (C) Capital Assets

Capital assets consist primarily of data processing equipment, software, and internally developed computer software recognized as intangible assets. Capital assets are depreciated using the straight-line method over an estimated useful life of five years. Intangible assets are amortized using the straight-line method over an estimated useful life of twenty years for assets purchased prior to July 1, 2012 and 5 years for assets purchased after June 30, 2012.

### (D) Benefits Payable

Benefits payable identifies the obligations of the System, on an accrual basis, at the end of the fiscal year. It includes the estimated retirement and death benefits payable, premium assistance benefits payable, and the HOP IBNR claims for its participants.

### (E) Compensated Absences

The System uses the accrual basis of accounting for measuring vacation leave, sick leave, and other compensated absences liabilities. Employees of the System are paid for accumulated vacation leave upon termination or retirement. Retiring employees of the System that meet service, age, or disability requirements are paid between 30% and 100% of sick days available at retirement, up to 161 maximum days paid. As of June 30, 2014 and 2013, \$3,649,000 and \$3,419,000, respectively, were accrued for unused vacation and sick leave for the System's employees and are included in "Accounts payable and accrued expenses" on the Statements of Plan Net Position.

### (F) Participant Premium Advances

Premium advances in the fiscal years ended June 30, 2014 and 2013 are for HOP premiums related to health care coverage to be provided in calendar year 2014 and 2013, respectively.

### (G) Federal Income Taxes

The Internal Revenue Service (IRS) issued a determination letter dated September 30, 2013 which stated that the plan and its underlying trust qualify under the provisions of Section 501(a) of the Internal Revenue Code (IRC) and therefore are exempt from federal income taxes.

### (H) Risk Management

The System is exposed to various liabilities and risks of loss, including, without limitation, the ordinary risks of investment losses, risks related to theft or destruction of assets, liabilities resulting from injuries to employees,

and liabilities resulting from court challenges to fiduciary decisions. As an administrative agency of the Commonwealth of Pennsylvania, the System is accorded sovereign immunity. For claims not shielded by sovereign immunity, the System participates in certain Commonwealth pooled insurance programs and requires asset managers to carry certain insurance coverage for the protection of the System. The System has implemented a self-insurance program for fiduciary and director and officer liability coverage. During the past three fiscal years, insurance settlements did not exceed insurance coverage.

### (I) Reclassifications

Certain 2013 amounts have been reclassified in conformity with the 2014 presentation. These reclassifications had no effect on net position held in trust for pension benefits or the change in plan net position.

### (J) Members Receivables

Members receivables include an amount for members' obligations to the System for the purchase of service credit. Members have a variety of options to remit purchase of service payments:

- Remit a lump sum payment.
- Request an installment plan from one to seven years where the member's employer establishes a payroll deduction process. The member's employer then forwards monthly payments of the withheld amounts to PSERS.
- Accept an actuarial reduction debt through which the amount of the purchase plus accumulated interest will reduce the member's retirement or death benefit.
- Rollover funds from an eligible distribution.

The following is a summary of the members receivables at June 30, 2014 and 2013:

	(Dollar Amounts in Thousands)	
	2014	2013
<b>Pension:</b>		
Member contributions	\$ 69,874	\$ 71,895
Purchase of service	234,727	229,130
Other	5,704	5,777
<b>Total Members Receivables</b>	<b>\$ 310,305</b>	<b>\$ 306,802</b>

### (K) Interfund Transactions and Balances

Interfund transfers of assets take place on a regular recurring basis between Pension and Premium Assistance. The transfers occur upon receipt of employer contributions and



**Notes to Financial Statements (continued)**

payment of benefits or expenses. The interfund receivables and payables related to interfund activity are classified under receivables and liabilities on the financial statements.

**(L) Adoption of New Accounting Standards**

During the fiscal year ended June 30, 2014 the System adopted GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*. This Statement specifies items that were previously reported as assets and liabilities that should now be reported as deferred outflows of resources or deferred inflow of resources.

During the fiscal year ended June 30, 2014 the System adopted GASB Statement No. 67 which addresses accounting and financial reporting requirements for pension plans. The requirements for GASB No. 67 require changes in presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include an actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures.

During the fiscal year ended June 30, 2014 the System adopted GASB Statement No. 70, *Accounting and Financial Reporting for Nonexchange Financial Guarantees*. This Statement establishes accounting and financial reporting standards for situations where a state or local government, as a guarantor, agrees to indemnify a third-party obligation holder under specified conditions. Upon examination of GASB 70, it was determined to have no current impact on PSERS.

During the fiscal year ended June 30, 2013 the System adopted GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position*. 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 Code requires the System to maintain the following accounts which represent reserves held for future and current benefit payments as follows and as illustrated in the table at the top of the following page.

**(A) State Accumulation Account**

The State Accumulation Account is credited with contributions from the Commonwealth and the employers. Additionally, interest earnings of the System (after crediting the Members' Savings Account with 4% interest and the reserve for retirement with 5.50% statutory interest) are credited to this account. Each year, the necessary amounts, as determined by the actuary for the payment of retirement, disabilities, and death benefits, are transferred from the State Accumulation Account to the Annuity Reserve Account increasing the reserve credit to the 7.50% valuation assumption rate determined by the actuary. All administrative expenses necessary for the operation of the System, except for Premium Assistance and HOP expenses, are paid from the State Accumulation Account.

**(B) Members' Savings Account**

The Members' Savings Account is credited with all contributions made by active members of the System. Interest is added to the member's individual account at an annual rate of 4%.

Upon death or retirement of a member, the accumulated contributions plus interest are transferred to the Annuity Reserve Account for subsequent payment of benefits.

**(C) Annuity Reserve Account**

The Annuity Reserve Account represents the amounts transferred from the Members' Savings and State Accumulation Accounts, plus additional contributions made by the Commonwealth and employers for the payment of supplemental annuities and cost-of-living increases. All death, disability, and retirement benefits are paid from this account. Annual interest of 5.50% is credited to the Annuity Reserve Account.

**(D) Health Insurance Account**

The Health Insurance Account is credited with contributions from the Commonwealth and the employers for Premium Assistance. Effective January 1, 2002, under the provisions of Act 9 of 2001, participating eligible annuitants are entitled to receive premium assistance payments equal to the lesser of \$100 per month or their out-of-pocket monthly health insurance premium. The Health Insurance Account pays all administrative expenses necessary to operate the Premium Assistance.

**(E) Health Insurance Program Account**

The Health Insurance Program Account is credited with premiums from members of the HOP and from CMS. All benefits related to the HOP (premium payments to the

## Notes to Financial Statements (continued)

	(Dollar Amounts in Thousands)	
	2014	2013
<b>Pension:</b>		
State Accumulation Account	\$ (13,136,437)	\$ (13,758,928)
Members' Savings Account	13,554,229	13,089,342
Annuity Reserve Account	52,562,323	49,685,147
	<u>\$ 52,980,115</u>	<u>\$ 49,015,561</u>
<b>Postemployment Healthcare:</b>		
Health Insurance Account	\$ 112,060	\$ 100,349
Health Insurance Program Account	169,749	159,787
	<u>\$ 281,809</u>	<u>\$ 260,136</u>

insurance companies and self-funded benefits) are paid from this account. The Health Insurance Program Account pays all administrative expenses necessary to operate the HOP.

## 4. Investments

### (A) Summary of Investments

The Board has the responsibility to invest and reinvest available funds of the System in accordance with the guidelines and limitations set forth in the Code and other applicable state law. The Board accomplishes the daily management of the System's investments through investment advisors who act as agents for the System and through internal investment managers.

The Board invests the funds of the System using the Prudent Investor Standard, as articulated in the Code, which means "the exercise of that degree of judgment, skill and care under the circumstances then prevailing which persons of prudence, discretion and intelligence who are familiar with such matters exercise in the management of their own affairs not in regard to speculation, but in regard to the permanent disposition of the fund, considering the probable income to be derived therefrom as well as the probable safety of their capital." The Board has adopted its 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. See the summary of investments table on the following page.

### (B) Deposit and Investment Risk Disclosures

#### i. Deposits

Custodial credit risk for deposits is the risk that, in the event of a financial institution failure, the System would not be able to recover the value of the deposits. The Commonwealth's Treasury Department is the custodian of

the System's funds. Commonwealth Treasury Department deposits must be held in insured depositories approved by the Commonwealth's Board of Finance and Revenue and must be fully collateralized.

The System, through its third party administrator, maintains certain bank deposits for the operation of its voluntary HOP. These deposits are not required to be collateralized by statute or policy. These deposits totaled \$98,774,000 and \$87,258,000 at June 30, 2014 and 2013, respectively, and are under the custody of M&T Bank which has an A- rating by Standard and Poor's (S&P) and an A3 rating by Moody's Investor Services (Moody's).

#### ii. Investment Risks

The System's investments, including derivatives and other similar investments, may be subject to various risks. Among these risks are concentration of credit risk, custodial credit risk, credit risk, interest rate risk, and foreign currency risk. The policies addressing each one of these risks, discussed in more detail below, are contained within the Investment Policy Statement, Objectives, and Guidelines reviewed and approved annually by the Board. Due to the level of risk associated with certain investments, it is possible that changes in the values of investments may occur in the near term and that such changes could materially affect the amounts reported in the Statements of Plan Net Position.

##### (a) Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the System's investment in a single issuer. As of June 30, 2014 and 2013 the System had no single issuer that exceeded 5% of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments were excluded.

##### (b) Custodial Credit Risk

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. 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 a very minimal level of custodial credit risk. The remaining investments, which do not have securities that are used as evidence of the investment, are primarily in collective

**Notes to Financial Statements (continued)**

A summary of the fair value of investments at June 30, 2014 and 2013 follows:

	(Dollar Amounts in Thousands)	
	2014	2013
<b>Pension investments:</b>		
<b>Short-term:</b>		
PSERS Short-Term Investment Fund	\$ 3,730,820	\$ 2,267,954
Other domestic short-term	216,570	606,776
International short-term	132,296	129,142
	<u>4,079,686</u>	<u>3,003,872</u>
<b>Fixed income:</b>		
Domestic asset-backed and mortgage-backed securities	1,739,734	1,871,421
U.S. government and agency obligations	1,523,266	1,344,866
Domestic corporate and taxable municipal bonds	1,103,634	1,378,989
International fixed income	1,165,580	1,233,142
	<u>5,532,214</u>	<u>5,828,418</u>
<b>Common and preferred stock:</b>		
Domestic common and preferred stock	6,675,218	5,634,776
International common and preferred stock	4,176,239	4,127,751
	<u>10,851,457</u>	<u>9,762,527</u>
<b>Collective trust funds</b>	<u>11,795,390</u>	<u>11,280,497</u>
<b>Real estate:</b>		
Equity real estate	6,944,983	6,526,261
Directly-owned real estate	285,510	271,274
	<u>7,230,493</u>	<u>6,797,535</u>
<b>Alternative investments:</b>		
Private equity	8,748,284	8,380,952
Private debt	3,471,149	3,399,037
Venture capital	967,932	843,302
	<u>13,187,365</u>	<u>12,623,291</u>
<b>Pension investments at fair value</b>	<u>\$ 52,676,605</u>	<u>\$ 49,296,140</u>
<hr/> <hr/>		
<b>Postemployment healthcare investments:</b>		
<b>Premium Assistance:</b>		
PSERS Short-Term Investment Fund	\$ 53,052	\$ 42,994
Other domestic short-term	11,047	19,583
	<u>64,099</u>	<u>62,577</u>
<b>Health Options Program:</b>		
PSERS Short-Term Investment Fund	88,629	88,432
Other domestic short-term	98,774	87,258
	<u>187,403</u>	<u>175,690</u>
<b>Postemployment healthcare investments at fair value</b>	<u>\$ 251,502</u>	<u>\$ 238,267</u>

**Notes to Financial Statements (continued)**

trust funds and limited partnerships, which include real estate and alternative investments.

**(c) Credit Risk**

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 organizations (NRSRO) such as Fitch Investor Services (Fitch), Moody's, and S&P. Annually, the Board establishes an asset allocation plan. This plan manages the overall credit risk of the fixed income asset class through a clearly defined long-term asset allocation policy. This policy establishes a long-term target allocation of the fixed income asset class at 23.0% of the investment portfolio. The fixed income target allocation consists of:

- An allocation of 5.0% of the portfolio has been made to the U.S. core plus segment of the fixed income asset class benchmarked to the Barclays Capital U.S. Aggregate Index. The U.S. core plus allocation is composed of primarily investment grade, relatively liquid, public domestic bonds with an overall weighted-average NRSRO credit rating of A or better.
- An allocation of 6.0% of the portfolio has been made to the high yield segment of the fixed income asset class benchmarked to the Barclays Capital U.S. High Yield Index. The high yield allocation is composed of less liquid public non-investment grade fixed income securities with an overall weighted-average NRSRO credit rating of B- or better.
- An allocation of 6.0% of the portfolio has been made to the Treasury Inflation-Protected Securities (TIPS) segment of the fixed income asset class benchmarked to the Barclays Capital U.S. TIPS Index and composed of primarily government issued TIPS with an overall weighted-average NRSRO credit rating of AA or better. The portfolio manager is permitted to leverage the portfolio using TIPS total return swaps up to 3:1.
- An allocation of 1.0% of the portfolio has been made to the non-U.S. developed markets fixed income asset class benchmarked to the Barclays Capital Global Aggregate GDP-weighted Developed Market ex-U.S. (Unhedged) Index composed of primarily investment grade, relatively liquid non-U.S. public bonds with an overall weighted-average NRSRO credit rating of A or better.
- An allocation of 2.0% of the portfolio has been made to the emerging markets fixed income asset class benchmarked to the Barclays Capital EM Local Currency-Government-MV Weighted (Unhedged)

-10% Country Cap Index composed of primarily investment grade, relatively liquid non-U.S. public bonds with an overall weighted-average NRSRO credit rating of BB- or better.

- An allocation of 3.0% of the portfolio has been made to cash benchmarked to the Merrill Lynch U.S. Treasury Bill 0-3 Months Index composed of primarily investment grade, relatively liquid U.S. and non-U.S. public bonds with an overall weighted-average NRSRO credit rating of AA or better.

The following table discloses aggregate market value by credit quality rating category. Many securities have ratings from more than one NRSRO and sometimes those ratings differ from one NRSRO to another. The data listed below uses the rating (expressed as S&P equivalent) available from Fitch, Moody's and/or S&P that indicates the lowest credit quality at June 30, 2014 and 2013.

Quality Rating	(Dollar Amounts in Thousands)	
	2014 Fair Value	2013 Fair Value
AAA	\$ 533,518	\$ 462,587
AA	613,511	732,914
A	460,003	501,547
BBB	648,371	773,066
BB and Below	362,024	901,324
NR*	13,249,826	10,777,373
<b>Total Exposed to Credit Risk</b>	<b>15,867,253</b>	<b>14,148,811</b>
<b>US Government Guaranteed**</b>	<b>2,189,602</b>	<b>2,572,807</b>
<b>Total Fixed Income and Short-Term Investments</b>	<b>\$ 18,056,855</b>	<b>\$ 16,721,618</b>

\* Not Rated securities include \$8,194,002 and \$7,651,061 in collective trust funds at June 30, 2014 and 2013 respectively.

\*\* Comprised of U.S. government and agency obligations explicitly guaranteed by the U.S. government and not considered to have credit risk.

For derivatives exposed to credit risk, the table below presents aggregate market value by the least favorable credit rating provided by NRSROs at June 30, 2014 and 2013.

Quality Rating	(Dollar Amounts in Thousands)	
	2014 Fair Value	2013 Fair Value
A	\$ 87,881	\$ (93,228)
<b>Total Swaps-Total Return</b>	<b>\$ 87,881</b>	<b>\$ (93,228)</b>

## Notes to Financial Statements (continued)

At June 30, 2014 and 2013, the System's fixed income portfolio had the following option-adjusted durations by fixed income sector:

Investment Type	(Dollar Amounts in Thousands)			
	2014		2013	
	Option-Adjusted Duration	Fair Value	Option-Adjusted Duration	Fair Value
Domestic asset-backed and mortgage-backed securities	1.3	\$ 1,739,734	1.8	\$ 1,871,421
U.S. government and agency obligations	7.6	1,523,266	8.6	1,344,866
Domestic corporate and taxable municipal bonds	3.3	1,103,634	3.6	1,378,989
International fixed income	5.3	1,165,580	5.4	1,233,142
Collective trust funds	4.1	8,194,002	4.0	7,651,061
PSERS Short-Term Investment Fund	0.1	3,872,501	0.1	2,399,380
<b>Total</b>	3.3*	<b>\$ 17,598,717</b>	3.6*	<b>\$ 15,878,859</b>

\* Fixed income investment managers enter into futures contracts to adjust the durations of their portfolios as a whole rather than any particular investment type within the portfolio. In total, the futures contracts have adjusted PSERS' total portfolio duration upward by 0.1 at June 30, 2014 and 2013. The total portfolio option-adjusted duration is calculated by weighting each investment type by fair value.

**(d) Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of a fixed income investment. The System manages its interest rate risk by diversifying the fixed income portfolio and maintaining the fixed income portfolio at a Board-approved effective duration range of the benchmark index.

Duration is a measure of the approximate sensitivity of a bond's value to interest rate changes. The higher the duration, the greater the changes in fair value when interest rates change. For example, a duration of 4.0 would mean that, given a 100-basis point change up/down in rates, a bond's price would move down/up approximately 4.0%. PSERS measures interest rate risk using option-adjusted duration, which recognizes the fact that yield changes may change the expected cash flows due to embedded options.

**(e) Foreign Currency Risk**

Foreign currency risk is the risk that fluctuations 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 non-U.S. markets. Investment managers in non-U.S. equity and global fixed income may hedge their non-U.S. foreign currency exposure back to U.S. dollars. During FY 2014, the System adopted an 8% total fund-level currency hedge on foreign currency exposure to developed market currencies which include, but are not limited to, the Australian dollar, Swiss franc, Euro, British pound sterling, Hong Kong dollar, and Japanese yen.

At June 30, 2014 and 2013, the System had foreign currency exposures for its derivatives (except for foreign exchange contracts which are included in Note 5) as presented in the table at the bottom of this page.

Currency	(Dollar Amounts in Thousands)	
	2014	2013
	Notional Value	Notional Value
Japanese yen	\$ 501,484	\$ 65,407
Euro	144,193	74,402
British pound sterling	118,565	83,290
Canadian dollar	40,219	29,289
Australian dollar	29,941	22,700
Hong Kong dollar	1,640	267
<b>Total Futures Contracts and Total Return Swaps</b>	<b>\$ 836,042</b>	<b>\$ 275,355</b>

## Notes to Financial Statements (continued)

Non-U.S. currency exposures at June 30, 2014 and 2013:

<b>2014</b>						
(Dollar Amounts in Thousands)						
Currency	Equity	Fixed Income	Alternative Investments & Real Estate	Short-Term*	Currency Hedge	Total Fair Value
Euro	\$ 676,095	\$ 211,282	\$ 2,991,462	\$ 50,951	\$ (1,941,107)	\$ 1,988,683
British pound sterling	702,457	54,218	56,465	51,156	49,029	913,325
Canadian dollar	270,360	27,266	48	6,681	(87,043)	217,312
Japanese yen	629,041	57,363	-	46,142	(535,133)	197,413
Australian dollar	213,541	20,878	-	5,992	(60,118)	180,293
South Korean won	114,168	43,328	-	542	2,719	160,757
Hong Kong dollar	144,030	-	-	1,806	177	146,013
Swedish krona	128,351	2,572	-	154	(9,108)	121,969
Taiwan new dollar	100,911	-	-	587	(386)	101,112
Other non-U.S. currencies	759,979	469,532	-	20,031	(180,847)	1,068,695
<b>Total</b>	<b>\$ 3,738,933</b>	<b>\$ 886,439</b>	<b>\$ 3,047,975</b>	<b>\$ 184,042</b>	<b>(2,761,817)</b>	<b>\$ 5,095,572</b>

<b>2013</b>						
(Dollar Amounts in Thousands)						
Currency	Equity	Fixed Income	Alternative Investments & Real Estate	Short-Term*	Currency Hedge	Total Fair Value
Euro	\$ 555,685	\$ 217,309	\$ 2,697,145	\$ 70,839	\$ (97,569)	\$ 3,443,409
British pound sterling	656,998	41,197	29,062	39,252	(36,194)	730,315
Japanese yen	641,692	64,537	-	45,570	(55,216)	696,583
Canadian dollar	246,348	21,888	47	282	7,359	275,924
Hong Kong dollar	244,622	-	-	533	(456)	244,699
South Korean won	100,066	44,102	-	(222)	255	144,201
Swiss franc	191,796	-	-	2,442	(50,700)	143,538
Brazil real	65,173	67,787	-	(685)	394	132,669
Swedish krona	100,390	170	-	(40)	8,697	109,217
South African rand	74,211	31,740	-	54	318	106,323
Taiwan new dollar	103,916	-	-	2,377	(184)	106,109
Mexican new peso	38,304	68,633	-	459	(3,084)	104,312
Other non-U.S. currencies	661,058	320,349	-	21,223	(183,047)	819,583
<b>Total</b>	<b>\$ 3,680,259</b>	<b>\$ 877,712</b>	<b>\$ 2,726,254</b>	<b>\$ 182,084</b>	<b>(409,427)</b>	<b>\$ 7,056,882</b>

\* Includes investment receivables and payables

**Notes to Financial Statements (continued)**

**(C) Securities Lending**

In accordance with a contract between the Commonwealth and its custodial agent, the System participates in a securities lending program. Under this program, the custodian, acting as the lending agent, loans securities (equities, fixed income and money market instruments) to independent brokers and dealers in exchange for collateral in an amount not less than 102% of the fair value of any securities loaned except for non-U.S. corporations for which 105% of the fair value is required. For Euro fixed income debt issues, for which the Commonwealth receives Euros as collateral and international fixed income debt issues denominated in U.S. dollars, the collateral required to be exchanged is in an amount not less than 102% of the fair value of any securities loaned. Collateral is marked-to-market daily. If the fair value of the collateral held falls below the minimum guidelines for securities loaned, additional collateral is obtained. In lieu of certain approved securities or cash, the borrower may deliver to the lending agent irrevocable bank letters of credit as collateral. If the collateral obtained consists in whole or in part of cash, the lending agent may use or invest the cash in accordance with reinvestment guidelines approved by the System.

As of June 30, 2014 and 2013, the System had no credit risk exposure to borrowers because the amounts the System owed the borrowers exceeded the amounts the borrowers owed the System. Under the securities lending program, the lending agent provides indemnification to the Commonwealth if the same borrowers fail to return the underlying securities (and the collateral is inadequate to replace the loaned securities) or fail to pay income distributions on them. There were no losses during the fiscal years ended June 30, 2014 and 2013, resulting from a default of the borrowers or the lending agent.

All securities loans can be terminated on demand by either the System or the borrower, although the average term of the loan is one day. There were no term loans as of June 30, 2014 and 2013.

Cash collateral is invested in one of two short-term collateral investment pools, the first of which is denominated in U.S. dollars and the second in Euros. Each collateral investment pool is managed by the lending agent, is segregated from all other clients of the lending agent, and is not subject to custodial credit risk. The System's income from securities lending represents its pro-rata share from participating in the program. The weighted-average maturity of the investments in the pool was one-day at June 30, 2014 and 2013. During the fiscal years ended June 30, 2014 and 2013, the mismatch between the maturities of the investments made with cash collateral and the maturities of the securities loans may have posed some interest rate risk to the System. The System

cannot pledge or sell collateral securities received unless the borrower defaults. In the event of a default, the lending agent may use the collateral to replace the loaned securities.

As of June 30, 2014, the fair value of loaned securities was \$2,305,109,000, which includes \$1,722,457,000 of loaned securities which are collateralized by securities and irrevocable letters of credit that are not included in the Statements of Plan Net Position. The fair value of the associated collateral was \$2,476,587,000 of which \$596,936,000 was cash. As of June 30, 2013, the fair value of loaned securities was \$2,394,222,000, which includes \$1,802,924,000 of loaned securities which are collateralized by securities and irrevocable letters of credit that are not included in the Statements of Plan Net Position. The fair value of the associated collateral was \$2,556,501,000 of which \$615,159,000 was cash.

**5. Derivative and Other Similar Investments**

The System enters into a variety of financial contracts, which include options and futures. The System also enters into foreign exchange positions, such as forward and spot contracts to obtain or hedge foreign currency exposure; swap agreements to gain exposure to certain sectors of the equity and fixed income markets; collateralized mortgage obligations (CMOs); other forward contracts, and U.S. Treasury strips. The System is not a dealer, but an end-user of these instruments. The contracts are used primarily to enhance performance and reduce the volatility of the portfolio. The System is exposed to credit risk in the event of non-performance by counterparties to financial instruments. The System generally enters into transactions only with high quality institutions. Legal risk is mitigated through selection of executing brokers and review of all documentation. The System is exposed to market risk, the risk that future changes in market conditions may make an instrument less valuable. Exposure to market risk is managed in accordance with risk limits set by senior management, through buying or selling instruments or entering into offsetting positions.

The notional or contractual amounts of derivatives indicate the extent of the System's involvement in the various types and uses of derivative financial instruments and do not measure the System's exposure to credit or market risks and do not necessarily represent amounts exchanged by the parties. The amounts exchanged are determined by reference to the notional amounts and the other terms of the derivatives.

Futures contracts are contracts in which the buyer agrees to purchase and the seller agrees to make delivery of a specific financial instrument at a predetermined date and price. Gains and losses on futures contracts are settled daily based on a notional (underlying) principal value and do not

**Notes to Financial Statements (continued)**

involve an actual transfer of the specific instrument. Futures contracts are standardized and are traded on exchanges. The exchange assumes the risk that a counterparty will not pay and generally requires margin payments to minimize such risk. In addition, the System enters into short sales, sales of securities it does not presently own, to neutralize the market risk of certain equity positions. Initial margin requirements on futures contracts and collateral for short sales are provided by investment securities pledged as collateral and by cash held by various brokers. Although the System has the right to access individual pledged securities, it must maintain the amount pledged by substituting other securities for those accessed. The value of securities pledged and the amount of cash held at June 30, 2014 and 2013 represent a restriction on the amount of assets available as of year-end for other purposes.

Option contracts provide the option purchaser with the right, but not the obligation, to buy or sell the underlying security at a set price during a period or at a specified date. The option writer is obligated to buy or sell the underlying security if the option purchaser chooses to exercise the option. The System generally uses exchange listed currency, index, stock, and futures options. The System held no option positions at June 30, 2014. The fair value of option

contracts of \$(76,000) at June 30, 2013 is included in the Statements of Plan Net Position.

Foreign exchange contracts involve an agreement to exchange the currency of one country for the currency of another country at an agreed-upon price and settlement date. To reduce the risk of counterparty non-performance, the investment managers generally enter into these contracts with institutions regarded as meeting high standards of credit worthiness. The contracts reported below primarily include forwards. The \$5,644,996,000 of foreign currency contracts outstanding at June 30, 2014 consist of “buy” contracts, which represent the U.S. dollar equivalents of commitments to purchase foreign currencies of \$1,465,116,000 and “sell” contracts, which represent U.S. dollar equivalents of commitments to sell foreign currencies of \$4,179,880,000. The \$1,834,065,000 of foreign currency contracts outstanding at June 30, 2013 consist of “buy” contracts of \$718,075,000 and “sell” contracts of \$1,115,990,000. The unrealized gain (loss) on contracts of \$(32,195,000) and \$1,920,000 at June 30, 2014 and 2013, respectively, is included in the Statements of Plan Net Position and represents the fair value of the contracts.

The table presented below summarizes the aggregate notional or contractual amounts for the System’s derivative financial instruments at June 30, 2014 and 2013.

	(Dollar Amounts in Thousands)	
	2014	2013
<b>Futures contracts - long:</b>		
Treasury futures	\$ 1,724,904	\$ 631,594
Eurodollar futures	-	3,719
U.S. equity futures	605,732	556,477
Non-U.S. equity futures	748,268	238,147
Commodity futures	815,786	1,118,598
Non-U.S. bond futures	102,093	29,059
<b>Futures contracts - short:</b>		
Treasury futures	105,342	147,528
Eurodollar futures	-	14,200
U.S. equity futures	94,272	-
Commodity futures	26,553	29,446
Non-U.S. bond futures	7,087	11,425
Foreign exchange forward and spot contracts, gross	5,644,996	1,834,065
Options - calls purchased	-	3,952
Options - puts purchased	-	23,684
Options - puts sold	-	27,792
Swaps - total return type	3,203,881	1,686,905



**Notes to Financial Statements (continued)**

Swap agreements provide for periodic payments at predetermined future dates between parties based on the change in value of underlying securities, indexes, or interest rates. During the year ended June 30, 2014 and 2013, the System entered into total return type swaps. Under the total return type swap arrangements, the System receives the net return of certain equity securities or indexes in exchange for a short-term rate minus a spread or a predetermined fixed charge. The receivable (payable) on the total return type swap contracts of \$87,881,000 and \$(93,228,000) at June 30, 2014 and 2013, respectively, is included in the Statements of Plan Net Position and represents the fair value of the contracts. The contracts have varying maturity dates ranging from July 1, 2014 to July 2, 2015.

Through certain collective trust funds, the System also indirectly holds various derivative financial instruments. The collective trust funds invest in futures and options thereon; forward foreign currency contracts; options; interest rate, currency, equity, index, and total return swaps; interest-only strips; and CMOs, to enhance the performance and/or reduce the volatility of their portfolios.

The System also invests in mortgage-backed securities (MBS) such as CMOs and MBS forwards to maximize yields. These securities are sensitive to prepayments of mortgages, which may result from a drop in interest rates. The MBS forwards are subject to credit risk in the event of nonperformance by counterparties. The fair value of CMOs at June 30, 2014 and 2013 is \$990,794,000 and \$1,318,695,000, respectively.

The System invests in U.S. Treasury strips which essentially act as zero coupon bonds and are subject to market volatility from a rise or drop in interest rates.

The fair values of derivative instruments outstanding at June 30, 2014 and 2013 are classified by type and by the changes in fair value of the derivative instrument in the table below.

(Dollar Amounts in Thousands)

Investment Derivative Type	Change in Fair Value Gain/(Loss) FY 2014		Fair Value at June 30, 2014	
	Classification	Amount	Classification	Amount
Futures	Investment income	\$ 21,549	Receivable/(Payable)	\$ 21,549
Total return type swaps	Investment income	87,881	Receivable/(Payable)	87,881
Foreign exchange contracts	Investment income	(32,195)	Receivable/(Payable)	(32,195)
<b>Total</b>		<b>\$ 77,235</b>		<b>\$ 77,235</b>

Investment Derivative Type	Change in Fair Value Gain/(Loss) FY 2013		Fair Value at June 30, 2013	
	Classification	Amount	Classification	Amount
Futures	Investment income	\$ (93,969)	Receivable/(Payable)	\$ (93,969)
Total return type swaps	Investment income	(93,228)	Receivable/(Payable)	(93,228)
Options	Investment income	(76)	Investment	(76)
Foreign exchange contracts	Investment income	1,920	Receivable/(Payable)	1,920
<b>Total</b>		<b>\$ (185,353)</b>		<b>\$ (185,353)</b>

**Notes to Financial Statements (continued)**

The following table summarizes the System's foreign exchange contracts by currency at June 30, 2014 and 2013:

<b>2014</b>				
(Dollar Amounts in Thousands)				
<b>Currency</b>	<b>Buys</b>	<b>Unrealized Gain/(Loss)</b>	<b>Sells</b>	<b>Unrealized Gain/(Loss)</b>
British pound sterling	\$ 487,597	\$ 3,772	\$ 438,568	\$ (7,071)
Japanese yen	249,459	750	784,593	(7,534)
Euro	235,252	1,433	2,144,922	(15,155)
Australian dollar	194,925	1,508	255,045	(4,251)
Canadian dollar	128,865	1,836	215,908	(3,933)
New Zealand dollar	32,404	70	54,237	(839)
Swedish krona	28,814	86	25,512	(56)
Norwegian krone	24,614	(417)	17,420	456
Swiss franc	22,514	(2)	214,648	(2,716)
Philippine dollar	14,670	69	1,990	(7)
Brazilian real	8,287	38	10,875	(130)
Polish zloty	5,944	8	5,960	(48)
Malaysian ringgit	5,483	47	2,003	1
Other non-US currencies	26,288	(101)	8,199	(9)
<b>Total</b>	<b>\$ 1,465,116</b>	<b>\$ 9,097</b>	<b>\$ 4,179,880</b>	<b>\$ (41,292)</b>

<b>2013</b>				
(Dollar Amounts in Thousands)				
<b>Currency</b>	<b>Buys</b>	<b>Unrealized Gain/(Loss)</b>	<b>Sells</b>	<b>Unrealized Gain/(Loss)</b>
Euro	\$ 231,677	\$ (1,154)	\$ 324,089	\$ 3,676
Japanese yen	121,855	(900)	177,071	671
British pound sterling	117,687	(985)	153,881	1,718
Canadian dollar	78,764	(1,153)	71,405	871
Australian dollar	59,836	(1,862)	262,798	1,889
Swedish krona	21,779	(200)	9,918	118
Norwegian krone	18,645	(514)	14,183	98
New Zealand dollar	18,031	(547)	16,367	236
Philippine dollar	14,675	(683)	-	-
Swiss franc	8,146	110	58,846	833
Mexican new peso	6,064	(279)	9,148	(192)
Singapore dollar	4,838	(47)	435	(2)
Turkish lira	3,398	(73)	3,099	56
Other non-US currencies	12,680	11	14,750	224
<b>Total</b>	<b>\$ 718,075</b>	<b>\$ (8,276)</b>	<b>\$ 1,115,990</b>	<b>\$ 10,196</b>

Notes to Financial Statements (continued)

6. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at June 30, 2014 were as follows:

(Dollar amounts in thousands)	
Total pension liability	\$ 92,560,832
Plan fiduciary net position	(52,980,115)
Employer net pension liability	\$ 39,580,717
Plan fiduciary net position as a percentage of the total pension liability	57.24%

**Actuarial Assumptions**

The total pension liability as of June 30, 2014 was determined by rolling forward the System’s total pension liability as of June 30, 2013 to June 30, 2014 using the following actuarial assumptions, applied to all periods included in the measurement:

- Actuarial cost method - Entry Age Normal -level % of pay
- Investment return - 7.50%, includes inflation at 3.00%
- Salary increases - Effective average of 5.50%, which reflects an allowance for inflation of 3.00%, real wage growth of 1%, and merit or seniority increases of 1.50%
- Mortality rates were based on the RP-2000 Combined Healthy Annuitant Tables (male and female) with age set back 3 years for both males and females. For disabled annuitants the RP-2000 Combined Disabled Tables (male and female) with age set back 7 years for males and 3 years for females.

**Investments**

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

The pension plan’s policy in regard to the allocation of invested plan assets is established and may be amended by the Board. Plan assets are managed with a long-term objective of achieving and maintaining a fully funded status for the benefits provided through the pension.

Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Public markets global equity	19%	5.0%
Private markets (equity)	21%	6.5%
Private real estate	13%	4.7%
Global fixed income	8%	2.0%
U.S. long treasuries	3%	1.4%
TIPS	12%	1.2%
High yield bonds	6%	1.7%
Cash	3%	0.9%
Absolute return	10%	4.8%
Risk parity	5%	3.9%
MLPs/Infrastructure	3%	5.3%
Commodities	6%	3.3%
Financing (LIBOR)	(9%)	1.1%
	100%	

The above was the Board’s adopted asset allocation policy and best estimates of geometric real rates of return for each major asset class as of June 30, 2014.

For the year ended June 30, 2014, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 14.98%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

**Discount Rate**

The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from employers will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

**Sensitivity of the Net Pension Liability**

The following presents the net pension liability, calculated using the discount rate of 7.50%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower (6.50%) or 1-percentage-point higher (8.50%) than the current rate:

## Notes to Financial Statements (continued)

~~~~~  
(Dollar amounts in thousands)

|                       | Current       |               |               |
|-----------------------|---------------|---------------|---------------|
|                       | 1% Decrease   | Discount Rate | 1% Increase   |
|                       | 6.50%         | 7.50%         | 8.50%         |
| Net pension liability | \$ 49,371,459 | \$ 39,580,717 | \$ 31,222,108 |

~~~~~

### 7. Pension Plan for Employees of the System

The System contributes to the Commonwealth's State Employees' Retirement System (SERS), a cost-sharing multiple-employer defined benefit pension plan. SERS provides retirement, death, and disability benefits to plan members and beneficiaries according to Commonwealth statute. SERS issues a publicly available financial report which can be downloaded from SERS' website at [www.sers.state.pa.us](http://www.sers.state.pa.us).

The contribution requirements of plan members and the System are mandated by Commonwealth statute. Most SERS plan members are required to contribute 5%, 6.25%, or 9.37% of their annual covered payroll depending upon service class. The System is required to contribute at an actuarially determined rate.

The rates applied to annual covered payroll were 15.12% at June 30, 2014, 10.51% at June 30, 2013, and 6.99% at June 30, 2012. The System's contributions to SERS for the years ended June 30, 2014, 2013 and 2012 were \$2,838,000, \$2,375,000, and \$1,363,000 respectively, which were equal to the required contributions each year.

### 8. Postemployment Healthcare Plan for Employees of the System

The System participates in the Commonwealth's 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 Commonwealth's Office of Administration (OA), in its sole discretion, determines available REHP benefits on an ongoing basis. The Pennsylvania Employees Benefit Trust Fund (PEBTF) is a third-party administrator for the REHP under the provisions of an Administration Agreement between OA and PEBTF.

Employer costs for retiree healthcare benefits are charged as a component of payroll expenditures on a 'pay-as-you-go' basis. REHP funding is arranged between OA and the Governor's Budget Office. FY 2014 employer costs were charged at the rate of \$305/employee/bi-weekly pay period. Plan members who retired after June 30, 2005 contribute to the plan based on a percentage of their final annual gross base salary at the time of retirement. Plan member

contribution rates vary based on their REHP enrollment date.

In September 2013, the Commonwealth released an Actuarial Valuation of its Post-Retirement Medical Plan with calculations made as of July 1, 2013 using census data collected as of December 2012 and health care claims costs for calendar 2012. This valuation provided Other Postemployment Benefits (OPEB) reporting that was used for both FY 2012 and FY 2013. For FY 2013, the valuation indicated overall Annual OPEB Cost (AOC) of \$869.1 million with the System's allocated AOC of \$4.0 million. Based on the aggregate REHP qualifying contributions for FY 2013, the net OPEB liability for the System was \$1.2 million for that fiscal year. For FY 2014, the valuation indicated overall AOC of \$898.3 million with the System's allocated AOC of \$4.1 million. Based on the aggregate REHP qualifying contributions for FY 2014, the net OPEB liability for the System was \$0.9 million for that fiscal year. The ARC/AOCs and OPEB for fiscal years 2014, 2013, and 2012 are illustrated in the following table:

~~~~~  
(Dollar Amounts in Thousands)

| Fiscal Year | Commonwealth ARC/AOC | PSERS' ARC/AOC | PSERS' Net OPEB |
|-------------|----------------------|----------------|-----------------|
| 2014        | \$ 898,330           | \$ 4,099       | \$ 948          |
| 2013        | 869,100              | 3,966          | 1,166           |
| 2012        | 870,200              | 3,133          | 871             |

~~~~~

### 9. Litigation and Contingencies

The System is subject to various threatened and pending lawsuits. These lawsuits include issues related to benefit calculations and eligibility. It is the opinion of management that the ultimate liability arising from such threatened and pending litigation will not have a material effect on the financial position of the System. The System is exposed to various other liabilities and risks related to fiduciary responsibilities of directors and officers.

### 10. Commitments

As of June 30, 2014, PSERS had commitments for the future purchase of investments in alternative investments of \$6.8 billion and real estate of \$2.1 billion.

### 11. Subsequent Events

The System has performed an evaluation of subsequent events through September 16, 2014, the date the basic financial statements were available to be issued. No material events were identified by the System.

**Required Supplementary Schedule 1**  
**Schedule of Changes in the Employer Net Pension Liability**  
**(Unaudited – See Accompanying Auditor’s Report)**  
(Dollar Amounts in Thousands)

	2014
Total pension liability	
Service cost	\$ 2,139,037
Interest	6,523,484
Changes of benefit terms	-
Differences between expected and actual experience	-
Changes of assumptions	-
Benefit payments	(6,053,505)
Net change in total pension liability	2,609,016
Total pension liability - beginning	89,951,816
Total pension liability - ending (a)	\$ 92,560,832
Plan fiduciary net position	
Contributions - employer	\$ 1,992,084
Contributions - member	966,926
Net investment income	7,097,761
Benefit payments	(6,053,505)
Administrative expense	(38,712)
Other	-
Net Change in plan fiduciary net position	3,964,554
Plan fiduciary net position - beginning	49,015,561
Plan fiduciary net position - ending (b)	\$ 52,980,115
Employer net pension liability - ending (a) - (b)	\$ 39,580,717

**Required Supplementary Schedule 2**  
**Schedule of Employer Net Pension Liability**  
**(Unaudited – See Accompanying Auditor’s Report)**  
(Dollar Amounts in Thousands)

	2014
Total pension liability	\$ 92,560,832
Plan fiduciary net position	(52,980,115)
Employer net pension liability	\$ 39,580,717
Plan fiduciary net position as a percentage of the total pension liability	57.24%
Covered-employee payroll	\$ 12,760,785
Employer net pension liability as a percentage of covered-employee payroll	310.17%

**Required Supplementary Schedule 3**  
**Schedule of Employer Contributions**  
**(Unaudited – See Accompanying Auditor’s Report)**  
(Dollar Amounts in Thousands)

Pension	
	2014
Actuarially determined contribution	\$ 2,965,715
Contractually required contribution	1,992,084
Contributions in relation to the actuarially determined contribution	1,992,084
Contribution deficiency	\$ 973,631
Covered-employee payroll	\$ 12,760,785
Contributions as a percentage of covered-employee payroll	15.61%

Premium Assistance			
Year Ended June 30	Annual Required Contributions	Actual Employer Contributions	Percentage Contributed
2014	\$ 121,260	\$ 117,471	97%
2013	113,016	107,993	96%
2012	102,104	80,936	79%

**Required Supplementary Schedule 4  
Schedule of Investment Returns  
(Unaudited – See Accompanying Auditor’s Report)**

	2014
Annual money-weighted rate of return, net of investment expense	14.98%

**Required Supplementary Schedule 5  
Schedule of Funding Progress\*  
(Unaudited – See Accompanying Auditor’s Report)  
(Dollar Amounts in Millions)**

Premium Assistance							
Valuation as of June 30	(1) Actuarial Accrued Liabilities (AAL)	(2) Actuarial Value of Assets	(3) Unfunded Actuarial Accrued Liabilities UAAL (1) - (2)	(4) Ratio of Assets to AAL (2) / (1)	(5) Annualized Salaries	(6) UAAL as a Percentage of Covered Payroll (3) / (5)	
2013	\$ 1,385.0	\$ 100.3	\$ 1,284.7	7.2%	\$ 12,577.1	10.2%	
2012	1,364.7	93.8	1,270.9	6.9%	12,714.4	10.0%	
2011	1,339.4	111.3	1,228.2	8.3%	12,910.0	9.5%	
2010	1,162.2	116.8	1,045.4	10.1%	12,788.8	8.2%	

\* The amounts reported above in the Schedule of Funding Progress do not include assets or liabilities for the HOP.

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**Notes to Required Supplementary Information  
for the Year Ended June 30, 2014**

***Changes in benefit terms***

None

***Changes in assumptions***

None

***Method and assumptions used in calculations of actuarially determined contributions***

The actuarially determined contributions are calculated as of the June 30 preceding the fiscal year in which contributions are made. That is, the contribution calculated as of the June 30, 2013 actuarial valuation will be made during the fiscal year ended June 30, 2015. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

- Investment return - 7.50%, includes inflation at 3.00%
- Salary increases - Effective average of 5.50%, which reflects an allowance for inflation of 3.00%, real wage growth of 1%, and merit or seniority increases of 1.50%
- Benefit payments - no postretirement benefit increases assumed in the future
- Multiple decrement tables - mortality, vesting, retirement age, and withdrawal estimates are based upon tables provided by the actuary



**Supplementary Schedule 1**  
**Schedule of Operating Expenses**  
**Year Ended June 30, 2014**  
(Dollar Amounts in Thousands)

	<u>Administrative Expenses (1)</u>	<u>Investment Expenses (2)</u>	<u>Total</u>
<b>Personnel costs:</b>			
Salaries and wages	\$ 14,765	\$ 4,285	\$ 19,050
Social security contributions	1,115	254	1,369
Retirement contributions	2,220	649	2,869
Employees' insurance contributions	5,342	651	5,993
Other employee benefits	213	124	337
<b>Total personnel costs</b>	<b>23,655</b>	<b>5,963</b>	<b>29,618</b>
<b>Operating costs:</b>			
Investment managers' fees	-	463,400	463,400
Custodian fees	-	1,221	1,221
Specialized services	28,060	3,737	31,797
Rental of real estate, electricity	2,036	220	2,256
Consultant and legal fees	1,544	5,279	6,823
Treasury and other Commonwealth services	1,504	199	1,703
Postage	1,350	-	1,350
Contracted maintenance and repair services	1,147	-	1,147
Office supplies	168	8	176
Rental of equipment and software	3,819	442	4,261
Printing	199	-	199
Travel and training	154	23	177
Telecommunications	449	-	449
Equipment (non-capital assets)	113	-	113
Miscellaneous expenses	566	1,744	2,310
<b>Total operating costs</b>	<b>41,109</b>	<b>476,273</b>	<b>517,382</b>
<b>Other charges:</b>			
Depreciation	1,953	-	1,953
<b>Total other charges</b>	<b>1,953</b>	<b>-</b>	<b>1,953</b>
<b>Total operating expenses</b>	<b>\$ 66,717</b>	<b>\$ 482,236</b>	<b>\$ 548,953</b>

(1)Includes administrative expenses of \$2,030 related to Postemployment Healthcare Premium Assistance and \$25,975 related to Postemployment Healthcare Health Options Program for the fiscal year ended June 30, 2014.

(2)Includes investment expenses of \$95 related to Postemployment Healthcare Premium Assistance for fiscal year ended June 30, 2014 and does not include \$7,948 in capitalized broker commissions for the fiscal year ended June 30, 2014.

**Supplementary Schedule 2**  
**Summary of Investment Expenses\***  
**Year Ended June 30, 2014**  
(Dollar Amounts in Thousands)

	<b>Fees</b>
<b>External management:</b>	
Domestic equity	\$ 3,051
International equity	18,392
Fixed income	81,835
Real estate	73,926
Alternative investments	116,951
Absolute return	140,523
Commodities	11,334
Master limited partnership	11,133
Risk parity	6,255
<b>Total external management</b>	<b>463,400</b>
<b>Total internal management</b>	<b>12,336</b>
<b>Total investment management</b>	<b>475,736</b>
Custodian fees	1,221
Consultant and legal fees	5,279
<b>Total investment expenses</b>	<b>\$ 482,236</b>

\* External management fees classified on an asset allocation basis

**Supplementary Schedule 3**  
**Schedule of Payments to Non-Investment Consultants**  
**Year Ended June 30, 2014**  
(Dollar Amounts Greater than \$100,000)

<b>Consultant</b>	<b>Fees</b>	<b>Services Provided</b>
CoreSource Inc.	\$ 17,827,860	Postemployment healthcare benefits administration and claims adjudication
ViTech Systems Group Inc.	5,852,332	Pension administration system services
Rx Solutions, Inc.	4,548,820	Administration of postemployment healthcare benefits and prescription drug plan
The Segal Company, Inc.	2,579,589	Actuarial services and consulting for HOP and prescription drug plan
Independent Pharmaceutical Consultants, Inc.	513,149	Pharmacy benefit consulting services
Buck Consultants LLC	378,286	Pension benefit actuarial services

**Supplementary Schedule 4**  
**Schedule of Employer Contributions**  
**(Unaudited – See Accompanying Auditor’s Report)**  
(Dollar Amounts in Thousands)

<b>Pension</b>			
<b>Year Ended June 30</b>	<b>Annual Required Contributions</b>	<b>Actual Employer Contributions</b>	<b>Percentage Contributed</b>
2014	\$ 3,410,373	\$ 1,986,384	58%
2013	3,110,429	1,434,815	46%
2012	2,629,244	1,001,140	38%
2011	2,436,602	646,560	27%
2010	1,928,278	527,212	27%
2009	1,761,295	503,227	29%

The schedule above and information below is not required by current GASB standards. PSERS is voluntarily providing this supplemental information for historical perspective as PSERS transitions to GASB Statement No. 67.

The Board adopted all contribution rates as recommended by the Board’s actuary pursuant to the prevailing provisions of the Retirement Code for each year, with the exception of the year ended June 30, 2011. Act 46 required the Board to recertify the employer contribution rate from 8.22% to 5.64%, allocating 5% to the pension component and .64% to the premium assistance component.

### **Funding Status and Annual Required Contributions (ARC)**

As of June 30, 2013, the most recent actuarial valuation, the plan was 63.8% funded. The actuarial accrued liability for pension benefits was \$90.0 billion, and the actuarial value of pension assets was \$57.4 billion, resulting in an unfunded accrued liability of \$32.6 billion. The covered payroll of active members was \$12.6 billion and the ratio of the unfunded actuarial accrued liability to the covered payroll was 259.2%.

For fiscal year ended June 30, 2014, the ARC was \$3.4 billion. The actual employer contributions, net of purchase of service contributions, for fiscal year ended June 30, 2014 was \$2.0 billion resulting in a 58% contributed rate.

The Schedule of Funding Progress and the Schedule of Employer Contributions included as Required Supplementary Information following the notes to the financial statements provide multiyear presentations of funding status and ARC to illustrate their trends over time.

### **Actuarial Assumptions and Methods**

#### **(A) Funding Method**

For purposes of determining pension contributions under the PSERS Code, the entry-age normal actuarial cost method is used in determining benefit liabilities and normal cost. Act 120 modified the funding method. The outstanding balance of the unfunded accrued liability as of June 30, 2010 was re-amortized over a 24-year period with amortization payments based on level percentage of pay. Future valuation experience gains or losses, and changes in the unfunded accrued liability resulting from changes in actuarial assumptions and methods, are amortized over a 24-year period as a level percent of pay. Future increases in accrued liability enacted by legislation after June 30, 2010 will be funded over a 10-year period as a level percent of pay.

### **(B) Asset Valuation Method**

For actuarial purposes, Act 120 extended the asset smoothing from five years to ten years. Assets are valued using a ten-year moving market average value that will recognize the actuarial expected investment return immediately and spread the difference between actual and expected investment return beginning with fiscal year ended June 30, 2010 over a period of ten years (the averaging period is being phased-in from fiscal year 2006). Previously, PSERS recognized the actuarial expected return immediately and spread the difference between actual and expected investment return over a period of five years.

### **(C) Actuarial Assumptions**

Significant actuarial assumptions employed by the actuary for funding purposes as of June 30, 2013, the date of the most recent actuarial valuation, include:

- Investment return - 7.50%, includes inflation at 3.00%
- Salary increases - Effective average of 5.50%, which reflects an allowance for inflation of 3.00%, real wage growth of 1%, and merit or seniority increases of 1.50%
- Benefit payments - no postretirement benefit increases assumed in the future
- Multiple decrement tables - mortality, vesting, retirement age, and withdrawal estimates are based upon tables provided by the actuary

The System's actuarial liabilities are calculated separately for retirees and beneficiaries and for active and inactive members. The actuarial present value of benefits to be paid to retirees and beneficiaries currently receiving benefits and deferred survivor beneficiaries, whose benefits have been determined, is calculated using the assumptions noted above. The Annuity Reserve Account with interest credited thereon at an annual rate of 5.50% is compared to the actuarial accrued liability for the remaining lifetimes of the retirees and beneficiaries and any deficiency is then funded by a transfer from the State Accumulation Account.

The actuarial accrued liability for active and inactive members is calculated on the projected benefit basis using the entry-age normal actuarial cost method under which the present value of each member's expected benefit payable at retirement or death is determined. The assets of the Members' Savings Account, State Accumulation Account and the fair value adjustment are subtracted from this present value to arrive at the funded or unfunded actuarial accrued liability.

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COMMONWEALTH OF PENNSYLVANIA  
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

James H. Grossman Jr., CPA, CFA  
Chief Investment Officer

October 31, 2014

Dear Members of The PSERS Board of Trustees:

It is a privilege to present to you the Investment Section of the Comprehensive Annual Financial Report for the year ended June 30, 2014.

### Authority and Fiduciary Standard

The Board has the responsibility to invest funds of the System in accordance with guidelines and limitations set forth in the Code and other applicable state law. As fiduciaries, the members of the Board and Staff must act solely in the interests of the members of the System and for the exclusive benefit of the System's members. In performance of their duties, the members of the Board and Staff delegated with investment authority shall be held to the Prudent Investor Standard.

The Prudent Investor Standard, as articulated in the Code, means "the exercise of that degree of judgment, skill and care under the circumstances then prevailing which persons of prudence, discretion and intelligence who are familiar with such matters exercise in the management of their own affairs not in regard to speculation, but in regard to the permanent disposition of the fund, considering the probable income to be derived therefrom as well as the probable safety of their capital."

The Prudent Investor Standard requires a trustee to act prudently and with caution, discretion, loyalty, and care but does not restrict the assets in which the Board can invest. Under the Prudent Investor Standard, which recognizes modern portfolio theory, the Board's investment and management decisions with respect to individual assets shall be considered in the context of the portfolio as a whole and as part of an overall investment strategy, and not in isolation. No specific investment or course of action, taken alone, shall be considered inherently prudent or imprudent. This Standard recognizes the trade-off between risk and return.

### Policies and Objectives

The Board is responsible for the formulation of investment policies for the System. The overall investment objectives of the System are as follows:

**Return Objectives** – the System has a return objective of meeting or exceeding the targeted actuarial rate of return of 7.5% over the long-term. In addition, the Board has the following broad objectives:

1. The assets of the System shall be invested to maximize the returns for the level of risk taken; and,
2. The System shall strive to achieve a return that exceeds the Policy Index (the Policy Index is a custom benchmark, based on the Board-established asset allocation structure that seeks to generate a return that meets the actuarial rate of return assumption).

### Risk Objectives

1. The assets of the System shall be diversified to minimize the risk of losses within any one asset class, investment type, industry or sector distribution, maturity date, or geographic location. Failure to do so could impair the System's ability to achieve its funding and long-term investment goals and objectives; and,
2. The System's assets shall be invested so that the probability of investment losses (as measured by the Policy Index) in excess of 15% in any one year is no greater than 2.5% (or two standard deviations below the expected return).

To achieve these objectives, the Board meets during the first half of the calendar year to review the overall asset allocation plan and investment policies for the System. Implementation of investment policies is accomplished through the use

of external investment management firms who act as agents for the System and through the use of internal investment managers. The Board also retains various investment consultants to assist with the formulation and implementation of investment policies.

### Operations

The Board, via its Finance Committee, provides oversight of investment activities. The Finance Committee generally conducts seven meetings per year and may meet more frequently as needed. Investment Office staff, as well as external investment advisors, Investment Accounting staff, and Internal Audit staff, assist the Board in achieving investment objectives and monitoring compliance with investment policies. For the fiscal year ended June 30, 2014, Hewitt EnnisKnupp (HEK) served as the general investment consultant to assist the Board and Staff in formalizing investment objectives, establishing an asset allocation plan, conducting investment advisor searches, reviewing performance, and commenting on compliance with investment policies (Wilshire Associates served as the general investment consultant into November 2013). In addition, the Board utilized Aksia, LLC as an absolute return consultant, Courtland Partners, Ltd. as a real estate consultant, and Portfolio Advisors, LLC as an alternative investment consultant. Alternative investments generally consist of investments in private debt, private equity, and venture capital limited partnerships. Investment Office staff implement the investment decisions within the guidelines established in the Investment Policy Statement, Objectives and Guidelines regarding asset allocation, manager selection, security selection, and other objectives directed by the Board.

The Board employs both external investment management firms and internal investment managers to manage the investment portfolio of the System. At fiscal year-end, 39 external public market investment management firms were managing \$17.0 billion in assets of the System, \$15.2 billion in assets were managed by the System's internal investment managers, and the remaining \$20.7 billion in assets were managed by numerous alternative investment and real estate investment managers. The performance of each external investment management firm and each internal manager is monitored quarterly against a pre-established benchmark as well as the performance of the manager's peer group.

### Asset Allocation

The Board reviews the long-term asset allocation targets of the System during the first half of each calendar year. The Board will consult with its actuary, consultants, Investment Office staff, and other sources of information it deems appropriate in formulating the asset allocation plan. The level of risk assumed by the System is largely determined by the Board's strategic asset allocation plan. The Board, in determining its long-term asset allocation, takes the following factors into consideration:

- The System's investment time horizon;
- The demographics of the plan participants and beneficiaries;
- The cash flow requirements of the System;
- The actuarial assumptions approved by the Board;
- The funded status of the System;
- The employers' (Commonwealth and school districts) financial strength; and
- The Board's willingness and ability to take risk.

In establishing the asset allocation for the System, the Board considers capital market expectations for expected return, volatility, and asset class correlations as prepared by its general investment consultant. The current long-term, top-down asset allocation targets of the Board are discussed in the following paragraphs.

The current target allocation as of June 30, 2014 included an equity target allocation of 39.0% consisting of publicly traded stocks (18.0%) and private markets (21.0%). Specific publicly traded stock targets have been established for U.S. equity (9.0%) and non-U.S. equity (9.0%). Within the U.S. equity target, the portfolios are diversified between large, small, and micro capitalization investment mandates, and growth and value investment exposures. The non-U.S. equity exposure includes both developed and emerging markets portfolios as well as large and small capitalization investment mandates. The primary vehicle used to invest funds in private markets is the limited partnership. The partnerships are established by individual management groups that have been selected by the System for the purpose of investing in and managing private equity, venture capital, and unlisted subordinated debt positions on behalf of PSERS and other limited partners.



## Investment Section

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The fixed income target allocation of 23.0% consisted of investment grade exposure (6.0%), credit-related exposure (8.0%), inflation protected exposure (6.0%) and cash (3.0%). Investment grade exposure consisted of U.S. core fixed income (5.0%) and non-U.S. developed market fixed income (1.0%). Credit-related exposure consisted of high yield (6%) and emerging markets fixed income (2.0%). Inflation protected exposure consisted of leveraged Treasury Inflation-Protected Securities (TIPS) (6.0%) which provides approximately two times exposure to TIPS. Within these categories, all sectors of the fixed income market are represented. The high yield exposure is a mix of publicly traded high yield securities and private debt. The System also gains incremental fixed income exposure through U.S. Long Treasury securities funded primarily through leverage equating to approximately 3.0% of the System's assets (not included in the fixed income target allocation). The cash allocation target of 3.0% consisted of short-duration, high quality government and investment grade securities. The Board, Staff, and HEK deemed it prudent to have an allocation to cash given the known and potential cash flow requirements of the System.

The real asset exposure of 23.0% consisted of real estate (14.0%), master limited partnerships (3.0%), and commodities (6.0%). The real estate target allocation of 14.0% consisted primarily of limited partnerships. The types of partnerships the System invests in include core, value-added, and opportunistic real estate limited partnerships. The commodities allocation consisted primarily of commodity futures and commodity and commodity-related publicly traded stocks. Commodities are included in the allocation to diversify the System's total portfolio risk. The Master Limited Partnership (MLP) allocation consisted of publicly traded partnerships that own and operate assets such as natural gas, crude oil, refined products and pipelines, and storage facilities that are a vital part of the U.S. energy infrastructure. MLPs are included in the allocation due to their attractive current yields, strong growth potential, and ability to diversify the System's total portfolio risk.

The absolute return target allocation of 10.0% consisted primarily of investment managers retained by the System to generate positive returns over time that are independent of how the equity, fixed income, and commodity markets perform. Strategies implemented to achieve this target include, but are not limited to, global macro, event-driven, and relative value strategies such as insurance-linked securities and long/short credit. The absolute return program is included in the allocation to generate returns equal to or greater than LIBOR plus 3.5% with low correlation to the public markets to diversify the System's total portfolio risk.

The risk parity allocation of 5.0% consisted primarily of global equities, global nominal bonds, global inflation-linked securities, and commodities in an allocation that balances risk across these asset classes with structurally offsetting biases to the primary drivers of asset class returns, growth and inflation. Risk parity provides diversification and liquidity to the System. The risk parity allocation is managed to a targeted risk level of 12.0%.

### Liquidity and Asset Allocation

The System's risk profile is, in part, driven by its liquidity needs in any given year. During each of the past four fiscal years, the System has paid out over \$3.0 billion more in benefits than it received in member and employer contributions. This funding deficiency has amounted to more than 6.0% of beginning net assets each year and represents the amount of investment return needed each year to make up the shortfall. The large annual cash flow shortfall will continue and necessitates a larger liquidity position and lower risk profile than a retirement system that has smaller liquidity requirements. Given the legislated reduction in the employer contribution rate, which is expected to continue for the next few years, the System anticipates only a modest liquidity improvement until the employer contribution rate rises to the actuarially required level.

Given the significant cash outflows projected, the Board has prudently reduced the risk profile of the System since the financial crisis in 2008. It has done so by decreasing its dependence on the equity markets for returns and balancing the risk exposures into less correlated asset classes such as inflation-linked bonds, commodities, and absolute return. The goal of such an allocation is to generate the desired return profile with less volatility. While such an allocation will not provide for a large upside in returns, it is expected to minimize downside risks to the System's assets in the event of a large equity drawdown as experienced during the financial crisis in 2008.

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## The Economy During The Past Fiscal Year

### *The U.S. Economy*

The U.S. economy during the past year remained relatively strong with the exception of the 1st quarter of 2014. The U.S. real Gross Domestic Product (GDP) increased by 4.1%, 2.6%, (2.9%), and 4.2% in the third quarter 2013, fourth quarter 2013, first quarter 2014, and second quarter 2014, respectively. The (2.9%) U.S. real GDP print in the first quarter can be attributed to a very cold and snowy winter which impeded economic activity. The official unemployment rate (otherwise known as the U3 unemployment rate) fell during the fiscal year from 7.6% as of June 2013 to 6.1% as of June 2014, approaching what the Federal Reserve (Fed) would consider full employment. The more encompassing U6 unemployment rate, which measures not only people without work seeking full-time employment (U3 unemployment rate) but also counts “marginally attached workers and those working part-time for economic reasons” remains elevated at 12.1% as of fiscal year end, down from 14.3% at the end of the last fiscal year but significantly above the low point over the past 10 years of 7.9% in December 2006. However, the U.S. Labor Participation Rate (LPR), which measures the total labor force as a percentage of the working age population, remains depressed. The LPR dropped from 63.5% in June 2013 to 62.8% in June 2014 which explains some of the improvement in the official unemployment rate. The LPR was as high as 67.3% in March 2000. If the LPR were at 2001 levels today, the official unemployment rate would probably be significantly higher.

The Fed has had extremely accommodative monetary policies during the past few years to support asset prices and economic growth in the United States. The Federal Funds target rate has been in a range between 0.0% to 0.25% all year and has been that low since December 2008. The Fed’s program of outright purchases of longer dated U.S. Treasuries in the amount of \$45 billion a month and mortgage-backed securities in the amount of \$40 billion began in 2013. The Fed’s objectives were to lower the cost of borrowing money so that the economy, housing, and employment conditions could continue to improve. This program of buying assets, which began in varying forms in 2008, saw the Fed’s balance sheet increase from \$910 billion in August 2008 to \$3.48 trillion in June 2013 to \$4.37 trillion in June 2014. Given the improvement in economic growth and the unemployment rate, the Fed started tapering these purchases in December 2013 by \$10 billion per meeting and has signaled to the market that the asset purchase program will end in October 2014. While interest rates remain very accommodative, this tapering represents a mild tightening to monetary conditions in the United States.

Inflation in the United States, even with improving economic conditions and very accommodative interest rates, remains well anchored and around the Fed’s target inflation rate of 2.0%. The U.S. Core Consumer Price Index (CPI) was 1.6% year over year as of June 2013 and increased mildly over the year to 1.9% as of June 2014. Housing during the past fiscal year has continued to be strong, up 8.1% as measured by the S&P Case-Shiller 20-City Home Price Index after being up over 12.0% last fiscal year.

### *Select Non-U.S. Economies*

The Eurozone economy during the past year remained very weak and on the verge of recession. The Eurozone real GDP increased by 0.1%, 0.3%, 0.2% and 0.0% in the third quarter 2013, fourth quarter 2013, first quarter 2014, and second quarter 2014, respectively. The Eurozone unemployment rate, while falling modestly during the fiscal year from 12.0% as of June 2013 to 11.5% as of June 2014, remains very elevated. Inflation for the Eurozone has fallen from 1.6% on a year over year basis in June 2013 to 0.5% in June 2014 and is getting uncomfortably close to deflation. Economic conditions remain very depressed in the Eurozone as fiscal and monetary conditions on the whole have not been loose enough to generate any real improvements in economic growth and employment.

During the past year the Japanese economy remained weak but is showing signs of improving. The Japanese real GDP increased by 0.4%, 0.0%, 1.5% and (1.7%) in the third quarter 2013, fourth quarter 2013, first quarter 2014, and second quarter 2014, respectively. The increase in economic activity in the first quarter 2014 was due to an announced increase in the consumption tax in Japan from 5.0% to 8.0% effective April 1, 2014. Consumption was brought forward which caused the spike in real GDP in the first quarter of 2014 and the drop of real GDP in the second quarter of 2014. The Japanese unemployment rate remains very well contained, falling from a modest 3.9% in June 2013 to 3.7% in June 2014. Inflation for Japan has increased significantly during the past fiscal year from a 0.2% year over year rate in June 2013 to 3.6% in 2014. Japanese policy makers have been providing increasing amounts of monetary and fiscal stimulus to the economy in an effort to end many years of deflation and stagnant growth. Economic conditions have improved in Japan over the past year and time will tell if the necessary economic and structural reforms can be put in place for a sustained period of economic prosperity.

## Investment Section

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The Chinese economy during the past year continued to be one of the stronger economies in the world, albeit at a slowing pace of growth. The Chinese real GDP increased by 7.8%, 7.7%, 7.4% and 7.5% in the third quarter 2013, fourth quarter 2013, first quarter 2014, and second quarter 2014, respectively. Inflation in China has fallen from 2.7% on a year over year basis in June 2013 to 2.3% in June 2014 and appears fairly stable. Economic conditions in China appear to be fairly well managed by the Chinese fiscal and monetary authorities.

### Investment Results

This past fiscal year was an excellent year to be invested in risky assets of all types. The year was marked by improving global growth and relatively stable inflation expectations, led by the U.S. economy, accompanied by generally very accommodative monetary policies worldwide. The relatively calm economic and monetary conditions of the past year produced a low-volatility environment that encouraged a continued movement of money into riskier assets, compressing risk premiums. The low-volatility environment as measured by the Chicago Board Options Exchange Volatility Index (VIX index), an index which reflects a market estimate of future volatility, fell from 16.86 in June 2013 to 11.57 in June 2014. As a point of reference, during the financial crisis, the VIX Index peaked on a monthly basis at 59.89 in October 2008. It was a good year to use leverage (borrow cash) to buy riskier assets since the return on cash was lower than the return on other asset classes. Equities, the riskiest asset class, had the best performance during the past year, even on a risk-adjusted basis. However, other asset classes had positive returns as well. Unless otherwise noted, all rates of return are based on time-weighted return methodology. Highlights of the System's fiscal year performance follow.

As of June 30, 2014, the fair value of the investment portfolio was \$52.9 billion, an increase of \$3.4 billion from last year's value. This increase was primarily due to the combination of net investment income (\$7.1 billion) and member and employer contributions (\$3.1 billion) exceeding the deductions for benefits and administrative expenses (\$6.5 billion) and net changes in other investment assets and liabilities (\$0.3 billion). The investment portfolio, as invested, was composed of 19.6% common and preferred stocks (equities), 23.6% fixed income investments, 20.9% alternative investments, 14.2% real estate, 9.8% absolute return portfolios, 4.0% commodities, 3.8% master limited partnerships, and 4.1% risk parity at June 30, 2014. The table immediately following this letter illustrates a more detailed description of the investment portfolio's asset classes in dollars and as a percentage of the total investment portfolio.

The MSCI U.S. Investable Market Index, a U.S. equity index, returned 24.55% during the fiscal year. Returns for the first and second quarters of the fiscal year were exceptionally strong, posting a 6.11% and 9.94% return, respectively. Returns for the third and fourth quarters of the fiscal year were good, posting 1.86% and 4.82%, respectively. Foreign markets, in U.S. dollar terms, were weaker than the U.S. markets but strong nonetheless as the MSCI All-Country World (ACW) ex. U.S. Investable Market Index hedged, an international equity index with developed market currencies hedged back to the U.S. dollar, returned 18.39% for the fiscal year, driven primarily by multiple expansion, accommodative monetary policies, and more stable economic conditions. The Thomson ONE median return, a benchmark for alternative investments that represents the median performance of the venture capital/private equity industry listed in the Investment Benchmark Reports on Venture Capital and buy-outs produced by Thomson Reuters, returned 8.34% for the fiscal year (reported on a one-quarter lag) as these investments were written up to prices comparable to gains in the public equity markets.

Commodity markets performed well in this environment as global economic conditions improved and monetary conditions remained loose. For the fiscal year, the Bloomberg Commodity Index, an index composed of futures contracts on 19 physical commodities weighted to account for economic significance and market liquidity, was up 8.21%.

Fixed income markets were generally positive in this environment as interest rates fell even with the headwind of slight monetary tightening in the U.S. from a tapering of quantitative easing by the Fed. For the fiscal year, the Barclays U.S. Aggregate Index, a U.S. fixed income index, was up 4.37% as the yield curve fell from the June 2013 level. The Barclays Global Aggregate GDP Weighted Developed Market ex. U.S. Index (Unhedged), a non-U.S. fixed income index, was up 8.22%. The Barclays High Yield Index returned 11.73% during the past fiscal year due to a tightening of credit spreads as investors continued to bid up credit in search of yield. The Barclays U.S. TIPS Index, an index of U.S. treasury inflation protection securities, driven by falling real yields, had a positive return of 4.44% for the fiscal year.

To benchmark real estate performance, the System uses the National Council of Real Estate Investment Fiduciaries/Townsend Fund (NTF) Index, a quarterly time series of real estate partnership portfolios used to simulate the universe of core and value-added estate partnerships. The indexes are designed to reflect the performance of funds available to U.S. institutional investors, including private real estate/equity-oriented investments, without regard to geographic location.

The following table provides the System's total time-weighted investment returns for each major asset class and the total portfolio, including, where applicable and available, respective benchmark indexes used by asset class and median performance by asset class:

	Annualized Total Returns (%)			
	Net of Fees			
	Ended June 30, 2014			
	1 Year	3 Years	5 Years	10 Years
<b>PSERS Total Portfolio</b>	<b>14.91</b>	<b>8.66</b>	<b>12.09</b>	<b>7.28</b>
Total Fund Policy Index	12.05	6.14	9.20	5.81
Median Public Defined Benefit Plan (DBP) Fund Universe (HEK Database)	16.56	9.57	12.44	6.86
<b>PSERS U.S. Equity Portfolios</b>	<b>25.27</b>	<b>16.52</b>	<b>19.95</b>	<b>7.99</b>
U.S. Equity Policy Index (1)	24.55	15.77	18.73	8.07
<b>PSERS Non-U.S. Equity Portfolios</b>	<b>18.14</b>	<b>6.01</b>	<b>12.32</b>	<b>9.20</b>
Non-U.S. Equity Policy Index (2)	21.10	5.54	11.29	8.20
<b>PSERS Fixed Income Portfolios</b>	<b>9.86</b>	<b>7.21</b>	<b>10.71</b>	<b>7.46</b>
Fixed Income Policy Index (3)	6.52	4.34	7.83	6.50
<b>PSERS Commodity Portfolios</b>	<b>13.12</b>	<b>-4.59</b>	<b>3.94</b>	<b>N/A</b>
Commodity Policy Index (4)	8.21	-5.16	1.99	N/A
<b>PSERS Absolute Return Portfolios</b>	<b>6.31</b>	<b>4.33</b>	<b>8.24</b>	<b>N/A</b>
Absolute Return Policy Index (5)	7.50	7.50	7.70	N/A
<b>PSERS Risk Parity Portfolios</b>	<b>23.95</b>	<b>12.95</b>	<b>N/A</b>	<b>N/A</b>
Risk Parity Policy Index (6)	16.45	4.23	N/A	N/A
<b>PSERS Master Limited Partnership (MLP) Portfolios</b>	<b>35.97</b>	<b>28.46</b>	<b>33.01</b>	<b>N/A</b>
Standard & Poor's MLP Index	24.87	20.32	26.99	N/A
<b>PSERS Real Estate (7)</b>	<b>16.44</b>	<b>10.91</b>	<b>7.90</b>	<b>6.06</b>
Blended Real Estate Index (8)	11.13	10.21	8.75	8.63
<b>PSERS Alternative Investments (7)</b>	<b>14.27</b>	<b>11.33</b>	<b>14.90</b>	<b>13.70</b>
Thomson ONE Median Return, Vintage Year Weighted	8.34	5.14	7.60	5.78

1. MSCI USA Investable Market Index effective April 1, 2009; previously was the Dow Jones Wilshire 5000 Index.
2. MSCI All Country World (ACW) ex. USA Investable Market Index effective July 1, 2008; previously was the MSCI ACW ex. U.S. Index. The benchmark was 30% hedged to the U.S. dollar from July 1, 2006 to March 31, 2009; otherwise, the benchmark is unhedged.
3. Returns presented are a blend of the Barclays Capital U.S. Aggregate Index (17.2%), Barclays Capital Global Aggregate GDP-weighted Developed Market ex-U.S. (Unhedged) Index (3.4%), Barclays Capital EM Local Currency - Government - MV Weighted (Unhedged) - 10% Country Cap Index (6.9%), Barclays Capital U.S. Treasury Long Index (10.4%), Barclays Capital U.S. TIPS Index (Series -L) (41.4%), and Barclays Capital U.S. High Yield Index (20.7%) effective January 1, 2012. The weights to these indexes have varied in previous quarters. Prior to January 1, 2012, the Barclays Capital U.S. Universal Index was used in place of the Barclays Capital U.S. Aggregate Index.
4. Returns presented are a blend of the DJ/UBS Commodity Gold Index (33.3%) and the DJ/UBS Commodity Index (66.7%).
5. Absolute Return started April 1, 2009. The assumed actuarial rate of return for the fund was 8.0% from July 1, 2009 through June 30, 2011. The rate changed to 7.5% beginning July 1, 2011.
6. Returns presented are a blend of the MSCI ACWI (\$Net) (35%); Barclays Capital U.S. Treasury Index (75%); Barclays Capital World Inflation Linked Bond Index Hedged (120%); Dow Jones-UBS Commodity Index (Total Return) (15%); Dow Jones-UBS Gold Index (5%); and 3-Month LIBOR (-150%).
7. Returns reported on a one-quarter lag, except for publicly traded real estate security investments.
8. NTFI Index effective July 1, 2010. The NTFI Index is reported on a one-quarter lag. Between April 1, 2010 and June 30, 2010, the NCREIF Index was used. Previously, returns presented were a blend of the FTSE EPRA/NAREIT Global Real Estate Index and the NCREIF Index.

## Investment Section

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The NTF Index returned 11.13% during the past fiscal year. Index returns are reported on a one-quarter lag due to the time taken to acquire this information from private market sources, so this return is for the twelve months ended March 31, 2014. Investment performance in the private real estate markets has continued to rebound from significant declines sustained during the credit crisis in 2008.

The absolute return program had a below target fiscal year generating a total return of 6.31%, 119 basis points under its target return of 7.50%. The weak performance was driven primarily by the commodity trading advisors (CTAs) who were whipsawed by interest rate markets during the year. The absolute return program is structured to have low beta to the equity, fixed income, and commodity markets and to provide additional diversification from the remainder of the asset allocation. These objectives were achieved by the program.

The risk parity program had a return of 23.95%, exceeding the policy index for this program by 750 basis points. The risk parity managers take a balanced risk approach to portfolio construction, leveraging low risk assets such as nominal and inflation-linked bonds to an equivalent risk level as equities and commodities and then balancing the risks in constructing their portfolios. Risk parity had strong positive performance given relatively calm economic and monetary conditions for the past year coupled with positive returns from all major asset classes.

The master limited partnership market continued to perform extremely well during the fiscal year, with a return of 35.97%, as the companies in this market exhibited strong growth in distributions and high yields which compressed during the year. For the fiscal year, the Standard & Poor's MLP Index was up 24.87%.

For the one-year period ended June 30, 2014, the System generated a total net of fee return of 14.91%. This return exceeded the total fund Policy Index return of 12.05% by 286 basis points. Annualized total net of fee returns for the three-, five-, and ten-year periods ended June 30, 2014 were 8.66%, 12.09%, and 7.28%, respectively. The three-, five- and ten-year returns ended June 30, 2014 exceeded the total fund Policy Index returns by 252, 289, and 147 basis points, respectively.

HEK calculates the total investment return of the System as well as the performance of each external investment management firm and each internal investment manager retained by the Board to invest the System's assets. Performance is calculated using a time-weighted return methodology.

The System also participates in a securities lending program administered by The Bank of New York Mellon Corporation. This program is designed to provide incremental income to the System by lending securities in the System's portfolio to securities dealers in exchange for cash collateral, which can be reinvested to generate income, or non-cash collateral plus a cash fee. This program generated \$18.6 million in net gains during the year.

### Accomplishments

The System continued its efforts to diversify its market exposures as the Board approved increased allocations to risk parity and master limited partnerships starting in 2014. The System continues work on a number of risk initiatives, including studies covering liquidity risk, leverage risk, downside risk, and counterparty risk. As the markets continue to get more expensive, managing risk will become increasingly important.

I am proud that collectively the Board, the Investment Office staff, external investment managers, and the System's consultants (collectively, the "Investment Team") contributed to generating returns in excess of the passive Policy Index of over \$1.2 billion, net of all fees and expenses. If the Board succumbed to the pressure of passively managing the entire portfolio, the System would have billions of dollars less in assets than it does today. Over the past ten years, the System has generated approximately \$6.6 billion in excess of the dollar returns that would have been generated from the passive Policy Index. In fact, the System has exceeded its Policy Index in 8 of the past 10 years (31 of the past 40 quarters). Many people mistakenly associate higher management fees with lower investment returns. When a manager generates investment returns, net of fees and expenses, in excess of the passive index returns, their fees can generally be justified as long as those returns were accomplished in a risk-controlled fashion. PSERS' program of active management has been successful due to the wisdom of the System's Board in giving staff the latitude to use active managers and the skill of PSERS' Investment Team in choosing active managers in those areas where staff believe inefficiencies exist and where staff believe the System has an edge in manager selection. In those areas that staff believe are efficient or where staff does not believe PSERS has an edge in manager selection (i.e. U.S. equities), the System will generally internally manage those assets in passive index funds. In addition, the Investment Team will terminate those managers underperforming their benchmarks over

time should staff believe that they no longer have an investment edge or are incurring too much risk. Just as investment managers are actively managing portfolios, the Investment Team is actively managing managers. Should PSERS no longer be successful using active management, for whatever reason, PSERS has a very capable and competent team of investment professionals at the System who can manage those assets internally at competitive costs.

### Summary

The System had an excellent fiscal year ended June 30, 2014 with a return of 14.91%, which was in excess of the Policy Index return of 12.05%. This excess return amounted to an incremental income for the System of approximately \$1.2 billion. Over the past five- and ten-year periods ended June 30, 2014, the System returned 12.09% and 7.28%, both in excess of the System's Policy Index. The environment during the past fiscal year was one in which the global economy was no longer in a recession but was not overheating. Inflationary and deflationary forces were roughly in balance, asset pricing is near equilibrium, and there is little pressure to tighten or ease monetary policy. Given this environment, market volatility collapsed, the discounting of future growth and inflation has changed very little, and monetary policies unfolded roughly as expected. This set of conditions combined with abundant liquidity has encouraged the movement of cash and less risky assets into riskier assets, increasing their prices and compressing their risk premiums. This compression of risk premiums, while increasing returns today, will probably lead to a period of more modest returns in the future. In addition, we expect the future to be less benign and more difficult. As discussed in a recent Bridgewater Daily Observation report (Bridgewater Associates, LP is one of the System's TIPS, Absolute Return, and Risk Parity managers), economic conditions around the world are increasingly divergent. As an example, the U.S. and Europe are diverging after being highly correlated since the financial crisis in 2008. The U.S. has had more aggressive monetary policies leading to a strengthening economy and a Fed now on the verge of raising rates. Europe continues to stagnate due to less aggressive monetary policies which may require the European Central Bank to embark on quantitative easing and continued low interest rates. Japan is experimenting with more aggressive monetary policies and reforms in an attempt to end decades of stagnation. In a world of increasing uncertainties, balancing risks in an investment portfolio becomes more important as the range of outcomes widens. We believe the System continues to be well positioned for this uncertain environment due to its risk balanced allocation and asset class diversification.



James H. Grossman Jr., CPA, CFA  
Chief Investment Officer

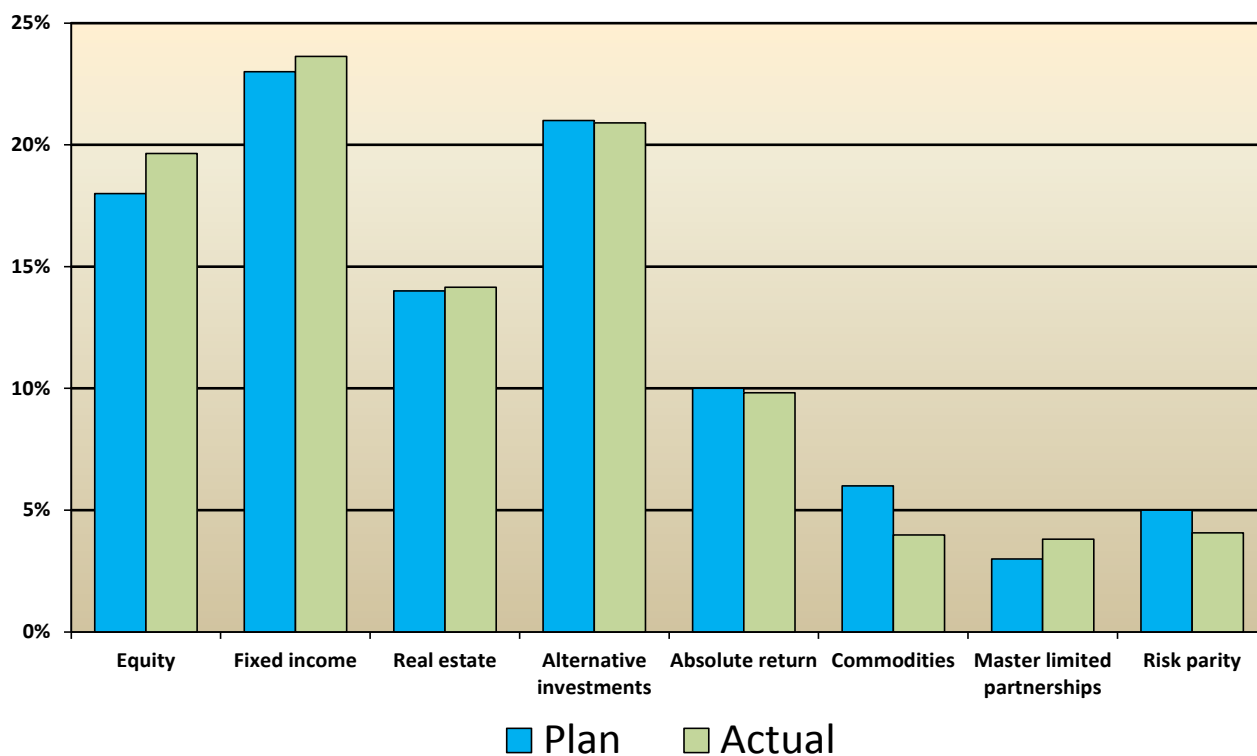
**Portfolio Summary Statistics**  
**Asset Allocation**  
**As of June 30, 2014**  
(Dollar Amounts in Thousands)

<b>Pension investments</b>	<b>Fair Value</b>	<b>% Fair Value</b>
<b>Common and preferred stock (Equity):</b>		
Large and mid cap stocks	\$ 3,333,804	6.3
Small cap stocks	743,887	1.4
Emerging markets stocks	1,264,765	2.4
<b>Total Non-U.S. equity</b>	<b>5,342,456</b>	<b>10.1</b>
Large cap stocks	3,658,091	6.9
Mid and small cap stocks	1,275,958	2.4
Microcap stocks	131,021	0.2
<b>Total U.S. equity</b>	<b>5,065,070</b>	<b>9.5</b>
<b>Total Common and preferred stock - Asset Allocation Basis</b>	<b>10,407,526</b>	<b>19.6</b>
<b>Fixed income:</b>		
Investment grade fixed income	4,231,437	8.0
High yield fixed income	2,745,764	5.2
<b>Total U.S. Fixed income</b>	<b>6,977,201</b>	<b>13.2</b>
Non-U.S. developed markets fixed income	2,296,844	4.4
Emerging markets fixed income	883,226	1.7
<b>Total Non-U.S. Fixed income</b>	<b>3,180,070</b>	<b>6.1</b>
<b>Cash and cash equivalents</b>	<b>2,255,397</b>	<b>4.3</b>
<b>Total Fixed income - Asset Allocation Basis</b>	<b>12,412,668</b>	<b>23.6</b>
<b>Real estate</b>	<b>7,454,792</b>	<b>14.2</b>
<b>Alternative investments:</b>		
Private equity	8,743,446	16.7
Private debt	1,274,460	2.4
Venture capital	967,932	1.8
<b>Total Alternative investments - Asset Allocation Basis</b>	<b>10,985,838</b>	<b>20.9</b>
<b>Absolute return</b>	<b>5,175,452</b>	<b>9.8</b>
<b>Commodities</b>	<b>2,099,961</b>	<b>4.0</b>
<b>Master limited partnerships</b>	<b>2,004,393</b>	<b>3.8</b>
<b>Risk parity</b>	<b>2,142,784</b>	<b>4.1</b>
<b>Total Pension investments - Asset Allocation Basis</b>	<b>52,683,414</b>	<b>100.0</b>
Net Asset Allocation Adjustment*	(6,809)	
<b>Pension investments per Statement of Plan Net Position</b>	<b>52,676,605</b>	
<b>Postemployment Healthcare investments</b>	<b>\$ 251,502</b>	<b>100.0</b>

\* Includes reclassifications of certain investments between asset classes and investment receivables/payables to adjust the Statement of Plan Net Position classification to the basis used to measure Asset Allocation. See the table and graph which follow.

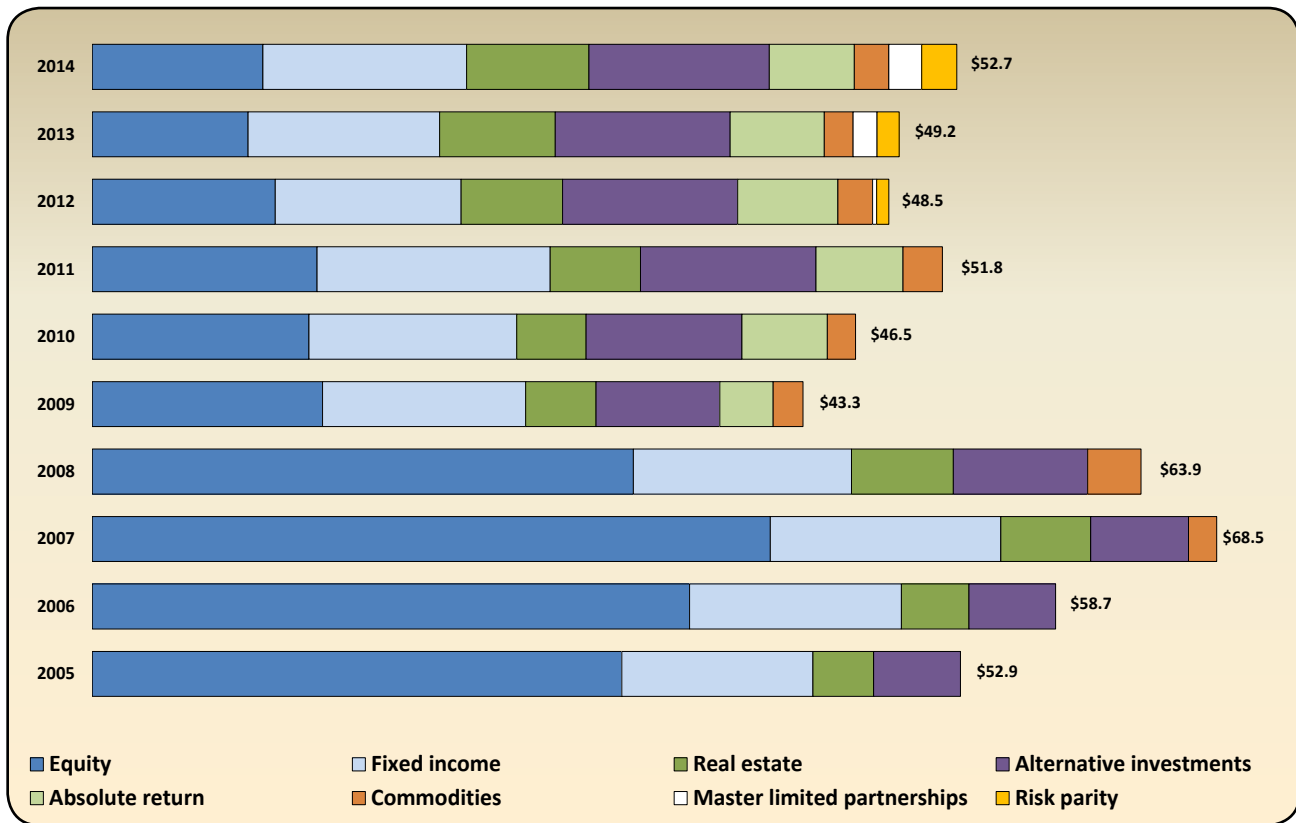
### Comparison of Actual Portfolio Distribution to Asset Allocation Plan As of June 30, 2014

Asset Category	Plan	Actual
Common and preferred stock (Equity)	18.0%	19.6%
Fixed income	23.0	23.6
Real estate	14.0	14.2
Alternative investments	21.0	20.9
Absolute return	10.0	9.8
Commodities	6.0	4.0
Master limited partnerships	3.0	3.8
Risk parity	5.0	4.1
Total	<u>100.0%</u>	<u>100.0%</u>





### Portfolio Distribution 10 Year Trend (Fair Value - Dollar Amounts in Billions)



The following lists of portfolio detail statistics present the ten largest holdings by descending order of fair value for the largest public market asset classes. Information on the complete holdings of the System can be downloaded from the PSERS website at [www.psers.state.pa.us](http://www.psers.state.pa.us).

### Common and Preferred Stock - Non-U.S. Equity 10 Largest Holdings in Descending Order by Fair Value As of June 30, 2014 (Dollar Amounts and Shares in Thousands)

Description	No. of Shares	Fair Value
BlackRock Emerging Markets Alpha Advantage Fund Ltd.- Class D	199	\$ 230,388
The 32 Capital Fund Ltd.	98	175,136
BlackRock Emerging Markets Alpha Advantage Fund Ltd.- Class P	32	109,901
Nestle SA	882	48,282
Roche Holding AG	102	30,388
BHP Billiton Ltd.	2,314	30,172
Novartis AG	319	28,874
Schlumberger Ltd.	239	28,131
Taiwan Semiconductor Manufacturing Company, Ltd.	6,430	24,849
Samsung Electronics Company, Ltd.	19	24,370
<b>Total of 10 Largest Holdings</b>		<b>\$ 730,491</b>

**Common and Preferred Stock - U.S. Equity**  
**10 Largest Holdings in Descending Order by Fair Value**  
**As of June 30, 2014**  
(Dollar Amounts and Shares in Thousands)

Description	No. of Shares	Fair Value
Security Capital Preferred Growth	13,039	\$ 197,093
AllianceBernstein Factor Risk Premia Fund, L.P.	195,243	194,850
Apple Computer, Inc.	1,104	102,627
Exxon Mobil Corporation	787	79,188
Microsoft Corporation	1,377	57,411
Johnson & Johnson	518	54,210
General Electric Company	1,837	48,266
Wells Fargo & Company	878	46,140
Chevron Corporation	349	45,517
JPMorgan Chase & Co.	693	39,941
<b>Total of 10 Largest Holdings</b>		<b>\$ 865,243</b>

**Fixed Income**  
**10 Largest Holdings in Descending Order by Fair Value**  
**As of June 30, 2014**  
(Dollar Amounts and Shares in Thousands)

Description	No. of Shares	Fair Value
PIMCO Multi-Sector Strategy Fund Ltd.	817	\$ 913,939
BlackRock US Extended Core Global Alpha Bond Fund Ltd.	485	813,984
Bridgewater International Inflation-Linked Bond Fund	273	611,115
Bridgewater U.S. Inflation-Linked Bond Fund	220	463,924
Bridgewater Pure Alpha Fund II Ltd.	116	440,557
Sankaty Advisors LLC-Bank Loans	N/A	420,257
Black River Inflation Opportunity Fund Class B	350	315,300
Sankaty Credit Opportunities V-A, L.P.	N/A	167,733
Sankaty Middle Market Opportunities Fund L.P.	N/A	157,149
Cerberus Levered Loan Opportunities Fund II, L.P.	N/A	156,606
<b>Total of 10 Largest Holdings</b>		<b>\$ 4,460,564</b>

**Absolute Return**  
**10 Largest Holdings in Descending Order by Fair Value**  
**As of June 30, 2014**  
(Dollar Amounts and Shares in Thousands)

Description	No. of Shares	Fair Value
Bridgewater Pure Alpha Fund II, Ltd.	291	\$ 1,009,268
Brigade Leveraged Capital Structures Offshore Ltd.	364	585,119
Brevan Howard Fund Ltd. - Class E US	3,095	398,765
Capula Tail Risk Fund Ltd.	3,977	338,512
Black River Fixed Income Relative Value Opportunity Fund Ltd.	250	297,706
Palmetto Fund Ltd. Class G	241	273,845
BlackRock Capital Structure Investments Offshore Fund Ltd.	198	265,663
PIMCO Global Credit Opportunity Offshore Fund Ltd.	127	250,937
PIMCO Absolute Return Strategy V Offshore Fund Ltd.	103	249,681
Caspian Select Credit International, Ltd. Series A	199	247,893
<b>Total of 10 Largest Holdings</b>		<b>\$ 3,917,389</b>

**Postemployment Healthcare Investments**  
**10 Largest Holdings in Descending Order by Fair Value**  
**As of June 30, 2014**  
(Dollar Amounts in Thousands)

Description	Maturity Date	Interest Rate (%)	Par Value	Fair Value
PSERS Short-Term Investment Fund	Various	Various	\$ 141,681	\$ 141,681
Wilmington US Government MM	N/A	Various	60,906	60,906
Wilmington US Government MM	N/A	Various	10,549	10,549
GNMA Guaranteed REMIC 2010-87 Class LH	08/20/36	2.500	2,314	2,362
GNMA Guaranteed REMIC 2006-31 Class E	05/16/39	4.702	1,602	1,631
JPMorgan Chase & Co.	09/15/14	5.125	1,238	1,250
Mercedes-Benz Auto Lease Trust 2013-B Class A3	07/15/16	0.620	1,105	1,106
Public Service Electric & Gas Company	08/15/14	5.000	1,060	1,066
FHLMC Multiclass 3625 Class AJ	03/15/23	4.000	881	893
Colgate-Palmolive Company	09/27/41	0.000	800	797
<b>Total of 10 Largest Holdings</b>				<b>\$ 222,241</b>

**Comparison of Investment Activity Income**  
**For Fiscal Years Ended June 30, 2014 and 2013**  
(Dollar Amounts in Thousands)

<b>Investment Activity</b>	<b>2014</b>	<b>2013</b>
Net appreciation in fair value of investments	\$ 6,023,861	\$ 3,427,309
Short-term	8,702	9,290
Fixed income	220,447	228,760
Common and preferred stock	284,808	255,248
Collective trust funds	7,069	17,749
Real estate	374,076	251,742
Alternative investments	642,727	485,622
<b>Total investment activity income</b>	<b>\$ 7,561,690</b>	<b>\$ 4,675,720</b>

Brokers' fees on equity investment transactions for the fiscal year ended June 30, 2014 were \$7.9 million. The System has commission recapture contracts with several brokers. These contracts generally stipulate that the brokers rebate a percentage of commissions earned on investment transactions directly to the System. During the fiscal year ended June 30, 2014, the System earned \$75,000 from the commissions recapture program. A list of the brokers receiving fees in excess of \$100,000 during the fiscal year follows:

**Summary Schedule of Brokers' Fees**  
**(Cumulative Fiscal Year Amounts Exceeding \$100,000)**  
**Fiscal Year Ended June 30, 2014**

<b>Broker Name</b>	<b>Fees Paid</b>	<b>Broker Name</b>	<b>Fees Paid</b>
Goldman Sachs & Company	\$ 882,929	Fimat USA	\$ 234,221
Citigroup Global Markets Incorporated	462,638	JPMorgan Chase & Co.	233,840
Instinet Corporation	336,828	Wells Fargo Securities	177,572
BNY Mellon	311,062	Daiwa Securities	173,260
Merrill Lynch	302,137	Royal Bank of Scotland	132,400
UBS Securities	298,054	Macquarie Equities Limited	121,714
Jones & Associates	295,599	Liquidnet Incorporated	113,308
Credit Suisse First Boston	293,947	Deutsche Bank	105,746
Morgan Stanley & Company	287,202		

**Professional Consultants  
External Investment Advisors  
As of June 30, 2014**

**Absolute Return Managers**

- ◆ Apollo Aviation Services II, LP
- ◆ Aeolus Capital Management, Ltd.
- ◆ Anderson Global Macro, LLC
- ◆ Black River Asset Management, LLC
- ◆ BlackRock Financial Management, Inc.
- ◆ Brevan Howard Asset Management, LLP
- ◆ Bridgewater Associates, Inc.
- ◆ Brigade Capital Management
- ◆ Capula Investment Management, LLP
- ◆ Caspian Capital, LP
- ◆ Ellis Lake Capital, LLC
- ◆ Nephila Capital, Ltd.
- ◆ Pacific Investment Management Company
- ◆ Perry Capital, LLC

**U.S. Equity Managers**

- ◆ AH Lisanti Capital Growth, LLC
- ◆ First Pacific Advisors, Inc.
- ◆ NorthPointe Capital, LLC

**Publicly-Traded Real Estate Securities Manager**

- ◆ Security Capital Research & Management, Inc.

**Non-U.S. Equity Managers**

- ◆ Acadian Asset Management, Inc.
- ◆ Baillie Gifford Overseas, Ltd.
- ◆ Batterymarch Financial Management, Inc.
- ◆ BlackRock Financial Management, Inc.
- ◆ Marathon Asset Management, LLP
- ◆ Oberweis Asset Management, Inc.
- ◆ Pyramis Global Advisors, Inc.
- ◆ Wasatch Advisors, Inc.
- ◆ Westwood Global Investments, LLC

**Commodity Managers**

- ◆ Black River Asset Management, LLC
- ◆ Credit Suisse Asset Management, LLC
- ◆ Gresham Investment Management, LLC
- ◆ Wellington Management Company, LLP

**U.S. Core Plus Fixed Income Managers**

- ◆ BlackRock Financial Management, Inc.
- ◆ Piedmont Investment Advisors, LLC
- ◆ Pugh Capital Management, Inc.
- ◆ SEI Investment Management Corporation

**High Yield Fixed Income Managers**

- ◆ Apollo Management International, LLP
- ◆ BlackRock Financial Management, Inc.
- ◆ Brigade Capital Management
- ◆ Cerberus Institutional Partners, LP

- ◆ Haymarket Financial, LLP
- ◆ Intermediate Capital Group, PLC
- ◆ LBC Credit Partners
- ◆ Mariner Investment Group, LLC
- ◆ Oaktree Capital Management, LP
- ◆ Radcliffe Capital Management, LP
- ◆ Sankaty Advisors, LLC
- ◆ The Carlyle Group
- ◆ TPG Partners, LP

**Non-U.S. Developed Markets Fixed Income Managers**

- ◆ AllianceBernstein, LP
- ◆ Strategic Fixed Income, LLC

**Emerging Markets Debt Managers**

- ◆ Franklin Templeton Investments
- ◆ Stone Harbor Investment Partners, LP

**Multi-Sector Fixed Income Manager**

- ◆ Pacific Investment Management Company

**Global Treasury Inflation - Protected Securities Managers**

- ◆ Black River Asset Management, LLC
- ◆ Bridgewater Associates, Inc.

**Active Currency Hedging Overlay Program Manager**

- ◆ Pareto Investment Management, Ltd.

**Risk Parity Managers**

- ◆ AQR Capital Management, LLC
- ◆ Bridgewater Associates, Inc.
- ◆ D.E. Shaw Investment Management, LLC

**Master Limited Partnership Advisors**

- ◆ Atlantic Trust Private Wealth Management
- ◆ Harvest Fund Advisors, LLC
- ◆ Salient Capital Advisors, LLC

**Professional Consultants (Continued)****Real Estate Advisors**

- ◆ Charter Oak Advisors, Inc.
- ◆ GF Management, Inc.
- ◆ Grosvenor Fund Management US, Inc.
- ◆ L&B Realty Advisors, LLP

**Real Estate Partnerships**

- ◆ AG Core Plus Realty Fund III, LP
- ◆ Almanac Realty Securities V & VI, LP
- ◆ Apollo Real Estate Finance Corp.
- ◆ AREFIN Co-Invest Corp.
- ◆ Ares European Real Estate Fund III, LP
- ◆ Ares U.S. Real Estate Fund VII, LP
- ◆ AvalonBay Value Added Fund I & II, LP
- ◆ Avenue Real Estate Fund, LP
- ◆ Beacon Capital Strategic Partners V, LP
- ◆ Bell Institutional Fund IV & V, LP
- ◆ BlackRock Asia Property Fund III, LP
- ◆ BlackRock Europe Property Fund III, LP
- ◆ Blackstone Real Estate Debt Strategies II, LP
- ◆ Blackstone Real Estate Partners V, VI, & VII, LP
- ◆ Blackstone Real Estate Partners Europe III & IV, LP
- ◆ BPG Investment Partnership V & VI, LP
- ◆ BPG/PSERS Co-Investment Fund, LP
- ◆ Broadway Partners Real Estate Fund II & III, LP
- ◆ Brookfield Strategic Real Estate Partners, LP
- ◆ Cabot Industrial Value Fund III & IV, LP
- ◆ Carlyle Europe Real Estate Partners III-A, LP
- ◆ Carlyle Realty Partners III, IV, V, & VI, LP
- ◆ DLJ Real Estate Capital Partners II, III, & IV, LP
- ◆ DRA Growth and Income Fund VI & VII, LLC
- ◆ Exeter Industrial Value Fund II, LP
- ◆ Fillmore West Fund, LP
- ◆ Fortress Investment Fund I, IV, & V, LP
- ◆ Hines U.S. Office Value Added Fund, LP
- ◆ JP Morgan Strategic Property Fund
- ◆ Latitude Management Real Estate Capital III, Inc.
- ◆ LCCG Real Estate Special Situations Mortgage Fund, LLC
- ◆ Legg Mason Real Estate Capital I & II, Inc.
- ◆ LEM Real Estate High Yield Debt and Preferred Equity Fund III, LP
- ◆ LEM Real Estate Mezzanine Fund II, LP
- ◆ Lubert-Adler Real Estate Fund III, IV, V, & VI, LP
- ◆ Madison Marquette Retail Enhancement Fund, LP
- ◆ Morgan Stanley Domestic Real Estate Fund IV, LP
- ◆ Morgan Stanley Int'l. Real Estate Fund IV, V, & VI, LP
- ◆ Morgan Stanley Real Estate Fund II, LP
- ◆ Morgan Stanley Real Estate Fund V US, LP
- ◆ Morgan Stanley Real Estate Fund VII Global, LP
- ◆ O'Connor North American Property Partners I & II, LP
- ◆ Paladin Realty Latin America Investors III, LP
- ◆ Peabody Global Real Estate Partners
- ◆ PRISA
- ◆ ProLogis North American Industrial Fund, LP
- ◆ RCG Longview Debt Fund IV & V, LP

- ◆ RCG Longview Equity Fund, LP
- ◆ Senior Housing Partnership Fund IV, LP
- ◆ Silverpeak Legacy Partners I, II, & III, LP
- ◆ Stockbridge Real Estate Fund I, II, & III, LP
- ◆ Strategic Partners II, III, & IV RE, LP
- ◆ Strategic Partners Value Enhancement Fund, LP
- ◆ UBS (US) Trumbull Property Fund, LP
- ◆ Whitehall Street Real Estate VII & VIII, LP
- ◆ William E. Simon & Sons Realty Partners, LP

**Farmland Advisor**

- ◆ Prudential Agricultural Group

**Private Equity/Venture Capital Partnerships**

- ◆ ABS Capital Partners II, LP
- ◆ Actis Emerging Markets 3, LP
- ◆ Actis Global 4, LP
- ◆ Adams Capital Management, LP
- ◆ Aisling Capital Partners II & III, LP
- ◆ Allegheny New Mountain Partners, LP
- ◆ Apax Europe VII, LP
- ◆ Bain Capital Asia Fund II, LP
- ◆ Bain Capital Fund XI, LP
- ◆ Baring Asia Private Equity Fund III, IV, & V, LP
- ◆ Blue Point Capital Partners I, II, & III, LP
- ◆ Bridgepoint Capital II, LP
- ◆ Bridgepoint Europe I, II, III, & IV, LP
- ◆ Capital International Private Equity Fund V & VI, LP
- ◆ Catterton Growth Partners I & II, LP
- ◆ Catterton Partners V, VI, & VII, LP
- ◆ Clarity Partners I & II, LP
- ◆ Co-Investment Fund 2000, LP
- ◆ Co-Investment Fund II, LP
- ◆ Coller International Partners VI, LP
- ◆ Credit Suisse Equity Partners, LP
- ◆ Credit Suisse Intl. Equity Partners, LP
- ◆ Crestview Partners I & II, LP
- ◆ Cross Atlantic Technology Fund I & II, LP
- ◆ CVC Capital Partners Asia Pacific III, LP
- ◆ CVC European Equity Partners V, LP
- ◆ DCPF VI Oil and Gas Co-Investment Fund, LP
- ◆ Denham Commodity Partners VI, LP
- ◆ DLJ Merchant Banking Partners III, LP
- ◆ Dubin Clark Fund II, LP
- ◆ Edgewater Growth Capital Partners, LP
- ◆ Edgewater Private Equity Fund III, LP
- ◆ Evergreen Pacific Partners I & II, LP
- ◆ First Reserve Fund XI & XII, LP
- ◆ Furman Selz Investors III, LP
- ◆ Goldpoint Partners Co-Investment Fund V, LP
- ◆ Graham Partners Investments, LP
- ◆ Greenwich Street Capital Partners II, LP
- ◆ Halifax Capital Partners, LP
- ◆ Headland Private Equity Fund 6, LP
- ◆ HgCapital 7, LP

Professional Consultants (Continued)

- ◆ Incline Equity Partners III, LP
- ◆ Irving Place Capital Partners II & III, LP
- ◆ Jefferies Capital Partners IV, LP
- ◆ Jefferson Partners Fund IV, LP
- ◆ KBL Healthcare Ventures, LP
- ◆ KKR 2006 Fund, LP
- ◆ KRG Capital Fund II, III, & IV, LP
- ◆ Landmark Equity Partners IV, V, XIII, & XIV, LP
- ◆ Landmark Mezzanine Partners, LP
- ◆ Lexington Capital Partners I, LP
- ◆ Lindsay, Goldberg & Bessemer, LP
- ◆ LLR Equity Partners I, II, III, & IV, LP
- ◆ Milestone Partners II, III, & IV, LP
- ◆ Morgan Stanley Dean Witter Capital Partners IV, LP
- ◆ Morgan Stanley Private Equity Asia Fund IV, LP
- ◆ Navis Asia Fund V, LP
- ◆ NEPA Venture Fund II, LP
- ◆ New Mountain Partners I & III, LP
- ◆ New York Life Capital Partners I, II, III, & IV, LP
- ◆ NGP Natural Resources X, LP
- ◆ Nordic Capital VII Beta, LP
- ◆ Novitas Capital I & II, LP
- ◆ Orchid Asia V, LP
- ◆ PAI Europe IV & V, LP
- ◆ Palladium Equity Partners II-A & IV, LP
- ◆ Partners Group Secondary 2008 & 2011, LP
- ◆ Permira IV, LP
- ◆ Perseus-Soros Bio-Pharmaceutical Fund, LP
- ◆ Platinum Equity Capital Partners I, II, & III, LP
- ◆ PNC Equity Partners I & II, LP
- ◆ Providence Equity Partners VI, LP
- ◆ Psilos Group Partners III, LP
- ◆ Quadrangle Capital Partners I & II, LP
- ◆ Quaker BioVentures I & II, LP
- ◆ SCP Private Equity Partners I & II, LP
- ◆ StarVest Partners I & II, LP
- ◆ StepStone International Investors III, LP
- ◆ Sterling Capital Partners, LP
- ◆ Sterling Venture Partners, LP
- ◆ Strategic Feeder, LP
- ◆ Strategic Partners II, III-B, & III-VC, LP
- ◆ Strategic Partners Fund IV, IV-VC, & V, LP
- ◆ Summit Partners Growth Equity Fund VIII, LP
- ◆ Summit Partners Venture Capital Fund III, LP
- ◆ Tenaya Capital IV-P, V-P, & VI, LP
- ◆ The Fifth Cinven Fund No. 1, LP
- ◆ The Fourth Cinven Fund
- ◆ TPG Partners V & VI, LP
- ◆ Trilantic Capital Partners IV, LP
- ◆ Trilantic Capital Partners V (North America), LP
- ◆ U.S. Equity Partners II, LP
- ◆ Wicks Communications & Media Partners, LP

**Private Debt Partnerships**

- ◆ Apollo Investment Fund VIII, LP
- ◆ Avenue Asia Special Situations Fund II, III, & IV, LP
- ◆ Avenue Europe Special Situations Fund, LP
- ◆ Avenue Special Situations Fund IV, V, & VI, LP
- ◆ Cerberus Institutional Partners, LP (Series Two, Three, & Four)
- ◆ Cerberus Institutional Partners V, LP
- ◆ Gleacher Mezzanine Fund I & II
- ◆ Gold Hill Venture Lending, LP
- ◆ GSC Partners CDO Investors IV, LP
- ◆ GSC Recovery II & III, LP
- ◆ New York Life Investment Management Mezzanine Partners I & II, LP
- ◆ OCM Opportunities Fund VII & VII-B, LP
- ◆ Versa Capital Fund I & II, LP
- ◆ Windjammer Senior Equity Fund III & IV, LP

**Alternative Investment Consultant**

- ◆ Portfolio Advisors, LLC

**Custodian Bank and Securities Lending Agent**

- ◆ The Bank of New York Mellon Corporation

**Absolute Return Consultant**

- ◆ Aksia, LLC

**Investment Accounting Application Service Provider**

- ◆ Financial Control Systems, Inc.

**Investment Evaluator and General Investment Consultant**

- ◆ Hewitt EnnisKnupp

**Proxy Voting Agent**

- ◆ Glass, Lewis & Co., LLC

**Real Estate Investment Consultant**

- ◆ Courtland Partners, Ltd.

# ACTUARIAL SECTION

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Buck Consultants, LLC  
500 Plaza Drive  
Secaucus, NJ 07096

January 22, 2014

The Retirement Board  
Public School Employees'  
Retirement System of Pennsylvania  
5 North 5th Street  
Harrisburg, Pennsylvania 17101-1905

tel 201.902.2300  
fax 201.902.2450

Re: Actuary's Certification Letter

Members of the Board:

An actuarial valuation of the Public School Employees' Retirement System of Pennsylvania (Retirement System or PSERS) is performed annually to measure the ongoing costs of the Retirement System and the progress towards the funding goals of the Retirement System over time. The financing objective of the Retirement System is to:

- Fully fund all current costs based on the normal contribution rate determined under the funding method; and
- Liquidate the unfunded accrued liability based on level percentage of pay amortization schedules required by the Public School Employees' Retirement Code, 24 Pa. C.S. §8101 et. seq. (Retirement Code) as amended by Act 2010-120, which requires amortization over 24 years of the unfunded accrued liability as of June 30, 2010, and of each change in the unfunded accrued liability due to actuarial experience after the June 30, 2010 valuation. Any increases in the unfunded liability arising from legislation enacted after June 30, 2010, are to be amortized over 10 years.
- As directed by Act 2010-120, use pension rate collars to moderate the rise of annual employer pension contribution rates to reach the full actuarially determined contribution funding level in a budgetarily sound manner and within a financially responsible period of time.

Based on the June 30, 2013, actuarial valuation, a total contribution rate of 26.87% of payroll payable by employers for FY2014/2015, when taken together with the contributions payable by the members, current assets, and expected future asset returns, is sufficient to achieve the financing objective. However, Act 2010-120 limits the contribution for FY 2014/2015 to 21.40% of payroll. This has the effect of deferring part of the contribution that would otherwise have been payable in FY 2014/2015 to future years.

The valuation takes into account all of the promised benefits to which members are entitled as of June 30, 2013, including pension and survivor benefits, and as required by the Retirement Code is the basis for the contribution rate for fiscal year 2014/2015. There were no legislative or administrative changes made to the benefits payable by PSERS since the prior valuation.

As required under Section 8502(j) of the Retirement Code, experience studies are performed for PSERS every five years, the most recent having been made as of June 30, 2010. This valuation was prepared on the basis of the demographic and economic assumptions that were recommended on the basis of the July 1, 2005 – June 30, 2010 Experience Review and approved by the Board of Trustees at its March 11, 2011, meeting.

The actuarial assumptions and methods used by PSERS for financial reporting meet the requirements set forth in Governmental Accounting Standards Board (GASB) Statements No. 25, 43, and 50, and are unchanged from the prior valuation. The actuarial assumptions and methods for the GASB 25 disclosure are the same as those used for pension funding, except that the GASB 25 amortization payment will be determined on the basis of 30-year level-dollar funding. The Health Insurance funding provisions of the Retirement Code differ from the GASB 43 disclosure requirements. For funding purposes, the actuarial liability equals the assets in the health insurance account, and a contribution is determined to provide

for solvency of the account through the third fiscal year following the valuation date. For GASB 43 purposes the Health Insurance actuarial liability and normal cost requirements are determined under the entry age actuarial cost method, with 30-year level-dollar funding. (The entry age actuarial cost method meets the GASB 43 requirements for determining actuarial liability and normal cost and is the cost method specified by the Retirement Code for the PSERS pension plan.)

The Retirement System reported the individual data for members of the Retirement System as of the valuation date to the actuaries. While we did not verify the data at their source, we did perform tests for internal consistency and reasonableness. The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the Retirement System. The accuracy of the results presented in this report is dependent on the accuracy of the data.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. An analysis of the potential range of future results is beyond the scope of this valuation.

In our opinion, the attached schedules of valuation results fairly represent the status of the Public School Employees' Retirement System and present an accurate view of historical data. The underlying assumptions and methods used for both funding and GASB disclosure purposes are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the Retirement System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants:

- Summary of Results of Actuarial Valuation as of June 30, 2013
- History and Projection of Contribution Rates and Funded Ratios
- Description of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Schedule of Retired Members and Beneficiaries Added To and Removed From Rolls
- Solvency Test
- Analysis of Past Financial Experience - Reconciliation of Employer Contribution Rates

In addition, Buck Consultants prepared the "Schedule of Changes in the Employer Net Pension Liability," "Schedule of Employer Net Pension Liability," "Schedule of Employer Contributions," and "Schedule of Funding Progress" in the Financial Section.

This report was prepared solely for the Public School Employees' Retirement System of Pennsylvania for the purposes herein stated and may not be appropriate to use for other purposes. Buck does not intend to benefit and assumes no duty or liability to other parties who receive this work. Use of this report for any other purposes or by anyone other than PSERS and its auditors may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. The attached pages should not be provided without a copy of this cover letter. No one may make any representations or warranties based on any statements or conclusions contained in this report without Buck Consultants' written consent.

David L. Driscoll is a Fellow of the Society of Actuaries and a Member of the American Academy of Actuaries. Edward Quinn and Salvador Nakar are Members of the American Academy of Actuaries. We meet the Qualification Standards of

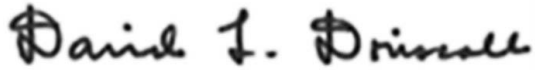


## Actuarial Section

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the American Academy of Actuaries to render the actuarial opinions contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions concerning it.

Respectfully submitted,  
Buck Consultants



David L. Driscoll, FSA, MAAA, EA  
Principal, Consulting Actuary



Edward A. Quinn, MAAA, EA  
Director, Retirement Actuary



Salvador Nakar, MAAA, EA  
Senior Consultant



**SUMMARY OF RESULTS OF ACTUARIAL VALUATION**  
**AS OF JUNE 30, 2013**  
**(\$ Amounts in Thousands)**

Item	June 30, 2013	June 30, 2012
<b>Member Data</b>		
1. Number of Members		
a) Active Members	267,428	273,504
b) Inactive Members and Vestees	18,911	17,121
c) Annuitants, Beneficiaries and Survivor Annuitants	209,204	202,015
d) Total	495,543*	492,640*
2. Annualized Salaries (\$ Amounts in Thousands)	\$ 12,577,105	\$ 12,714,371
3. Annual Annuities (\$ Amounts in Thousands)	\$ 5,147,060	\$ 4,872,918
<b>Valuation Results</b>		
4. Present Value of Future Pension Benefits		
a) Active Members	\$ 59,347,835	\$ 59,970,002
b) Inactive Members and Vestees	1,379,601	1,232,277
c) Annuitants, Beneficiaries and Survivor Annuitants	49,979,444	47,511,912
d) Total	\$ 110,706,880	\$ 108,714,191
5. Present Value of Future Pension Normal Cost		
a) Active Members	\$ 9,826,502	\$ 9,836,166
b) Employer	10,928,562	11,117,365
c) Total	\$ 20,755,064	\$ 20,953,531
6. Pension Accrued Liability		
a) Active Members (4a) – (5c)	\$ 38,592,771	\$ 39,016,471
b) Inactive Members and Vestees	1,379,601	1,232,277
c) Annuitants, Beneficiaries and Survivor Annuitants	49,979,444	47,511,912
d) Total	\$ 89,951,816	\$ 87,760,660
7. Health Insurance Assets for Premium Assistance	\$ 100,349	\$ 93,753
8. Total Accrued Liability for Funding (6) + (7)	\$ 90,052,165	\$ 87,854,413
9. Actuarial Value of Assets	\$ 57,453,611	\$ 58,321,375
10. Funded Status (9) / (8)	63.8%	66.4%
11. Unfunded Accrued Liability (8) – (9)	\$ 32,598,554	\$ 29,533,038
12. Total Normal Cost Rate	15.92%	16.00%
13. Member Contribution Rate	7.46%	7.43%
14. Employer Normal Cost Rate (12) – (13)	8.46%	8.57%
<b>Employer Annual Funding Requirement</b>		
15. Employer Contribution Rate Calculated by Actuary	<b>Fiscal 2014/2015</b>	<b>Fiscal 2013/2014</b>
a) Normal	8.46%	8.57%
b) Unfunded Accrued Liability	17.51%	15.25%
c) Preliminary Pension Rate	25.97%	23.82%
d) Act 120 Employer Pension Rate Collar	20.50%	16.00%
e) Health Insurance	0.90%	0.93%
f) Total Rate	21.40%	16.93%

\* In addition, there are 109,739 and 105,165 inactive members as of June 30, 2013 and June 30, 2012, respectively, who are no longer participating and are valued for their accumulated deductions only.

**HISTORY AND PROJECTION OF CONTRIBUTION RATES AND FUNDED RATIOS<sup>1</sup>**

Fiscal Year Ending June 30	Appropriation Payroll <sup>9</sup> (thousands)	Contribution Rates <sup>2</sup>							
		Employee	Employer Normal Cost	Employer Unfunded Liability	Preliminary Employer Pension	Final Employer Pension <sup>7</sup>	Employer Health Insurance	Total Employer	Funded Ratio
2004	\$ 10,030,705	7.08%	7.25%	(4.27%)	2.98%	2.98%	0.79%	3.77%	91.2%
2005 <sup>3</sup>	11,062,589	7.12	7.48	(7.10)	0.38	4.00	0.23	4.23	83.7
2006	11,505,093	7.16	7.61	(4.28)	3.33	4.00	0.69	4.69	81.2
2007 <sup>4</sup>	11,821,951	7.21	6.62	(0.95)	5.67	5.72	0.74	6.46	85.8
2008	12,881,244	7.25	6.68	(0.24)	6.44	6.44	0.69	7.13	86.0
2009	12,500,000	7.29	6.68	(3.37)	3.31	4.00	0.76	4.76	79.2
2010 <sup>5</sup>	12,899,000	7.32	7.35	(3.72)	3.63	4.00	0.78	4.78	75.1
2011 <sup>5,6</sup>	13,510,000	7.34	8.08	(0.50)	7.58	5.00	0.64	5.64	69.1
2012	14,112,000	7.37	8.12	10.15	18.27	8.00	0.65	8.65	66.4
2013 <sup>8</sup>	14,297,000	7.40	8.66	12.99	21.65	11.50	0.86	12.36	63.8
2014	13,720,000	7.43	8.57	15.25	23.82	16.00	0.93	16.93	61.6
2015	13,482,000	7.46	8.46	17.51	25.97	20.50	0.90	21.40	59.8
2016	13,841,530	7.47	8.23	19.05	27.28	25.00	0.84	25.84	58.5
2017	14,214,689	7.48	8.03	20.41	28.44	28.44	0.83	29.27	57.3
2018	14,613,842	7.48	7.84	21.59	29.43	29.43	0.82	30.25	56.6
2019	15,028,322	7.49	7.66	22.83	30.49	30.49	0.79	31.28	57.9
2020	15,465,597	7.49	7.49	23.81	31.30	31.30	0.78	32.08	59.2
2021	15,914,196	7.49	7.32	23.93	31.25	31.25	0.77	32.02	60.2
2022	16,378,425	7.50	7.15	24.12	31.27	31.27	0.74	32.01	61.6
2023	16,858,286	7.50	6.99	24.50	31.49	31.49	0.73	32.22	63.1
2024	17,349,187	7.50	6.83	24.75	31.58	31.58	0.72	32.30	64.8
2025	17,847,579	7.50	6.67	25.00	31.67	31.67	0.69	32.36	66.5

1. The projection of contribution rates is based on the assumption that there are no changes in demographic assumptions, no changes in benefit provisions and no actuarial gains or losses other than gains or losses on the actuarial value of assets that result from recognizing currently deferred gains or losses on the market value of assets.
2. In general, the Preliminary Employer Pension Rate equals the sum of the rates for the Employer Normal Cost and the Unfunded Liability; and the Final Employer Pension Rate is the greater of the Preliminary Pension Rate and any Pension Rate Floor or Collar stated in the Retirement Code. The Total Employer Rate is the sum of the Final Employer Pension Rate and the Employer Health Insurance Rate.
3. Act 2003-40 amended the Retirement Code to increase the Employer Pension Rate Floor from 1% to 4%.
4. Revised actuarial assumptions based on a five-year experience review ending June 30, 2005 were used to determine the contributions for the fiscal year ending June 30, 2007. Since the benefit changes under Act 2001-9 had not been in effect throughout the entire period covered by the study the Board decided, at its December 2005 meeting, to delay making any changes to the retirement rate assumptions until further data became available. The 5.72% Final Employer Pension Rate equals the 6.46% Total Employer Rate certified by the Board at that meeting, minus the 0.74% Employer Health Insurance Rate. The 5.67% Preliminary Employer Pension Rate equals the sum of the Employer Normal Cost and Unfunded Liability rates. The Normal Cost and Unfunded Liability rates were calculated by the actuary in January 2006, based on the package of assumptions adopted at the December 2005 meeting.
5. At its January 2009 meeting, the Board voted to reduce the interest rate from 8.50% to 8.25% for the June 30, 2008 valuation and to 8.00% thereafter.
6. Act 2010-46 recertified the fiscal year ending June 30, 2011 pension rate from 7.58% to 5.00%.
7. The Final Employer Pension rate is limited by the Act 2010-120 pension rate collars for fiscal years 2012 through 2016.
8. Revised actuarial assumptions based on a five-year experience review ending June 30, 2010 were used to determine the contributions for the fiscal year ending June 30, 2013 and thereafter, which includes an interest rate of 7.50%.
9. Beginning fiscal year ending June 30, 2005, the appropriation payroll shown is estimated payroll used for valuation purposes, not actual appropriation payroll. Prior to fiscal year ending June 30, 2005, the appropriation payroll shown is the annualized salary.

## DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

### ASSUMPTIONS

**Investment Rate of Return:** 7.50% per annum, compounded annually (adopted as of June 30, 2011). The components are 3.00% for inflation and 4.50% for the real rate of return. Actuarial equivalent benefits are determined based on 4% (since 1960).

**Separation from Service:** Illustrative rates of assumed separation from service are shown in the following table (adopted as of June 30, 2011).

Age	Annual Rate of:						
	Non-Vested Withdrawal	Vested Withdrawal*		Death	Disability	Early Retirement**	Superannuation Retirement
		Less Than 10 Years of Service	10 or More Years of Service				
<b>MALES</b>							
25	12.50%	5.50%	2.00%	0.037%	0.024%		
30	10.50	3.20	2.00	0.038	0.024		
35	11.00	3.00	1.50	0.056	0.100		
40	13.00	3.50	1.25	0.090	0.180		
45	13.00	3.50	1.25	0.121	0.180		25.00%
50	13.00	3.50	1.70	0.173	0.280		25.00
55	11.00	3.50	3.00	0.245	0.430	15.00%	30.00
60	10.50	3.50	4.50	0.363	0.580	12.00	28.00
65				0.592	0.100		20.00
69				0.810	0.100		18.00
<b>FEMALES</b>							
25	13.00%	8.50%	5.00%	0.018%	0.030%		
30	13.00	6.50	4.00	0.019	0.040		
35	13.00	5.50	3.00	0.022	0.060		
40	10.90	4.50	1.50	0.035	0.100		
45	10.90	4.00	1.50	0.055	0.150		30.00%
50	10.90	3.75	1.75	0.085	0.200		30.00
55	10.90	3.75	3.00	0.133	0.380	15.00%	30.00
60	10.90	4.50	5.50	0.197	0.380	15.00	30.00
65				0.301	0.130		25.00
69				0.428	0.130		20.00

\* Vested Withdrawal – At least 5 years of service for Class T-C and Class T-D members and 10 years of service for Class T-E and Class T-F members but not eligible for Early or Superannuation retirement.

\*\* Early Retirement – Age 55 with 25 years of service, but not eligible for Superannuation retirement.

**DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS  
(Continued)**

**Death after Retirement:** The RP-2000 Combined Healthy Annuitant Tables (Male and Female) with age set back 3 years for both genders for healthy annuitants and for dependent beneficiaries. The RP-2000 Combined Disabled Tables (Male and Female) with age set back 7 years for males and set back 3 years for females for disabled annuitants. (A unisex table based on the RP-2000 Combined Healthy Annuitant Tables (Male and Female) with age set back 3 years for both genders assuming the population consists of 25% males and 75% females is used to determine actuarial equivalent benefits.) No provision has been made for future improvements in mortality.

**Salary Increase:** Effective average of 5.50% per annum, compounded annually (adopted as of June 30, 2011). The components are 3.00% for inflation, 1% for real wage growth and 1.5% for merit or seniority increases. Representative values are as follows:

Age	Annual Rate of Salary Increase
20	10.75%
30	8.25
40	6.25
50	4.25
55	3.75
60	3.75
65	3.75
70	3.75

**Payroll Growth:** 3.50% per annum.

**MISCELLANEOUS**

**Option 4 Elections:** 100% of Class T-C and Class T-D members are assumed to elect a refund of contributions and a reduced annuity.

**Withdrawal Annuity:** 90% of members are assumed to commence payment immediately and 10% are assumed to defer payment to superannuation age.

**Health Insurance**

**Elections:** 66% of eligible retirees are assumed to elect premium assistance.

**Administrative Expenses:** Assumed equal to 2% of contributions made during the year.

**METHODS**

**Calculations:** The actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the Retirement System, and on actuarial assumptions that are internally consistent and reasonable based on the actual experience of the System.

**Asset Valuation Method:** A ten-year smoothed market average (five-year smoothed market average prior to June 30, 2010) value of assets that recognizes the 7.50% (8.00% prior to June 30, 2011, 8.25% prior to June 30, 2009, and 8.50% prior to June 30, 2008) actuarial expected investment return immediately and spreads the difference between the actual return on the market value of assets and the expected return on the actuarial value of assets over a period of ten years. The averaging period is being phased-in from fiscal year 2006.

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## DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

**Actuarial Cost Method for Pension Funding:** Entry Age Normal Cost Method (modified slightly as of June 30, 2005 to use a pay-weighted average normal contribution rate). The results of each June 30 valuation normally determine the employer contribution rate for the second succeeding fiscal year. Act 120 revised the funding method effective with the June 30, 2010 valuation. Act 120 mandated that the outstanding balance of the unfunded accrued liability as of June 30, 2010, including changes in the unfunded accrued liability due to the funding reforms of Act 120, be amortized over a 24-year period, as a level percent of pay, beginning July 1, 2011. Future valuation gains and losses, and changes in the unfunded accrued liability resulting from changes in actuarial assumptions and methods, are amortized over a 24-year period, as a level percent of pay. Future increases in the unfunded accrued liability due to legislation will be amortized over a 10-year period, as a level percent of pay. Act 120 also modified the employer pension contribution requirements by imposing collars on the rate at which employer contributions may rise from year to year. For the fiscal years ending June 30, 2012, June 30, 2013, and on or after June 30, 2014 the pension contribution rate can be no more than 3%, 3.5% and 4.5%, respectively, of total compensation of all active members, greater than the prior year's final contribution rate. Beginning with the fiscal year in which the actuarially required contribution rate is less than the collared rate, the final contribution rate is the actuarially determined contribution rate, provided that the final contribution rate is not less than the employer normal contribution rate.

**Actuarial Cost Method for GASB 25 Accounting for Pensions:** Same as for pension funding, except that the GASB 25 amortization payment will be set equal to the level dollar amount that will amortize the unfunded accrued liability over a period of 30 years.

**Actuarial Cost Method for Health Insurance Funding:** The actuarial liability equals the assets in the health insurance account, and the results of the June 30 valuation determine the contribution rate for the second succeeding fiscal year. The rate so determined is the rate necessary to establish reserves sufficient to cover administrative

expenses and provide premium assistance payments for all participating eligible annuitants during the third fiscal year that follows the valuation date.

**Actuarial Cost Method for GASB 43 Accounting for Health Insurance:** The actuarial liability is determined under the entry age actuarial cost method, and the Annual Required Contribution (ARC) for the second fiscal year that follows the valuation date is equal to the entry age normal cost for health insurance plus an amount that will amortize the entry age unfunded actuarial liability for health insurance over a period of 30 years.

### DATA

**Census and Assets:** The valuation was based on members of the Retirement System as of June 30, 2013 and does not take into account future members. All census data was supplied by the Retirement System and was subject to reasonable consistency checks. The actuary adjusts the data to account for service and pay earned by members on or before the valuation that is not reported by the Retirement System until after the actuarial valuation is performed. Asset data was supplied by the Retirement System.



**SCHEDULE OF ACTIVE MEMBERS**

**VALUATION DATA**

Valuation as of June 30	Number of Participating Employers	Number of Active Members	Annual Compensation (Thousands)	Average Compensation	% Increase in Average
2013	782	267,428	\$12,577,105	\$47,030	1.17%
2012	773	273,504	12,714,371	46,487	0.52
2011	747	279,152	12,910,043	46,247	1.99
2010	747	282,041	12,788,847	45,344	1.26
2009	742	279,701	12,524,593	44,779	2.43
2008	739	272,690	11,921,469	43,718	1.16
2007	739	264,023	11,410,257	43,217	(0.33)
2006	733	263,350	11,419,049	43,361	5.22
2005	734	255,465	10,527,668	41,209	1.84
2004	733	247,901	10,030,705	40,463	3.40

**SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES**

**ADDED TO AND REMOVED FROM ROLLS**

Valuation Date as of June 30	Added to Rolls		Removed from Rolls		Rolls at End of Year		% Increase in Annual Allowance	Average Annual Allowance
	Number	Annual Allowance (Millions)	Number	Annual Allowance (Millions)	Number*	Annual Allowance** (Millions)		
2013	16,404	\$377.6	9,215	\$83.7	209,204	\$5,147.1	5.63%	\$24,603
2012	14,579	332.7	7,186	66.6	202,015	4,872.9	4.78	24,122
2011	16,228	453.7	6,540	76.4	194,622	4,650.8	7.17	23,897
2010	12,649	372.8	5,678	77.6	184,934	4,339.6	8.59	23,466
2009	9,651	314.9	5,228	74.4	177,963	3,996.3	4.85	22,456
2008	10,911	345.3	5,397	73.9	173,540	3,811.5	8.18	21,963
2007	10,612	307.5	4,399	56.0	168,026	3,523.4	7.60	20,970

\* Excludes inactive members and vestees.

\*\* Reflects changes in annuities for continuing payees due to finalization of benefit calculations and due to the commencement of supplemental annuity payments.

**POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS**

**SCHEDULE OF RETIRED MEMBERS ADDED TO AND REMOVED FROM ROLLS\***

Valuation Date as of June 30	Added to Rolls		Removed from Rolls		Rolls at End of Year		% Increase in Annual Premium Assistance	Average Annual Premium Assistance
	Number*	Annual Premium Assistance (Millions)	Number*	Annual Premium Assistance (Millions)	Number*	Annual Premium Assistance (Millions)		
2013	6,759	\$5.4	2,364	\$1.9	137,693	\$109.1	3.31%	\$1,200
2012	5,751	4.6	1,372	1.1	133,298	105.6	3.43	1,200
2011	8,185	6.5	2,074	1.6	128,919	102.1	4.93	1,200
2010	6,709	5.3	2,323	1.8	122,808	97.3	3.73	1,200
2009	6,285	5.0	3,079	2.4	118,422	93.8	2.74	1,200
2008	8,792	7.0	6,050	4.8	115,216	91.3	2.47	1,200
2007	7,072	5.6	2,637	2.1	112,474	89.1	4.09	1,200

\* Number of retired members eligible to participate in the Health Insurance Premium Assistance; 66% of eligible retirees are assumed to elect premium assistance.

**SOLVENCY TEST**  
**COMPARATIVE SUMMARY OF ACCRUED LIABILITY AND**  
**ACTUARIAL VALUE OF ASSETS**  
**(\$ Amounts in Thousands)**

**PENSIONS**

Valuation as of June 30	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed	Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
					(1)	(2)	(3)
2013	\$13,089,342	\$49,979,444	\$26,883,030	\$57,353,262	100%	89%	0%
2012	12,535,442	47,511,912	27,713,306	58,227,622	100	96	0
2011	12,242,308	45,648,780	27,749,295	59,141,131	100	100	5
2010	11,850,031	40,284,383	26,871,014	59,306,848	100	100	27
2009	11,087,345	37,112,318	27,321,073	59,781,575	100	100	42
2008	10,532,683	34,617,953	25,695,001	60,922,157	100	100	61
2007	10,183,433	31,603,788	24,708,649	57,057,838	100	100	62
2006	9,571,668	29,117,164	25,938,529	52,464,726	100	100	53
2005	9,116,347	27,051,245	25,058,989	51,219,293	100	100	60
2004	8,755,109	24,482,234	23,885,657	52,094,479	100	100	79

**POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS**

Valuation as of June 30	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed	Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
					(1)	(2)	(3)
2013	\$0	\$961,701	\$423,332	\$100,349	N/A	10%	0%
2012	0	934,506	430,161	93,753	N/A	10	0
2011	0	909,076	430,368	111,258	N/A	12	0
2010	0	767,587	394,632	116,831	N/A	15	0
2009	0	759,891	399,164	105,114	N/A	14	0
2008	0	749,070	383,941	95,785	N/A	13	0
2007	0	684,677	373,415	97,292	N/A	14	0
2006	0	684,435	371,719	92,777	N/A	14	0

The solvency test compares the actuarial accrued liabilities by various categories with the System's actuarial value of assets.

**ANALYSIS OF PAST FINANCIAL EXPERIENCE  
RECONCILIATION OF EMPLOYER CONTRIBUTION RATES**

<b>Fiscal Year Ending June 30</b>	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>
Effective Prior Year Contribution Rate	16.93%	12.36%	8.65%	5.64%	4.78%	4.76%	7.13%	6.46%
Prior Year Adjustment for Legislation	7.82	10.15	10.27	2.58	(0.37)	(0.69)	N/A	(0.05)
<b>Net Change Due to:</b>								
Change in Normal Rate	(0.11)	(0.09)	(0.22)	0.04	0.00	(0.02)	0.00	0.06
Payroll Growth and Liability Experience	0.68	0.72	(0.21)	0.40	(0.03)	0.33	(0.88)	0.47
Investment Loss/(Gain)	0.81	0.78	0.59	1.94	2.04	(1.71)	(2.25)	0.24
Health Insurance Contribution Change	(0.03)	0.07	0.21	0.01	(0.14)	0.02	0.07	(0.05)
Assumption/Method Change	N/A	N/A	3.04	N/A	1.94	1.72	N/A	N/A
Act 40 4.00% Floor*	N/A	N/A	N/A	N/A	N/A	0.37	0.69	N/A
Act 120 Funding Reforms	N/A	N/A	N/A	8.31	N/A	N/A	N/A	N/A
Amortization of Prior Legislation Deferrals	0.77	0.76	0.18	N/A	N/A	N/A	N/A	N/A
Legislation Deferrals:								
Act 46 Rate Cap**	N/A	N/A	N/A	N/A	(2.58)	N/A	N/A	N/A
Act 120 Collar***	(5.47)	(7.82)	(10.15)	(10.27)	N/A	N/A	N/A	N/A
Actual Contribution Rate:	21.40%	16.93%	12.36%	8.65%	5.64%	4.78%	4.76%	7.13%

\* Act 2003-40 amended the Retirement Code to increase the Employer Pension Rate Floor from 1% to 4%.

\*\* Act 2010-46 recertified the fiscal year ending June 30, 2011 pension rate from 7.58% to 5.00%.

\*\*\* The Final Employer Pension rate is limited by the Act 2010-120 pension rate collar. For the fiscal years ending June 30, 2012, June 30, 2013, and on or after June 30, 2014 the pension contribution rate can be no more than 3%, 3.5% and 4.5%, respectively, of total compensation of all active members, greater than the prior year's final contribution rate. Beginning with the fiscal year in which the actuarially required contribution rate is less than the collared rate, the final contribution rate is the actuarially determined contribution rate, provided that the final contribution rate is not less than the employer normal contribution rate.

**Schedule of Funding Progress for Pensions\***  
**GASB Statement No. 25 Disclosure**  
**(\$ Amounts in Thousands)**

Valuation as of June 30	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Accrued Liability as a Percentage of Covered Payroll
2013	\$57,353,262	\$89,951,816	\$32,598,554	63.8%	\$12,577,105	259.2%
2012	58,227,622	87,760,660	29,533,038	66.3	12,714,371	232.3
2011	59,141,131	85,640,383	26,499,252	69.1	12,910,043	205.3
2010	59,306,848	79,005,428	19,698,580	75.1	12,788,847	154.0
2009	59,781,575	75,520,736	15,739,161	79.2	12,524,593	125.7
2008	60,922,157	70,845,637	9,923,480	86.0	11,921,469	83.2
2007	57,057,838	66,495,870	9,438,032	85.8	11,410,257	82.7
2006	52,464,726	64,627,361	12,162,635	81.2	11,419,049	106.5
2005	51,122,156	61,129,444	10,007,288	83.6	10,527,668	95.1
2004	51,949,622	56,978,143	5,028,521	91.2	10,030,705	50.1

\* The amounts reported above include assets and liabilities for Pensions.

**Schedule of Funding Progress for**  
**Postemployment Benefits Other Than Pensions\***  
**GASB Statement No. 43 Disclosure**  
**(\$ Amounts in Thousands)**

Valuation as of June 30	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	Unfunded Accrued Liability as a Percentage of Covered Payroll
2013	\$100,349	\$1,385,033	\$1,284,684	7.2%	\$12,577,105	10.2%
2012	93,753	1,364,667	1,270,914	6.9	12,714,371	10.0
2011	111,258	1,339,444	1,228,186	8.3	12,910,043	9.5
2010	116,831	1,162,219	1,045,388	10.1	12,788,847	8.2
2009	105,114	1,159,055	1,053,941	9.1	12,524,593	8.4
2008	95,785	1,133,011	1,037,226	8.5	11,921,469	8.7
2007	97,292	1,058,092	960,800	9.2	11,410,257	8.4
2006	92,777	1,056,154	963,377	8.8	11,419,049	8.4

\* The amounts reported above include assets and liabilities for Health Insurance Premium Assistance. The health insurance liabilities for GASB 43 disclosure have been calculated under the entry age normal cost method, which provides liabilities that differ from those determined under the funding requirements of the Retirement Code.

**SCHEDULE OF EMPLOYER CONTRIBUTIONS FOR PENSIONS**  
**GASB STATEMENT NO. 25 DISCLOSURE**  
**(\$ Amounts in Thousands)**

Fiscal Year Ended June 30	Annual Required Contribution	Actual Employer Contribution	Percentage Contributed
2013	\$3,110,429	\$1,434,815	46%
2012	2,629,244	1,001,140	38
2011	2,436,602	647,000	27
2010	1,928,278	527,212	27
2009	1,761,295	503,227	29
2008	1,852,238	753,532	41
2007	1,708,821	659,545	39
2006	1,328,373	456,878	34
2005	945,107	431,556	46
2004	321,091	321,091	100

The Annual Required Contribution (ARC) presented above was determined as part of the actuarial valuation as of two years prior to the dates indicated (i.e., the ARC for the fiscal year ended June 30, 2013 was determined by the valuation completed as of June 30, 2011, which was based on a 7.50% interest rate).

Additional information as of the latest actuarial valuation follows:

Valuation Date:	6/30/2013
Actuarial Cost Method:	Entry Age
Amortization Method:	Level Dollar, Open
Remaining Amortization Period:	30 Years
Asset Valuation Method:	10 Year Smoothed Market
Actuarial Assumptions:	
-Investment Rate of Return*	7.50%
-Projected Salaried Increases*	5.50%
*Includes Inflation at:	3.00%

**SCHEDULE OF EMPLOYER CONTRIBUTIONS FOR  
POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS  
GASB STATEMENT NO. 43 DISCLOSURE  
(\$ Amounts in Thousands)**

<b>Fiscal Year Ended June 30</b>	<b>Annual Required Contribution</b>	<b>Actual Employer Contribution</b>	<b>Percentage Contributed</b>
2013	\$113,016	\$107,993	96%
2012	102,104	80,936	79
2011	119,320	88,796	74
2010	117,187	102,703	88
2009	109,531	92,493	84
2008	101,352	81,317	80
2007	94,970	86,763	91

The Annual Required Contribution (ARC) beginning with the fiscal year ended June 30, 2009 was determined as part of the actuarial valuation as of two years prior to the date indicated (i.e., the ARC for the fiscal year ended June 30, 2013 was determined by the valuation completed as of June 30, 2011, which was based on a 7.50% interest rate). Prior to the fiscal year which ended June 30, 2009, the ARC was determined as part of the actuarial valuation as of one year prior to the dates indicated.

Additional information as of the latest actuarial valuation follows:

Valuation Date:	6/30/2013
Actuarial Cost Method:	Entry Age
Amortization Method:	Level Dollar, Open
Remaining Amortization Period:	30 Years
Asset Valuation Method:	Market
Actuarial Assumptions:	
-Investment Rate of Return*	7.50%
-Projected Salaried Increases*	5.50%
*Includes Inflation at:	3.00%



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## Statistical Section Narrative

To assist readers in the assessment of the System's economic condition, the Statistical Section of this Comprehensive Annual Financial Report presents information to add historical perspective, context, and detail to the financial statements, notes to financial statements, and required supplementary information presented in the preceding sections. To provide historical perspective and a sense of trend, the exhibits in this Section are presented in multiple-year formats. The information is categorized into four topical groups: *Financial Trends, Revenue Capacity, Demographic and Economic Information, and Operating Information.*

### Financial Trends

The *Schedule of Trend Data* provides key financial, actuarial, and demographic information for a ten-year period ended June 30, 2014.

The Schedules of *Total Changes in Pension Plan Net Position* and *Total Changes in Postemployment Healthcare Plans Net Position* show the historical combined effects of the additions and deductions of the plans' net position over the ten-year period ended June 30, 2014.

The graphs of *Additions to Pension Plan Net Position* and *Additions to Postemployment Healthcare Plans Net Position* provide visual details of the additions to the plans' net position over the ten-year period ended June 30, 2014.

The graphs of *Deductions from Pension Plan Net Position* and *Deductions from Postemployment Healthcare Plans Net Position* provide visual details of the deductions from the plans' net position over the ten-year period ended June 30, 2014.

### Revenue Capacity

The Schedules of *Pension Investment Income, Premium Assistance Investment Income,* and *Health Options Program Investment Income* provide a ten-year perspective on the System's largest source of revenue, Net Investment Income, over the ten-year period ended June 30, 2014.

### Demographic and Economic Information

Some of the following schedules listed are dependent upon an actuarial valuation. For those schedules, the most recent information is presented as of the year ended June 30, 2013, the date of the most current valuation completed at the time of publication.

The Schedule of *Summary Membership Data* provides general populations and statistics relating to the System's

active membership over the ten-year period ended June 30, 2013.

The Schedule of *Summary Annuity Data* provides general populations and statistics relating to the System's annuitants over the ten-year period ended June 30, 2013.

The Schedule of *Pension Benefit and Refund Deductions from Plan Net Position* provides summary statistics by payment type relating to retirement and refunds over the ten-year period ended June 30, 2014.

The Schedule of *Average Monthly Pension Benefit Payments* provides summary statistics of monthly average pension benefits and counts of recipients, by payment type, grouped in five-year increments of member credited service over the ten-year period ended June 30, 2013.

The Schedules of *Average Monthly Benefit Payments and Average Final Average Salary* provides summary statistics of average monthly pension benefits and postemployment healthcare benefits, counts of recipients with benefit effective dates within the designated fiscal year, and the recipients' average final average salary grouped in five-year increments of member credited service over the ten-year period ended June 30, 2013.

### Operating Information

The list of *Ten Largest Employers* shows the System's ten largest employers based on number of PSERS' members during FY 2014 and the *Schedule of Employers* provides the full list of PSERS' employers.

**Schedule of Trend Data**  
(Dollar Amounts in Thousands)\*

For years ended June 30	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
<b>Contribution Rates:</b>										
Total Pension %	16.00	11.50	8.00	5.00	4.00	4.00	6.44	5.72	4.00	4.00
Health Care Insurance Premium Assistance %	.93	.86	.65	.64	.78	.76	.69	.74	.69	.23
Total Employer %	16.93	12.36	8.65	5.64	4.78	4.76	7.13	6.46	4.69	4.23
Average Member %	7.43	7.40	7.37	7.34	7.32	7.29	7.25	7.21	7.16	7.12
<b>Contributions:</b>										
Member - Pension \$	966,926	991,087	952,887	1,042,707	952,047	911,118	879,598	855,322	827,647	788,310
Employer - Pension \$	1,992,084	1,446,402	1,004,584	658,511	535,331	515,889	753,532	659,545	456,878	431,556
Employer - Health Care Insurance Premium Assistance \$	117,868	108,676	81,343	89,242	102,703	92,483	81,317	86,763	74,065	26,252
Member - HOP \$	257,740	234,516	213,642	201,014	191,184	178,801	159,563	144,185	155,199	167,199
CMS \$ ***	37,759	40,698	33,462	32,080	33,901	31,556	28,426	27,789	13,941	-
Average Annual Member Compensation \$ *	47,931	47,030	46,487	46,247	45,344	44,779	43,718	43,217	43,361	41,210
Market Value of Assets \$	53,092,000	49,116,000	48,628,000	51,311,000	45,715,000	43,101,000	62,569,000	67,438,000	57,328,000	52,033,534
Actuarial Value of Assets \$	**	57,454,000	58,321,000	59,252,000	59,424,000	59,887,000	61,018,000	57,155,000	52,558,000	51,219,300
Accrued Actuarial Liability \$	**	90,052,000	87,854,000	85,752,000	79,122,000	75,626,000	70,941,000	66,593,000	64,720,000	61,129,444
Funded Ratio %	**	63.8	66.4	69.1	75.1	79.2	86.0	85.8	81.2	83.7
Total Benefits & Refunds \$	6,417,455	6,373,363	5,992,979	5,617,247	5,269,175	4,931,854	4,941,681	4,320,440	4,115,865	3,877,842
Average Pension \$ *	24,962	24,799	24,122	23,897	23,466	22,456	21,963	20,970	20,236	19,343
Annuitants & Beneficiaries	213,900	207,553	202,015	194,622	184,934	177,963	173,540	168,026	161,813	156,519
Active Members	263,312	267,428	273,504	279,152	282,041	279,701	272,690	264,023	263,350	255,465
Retirements	9,888	12,468	12,228	11,546	9,255	8,753	9,701	10,106	9,388	9,651

\* All dollar amounts are in thousands, except Average Annual Member Compensation and Average Pension.  
 \*\* Data for these categories relate to the actuarial valuation for fiscal year ended June 30, 2014. Results for this valuation were not available at publication date.  
 \*\*\* Centers for Medicare and Medicaid Services

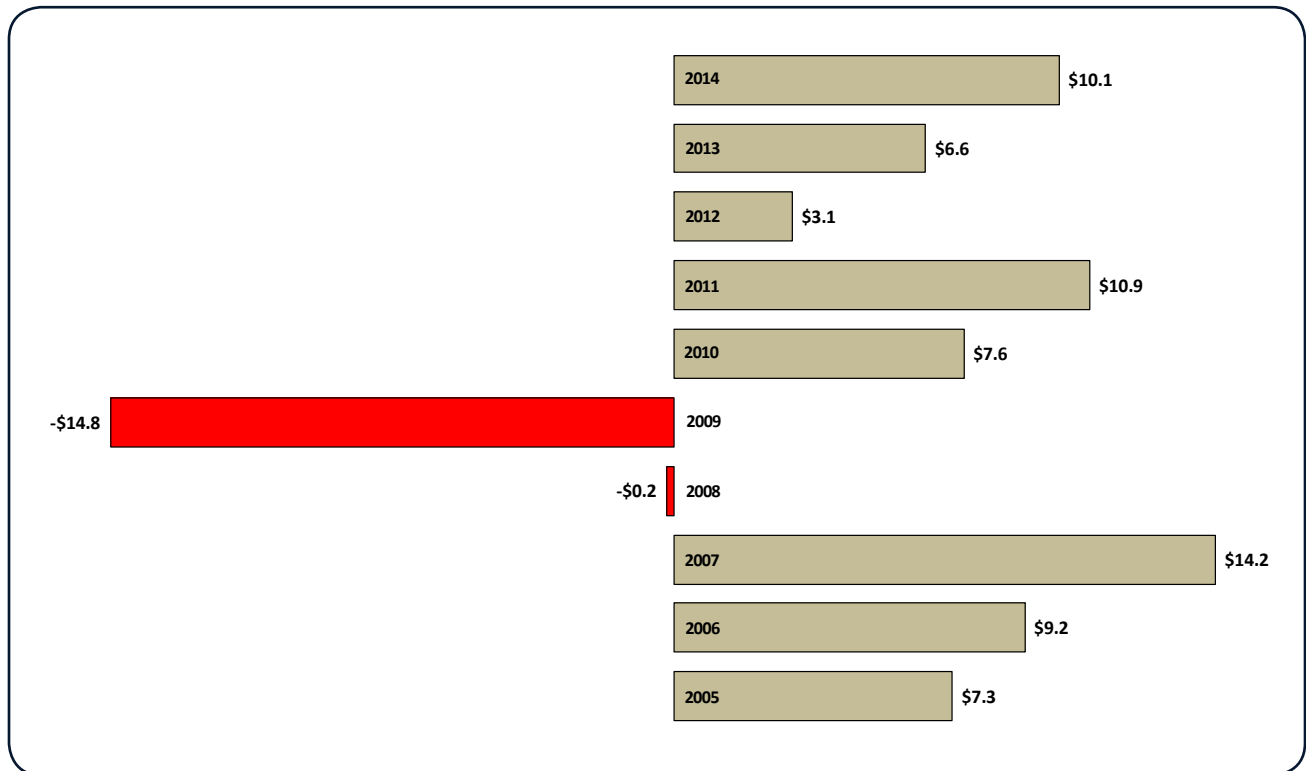
## Total Changes in Pension Plan Net Position 10 Year Trend (Dollar Amounts in Thousands)

Year Ended June 30	Additions to Plan Net Position					Deductions from Plan Net Position					Net Increase / (Decrease)
	Member Contributions	Employer Contributions	Net Investment Income	Total Additions	Monthly Benefits	Lump-Sum and Installment	Refunds of Contributions	Administrative*	Net Transfers**	Total Deductions	
2014	\$ 966,926	\$ 1,992,084	\$ 7,097,761	\$ 10,056,771	\$ 5,166,777	\$ 862,018	\$ 22,823	\$ 38,712	\$ 1,887	\$ 6,092,217	\$ 3,964,554
2013	991,087	1,446,402	4,126,002	6,563,491	4,905,200	1,111,692	24,461	37,480	2,893	6,081,726	481,765
2012	952,887	1,004,584	1,093,319	3,050,790	4,691,250	964,056	24,675	34,242	2,765	5,716,988	(2,666,198)
2011	1,042,707	658,511	9,246,091	10,947,309	4,322,520	958,703	17,695	37,028	9,844	5,345,790	5,601,519
2010	952,047	535,331	6,113,679	7,601,057	4,095,334	866,888	16,720	12,105	7,015	4,998,062	2,602,995
2009	911,118	515,889	(16,201,701)	(14,774,694)	3,885,286	754,011	20,369	35,639	7,947	4,703,252	(19,477,946)
2008	879,598	753,532	(1,782,628)	(149,498)	3,623,652	1,012,688	28,713	35,863	17,157	4,718,073	(4,867,571)
2007	855,322	659,545	12,694,327	14,209,194	3,189,004	855,431	18,180	35,239	6,010	4,103,864	10,105,330
2006	827,647	456,878	7,935,586	9,220,111	3,030,297	830,361	16,330	35,391	8,462	3,920,841	5,299,270
2005	788,310	431,556	6,076,482	7,296,348	2,947,749	692,089	16,233	32,670	10,859	3,699,600	3,596,748

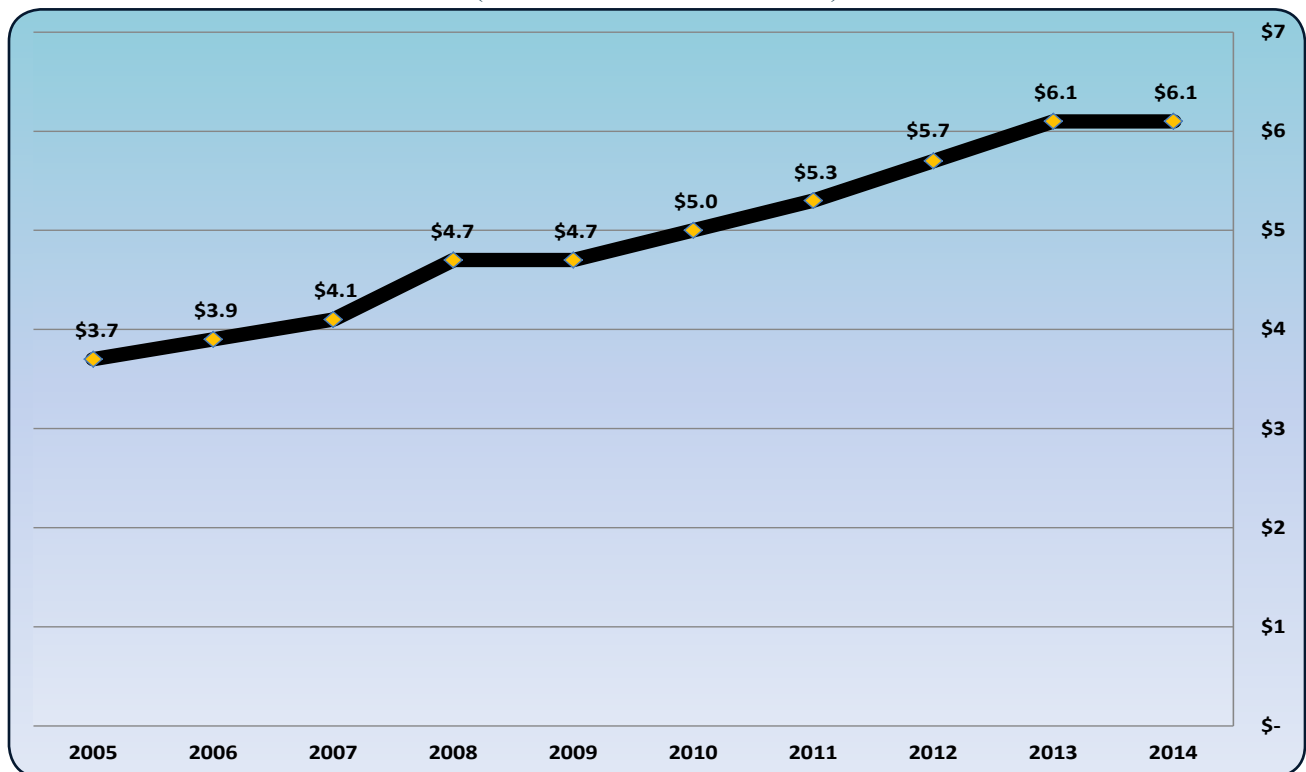
\* Reporting of administrative expenses for fiscal year ended June 30, 2010 includes effects of the capitalization of intangible assets as a result of PSERS' implementation of GASB Statement No. 51 *Accounting and Financial Reporting for Intangible Assets*.

\*\* Net transfers to the Commonwealth of Pennsylvania State Employees' Retirement System.

### Additions to Pension Plan Net Position 10 Year Trend (Dollar Amounts in Billions)



### Deductions from Pension Plan Net Position 10 Year Trend (Dollar Amounts in Billions)



## Total Changes in Postemployment Healthcare Plans Net Position 10 Year Trend (Dollar Amounts in Thousands)

### Premium Assistance

Year Ended June 30	Additions to Plan Net Position			Deductions from Plan Net Position			Net Increase / (Decrease)
	Employer Contributions	Net Investment Income	Total Additions	Benefits	Administrative	Total Deductions	
2014	\$ 117,868	\$ 70	\$ 117,938	\$ 104,197	\$ 2,030	\$ 106,227	\$ 11,711
2013	108,676	110	108,786	100,078	2,112	102,190	6,596
2012	81,343	423	81,766	97,206	2,065	99,271	(17,505)
2011	89,242	691	89,933	93,518	1,988	95,506	(5,573)
2010	102,703	869	103,572	89,911	1,944	91,855	11,717
2009	92,493	1,861	94,354	83,206	1,819	85,025	9,329
2008	81,317	2,755	84,072	84,335	1,244	85,579	(1,507)
2007	86,763	2,573	89,336	82,031	2,790	84,821	4,515
2006	74,065	2,850	76,915	79,298	1,977	81,275	(4,360)
2005	26,252	2,369	28,621	74,465	1,876	76,341	(47,720)

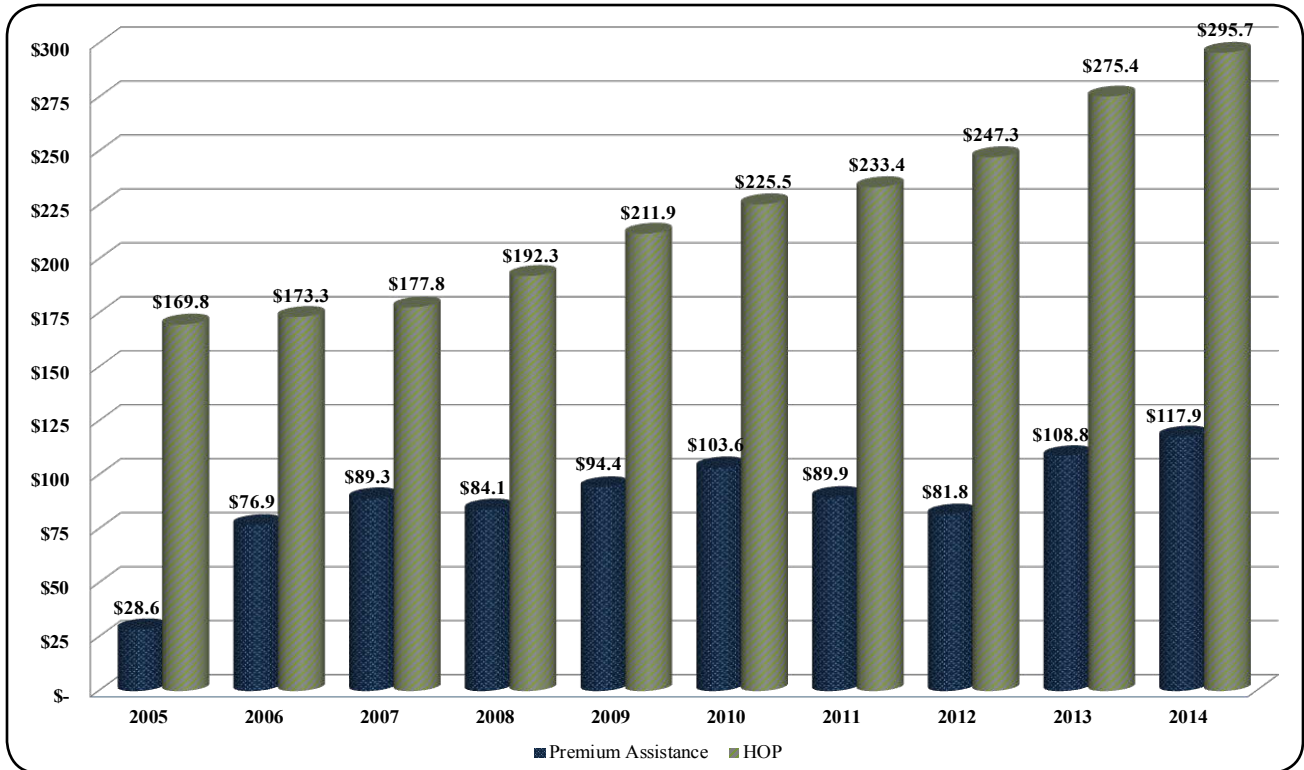
### Health Options Program

Year Ended June 30	Additions to Plan Net Position			Deductions from Plan Net Position			Net Increase / (Decrease)
	Participant Premiums	CMS Contributions	Net Investment Income	Benefits	Administrative	Total Deductions	
2014	\$ 257,740	\$ 37,759	\$ 191	\$ 259,753	\$ 25,975	\$ 285,728	\$ 9,962
2013	234,516	40,698	226	229,039	22,644	251,683	23,757
2012	213,642	33,462	237	213,027	20,213	233,240	14,101
2011	201,014	32,080	310	214,967	18,729	233,696	(292)
2010	191,184	33,901	440	193,307	16,443	209,750	15,775
2009	178,801	31,556	1,528	181,035	13,817	194,852	17,033
2008	159,563	28,426	4,288	175,136	12,143	187,279	4,998
2007	144,185	27,789	5,821	169,784	12,453	182,237	(4,442)
2006	155,199	13,941	4,203	151,117	11,261	162,378	10,965
2005	167,199	-	2,646	136,447	8,099	144,546	25,299

## Additions to Postemployment Healthcare Plans Net Position

### 10 Year Trend

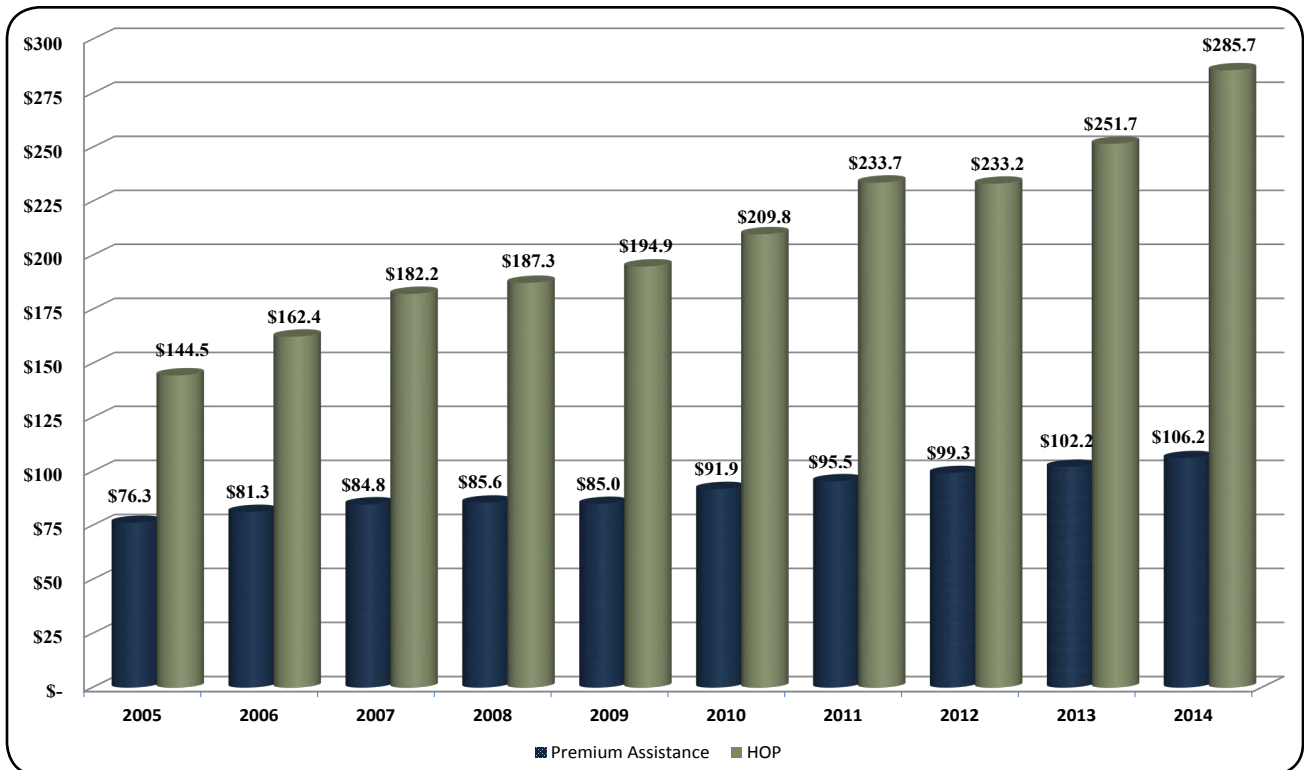
(Dollar Amounts in Millions)



## Deductions from Postemployment Healthcare Plans Net Position

### 10 Year Trend

(Dollar Amounts in Millions)



**Pension Investment Income**  
**10 Year Trend**  
(Dollar Amounts in Thousands)

For years ended June 30	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
<b>Investment income:</b>										
From investing activities:										
Net appreciation (depreciation) in fair value of investments	\$ 6,024,512	\$ 3,428,449	\$ 539,129	\$ 8,616,152	\$ 5,561,419	\$ (17,007,821)	\$ (3,763,649)	\$ 10,457,473	\$ 5,969,223	\$ 4,463,930
Investment income	1,536,822	1,246,879	1,027,141	1,137,339	1,066,017	1,310,460	2,331,266	2,524,655	2,154,654	1,789,078
Total investment activity income (loss)	7,561,334	4,675,328	1,566,270	9,753,491	6,627,436	(15,697,361)	(1,432,383)	12,982,128	8,123,877	6,253,008
Investment expenses	(482,141)	(557,533)	(481,234)	(514,647)	(522,268)	(477,520)	(399,098)	(313,726)	(211,247)	(192,629)
Net income (loss) from investing activities	7,079,193	4,117,795	1,085,036	9,238,844	6,105,168	(16,174,881)	(1,831,481)	12,668,402	7,912,630	6,060,379
From securities lending activities:										
Securities lending income	19,859	9,541	9,457	8,251	9,574	55,574	319,107	419,762	270,447	125,882
Securities lending expense	(1,291)	(1,334)	(1,174)	(1,004)	(1,063)	(82,394)	(270,254)	(393,837)	(247,491)	(109,779)
Net income (loss) from securities lending activities	18,568	8,207	8,283	7,247	8,511	(26,820)	48,853	25,925	22,956	16,103
Total net investment income (loss)	\$ 7,097,761	\$ 4,126,002	\$ 1,093,319	\$ 9,246,091	\$ 6,113,679	\$ (16,201,701)	\$ (1,782,628)	\$ 12,694,327	\$ 7,935,586	\$ 6,076,482

**Premium Assistance Investment Income**  
**10 Year Trend**  
(Dollar Amounts in Thousands)

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
<b>For years ended June 30</b>										
<b>Investment income:</b>										
From investing activities:										
Net appreciation (depreciation) in fair value of investments	\$ (651)	\$ (1,140)	\$ (1,543)	\$ (1,324)	\$ (1,039)	\$ (363)	\$ 268	\$ 88	\$ (480)	\$ (2,218)
Investment income	816	1,306	2,018	2,063	1,955	2,269	2,525	2,517	3,362	4,635
Total investment activity income	165	166	475	739	916	1,906	2,793	2,605	2,882	2,417
Investment expenses	(95)	(56)	(52)	(48)	(47)	(45)	(38)	(32)	(32)	(48)
<b>Total net investment income</b>	<b>\$ 70</b>	<b>\$ 110</b>	<b>\$ 423</b>	<b>\$ 691</b>	<b>\$ 869</b>	<b>\$ 1,861</b>	<b>\$ 2,755</b>	<b>\$ 2,573</b>	<b>\$ 2,850</b>	<b>\$ 2,369</b>

**Health Options Program Investment Income**  
**10 Year Trend**  
(Dollar Amounts in Thousands)

	2014	2013	2012	2011	2010	2009	2008	2007	2006	2005
<b>For years ended June 30</b>										
<b>Investment income:</b>										
From investing activities:										
Net appreciation in fair value of investments	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 123	\$ 672
Investment income	191	226	237	310	440	1,528	4,288	5,821	4,080	1,974
Total investment activity income	191	226	237	310	440	1,528	4,288	5,821	4,203	2,646
Investment expenses	-	-	-	-	-	-	-	-	-	-
<b>Total net investment income</b>	<b>\$ 191</b>	<b>\$ 226</b>	<b>\$ 237</b>	<b>\$ 310</b>	<b>\$ 440</b>	<b>\$ 1,528</b>	<b>\$ 4,288</b>	<b>\$ 5,821</b>	<b>\$ 4,203</b>	<b>\$ 2,646</b>



**Summary Membership Data  
10 Year Trend \***

<b>For year ended June 30</b>	<b>Male</b>			<b>Female</b>			<b>Total Number of Active Members</b>
	<b>Average Age</b>	<b>Average Service</b>	<b>Average Annual Salaries</b>	<b>Average Age</b>	<b>Average Service</b>	<b>Average Annual Salaries</b>	
2013	44.4	11.1	\$ 52,413	44.9	10.7	\$ 45,005	267,428
2012	44.3	10.9	51,751	44.9	10.6	44,513	273,504
2011	44.1	10.8	51,678	44.6	10.3	44,209	279,152
2010	44.2	10.9	50,770	44.6	10.3	43,306	282,041
2009	44.4	11.2	50,613	44.7	10.3	42,606	279,701
2008	44.5	11.4	49,818	44.7	10.4	41,440	272,690
2007	44.5	11.7	49,220	44.7	10.5	40,958	264,023
2006	44.6	12.0	49,153	44.7	10.7	41,155	263,350
2005	44.9	12.6	47,416	45.0	11.0	38,832	255,465
2004	45.1	13.0	47,103	45.1	11.1	37,901	247,901

\* Actuarial Valuation for year ended June 30, 2013 is most current valuation completed at publication date.

**Summary Annuity Data  
10 Year Trend \*\***

<b>For year ended June 30</b>	<b>Number of Annuitants &amp; Beneficiaries</b>	<b>Total Annual Annuities***</b>	<b>Average Annual Annuity</b>
2013	209,204	\$ 5,147,060	\$ 24,603
2012	202,015	4,872,918	24,122
2011	194,622	4,650,798	23,897
2010	184,934	4,339,639	23,466
2009	177,963	3,996,000	22,456
2008	173,540	3,812,000	21,963
2007	168,026	3,523,000	20,970
2006	161,813	3,274,000	20,236
2005	156,519	3,027,550	19,343
2004	151,552	2,798,211	18,464

\*\* Actuarial Valuation for year ended June 30, 2013 is most current valuation completed at publication date.

\*\*\* Total Annual Annuities dollar amounts expressed in thousands.

## Pension Benefit and Refund Deductions from Plan Net Position 10 Year Trend (Dollar Amounts in Thousands)

For year ended June 30	Retirements *							Total Pension Benefits and Refund Deductions	
	Normal	Early	Disability	Pension Lump Sum Benefits	Survivor and Beneficiary	Net Transfers***	Total Pension Benefits Deductions		
2014	\$ 2,953,187	\$ 1,928,614	\$ 167,676	\$ 741,386	\$ 237,932	\$ 1,887	\$ 6,030,682	\$ 22,823	\$ 6,053,505
2013	2,811,906	1,845,269	161,995	933,049	264,673	2,893	6,019,785	24,461	6,044,246
2012	2,629,151	1,758,581	149,000	887,244	231,330	2,765	5,658,071	24,675	5,682,746
2011	2,420,883	1,664,903	141,273	847,482	206,682	9,844	5,291,067	17,695	5,308,762
2010	2,273,819	1,600,435	136,174	733,333	218,461	7,015	4,969,237	16,720	4,985,957
2009	2,110,018	1,538,421	130,820	666,827	193,211	7,947	4,647,244	20,369	4,667,613
2008	4,636,340	**	**	**	**	17,157	4,653,497	28,713	4,682,210
2007	4,044,435	**	**	**	**	6,010	4,050,445	18,180	4,068,625
2006	3,860,658	**	**	**	**	8,462	3,869,120	16,330	3,885,450
2005	3,639,838	**	**	**	**	10,859	3,650,697	16,233	3,666,930

\* Data presented in Normal column for years 2005 to 2008 are aggregate amounts for all Retirement Types.

\*\* Data for these years is not readily available in the format adopted for the year ended June 30, 2009 and thereafter.

\*\*\* Net transfers to the Commonwealth of Pennsylvania State Employees' Retirement System.

## Average Monthly Pension Benefit Payments\* Total Annuitants Grouped by Years of Credited Service 10 Year Trend

Years of Credited Service									Total
< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	

**Fiscal year ended June 30, 2013**

Normal and Early	4,051	14,757	23,095	19,499	19,506	22,897	44,704	35,277	5,384	<b>189,170</b>
	\$ 93	\$ 179	\$ 331	\$ 708	\$ 1,243	\$ 2,041	\$ 3,151	\$ 4,142	\$ 4,354	\$ <b>2,146</b>
Disability	-	1,749	1,950	1,554	1,455	1,283	547	17	10	<b>8,565</b>
	\$ -	\$ 729	\$ 925	\$ 1,249	\$ 1,843	\$ 2,654	\$ 3,546	\$ 3,163	\$ 2,311	\$ <b>1,532</b>
Beneficiary and Survivor	-	5,659	724	729	728	745	1,191	1,190	503	<b>11,469</b>
	\$ -	\$ 814	\$ 254	\$ 387	\$ 620	\$ 854	\$ 1,195	\$ 1,368	\$ 1,442	\$ <b>866</b>

**Fiscal year ended June 30, 2012**

Normal and Early	3,881	13,459	22,313	18,971	18,919	21,855	43,662	34,024	5,170	<b>182,254</b>
	\$ 111	\$ 176	\$ 317	\$ 680	\$ 1,202	\$ 1,972	\$ 3,105	\$ 4,078	\$ 4,196	\$ <b>2,110</b>
Disability	-	1,698	1,882	1,517	1,397	1,257	531	15	9	<b>8,306</b>
	\$ -	\$ 694	\$ 875	\$ 1,166	\$ 1,748	\$ 2,583	\$ 3,465	\$ 2,917	\$ 2,147	\$ <b>1,467</b>
Beneficiary and Survivor	-	5,234	772	784	780	797	1,261	1,281	546	<b>11,455</b>
	\$ -	\$ 702	\$ 245	\$ 390	\$ 603	\$ 850	\$ 1,175	\$ 1,341	\$ 1,412	\$ <b>811</b>

**Fiscal year ended June 30, 2011**

Normal and Early	3,695	12,263	21,497	18,343	18,199	21,042	42,507	33,045	5,045	<b>175,636</b>
	\$ 114	\$ 174	\$ 305	\$ 656	\$ 1,158	\$ 1,921	\$ 3,064	\$ 4,041	\$ 4,133	\$ <b>2,091</b>
Disability	-	1,629	1,798	1,473	1,366	1,216	523	15	9	<b>8,029</b>
	\$ -	\$ 680	\$ 839	\$ 1,136	\$ 1,686	\$ 2,548	\$ 3,476	\$ 2,878	\$ 2,147	\$ <b>1,441</b>
Beneficiary and Survivor	-	4,389	817	819	804	842	1,322	1,362	602	<b>10,957</b>
	\$ -	\$ 652	\$ 239	\$ 372	\$ 583	\$ 842	\$ 1,170	\$ 1,322	\$ 1,383	\$ <b>796</b>

**Fiscal year ended June 30, 2010**

Normal and Early	4,695	11,529	20,812	17,777	17,356	19,973	40,625	30,716	4,755	<b>168,238</b>
	\$ 1,023	\$ 349	\$ 287	\$ 613	\$ 1,093	\$ 1,839	\$ 3,004	\$ 3,933	\$ 3,896	\$ <b>2,037</b>
Disability	-	1,633	1,761	1,453	1,352	1,227	517	18	11	<b>7,972</b>
	\$ -	\$ 694	\$ 819	\$ 1,098	\$ 1,654	\$ 2,513	\$ 3,475	\$ 2,563	\$ 1,958	\$ <b>1,424</b>
Beneficiary and Survivor	-	2,604	772	735	755	773	1,192	1,280	613	<b>8,724</b>
	\$ -	\$ 1,008	\$ 217	\$ 336	\$ 525	\$ 770	\$ 1,075	\$ 1,200	\$ 1,241	\$ <b>872</b>

**Fiscal year ended June 30, 2009**

Normal and Early	4,395	10,474	20,503	17,544	17,134	19,821	39,700	28,187	4,448	<b>162,206</b>
	\$ 376	\$ 178	\$ 279	\$ 602	\$ 1,090	\$ 1,828	\$ 2,966	\$ 3,780	\$ 3,720	\$ <b>1,945</b>
Disability	-	1,566	1,713	1,417	1,313	1,205	485	12	2	<b>7,713</b>
	\$ -	\$ 661	\$ 802	\$ 1,103	\$ 1,658	\$ 2,507	\$ 3,461	\$ 3,318	\$ 2,348	\$ <b>1,412</b>
Beneficiary and Survivor	-	1,824	788	744	767	786	1,207	1,304	624	<b>8,044</b>
	\$ -	\$ 838	\$ 218	\$ 336	\$ 524	\$ 770	\$ 1,070	\$ 1,201	\$ 1,248	\$ <b>820</b>

\* Actuarial valuation for year ended June 30, 2013 is the most current valuation completed at the publication date.

**Average Monthly Pension Benefit Payments**  
**Total Annuitants Grouped by Years of Credited Service**  
**10 Year Trend (Continued)**

Years of Credited Service										
< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+	Total	

**Fiscal year ended June 30, 2008**

Normal and Early	4,054	9,541	20,539	17,450	16,748	19,166	38,331	27,318	4,509	<b>157,656</b>
	\$ 355	\$ 165	\$ 270	\$ 584	\$ 1,032	\$ 1,733	\$ 2,904	\$ 3,732	\$ 3,629	\$ <b>1,896</b>
Disability	-	1,468	1,664	1,364	1,280	1,178	466	14	1	<b>7,435</b>
	\$ -	\$ 876	\$ 949	\$ 1,205	\$ 1,854	\$ 2,714	\$ 3,707	\$ 3,681	\$ 4,550	\$ <b>1,595</b>
Beneficiary and Survivor	789	402	964	874	879	917	1,381	1,522	721	<b>8,449</b>
	\$ 1,127	\$ 121	\$ 223	\$ 347	\$ 533	\$ 783	\$ 1,083	\$ 1,223	\$ 1,255	\$ <b>817</b>

**Fiscal year ended June 30, 2007**

Normal and Early	2,812	8,675	20,554	17,448	16,304	18,664	37,422	25,100	5,382	<b>152,361</b>
	\$ 54	\$ 149	\$ 256	\$ 553	\$ 971	\$ 1,662	\$ 2,821	\$ 3,574	\$ 3,488	\$ <b>1,820</b>
Disability	-	1,437	1,689	1,370	1,307	1,154	430	11	1	<b>7,399</b>
	\$ -	\$ 595	\$ 770	\$ 1,044	\$ 1,569	\$ 2,476	\$ 3,466	\$ 3,576	\$ 4,550	\$ <b>1,356</b>
Beneficiary and Survivor	94	430	1,025	930	936	980	1,453	1,628	790	<b>8,266</b>
	\$ 47	\$ 119	\$ 218	\$ 342	\$ 530	\$ 768	\$ 1,075	\$ 1,201	\$ 1,234	\$ <b>767</b>

**Fiscal year ended June 30, 2006**

Normal and Early	2,723	7,810	20,380	17,198	15,979	18,140	35,227	23,660	5,465	<b>146,582</b>
	\$ 53	\$ 147	\$ 249	\$ 537	\$ 945	\$ 1,611	\$ 2,747	\$ 3,474	\$ 3,397	\$ <b>1,756</b>
Disability	-	1,375	1,655	1,339	1,261	1,136	398	10	1	<b>7,175</b>
	\$ -	\$ 579	\$ 750	\$ 1,023	\$ 1,510	\$ 2,429	\$ 3,422	\$ 3,549	\$ 4,550	\$ <b>1,320</b>
Beneficiary and Survivor	88	413	1,000	902	911	951	1,404	1,572	815	<b>8,056</b>
	\$ 47	\$ 116	\$ 212	\$ 327	\$ 516	\$ 742	\$ 1,027	\$ 1,154	\$ 1,182	\$ <b>739</b>

**Fiscal year ended June 30, 2005**

Normal and Early	2,654	7,117	20,423	17,022	15,827	17,732	33,402	21,971	5,615	<b>141,763</b>
	\$ 67	\$ 147	\$ 244	\$ 523	\$ 921	\$ 1,561	\$ 2,669	\$ 3,326	\$ 3,278	\$ <b>1,679</b>
Disability	8	1,321	1,641	1,281	1,232	1,113	357	10	1	<b>6,964</b>
	\$ 1,301	\$ 550	\$ 723	\$ 975	\$ 1,464	\$ 2,377	\$ 3,340	\$ 3,546	\$ 4,550	\$ <b>1,271</b>
Beneficiary and Survivor	79	400	976	881	876	913	1,322	1,530	814	<b>7,791</b>
	\$ 47	\$ 110	\$ 204	\$ 316	\$ 496	\$ 709	\$ 987	\$ 1,075	\$ 1,099	\$ <b>700</b>

**Fiscal year ended June 30, 2004**

Normal and Early	3,111	6,585	20,407	16,821	15,637	17,285	31,443	20,313	5,699	<b>137,301</b>
	\$ 224	\$ 148	\$ 240	\$ 509	\$ 901	\$ 1,516	\$ 2,592	\$ 3,191	\$ 3,198	\$ <b>1,602</b>
Disability	24	1,256	1,589	1,205	1,225	1,083	305	8	1	<b>6,696</b>
	\$ 873	\$ 527	\$ 700	\$ 937	\$ 1,435	\$ 2,342	\$ 3,212	\$ 3,227	\$ 4,550	\$ <b>1,229</b>
Beneficiary and Survivor	123	408	946	861	830	881	1,235	1,444	826	<b>7,554</b>
	\$ 224	\$ 107	\$ 196	\$ 303	\$ 465	\$ 680	\$ 944	\$ 997	\$ 1,042	\$ <b>658</b>

**Average Monthly Pension  
Benefit Payments and Average Final Average Salary \*  
New Annuitants Grouped by Years of Credited Service  
10 Year Trend**

Years of Credited Service								
< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+

**Fiscal year ended June 30, 2013**

Number of retired members	404	1,967	1,662	1,386	1,471	1,680	2,013	1,517	298
Final Average Salary	\$ 22,052	\$ 30,966	\$ 36,735	\$ 46,773	\$ 55,331	\$ 67,805	\$ 77,241	\$ 83,353	\$ 85,981
Monthly Benefit	\$ 156	\$ 280	\$ 658	\$ 1,265	\$ 1,988	\$ 2,956	\$ 4,161	\$ 5,200	\$ 6,066

**Fiscal year ended June 30, 2012**

Number of retired members	384	1,716	1,395	1,226	1,373	1,440	1,998	1,704	319
Final Average Salary	\$ 19,074	\$ 30,273	\$ 35,706	\$ 44,534	\$ 54,305	\$ 64,007	\$ 74,534	\$ 80,285	\$ 80,899
Monthly Benefit	\$ 126	\$ 286	\$ 635	\$ 1,216	\$ 1,977	\$ 2,815	\$ 4,097	\$ 5,033	\$ 5,630

**Fiscal year ended June 30, 2011**

Number of retired members	380	1,591	1,323	1,131	1,247	1,418	2,309	2,023	281
Final Average Salary	\$ 17,212	\$ 30,174	\$ 34,363	\$ 44,577	\$ 52,788	\$ 64,398	\$ 73,905	\$ 79,420	\$ 79,799
Monthly Benefit	\$ 98	\$ 315	\$ 645	\$ 1,238	\$ 1,908	\$ 2,893	\$ 4,031	\$ 4,981	\$ 5,491

**Fiscal year ended June 30, 2010**

Number of retired members	312	1,294	989	826	947	1,035	1,992	1,731	218
Final Average Salary	\$ 21,528	\$ 28,957	\$ 34,500	\$ 42,207	\$ 52,104	\$ 63,290	\$ 72,258	\$ 79,239	\$ 80,405
Monthly Benefit	\$ 312	\$ 269	\$ 634	\$ 1,140	\$ 1,906	\$ 2,833	\$ 3,979	\$ 4,963	\$ 5,550

**Fiscal year ended June 30, 2009**

Number of retired members	259	1,213	857	753	835	902	1,959	1,757	165
Final Average Salary	\$ 18,802	\$ 27,718	\$ 31,600	\$ 39,456	\$ 48,973	\$ 61,459	\$ 71,256	\$ 76,947	\$ 77,351
Monthly Benefit	\$ 106	\$ 230	\$ 556	\$ 1,063	\$ 1,726	\$ 2,764	\$ 3,915	\$ 4,834	\$ 5,343

**Fiscal year ended June 30, 2008**

Number of retired members	253	1,304	903	857	798	1,038	2,318	1,936	139
Final Average Salary	\$ 18,146	\$ 26,404	\$ 31,479	\$ 38,271	\$ 47,220	\$ 57,595	\$ 70,232	\$ 75,942	\$ 75,041
Monthly Benefit	\$ 104	\$ 210	\$ 556	\$ 1,010	\$ 1,647	\$ 2,551	\$ 3,863	\$ 4,775	\$ 5,164

**Fiscal year ended June 30, 2007**

Number of retired members	274	1,348	920	884	836	1,163	2,702	2,105	142
Final Average Salary	\$ 17,233	\$ 26,678	\$ 29,390	\$ 38,155	\$ 45,934	\$ 56,810	\$ 68,962	\$ 73,165	\$ 77,381
Monthly Benefit	\$ 85	\$ 231	\$ 502	\$ 1,011	\$ 1,591	\$ 2,534	\$ 3,800	\$ 4,604	\$ 5,421

**Fiscal year ended June 30, 2006**

Number of retired members	256	1,184	816	889	788	1,063	2,654	1,908	132
Final Average Salary	\$ 16,172	\$ 25,512	\$ 28,360	\$ 35,156	\$ 43,902	\$ 54,791	\$ 66,976	\$ 72,236	\$ 75,847
Monthly Benefit	\$ 88	\$ 222	\$ 475	\$ 947	\$ 1,536	\$ 2,467	\$ 3,725	\$ 4,571	\$ 5,255

**Fiscal year ended June 30, 2005**

Number of retired members	199	931	770	867	711	1,121	2,903	2,234	166
Final Average Salary	\$ 16,899	\$ 24,980	\$ 28,573	\$ 35,081	\$ 42,144	\$ 53,664	\$ 66,212	\$ 70,328	\$ 73,362
Monthly Benefit	\$ 85	\$ 232	\$ 519	\$ 938	\$ 1,488	\$ 2,436	\$ 3,684	\$ 4,454	\$ 5,096

**Fiscal year ended June 30, 2004**

Number of retired members	171	804	753	736	702	989	2,647	1,849	141
Final Average Salary	\$ 15,913	\$ 22,502	\$ 27,392	\$ 33,361	\$ 40,589	\$ 52,181	\$ 62,708	\$ 68,374	\$ 69,609
Monthly Benefit	\$ 79	\$ 229	\$ 505	\$ 861	\$ 1,503	\$ 2,376	\$ 3,480	\$ 4,339	\$ 4,916

\* Actuarial valuation for year ended June 30, 2013 is the most current valuation completed at the publication date.

**Average Monthly Premium Assistance  
Benefit Payments and Average Final Average Salary \*  
New Annuitants Grouped by Years of Credited Service  
10 Year Trend**

Years of Credited Service								
< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+

**Fiscal year ended June 30, 2013**

Number of retired members		10	29	345	521	945	1,169	937	191
Final Average Salary		\$ 39,856	\$ 61,571	\$ 51,758	\$ 57,669	\$ 69,854	\$ 76,812	\$ 83,780	\$ 84,225
Monthly Benefit		\$ 99	\$ 100	\$ 99	\$ 100	\$ 98	\$ 98	\$ 98	\$ 100

**Fiscal year ended June 30, 2012**

Number of retired members		8	18	259	342	594	819	666	128
Final Average Salary		\$ 33,448	\$ 38,655	\$ 45,382	\$ 54,454	\$ 64,728	\$ 74,849	\$ 79,041	\$ 77,220
Monthly Benefit		\$ 100	\$ 69	\$ 100	\$ 100	\$ 99	\$ 98	\$ 97	\$ 99

**Fiscal year ended June 30, 2011**

Number of retired members		24	39	325	475	853	1,543	1,402	207
Final Average Salary		\$ 41,609	\$ 51,763	\$ 48,062	\$ 54,261	\$ 67,086	\$ 74,658	\$ 79,436	\$ 77,751
Monthly Benefit		\$ 100	\$ 100	\$ 98	\$ 99	\$ 97	\$ 96	\$ 97	\$ 98

**Fiscal year ended June 30, 2010**

Number of retired members		20	21	227	381	597	1,371	1,253	165
Final Average Salary		\$ 36,052	\$ 48,277	\$ 45,245	\$ 55,323	\$ 65,244	\$ 73,207	\$ 80,413	\$ 80,328
Monthly Benefit		\$ 100	\$ 100	\$ 98	\$ 98	\$ 98	\$ 97	\$ 97	\$ 100

**Fiscal year ended June 30, 2009**

Number of retired members		32	33	202	353	555	1,324	1,273	129
Final Average Salary		\$ 30,120	\$ 44,926	\$ 44,889	\$ 49,416	\$ 62,449	\$ 72,314	\$ 76,742	\$ 79,676
Monthly Benefit		\$ 100	\$ 96	\$ 99	\$ 98	\$ 97	\$ 95	\$ 96	\$ 97

**Fiscal year ended June 30, 2008**

Number of retired members		32	36	242	336	609	1,686	1,435	114
Final Average Salary		\$ 31,419	\$ 41,391	\$ 41,714	\$ 49,709	\$ 59,708	\$ 70,486	\$ 75,903	\$ 72,718
Monthly Benefit		\$ 97	\$ 100	\$ 99	\$ 99	\$ 97	\$ 95	\$ 95	\$ 96

**Fiscal year ended June 30, 2007**

Number of retired members		29	36	271	370	741	1,986	1,609	101
Final Average Salary		\$ 36,165	\$ 39,981	\$ 37,907	\$ 46,781	\$ 59,682	\$ 69,722	\$ 73,808	\$ 78,288
Monthly Benefit		\$ 9	\$ 99	\$ 98	\$ 99	\$ 96	\$ 93	\$ 93	\$ 98

**Fiscal year ended June 30, 2006**

Number of retired members		35	29	288	343	713	1,931	1,491	113
Final Average Salary		\$ 27,700	\$ 40,994	\$ 37,316	\$ 43,608	\$ 56,647	\$ 68,662	\$ 72,726	\$ 74,851
Monthly Benefit		\$ 97	\$ 100	\$ 97	\$ 98	\$ 98	\$ 93	\$ 92	\$ 92

**Fiscal year ended June 30, 2005**

Number of retired members		32	42	265	297	751	2,143	1,759	136
Final Average Salary		\$ 31,231	\$ 32,470	\$ 37,651	\$ 41,099	\$ 56,000	\$ 68,328	\$ 71,690	\$ 74,802
Monthly Benefit		\$ 78	\$ 99	\$ 100	\$ 97	\$ 94	\$ 89	\$ 87	\$ 94

**Fiscal year ended June 30, 2004**

Number of retired members		33	44	232	322	661	1,974	1,536	116
Final Average Salary		\$ 27,158	\$ 35,190	\$ 34,821	\$ 43,361	\$ 54,435	\$ 64,237	\$ 69,087	\$ 69,369
Monthly Benefit		\$ 99	\$ 98	\$ 100	\$ 100	\$ 96	\$ 95	\$ 93	\$ 96

\* Actuarial valuation for year ended June 30, 2013 is the most current valuation completed at the publication date.

**Ten Largest Employers \***  
**As of June 30, 2014**  
(Based on number of reported members)

	<b>Employer</b>	<b>Number of Reported Members</b>	<b>Percentage of Total</b>
1.	Philadelphia City School District	16,897	6.63%
2.	Pittsburgh School District	4,001	1.57%
3.	Central Bucks School District	2,626	1.03%
4.	Allentown City School District	2,089	0.82%
5.	North Penn School District	2,071	0.81%
6.	Bethlehem Area School District	1,875	0.74%
7.	Pennsbury School District	1,645	0.65%
8.	Lower Merion School District	1,581	0.62%
9.	Council Rock School District	1,576	0.62%
10.	Downingtown Area School District	1,558	0.61%

\* Due to the stable comparable populations of school employees in PSERS' employers over the years, a single presentation provides perspective for a ten-year period.

**Schedule of Employers  
School Districts**

**A** \_\_\_\_\_

Abington  
Abington Heights  
Albert Gallatin  
Aliquippa  
Allegheny Valley  
Allegheny-Clarion Valley  
Allentown City  
Altoona Area  
Ambridge Area  
Annville-Cleona  
Antietam  
Apollo-Ridge  
Armstrong  
Athens Area  
Austin Area  
Avella Area  
Avon Grove  
Avonworth

**B** \_\_\_\_\_

Bald Eagle Area  
Baldwin-Whitehall  
Bangor Area  
Beaver Area  
Bedford Area  
Belle Vernon Area  
Bellefonte Area  
Bellwood-Antis  
Bensalem Township  
Benton Area  
Bentworth  
Berlin Brothersvalley  
Bermudian Springs  
Berwick Area  
Bethel Park  
Bethlehem Area  
Bethlehem-Center  
Big Beaver Falls Area  
Big Spring  
Blackhawk  
Blacklick Valley  
Blairsville-Saltsburg  
Bloomsburg Area  
Blue Mountain  
Blue Ridge  
Boyertown Area  
Bradford Area  
Brandywine Heights Area  
Brentwood Borough  
Bristol Borough  
Bristol Township  
Brockway Area  
Brookville Area

Brownsville Area  
Burgettstown Area  
Burrell  
Butler Area

**C** \_\_\_\_\_

California Area  
Cambria Heights  
Cameron County  
Camp Hill  
Canon-McMillan  
Canton Area  
Carbondale Area  
Carlisle Area  
Carlynton  
Carmichaels Area  
Catasauqua Area  
Centennial  
Central Bucks  
Central Cambria  
Central Columbia  
Central Dauphin  
Central Fulton  
Central Greene  
Central Valley  
Central York  
Chambersburg Area  
Charleroi Area  
Chartiers Houston  
Chartiers Valley  
Cheltenham Township  
Chester-Upland  
Chestnut Ridge  
Chichester  
Clairton City  
Clarion Area  
Clarion-Limestone Area  
Claysburg-Kimmel  
Clearfield Area  
Coatesville Area  
Cocalico  
Colonial  
Columbia Borough  
Commodore Perry  
Conemaugh Township Area  
Conemaugh Valley  
Conestoga Valley  
Conewago Valley  
Conneaut  
Connellsville Area  
Conrad Weiser Area  
Cornell  
Cornwall-Lebanon  
Corry Area

Coudersport Area  
Council Rock  
Cranberry Area  
Crawford Central  
Crestwood  
Cumberland Valley  
Curwensville Area

**D** \_\_\_\_\_

Dallas  
Dallastown Area  
Daniel Boone Area  
Danville Area  
Deer Lakes  
Delaware Valley  
Derry Area  
Derry Township  
Donegal  
Dover Area  
Downingtown Area  
Dubois Area  
Dunmore  
Duquesne City

**E** \_\_\_\_\_

East Allegheny  
East Lycoming  
East Penn  
East Pennsboro Area  
East Stroudsburg Area  
Eastern Lancaster County  
Eastern Lebanon County  
Eastern York  
Easton Area  
Elizabeth Forward  
Elizabethtown Area  
Elk Lake  
Ellwood City Area  
Ephrata Area  
Erie City  
Everett Area  
Exeter Township

**F** \_\_\_\_\_

Fairfield Area  
Fairview  
Fannett Metal  
Farrell Area  
Ferndale Area  
Fleetwood Area  
Forbes Road  
Forest Area  
Forest City Regional  
Forest Hills



## Statistical Section

### Schedule of Employers (Continued)

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Fort Cherry  
Fort LeBoeuf  
Fox Chapel Area  
Franklin Area  
Franklin Regional  
Frazier  
Freedom Area  
Freeport Area

#### G

Galeton Area  
Garnet Valley  
Gateway  
General McLane  
Gettysburg Area  
Girard  
Glendale  
Governor Mifflin  
Great Valley  
Greater Johnstown  
Greater Latrobe  
Greater Nanticoke Area  
Greencastle-Antrim  
Greensburg Salem  
Greenville Area  
Greenwood  
Grove City Area

#### H

Halifax Area  
Hamburg Area  
Hampton Township  
Hanover Area  
Hanover Public  
Harbor Creek  
Harmony Area  
Harrisburg City  
Hatboro-Horsham  
Haverford Township  
Hazleton Area  
Hempfield  
Hempfield Area  
Hermitage  
Highlands  
Hollidaysburg Area  
Homer-Center  
Hopewell Area  
Huntingdon Area

#### I

Indiana Area  
Interboro  
Iroquois

#### J

Jamestown Area  
Jeannette City  
Jefferson-Morgan  
Jenkintown  
Jersey Shore Area  
Jim Thorpe Area  
Johnsonburg Area  
Juniata County  
Juniata Valley

#### K

Kane Area  
Karns City Area  
Kennett Consolidated  
Keystone  
Keystone Central  
Keystone Oaks  
Kiski Area  
Kutztown Area

#### L

Lackawanna Trail  
Lakeland  
Lake-Lehman  
Lakeview  
Lampeter-Strasburg  
Lancaster  
Laurel  
Laurel Highlands  
Lebanon  
Leechburg Area  
Lehigh Area  
Lewisburg Area  
Ligonier Valley  
Line Mountain  
Littlestown Area  
Lower Dauphin  
Lower Merion  
Lower Moreland Township  
Loyalsock Township

#### M

Mahanoy Area  
Manheim Central  
Manheim Township  
Marion Center Area  
Marple Newtown  
Mars Area  
McGuffey  
McKeesport Area  
Mechanicsburg Area  
Mercer Area  
Methacton

Meyersdale Area  
Mid Valley  
Middletown Area  
Mid-West  
Midland Borough  
Mifflin County  
Mifflinburg Area  
Millcreek Township  
Millersburg Area  
Millville Area  
Milton Area  
Minersville Area  
Mohawk Area  
Monessen  
Moniteau  
Montgomery Area  
Montour  
Montoursville Area  
Montrose Area  
Moon Area  
Morrisville Borough  
Moshannon Valley  
Mount Carmel Area  
Mount Pleasant Area  
Mount Union Area  
Mountain View  
Mt. Lebanon  
Muhlenberg  
Muncy

#### N

Nazareth Area  
Neshaminy  
Neshannock Township  
New Brighton Area  
New Castle Area  
New Hope-Solebury  
New Kensington-Arnold  
Newport  
Norristown Area  
North Allegheny  
North Clarion County  
North East  
North Hills  
North Penn  
North Pocono  
North Schuylkill  
North Star  
Northampton Area  
Northeast Bradford  
Northeastern York  
Northern Bedford County  
Northern Cambria  
Northern Lebanon

Schedule of Employers (Continued)

Northern Lehigh  
 Northern Potter  
 Northern Tioga  
 Northern York County  
 Northgate  
 Northwest Area  
 Northwestern  
 Northwestern Lehigh  
 Norwin

O \_\_\_\_\_

Octorara Area  
 Oil City Area  
 Old Forge  
 Oley Valley  
 Oswayo Valley  
 Otto-Eldred  
 Owen J. Roberts  
 Oxford Area

P \_\_\_\_\_

Palisades  
 Palmerton Area  
 Palmyra Area  
 Panther Valley  
 Parkland  
 Pen Argyl Area  
 Penn Cambria  
 Penn Hills  
 Penn Manor  
 Penncrest  
 Penn-Delco  
 Pennridge  
 Penns Manor  
 Penns Valley Area  
 Pennsbury  
 Penn-Trafford  
 Pequea Valley  
 Perkiomen Valley  
 Peters Township  
 Philadelphia City  
 Philipsburg-Osceola Area  
 Phoenixville Area  
 Pine Grove Area  
 Pine-Richland  
 Pittsburgh  
 Pittston Area  
 Pleasant Valley  
 Plum Borough  
 Pocono Mountain  
 Port Allegany  
 Portage Area  
 Pottsgrove  
 Pottstown

Pottsville Area  
 Punxsutawney Area  
 Purchase Line

Q \_\_\_\_\_

Quaker Valley  
 Quakertown Community

R \_\_\_\_\_

Radnor Township  
 Reading  
 Red Lion Area  
 Redbank Valley  
 Reynolds  
 Richland  
 Ridgway Area  
 Ridley  
 Ringgold  
 Riverside  
 Riverside Beaver County  
 Riverview  
 Rochester Area  
 Rockwood Area  
 Rose Tree Media

S \_\_\_\_\_

Saint Clair Area  
 Saint Marys Area  
 Salisbury Township  
 Salisbury-Elk Lick  
 Saucon Valley  
 Sayre Area  
 Schuylkill Haven Area  
 Schuylkill Valley  
 Scranton  
 Selinsgrove Area  
 Seneca Valley  
 Shade Central City  
 Shaler Area  
 Shamokin Area  
 Shanksville-Stonycreek  
 Sharon City  
 Sharpsville Area  
 Shenandoah Valley  
 Shenango Area  
 Shikellamy  
 Shippensburg Area  
 Slippery Rock Area  
 Smethport Area  
 Solanco  
 Somerset Area  
 Souderton Area  
 South Allegheny  
 South Butler County

South Eastern  
 South Fayette Township  
 South Middleton  
 South Park  
 South Side Area  
 South Western  
 South Williamsport Area  
 Southeast Delco  
 Southeastern Greene  
 Southern Columbia Area  
 Southern Fulton  
 Southern Huntingdon County  
 Southern Lehigh  
 Southern Tioga  
 Southern York County  
 Southmoreland  
 Spring Cove  
 Spring Grove Area  
 Springfield  
 Springfield Township  
 Spring-Ford Area  
 State College Area  
 Steel Valley  
 Steelton-Highspire  
 Sto-Rox  
 Stroudsburg Area  
 Sullivan County  
 Susquehanna Community  
 Susquehanna Township  
 Susquenita

T \_\_\_\_\_

Tamaqua Area  
 Titusville Area  
 Towanda Area  
 Tredyffrin-Easttown  
 Trinity Area  
 Tri-Valley  
 Troy Area  
 Tulpehocken Area  
 Tunkhannock Area  
 Turkeyfoot Valley Area  
 Tuscarora  
 Tussey Mountain  
 Twin Valley  
 Tyrone Area

U \_\_\_\_\_

Union  
 Union Area  
 Union City Area  
 Uniontown Area  
 Unionville-Chadds Ford  
 United

## Statistical Section

### Schedule of Employers (Continued)

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Upper Adams  
Upper Darby  
Upper Dauphin Area  
Upper Dublin  
Upper Merion Area  
Upper Moreland Township  
Upper Perkiomen  
Upper Saint Clair

#### V

Valley Grove  
Valley View

#### W

Wallenpaupack Area  
Wallingford-Swarthmore  
Warren County  
Warrior Run  
Warwick  
Washington  
Wattsburg Area  
Wayne Highlands  
Waynesboro Area

Weatherly Area  
Wellsboro Area  
West Allegheny  
West Branch Area  
West Chester Area  
West Greene  
West Jefferson Hills  
West Middlesex Area  
West Mifflin Area  
West Perry  
West Shore  
West York Area  
Western Beaver County  
Western Wayne  
Westmont Hilltop  
Whitehall-Coplay  
Wilkes-Barre Area  
Wilkinsburg Borough  
William Penn  
Williams Valley  
Williamsburg Community  
Williamsport Area  
Wilmington Area

Wilson  
Wilson Area  
Windber Area  
Wissahickon  
Woodland Hills  
Wyalusing Area  
Wyoming Area  
Wyoming Valley West  
Wyomissing Area

#### Y

York City  
York Suburban  
Yough

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### Area Vocational Technical Schools

A. W. Beattie Career Center  
Admiral Peary AVTS  
Beaver County AVTS  
Bedford County Technical Center  
Berks CTC  
Bethlehem AVTS  
Bucks County Technical High School  
Butler County AVTS  
Carbon Career & Technical Institute  
Career Institute of Technology  
Central Montco Technical High School  
Central PA Institute of Science &  
Technology  
Central Westmoreland CTC  
Clarion County Career Center  
Clearfield County CTC  
Columbia-Montour AVTS  
Crawford County CTC  
CTC of Lackawanna County  
Cumberland-Perry AVTS  
Dauphin County Technical School  
Delaware County AVTS  
Eastern Center for Arts & Technology  
Eastern Westmoreland CTC  
Erie County Technical School  
Fayette County AVTS  
Forbes Road CTC  
Franklin County CTC  
Fulton County AVTS

Greater Altoona CTC  
Greater Johnstown AVTS  
Greene County CTC  
Huntingdon County CTC  
Indiana County Technology Center  
Jefferson County-DuBois AVTS  
Lancaster County CTC  
Lawrence County CTC  
Lebanon County CTC  
Lehigh Career & Technical Institute  
Lenape Tech  
Lycoming CTC  
Mercer County Career Center  
Middle Bucks Institute of Technology  
Mifflin-Juniata CTC  
Mon Valley CTC  
Monroe Career & Tech Institute  
North Fayette County AVTS  
North Montco Technical Career Center  
Northern Tier Career Center  
Northern Westmoreland CTC  
Northumberland County AVTS  
Parkway West CTC  
Reading-Muhlenberg CTC  
Schuylkill Technology Center  
Somerset County Technology Center  
Steel Center AVTS  
SUN Area CTC  
Susquehanna County CTC

Upper Bucks County AVTS  
Venango Technology Center  
West Side AVTS  
Western Area CTC  
Western Center for Technical Studies  
Wilkes-Barre Area CTC  
York County School of Technology

**Schedule of Employers (Continued)****Intermediate Units**

Allegheny #3	Colonial #20	Schuylkill #29
Appalachia #8	Delaware County #25	Seneca Highlands #9
Arin #28	Intermediate Unit #1	Tuscarora #11
Beaver Valley #27	Lancaster-Lebanon #13	Westmoreland #7
Berks County #14	Lincoln #12	
BLaST #17	Luzerne #18	
Bucks County #22	Midwestern #4	
Capital Area #15	Montgomery County #23	
Carbon-Lehigh #21	Northeastern Educational #19	
Central #10	Northwest Tri-County #5	
Central Susquehanna #16	Pittsburgh-Mt. Oliver #2	
Chester County #24	Riverview #6	

**Colleges / Universities**

Bloomsburg University	Kutztown University	West Chester University
Bucks County Community College	Lehigh Carbon Community College	Westmoreland County Community College
Butler County Community College	Lock Haven University	
California University	Luzerne County Community College	
Cheyney University	Mansfield University	
Clarion University of Pennsylvania	Millersville University	
Community College of Allegheny County	Montgomery County Community College	
Community College of Beaver County	Northampton County Community College	
Community College of Philadelphia	Penn State University	
Delaware County Community College	Pennsylvania College of Technology	
East Stroudsburg University	Pennsylvania Highlands Community College	
Edinboro University	Reading Area Community College	
Education Resource	Shippensburg University	
Harrisburg Area Community College	Slippery Rock University	
Indiana University	State System of Higher Education	

**Other**

Berks County Earned Income Tax Bureau	Overbrook School for the Blind	York Adams Academy
Department of Corrections - Commonwealth of Pennsylvania	Pennsylvania School Boards Association	
Department of Education - Commonwealth of Pennsylvania	Pennsylvania School for the Deaf	
Lancaster County Academy	Thaddeus Stevens College of Technology	
	Western Pennsylvania School for the Blind	
	Western Pennsylvania School for the Deaf	

**Charter Schools (C S)**

21st Century Cyber C S	Baden Academy C S	Central Pennsylvania Digital Learning Foundation C S
Achievement House C S	Bear Creek Community C S	Centre Learning Community C S
Act Academy Cyber C S	Beaver Area Academic C S	Chester County Family Academy C S
Ad Prima C S	Belmont Academy C S	Christopher Columbus C S
Agora Cyber C S	Belmont C S	Circle of Seasons C S
Alliance For Progress C S	Birney Preparatory Academy C S	City Charter High School
Antonia Pantoja C S	Boys' Latin of Philadelphia C S	Collegium C S
Architecture and Design Charter High School	Bucks County Montessori C S	Commonwealth Connections Academy C S
Arise Academy Charter High School	Career Connections C S	Community Academy of Philadelphia C S
Arts Academy C S	Casa C S	Crispus Attucks Youthbuild C S
Aspira Bilingual Cyber C S	Center for Student Learning Charter School at Pennsbury	Delaware Valley C S
Avon Grove C S		

## Statistical Section

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### Schedule of Employers (Continued)

Discovery C S	Mastery Charter School - Mann Elementary	Russell Byers C S
Dr. Robert Ketterer C S	Mastery Charter School - Pickett Campus	Sankofa Academy C S
Eastern University Academy C S	Mastery Charter School - Shoemaker Campus	Sankofa Freedom Academy C S
Environmental Charter School at Frick Park	Mastery Charter School - Simon Gratz	School Lane C S
Erie Rise Leadership Academy C S	Mastery Charter School - Smedley Elementary	Seven Generations C S
Esperanza Cyber C S	Mastery Charter School - Thomas Campus	Souderton Charter School Collaborative
Eugenio Maria de Hostos Community Bilingual C S	Math Civics and Sciences C S	Spectrum C S
Evergreen Community C S	Mathematics, Science & Technology Community C S	Stone Valley Community C S
Fell C S	Medical Academy C S	Sugar Valley Rural C S
First Philadelphia Charter School for Literacy	Memphis Street Academy C S - J.P. Jones	SusQ - Cyber C S
Folk Arts - Cultural Treasures C S	Montessori Regional C S	Sylvan Heights Science C S
Franklin Towne Charter Elementary School	Multi-Cultural Academy C S	Tacony Academy C S
Franklin Towne Charter High School	New Day C S	Tidioute Community C S
Freire C S	New Foundations C S	Truebright Science Academy C S
Gettysburg Montessori C S	New Hope Academy	Universal Alcorn C S
Gillingham C S	New Media Technology C S	Universal Audenried C S
Global Leadership Academy C S	Nittany Valley C S	Universal Bluford C S
Graystone Academy C S	Northside Urban Pathways C S	Universal Creighton C S
Green Woods C S	Northwood Academy C S	Universal Daroff C S
Hardy Williams Academy C S	Nueva Esperanza Academy C S	Universal Institute C S
Helen Thackston C S	Olney Charter High School	Universal Vare C S
Hope C S	Pan American Academy C S	Urban League of Pittsburgh C S
Hope for Hyndman C S	Penn Hills C S for Entrepreneurship	Urban Pathways K - 5 College C S
Howard Gardner Multiple Intelligence C S	Pennsylvania Cyber C S	Vida C S
I-Lead C S	Pennsylvania Distance Learning C S	Wakisha C S
Imani Education Circle C S	Pennsylvania Leadership C S	Walter D. Palmer Leadership Learning Partnership C S
IMHOTEP Institute C S	Pennsylvania Virtual C S	West Oak Lane C S
Independence C S	People for People C S	West Philadelphia Achievement Charter Elementary School
Infinity C S	Perseus House Charter School of Excellence	Wissahickon C S
John B Stetson C S	Philadelphia Academy C S	Wonderland C S
Keystone Academy C S	Philadelphia Charter School for Arts & Sciences at H.R. Edmunds	World Communications C S
Keystone Education Center C S	Philadelphia Electrical & Technology Charter High School	York Academy Regional C S
Khepera C S	Philadelphia Harambee Institute of Science and Technology C S	Young Scholars C S
Kipp Academy C S	Philadelphia Montessori C S	Young Scholars Frederick Douglas C S
Kipp West Philadelphia Preparatory C S	Philadelphia Performing Arts C S	Young Scholars Kenderton C S
La Academia: The Partnership C S	Pocono Mountain C S	Young Scholars of Central Pennsylvania C S
Laboratory C S	Premier Arts & Science C S	Young Scholars of Western Pennsylvania C S
Lehigh Valley Academy Regional C S	Preparatory Charter School of Mathematics, Science, Technology & Careers	
Lehigh Valley Charter School for the Performing Arts	Propel - East C S	
Lehigh Valley Dual Language C S	Propel - Northside	
Lincoln C S	Propel Charter School - Braddock Hills	
Lincoln Leadership Academy C S	Propel Charter School - Homestead	
Lincoln Park Performing Arts C S	Propel Charter School - McKeesport	
Manchester Academic C S	Propel Charter School - Montour	
Mariana Bracetti Academy C S	Propel Charter School - Pitcairn	
Maritime Academy C S	Renaissance Academy - Edison C S	
Mastery Charter High School	Richard Allen Preparatory C S	
Mastery Charter School - Cleveland Elementary	Robert Benjamin Wiley Community C S	
Mastery Charter School - Clymer Elementary	Roberto Clemente C S	
Mastery Charter School - Francis D Pastorius Elementary		
Mastery Charter School - Harrity Elementary		

