

Commonwealth of Pennsylvania

Public School Employees'

Retirement System

**(A Component Unit of the Commonwealth of Pennsylvania)**

Financial Statements

**June 30, 2013 and 2012**

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## **Independent Auditor's Report**

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 Commonwealth of Pennsylvania Public School Employees' Retirement System (PSERS), as of June 30, 2013, and for the year then ended, and the related notes to the financial statements, which collectively comprise PSERS's 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 audit. We conducted our audit 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, 2013, and the respective changes in its financial position thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America (GAAP).



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**Other Matters**

The financial statements of PSERS as of and for the year ended June 30, 2012, were audited by another auditor who expressed an unmodified opinion on those statements on September 18, 2012.

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis and Required Supplementary Schedules of Funding Progress and Employer Contributions 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.

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, and Schedule of Payments to Non-Investment Consultants 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.

*SB & Company, LLC*

Harrisburg, Pennsylvania  
September 18, 2013

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## 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, 2013 (FY 2013) 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 postemployment healthcare programs, the Health Insurance Premium Assistance Program (PA) 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, 2013, 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, 2012 to June 30, 2013, including comparative amounts for the prior year.

The *Notes to Financial Statements* provide additional information that is essential to 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 two schedules illustrating historical information concerning the funded status of PSERS 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.

The remaining supplementary schedules provide additional detailed information concerning the operating expenses,

investment expenses and payments to non-investment consultants. All of this supplementary information is considered useful in understanding and evaluating the financial activities of PSERS.

### Financial Highlights

- The rate of return on investments was 7.96% for FY 2013, 3.43% for the fiscal year ended June 30, 2012 (FY 2012) and 20.37% for the fiscal year ended June 30, 2011 (FY 2011). The annualized rate of return for the three years ended June 30, 2013 was 10.36%, 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 \$500 million from \$48.8 billion at June 30, 2012 to \$49.3 billion at June 30, 2013. 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, 2011 to June 30, 2012 was a decrease of \$2.6 billion from \$51.4 billion at June 30, 2011 to \$48.8 billion at June 30, 2012. This decrease was due in large part to deductions for benefits and administrative expenses exceeding net investment income plus member and employer contributions.
- PSERS' funded ratio for the pension plan, as of the latest actuarial valuation dated June 30, 2012, decreased from 69.1% at June 30, 2011 to 66.3% at June 30, 2012. This decrease was primarily due to experience losses on investment assets and employer contributions that were less than the normal cost on the unfunded liability. The funded ratio at June 30, 2010 was 75.1%.
- Total member contributions for pension increased from \$952.9 million in FY 2012 to \$991.1 million in FY 2013. The increase was due to a \$40.4 million increase in purchase of service contributions which was partially offset by a 1% reduction in 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 \$1.1 billion in FY 2012 to \$1.6 billion in FY 2013. This increase was primarily attributable to an increase in the total employer contribution rate from 8.65% in FY 2012 to 12.36% in FY 2013 which was partially offset by a 1% reduction in active

## Management's Discussion and Analysis (continued)

member payroll. Total employer contributions increased from FY 2011 to FY 2012 which was attributable to an increase in the total employer contribution rate from 5.64% in FY 2011 to 8.65% in FY 2012 which was partially offset by a 2.6% reduction in the active member payroll.

- 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 increased by approximately 1% from FY 2012. Total PSERS' benefit expense increased by \$400 million from \$5.6 billion in FY 2011 to \$6.0 billion in FY 2012. This increase is
- Total PSERS' administrative expenses increased from \$56.5 million for FY 2012 to \$62.2 million in FY 2013 mainly due to an increase in the administrative costs in the HOP from increasing enrollments and other information technology expenditures. Total PSERS' administrative expenses decreased slightly from \$57.7 million in FY 2011 to \$56.5 million for FY 2012.

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

| Summary of Plan Net Position         | FY 2013              | Increase<br>(Decrease) | FY 2012              | Increase<br>(Decrease) | FY 2011              |
|--------------------------------------|----------------------|------------------------|----------------------|------------------------|----------------------|
| <b>Assets:</b>                       |                      |                        |                      |                        |                      |
| Receivables                          | \$ 1,173,601         | \$ (259,510)           | \$ 1,433,111         | \$ 258,554             | \$ 1,174,557         |
| Investments                          | 49,534,407           | 993,558                | 48,540,849           | (3,288,315)            | 51,829,164           |
| Securities lending collateral pool   | 615,159              | 108,355                | 506,804              | (255,001)              | 761,805              |
| Capital assets                       | 22,404               | 71                     | 22,333               | 1,304                  | 21,029               |
| <b>Total Assets</b>                  | <b>51,345,571</b>    | <b>842,474</b>         | <b>50,503,097</b>    | <b>(3,283,458)</b>     | <b>53,786,555</b>    |
| <b>Liabilities:</b>                  |                      |                        |                      |                        |                      |
| Payables and other liabilities       | 1,454,715            | 222,001                | 1,232,714            | (358,855)              | 1,591,569            |
| Obligations under securities lending | 615,159              | 108,355                | 506,804              | (255,001)              | 761,805              |
| <b>Total Liabilities</b>             | <b>2,069,874</b>     | <b>330,356</b>         | <b>1,739,518</b>     | <b>(613,856)</b>       | <b>2,353,374</b>     |
| <b>Plan Net Position</b>             | <b>\$ 49,275,697</b> | <b>\$ 512,118</b>      | <b>\$ 48,763,579</b> | <b>\$ (2,669,602)</b>  | <b>\$ 51,433,181</b> |

### Summary of Changes in Plan Net Position

|                                     |                   |                     |                       |                       |                     |
|-------------------------------------|-------------------|---------------------|-----------------------|-----------------------|---------------------|
| <b>Additions:</b>                   |                   |                     |                       |                       |                     |
| Contributions                       | \$ 2,546,165      | \$ 507,351          | \$ 2,038,814          | \$ 248,354            | \$ 1,790,460        |
| Participant premiums and CMS        | 275,214           | 28,110              | 247,104               | 14,010                | 233,094             |
| Net investment income               | 4,126,338         | 3,032,359           | 1,093,979             | (8,153,113)           | 9,247,092           |
| <b>Total Additions</b>              | <b>6,947,717</b>  | <b>3,567,820</b>    | <b>3,379,897</b>      | <b>(7,890,749)</b>    | <b>11,270,646</b>   |
| <b>Deductions:</b>                  |                   |                     |                       |                       |                     |
| Benefit expense                     | 6,373,363         | 380,384             | 5,992,979             | 375,732               | 5,617,247           |
| Administrative expenses             | 62,236            | 5,716               | 56,520                | (1,225)               | 57,745              |
| <b>Total Deductions</b>             | <b>6,435,599</b>  | <b>386,100</b>      | <b>6,049,499</b>      | <b>374,507</b>        | <b>5,674,992</b>    |
| <b>Changes in Plan Net Position</b> | <b>\$ 512,118</b> | <b>\$ 3,181,720</b> | <b>\$ (2,669,602)</b> | <b>\$ (8,265,256)</b> | <b>\$ 5,595,654</b> |

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## Management's Discussion and Analysis (continued)

### Funded Status

PSERS uses an actuarial reserve type of funding that is financed by member contributions, employer contributions, and earnings from invested assets. 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 66.3% funded as of June 30, 2012. The funded ratio decreased from 69.1% as of June 30, 2011 due to a decrease in the actuarial value of assets, which is based on a ten-year smoothing period, employer contributions below the normal cost, and an increase in the actuarial accrued liability.

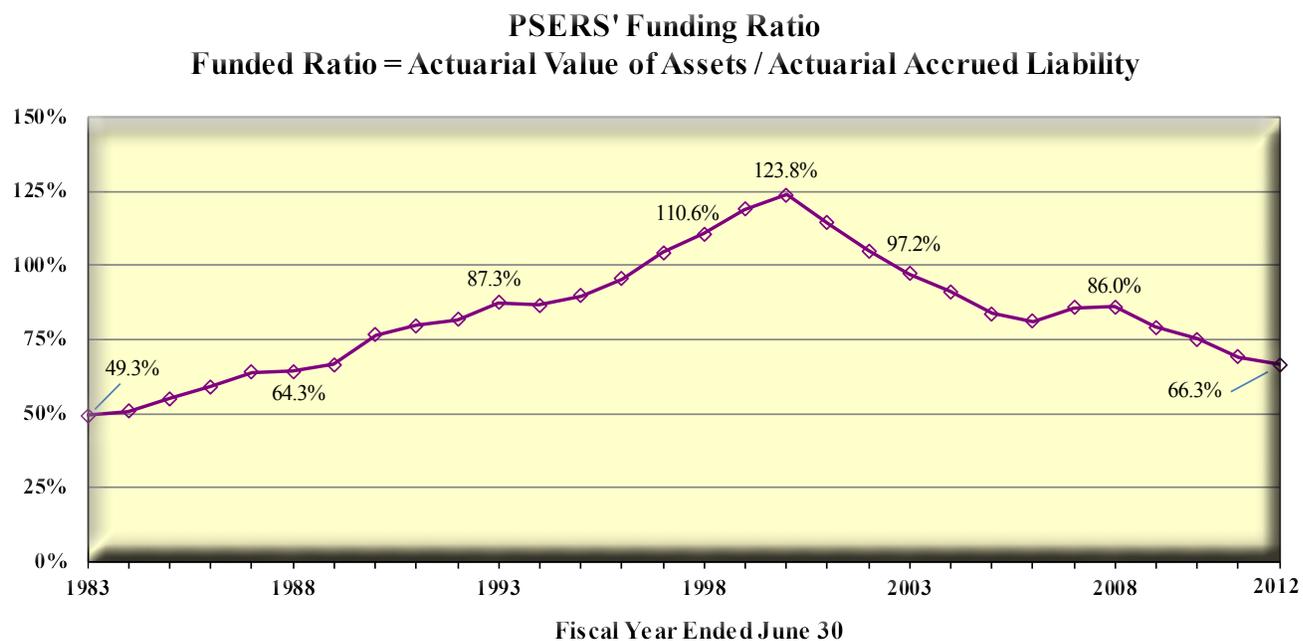
The results of operations for FY 2013 will be reflected in the actuarial valuation for the year ended June 30, 2013. Due to the normal lag time for completion of the actuarial valuation, the resulting funded status will be available at the end of the 2013 calendar year and will be reported in the financial statements for the fiscal year ending June 30, 2014 (FY 2014). Based on the investment performance for

the nine-year period ended June 30, 2013, which is below the investment rate of return assumption during that time period, and employer contributions below the normal cost plus interest, the funded ratio at June 30, 2013 is expected to decrease. FY 2013 is the fourth year of a five-year transition from five-year to ten-year smoothing of actuarial assets. A thirty-year history of PSERS' funded status is shown at the bottom of the page.

PSERS' State Accumulation Account remained consistent at June 30, 2013 and 2012 (See Note 3). The deficit increased slightly in FY 2013 due to employer contributions below the normal cost. Employer contributions 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



## Management's Discussion and Analysis (continued)

account the risk associated with each asset class as well as the financial objectives of the Fund.

Economically, the fiscal that year ended June 30, 2013 was characterized by positive gains in the first three quarters and a fourth quarter that gave back some of those gains. The positive gains were led by a strong rally in developed market equities, specifically U.S. equities. Domestically, the Federal Reserve (Fed) implemented another asset purchase program during the year (QE3). In December, Operation Twist (a plan to sell short-term notes and purchase long-term Treasuries to reduce interest rates) came to an end and was replaced with outright purchases of longer-dated U.S. Treasuries. This Fed program partially offset the effects of U.S. fiscal tightening through sequestration (government spending cuts of about \$40 billion), the payroll tax increase, the expiration of some of the Bush-era tax cuts, and the Affordable Care Act tax increase during 2013 which acted as a drag on U.S. growth of about 1.0 – 1.5%. U.S. economic activity as represented by the U.S. Gross Domestic Product (GDP) has been fairly tepid during the past fiscal year while housing was strong, up 12.07% as measured by the S&P Case-Shiller 20-City Home Price Index. Internationally, Chinese growth and falling inflation expectations overshadowed loose monetary policy, causing the commodity markets to perform poorly. The Bank of Japan introduced a 2% inflation target and announced open-ended purchases of assets amounting to 13 trillion yen per month and fiscal stimulation amounting to over 1% of GDP for 2013. These loose monetary conditions led to a strong “risk-on” environment for the first three quarters of the fiscal year. Europe still has excess debt, austerity, and unemployment issues, China continues to slow, and the emerging markets are facing a potentially vicious cycle of capital outflows. In summary, the equity markets had a strong “risk-on” year while fixed income markets and commodity markets had weak years. Even with a more risk balanced allocation, the System was still able to generate strong absolute returns.

For FY 2013 PSERS’ rate of return on investments was 7.96% which exceeded PSERS’ total fund Policy Index of 5.68% 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 \$4.1 billion in FY 2013 increased from a net investment income of \$1.1 billion in FY 2012.

The annualized rate of return over the past three- and five-year periods ended June 30, 2013 was 10.36% and 2.50%, respectively. The returns for the three- and five-year periods exceeded the total fund Policy Index returns for those periods by 223 and 51 basis points, respectively. The annualized rate of return for the ten- and twenty-five-year periods ended June 30, 2013 was 7.72% and 8.65%, respectively.

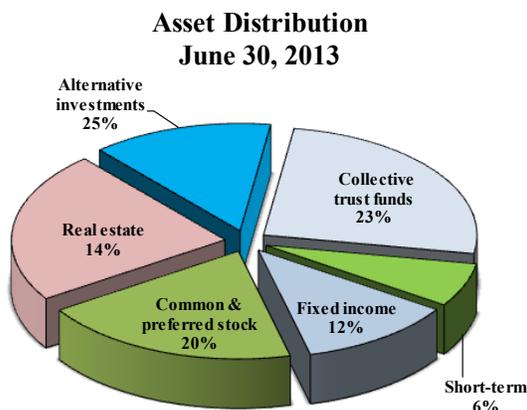
PSERS’ long-term actuarial investment rate of return assumption was 7.5% at June 30, 2013. PSERS’ Board of Trustees (Board) decreased the actuarial investment rate of return assumption from 8.0% to 7.5% for the June 30, 2011 actuarial valuation. The change made by the Board lowered PSERS’ rate of return assumption to provide a more realistic outlook on the future earnings potential of the Fund as long-term capital market assumptions have declined.

The asset distribution of PSERS’ investment portfolio at June 30, 2013, 2012 and 2011, at fair value, and including postemployment healthcare assets, is presented in the table at the bottom of the page.

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 overweighted at June 30, 2013 and underweighted at June 30, 2012 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

| <u>Asset Class</u>         | <u>(Dollar Amounts in Thousands)</u> |               |                      |              |                      |              |
|----------------------------|--------------------------------------|---------------|----------------------|--------------|----------------------|--------------|
|                            | <u>2013</u>                          | <u>%</u>      | <u>2012</u>          | <u>%</u>     | <u>2011</u>          | <u>%</u>     |
| Short-term                 | \$ 3,242,139                         | 6.5%          | \$ 2,649,495         | 5.5          | \$ 5,813,421         | 11.2         |
| Fixed income               | 5,828,418                            | 11.8%         | 7,207,558            | 14.8         | 8,527,633            | 16.4         |
| Common and preferred stock | 9,762,527                            | 19.7%         | 9,357,122            | 19.3         | 11,319,183           | 21.8         |
| Collective trust funds     | 11,280,497                           | 22.8%         | 10,460,482           | 21.5         | 8,320,294            | 16.1         |
| Real estate                | 6,797,535                            | 13.7%         | 6,003,753            | 12.4         | 5,263,467            | 10.2         |
| Alternative investments    | 12,623,291                           | 25.5%         | 12,862,439           | 26.5         | 12,585,166           | 24.3         |
| <b>Total</b>               | <b>\$ 49,534,407</b>                 | <b>100.0%</b> | <b>\$ 48,540,849</b> | <b>100.0</b> | <b>\$ 51,829,164</b> | <b>100.0</b> |

## Management's Discussion and Analysis (continued)



Short-term investments (cash and cash equivalents) decreased by \$3.2 billion from \$5.8 billion at June 30, 2011 to \$2.6 billion at June 30, 2012. This asset class was overweighted at June 30, 2011 and underweighted at June 30, 2012 according to the asset allocation plans approved by the Board. Due to manager terminations, reallocation of investments and funding for benefit payments, PSERS decreased its short-term investments during FY 2012. Fixed income investments decreased by \$1.3 billion from \$8.5 billion at June 30, 2011 to \$7.2 billion at June 30, 2012 mostly due to manager terminations and reallocation of exposure to other asset classes during FY 2012. Common and preferred stock investments also decreased by \$1.9 billion from \$11.3 billion at June 30, 2011 to \$9.4 billion at June 30, 2012. The reduction in this asset category was

\$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.

mainly the result of negative returns in the international equity market. Collective trust funds rose by \$2.2 billion from \$8.3 billion at June 30, 2011 to \$10.5 billion at June 30, 2012 mostly due to a reallocation of exposure from other asset classes. Real estate investments increased by \$700 million from \$5.3 billion at June 30, 2011 to \$6.0 billion at June 30, 2012 due to contributions to new and existing partnerships combined with a recovery of value in partnership portfolio holdings. Alternative investments increased by \$300 million from \$12.6 billion at June 30, 2011 to \$12.9 billion at June 30, 2012 due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings.

### Securities Lending

The System experienced only a slight change in net income from securities lending activities from \$8.3 million in FY 2012 to \$8.2 million in FY 2013 as a small improvement in spreads was offset by a decrease in volume.

### Contributions

Employer contributions increased from \$1.1 billion in FY 2012 to \$1.6 billion in FY 2013 due to the increase in the total employer contribution rate from 8.65% in FY 2012 to 12.36% in FY 2013.

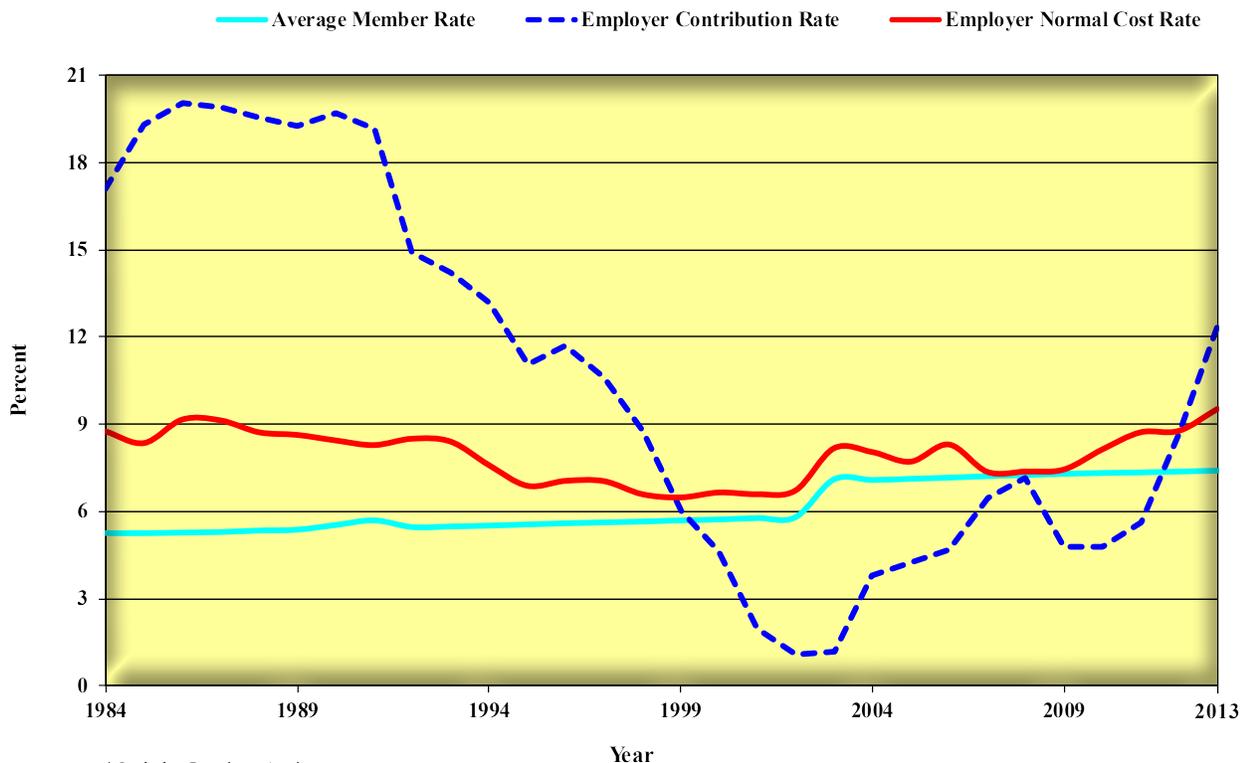
Total member contributions increased from \$952.9 million in FY 2012 to \$991.1 million in FY 2013 due to a \$40 million increase in purchase of service contributions and a small increase in the average member contribution rate. The average member contribution rate for pension increased from 7.37% in FY 2012 to 7.40% in FY 2013. These increases were partially offset by a 1% decrease in active member payroll. Total member contributions decreased from \$1.0 billion in FY 2011 to \$952.9 million in FY 2012 due to a decrease in active member payroll for pension offset by a slight increase in the average member contribution rate. The average member contribution rate for pension increased from 7.34% in FY 2011 to 7.37% in FY 2012.

A thirty-year history of PSERS' contribution rates is presented on the next page.

As a result of an increase in service credit purchases by members from FY 2012 to FY 2013, member contribution receivables increased from \$290.1 million at June 30, 2012 to \$312.0 million at June 30, 2013. The increase in the employer contribution rate from FY 2012 to FY 2013 combined with an increase in employer cost of service credit purchases resulted in the employer contribution receivable rising from \$319.2 million at June 30, 2012 to \$451.8 million at June 30, 2013.

## Management's Discussion and Analysis (continued)

### History of PSERS' Contribution Rates as a Percent of Payroll\*



## Pennsylvania Act 120 of 2010

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.

Act 120 has a projected net savings of \$1.38 billion thru 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 rates spike projected for FY 2013 by smoothing the projected rate increases over a five- to nine-year time period. In addition, the benefit reductions and risk sharing provisions for new members on July 1, 2011 and thereafter have created a low employer cost structure for new members and shifted some of the investment risk to members. The employer normal cost for Act 120 members is 68% less than pre-Act 120 members as the benefit plan is primarily member funded.

## Act 120 New Member Highlights

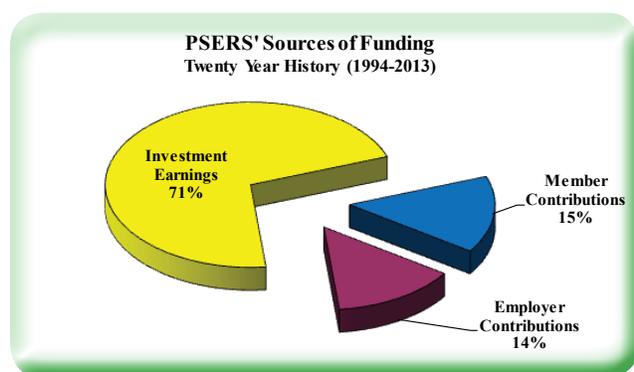
- Reduced benefit accrual by 20% from 2.5% to 2% of salary for each year of service and retained employee contributions at pre-reform levels
- Increased normal retirement age
- Eliminated lump sum withdrawals of contributions and interest at retirement
- Extended vesting period from five to ten years
- Required that members purchase Non Qualifying Part Time (NQPT) service and most types of nonschool or nonstate service credit (other than military service) at full actuarial cost of the service
- Created “shared risk” to allow increased employee contributions for investment underperformance
- Capped growth of employer contribution:
  - » 3.0% in FY 2012
  - » 3.5% in FY 2013
  - » 4.5% each year thereafter until no longer needed
- Re-amortized the System’s existing liabilities over 24 years through an actuarial “Fresh Start”

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

## Management's Discussion and Analysis (continued)

### Investment Income

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. Net investment income decreased from \$9.2 billion in FY 2011 to \$1.1 billion in FY 2012, which is consistent with the decrease in the investment rate of return from 20.37% for FY 2011 to 3.43% for FY 2012. 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.



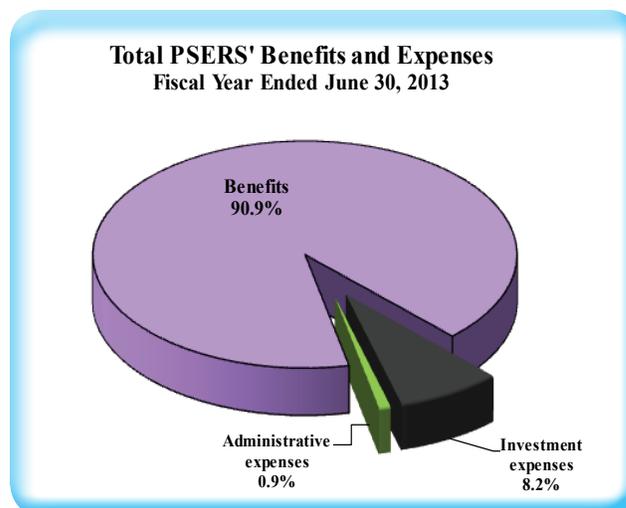
### Total PSERS' Benefits and Expenses

The primary source of expense during FY 2013 was for the payment of benefits approximating \$6.3 billion. The breakdown consisted of \$6.0 billion for Pension, \$100.1 million for the PA program, and \$229.0 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 \$6.0 billion in FY 2012 to \$6.3 billion in FY 2013. The increase is attributable to an ongoing increase to the average monthly benefit, higher lump sum payments, and an increase in the number of members receiving benefits. There was an increase in fourth quarter retirements in FY 2013 versus the same period in FY 2012, resulting in a higher pension benefits payable figure at June 30, 2013 of \$747.6 million compared to \$495.0 million at June 30, 2012. New retirements during FY 2013 increased by approximately 1% from FY 2012. Benefit expense increased from \$5.6 billion in FY 2011 to \$6.0 billion in FY 2012. 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 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 changes in fee structure brought on by partnerships maturing. Investment expenses decreased by \$33.4 million from \$514.7 million in FY 2011 to \$481.3 million in FY 2012 mainly due to a decline in management fees in the real estate and alternative investment asset classes. This reduction is widely attributable to changes in fee structure brought on by partnerships maturing. Also contributing to this change was a decrease in performance fees in the public market sector from FY 2011 to FY 2012.

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. Administrative expenses decreased by \$1.2 million from \$57.7 million during FY 2011 compared to \$56.5 million during FY 2012.



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## Management's Discussion and Analysis (continued)

### Postemployment Healthcare

PSERS administers two postemployment healthcare programs, the Health Insurance Premium Assistance Program (PA) 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 (PA) Program

##### Financial Highlights

- Total plan net position increased by \$6.6 million in FY 2013 due to an increase in employer contributions driven by the increase in the contribution rate from 0.65% for FY 2012 to 0.86% for the FY 2013. The change from June 30, 2011 to June 30, 2012 was a decrease of \$17.5 million due to a decrease in employer contributions and an increase in benefit payments.
- Total receivables increased from \$29.1 million at June 30, 2012 to \$38.2 million at June 30, 2013 due to the increase in the employer contribution rate.
- Investments decreased from \$65.1 million at June 30, 2012 to \$62.6 million at June 30, 2013 due to lower investment returns.

##### Contributions

Total employer contributions for PA increased from \$81.3 million in FY 2012 to \$108.7 million in FY 2013 due to the increase in the employer contribution rate from FY 2012 to FY 2013. The contribution rate had increased from 0.65% in FY 2012 to 0.86% in FY 2013.

##### Investment Income

Total investment income for PA decreased from \$0.4 million in FY 2012 to \$0.1 million in FY 2013. The decrease is due to declining short-term interest rates from FY 2012 to FY 2013 and a reduction in investments.

##### Benefits and Expenses

Overall expenses for PA increased from \$99.3 million in FY 2012 to \$102.2 million in FY 2013. 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 \$23.8 million in FY 2013 primarily due to the rise in contributions that outpaced the rise in expenses. The change from June 30, 2011 to June 30, 2012 is also primarily due to the rise in contributions that outpaced the rise in expenses.
- Total receivables increased from \$16.8 million at June 30, 2012 to \$23.0 million at June 30, 2013. The increase is tied primarily to higher contributions due to an increase in participation in the HOP.
- Investments increased from \$157.8 million at June 30, 2012 to \$175.7 million at June 30, 2013 due to increased participation, which increased contributions and improved cash flow.
- Total liabilities increased 1.0% from June 30, 2012 to June 30, 2013. The increase is due to increased participation in the program slightly offset by a decrease in claims payable.

##### Contributions

Total participant premiums and Centers for Medicare and Medicaid Services (CMS) contributions for HOP increased from \$247.1 million in FY 2012 to \$275.2 million in FY 2013. This increase is representative of the 8.3% increase in plan participation.

##### Investment Income

Investment income for HOP remained at \$0.2 million for FY 2012 and FY 2013.

##### Benefits and Expenses

Overall expenses for HOP increased from \$233.2 million in FY 2012 to \$251.7 million in FY 2013. 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 2013           | Increase<br>(Decrease) | FY 2012          | Increase<br>(Decrease) | FY 2011           |
|--------------------------------|-------------------|------------------------|------------------|------------------------|-------------------|
| <b>Assets:</b>                 |                   |                        |                  |                        |                   |
| Receivables                    | \$ 38,210         | \$ 9,108               | \$ 29,102        | \$ (3,519)             | \$ 32,621         |
| Investments                    | 62,577            | (2,495)                | 65,072           | (15,515)               | 80,587            |
| <b>Total Assets</b>            | <b>100,787</b>    | <b>6,613</b>           | <b>94,174</b>    | <b>(19,034)</b>        | <b>113,208</b>    |
| <b>Liabilities</b>             |                   |                        |                  |                        |                   |
| Payables and other liabilities | 438               | 17                     | 421              | (1,529)                | 1,950             |
| <b>Total Liabilities</b>       | <b>438</b>        | <b>17</b>              | <b>421</b>       | <b>(1,529)</b>         | <b>1,950</b>      |
| <b>Plan Net Position</b>       | <b>\$ 100,349</b> | <b>\$ 6,596</b>        | <b>\$ 93,753</b> | <b>\$ (17,505)</b>     | <b>\$ 111,258</b> |

#### Summary of Changes in Plan Net Position

|                                     | FY 2013         | Increase<br>(Decrease) | FY 2012            | Increase<br>(Decrease) | FY 2011           |
|-------------------------------------|-----------------|------------------------|--------------------|------------------------|-------------------|
| <b>Additions:</b>                   |                 |                        |                    |                        |                   |
| Contributions                       | \$ 108,676      | \$ 27,333              | \$ 81,343          | \$ (7,899)             | \$ 89,242         |
| Net Investment Income               | 110             | (313)                  | 423                | (268)                  | 691               |
| <b>Total Additions</b>              | <b>108,786</b>  | <b>27,020</b>          | <b>81,766</b>      | <b>(8,167)</b>         | <b>89,933</b>     |
| <b>Deductions:</b>                  |                 |                        |                    |                        |                   |
| Benefit Expenses                    | 100,078         | 2,872                  | 97,206             | 3,688                  | 93,518            |
| Administrative Expenses             | 2,112           | 47                     | 2,065              | 77                     | 1,988             |
| <b>Total Deductions</b>             | <b>102,190</b>  | <b>2,919</b>           | <b>99,271</b>      | <b>3,765</b>           | <b>95,506</b>     |
| <b>Changes in Plan Net Position</b> | <b>\$ 6,596</b> | <b>\$ 24,101</b>       | <b>\$ (17,505)</b> | <b>\$ (11,932)</b>     | <b>\$ (5,573)</b> |

### Health Options Program

#### Summary of Plan Net Position

(Dollar Amounts in Thousands)

|                                | FY 2013           | Increase<br>(Decrease) | FY 2012           | Increase<br>(Decrease) | FY 2011           |
|--------------------------------|-------------------|------------------------|-------------------|------------------------|-------------------|
| <b>Assets:</b>                 |                   |                        |                   |                        |                   |
| Receivables                    | \$ 23,043         | \$ 6,230               | \$ 16,813         | \$ 3,044               | \$ 13,769         |
| Investments                    | 175,690           | 17,905                 | 157,785           | 11,884                 | 145,901           |
| <b>Total Assets</b>            | <b>198,733</b>    | <b>24,135</b>          | <b>174,598</b>    | <b>14,928</b>          | <b>159,670</b>    |
| <b>Liabilities</b>             |                   |                        |                   |                        |                   |
| Payables and other liabilities | 38,946            | 378                    | 38,568            | 827                    | 37,741            |
| <b>Total Liabilities</b>       | <b>38,946</b>     | <b>378</b>             | <b>38,568</b>     | <b>827</b>             | <b>37,741</b>     |
| <b>Plan Net Position</b>       | <b>\$ 159,787</b> | <b>\$ 23,757</b>       | <b>\$ 136,030</b> | <b>\$ 14,101</b>       | <b>\$ 121,929</b> |

#### Summary of Changes in Plan Net Position

|                                     | FY 2013          | Increase<br>(Decrease) | FY 2012          | Increase<br>(Decrease) | FY 2011         |
|-------------------------------------|------------------|------------------------|------------------|------------------------|-----------------|
| <b>Additions:</b>                   |                  |                        |                  |                        |                 |
| Participant premiums and CMS        | \$ 275,214       | \$ 28,110              | \$ 247,104       | \$ 14,010              | \$ 233,094      |
| Net Investment Income               | 226              | (11)                   | 237              | (73)                   | 310             |
| <b>Total Additions</b>              | <b>275,440</b>   | <b>28,099</b>          | <b>247,341</b>   | <b>13,937</b>          | <b>233,404</b>  |
| <b>Deductions:</b>                  |                  |                        |                  |                        |                 |
| Benefit Expenses                    | 229,039          | 16,012                 | 213,027          | (1,940)                | 214,967         |
| Administrative Expenses             | 22,644           | 2,431                  | 20,213           | 1,484                  | 18,729          |
| <b>Total Deductions</b>             | <b>251,683</b>   | <b>18,443</b>          | <b>233,240</b>   | <b>(456)</b>           | <b>233,696</b>  |
| <b>Changes in Plan Net Position</b> | <b>\$ 23,757</b> | <b>\$ 9,656</b>        | <b>\$ 14,101</b> | <b>14,393</b>          | <b>\$ (292)</b> |

**Statements of Plan Net Position**  
**June 30, 2013 and 2012**  
(Dollar Amounts in Thousands)

|  | 2013                      |                    |                        |                      |
|--|---------------------------|--------------------|------------------------|----------------------|
|  | 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               |
| 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              |
| <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 Plan Net Position**  
**June 30, 2013 and 2012**  
(Dollar Amounts in Thousands)

|  | <b>2012</b>               |                    |                        |                      |
|--|---------------------------|--------------------|------------------------|----------------------|
|  | Postemployment Healthcare |                    |                        | Totals               |
|  | Pension                   | Premium Assistance | Health Options Program |                      |
| <b>Assets:</b>   |                           |                    |                        |                      |
| Receivables:   |                           |                    |                        |                      |
| Members  | \$ 284,565                | \$ 5,492           | \$ 19                  | \$ 290,076           |
| Employers  | 296,374                   | 22,807             | -                      | 319,181              |
| Investment income  | 284,451                   | 251                | 28                     | 284,730              |
| Investment proceeds  | 521,217                   | -                  | -                      | 521,217              |
| CMS Part D and prescriptions   | -                         | -                  | 16,615                 | 16,615               |
| Miscellaneous  | 589                       | 552                | 151                    | 1,292                |
| <b>Total Receivables</b>   | <b>1,387,196</b>          | <b>29,102</b>      | <b>16,813</b>          | <b>1,433,111</b>     |
| Investments, at fair value:  |                           |                    |                        |                      |
| Short-term   | 2,426,638                 | 65,072             | 157,785                | 2,649,495            |
| Fixed income   | 7,207,558                 | -                  | -                      | 7,207,558            |
| Common and preferred stock   | 9,357,122                 | -                  | -                      | 9,357,122            |
| Collective trust funds   | 10,460,482                | -                  | -                      | 10,460,482           |
| Real estate  | 6,003,753                 | -                  | -                      | 6,003,753            |
| Alternative investments  | 12,862,439                | -                  | -                      | 12,862,439           |
| <b>Total Investments</b>   | <b>48,317,992</b>         | <b>65,072</b>      | <b>157,785</b>         | <b>48,540,849</b>    |
| Securities lending collateral pool   | 506,804                   | -                  | -                      | 506,804              |
| Capital assets (net of accumulated depreciation \$20,044)                            | 22,333                    | -                  | -                      | 22,333               |
| <b>Total Assets</b>  | <b>50,234,325</b>         | <b>94,174</b>      | <b>174,598</b>         | <b>50,503,097</b>    |
| <b>Liabilities:</b>  |                           |                    |                        |                      |
| Accounts payable and accrued expenses  | 106,413                   | 314                | 1,571                  | 108,298              |
| Benefits payable   | 494,996                   | 107                | 18,499                 | 513,602              |
| Participant premium advances   | -                         | -                  | 18,498                 | 18,498               |
| Investment purchases and other liabilities   | 592,316                   | -                  | -                      | 592,316              |
| Obligations under securities lending   | 506,804                   | -                  | -                      | 506,804              |
| <b>Total Liabilities</b>   | <b>1,700,529</b>          | <b>421</b>         | <b>38,568</b>          | <b>1,739,518</b>     |
| <b>Net position held in trust for pension and postemployment healthcare benefits</b> | <b>\$ 48,533,796</b>      | <b>\$ 93,753</b>   | <b>\$ 136,030</b>      | <b>\$ 48,763,579</b> |

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

**Statements of Changes in Plan Net Position**  
**Years Ended June 30, 2013 and 2012**  
(Dollar Amounts in Thousands)

|   | 2013                      |                    |                        |                      |
|---|---------------------------|--------------------|------------------------|----------------------|
|   | 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  | -                         | -                  | 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 (decrease)</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.

**Statements of Changes in Plan Net Position**  
**Years Ended June 30, 2013 and 2012**  
(Dollar Amounts in Thousands)

|   | 2012                      |                    |                        |                      |
|---|---------------------------|--------------------|------------------------|----------------------|
|   | Postemployment Healthcare |                    |                        | Totals               |
|   | Pension                   | Premium Assistance | Health Options Program |                      |
| <b>Additions:</b>   |                           |                    |                        |                      |
| Contributions:  |                           |                    |                        |                      |
| Members   | \$ 952,887                | \$ -               | \$ -                   | \$ 952,887           |
| Employers   | 1,004,584                 | 81,343             | -                      | 1,085,927            |
| <b>Total contributions</b>  | <b>1,957,471</b>          | <b>81,343</b>      | <b>-</b>               | <b>2,038,814</b>     |
| Participant premiums  | -                         | -                  | 213,642                | 213,642              |
| Centers for Medicare & Medicaid Services  | -                         | -                  | 33,462                 | 33,462               |
| Investment income:  |                           |                    |                        |                      |
| From investing activities:  |                           |                    |                        |                      |
| Net appreciation (depreciation) in fair value of investments                          | 539,129                   | (1,543)            | -                      | 537,586              |
| Short-term  | 8,422                     | 2,018              | 237                    | 10,677               |
| Fixed income  | 328,492                   | -                  | -                      | 328,492              |
| Common and preferred stock  | 258,258                   | -                  | -                      | 258,258              |
| Collective trust funds  | 5,209                     | -                  | -                      | 5,209                |
| Real estate   | 170,991                   | -                  | -                      | 170,991              |
| Alternative investments   | 255,769                   | -                  | -                      | 255,769              |
| <b>Total investment activity income</b>   | <b>1,566,270</b>          | <b>475</b>         | <b>237</b>             | <b>1,566,982</b>     |
| Investment expenses   | (481,234)                 | (52)               | -                      | (481,286)            |
| <b>Net income from investing activities</b>   | <b>1,085,036</b>          | <b>423</b>         | <b>237</b>             | <b>1,085,696</b>     |
| From securities lending activities:   |                           |                    |                        |                      |
| Securities lending income   | 9,457                     | -                  | -                      | 9,457                |
| Securities lending expense  | (1,174)                   | -                  | -                      | (1,174)              |
| <b>Net income from securities lending activities</b>                                  | <b>8,283</b>              | <b>-</b>           | <b>-</b>               | <b>8,283</b>         |
| <b>Total net investment income</b>  | <b>1,093,319</b>          | <b>423</b>         | <b>237</b>             | <b>1,093,979</b>     |
| <b>Total Additions</b>  | <b>3,050,790</b>          | <b>81,766</b>      | <b>247,341</b>         | <b>3,379,897</b>     |
| <b>Deductions:</b>  |                           |                    |                        |                      |
| Benefits  | 5,655,306                 | 97,206             | 213,027                | 5,965,539            |
| Refunds of contributions  | 24,675                    | -                  | -                      | 24,675               |
| Net transfer to State Employees' Retirement System                                    | 2,765                     | -                  | -                      | 2,765                |
| Administrative expenses   | 34,242                    | 2,065              | 20,213                 | 56,520               |
| <b>Total Deductions</b>   | <b>5,716,988</b>          | <b>99,271</b>      | <b>233,240</b>         | <b>6,049,499</b>     |
| <b>Net increase (decrease)</b>  | <b>(2,666,198)</b>        | <b>(17,505)</b>    | <b>14,101</b>          | <b>(2,669,602)</b>   |
| <b>Net position held in trust for pension and postemployment healthcare benefits:</b> |                           |                    |                        |                      |
| <b>Balance, beginning of year</b>   | <b>51,199,994</b>         | <b>111,258</b>     | <b>121,929</b>         | <b>51,433,181</b>    |
| <b>Balance, end of year</b>   | <b>\$ 48,533,796</b>      | <b>\$ 93,753</b>   | <b>\$ 136,030</b>      | <b>\$ 48,763,579</b> |

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

# Notes to Financial Statements

## Years Ended June 30, 2013 and 2012

### 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, 2013, there were 797 participating employers, generally school districts. Membership as of June 30, 2012, 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 \$205,000 for 2013 and \$200,000 for 2012.

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

|   |         |                |
|---|---------|----------------|
| Currently employed members:   |         |                |
| Vested  | 195,108 |                |
| Nonvested   | 78,396  |                |
| <b>Total currently employed members</b>                             |         | <b>273,504</b> |
| Retirees and beneficiaries currently receiving benefits             | 202,015 |                |
| Inactive members and vestees entitled to but not receiving benefits | 122,286 |                |
| <b>Total retirees and other members</b>                             |         | <b>324,301</b> |
| <b>Total number of members</b>                                      |         | <b>597,805</b> |

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## 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%

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service, a member's right to the defined benefits is vested and early retirement benefits may be elected. For Class 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.

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 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 individual balance 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 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 this page. The IRC limitation on the annual compensation for a

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## Notes to Financial Statements (continued)

defined benefit plan was \$250,000 for 2012 and \$255,000 for 2013.

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 12.36% and 8.65% of qualified compensation for the years ended June 30, 2013 and 2012, 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 as follows:

- FY 2012 - not more than 3.0% plus the premium assistance contribution rate
- FY 2013 - not more than 3.5% plus the premium assistance contribution rate
- FY 2014 and thereafter - not 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.

A portion of each employer and Commonwealth contribution to the System is set aside for the funding of the Health Insurance Premium Assistance (PA) Program. The PA Program contribution rate is set at a level necessary to establish reserves sufficient to provide PA Program 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 the PA Program was 0.86% and 0.65% for the years ended June 30, 2013 and 2012, respectively.

### iii. Funding Status and Annual Required Contributions (ARC)

As of June 30, 2012, the most recent actuarial valuation, the plan was 66.3% funded. The actuarial accrued liability for pension benefits was \$87.7 billion, and the actuarial value of pension assets was \$58.2 billion, resulting in an unfunded accrued liability of \$29.5 billion. The covered payroll of active members was \$12.7 billion and the ratio of the unfunded actuarial accrued liability to the covered payroll was 232.3%.

For fiscal year ended June 30, 2013, the ARC was \$3.1 billion. The actual employer contributions, net of purchase of service contributions, for fiscal year ended June 30, 2013 was \$1.4 billion resulting in a 46% 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.

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## Notes to Financial Statements (continued)

### iv. 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.

For purposes of determining the annual required contributions under GASB Statement No. 25, the same funding method is used as for pension funding, except that (i) the 4% pension floor is not taken into account and (ii) the amortization payment will be set equal to the level dollar amount that will amortize the unfunded accrued liability over a period of 30 years.

#### (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, 2012, the date of the most recent actuarial valuation, include:

- 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%
- Amortization method - level percent of pay
- 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.

### (C) Postemployment Healthcare Plans

#### i. Health Insurance Premium Assistance Program

##### (a) Premium Assistance Benefits

The System provides a Health Insurance Premium Assistance (PA) Program for all eligible annuitants who qualify or elect to participate. Under this program, employer contribution rates for the PA Program are established to provide reserves in the Health Insurance Account that are sufficient for the payment of PA Program 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, 2013 there were no assumed future benefit increases to participating eligible annuitants in the PA Program.

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## Notes to Financial Statements (continued)

### (b) Funding Status and Annual Required Contributions

As of June 30, 2012, the most recent actuarial valuation, the plan was 6.9% funded. The actuarial accrued liability for benefits was \$1.365 billion, and the actuarial value of assets was \$93.8 million, resulting in an unfunded accrued liability of \$1.271 billion. The covered payroll of active members was \$12.7 billion and the ratio of the unfunded actuarial accrued liability to the covered payroll was 10.0%.

For fiscal year ended June 30, 2013, the ARC was \$113.0 million. The actual employer contributions for fiscal year ended June 30, 2013 was \$108.0 million resulting in a 96% 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 multiple year presentations of funding status and ARC to illustrate their trends over time.

### (c) 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 PA Program account, and the contribution required is the amount necessary to establish reserves sufficient to provide PA Program 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 the PA Program includes calculations that are based on the PA 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 the PA Program 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, 2012, 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 contributions are received from CMS covering the 56,719 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, 2013 and 2012 PSERS recorded \$12,810,000 and \$14,389,000, respectively, in IBNR. The IBNR is included in benefits payable. The PSERS pension fund assets are not available to fund or satisfy obligations of the HOP.

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## Notes to Financial Statements (continued)

### 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, 2013 and 2012, \$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.

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## Notes to Financial Statements (continued)

### (C) Capital Assets

Capital assets consist primarily of data processing equipment and 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, 2013 and 2012, \$3,237,000 and \$3,452,000, respectively, were accrued for unused vacation and sick leave for the System's employees and 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, 2013 and 2012 are for HOP premiums related to health care coverage to be provided in calendar year 2013 and 2012, respectively.

### (G) Federal Income Taxes

The Internal Revenue Service (IRS) issued a determination letter dated March 3, 1978 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. The plan has been amended since receiving that determination letter. Additionally, the IRS issued a 1982 ruling which concluded that the fund and the board are integral parts of the Commonwealth, and are therefore not subject to federal income tax. In the opinion of management, the System has operated within the terms of the plan and remains qualified under the applicable provisions of the IRC.

### (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 2012 amounts have been reclassified in conformity with the 2013 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.

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The following is a summary of the members receivables at June 30, 2013 and 2012:

|                          | (Dollar Amounts in Thousands) |                   |
|--------------------------|-------------------------------|-------------------|
|                          | 2013                          | 2012              |
| Pension:                 |                               |                   |
| Member contributions     | \$ 71,895                     | \$ 76,202         |
| Purchase of service      | 229,130                       | 202,271           |
| Other                    | 5,777                         | 6,092             |
| Total Members Receivable | <u>\$ 306,802</u>             | <u>\$ 284,565</u> |

## Notes to Financial Statements (continued)

### (K) Adoption of New Accounting Standards

During the 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*.

In June 2011 GASB issued GASB Statement No. 64 (GASB 64), *Derivative Instruments: Application of Hedge Accounting Termination Provisions – an amendment of GASB Statement No. 53*. GASB 64 became effective during FY 2012 and was issued to provide government entities guidance to enhance comparability and improve financial reporting by clarifying the circumstances in which hedge accounting should continue when a swap counterparty or a swap counterparty's credit support provider is replaced. Upon examination of the provisions of GASB 64, it was determined to have no current impact on PSERS.

### 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:

#### (A) State Accumulation Account

The State Accumulation Account is credited with the contributions of 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%.

|                                  | (Dollar Amounts in Thousands) |                      |
|----------------------------------|-------------------------------|----------------------|
|                                  | 2013                          | 2012                 |
| Pension:                         |                               |                      |
| State Accumulation Account       | \$ (13,758,928)               | \$ (13,746,778)      |
| Members' Savings Account         | 13,089,342                    | 12,535,442           |
| Annuity Reserve Account          | 49,685,147                    | 49,745,132           |
|                                  | <u>\$ 49,015,561</u>          | <u>\$ 48,533,796</u> |
| Postemployment Healthcare:       |                               |                      |
| Health Insurance Account         | \$ 100,349                    | \$ 93,753            |
| Health Insurance Program Account | 159,787                       | 136,030              |
|                                  | <u>\$ 260,136</u>             | <u>\$ 229,783</u>    |

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 of the Commonwealth and the employers for the PA Program. 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 health insurance premium assistance program.

#### (E) Health Insurance Program Account

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

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## Notes to Financial Statements (continued)

### 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 \$87,258,000 and \$69,588,000 at June 30, 2013 and 2012, 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, 2013 and 2012 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 trust funds and limited partnerships, which include real estate and alternative investments.

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**Notes to Financial Statements (continued)**

A summary of the fair value of investments at June 30, 2013 and 2012 follows:

|  | (Dollar Amounts in Thousands) |                      |
|--|-------------------------------|----------------------|
|  | 2013                          | 2012                 |
| <b>Pension investments:</b>                                |                               |                      |
| <b>Short-term:</b>   |                               |                      |
| PSERS Short-Term Investment Fund                           | \$ 2,267,954                  | \$ 1,621,607         |
| Other domestic short-term                                  | 606,776                       | 584,277              |
| International short-term                                   | 129,142                       | 220,754              |
|  | <u>3,003,872</u>              | <u>2,426,638</u>     |
| <b>Fixed income:</b>                                       |                               |                      |
| Domestic asset-backed and mortgage-backed securities       | 1,871,421                     | 2,580,131            |
| U.S. government and agency obligations                     | 1,344,866                     | 1,961,606            |
| Domestic corporate and taxable municipal bonds             | 1,378,989                     | 1,426,219            |
| International fixed income                                 | 1,233,142                     | 1,239,602            |
|  | <u>5,828,418</u>              | <u>7,207,558</u>     |
| <b>Common and preferred stock:</b>                         |                               |                      |
| Domestic common and preferred stock                        | 5,634,776                     | 5,056,850            |
| International common and preferred stock                   | 4,127,751                     | 4,300,272            |
|  | <u>9,762,527</u>              | <u>9,357,122</u>     |
| <b>Collective trust funds</b>                              | <u>11,280,497</u>             | <u>10,460,482</u>    |
| <b>Real estate:</b>  |                               |                      |
| Equity real estate   | 6,526,261                     | 5,767,203            |
| Directly-owned real estate                                 | 271,274                       | 236,550              |
|  | <u>6,797,535</u>              | <u>6,003,753</u>     |
| <b>Alternative investments:</b>                            |                               |                      |
| Private equity   | 8,380,952                     | 8,054,170            |
| Private debt   | 3,399,037                     | 3,918,894            |
| Venture capital  | 843,302                       | 889,375              |
|  | <u>12,623,291</u>             | <u>12,862,439</u>    |
| <b>Pension investments at fair value</b>                   | <u>\$ 49,296,140</u>          | <u>\$ 48,317,992</u> |
| <hr/> <hr/>  |                               |                      |
| <b>Postemployment healthcare investments:</b>              |                               |                      |
| <b>Premium Assistance Program:</b>                         |                               |                      |
| PSERS Short-Term Investment Fund                           | \$ 42,994                     | \$ 21,995            |
| Other domestic short-term                                  | 19,583                        | 43,077               |
|  | <u>62,577</u>                 | <u>65,072</u>        |
| <b>Health Options Program:</b>                             |                               |                      |
| PSERS Short-Term Investment Fund                           | 88,432                        | 88,197               |
| Other domestic short-term                                  | 87,258                        | 69,588               |
|  | <u>175,690</u>                | <u>157,785</u>       |
| <b>Postemployment healthcare investments at fair value</b> | <u>\$ 238,267</u>             | <u>\$ 222,857</u>    |

## Notes to Financial Statements (continued)

### (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, 2013 and 2012.

| Quality Rating                                       | (Dollar Amounts in Thousands) |                      |
|--|-------------------------------|----------------------|
|  | 2013<br>Fair Value            | 2012<br>Fair Value   |
| AAA  | \$ 462,587                    | \$ 764,417           |
| AA   | 732,914                       | 473,928              |
| A  | 501,547                       | 705,148              |
| BBB  | 773,066                       | 702,523              |
| BB and Below   | 901,324                       | 971,777              |
| NR*  | 10,777,373                    | 8,055,914            |
| <b>Total Exposed to Credit Risk</b>                  | <b>14,148,811</b>             | <b>11,673,707</b>    |
| <b>US Government Guaranteed**</b>                    | <b>2,572,807</b>              | <b>3,638,615</b>     |
| <b>Total Fixed Income and Short-Term Investments</b> | <b>\$ 16,721,618</b>          | <b>\$ 15,312,322</b> |

\* Not Rated securities include \$7,651,061 and \$5,455,269 in collective trust funds at June 30, 2013 and 2012 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, 2013 and 2012.

| Quality Rating                  | (Dollar Amounts in Thousands) |                    |
|---------------------------------|-------------------------------|--------------------|
|                                 | 2013<br>Fair Value            | 2012<br>Fair Value |
| AA                              | \$ -                          | \$ (11,394)        |
| A                               | (93,228)                      | (11,866)           |
| <b>Total Swaps-Total Return</b> | <b>\$ (93,228)</b>            | <b>\$ (23,260)</b> |

## Notes to Financial Statements (continued)

### (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.

At June 30, 2013 and 2012, the System's fixed income portfolio had the following option-adjusted durations by fixed income sector:

| Investment Type                                      | (Dollar Amounts in Thousands) |                      |                          |                      |
|--|-------------------------------|----------------------|--------------------------|----------------------|
|  | 2013                          |                      | 2012                     |                      |
|  | Option-Adjusted Duration      | Fair Value           | Option-Adjusted Duration | Fair Value           |
| Domestic asset-backed and mortgage-backed securities | 1.8                           | \$ 1,871,421         | 1.0                      | \$ 2,580,131         |
| U.S. government and agency obligations               | 8.6                           | 1,344,866            | 6.9                      | 1,961,606            |
| Domestic corporate and taxable municipal bonds       | 3.6                           | 1,378,989            | 0.6                      | 1,426,219            |
| International fixed income                           | 5.4                           | 1,233,142            | 4.0                      | 1,239,602            |
| Collective trust funds                               | 4.0                           | 7,651,061            | 4.3                      | 5,455,269            |
| PSERS Short-Term Investment Fund                     | 0.1                           | 2,399,380            | 0.1                      | 1,731,799            |
| <b>Total</b>   | <b>3.6*</b>                   | <b>\$ 15,878,859</b> | <b>3.1*</b>              | <b>\$ 14,394,626</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, 2013 and 2012. The total portfolio option-adjusted duration is calculated by weighting each investment type by fair value.

### (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.

At June 30, 2013 and 2012, 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 the page.

| Currency  | (Dollar Amounts in Thousands) |                   |
|---|-------------------------------|-------------------|
|   | 2013                          | 2012              |
|   | Notional Value                | Notional Value    |
| British pound sterling                                | \$ 83,290                     | \$ 82,410         |
| Japanese yen  | 65,407                        | 60,038            |
| Euro  | 74,402                        | 63,260            |
| Canadian dollar                                       | 29,289                        | 29,455            |
| Australian dollar                                     | 22,700                        | 22,457            |
| Hong Kong dollar                                      | 267                           | -                 |
| <b>Total Futures Contracts and Total Return Swaps</b> | <b>\$ 275,355</b>             | <b>\$ 257,620</b> |

## Notes to Financial Statements (continued)

Non-U.S. currency exposures at June 30, 2013 and 2012:

| 2013                          |                     |                   |   |                     |                     |
|-------------------------------|---------------------|-------------------|---|---------------------|---------------------|
| (Dollar Amounts in Thousands) |                     |                   |   |                     |                     |
| Currency                      | Equity              | Fixed Income      | Alternative<br>Investments &<br>Real Estate | Short-Term*         | Total Fair Value    |
| Euro                          | \$ 555,685          | \$ 217,309        | \$ 2,697,145                                | \$ (26,730)         | \$ 3,443,409        |
| British pound sterling        | 656,998             | 41,197            | 29,062                                      | 3,058               | 730,315             |
| Japanese yen                  | 641,692             | 64,537            | -   | (9,646)             | 696,583             |
| Canadian dollar               | 246,348             | 21,888            | 47  | 7,641               | 275,924             |
| Hong Kong dollar              | 244,622             | -                 | -   | 77                  | 244,699             |
| South Korean won              | 100,066             | 44,102            | -   | 33                  | 144,201             |
| Swiss franc                   | 191,796             | -                 | -   | (48,258)            | 143,538             |
| Brazil real                   | 65,173              | 67,787            | -   | (291)               | 132,669             |
| Swedish krona                 | 100,390             | 170               | -   | 8,657               | 109,217             |
| South African rand            | 74,211              | 31,740            | -   | 372                 | 106,323             |
| Taiwan new dollar             | 103,916             | -                 | -   | 2,193               | 106,109             |
| Mexican new peso              | 38,304              | 68,633            | -   | (2,625)             | 104,312             |
| Other non-U.S. currencies     | 661,058             | 320,349           | -   | (161,824)           | 819,583             |
| <b>Total</b>                  | <b>\$ 3,680,259</b> | <b>\$ 877,712</b> | <b>\$ 2,726,254</b>                         | <b>\$ (227,343)</b> | <b>\$ 7,056,882</b> |

| 2012                          |                     |                   |   |                     |                     |
|-------------------------------|---------------------|-------------------|---|---------------------|---------------------|
| (Dollar Amounts in Thousands) |                     |                   |   |                     |                     |
| Currency                      | Equity              | Fixed Income      | Alternative<br>Investments &<br>Real Estate | Short-Term*         | Total Fair Value    |
| Euro                          | \$ 573,763          | \$ 171,451        | \$ 2,420,337                                | \$ (629,843)        | \$ 2,535,708        |
| Japanese yen                  | 675,615             | 53,696            | -   | 73,113              | 802,424             |
| British pound sterling        | 772,071             | 36,716            | 24,171                                      | (139,358)           | 693,600             |
| Canadian dollar               | 359,569             | 22,974            | 269   | 17,386              | 400,198             |
| Australian dollar             | 264,528             | -                 | -   | (39,707)            | 224,821             |
| Hong Kong dollar              | 210,518             | -                 | -   | 210                 | 210,728             |
| Brazil real                   | 52,874              | 65,855            | -   | 75,055              | 193,784             |
| South African rand            | 64,243              | 43,544            | -   | 72,791              | 180,578             |
| New Turkish lira              | 37,238              | 39,922            | -   | 101,023             | 178,183             |
| Mexican new peso              | 10,288              | 67,619            | -   | 52,407              | 130,314             |
| South Korean won              | 72,610              | 42,477            | -   | (1,328)             | 113,759             |
| Norwegian krone               | 39,774              | 2,906             | -   | 70,461              | 113,141             |
| Polish zloty                  | 7,660               | 36,509            | -   | 62,622              | 106,791             |
| Other non-U.S. currencies     | 713,324             | 197,579           | -   | (438,917)           | 471,986             |
| <b>Total</b>                  | <b>\$ 3,854,075</b> | <b>\$ 781,248</b> | <b>\$ 2,444,777</b>                         | <b>\$ (724,085)</b> | <b>\$ 6,356,015</b> |

\* Includes investment receivables and payables

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## 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, 2013 and 2012, 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, 2013 and 2012, 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, 2013 and 2012.

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 were one-day and two-days at June 30, 2013 and 2012, respectively. During the fiscal years ended June 30, 2013 and 2012, 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, 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. As of June 30, 2012, the fair value of loaned securities was \$2,841,486,000, which includes \$2,343,034,000 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 \$2,962,708,000 of which \$506,804,000 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

## Notes to Financial Statements (continued)

The table presented below summarizes the aggregate notional or contractual amounts for the System's derivative financial instruments at June 30, 2013 and 2012.

|  | (Dollar Amounts in Thousands) |            |
|--|-------------------------------|------------|
|  | 2013                          | 2012       |
| <b>Futures contracts - long:</b>                   |                               |            |
| Treasury futures                                   | \$ 631,594                    | \$ 386,242 |
| Eurodollar futures                                 | 3,719                         | -          |
| U.S. equity futures                                | 556,477                       | 550,224    |
| Non-U.S. equity futures                            | 238,147                       | 217,950    |
| Commodity futures                                  | 1,118,598                     | 1,339,130  |
| Non-U.S. bond futures                              | 29,059                        | -          |
| <b>Futures contracts - short:</b>                  |                               |            |
| Treasury futures                                   | 147,528                       | 209,438    |
| Eurodollar futures                                 | 14,200                        | 49,991     |
| Commodity futures                                  | 29,446                        | -          |
| Non-U.S. bond futures                              | 11,425                        | -          |
| Foreign exchange forward and spot contracts, gross | 1,834,065                     | 9,497,409  |
| Options - calls purchased                          | 3,952                         | 5,103,649  |
| Options - puts purchased                           | 23,684                        | 5,140,968  |
| Options - calls sold                               | -                             | 5,751,549  |
| Options - puts sold                                | 27,792                        | 5,831,011  |
| Swaps - total return type                          | 1,686,905                     | 2,338,655  |

based on a notional (underlying) principal value and do not 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, 2013 and 2012 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 fair value of option

contracts of \$(76,000) and \$25,617,000 at June 30, 2013 and 2012, respectively, is included in the Statements of Plan Net Position. During FY 2013, the System discontinued two active currency strategy portfolios which heavily utilized foreign exchange forward and option contracts.

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 and in the chart above primarily include forwards. The \$1,834,065,000 of foreign currency contracts outstanding at June 30, 2013 consist of "buy" contracts, which represent the U.S. dollar equivalents of commitments to purchase foreign currencies of \$718,075,000 and "sell" contracts, which represent U.S. dollar equivalents of commitments to sell foreign currencies of \$1,115,990,000. The \$9,497,409,000 of foreign currency contracts outstanding at June 30, 2012 consist of "buy" contracts of \$4,376,438,000 and "sell" contracts of \$5,120,971,000. The unrealized gain (loss) on contracts of \$1,920,000 and \$(7,891,000) at June 30, 2013

## Notes to Financial Statements (continued)

and 2012, respectively, is included in the Statements of Plan Net Position and represents the fair value of the contracts.

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, 2013 and 2012, 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 \$(93,228,000) and \$(23,260,000) at June 30, 2013 and 2012, 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, 2013 to June 13, 2014.

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, 2013 and 2012 is \$1,318,695,000 and \$1,437,519,000, 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.

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 fair values of derivative instruments outstanding at June 30, 2013 and 2012 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<br>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> |

| Investment Derivative Type | Change in Fair Value<br>Gain/(Loss) FY 2012 |                 | Fair Value at June 30, 2012 |                 |
|----------------------------|---|-----------------|-----------------------------|-----------------|
|                            | Classification                              | Amount          | Classification              | Amount          |
| Futures                    | Investment income                           | \$ 11,174       | Receivable/(Payable)        | \$ 11,174       |
| Total return type swaps    | Investment income                           | (23,260)        | Receivable/(Payable)        | (23,260)        |
| Options                    | Investment income                           | 25,617          | Investment                  | 25,617          |
| Foreign exchange contracts | Investment income                           | (7,891)         | Receivable/(Payable)        | (7,891)         |
| <b>Total</b>               |   | <b>\$ 5,640</b> |                             | <b>\$ 5,640</b> |

## Notes to Financial Statements (continued)

The following table summarizes the System's foreign exchange contracts by currency at June 30, 2013 and 2012:

| <b>2013</b>                   |                   |                                   |                     |                                   |
|-------------------------------|-------------------|-----------------------------------|---------------------|-----------------------------------|
| (Dollar Amounts in Thousands) |                   |                                   |                     |                                   |
| <b>Currency</b>               | <b>Buys</b>       | <b>Unrealized<br/>Gain/(Loss)</b> | <b>Sells</b>        | <b>Unrealized<br/>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>                  |

| <b>2012</b>                   |                     |                                   |                     |                                   |
|-------------------------------|---------------------|-----------------------------------|---------------------|-----------------------------------|
| (Dollar Amounts in Thousands) |                     |                                   |                     |                                   |
| <b>Currency</b>               | <b>Buys</b>         | <b>Unrealized<br/>Gain/(Loss)</b> | <b>Sells</b>        | <b>Unrealized<br/>Gain/(Loss)</b> |
| Euro                          | \$ 746,352          | \$ (4,418)                        | \$ 1,350,760        | \$ (1,985)                        |
| Japanese yen                  | 379,984             | (807)                             | 354,361             | 734                               |
| Australian dollar             | 343,044             | 7,831                             | 346,844             | (6,826)                           |
| British pound sterling        | 324,185             | 2,330                             | 506,845             | (1,875)                           |
| Mexican new peso              | 266,694             | 7,152                             | 193,829             | (5,942)                           |
| Canadian dollar               | 237,112             | 1,409                             | 234,769             | (966)                             |
| Turkish lira                  | 200,666             | 2,497                             | 99,968              | (1,386)                           |
| Brazil real                   | 196,941             | 2,739                             | 126,023             | (2,077)                           |
| New Zealand dollar            | 170,912             | 4,248                             | 175,612             | (5,503)                           |
| Norwegian krone               | 168,289             | 1,360                             | 89,258              | (453)                             |
| South African rand            | 148,768             | 2,116                             | 76,178              | (1,264)                           |
| Indonesian rupiah             | 131,107             | (2,192)                           | 128,228             | 865                               |
| Indian rupee                  | 130,890             | (252)                             | 104,850             | (259)                             |
| Swiss franc                   | 119,192             | 661                               | 424,828             | (3,640)                           |
| Swedish krona                 | 105,483             | 2,008                             | 290,916             | (8,691)                           |
| Hungarian forint              | 88,252              | 4,496                             | 8,249               | (236)                             |
| Taiwan new dollar             | 86,403              | (626)                             | 135,764             | 896                               |
| Other non-US currencies       | 532,164             | 787                               | 473,689             | (622)                             |
| <b>Total</b>                  | <b>\$ 4,376,438</b> | <b>\$ 31,339</b>                  | <b>\$ 5,120,971</b> | <b>\$ (39,230)</b>                |

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## Notes to Financial Statements (continued)

### 6. 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 10.51% at June 30, 2013, 6.99% at June 30, 2012, and 4.11% at June 30, 2011. The System's contributions to SERS for the years ended June 30, 2013, 2012 and 2011 were \$2,375,000, \$1,363,000, and \$790,000 respectively, which were equal to the required contributions each year.

### 7. 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 2013 employer costs were charged at the rate of \$265/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 2012, the Commonwealth released an Actuarial Valuation of its Post-Retirement Medical Plan with calculations made as of July 1, 2012 using census data collected as of December 2011 and health care claims costs for calendar 2011. This valuation provided Other

Postemployment Benefits (OPEB) reporting that was used for both FY 2011 and FY 2012. For FY 2012, the valuation indicated overall Annual OPEB Cost (AOC) of \$870.2 million with the System's allocated AOC \$3.3 million. Based on the aggregate REHP qualifying contributions for FY 2012, the net OPEB liability for the System was \$0.9 million for that fiscal year. For FY 2013, the valuation indicated overall AOC of \$869.1 million with the System's allocated AOC \$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.

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(Dollar Amounts in Thousands)

| Fiscal Year | Commonwealth ARC/AOC | PSERS' ARC/AOC | PSERS' Net OPEB |
|-------------|----------------------|----------------|-----------------|
| 2013        | \$ 869,100           | \$ 3,966       | \$ 1,166        |
| 2012        | 870,200              | 3,133          | 871             |
| 2011        | 883,160              | 3,319          | 1,070           |

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### 8. 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.

### 9. Commitments

As of June 30, 2013, PSERS had commitments for the future purchase of investments in alternative investments of \$6.7 billion and real estate of \$2.2 billion.

### 10. Subsequent Events

The System has performed an evaluation of subsequent events through September 18, 2013, the date the basic financial statements were available to be issued. No material events were identified by the System.

**Required Supplementary Schedule 1**  
**Schedules of Funding Progress\***  
**(Unaudited – See Accompanying Auditor’s Report)**  
(Dollar Amounts in Millions)

| <b>Pension</b>          |   |                                     |  |   |                           |   |
|-------------------------|---|-------------------------------------|--|---|---------------------------|---|
| Valuation as of June 30 | (1)<br>Actuarial<br>Accrued<br>Liabilities<br>(AAL) | (2)<br>Actuarial Value<br>of Assets | (3)<br>Unfunded Actuarial<br>Accrued Liabilities<br>UAAL (1) - (2) | (4)<br>Ratio of<br>Assets to<br>AAL (2) / (1) | (5)<br>Covered<br>Payroll | (6)<br>UAAL as a<br>Percentage of<br>Covered Payroll<br>(3) / (5) |
| 2012                    | \$ 87,760.7   | \$ 58,227.6                         | \$ 29,533.1  | 66.3%   | \$ 12,714.4               | 232.3%  |
| 2011                    | 85,640.4  | 59,141.1                            | 26,499.3   | 69.1%   | 12,910.0                  | 205.3%  |
| 2010                    | 79,005.4  | 59,306.8                            | 19,698.6   | 75.1%   | 12,788.8                  | 154.0%  |
| 2009                    | 75,520.7  | 59,781.6                            | 15,739.1   | 79.2%   | 12,524.6                  | 125.7%  |
| 2008                    | 70,845.6  | 60,922.1                            | 9,923.5  | 86.0%   | 11,921.5                  | 83.2%   |
| 2007                    | 66,495.8  | 57,057.8                            | 9,438.0  | 85.8%   | 11,410.3                  | 82.7%   |

| <b>Premium Assistance</b> |   |                                     |  |   |                           |   |
|---------------------------|---|-------------------------------------|--|---|---------------------------|---|
| Valuation as of June 30   | (1)<br>Actuarial<br>Accrued<br>Liabilities<br>(AAL) | (2)<br>Actuarial Value<br>of Assets | (3)<br>Unfunded Actuarial<br>Accrued Liabilities<br>UAAL (1) - (2) | (4)<br>Ratio of<br>Assets to<br>AAL (2) / (1) | (5)<br>Covered<br>Payroll | (6)<br>UAAL as a<br>Percentage of<br>Covered Payroll<br>(3) / (5) |
| 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.

Each time a new benefit is added which applies to service already rendered, an “unfunded accrued liability” is created. The laws governing PSERS require that these additional liabilities be financed systematically over a period of future years. Also, if actual financial experiences are less favorable than assumed financial experiences, the difference is added to unfunded accrued liabilities.

In an inflationary economy, the value of the dollar is decreasing. In this environment, employees pay in greater dollar amounts, resulting in a dollar increase in unfunded accrued liabilities. This occurs at a time when the actual substance of these items may be decreasing. Looking at just the dollar amounts of unfunded accrued liabilities can be misleading. Unfunded accrued liabilities divided by active employee payroll provides an index which clarifies understanding. The smaller the ratio of unfunded liabilities to covered payroll, the stronger the system. Observation of this relative index over a period of years will give an indication of whether the system is becoming financially stronger or weaker.

**Required Supplementary Schedule 2**  
**Schedules 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> |
| 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%                           |
| 2008                      | 1,852,238                            | 753,532                               | 41%                           |

| <b>Premium Assistance</b> |                                      |                                      |                               |
|---------------------------|--------------------------------------|--------------------------------------|-------------------------------|
| <b>Year Ended June 30</b> | <b>Annual Required Contributions</b> | <b>Actual Employer Contributions</b> | <b>Percentage Contributed</b> |
| 2013                      | \$ 113,016                           | \$ 107,993                           | 96%                           |
| 2012                      | 102,104                              | 80,936                               | 79%                           |
| 2011                      | 119,320                              | 88,796                               | 74%                           |

\* Includes purchase of service contributions in FY 2008.

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.

**Supplementary Schedule 1**  
**Schedule of Operating Expenses**  
**Year Ended June 30, 2013**  
(Dollar Amounts in Thousands)

|  | <u>Administrative<br/>Expenses (1)</u> | <u>Investment<br/>Expenses (2)</u> | <u>Total</u>      |
|--|--|------------------------------------|-------------------|
| <b>Personnel costs:</b>                    |  |                                    |                   |
| Salaries and wages                         | \$ 13,597                              | \$ 4,188                           | \$ 17,785         |
| Social security contributions              | 803                                    | 254                                | 1,057             |
| Retirement contributions                   | 1,936                                  | 439                                | 2,375             |
| Employees' insurance contributions         | 4,881                                  | 608                                | 5,489             |
| Other employee benefits                    | 29                                     | 198                                | 227               |
| <b>Total Personnel Costs</b>               | <b>21,246</b>                          | <b>5,687</b>                       | <b>26,933</b>     |
| <b>Operating costs:</b>                    |  |                                    |                   |
| Investment managers' fees                  | -                                      | 538,027                            | 538,027           |
| Custodian fees                             | -                                      | 496                                | 496               |
| Specialized services                       | 22,945                                 | 6,467                              | 29,412            |
| Rental of real estate, electricity         | 1,928                                  | 196                                | 2,124             |
| Consultant and legal fees                  | 3,508                                  | 4,432                              | 7,940             |
| Treasury and other commonwealth services   | 1,547                                  | 190                                | 1,737             |
| Postage                                    | 1,230                                  | -                                  | 1,230             |
| Contracted maintenance and repair services | 1,478                                  | -                                  | 1,478             |
| Office supplies                            | 183                                    | 8                                  | 191               |
| Rental of equipment and software           | 3,587                                  | 245                                | 3,832             |
| Printing                                   | 165                                    | -                                  | 165               |
| Travel and training                        | 213                                    | 19                                 | 232               |
| Telecommunications                         | 605                                    | -                                  | 605               |
| Equipment (non-capital assets)             | 584                                    | -                                  | 584               |
| Miscellaneous expenses                     | 931                                    | 1,822                              | 2,753             |
| <b>Total Operating Costs</b>               | <b>38,904</b>                          | <b>551,902</b>                     | <b>590,806</b>    |
| <b>Other charges:</b>                      |  |                                    |                   |
| Depreciation                               | 2,086                                  | -                                  | 2,086             |
| <b>Total Other Charges</b>                 | <b>2,086</b>                           | <b>-</b>                           | <b>2,086</b>      |
| <b>Total Operating Expenses</b>            | <b>\$ 62,236</b>                       | <b>\$ 557,589</b>                  | <b>\$ 619,825</b> |

(1)Includes administrative expenses of \$2,112 related to Postemployment Healthcare Premium Assistance and \$22,644 related to Postemployment Healthcare Health Options Program for the fiscal year ended June 30, 2013.

(2)Includes investment expenses of \$56 related to Postemployment Healthcare Premium Assistance for fiscal year ended June 30, 2013 and does not include \$9,183 in capitalized broker commissions for the fiscal year ended June 30, 2013.

**Supplementary Schedule 2**  
**Summary of Investment Expenses\***  
**Year Ended June 30, 2013**  
(Dollar Amounts in Thousands)

|                                    | <b>Fees</b>       |
|------------------------------------|-------------------|
| <b>External management:</b>        |                   |
| Domestic equity                    | \$ 2,287          |
| International equity               | 27,941            |
| Fixed income                       | 118,293           |
| Real estate                        | 75,006            |
| Alternative investments            | 137,211           |
| Absolute return                    | 149,764           |
| Commodities                        | 17,409            |
| Master limited partnership         | 4,966             |
| Risk parity                        | 5,150             |
| <b>Total External Management</b>   | <b>538,027</b>    |
| <b>Total Internal Management</b>   | <b>14,634</b>     |
| <b>Total Investment Management</b> | <b>552,661</b>    |
| Custodian fees                     | 496               |
| Consultant and legal fees          | 4,432             |
| <b>Total Investment Expenses</b>   | <b>\$ 557,589</b> |

\* External management fees classified on an asset allocation basis

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**Supplementary Schedule 3**  
**Schedule of Payments to Non-Investment Consultants**  
**Year Ended June 30, 2013**  
(Dollar Amounts Greater than \$50,000)

| <b>Consultant</b>                            | <b>Fees</b>   | <b>Services Provided</b>  |
|--|---------------|---|
| CoreSource Inc.                              | \$ 16,179,136 | Postemployment healthcare benefits administration and claims adjudication       |
| ViTech Systems Group Inc.                    | 5,205,228     | Pension administration system services  |
| Rx Solutions, Inc.                           | 4,010,219     | Administration of postemployment healthcare benefits and prescription drug plan |
| The Segal Company, Inc.                      | 2,359,018     | Actuarial services and consulting for HOP and prescription drug plan            |
| Buck Consultants LLC                         | 475,619       | Pension benefit actuarial services  |
| Independent Pharmaceutical Consultants, Inc. | 391,800       | Pharmacy benefit consulting services  |
| CliftonLarsonAllen LLP                       | 120,000       | Financial audit of pension system and postemployment healthcare programs        |