



# PSERS

## COMMONWEALTH OF PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT BOARD

MELVA S. VOGLER Chairman

SALLY J. TURLEY Vice Chairman

February 23, 2012

Members of the Senate Appropriations Committee

#### Dear Members:

On behalf of the Public School Employees' Retirement System (PSERS), I am pleased to present the accompanying report on the financial, actuarial, and investment operations of PSERS and the budgetary recommendations for the 2012/13 fiscal year. In addition, PSERS Comprehensive Annual Financial Report for the fiscal year ended June 30, 2011 (FY2010/11) is also attached.

PSERS is responsible for administering a defined benefit pension plan for over 588,000 active, retired, inactive and vested public school employees in the Commonwealth of Pennsylvania. PSERS also administers two postemployment healthcare programs, the Premium Assistance Program and the Health Options Program (HOP) for its annuitants. Some highlights of recent activities follow:

#### **Financial Highlights**

- For the fiscal year ended June 30, 2011 PSERS' investment portfolio generated a rate of return of 20.37%. In the following six months, the markets remained volatile while European sovereign debt issues escalated and the U.S. continued its slow recovery from the recession. As a result, PSERS estimates its one year return for the year ended December 31, 2011 at 4.32%.
- Income from the investment portfolio represents the major source of revenue to PSERS, accounting for nearly 69% of total revenues over the ten-year period from FY2001/02 to FY2010/11. PSERS' total plan net assets increased by \$5.6 billion from \$45.8 billion at June 30, 2010 to \$51.4 billion at June 30, 2011. PSERS total plan net assets as of December 31, 2011 were \$47.9 billion.
- The Board continued to fulfill its mission to maintain the stability and long-term optimum value of the Fund. Of utmost importance to the Board is the assurance that the required reserves are available for payment of retirement benefits. PSERS Board decreased the investment rate of return assumption further from 8.0% to 7.5% effective as of the June 30, 2011 actuarial valuation. The Board decreased the 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 decrease in the assumption allowed PSERS to modify its asset allocation plan during FY2010/11 to achieve its new return target with lower overall risk. The estimated annualized rate of return for the twenty-five year period ended December 31, 2011 was 8.58% and exceeded the Fund's long-term investment rate of return assumption during that time period.

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- PSERS benefits from managing almost 1/3 of its assets internally including operating its own equity trading room. During 2011, PSERS continued to bring more investments in-house to be managed by PSERS' internal Investment Professional staff. In FY2010/11 PSERS saved approximately \$10.4 million in management fees by utilizing PSERS in-house portfolio managers. The in-house investment professionals also outperformed their benchmarks and added \$48.0 million in additional investment income to the Fund. Therefore, PSERS investment staff saved the Fund a total of \$58.4 million.
- Total member contributions increased from \$1.14 billion in FY2009/10 to \$1.24 billion in FY2010/11 as a result of a slight increase in the average member contribution rate and an increase in the active member payroll.
- Total employer contributions increased from \$638.0 million in FY2009/10 to \$747.8 million in FY2010/11 due to an increase in the employer contribution rate from 4.78% in FY2009/10 to 5.64% in FY2010/11 and an increase in the active member payroll. The current employer contribution rate is 8.65% and will increase to 12.36% for FY2012/13.
- PSERS total administrative budget request recommended by the Governor is \$44.1 million for FY2012/13 and is level compared to the \$44.1 million available for FY2011/12. PSERS has been able to maintain operational efficiencies while the member population is increasing as discussed further under "Continued Improvement in Efficiency of Operations."

#### **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 is 69.1% funded as of June 30, 2011. This represents a decrease from PSERS' 75.1% funded status as of June 30, 2010.

#### **Investment and Pennsylvania Commitment**

- PSERS has a continuing commitment to Pennsylvania companies by contracting with Pennsylvania-based investment advisor companies and by investing in Pennsylvania-based companies where investment characteristics, including yield, risk, and liquidity, are equivalent.
   Data on Pennsylvania investments is contained in the accompanying report.
- PSERS' total benefit expense increased by \$300 million from \$5.3 billion in FY2009/10 to \$5.6 billion in FY2010/11. This increase is attributable to the number of new retirements for the year, higher lump sum payments as well as an ongoing increase to the average monthly benefit.
- Since 91% was distributed to Commonwealth residents, a substantial portion of PSERS' estimated \$5.6 billion annual payroll remains in Pennsylvania, thus benefiting the economy of the Commonwealth.

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#### Implementation of Act 120 of 2010

- Over the past year PSERS began to phase in the implementation of Act 120 of 2010. Act 120 of 2010 provided historic pension reform and made dramatic progress toward addressing funding issues at PSERS. The legislation included actuarial and funding changes to PSERS and benefit reductions for individuals who become new members of PSERS on or after July 1, 2011.
- If Act 120 was not in place the employer contribution rate would have spiked to 29.65% in FY2012/13. That is an approximately \$2.5 billion dollar difference between the 29.65% pre-Act 120 employer rate and the 12.36% employer rate that will go into effect July 1, 2012. This budgetary deferral of contributions will significantly benefit the Commonwealth and school districts in FY2012/13.
- Act 120 gradually increases contributions to PSERS in a more budgetary feasible manner for both the Commonwealth and school employers than under previous law. Over the next five years, Act 120 will result in a deferral of \$8.9 billion of employer contributions. Despite the budgetary deferrals provided by Act 120, the future employer contributions required are significant as shown in the supporting budget material. The process now becomes an appropriation challenge to meet the gradual funding increases provided for in Act 120. The Governor's Budget fully funds the Commonwealth's portion of the employer contribution rate of 12.36% for FY2012/13 in compliance with Act 120.
- The projected employer normal cost of Act 120 members is approximately 3% of payroll which is 68% less than the normal cost for pre-Act 120 members. The "employer normal cost" is the amount needed from the school employers to fund the benefits earned by the active members for that year. Based on the 2010 Comparative Study of Major Public Employee Retirement Systems prepared by the Wisconsin Legislative Council, PSERS' projected employer normal cost rate of 3% is one of the lowest among major U.S. public retirement systems.

#### **Continued Improvement in Efficiency of Operations**

• PSERS' efforts to increase efficiency have continued to positively impact PSERS' operations. During calendar year 2011, PSERS saw an increase of approximately 34% in retirements processed (13,206 in 2011 and 9,863 in 2010). In 2011, 84.77% of the retirement applications processed were finalized in one-step as compared to 69.68% in 2010. Historically, PSERS had paid retirement benefits in two steps: a reduced initial benefit within about 10 weeks of retirement based on information on file with PSERS at that time and then a final benefit with retroactive monies within about 18 months of the retirement date using final information. The one-step benefits are being paid in an average of less than four weeks after all the necessary information is received.

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- The direct result of these improved efficiencies is a reduction in duplicated work that enables staff to focus on other customer service areas and process higher volumes without increasing staff size. PSERS staff counseled 2,073 additional members for an increase of 23% over the previous fiscal year (from 8,905 in FY2009/10 to 10,978 in FY2010/11).
- Efforts to prevent and reduce backlogs have also continued. In 2009, there were more than 25,000 Purchase of Service (POS) applications to process. At the end of calendar year 2011, there were approximately 5,000 applications remaining to be processed. This reduction occurred despite 10,732 new POS applications being received.
- The administrative cost for members (active, annuitant, and beneficiaries) has decreased from \$95.73 in FY2003/04 to an estimated \$75.87 in FY2012/13 primarily due to efficiencies gained from the implementation of the new pension administration system, the increased use of one-step processing as previously described, limited travel and increased use of electronic communications with members and stakeholders.

In conclusion, please contact Jeffrey B. Clay, PSERS Executive Director, if you have any questions or would like additional information.

Respectfully,

Melva S. Vogler

Chairman of the Board

Melin S. Vogler

# Pennsylvania Public School Employees' Retirement System

(A Component Unit of the Commonwealth of Pennsylvania)

PO Box 125 Harrisburg, Pennsylvania 17108-0125

# FY2012/13 Budget Report Senate Appropriations Committee February 23, 2012

Melva S. Vogler Chairman Board of Trustees

Sally J. Turley Vice Chairman Board of Trustees

Jeffrey B. Clay Executive Director

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#### Overview

Established on July 18, 1917, with operations commencing in 1919, the Pennsylvania Public School Employees' Retirement System (PSERS or System) provides retirement benefits to public school employees of the Commonwealth of Pennsylvania.

As of June 30, 2011, the System had approximately 279,000 active members. The annuitant membership was comprised of approximately 195,000 retirees and beneficiaries who received average monthly pension benefit payments of over \$394 million including healthcare premium assistance. The average yearly pension benefit paid to annuitants was \$23,897. PSERS had 756 participating employers on June 30, 2011.

As reported in the latest Pension and Investments survey published February 6, 2012, PSERS is the 27th largest plan among United States corporate and public pension plans, and the 17th largest state-sponsored defined benefit public pension fund in the nation. PSERS' total plan net assets as of December 31, 2011 were approximately \$47.9 billion.

During the 2011 fiscal year the overall gross distribution of pension and postemployment healthcare benefits including monthly benefits, direct rollovers, survivor benefits and refunds totaled \$5.6 billion. Of this amount, 91% was distributed to Pennsylvania residents representing PSERS' significant impact on the Commonwealth's economy.

#### **Mission Statement**

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

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





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## **PSERS** Board of Trustees

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Sally J. Turley, Vice Chairman

Honorable Patrick M. Browne Senate of Pennsylvania

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Honorable Glen R. Grell House of Representatives

Honorable Lawrence M. Farnese Senate of Pennsylvania

Honorable Joseph F. Markosek House of Representatives

Honorable Robert M. McCord Treasurer of Pennsylvania

Hal Moss

Richard N. Rose

James M. Sando

Ronald J. Tomalis Secretary of Education

Patricia A. Tozer

Governor's Appointee (Vacant)

PSERS Board Members as of January 3, 2012



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#### Administrative Purchasing and Security and Business Continuity Division Contracting ADMINISTRATION Division Services Division HEALTH INSURANCE OFFICE HUMAN RESOURCES OFFICE BUREAU ASSISTANT EXECUTIVE DIRECTOR Office of General Counsel INFORMATION MANAGEMENT General Counsel Stewardship Division Investment Advisors BUREAU Data Business Applications Division Network, Server, and Database Division Business Architecture Center INFORMATION TECHNOLOGY INFORMATION TECHNOLOGY OFFICE BUREAU DEPUTY EXECUTIVE DIRECTOR EXECUTIVE DIRECTOR Organizational Chart EMPLOYEES' RETIREMENT BOARD PUBLIC SCHOOL Service Center Service Center Regional Offices: Field Services Division Publications North Central South Central Central West Central East Employer Member Northwest Southeast Southwest Northeast Center Communication COMMUNICATIONS AND COUNSELING Services Division BUREAU Q Internal Auditor Actuary Benefit Policy and Specialized Service Division System Support Center BENEFITS ADMINISTRATION INVESTMENT OFFICE Processing Division Exception Processing Division Benefit BUREAU Q OFFICE OF FINANCIAL MANAGEMENT Accounting and Budget Division Accounting Division Investment Accounting Annuitant Division General

Public School Employees' Retirement System

# Organizational Structure of the Public School Employees' Retirement System

#### **Executive Office**

This office is responsible for the overall management of the Public School Employees' Retirement System (PSERS) to achieve the primary objectives of the Fund as established by the Board of Trustees (Board). Reporting directly to the Executive Director are the Deputy Executive Director, Assistant Executive Director, Chief Investment Officer, Chief Financial Officer, Internal Auditor, Press Secretary, and Legislative Liaison. The Executive Director serves as chief executive officer responsible for the establishment, installation, and maintenance of modern management techniques to provide an efficient control of funds for and services to the active members and annuitants of the System.

The Executive Office monitors the operation of the investment portfolio and evaluates portfolio performance for consideration by the Board, certifies expenditures of the Fund, and measures performance of professional individuals or firms with whom the Board contracts for specialized services. The Executive Office also apprises the Board of any development that will in any way affect the System and its operation.

#### **Investment Office**

This office is responsible for the investment activities of the System. In compliance with the investment policy established by the Board, PSERS' investment assets are allocated to numerous outside professional investment advisors and internal investment professionals.

#### **Chief Counsel's Office**

This office provides legal services through a team of professional personnel under the Governor's Office of General Counsel. The Legal staff is responsible for representing PSERS in all administrative hearings and other litigation matters; drafting and negotiating PSERS' investment and administrative services contracts; and providing counsel on a wide variety of matters, including the interpretation of the Retirement Code and the Right-to-Know Law.

#### **Internal Auditor's Office**

This office performs systematic reviews of the various PSERS activities, testing for compliance with applicable laws, policies and procedures. The Internal Auditor makes recommendations on the improvement of PSERS' internal control system.

#### Office of Financial Management

This office is directed by the Chief Financial Officer and has responsibility for planning, organizing and directing a complete accounting and financial reporting system in conformance with accounting principles generally accepted in the United States of America. Oversight is provided for new accounting systems development and maintenance of existing systems, and ensuring appropriate accounting controls. The office is the liaison for other state and federal agencies, reporting units, financial consultants, actuaries, and investment advisors for all accounting, treasury operations, taxation, actuarial and budgetary matters. The office is organized into three divisions: General Accounting Division, Annuitant Accounting and Budget Division, and Investment Accounting Division.

#### **Deputy Executive Director**

The Deputy Executive Director directly oversees the benefit programs for all active and retired members of the System, the development and implementation of the member and employer communications programs and the member counseling programs, and the maintenance of agency policies, procedures, and benefit related data. Additionally, this position supervises a Chief Technology Officer who oversees business and information technology strategic planning, policy development, and implementation. The organizational units directly reporting to this position include the Bureau of Benefits Administration, the Bureau of Communications and Counseling, and the Bureau of The position oversees the Information Management. Bureau of Information Technology through the Chief Technology Officer.

#### **Information Technology Office**

This office oversees the Bureau of Information Technology and the Business Architecture Center. It is responsible for strategic information technology planning and policy development, ensuring that information technology plans and policies are aligned with, in support of, and prioritized according to agency needs and requirements, as well as those Commonwealth needs and requirements that are consistent with agency needs, and for communicating such to the agency's information technology staff. Large information technology contracts and projects are managed by this office. This office is responsible for understanding, analyzing, documenting, and improving PSERS' organization, business rules, processes, information systems, and the relationships among these components so that PSERS is able to: conduct its business consistently and according to established rules; understand each component, its relationship to each of the other components and to PSERS' mission, vision, values and goals; fully, yet quickly analyze and understand the impact of potential change to one or more of these components on the others; more effectively identify inefficient, duplicate, or suspect processes, and/or technologies; and account for its organizational business rules and processes, information systems and technologies.

#### **Organizational Structure (continued)**

#### **Bureau of Information Technology**

This bureau is responsible for planning, coordinating, administering, and implementing information technology resources in accordance with the agency's strategic plans, goals, objectives, and priorities as communicated by PSERS' Chief Technology Officer, and for providing operational support for those technologies and initiatives. The bureau is organized into three divisions: the Network, Server, and Database Division, the Business Applications Division, and the Document Archive and Data Capture Division.

#### **Bureau of Information Management**

This bureau is responsible for maintaining, documenting, and cleansing PSERS' member and employer data, managing PSERS' electronic data records, imaged records, paper and film/fiche records, understanding the meaning and knowing the location of its data. The bureau currently includes the Data Stewardship Division which houses PSERS' records management program, and the Data Integrity and Member Accounting section.

#### **Bureau of Benefits Administration**

This bureau is responsible for administering a comprehensive pension benefits program for PSERS. The bureau provides professional and technical services to individuals who are employed full-time and part-time in one of Pennsylvania's 756 public schools or institutions. They also provide services to retirees, their beneficiaries and persons legally authorized to act on their behalf. The bureau is organized into three divisions: the Benefit Processing Division, Benefit Policy and Specialized Service Division, and Exception Processing Division.

#### **Bureau of Communications and Counseling**

This bureau is responsible for professionally communicating accurate and timely information. The goal is to promote the understanding of PSERS' benefits and processes to the members, the employers, the Legislature, the Governor's Office, other government organizations, professional organizations, and the public. It is organized into two divisions: the Field Services Division and the Communications Services Division.

#### **Assistant Executive Director**

This position reports to the Executive Director and provides assistance to the Executive Director on agency-wide projects. The position administers the Health Options and Premium Assistance Programs in addition to the facilities, human resources, and procurement activities necessary to support, secure and optimize agency operations. Organizational units overseen by the Assistant Executive Director include the Bureau of Administration, the Human Resources Office, and the Health Insurance Office.

#### **Bureau of Administration**

This bureau is responsible for facilities, purchasing and contracting, documenting administrative policies and procedures, business continuity, automotive, mail, imaging, printing and other administrative services necessary to support agency functions. The bureau is organized into three divisions: the Purchasing and Contracting Division, the Administrative Services Division and the Security and Business Continuity Division.

#### **Human Resources Office**

This office is responsible for supporting management and staff to facilitate the accomplishment of the agency's mission. It administers all human resources programs and ensures compliance with labor law and Commonwealth regulations. Programs include position classification, labor relations, recruitment and placement, employee benefits, employee compensation and pay, training and staff development, time and attendance, performance management, organizational development and support, employee transactions, Equal Employment Opportunities and other miscellaneous programs.

#### **Health Insurance Office**

This office is responsible for all aspects of the PSERS' Health Options Program (HOP) and administering PSERS' health insurance Premium Assistance benefits. The HOP is a voluntary program that provides group health insurance coverage for 74,000 (at January 1, 2012) school retirees, their spouses, and eligible dependents.



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## **Organizational Structure (continued)**

#### **PSERS' Regional Offices**

There are eight PSERS Regional Offices strategically located throughout the Commonwealth. These offices provide services to both active and retired PSERS members and 756 employers. Among these services are regularly scheduled retirement counseling meetings and other informational presentations on various topics relating to retirement benefits and programs. See map on next page.

Services provided to PSERS' Members (by the Bureau of Communications and Counseling)							
	$\underline{FY2008/09} \qquad \underline{FY2009/10} \qquad \underline{FY2010/11}$						
Number of General Information Programs	197	209	206				
Number of Members Attended	10,850	12,372	13,625				
Number of Exit Counseling (small group) Sessions	908	909	1,084				
Number of Members Attended	6,438	7,466	9,653				
Individual Counseling Sessions	1,918	1,439	1,325				
Telephone Calls Answered	229,773	233,452	243,024				
Telephone Calls Out	54,628	55,200	56,576				
E-Mail In	31,008	33,298	60,527				
E-Mail Out	30,860	32,538	54,098				

Services provided to PSERS' Members (by the Bureau of Benefits Administration)							
Calendar Year <u>2009</u> <u>2010</u> <u>2011</u>							
<b>Purchase of Service Applications Processed</b>	16,404	22,243	16,540				
Retirements Processed							
Normal and Early	11,053	9,863	13,206				
• Disability	458	442	523				

## Toll Free 1-888-773-7748 ext. 5575 Warminster, PA 18974-2825 Suite 500, 605 Louis Drive Local (215) 443-3495 FAX (215) 443-3487 Toll Free 1-888-773-7748 ext. 5375 417 Lackawanna Avenue Scranton, PA 18503-2013 Local (570) 614-0269 FAX (570) 614-0278 Suite 201 Toll Free 1-888-773-7748 ext. 5475 Suite 103, 110 West Arch Street Fleetwood, PA 19522-1321 Local (610) 944-9113 FAX (610) 944-9275 CENTRALEASI Toll Free 1-888-773-7748 ext. 5275 Lock Haven, PA 17745-1903 300 Bellefonte Avenue NORTHCENTRAL Local (570) 893-4410 FAX (570) 893-4414 Suite 101, Three Crossgate Drive Toll Free 1-888-773-7748 ext. 5675 Mechanicsburg, PA 17050-2459 Suite 201 SOUTHCENTRAL Local (717) 795-9270 FAX (717) 795-9281 Toll Free 1-888-773-7748 ext. 5175 Suite C, Penn Wood Center 464 Allegheny Boulevard Franklin, PA 16323-6210 Local (814) 437-9845 Toll Free 1-888-773-7748 ext. 5875 FAX (814) 437-5826 Ebensburg, PA 15931-1540 219 West High Street Local (814) 419-1180 FAX (814) 419-1189 CENTRALWEST Toll Free 1-888-773-7748 ext. 5775 Suite 208, 900 Sarah Street Pittsburgh, PA 15203-1106 Local (412) 488-2031 FAX (412) 488-2338 SOUTHWEST

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PSERS REGIONAL OFFICES

The Southcentral Office will be moving to PSERS Harrisburg Headquarters during March 2012.



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## **PSERS' Member Demographics**

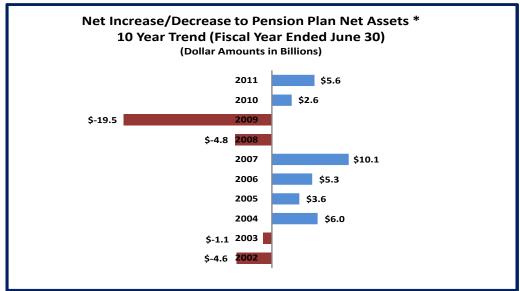
	Members by Type						
Fiscal Year ending <u>June 30</u>	Active <u>Members</u>	Inactive <u>Members</u>	Annuitants, Beneficiaries, and Survivor <u>Annuitants</u>	Total Active/Retired <u>Members</u>	Ratio of Active/ <u>Retired</u>	Total Inactive, Active & Survivor <u>Annuitants</u>	
2011	279,152	115,102	194,622	473,774	1.43 to 1	588,876	
2010	282,041	111,931	184,934	466,975	1.53	578,906	
2009	279,701	103,805	177,963	457,664	1.57	561,469	
2008	272,690	100,803	173,540	446,230	1.57	547,033	
2007	264,023	109,186	168,026	432,049	1.57	541,235	
2006	263,350	94,071	161,813	425,163	1.62	519,234	
2005	255,465	58,720	156,519	411,984	1.63	470,704	
2004	247,901	72,014	151,552	399,453	1.63	471,467	
2003	246,700	65,453	145,693	392,393	1.69	457,846	
2002	242,616	61,295	141,414	384,030	1.71	445,325	

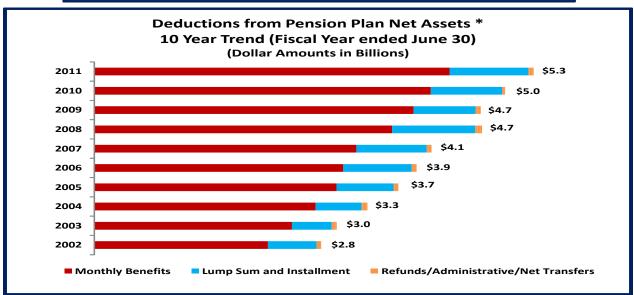
Age and Service Profile of Active Members						
<u>June 30, 2010</u> <u>June 30, 2011</u>						
Average Age	44.5 years	44.5 years				
Average Years of PSERS Service	10.5 years	10.4 years				
Average Annual Compensation	\$45,344	\$46,247				

Profile of PSERS' Annuitants, Beneficiaries, and Survivor Annuitants							
Type of Member	mber Number of Members Average Annual B						
	<u>6/30/2010</u>	6/30/2011	<u>6/30/2010</u>	6/30/2011			
Normal/Early Retirees	168,238	175,636	\$24,442	\$25,094			
Survivor Annuitants	8,724	10,957	\$10,467	\$9,547			
Disability Retirees	7,972	8,029	\$17,091	\$17,294			
Total	184,934	194,622	\$23,466	\$23,897			

## **PSERS' Member Demographics (continued)**

PSERS Pension Plan Changes in Net Assets * 10 Year Cumulative Summary (Dollar Amounts in Thousands)						
Cumulative 10 Year Total						
	July 1,	2001-June 30, 2011				
Balance of Net Assets (07/01/01)			\$	48,096,955		
Member Contributions	\$	8,455,111				
Employer Contributions		4,353,703				
Net Investment Income		30,818,944				
Total Deductions - Benefits & Expenses		( <u>40,524,719</u> )				
Net Increase			\$	3,103,039		
Balance of Net Assets (06/30/11)			\$	<u>51,199,994</u>		





<sup>\*</sup>Does not include PSERS Postemployment Healthcare Plan Net Assets.

# The Actuarial Process and Pension Plan Funding

PSERS is a defined benefit plan, meaning benefits are based on members' service and salary history. The following information highlights the actuarial process and funding for PSERS.

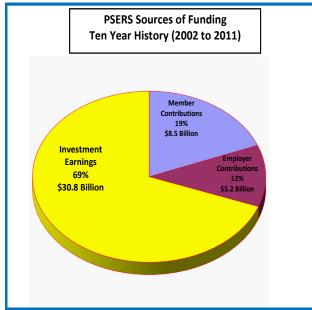
#### **Actuarial Process**

The actuarial process presumes that there will be a systematic flow of contributions at a specified level to pay for plan benefits and that the flow of contributions, together with investment earnings, will be sufficient to meet all benefit and expense requirements of the plan. Actuarial cost methods for funding PSERS pension plan are defined in the Public School Employees' Retirement Code. The actuary for the pension plan reviews economic and demographic experience annually and over five-year periods. The actuary's periodic valuations test the validity of the underlying actuarial assumptions versus the actual experience of the plan. That experience is also used as a basis for formulating actuarial assumptions, which are essentially highly educated predictions about what will occur in the future with respect to salary growth, investment returns, and demographic factors such as rates of retirement and death.

Effective with the June 30, 2011 actuarial valuation, PSERS adopted several new demographic and economic assumptions as a result of the Five-year Experience Study completed by PSERS' actuary. PSERS' investment rate of return assumption was changed from 8.00% to 7.50%, the Salary Growth Assumption was changed from 6.00% to 5.50%, and new mortality tables were adopted.

#### **Funding**

The plan is funded through three sources: (1) employer



contributions; (2) member contributions; and, (3) investment earnings. As depicted in the chart at the bottom of the page, for the ten-year period ended June 30, 2011 investment earnings provided 69% of PSERS' funding followed by 19% from members. Employers contributed 12%, the smallest of the three sources.

#### **Employer Contributions**

The Retirement Code vests the Board with the authority to establish the employer contribution rate (ECR). The Board, in consultation with the actuary, establishes the employer contribution rate annually, as part of the annual actuarial valuation. The employer contribution rate, which is expressed as a percentage of payroll, is composed of two items: (1) the pension contribution; and, (2) the contribution for health care premium assistance.

The total employer contribution rate for the fiscal year ended June 30, 2011 was 5.64%, including 0.64% for healthcare premium assistance. The total employer contribution rate for the year ending June 30, 2012 is 8.65%. This rate consists of an 8.00% pension rate (FY2010/11 rate of 5.00% plus the Act 120 3.00% collar) plus the healthcare premium assistance contribution of 0.65%. The FY2012/13 employer contribution rate is 12.36%. This rate consists of an 11.50% pension rate (FY2011/12 rate of 8.00% plus the Act 120 3.50% collar) plus the healthcare premium assistance contribution of 0.86%. The Board of Trustees certified this rate that was calculated in accordance with the provisions of Act 120 of 2010 at their December 2011 meeting.

For the fiscal year ended June 30, 2011, PSERS' employer contributions totaled \$748 million, which includes \$89 million for healthcare premium assistance. For the fiscal year ending June 30, 2012 the employer contribution estimate is \$1.221 billion, reflective of the 8.65% contribution rate. The contribution rate for the fiscal year ending June 30, 2013 is 12.36% which results in an employer contribution estimate of \$1.767 billion.

#### **Member Contributions**

Members of the Public School Employees' Retirement System who, prior to Act 9 of 2001, contributed to the Retirement Fund at the rate of 6.25% of their gross compensation, began contributing 7.50% in January of 2002, if they elected the higher retirement benefits. Members who contributed at the rate of 5.25% began contributing 6.50% if they elected the higher retirement benefits. The average contribution rate payable by the members for the current year (FY2011/12) is 7.37%.

In accordance with Act 120 of 2010, any employee who becomes a member after June 30, 2011 is a Class T-E member or, alternatively, can elect to become a Class T-F member. The base contribution rate for Class T-E members is 7.50% of compensation. The base contribution rate for

## The Actuarial Process and Pension Plan Funding (continued)

Class T-F members is 10.30% of compensation. Class T-E and Class T-F members are subject to a "shared risk" employee contribution rate. The member contribution rate will stay within the specified range alloted for Class T-E or Class T-F, but could increase or decrease every three years starting July 1, 2015 depending on investment performance.

PSERS members contributed \$1.043 billion for pension contributions for FY2011, compared to \$952 million for FY2010. Total member contributions are estimated to be \$1.040 billion for the year ending June 30, 2012 and \$1.058 billion for the fiscal year ending June 30, 2013. The annual member contributions are projected to remain flat in FY2011/12 due to the high level of purchase of service member contributions recorded in FY2010/11.

#### **Investment Returns**

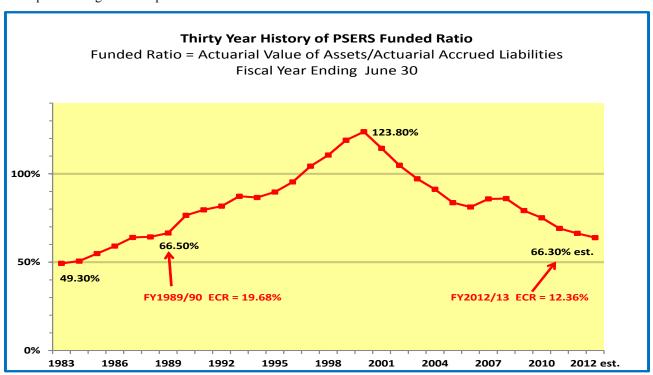
The investment rate of return (net of fees) for the fiscal years ended June 30, 2011 and June 30, 2010 was 20.37% and 14.59%, respectively. The annualized rates of investment return for the three, five and ten-year periods ended June 30, 2011 were 0.44%, 3.89% and 6.25% respectively. The estimated investment rates of return for the one, three, five and ten-year periods ended December 31, 2011 were 4.32%, 10.12%, 1.34% and 6.29%, respectively. Over the past 25 years ended December 31, 2011 the Fund earned an estimated annualized rate of return of 8.58% which exceeded the Fund's long term investment rate of return assumption during that time period.

#### **Funded Status**

PSERS funded status is measured by comparing the actuarial value of assets with the accrued liability. The accrued liability is the present value of benefits accumulated to date for both active and retired members.

#### **Key Facts**

- Funded Status: 69.1% as of June 30, 2011
- Funded Status: 75.1% as of June 30, 2010
- The decrease in FY2011 is primarily due to the actuarial value of assets loss that occurred during the year as a result of the 10 year asset smoothing used for actuarial valuation purposes and the adoption of new demographic and economic assumptions used to value the System's liability. There was also a net actuarial experience gain.
- The decrease in the funded status since 2000 is the result of several factors including: the unfavorable investment markets from FY2001 to FY2003 and FY2008 to FY2009; funding changes enacted in Act 38 of 2002 and Act 40 of 2003; the adoption of new demographic and economics assumptions in FY2008, FY2009 and FY2011 and actuarial liability losses
- A thirty-year history of PSERS' funded status is shown below.



## The Actuarial Process and Pension Plan Funding (continued)

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

In 2006, GASB began a multi-year project to re-examine the current pension accounting standards as detailed in GASB Statements 25 and 27. In March 2009, GASB issued an Invitation to Comment (ITC) on possible changes to the pension accounting standards. The ITC discussed two alternative approaches that the standards might follow. The first approach was similar to the current standards and the second was based on a market value approach similar to private sector pension accounting.

On June 16, 2010, GASB issued its Preliminary Views (PV) on proposed changes to accounting and financial reporting standards for state and local government employers that sponsor defined benefit pension plans. The PV was an intermediate step in the GASB Pension Project and reflects GASB's expectation of significant discussion related to the proposed changes. In the PV, GASB proposed a middle approach which combines elements of the two alternatives described in the ITC.

The proposed standards in the PV would have a significant impact on pension accounting and financial reporting by employers and would separate the accounting standards from the standards used to determine funding requirements. PSERS provided comments to GASB on the PV in September 2010 and has collaborated with constituent groups that have also provided comments to GASB.

After considering the comments they received from the PV, GASB issued two Exposure Drafts (ED) to further refine the Pension Project. The first ED entitled Financial Reporting for Pension Plans an amendment of GASB Statement No. 25, would amend the financial reporting by state and local governmental pension plans. The second ED entitled Accounting and Financial Reporting for Pensions an amendment of GASB Statement No. 27, would amend the financial reporting by state and local governments whose employees are provided with pensions. In October 2011, PSERS provided comments to GASB with regard to both EDs individually and collectively with constituent groups and completed participation in GASB's field test of the EDs. Once GASB reviews the input received in response to the EDs and field tests, it will issue the new accounting standards that could be effective in 2013. PSERS will continue to monitor the GASB Pension Project very closely to gauge the future impact on its financial governance.



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### **Employer Contribution Rate**

PSERS undergoes an annual independent actuarial valuation to calculate the actuarial assets and liabilities of the pension fund. Based on the actuarial valuation process, the actuary develops the recommended Employer Contribution Rate (ECR) that determines the employer contributions to the pension plan and healthcare premium assistance. The valuation process also measures the progress of the pension system towards funding pensions for its active and retired members.

#### **Employer Contribution Rate Statistics**

<ul> <li>Highest historical ECR (FY1985/86)</li> </ul>	20.04%
<ul> <li>Lowest historical ECR (FY2001/02)</li> </ul>	1.09%
• Ten yr. avg. ECR (2002/03 to 2011/12)	5.13%
• Twenty yr. avg. ECR (1992/93 to 2011/12)	6.72%
• Thirty yr. avg. ECR (1982/83 to 2011/12)	10.65%
<ul> <li>Adopted ECR (FY2012/13)</li> </ul>	12.36%

PSERS' average member rate, employer contribution rate and normal cost for thirty years is presented in the graph on the bottom of the page.

#### Act 120 of 2010

#### **Progress on Funding Issue**

Over the past year, PSERS began to phase in the implementation of Act 120 of 2010. Act 120 of 2010 provided historic pension reform and made dramatic progress toward addressing funding issues at PSERS. The legislation included actuarial and funding changes to PSERS and benefit reductions for individuals who become

new members of PSERS on or after July 1, 2011.

## Impact of Benefit Cuts for New Members on or after July 1, 2011

For school employees who become new members of PSERS on or after July 1, 2011, there are two new classes; Class T-E and T-F. All new members will automatically become Class T-E members. New members however, will 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. In other words, once the election is made either by action or inaction, the election is permanent.

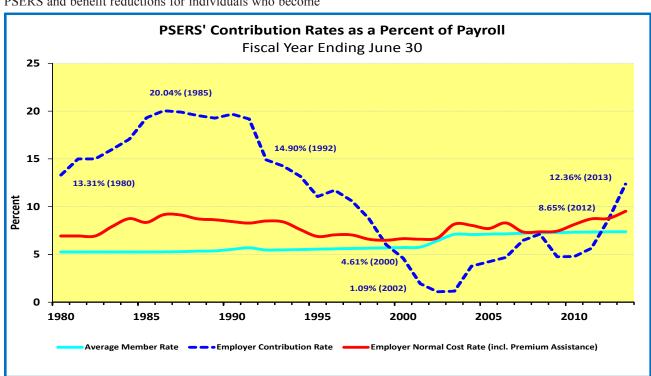
#### Class T-E

- Pension multiplier is 2%
- Effective July 1, 2011 employee contribution base rate is 7.5% (base rate) with "shared risk" contribution levels between 7.5% and 9.5%

#### Class T-F

- Pension multiplier is 2.5%
- Effective July 1, 2011 employee contribution base rate is 10.3% (base rate) with "shared risk" contribution levels between 10.3% and 12.3%

As of December 31, 2011, 471 or 18% of new members elected class T-F and 2,140 or 82% of new members remained in class T-E. As indicated above, Class T-F members maintain the higher 2.5% pension multiplier but contribute at a higher member contribution rate than Class T-E members.



# **Employer Contribution Rate** (continued)

#### **Funding/Actuarial Changes Summary**

#### **Funding Changes - Employer Contributions**

The legislation also 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:

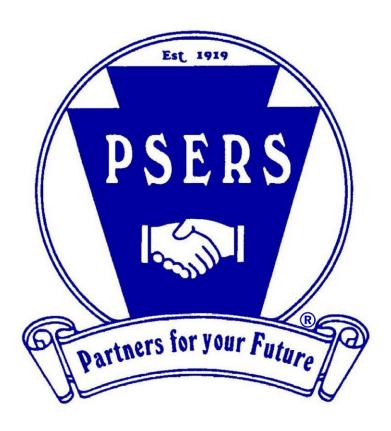
- FY2011/12 not more than 3.0% plus the premium assistance contribution rate
- FY2012/13 not more than 3.5% plus the premium assistance contribution rate
- FY2013/14 not more than 4.5% plus the premium assistance contribution rate
- Thereafter not more than 4.5%

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.

After that, the rate is what is calculated by PSERS actuary and approved by the PSERS Board, subject to a new rate floor or minimum employer contribution rate that will be the employer normal cost (currently about 8%), plus the premium assistance contribution rate. The "employer normal cost" is the amount needed from the school employers to fund the benefits earned by the active members for that year.

#### **Act 120 Costs and Savings**

As depicted by the chart on the following page, Act 120 has a projected net savings of \$1.38 billion over 30 years. Act 120 benefit reductions are projected to save \$24.65 billion through FY2043/44. The cost savings from benefit reductions are offset by Act 120 funding and actuarial changes. Those changes defer contributions for budgetary purposes and are projected to cost \$23.27 billion through FY2043/44.

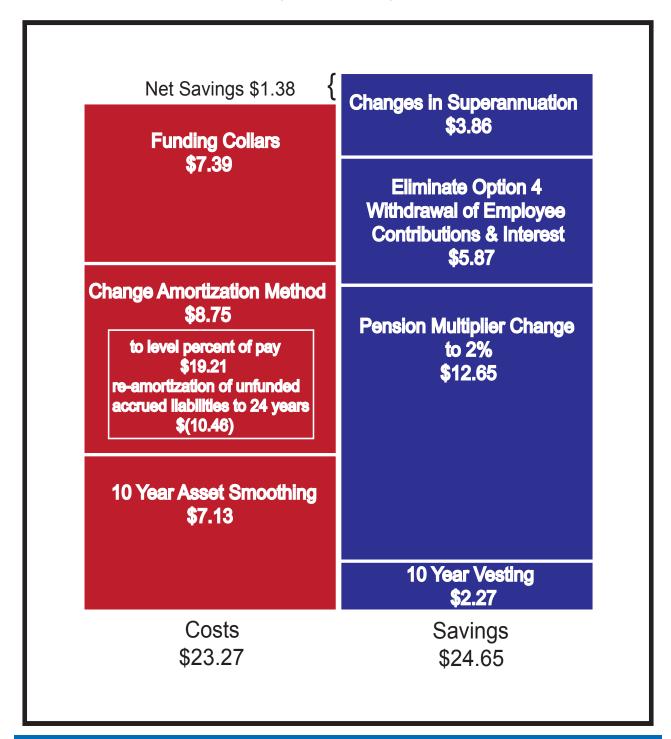


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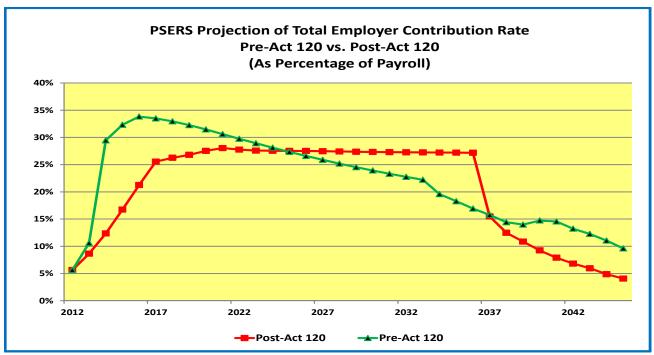
# **Employer Contribution Rate** (continued)

# Act 120 of 2010 Costs and Savings Compared to Prior Law Projected to FY 2043/2044

(\$ in billions)



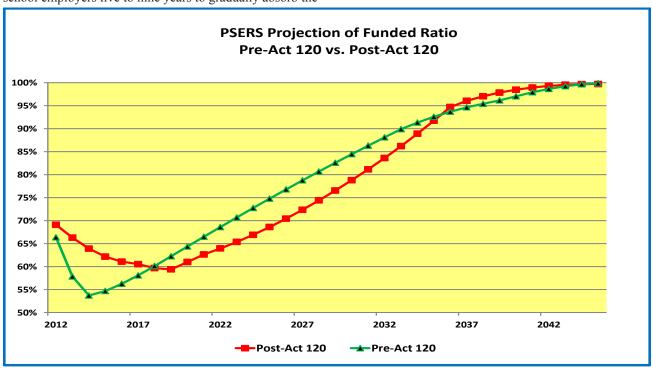
# **Employer Contribution Rate** (continued)



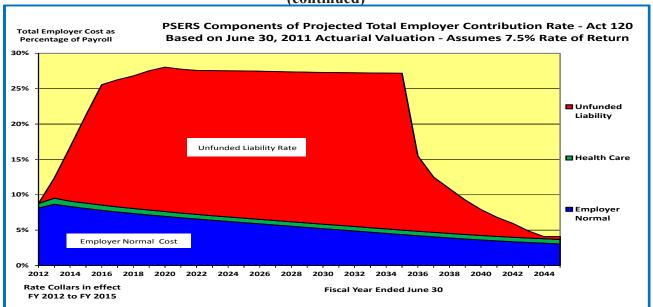
The chart at the top of the page shows PSERS' projections of total employer contribution rate under Act 120 compared to previous law (Pre-Act 120). As depicted in the chart, Act 120 smooths the rate spike under previous law over five to nine years. The rate spike under previous law was budgetarily prohibitive for the Commonwealth and school employers. Although the contribution levels are still significant, Act 120 gives the Commonwealth and school employers five to nine years to gradually absorb the

necessary funding increases required to adequately fund PSERS.

The chart at the bottom of the page shows PSERS' funded ratio projections under Act 120 compared to previous law. Due to the collars under Act 120, PSERS' funded ratio is projected to drop below 60% by 2018 before starting to rise again.



# **Employer Contribution Rate** (continued)

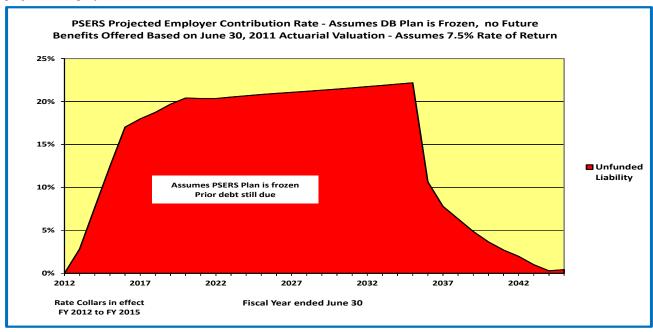


#### **Act 120 Employer Costs**

The cost structure of PSERS' new members under Act 120 is low and the shared risk provisions shift a portion of the investment risk to active members. The chart at the top of the page shows the components of the projected total employer contribution rate with unfunded liability, employer normal cost, and health care premium assistance. Essentially, Act 120 provides the members with a defined benefit plan, which is both adequate and secure, and provides the employers with a low cost employee pension benefit funded primarily by the members who have also assumed some of the investment risk. As the chart depicts, the employer normal cost decreases over time as Act 120 members replace retiring pre-Act 120 members. The projected employer normal cost of Act 120 members is

approximately 3% of payroll which is 68% less than the normal cost for pre-Act 120 members. This represents a significant cost reduction for the employers. Based on the 2010 Comparative Study of Major Public Employee Retirement Systems prepared by the Wisconsin Legislative Council, PSERS' employer normal cost rate of 3% is one of the lowest among major U.S. public retirement systems.

Regardless of the benefit structure going forward, as depicted in the charts at the top and bottom of this page, the unfunded liability accumulated for service already rendered by active members is significant and represents a much larger cost to employers than the projected normal cost for existing and Act 120 members over the next 25 years.



# **Employer Contribution Rate** (continued)

	Comparison of Employer Retirement Contributions Pre-Act 120 Vs. Post Act 120							
Fiscal Year Ending <u>June 30</u>	(A) Appropriation Payroll (in thousands)	(B) Employer Contribution Rates	(C) Pre-Act 120 Employer Contributions (in thousands)	(D)=(A)*(B) Act 120 Employer Contributions (in thousands)	(E)=(C)-(D) Budgetary Amount Deferred (in thousands)	(E)*56% (56%) State Share of Deferral (in thousands)	(E)*44% (44%) School Share of Deferral (in thousands)	% of GASB's Annual Required Contributions (ARC)
2013	\$ 14,297,000	12.36%	\$ 4,239,061	\$ 1,767,109	\$ 2,471,952	\$ 1,384,293	\$ 1,087,659	46.1
2014	\$ 14,746,607	16.75%	\$ 4,766,103	\$ 2,470,057	\$ 2,296,047	\$ 1,285,786	\$ 1,010,261	61.2
2015	\$ 15,137,573	21.25%	\$ 5,121,041	\$ 3,216,734	\$ 1,904,307	\$ 1,066,412	\$ 837,895	75.3
2016	\$ 15,553,058	25.56%	\$ 5,208,719	\$ 3,975,362	\$ 1,233,357	\$ 690,680	\$ 542,677	88.6
2017	\$ 15,998,404	26.26%	\$ 5,273,074	\$ 4,201,181	\$ 1,071,893	\$ 600,260	\$ 471,633	89.9
	Cumulative 5 Year Total Deferral \$ 8,977,556 \$ 5,027,431 \$ 3,950,125							

Schedule of Employer Contributions							
Year ended June 30	Annual Required Contributions (ARC)	Actual Employer <u>Contributions</u>	ARC Percentage <u>Contributed</u>				
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%				
2007	\$ 1,708,821	\$ 659,545	39%				
2006	\$ 1,328,373	\$ 456,878	34%				
* Net of purchase of service contributions.							

#### Act 120 Budgetary Deferral

As indicated previously, the funding and actuarial provisions of Act 120 have provided the Commonwealth and school employers a five to nine year period to appropriate funds for PSERS' unfunded liability. Act 120 is projected to defer \$8.9 billion in employer contributions in the next five years alone as seen in the table at the top of the page. If Act 120 was not in place, the employer contribution rate would have spiked to 29.65% in FY2012/13. That is an approximately \$2.5 billion dollar difference between the 29.65% Pre-Act 120 employer rate and the 12.36% employer rate that will go into effect July 1, 2012.

#### **PSERS Annual Required Contributions**

The schedule of employer contributions above shows historical trend information about the Annual Required Contribution (ARC) for pensions, and the percentage of the ARC contributed to the pension system. In addition, the Comparison of Employer Retirement Contributions table at the top of this page reflects projected ARC percentages through FY2016/17. In a report prepared by the PEW Center on the States, Pennsylvania ranks next to last (only New Jersey is lower), when comparing the five-year average of actuarially required contributions.

The national landscape is changing and the under funding of state pension plans is proving to be costly to New Jersey, Illinois, Connecticut and other states that have experienced bond ratings decreases as result of pension funding levels. As the table above shows, the Commonwealth and school employers have not made the required annual payments to PSERS for at least the past six years. Taxpayers, as a result, have benefited significantly for at least the past six years from pension payment deferrals. Pennsylvania must continue to increase its contributions to PSERS as provided in Act 120, or the problems currently facing New Jersey, Illinois, and other states could be Pennsylvania's issues in a few years.

The Governor's Budget fully funds the Commonwealth's portion of the employer contribution rate of 12.36% for FY2012/13 in compliance with Act 120. As a result, PSERS' ARC percentage is projected to increase from 27% in the FY2010/11 to 46.1% in FY2012/13. The FY2012/13 contribution rate of 12.36% includes a portion to fund the unfunded liability of the System. This will be the first payment toward the unfunded liability since FY2002/03 when PSERS funded ratio dropped below 100%. As depicted in the table at the top of the page, future projected contribution rate increases will raise PSERS' ARC percentage to nearly 90% in FY2016/17 which is close to the average ARC percentage of major public plans according to the Public Fund Survey prepared by the National Association of State Retirement Administrators.

# **Employer Contribution Rate** (continued)

#### **Next Steps**

As noted, the Commonwealth and School employers have benefited over the past six years and longer due to PSERS' very low ARC. Illinois, New Jersey, Connecticut and other states are currently dealing with the repercussions of underfunding their pension plans. Act 120 has significantly reduced the employer's normal cost for future new members via benefit reductions to new members, but a significant unfunded liability for service already rendered by active members still remains to be paid. As the chart on the bottom of page 23 shows, even if PSERS is closed to new members and the benefits are not replaced with another type of pension plan, the employer contribution rate to pay the unfunded liability still peaks at over 20% of payroll and remains there for over a decade. Act 120 has provided both the Commonwealth and the School employers with a five to nine year time horizon to gradually increase contributions to PSERS in a more budgetary feasible manner than the rate spike under previous law. The process now becomes an appropriation challenge to meet the gradual funding increases provided for in Act 120.

As in the past, PSERS remains committed to providing all available assistance to the Governor, General Assembly and School employers to address the appropriation challenges.



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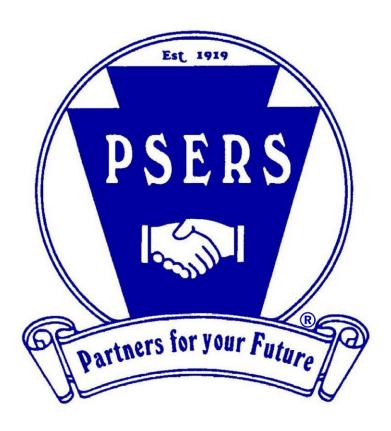
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# Consultants' Fees (\$50,000 and Over)

 $T^{\text{he following benefit, investment, information technology and financial professional service firms were under contract to provide services to PSERS during the fiscal year ended June 30, 2011.}$ 

<u>Firm</u>	Services Provided	<b>Consultant Fee</b>	
CoreSource, Inc.	Postemployment healthcare benefits administration and claims adjudication	\$ 12,168,669	*
Rx Solutions, Inc.	Administration of postemployment healthcare benefits' prescription drug plan	\$ 4,538,549	*
ViTech Systems Group, Inc.	Pension administration system services	\$ 4,452,065	*
The Segal Company	Actuarial services and consulting for the Health Options Program and prescription drug plan	\$ 3,116,391	*
Portfolio Advisors, LLC	Private market consulting	\$ 1,500,000	
Aksia LLC	Hedge fund investment consulting	\$ 900,000	
Financial Control Systems, Inc.	Investment accounting application service provider	\$ 654,488	
Buck Consultants LLC	Pension benefit actuarial services	\$ 624,333	*
Independent Pharmaceutical Consultants, Inc.	Pharmacy benefit consulting services	\$ 612,332	*
Wilshire Associates	General investment consulting	\$ 500,258	
Courtland Partners, Ltd.	Real estate investment consulting	\$ 260,093	
Glass Lewis & Company	Proxy voting	\$ 225,719	
Clifton Gunderson LLP	Financial audit of pension system and postemployment healthcare programs	\$ 110,000	*

<sup>\*</sup> Amounts as reported in PSERS' Comprehensive Annual Financial Report.



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## **Legislation Information**

There has been no legislation enacted affecting the operations or the membership of the Public School Employees' Retirement System, thus far into the 2011-2012 Legislative Session.



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### Section 2 - PSERS FY2012/13 Budget





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#### Section 2 - FY2012/13 Budget

#### Public School Employees' Retirement System Fiscal Year 2012/13 Budget

	Actual 2010/11	Governor Budget Available Recommend: 2011/12 2012/13		Budget mmendation	
Total Personnel Expenses	\$ 24,083,906	\$	25,820,000	\$	26,684,000
Operating Expenses					
Travel	\$ 104,206	\$	205,000	\$	190,000
Training & Conference Registration	94,886		131,000		155,000
Telecomm - Recurring	620,273		545,000		545,000
Telecomm - Voice Hardware less than \$5,000	57,132		5,000		5,000
Electricity	47,330		60,000		60,000
Consultant Services - Non IT	814,584		913,000		833,000
Consulting Services - Mgd Svcs (vendor hosted SW)	5,000		30,000		30,000
Consulting - Maint & Support - (post implemenation)	-		65,000		161,000
Consulting - Security (Outsourced Inf Sec Services)	-		10,000		12,000
Consulting - General (IT Support)	21,839		86,000		80,000
Consulting - Outsourced Infrastructure Svcs (DPH)	2,008,483		2,186,000		2,000,000
Legal Services/Fees	36,306		16,000		36,000
Specialized Services	302,938		440,000		353,000
Other Specialized Services	80,796		476,200		267,000
Advertising	5,771		10,000		10,000
Medical, Mental, & Dental Services	3,972		4,000		5,000
Software Licensing - Maintenance	1,115,209		1,097,500		1,056,000
Hardware Server - Maintenance	7,453		-		-
Hardware Network - Maintenance	13,257		15,000		15,000
Hardware Desktop - Maintenance	15,696		40,000		20,000
Contracted Maintenance Non EDP	257,442		243,000		189,000
Telecom Data Services	-		120,000		120,000
Contracted Repairs - Non EDP	18,628		35,000		15,000
Real Estate Rental	1,925,933		1,980,000		1,954,000
Vehicle Rental	1,994		4,000		4,000
Office Equipment Rental	263,351		294,000		298,000
Other Rentals	12,774		24,000		28,000
Office Supplies	230,690		329,000		302,000
Educational Supplies (Books)	1,868		21,000		11,000
Medical Supplies	314		1,000		1,000
SW License non-recurring less than \$5,000	66,040		47,000		171,000
HW Desktop less than \$5,000	256,184		85,000		55,000
Furniture and Fixtures	67,191		56,000		52,000
Other Equipment	45,820		32,000		-
Motorized Equipment Supplies	29,958		40,000		41,000
Postage	1,185,283		1,331,000		1,561,000

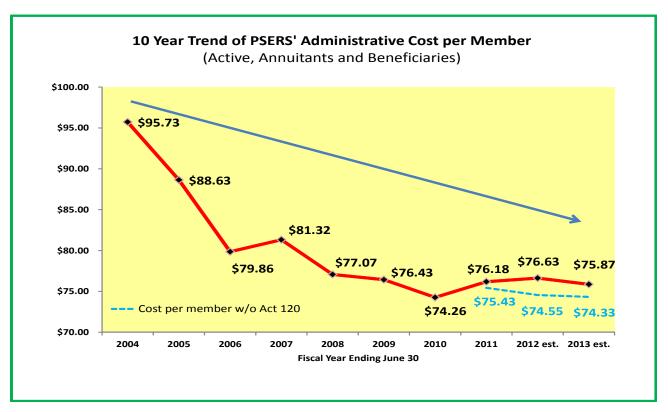
#### Section 2 - FY2012/13 Budget

#### Public School Employees' Retirement System Fiscal Year 2012/13 Budget (continued)

		Actual 2010/11		Available <b>2011/12</b>	Recoi	overnor's Budget mmendation 2012/13
Freight	\$	7,409	\$	15,000	\$	10,000
Printing		398,288		447,800		479,000
Subscriptions		79,513		95,500		99,000
Membership Dues		38,971		42,000		45,000
Conference Expense		42,410		75,000		75,000
Insurance, Surety & Fidelity Bonds		20,658		24,000		24,000
Graphic Services		178		1,000		1,000
Other Operational Expenses	_	1,758,804	_	1,953,000	_	1,787,000
Total Operating Expenses	\$	12,064,830	\$	13,630,000	\$	13,155,000
Fixed Assets						
HW Server greater than \$25,000	\$	260,987	\$	-	\$	-
HW Network greater than \$25,000		-		-		40,000
Telecomm -Voice HW greater than \$25,000		-		513,000		-
Telecomm - Data HW greater than \$25,000		-		-		-
Automobiles		-		78,000		105,000
SW License non-recurring greater than \$5,000		-		54,000		35,000
SW License recurring greater than \$5,000		4,254,530		4,012,000		4,125,000
Office Equipment		19,800		-		-
Telecommunications Equipment	_	6,500	_	<u>-</u>	_	
Total Fixed Assets	\$	4,541,817	\$	4,657,000	\$	4,305,000
Total Administrative Budget	\$	40,690,553	\$	44,107,000	<u>\$</u>	44,144,000
Personnel Augmentations		881,000		915,000		959,000
<b>Total with Augmentations</b>	\$	41,571,553	<u>\$</u>	45,022,000	<u>\$</u>	45,103,000

#### Section 2 - FY2012/13 Budget

Public School Employees' Retirement System Fiscal Year 2012/13 Budget (continued)



#### **Administrative Cost per Member**

The chart above diplays a ten-year trend of PSERS' administrative cost per member. Expenses were relatively higher in FY2003/04 and FY2004/05 due to the implementation of the new pension administration system. The downward trend in cost indicates that PSERS has achieved operational efficiencies while its membership has risen each year. The System has accomplished this without significantly increasing the size of its staff.

Some of the cost savings initiatives include: processing significantly more retirements in a more efficient one-step process versus a two-step process used previously, implementation of a new pension administration system which has automated procedures done manually, combining bulk mailings to members where possible, limiting travel and using electronic means, when possible, to communicate with members and stakeholders.

The gap between the dotted blue line and red line on the chart shows the effects of the recent pension reform legislation Act 120 of 2010 implementation. PSERS' projected cost per member will be slightly higher for the short term as it absorbs the costs to adopt the new requirements.



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### **Directed Commissions Recapture Program** (unaudited)

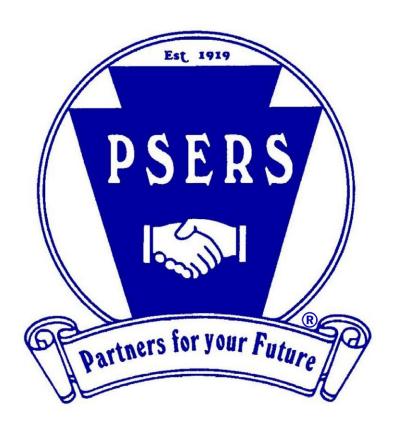
Directed Commissions Recapture is a program whereby a portion of commissions incurred by PSERS through investment trading activity is returned to PSERS. These funds, which are held in a restricted revenue account at Treasury, can be used for the administration of the Fund or can be reinvested back into the asset allocation through a transfer to the PSERS Retirement Account. Expenditures paid from the Directed Commissions Recapture Program Budget have the same approval process as any other expenditure made by the Fund.

### Directed Commissions Recapture Program - Directed Commissions Apropriation #6012700000

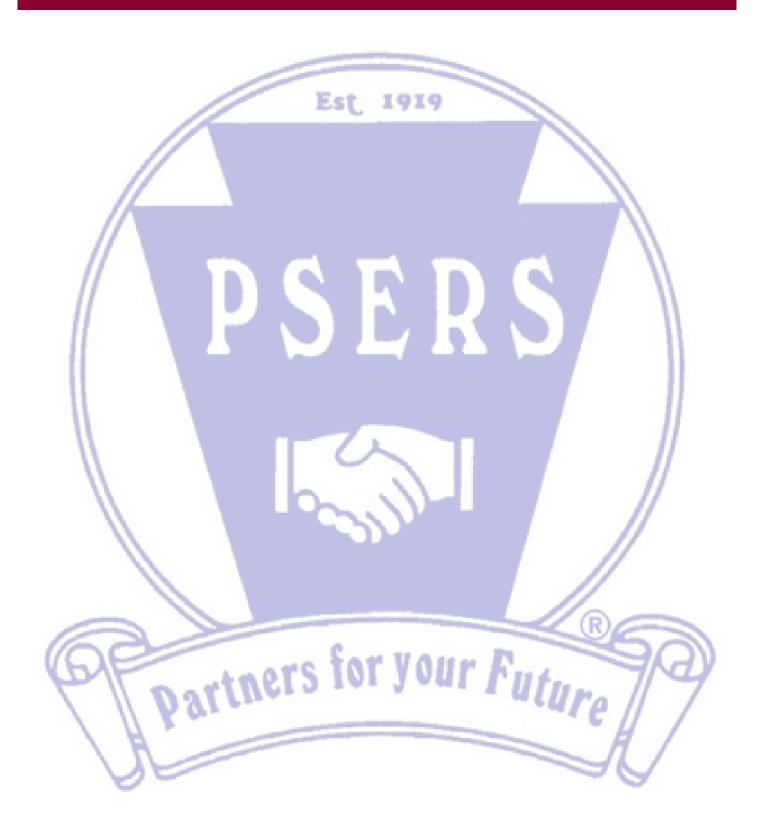
	Actual Expenditures FY2010/11	Available FY2011/12	Governor's Budget Recommendation <u>FY2012/13</u>
Budgetary Reserve	-	\$2,000,000	<u>\$2,000,000</u>
Total	-	<u>\$2,000,000</u>	<u>\$2,000,000</u>



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#### **Investment Policy**

The Public School Employees' Retirement Board of ■ Trustees (the Board) is responsible for, among other things, the formulation of an Investment Policy (the Policy) for the Public School Employees' Retirement System (the System). As articulated in the Public School Employees' Retirement Code 24 Pa. C.S. §8521(a), the Board and PSERS' Staff delegated with investment authority must act in a manner consistent with the Prudent Investor Standard, which requires "the exercise of that degree of judgment, skill and care under the circumstances then prevailing which persons of prudence, discretion and intelligence who are familiar with such matters exercise in the management of their own affairs not in regard to speculation, but in regard to the permanent disposition of the fund, considering the probable income to be derived therefrom as well as the probable safety of their capital." The Prudent Investor Standard recognizes modern portfolio theory and guides investment and management decisions respecting individual assets so that the trade-offs between risk and return for each asset are considered in the context of an overall investment strategy.

The System's Investment Policy Statement, Objectives, and Guidelines (the Policy), which is available at <a href="https://www.psers.state.pa.us">www.psers.state.pa.us</a>, reflects the many implications of the Prudent Investor Standard. The Board reviews the Policy at least annually, and may make more frequent changes as necessary. The Policy establishes clear criteria for the management of the assets by or on behalf of the Board. For example:

- The Board, PSERS' staff, investment consultants, and investment managers are assigned appropriate responsibilities and made to clearly understand the objectives and policies of the Board and the System;
- Allocation plans are prepared to guide the investment of the System's assets;
- Guidelines are established for each investment category so that asset quality, diversification, and return can be monitored;
- Investment managers are given guidance and limitations on the investment of the System's assets; and,
- The Board has created a meaningful basis for evaluating the investment performance of individual investment managers, as well as for evaluating overall success in meeting its objectives.

#### **General Investment Objectives**

The System seeks to provide benefits to its members through a carefully planned and well-executed investment program. The overall investment objective of the Board is to provide adequate funding for member benefits. Realization of this overall return objective would be sufficient to achieve funding adequacy (defined as when the actuarial market value of assets is at least equal to the System's projected benefit obligations) on an inflationadjusted basis. The Policy also identifies the following general investment objectives and constraints:

#### **Return Objectives**

- The System has an overall return objective of meeting or exceeding the actuarial rate (currently 7.5%) over the long term;
- The assets of the System shall be invested to maximize the returns for the level of risk taken; and,
- The System shall strive to achieve a return that exceeds the Policy Index.

#### **Risk Objectives**

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

#### **Constraints**

- The System shall maintain adequate liquidity to meet required benefit payments to the System's beneficiaries;
- The System's assets shall be invested in a manner that is consistent with the System's long-term investment horizon; and,
- As a tax-exempt investor, the System's assets may be invested without distinction between returns generated from income and returns generated from capital gains.

## **Investment Performance Net of Fees**

(for the period ended June 30, 2011) Annualized Total Returns(%)

Asset Class	One Year	Three Year	Five Year	Ten Year
PSERS U.S. Equities	32.69	3.57	2.81	3.73
U.S. Equity Policy Index (1)	31.98	3.77	3.32	3.67
PSERS Non-U.S. Equities	30.44	3.78	5.78	9.03
MSCI All Country World ex. USA Investable Market Index (2)	30.26	1.96	4.50	8.11
PSERS U.S. Fixed Income	11.55	10.26	8.85	7.60
U.S. Fixed Income Policy Index (3)	10.38	10.59	9.32	7.17
PSERS Global Fixed Income	14.41	9.75	8.78	8.84
Global Fixed Income Policy Index (4)	15.98	7.47	7.87	8.07
PSERS Commodities	31.84	-8.47	N/A	N/A
Dow Jones - UBS Commodity Index	25.91	-11.87	N/A	N/A
PSERS Real Estate (5)	20.18	-14.98	-5.42	6.01
Blended Real Estate Index (6)	20.04	-1.09	3.85	8.50
PSERS Private Markets (5)	18.60	1.84	11.36	10.87
Venture Economics Median Return, Vintage Year Weighted	11.37	2.82	5.49	4.04
PSERS Absolute Return (7)	13.18	N/A	N/A	N/A
Absolute Return of 8.0% annualized	8.00	N/A	N/A	N/A
PSERS Cash (8)	0.30	N/A	N/A	N/A
Merrill Lynch U.S. Treasury Bill 0 – 3 Months Index	0.15	N/A	N/A	N/A
Total Fund (9)	20.37	0.44	3.89	6.25
Policy Index	17.56	1.10	3.73	5.31

- (1) MSCI USA Investable Market Index effective April 1, 2009; previously was the Dow Jones Wilshire 5000 Index.
- (2) MSCI All Country World (ACW) ex. USA Investable Market Index effective July 1, 2008; previously was the MSCI ACW ex. U.S. Index. The benchmark was 30% hedged to the U.S. dollar from July 1, 2006 to March 31, 2009; otherwise, the benchmark is unhedged.
- (3) Returns presented are a blend of the Barclays Capital U.S. Universal Index (27.8%), Barclays Capital U.S. TIPS Index (Series L) (27.8%), and Barclays U.S. High Yield Index (44.4%) effective April 1, 2010. The weights to these indexes have varied in previous quarters. Prior to April 1, 2007, the Barclays Capital Aggregate Bond Index was used in place of the Barclays Capital U.S. Universal Index.
- (4) Returns presented are a blend of the Barclays Multiverse Index (40.8%) and the JP Morgan Global Bond Index Emerging Markets Global Diversified (USD Unhedged) Index (59.2%). Between April 1, 2007 and March 31, 2010, the Barclays Multiverse Index was used; previous to April 1, 2007; the Barclays Global Aggregate Bond Index was used.
- (5) Returns reported on a one-quarter lag, except for publicly traded real estate security investments.
- (6) NCREIF Index effective April 1, 2010. The NCREIF Index is reported on a one-quarter lag. Previously, returns presented were a blend of the FTSE EPRA/NAREIT Global Real Estate Index and the NCREIF Index. Prior to October 1, 2007, the Dow Jones Wilshire Real Estate Securities Index was used in place of the FTSE EPRA/NAREIT Global Real Estate Index.
- (7) Absolute Return started April 1, 2009.
- (8) Cash started November 1, 2008.
- (9) Over the past 25 years ended June 30, 2011, the Fund earned an annualized rate of return of 8.79 percent which remained above the Fund's assumed actuarial rate of return during that time period.

### **Estimated Investment Performance Net of Fees**

(for the period ended December 31, 2011) Annualized Total Returns(%)

Asset Class	One	Three	Five	Ten
	Year	Year	Year	Year
PSERS U.S. Equities	1.65	17.25	-0.26	3.60
U.S. Equity Policy Index (1)	0.63	14.56	-0.07	3.70
PSERS Non-U.S. Equities	-13.51	13.54	-0.88	7.90
MSCI All Country World ex. USA Investable Market Index (2)	-14.31	11.98	-2.16	6.88
PSERS U.S. Fixed Income	10.83	15.86	9.00	7.68
U.S. Fixed Income Policy Index (3)	8.58	15.33	9.20	7.08
PSERS Global Fixed Income	2.09	10.41	7.15	8.12
Global Fixed Income Policy Index (4)	3.15	6.39	6.41	7.39
PSERS Commodities	-10.00	12.35	0.97	N/A
Dow Jones - UBS Commodity Index	-13.32	6.39	-2.07	N/A
PSERS Real Estate (5)	13.21	-9.10	-7.23	6.28
Blended Real Estate Index (6)	17.06	2.67	2.72	8.65
PSERS Private Markets (5)	9.91	4.71	9.23	11.56
Venture Economics Median Return, Vintage Year Weighted	8.92	3.23	4.29	4.26
PSERS Absolute Return (7)	7.16	N/A	N/A	N/A
Absolute Return of 7.5% annualized	7.75	N/A	N/A	N/A
PSERS Cash (8)	1.97	1.14	N/A	N/A
Merrill Lynch U.S. Treasury Bill 0 - 3 Months Index	0.08	0.11	N/A	N/A
Total Fund (9)	4.32	10.12	1.34	6.29
Policy Index	3.10	8.97	1.18	5.28

- (1) MSCI USA Investable Market Index effective April 1, 2009; previously was the Dow Jones Wilshire 5000 Index.
- (2) MSCI All Country World (ACW) ex. USA Investable Market Index effective July 1, 2008; previously was the MSCI ACW ex. U.S. Index. The benchmark was 30% hedged to the U.S. dollar from July 1, 2006 to March 31, 2009; otherwise, the benchmark is unhedged.
- (3) Returns presented are a blend of the Barclays Capital U.S. Universal Index (27.8%), Barclays Capital U.S. TIPS Index (Series L) (27.8%), and Barclays U.S. High Yield Index (44.4%) effective April 1, 2010. The weights to these indexes have varied in previous quarters. Prior to April 1, 2007, the Barclays Capital Aggregate Bond Index was used in place of the Barclays Capital U.S. Universal Index.
- (4) Returns presented are a blend of the Barclays Multiverse Index (40.8%) and the JP Morgan Global Bond Index Emerging Markets Global Diversified (USD Unhedged) Index (59.2%). Between April 1, 2007 and March 31, 2010, the Barclays Multiverse Index was used; previous to April 1, 2007; the Barclays Global Aggregate Bond Index was used.
- (5) Returns reported on a one-quarter lag, except for publicly traded real estate security investments.
- (6) NCREIF Index effective April 1, 2010. The NCREIF Index is reported on a one-quarter lag. Previously, returns presented were a blend of the FTSE EPRA/NAREIT Global Real Estate Index and the NCREIF Index. Prior to October 1, 2007, the Dow Jones Wilshire Real Estate Securities Index was used in place of the FTSE EPRA/NAREIT Global Real Estate Index.
- (7) Absolute Return started April 1, 2009. The assumed actuarial rate of return for the fund was 8.0% from January 1 through June 30, 2011. The rate changed to 7.5% beginning July 1, 2011.
- (8) Cash started November 1, 2008.
- (9) Over the past 25 years ended December 31, 2011, the Fund earned an estimated annualized rate of return of 8.58 percent which remained above the Fund's assumed actuarial rate of return during that time period.



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### Asset Allocation (as of December 31, 2011)

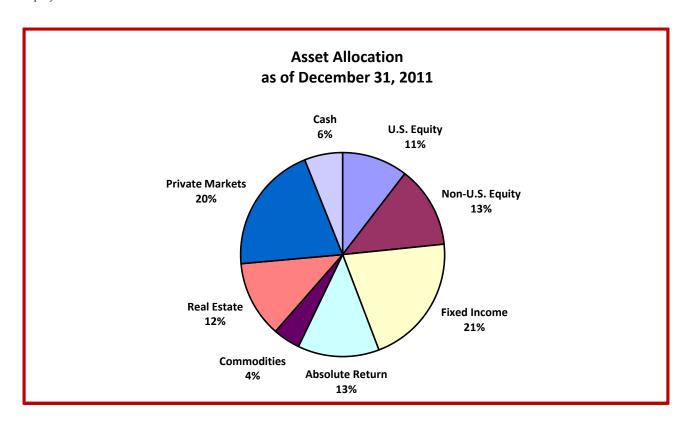
The Board reviews the long-term asset allocation targets of the System at least annually. In establishing the asset allocation plan, the Board will consult with its actuary, consultants, investment staff, and other sources of infor-

mation it deems appropriate in formulating this allocation. The purpose of the asset allocation is to meet the long-term financial needs and investment objectives of the System.

The following represents PSERS' asset allocation as of December 31, 2011 (unaudited):

Asset Class	Market Value <u>(in millions)</u>	Percentage of Total	Target Allocation %	Target Allocation <u>Range</u>
U.S. Equity	\$ 4,926.9	10.5%	11.0%	± 5%
Non-U.S. Equity	6,112.1	12.9	12.5	± 5
Fixed Income	9,846.2	20.8	21.2	± 10
Absolute Return	6,100.8	12.9	12.0	± 4
Commodities	2,034.3	4.3	6.0	± 4
Real Estate	5,733.2	12.1	11.8	-
Private Markets	9,623.2	20.4	20.5	-
Cash*	<u>2,860.7</u>	<u>6.1</u>	_5.0	± 5
Totals	<u>\$ 47,237.4</u>	<u>100.0%</u>	<u>100.0%</u>	

<sup>\*</sup> Cash includes the total short-term investment fund (STIF) managed by PSERS in the PSERS Proprietary Fund and a balanced risk fund (All Weather) managed by Bridgewater Associates, Inc. STIF is unitized and the managers in the various asset classes are allocated units of STIF. For purposes of this schedule, units of STIF are not included in the various asset classes. For example, a U.S. Equity manager may manage \$200 million, but if that manager has \$10 million in STIF, \$190 million would be included in U.S. Equity and \$10 million would be included in Cash.



#### Asset Allocation (as of December 31, 2011) (continued)

### Number of Investment Managers and Portfolios

#### Public Market Asset Classes (ex. Real Estate)

PSERS public market equity, fixed income, and commodity asset classes used 63 external investment managers who were responsible for 75 portfolios, and 7 internal portfolio managers who were responsible for 9 portfolios. There were 5 external public market investment managers with portfolios in multiple asset classes.

#### **Private Markets and Real Estate**

PSERS private markets and real estate (public and private markets) asset classes used 114 active external general partners to invest in 243 limited partnership interests of various private market real estate, private debt, private equity, and venture capital funds. PSERS has 2 internal real estate investment managers who are responsible for 1 public market real estate portfolio. Finally, PSERS has 5 external and 2 internal real estate asset managers who oversee the direct management of 6 separate real estate accounts. A further breakdown of the external and internal portfolio managers follows:

## Public Market Asset Classes (excluding Public Market Real Estate)

	Portfolio Managers	Portfolios/Accounts
U.S. Equity Investments:		
External*	9	9
Internal	3	3
Non-U.S. Equity Investments:		
External*	14	16
Internal	1	2
Fixed Income Investments:		
External*	17	23
Internal**	2	3
Commodities:		
External	5	5
Absolute Return:		
External*	16	19
Cash:		
External*	1	1
Internal**	1	1
Securities Lending:		
External	1	2
Total	70	84
Total External*	63	75
Total Internal	7	9

<sup>\*</sup> The Public Market Emerging Investment Manager Program consisted of 14 portfolio managers each managing a single portfolio. There were 7 U.S. Equity, 4 Non-U.S. Equity, 2 Fixed Income portfolios, and 1 Absolute Return portfolio in the Program.

<sup>\*\*</sup> PSERS managed \$209.6 million for the System's healthcare account.

# Summary of PSERS' U.S. Equity Investments (as of December 31, 2011)

U.S. Equities represent one of eight major asset classes that PSERS uses to diversify the investments of the Fund. PSERS' investment plan diversifies equity investments and balances equity management styles. PSERS contracts with external investment managers and hires internal portfolio managers to manage U.S. portfolios.

#### **Policy**

U.S. Equities are utilized by the Fund primarily because their expected large return premiums versus inflation will, if realized, help preserve and enhance the real value of the Fund over long periods of time. The U.S. Equity asset class is to be managed on a total return basis.

U.S. Equity investments shall consist almost entirely of publicly-traded securities listed on the New York, American, and Nasdaq Stock Exchanges or derivatives such as swaps or listed futures to replicate the performance of U.S. equity indexes such as the S&P 500 Index. Swaps and futures are employed by PSERS to equitize cash and portable alpha portfolios.

PSERS' Asset Allocation targets an eventual allocation of 11.0% of assets to U.S. Equities.

Market Value as of December 31, 2011: \$4,926.9 million, or 10.5% of the Fund's total market value.

**Number of External Investment Managers:** PSERS had contracts with nine external investment managers responsible for various U.S. Equity portfolios (including seven Public Market Emerging Manager Program managers).

**Number of Internal Portfolio Managers:** PSERS had three employees managing various U.S. Equity portfolios.

#### Types of Investment Portfolios at December 31, 2011:

- 79.2% large capitalization stock strategies, 19.2% medium/small capitalization stock strategies, and 1.6% in micro capitalization stock strategies
- 87.6% passively-managed portfolios and 12.4% actively-managed stock selection portfolios
- 87.7% was managed by internal portfolio managers and 12.3% is managed by external investment managers



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## Summary of PSERS' U.S. Equity Portfolios (unaudited) (as of December 31, 2011)

		ket Value millions)	% of U. S. <u>Equities</u>	% of <u>Total Fund</u>
Passively Managed Portfolios				
PSERS S&P 400 Index Fund	\$	267.6	5.4%	0.6%
PSERS S&P 500 Index Fund		3,816.3	77.5%	8.1%
PSERS S&P 600 Index Fund		230.2	4.7%	0.5%
Total Passively Managed U.S. Equity	\$	<u>4,314.1</u>	<u>87.6%</u>	9.2%
Actively Managed Large Cap Portfolios				
EDMP, Inc.	\$	46.5	0.9%	0.1%
Hellman Jordan	Ψ	31.7	0.6%	0.1%
Other		5.6	0.1%	0.0%
Total Actively Managed				
Large Cap U.S. Equity	\$	83.8	<u>1.7%</u>	0.2%
Actively Managed Mid and Small Cap Portfolios				
AH Lisanti Capital Growth, LLC	\$	56.4	1.1%	0.1%
Conestoga Capital Advisors		61.6	1.3%	0.1%
First Pacific Advisors, Inc.		172.6	3.5%	0.4%
Harvest MLP II		97.7	2.0%	0.2%
Opus Capital Management		<u>61.7</u>	1.3%	0.1%
Total Actively Managed Mid and				
Small Cap U.S. Equity	\$	<u>450.1</u>	<u>9.1%</u>	<u>1.0%</u>
Actively Managed MicroCap Portfolios	Φ.	10.0	0.40/	0.00/
Ativo Capital Management	\$	19.8	0.4%	0.0%
NorthPointe Capital, LLC		59.1	1.2%	0.1%
Total Actively Managed				
MicroCap U.S. Equity	\$	<u>78.9</u>	<u> 1.6%</u>	0.1%
Total U.S. Equity	\$	<u>4,926.9</u>	<u>100.0%</u>	<u>_10.5%</u>

Numbers may not add due to rounding.

## Summary of PSERS' Non-U.S. Equity Investments (as of December 31, 2011)

Non-U.S. Equities represent one of eight major asset classes that PSERS uses to diversify the investments of the Fund. PSERS' investment plan diversifies equity investments and balances equity management styles. PSERS contracts with external investment managers and hires internal portfolio managers to manage Non-U.S. portfolios.

#### **Policy**

Non-U.S. Equities are utilized by the Fund primarily because their expected large return premiums versus inflation will, if realized, help preserve and enhance the real value of the Fund over long periods of time. The Non-U.S. Equity asset class is to be managed on a total return basis.

Non-U.S. Equity investments shall consist almost entirely of publicly-traded securities listed on the exchanges in the countries approved by PSERS that provide PSERS with an equity interest in private sector concerns (i.e. common stock, preferred stock, convertible preferred stock, convertible

bonds, etc.). Swaps and futures are employed by PSERS to equitize cash and portable alpha portfolios.

PSERS' Asset Allocation targets an eventual allocation of 12.5% of assets to Non-U.S. Equities.

**Market Value as of December 31, 2011:** \$6,112.1 million, or 12.9% of the Fund's total market value.

**Number of External Investment Managers:** PSERS had contracts with 14 external investment managers responsible for various Non-U.S. Equity portfolios (including four Public Market Emerging Investment Manager Program managers).

**Number of Internal Portfolio Managers:** PSERS had one employee managing two Non-U.S. Equity portfolios.

#### Types of Investment Portfolios at December 31, 2011:

- 82.7% large capitalization stock strategies, 11.1% small capitalization strategies, and 6.2% emerging market stock strategies
- 64.8% passively-managed portfolios (managed internally) and 35.2% actively-managed portfolios (managed externally)



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## Summary of PSERS' Non-U.S. Equity Portfolios (unaudited) (as of December 31, 2011)

		ket Value millions)	% of Non-U. S. <u>Equities</u>	% of <u>Total Fund</u>
Passively Managed Portfolios				
PSERS ACWI x-US Index Fund	\$	3,756.6	61.5%	8.0%
PSERS World X-US Small Cap		_201.4	3.3%	_0.4%
Total Passively Managed Non-U.S. Equity	\$	<u>3,958.0</u>	64.8%	<u>8.4%</u>
Actively Managed Developed Large Cap Portfolios				
Baillie Gifford Overseas Ltd.	\$	407.4	6.7%	0.9%
BlackRock Financial Management, Inc.	Ψ	371.2	6.1%	0.8%
John Hsu Capital Group, Inc.		66.5	1.1%	0.1%
Marathon Asset Management Limited		402.9	6.6%	0.9%
Shah Capital Management		39.3	0.6%	0.1%
Pareto Investment Management, Ltd.		<u>8.0</u> a	0.1%	0.0%
-				
Total Actively Managed Developed				
Large Cap Non-U.S. Equity	\$	<u>1,295.3</u>	21.2%	<u>2.7%</u>
Actively Managed Emerging Market Portfolios	¢.	77.7	1.20/	0.20/
Batterymarch Financial Mgmt., Inc.	\$	77.7	1.3%	0.2%
Glovista Investments		26.1 130.7	0.4% 2.1%	0.1% 0.3%
Wasatch Advisors, Inc.		85.8	1.4%	0.3%
Wellington Management Co., LLP Westwood Global Investments		61.0	1.4%	0.2%
westwood Global Investments		01.0		
Total Actively Managed Emerging Market				
Non-U.S. Equity	\$	381.3	<u>6.2%</u>	0.8%
Actively Managed Developed Small Cap Portfolios				
Acadian Asset Management	\$	126.5	2.1%	0.3%
Batterymarch Financial Mgmt., Inc.		51.9	0.8%	0.1%
Oberweis Asset Management, Inc.		71.7	1.2%	0.2%
Pyramis Global Advisors		97.2	1.6%	0.2%
Wasatch Advisors, Inc.		130.2	2.1%	0.3%
Total Actively Managed Developed				
Small Cap Non-U.S. Equity	\$	<u>477.5</u>	<u>7.8%</u>	1.0%
Total Non-U.S. Equity	\$	<u>6,112.1</u>	<u>100.0%</u>	12.9%
Total Non-O.S. Equity	•	0,112.1	100.070	12.9

a - The Market Value represents the cumulative net gain on unsettled foreign exchange contracts.

Numbers may not add due to rounding.

#### Summary of PSERS' Fixed Income Investments (as of December 31, 2011)

Fixed Income represents one of eight major asset classes that PSERS uses to diversify the investments of the Fund. PSERS' investment plan diversifies Fixed Income investments and balances Fixed Income management styles. PSERS contracts with external investment managers and hires internal portfolio managers to manage portfolios.

#### **Policy**

Fixed Income investments are utilized by the Fund primarily because of their ability to serve as a hedge against disinflation and/or deflation, their general ability to produce current income in the form of periodic interest payments, and because such investments help diversify the overall Fund. The Fixed Income class is to be managed on a total return basis.

PSERS' Asset Allocation targets an eventual allocation of 21.2% of assets to Fixed Income, 5.2% of which is designated to U.S. core/core plus strategies, 5.0% of which is designated to TIPS strategies, 6.0% of which is designated to high yield/opportunistic strategies, 3.0% of which is designated to non-U.S. developed markets strategies, and 2.0% of which is designated to be Emerging Markets strategies. Of the total Fixed Income allocation,

16.2% is assigned to U.S. fixed income portfolios and 5.0% is assigned to global fixed income portfolios. Fixed Income investments are targeted to be 100.0% actively managed.

Market Value as of December 31, 2011: \$9,846.2 million, or 20.8% of the Fund's total market value.

**Number of External Investment Managers:** PSERS had contracts with 17 external investment managers responsible for various Fixed Income portfolios (including two Public Market Emerging Investment Manager Program managers).

**Number of Internal Portfolio Managers:** PSERS had two employees managing various Fixed Income portfolios.

#### Types of Investment Portfolios at December 31, 2011:

- 87.3% U.S. fixed income portfolios and 12.7% global fixed income portfolios
- 26.6% core/core plus strategies portfolios, 30.3% TIPS strategies portfolios, 30.4% high yield/ opportunistic strategies portfolios, 5.2% non-U.S. developed markets strategies portfolios, and 7.5% emerging markets strategies portfolios
- 27.7% was managed by internal portfolio managers and 72.3% was managed by external investment managers



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## Summary of PSERS' Fixed Income Portfolios (unaudited) (as of December 31, 2011)

	ket Value	% of Total Fixed <u>Income</u>	% of Total Fund
Actively Managed U.S. Core/Core Plus Fixed	 		
Income Portfolios			
BlackRock U.S. Extended Core Global Alpha Fund	\$ 547.7	5.6%	1.2%
Pacific Investment Mgmt. Co. (PIMCO)	469.2	4.8%	1.0%
Piedmont Investment Advisors	49.3	0.5%	0.1%
PSERS Active Aggregate	1,251.8	12.7%	2.7%
Pugh Capital Management, Inc.	86.1	0.9%	0.2%
Western Asset Management Co.	213.9	2.2%	0.5%
Other	1.2	_0.0%	_0.0%
Total Actively Managed U.S. Core/Core Plus			
Fixed Income	\$ 2,619.2	26.6%	_5.7%
Actively Managed Treasury Inflation-Protected			
Securities (TIPS) Portfolios			
Bridgewater Associates, Inc.	\$ 1,505.0	15.3%	3.2%
PSERS TIPS Portfolio	1,479.5	15.0%	3.1%
Total Actively Managed Treasury Inflation-			
Protected Securities (TIPS)	\$ 2,984.5	<u>30.3%</u>	6.3%
Actively Managed High Yield Fixed Income Portfolio			
MacKay-Shields Financial Corporation	\$ 387.7	3.9%	0.8%
Actively Managed Credit Opportunity Portfolios			
BlackRock Mortgage (Offshore) Investors	\$ 582.2	5.9%	1.2%
Brigade Distressed Value Offshore Fund	100.4	1.0%	0.2%
Cerberus Levered Loan Opportunities Fund, LP	104.6	1.1%	0.2%
LBC Credit Partners II, LP	154.2	1.6%	0.3%
Mariner Investment Group	268.1	2.7%	0.6%
Oaktree Loan Fund	169.1	1.7%	0.4%
Pacific Investment Mgmt. Co. (PIMCO) Mortgage	201.2	2.0%	0.4%
Sankaty Advisors LLC	546.0	5.5%	1.2%
Sankaty Credit Opportunities Fund IV, LP	400.8	4.1%	0.8%
Sankaty Middle Market Opportunities Fund	83.5	_0.8%	0.2%
Total Actively Managed Credit Opportunity			
Fixed Income	\$ <u>2,610.1</u>	<u>26.5%</u>	_5.5%
Total Actively Managed U.S.			
Fixed Income	\$ <u>8,601.6</u>	<u>87.3%</u>	<u>18.3%</u>

# Summary of PSERS' Fixed Income Portfolios (unaudited) (as of December 31, 2011) (continued)

	 rket Value <u>millions)</u>	% of Total Fixed <u>Income</u>	% of <u>Total Fund</u>
Actively Managed Non-U.S. Developed Markets			
<u>Fixed Income Portfolios</u>			
Alliance Bernstein	\$ 246.8	2.5%	0.5%
Rogge Global Partners	204.2	2.1%	0.4%
Other	<u>56.8</u>	0.6%	0.1%
Total Actively Managed Non-U.S. Developed Markets			
Fixed Income	\$ 507.8	<u>5.2%</u>	<u> 1.0%</u>
Actively Managed Global Emerging Markets Fixed			
Income Portfolios			
Franklin Templeton	\$ 390.3	4.0%	0.8%
Stone Harbor Investment Partners	<u>346.6</u>	3.5%	<u>0.7%</u>
Total Actively Managed Global Emerging Markets			
Fixed Income	\$ 736.9	<u>7.5%</u>	<u>1.5%</u>
Total Fixed Income	\$ <u>9,846.2</u>	<u>100.0%</u>	<u>20.8%</u>

Numbers may not add due to rounding.



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# Summary of PSERS' Absolute Return Investments (as of December 31, 2011)

Absolute Return represents one of eight major asset classes that PSERS uses to diversify the investments of the Fund. PSERS contracts with external investment managers to manage absolute return portfolios.

#### **Policy**

Absolute Return investments are utilized by the Fund primarily to generate returns that are uncorrelated with other asset classes or investments and help diversify the overall Fund. The benchmark for PSERS' Absolute Return investments is an absolute return of 7.5% annualized with risk of 7.5% or lower at the program level over a full market cycle.

Absolute Return investments shall be in a variety of unique, non-directional investment strategies, including equity and fixed income long/short, global macro, currency, option, capital structure arbitrage, and other strategies. The Fund shall diversify this program by manager and style.

PSERS' Asset Allocation currently targets an allocation of 12.0% of assets in Absolute Return investments.

Market Value as of December 31, 2011: \$6,100.8 million, or 12.9% of the Fund's total market value.

**Number of External Investment Managers:** PSERS had contracts with 16 external investment managers responsible for the various Absolute Return portfolios (including one Public Market Emerging Manager Program manager).

Number of Internal Investment Managers: None.

### **Summary of PSERS' Absolute Return Portfolios (unaudited)** (as of December 31, 2011)

	Market Value (in millions)	% of Total Absolute Return	% of Total Fund
Actively Managed Absolute Return Portfolios			
AQR Capital Management	\$ 794.4	13.0%	1.7%
Black River Asset Management, LLC	251.5	4.1%	0.5%
BlackRock Capital Structure Investments Fund	249.6	4.1%	0.5%
BlackRock Financial Management, Inc.	689.5	11.3%	1.5%
Boston Company Asset Management	205.9	3.4%	0.4%
Brevan Howard Fund, Ltd.	399.7	6.6%	0.8%
Bridgewater Associates, Inc.	844.2	13.8%	1.8%
Brigade Capital Management	714.3	11.7%	1.5%
Capula Global Relative Value Fund	212.7	3.5%	0.5%
Capula Special Opportunities Fund	242.5	4.0%	0.5%
Capula Tail Risk Fund	286.2	4.7%	0.6%
Caspian Capital Advisors, LLC	189.7	3.1%	0.4%
Denali Advisors, LLC	39.4	0.6%	0.1%
FX Concepts, Inc.	12.7	0.2%	0.0%
Lazard Asset Management	113.0	1.9%	0.2%
Nephila Capital, Ltd.	255.1	4.2%	0.5%
Pacific Investment Mgmt. Co. (PIMCO)	411.5	6.7%	0.9%
Pareto Investment Management, Ltd.	(5.3)	a 0.0%	0.0%
Robeco Investment Management, Inc.	_194.3	3.2%	0.4%
Total Absolute Return	<u>\$ 6,100.8</u>	<u>100.0%</u>	<u>12.9%</u>

a -The Market Value represents the cumulative net loss on unsettled foreign exchange contracts.

Numbers may not add due to rounding.

# Summary of PSERS' Commodity Investments (as of December 31, 2011)

Commodities represent one of eight major asset classes that PSERS uses to diversify the investments of the Fund. PSERS' investment plan diversifies Commodity investments and balances Commodity management styles. PSERS contracts with external investment managers to manage commodity portfolios.

#### **Policy**

Commodity investments are utilized by the Fund for diversification within the portfolio and to act as a hedge against unanticipated inflation. The prices of commodities are determined primarily by near-term events in global supply and demand conditions and are positively related with both the level of inflation and the changes in the rate of inflation. However, stock and bond valuations are based on longer-term expectations and react negatively to inflation. Therefore, commodity returns have had a historically

negative correlation to stock and bond returns. As such, commodities, when combined with stocks and bonds, lower the risk of a portfolio.

The Fund benchmarks its Commodity investments to the Dow Jones-UBS Commodity Index (DJ UBS). The DJ UBS is a broadly diversified basket of 20 commodities from 4 sectors (energy, industrial metals, precious metals, and agriculture).

PSERS' Asset Allocation currently targets an allocation of 6.0% of assets to Commodity investments and are targeted to be 100.0% actively managed.

**Market Value of December 31, 2011:** \$2,034.3 million, or 4.3% of the Fund's total market value.

**Number of External Investment Managers:** PSERS had contracts with five external investment managers to manage Commodity portfolios.

Number of Internal Investment Managers: None.

### Summary of PSERS' Commodity Portfolios (unaudited) (as of December 31, 2011)

	ket Value millions)	% of Total <u>Commodities</u>	% of <u>Total Fund</u>
Full Discretion Commodity Portfolios			
Deutsche Asset Management	\$ 199.8	9.8%	0.4%
Wellington Management Company, LLP	582.1	28.6%	1.2%
Total Full Discretion Commodities	\$ <u>781.9</u>	<u>38.4%</u>	<u>1.6%</u>
Core/Enhanced Commodity Portfolios			
Credit Suisse Asset Management	\$ 301.8	14.8%	0.7%
Gresham, LLC	477.6	23.5%	1.0%
Schroders Investment Management	<u>473.1</u>	23.3%	1.0%
<b>Total Core/Enhanced Commodities</b>	\$ 1,252.5	61.6%	<u>2.7%</u>
Total Commodities	\$ <u>2,034.3</u>	<u>100.0%</u>	4.3%

Numbers may not add due to rounding.

# Summary of PSERS' Real Estate Investments (as of December 31, 2011)

Real Estate represents one of eight major asset classes that PSERS uses to diversify the investments of the Fund. The primary objective of the real estate program is to invest in real property directly or indirectly through global publicly-traded real estate securities (PTRES), direct investments, commingled fund investments, limited partnerships, and direct private placements. This is done in a prudent manner to create a diversified real estate portfolio of high quality investments which will enhance PSERS' overall long-term investment performance, diversify the asset base, and reduce the volatility of returns of the total investment portfolio.

#### **Policy**

The real estate program is designed to create the highest possible risk-adjusted returns in a controlled, coordinated, and comprehensive manner. Recognizing that real estate market conditions and PSERS' objectives for real estate may change over time, the program is reviewed periodically and updated as needed. The existing target allocation is 11.8% of total assets.

Investments are made through global PTRES, direct investments, commingled fund investments, limited partnerships, and direct private placements. It is PSERS' intent to liquidate any investment at the point in time when its value has been maximized. PSERS seeks to diversify its real estate portfolio by investing in a mix of Opportunistic (25%), Value Added (50%), and Core (25%) real estate investments.

Opportunistic real estate investing is the financing, acquisition or investment in real estate assets, real estate companies, portfolios of real estate assets, private and public REIT's that do not have access to traditional public equity or debt financing. Opportunistic real estate consists of investment strategies that seek to exploit market inefficiencies with an emphasis on total return. Opportunistic investments require specialized expertise

and the flexibility to respond quickly to market imbalances or changing market conditions. Investments may include non-traditional property types and/or assets that involve development, re-development, or leasing risks.

Value Added real estate investing typically focuses on both income growth and appreciation potential, where opportunities created by dislocations and inefficiencies between and within segments of the real estate capital markets are capitalized upon to enhance returns. Investments can include high-yield equity and debt investments and undervalued or impaired properties in need of repositioning, re-development or leasing.

Core real estate investing is the financing, acquisition or investment in real estate assets, real estate companies, portfolios of real estate assets, private REITs that are broadly diversified by property type and location, focused primarily on completed, well-leased properties with modest levels of leasing risk, using relatively low leverage, and investing mainly in institutional property types and qualities allowing for relative ease of resale.

Market Value as of December 31, 2011: \$5,733.2 million or 12.1% of the Fund's total market value. This market value represents the combination of December 31, 2011 and September 30, 2011 market values adjusted for cash flows that occurred during the fourth quarter of 2011.

**Number of External Investment Managers:** PSERS had contracts with 5 external directly managed real estate asset managers and 39 external general partners to manage the real estate separate account, public securities, and pool fund portfolios.

**Number of Internal Portfolio Managers:** PSERS had two employees managing real estate portfolios.

#### **Types of Investment Portfolios at December 31, 2011:**

- 3.9% Separate Account Portfolios
- 3.1% Public Securities Portfolios
- 93.0% Pooled Fund Portfolios

### Summary of PSERS' Real Estate Portfolios (unaudited) (as of December 31, 2011)

Separate Accounts	xet Value millions)	% of Total <u>Real Estate</u>	% of <u>Total Fund</u>
Charter Oak Advisors, Inc.	\$ 112.6	2.0%	0.2%
GF Management, Inc.	55.2	1.0%	0.1%
Grandbridge Real Estate Capital, LLC	0.9	0.0%	0.0%
Grosvenor Fund Management U.S., Inc.	8.4	0.1%	0.0%
L&B Realty Advisors, LLP	24.8	0.4%	0.1%
Prudential Agricultural Group	24.8	0.4%	<u>0.1%</u>
Total Real Estate Separate Accounts	\$ <u>226.7</u>	<u>3.9%</u>	<u>0.5%</u>
Public Securities			
Actively Managed Publicly Traded Real Estate			
Securities Portfolio			
Security Capital Research & Management, Inc Preferred Growth	\$ <u>177.5</u>	<u>3.1%</u>	<u>0.4%</u>

Numbers may not add due to rounding.



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# Summary of PSERS' Real Estate Portfolios (unaudited) (as of December 31, 2011) (continued)

Market Value % of Total	% of
	% of
	Total Fund
Pooled Funds (in millions) Real Estate	Total Fund
Almanac Realty Securities V, L.P. \$ 64.5 1.1%	0.1%
Apollo European Real Estate Fund III, L.P. 98.2 1.7%	0.2%
Apollo Real Estate Finance Corp. 103.8 1.8%	0.2%
Apollo Value Enhancement Fund VII, L.P. 129.6 2.3%	0.3%
AREFIN Co-Invest Corp. 55.9 1.0%	0.1%
AvalonBay Value Added Fund, L.P. 77.2 1.3%	0.2%
AvalonBay Value Added Fund II, L.P. 98.8 1.7%	0.2%
Avenue Real Estate Fund Parallel, L.P. 63.3 1.1%	0.1%
Beacon Capital Strategic Partners V, L.P. 81.2 1.4%	0.2%
Blackstone Real Estate Partners Europe III, L.P. 75.6 1.3%	0.2%
Blackstone Real Estate Partners V. TE.1, L.P. 210.9 3.7%	0.4%
Blackstone Real Estate Partners VI. TE.1, L.P. 440.9 7.7%	0.9%
Blackstone Real Estate Partners VII. TE.2, L.P. 27.0 0.5%	0.1%
BPG Co-Investment Partnership, L.P. 15.6 0.3%	0.0%
BPG Investment Partnership, Fund V, L.P. 16.8 0.3%	0.0%
BPG Investment Partnership, Fund VI, L.P. 35.2 0.6%	0.1%
Broadway Partners RE Fund II, L.P. 28.1 0.5%	0.1%
Broadway Partners Parallel Fund P III, L.P. 8.4 0.1%	0.0%
Cabot Industrial Value Fund III, L.P. 44.7 0.8%	0.1%
Carlyle Europe Real Estate Partners III-A, L.P. 149.2 2.6%	0.3%
Carlyle Realty III, L.P. 37.1 0.6%	0.1%
Carlyle Realty IV, L.P. 78.7 1.4%	0.2%
Carlyle Realty V, L.P. 192.0 3.3%	0.4%
Carlyle Realty VI, L.P. 10.1 0.2%	0.0%
Centerline High Yield CMBS Fund III, L.L.C. 1.4 0.0%	0.0%
Cornerstone Patriot Fund, L.P. 70.8 1.2%	0.1%
CS Strategic Partners IV Real Estate, L.P. 48.8 0.9%	0.1%
CSFB Strategic Partners II RE, L.P. 12.2 0.2%	0.0%
CSFB Strategic Partners III RE, L.P. 39.6 0.7%	0.1%
DLJ Real Estate Capital Partners II, L.P. 16.4 0.3%	0.0%
DLJ Real Estate Capital Partners III, L.P. 88.5 1.5%	0.2%
DLJ Real Estate Capital Partners IV, L.P. 135.4 2.4%	0.3%
DRA Growth and Income Fund VI, L.P. 90.8 1.6%	0.2%
DRA Growth and Income Fund VII, L.P. 2.4 0.0%	0.0%
Fillmore West Fund, L.P. 59.8 1.0%	0.1%
Fortress Investment Fund IV, L.P. 80.8 1.4%	0.2%
Fortress Investment Fund V (Fund A), L.P. 165.5 2.9%	0.4%

# Summary of PSERS' Real Estate Portfolios (unaudited) (as of December 31, 2011) (continued)

	Market		
Dooled Funds (continued)	Value	% of Total	% of
Pooled Funds (continued)	(in millions)	Real Estate	Total Fund
Fortress PSERS Investment, L.P.	\$ 17.4	0.3%	0.0%
Hines U.S. Office Value Added Fund, L.P.	40.8	0.7%	0.1%
JPMCB Strategic Property Fund	19.1	0.3%	0.0%
LCCG Real Estate Special Situations Mortgage Fund, LLC	7.5	0.1%	0.0%
Legg Mason Real Estate Capital, Inc.	7.6	0.1%	0.0%
Legg Mason Real Estate Capital II, Inc.	97.1	1.7%	0.2%
LEM Real Estate Mezzanine Fund II, L.P.	44.7	0.8%	0.1%
LF Strategic Realty Investors I, L.P.	1.7	0.0%	0.0%
LF Strategic Realty Investors II, L.P.	91.9	1.6%	0.2%
Lubert-Adler Real Estate Fund III, L.P.	8.5	0.1%	0.0%
Lubert-Adler Real Estate Fund IV, L.P.	19.7	0.3%	0.0%
Lubert-Adler Real Estate Fund V, L.P.	31.4	0.5%	0.1%
Lubert-Adler Real Estate Fund VI, L.P.	55.8	1.0%	0.1%
Madison Marquette Retail Enhancement Fund, L.P.	58.8	1.0%	0.1%
MGPA Asia Fund III, L.P.	125.4	2.2%	0.3%
MGPA Europe Fund III, L.P.	98.4	1.7%	0.2%
Morgan Stanley Real Estate Fund II L.P.	5.1	0.1%	0.0%
Morgan Stanley Real Estate Fund IV Sp. Dom. L.P.	17.1	0.3%	0.0%
Morgan Stanley Real Estate Fund IV Sp. Int'l L.P.	18.9	0.3%	0.0%
Morgan Stanley Real Estate Fund V Sp. Int'l L.P.	82.7	1.4%	0.2%
Morgan Stanley Real Estate Fund V Sp. U.S. L.P.	10.1	0.2%	0.0%
Morgan Stanley Real Estate Fund VI Sp. Int'l L.P.	98.5	1.7%	0.2%
Morgan Stanley Real Estate Fund VII Global L.P.	92.5	1.6%	0.2%
O' Connor North American Property Partners, L.P.	41.7	0.7%	0.1%
O' Connor North American Property Partners II, L.P.	65.4	1.1%	0.1%
Paladin Realty Latin America III, L.P.	45.5	0.8%	0.1%
Peabody Global Real Estate Partners, L.P.	2.7	0.0%	0.0%
Prime Property Fund, LLC	3.5	0.1%	0.0%
PRISA	74.3	1.3%	0.2%
ProLogis North American Industrial Fund, L.P.	134.8	2.4%	0.3%
RCG Longview Debt Fund IV, L.P.	116.0	2.0%	0.2%
RCG Longview Equity Fund PA PSERS, L.P.	85.3	1.5%	0.2%
RREEF America REIT II, Inc.	3.0	0.1%	0.0%
Silverpeak Legacy PSERS Real Estate, L.P.	39.4	0.17%	0.1%
Silverpeak Legacy Real Estate Pension Partners II, L.P.	103.8	1.8%	0.2%
Silverpeak Legacy Real Estate Pension Partners III, L.P.	63.7	1.1%	0.1%
Stockbridge Real Estate Fund I, L.P.	241.1	4.2%	0.176
Stockoriage Real Louic I and I, L.I.	471.1	ਰ.∠ / 0	0.5/0

## Summary of PSERS' Real Estate Portfolios (unaudited) (as of December 31, 2011) (continued)

Pooled Funds (continued)	•	Aarket Value millions)	% of Total Real Estate	% of <u>Total Fund</u>
Stockbridge Real Estate Fund II-A, L.P.	\$	69.7	1.2%	0.1%
Stockbridge Real Estate Fund III, L.P.		81.3	1.4%	0.2%
Strategic Partners Value Enhancement Fund, L.P.		45.7	0.8%	0.1%
UBS Trumbull Property Fund, L.P.		67.8	1.2%	0.1%
Westbrook Real Estate Fund, L.P.		1.4	0.0%	0.0%
Whitehall Street Real Estate V & VI, L.P.		0.4	0.0%	0.0%
Whitehall Street Real Estate VII & VIII, L.P.		1.5	0.0%	0.0%
William E. Simon & Sons Realty Partners, L.P.		<u>35.2</u>	0.6%	<u>0.1%</u>
<b>Total Real Estate Pooled Funds</b>	\$	<u>5,329.1</u>	93.0%	<u>11.3%</u>
Total Real Estate	\$	<u>5,733.2</u>	<u>100.0%</u>	<u>12.1%</u>

Numbers may not add due to rounding.



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## Summary of PSERS' Private Market Investments (as of December 31, 2011)

Private Market investments represent one of eight major asset classes that PSERS uses to diversify the investments of the Fund. The primary vehicle used to invest funds in this asset class is the limited partnership. Individual management groups selected by PSERS form these partnerships for the purpose of investing in and managing private equity and unlisted-subordinated debt positions on behalf of PSERS and other limited partners. PSERS' Asset Allocation currently targets an allocation of 20.5% to Private Market investments. Private Market Investment sub-asset class explanations are as follows:

**Private Equity** involves investments in private companies which normally do not have technology risk associated with traditional venture capital investments. It has evolved to include the financing of more mature, profitable companies that do not have access to, or qualify for, public equity and debt funding. Private Equity strategies include:

- <u>Buyouts</u> Investment strategy is to acquire the assets
  of a publicly or privately held company. A subset
  of this category is the leveraged buyout, where
  financing enables companies to be acquired through
  the use of borrowed funds. Typically, the assets
  of target companies serve as collateral for loans
  originated in the transaction.
- <u>Secondary Partnerships</u> An investment strategy to acquire interests in established limited partnerships. Secondary investing can often be lucrative due to the fact that the partnerships are purchased at significant discounts to net asset value and the timing of the purchase frequently occurs as the acquired partnerships begin to realize profits.

**Venture Capital** is considered the financing of young, relatively small, rapidly growing companies. In traditional venture capital investments, companies have a 5-10 year investment horizon and develop technology for a particular market, such as pharmaceuticals, software, medical products, etc. Venture capital strategies are typically classified as follows:

 <u>Seed</u> - An investment strategy that involves companies that are still in the conceptual stage of growth. Seed stage investing involves product viability risk.

- Early Stage An investment strategy involving financing portfolio companies for product development and initial marketing, manufacturing and sales activities. Typically, early stage companies have been formed, but revenues have not been realized. Early stage investment involves risks associated with defining competitive markets, developing production and marketing channels.
- <u>Later Stage</u> An investment strategy involving financing portfolio companies for rapid expansion. Risk at this stage revolves around capturing market share while increasing production and delivery capabilities and building sales volume.
- <u>Balanced</u> An investment strategy including a variety of portfolio company development stages (Seed, Early, Later, etc.).

**Private Debt** involves investments in the secured and/or unsecured debt obligations of private and/or public companies. This debt is typically acquired through directly negotiated or competitively bid transactions. Owners of these debt instruments typically take either an active or passive role in the management of the firm. Private Debt strategies are typically classified as follows:

- <u>Mezzanine</u> Investments in unsecured or junior debt securities with equity enhancements such as warrants or nominally priced equity.
- <u>Distressed Debt</u> Investments in the debt obligations of under-performing companies that are in need of operating or financial restructuring, and are either in or out of bankruptcy.
- <u>Structured Products</u> Investments in the debt tranche
  of a security that is generally leveraged and backed
  by a diversified pool of assets. Assets include bank
  debt, investment grade debt, non-investment grade
  debt, or mortgages.

#### **Policy**

For the Private Market investments program, PSERS' long-term investment objective is to achieve a risk-adjusted total return, net of fees, that exceeds market returns for similar investments, or benchmark returns furnished by Venture Economics on a vintage year weighted basis.

# Summary of PSERS' Private Market Investments (as of December 31, 2011) (continued)

Market Value as of December 31, 2011: \$9,623.2 million, or 20.4% of the Fund's total market value. Sub-asset class market values (unaudited) and fund percentages were as follows:

	Total Commitment (in millions)		Market Value millions)	Percent Allocation to Total Fund	
Private Equity	\$	15,409.0	\$ 7,147.2	15.1%	
Venture Capital		2,020.5	787.8	1.7	
Private Debt		3,859.3	<u>1,688.2</u>	3.6	
Totals	\$	21,288.8	\$ 9,623.2	20.4%	

An objective of PSERS' Private Market Investments Program is to maintain investment diversification by industry, geographic location, and investment strategy. Diversification levels as of December 31, 2011 are as follows:

<u>Industry diversification</u>
(by number of companies in each industry)

Secondary Funds	31.3%
Services	12.4%
Industrial	11.8%
Financial	8.9%
Computer	8.3%
Medical	7.8%
Communication	6.9%
Consumer	4.4%
Transportation	3.1%
Energy	2.4%
Real Estate	2.0%
Other	0.7%

### <u>Geographical diversity</u> (by percentage of companies located in each state)

International	29.8%
New York	17.9%
California	13.3%
Massachusetts	4.4%
Texas	4.2%
Pennsylvania	3.8%
Connecticut	2.5%
New Jersey	2.4%
Illinois	2.4%
Florida	1.7%
Maryland	1.7%
Michigan	1.3%
Ohio	1.2%
Colorado	1.0%
Other	12.4%

PSERS' Private Equity Program has committed a total of \$15,409.0 million to 111 partnerships through December 31, 2011. Six of these partnerships are located in Pennsylvania. Twenty-six of the 31 international investment partnerships are included within the private equity sector. The international investments serve to increase the diversification of this asset class while providing the opportunity of increasing total returns.

PSERS' Venture Capital Program consists of 50 partnerships with committed capital totaling \$2,020.5 million through December 31, 2011. A significant number of the venture capital partnerships, 27 out of 50, are located in Pennsylvania. One of the 31 international partnerships is included within the venture capital sector.

PSERS Private Debt Program has committed \$3,859.3 million to 26 partnerships through December 31, 2011. The Private Debt Program was initiated in 2000 by re-allocating \$1.0 billion from the Fixed Income allocation to take advantage of the attractive market conditions within the mezzanine and distressed debt sectors. Two partnerships are located in Pennsylvania, and 4 of the 31 international partnerships are included within the private debt sector.

## Summary of PSERS' Active Private Market Investments Committed, Drawn, and Distributed (unaudited)

(as of December 31, 2011)

Partnership Name	Vintage	Capital	Capital	
Private Equity:	<u>Year</u>	<b>Committed</b>	<u>Drawn</u>	<u>Distributions*</u>
ABS Capital Partners II	1996	\$ 40,000,000	\$ 39,291,734	\$ 45,555,770
Actis Emerging Markets 3, L.P.	2007	200,000,000	140,529,120	17,030,258
Allegheny New Mountain Partners, L.P.	2004	100,000,000	82,828,915	63,758,208
Apax Europe VII, L.P.	2007	259,200,000	240,163,210	35,414,941
Baring Asia Private Equity Fund III, L.P.	2005	122,500,000	130,060,156	222,141,490
Baring Asia Private Equity Fund IV, L.P.	2007	300,000,000	280,420,551	104,853,409
Baring Asia Private Equity Fund V, L.P.	2011	200,000,000	15,048,781	-
Blue Point Capital Partners (B), L.P.	2001	103,750,000	87,061,943	109,881,859
Blue Point Capital Partners II (B), L.P.	2007	100,000,000	74,038,120	41,483,160
Bridgepoint Capital II (Secondary)	1998	84,714,906	81,290,641	165,509,605
Bridgepoint Europe I	1998	79,622,624	75,126,567	134,639,237
Bridgepoint Europe II	2001	388,800,000	317,885,713	589,030,287
Bridgepoint Europe III A, L.P.	2005	259,200,000	249,204,188	49,173,718
Bridgepoint Europe IV, L.P.	2008	388,800,000	226,138,285	-
Bruckmann, Rosser, Sherrill & Co. L.P.	1995	25,000,000	24,465,163	44,415,345
Capital International Private Equity Fund V L.P.	2007	200,000,000	182,402,952	91,589,554
Capital International Private Equity Fund VI, L.P.	2011	100,000,000	6,138,256	(31,258)
Catterton Growth Partners, L.P.	2008	75,000,000	60,542,237	10,390,138
Catterton Partners V, L.P.	2004	100,000,000	100,933,794	57,857,963
Catterton Partners VI, L.P.	2006	130,000,000	105,043,825	9,410,574
CIGNA	1988	4,566,946	4,566,946	6,645,349
Cinven Fund (Fourth), L.P.	2006	194,400,000	157,864,052	41,806,894
Clarity Partners L.P.	2000	203,590,000	204,424,890	113,625,449
Clarity PSERS II, L.P.	2008	17,386,250	11,425,961	562,500
Credit Suisse Equity Partners, L.P.	1998	137,172,500	114,737,213	26,851,583
Credit Suisse Int'l Equity Partners, L.P.	1997	83,000,000	75,537,254	94,200,315
Crestview Partners II (PF) LP	2008	200,000,000	133,195,902	5,991,986
Crestview Partners, L.P.	2005	150,000,000	148,380,811	36,049,940
CS Strategic Partners IV, L.P.	2008	100,000,000	79,951,830	31,266,691
CS Strategic Partners V, L.P.	2011	150,000,000	13,250,357	289,929
CSFB Strategic Partners II, L.P.	2003	300,000,000	261,378,264	435,730,360
CSFB Strategic Partners III-B, L.P.	2005	200,000,000	211,538,819	101,784,122
CVC Capital Partners Asia Pacific III, L.P.	2008	300,000,000	172,202,970	46,662,533
CVC European Equity Partners V (A), L.P.	2008	388,800,000	260,642,561	42,089,863
DLJ Merchant Banking Partners III, L.P.	2000	300,000,000	305,190,754	569,646,767
DLJ Strategic Partners	2001	200,000,000	190,167,557	285,684,631
Dubin Clark Fund II, L.P.	2000	24,083,333	23,685,569	15,278,223
Edgewater Growth Capital Partners, L.P.	2001	59,196,500	58,604,535	63,233,219
Edgewater Private Equity Fund III, L.P.	1998	39,000,000	39,000,000	19,533,028
Evergreen Pacific Partners, L.P.	2004	50,000,000	32,275,442	1,807,679

<sup>\*</sup>Includes capital contributions for management fees, late interest, etc. that are not applied to the capital commitments.

## **Summary of PSERS' Active Private Market Investments Committed, Drawn, and Distributed (unaudited)**

(as of December 31, 2011) (continued)

Partnership Name	Vintage	Capital	Capital	Dis4
Private Equity (continued):	<u>Year</u>	<u>Committed</u>	<u>Drawn</u>	Distributions*
Evergreen Pacific Partners II, L.P.	2008	\$ 80,954,545	\$ 19,391,482	\$ -
First Reserve Fund XI, L.P.	2006	200,000,000	192,514,139	49,499,638
First Reserve Fund XII, L.P.	2008	250,000,000	175,956,410	10,057,098
Furman Selz Investors III L.P.	2000	100,000,000	85,443,338	193,369,077
Graham Partners	1999	56,671,214	60,347,748	50,583,990
Green Equity Investors II	1994	25,000,000	24,151,005	50,916,127
Greenpark International Investors III L.P.	2007	129,600,000	125,304,172	35,674,818
Greenwich Street Capital Partners II	1998	200,000,000	192,779,634	185,083,682
Halifax Capital Partners	1999	50,000,000	39,575,503	54,061,711
Headland Private Equity Fund 6 L.P., The	2008	200,000,000	102,950,733	23,923,124
Incline Equity Partners III (PSERS), L.P.	2011	24,216,667	-	-
Irving Place Capital Partners II L.P.	2000	300,000,000	281,223,791	381,187,911
Irving Place Capital Partners III L.P.	2006	150,000,000	116,523,038	8,702,301
Jefferies Capital Partners IV, L.P.	2005	100,000,000	80,365,958	(6,917,390)
KKR 2006 Fund L.P.	2006	300,000,000	284,654,110	71,104,292
KRG Capital Fund II	2001	100,000,000	79,553,046	115,186,428
KRG Capital Fund III, L.P.	2005	88,000,000	80,779,783	26,862,831
KRG Capital Fund IV L.P.	2007	300,000,000	174,561,376	12,580,331
Landmark Equity Partners III, L.P.	1993	27,085,010	27,085,010	76,154,348
Landmark Equity Partners IV, L.P.	1994	10,533,687	10,242,502	15,305,000
Landmark Equity Partners XIII, L.P.	2006	100,000,000	91,095,300	50,124,310
Landmark Equity Partners XIV, L.P.	2008	150,000,000	57,515,777	12,507,896
Landmark Mezzanine Partners	1995	75,000,000	59,315,512	106,599,975
Lexington Capital Partners I, L.P.	1996	50,000,000	49,613,120	62,882,209
Lindsay Goldberg & Bessemer L.P.	2002	300,000,000	310,118,412	579,017,025
Milestone Partners II, L.P.	2004	29,890,000	26,375,867	33,456,236
Milestone Partners III, L.P.	2008	60,000,000	50,696,300	1,814,905
Milestone Partners IV, L.P.	2011	24,289,655	7,387,517	-
Morgan Stanley Dean Witter Cap Ptrs IV, L.P.	1998	300,000,000	227,851,338	451,687,488
Navis Asia Fund V, L.P.	2007	100,000,000	109,160,256	27,812,924
New Mountain Partners III L.P.	2007	300,000,000	202,541,398	43,242,492
New Mountain Partners L.P.	2000	192,509,033	161,272,026	220,235,427
New York Life Capital Partners I, L.P.	1999	200,000,000	204,678,699	193,349,617
New York Life Capital Partners II, L.P.	2001	200,000,000	193,279,467	465,475,498
New York Life Capital Partners III-A, L.P.	2005	200,000,000	201,897,535	32,748,274
New York Life Capital Partners IV-A. L.P.	2008	100,000,000	80,625,633	7,891,192
NGP Natural Resources X, L.P.	2012	100,000,000	-	-
Nordic Capital VII Beta L.P.	2008	194,400,000	132,000,076	2,674,699

<sup>\*</sup>Includes capital contributions for management fees, late interest, etc. that are not applied to the capital commitments.

## **Summary of PSERS' Active Private Market Investments Committed, Drawn, and Distributed (unaudited)**

(as of December 31, 2011) (continued)

Partnership Name	Vintage	Capital	Capital	Distributions*
Private Equity (continued):	<u>Year</u>	Committed	<u>Drawn</u>	<u>Distributions*</u>
Orchid Asia V, L.P.	2011	\$ 40,000,000	\$ 5,185,973	\$ -
PAI Europe III, L.P.	2001	388,800,000	333,547,528	1,064,878,898
PAI Europe IV-B2, L.P.	2005	129,600,000	124,838,417	122,512,443
PAI Europe V, L.P.	2007	129,600,000	95,936,978	(12,048)
Palladium Equity Partners II-A, L.P.	2000	57,750,000	61,770,514	40,822,260
Partners Group Secondary 2008, L.P.	2007	194,400,000	166,349,630	25,222,237
Permira IV, L.P.	2006	162,000,000	141,356,168	13,486,786
Platinum Equity Capital Partners - A, L.P.	2004	125,000,000	97,431,167	214,632,622
Platinum Equity Capital Partners-A II, L.P.	2007	300,000,000	269,303,547	96,045,869
PNC Equity Partners II, L.P.	2006	68,065,386	52,293,057	14,943,263
PNC Equity Partners, L.P.	2001	43,154,458	39,308,591	71,004,272
Providence Equity Partners VI, L.P.	2006	300,000,000	280,810,477	42,571,707
Quadrangle Capital Partners II, L.P.	2005	250,000,000	208,281,759	68,776,899
Quadrangle Capital Partners, L.P.	2001	270,422,415	222,477,734	318,688,355
Sterling Capital Partners, L.P.	2002	75,000,000	84,229,630	124,548,732
TPG Partners II, L.P.	1997	50,000,000	53,854,393	91,361,723
TPG Partners V, L.P.	2006	250,000,000	254,565,228	64,410,006
TPG Partners VI, L.P.	2008	360,000,000	241,518,112	35,992,069
Trilantic Capital Partners IV L.P.	2007	76,752,676	62,252,912	24,906,174
U.S. Equity Partners II	2001	300,000,000	222,012,175	202,215,242
Wicks Communications and Media Partners, L.P.	1999	87,500,000	88,878,287	104,929,461
Willis Stein & Partners, L.P.	1996	25,000,000	25,000,000	53,576,381
Total Private Equity		\$15,408,977,805	\$12,465,665,125	\$10,171,214,154

<sup>\*</sup>Includes capital contributions for management fees, late interest, etc. that are not applied to the capital commitments. Numbers may not add due to rounding.

## **Summary of PSERS' Active Private Market Investments Committed, Drawn, and Distributed (unaudited)**

(as of December 31, 2011) (continued)

Partnership Name Venture Capital	Vintage <u>Year</u>	Capital <u>Committed</u>	Capital <u>Drawn</u>	Distributions*
Adams Capital Management, L.P.	1997	\$ 12,500,000	\$ 12,500,000	\$ 22,671,838
Aisling Capital II L.P.	2006	50,000,000	45,165,190	9,445,447
Aisling Capital III, L.P.	2008	50,000,000	14,373,375	-
Co-Investment 2000 Fund, L.P.	2000	135,000,000	135,000,000	157,534,552
Co-Investment Fund II, L.P.	2006	135,000,000	106,650,000	-
Cross Atlantic Technology Fund II	2001	21,119,734	21,119,734	12,114,382
Cross Atlantic Technology Fund, L.P.	1999	30,141,666	30,141,667	32,521,161
CS Strategic Partners IV VC, L.P.	2008	50,000,000	50,512,470	10,894,657
CSFB Strategic Partners III-VC, L.P.	2005	50,000,000	50,226,294	30,156,862
Franklin Capital Partners III	1995	15,000,000	15,000,000	12,611,460
Jefferson Partners Fund IV (PA) L.P.	2003	28,700,187	24,176,870	200,195
KBL Healthcare Ventures	1999	13,593,334	13,593,333	6,563,009
Landmark Equity Partners II, L.P.	1992	25,000,000	25,000,000	39,039,687
Landmark Equity Partners V, L.P.	1995	49,060,283	48,478,943	58,700,790
LLR Equity Partners II, L.P.	2004	75,000,000	75,000,000	54,407,799
LLR Equity Partners III, L.P.	2008	187,500,000	122,498,631	31,875,441
LLR Equity Partners, L.P.	1999	62,500,000	61,250,000	129,535,601
NEPA Venture Fund II	1992	5,000,000	5,000,000	23,252,576
Novitas Capital, L.P.	1998	30,000,000	29,922,000	32,767,641
Novitas Capital II, L.P.	2000	75,000,000	74,400,000	15,330,009
P/A Fund	1993	30,000,000	30,000,000	66,195,394
Perseus-Soros BioPharmaceutical Fund	2001	112,206,666	104,211,563	156,937,995
Psilos Group Partners III, L.P.	2007	62,500,000	49,374,999	2,615,688
Quaker BioVentures II, L.P.	2007	100,000,000	53,999,125	9,575,528
Quaker Bio-Ventures, L.P.	2003	69,350,000	69,350,000	13,712,630
SCP Private Equity Partners I, L.P.	1996	62,500,000	62,500,000	42,080,342
SCP Private Equity Partners II, L.P.	2000	125,000,000	125,887,548	24,134,558
StarVest Partners , L.P.	1999	67,500,000	65,649,343	62,498,699
StarVest Partners II (Parallel), L.P.	2007	50,000,000	25,160,384	201,996
Sterling Venture Partners, L.P.	2000	33,986,000	35,554,923	30,643,349
TDH III, L.P.	1993	7,350,750	7,350,750	4,780,305
Tenaya Capital IV-P, L.P.	2003	75,000,000	71,642,910	47,461,790
Tenaya Capital V-P, L.P.	2007	75,000,000	56,671,018	16,106,537
TL Ventures III, L.P	1997	50,000,000	50,000,000	69,241,353
Total Venture Capital		\$ 2,020,508,620	\$ 1,767,361,070	\$ 1,225,809,273

<sup>\*</sup>Includes capital contributions for management fees, late interest, etc. that are not applied to the capital commitments. Numbers may not add due to rounding.

## **Summary of PSERS' Active Private Market Investments Committed, Drawn, and Distributed (unaudited)**

(as of December 31, 2011) (continued)

Partnership Name Private Debt:	Vintage <u>Year</u>	Capital <u>Committed</u>	Capital <u>Drawn</u>	Distributions*
Avenue Asia Special Situations Fund II, L.P.	2001	\$ 220,000,000	\$ 220,000,000	\$ 385,951,359
Avenue Asia Special Situations Fund III, L.P.	2003	100,000,000	76,892,230	73,629,536
Avenue Asia Special Situations Fund IV, LP	2006	300,000,000	224,960,884	97,387,672
Avenue Europe Special Situations Fund, L.P.	2008	259,200,000	260,544,328	244,763,790
Avenue Special Situations Fund III, L.P.	2002	205,156,000	151,715,376	258,577,487
Avenue Special Situations Fund IV, L.P.	2005	115,000,000	144,782,669	175,164,641
Avenue Special Situations Fund V, L.P.	2007	300,000,000	300,000,000	365,316,733
Avenue Special Situations Fund VI, L.P.	2011	75,000,000	60,531,650	(1,892,726)
Cerberus Institutional Partners, L.P. (Series 2)	2001	200,000,000	172,004,532	423,486,798
Cerberus Institutional Partners, L.P. (Series 3)	2003	100,000,000	81,000,000	82,508,005
Cerberus Institutional Partners, L.P. (Series 4)	2006	400,000,000	369,377,151	15,795,948
Gleacher Mezzanine Fund II, L.P.	2006	100,000,000	67,254,246	27,240,936
Gleacher Mezzanine Fund, L.P.	2001	75,000,000	63,450,304	95,306,111
Gold Hill Venture Lending 03-A, L.P.	2004	50,000,000	50,000,000	50,079,483
GSC Partners CDO Investors IV, L.P.	2003	80,000,000	80,000,000	80,000,000
GSC Recovery II, L.P.	2000	280,000,000	279,170,771	366,857,421
GSC Recovery III (Parallel Fund), L.P.	2005	200,000,000	199,461,456	121,355,326
NYLIM Mezzanine Partners (Parallel Fund) L.P.	2003	75,000,000	66,762,905	77,535,594
NYLIM Mezzanine Partners II (Parallel Fund) LP	2006	150,000,000	161,433,929	113,672,075
OCM Opportunities Fund VII L.P.	2007	75,000,000	75,000,000	41,669,310
OCM Opportunities Fund VII-b L.P.	2008	225,000,000	202,500,000	138,712,500
Versa Capital Fund I, L.P.	2005	75,000,000	79,875,000	52,363,350
Versa Capital Fund II, L.P.	2008	150,000,000	56,250,000	2,016,831
Windjammer Senior Equity Fund III, L.P.	2006	50,000,000	39,173,566	26,855,445
Total Private Debt		\$ 3,859,356,000	\$ 3,482,140,997	\$ 3,314,353,626
Grand Total		<u>\$21,288,842,425</u>	<u>\$17,715,167,192</u>	<u>\$14,711,377,052</u>

<sup>\*</sup>Includes capital contributions for management fees, late interest, etc. that are not applied to the capital commitments. Numbers may not add due to rounding.

# Summary of PSERS' Cash Investments (as of December 31, 2011)

Cash represents one of eight major asset classes that PSERS uses to diversify the investments of the Fund. PSERS assigned one internal investment manager to management of the cash portfolio.

#### **Policy**

Cash investments are utilized by the Fund primarily to provide sufficient liquidity to meet its obligation to pay member benefits and capital commitments to private market and real estate investments. Cash investments are targeted to be 100% actively managed.

PSERS' Asset Allocation currently targets an allocation of 5.0% of assets to Cash investments.

**Market Value as of December 31, 2011:** \$2,860.7 million, or 6.1% of the Fund's total market value.

Number of External Investment Managers: One.

**Number of Internal Investment Managers:** PSERS had one employee managing a cash portfolio.

# Summary of PSERS' Cash Portfolios (unaudited) (as of December 31, 2011)

<u>Cash</u>	Market Value (in millions)	% of Total <u>Cash</u>	% of <u>Total Fund</u>
Later Holden A. Dough			
Internally Managed Portfolio			
PSERS Proprietary Fund	\$ 2,185.4	76.4%	4.7%
Externally Managed Portfolio			
Bridgewater Associates, Inc.	675.3	23.6%	<u>1.4%</u>
Total Cash	\$ <u>2,860.7</u>	<u>100.0%</u>	<u>6.1%</u>

Numbers may not add due to rounding.



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## Summary of Investment Advisory Fees Fiscal Year Ended June 30, 2011 (Dollar Amounts in Thousands)

	<u>Fees</u>	Basis <u>Points</u>
External Management		
U.S. Equity	\$ 4,926	56
Non - U.S. Equity	30,002	60
Fixed Income	65,444	83
Commodities	16,610	71
Absolute Return	138,931	199
Real Estate	87,293	103
Alternative Investments	<u>156,980</u>	105
Total External Management	500,186	107
Total Internal Management	9,790	6
<b>Total Investment Management</b>	\$ <u>509,976</u>	82
Custodian Fees	600	
Consultant and Legal Fees	4,119	
<b>Total Investment Expenses</b>	\$ <u>514,695</u>	83

# Investment Advisory Fees Fiscal Years Ended June 30, 2006 - 2010 (Dollar Amounts in Thousands)

Fiscal <u>Year</u>	<u>Fees</u>	Basis <u>Points</u>
2006	211,279	35
2007	313,758	41
2008	399,136	47
2009	477,565	70
2010	522,315	82

## Investment Managers' Fees Fiscal Year Ended June 30, 2011

(Dollar Amounts in Thousands)

 $E_{administrative\ expense.}^{xternal\ Management\ fees\ are\ treated\ as\ a\ reduction\ of\ the\ investment\ revenue\ of\ the\ Fund\ rather\ than\ as\ a\ budgeted$ 

Manager	Location		<u>Amount</u>
U.S. Equity			
AH Lisanti Capital Growth, L.L.C.	New York	NY	\$ 197
Ativo Capital Management, L.L.C.	Chicago	IL	100
Biondo Group, L.L.C. (The)	Milford	PA	26
Conestoga Capital Advisors, Inc.	Radnor	PA	252
Donald Smith & Co., Inc.	New York	NY	140
EDMP, Inc.	Tampa	FL	167
Emerald Advisors, Inc.	Lancaster	PA	15
First Pacific Advisors, Inc.	Los Angeles	CA	1,798
Hanseatic Management Services, Inc.	Albuquerque	NM	40
Harvest Fund Advisors, L.L.C.	Wayne	PA	620
Hellman, Jordan Management Company, Inc.	Boston	MA	160
NorthPointe Capital, L.L.C.	Troy	MI	651
Oberweis Asset Management, Inc.	North Aurora	IL	209
Opus Capital Management, Inc.	Cincinnati	ОН	233
Thomson Horstmann & Bryant, Inc.	Saddle Brook	NJ	178
Turner Investment Partners, Inc.	Berwyn	PA	140
Total - U.S. Equity			4,926
Non - U.S. Equity			
Acadian Asset Management	Boston	MA	751
Baillie Gifford Overseas Ltd.	Edinburgh	UK	2,662
Batterymarch Financial Management, Inc.	Boston	MA	1,479
BlackRock Financial Management, Inc.	Boston	MA	11,654
Boston Company Asset Management, L.L.C.	Boston	MA	316
GlobeFlex Capital, L.P.	San Diego	CA	120
John Hsu Capital Group, Inc.	New York	NY	304
Marathon Asset Management Limited	London	UK	1,536
Martin Currie, Inc.	Edinburgh	UK	277
Mercator Asset Management, L.P.	Ft. Lauderdale	FL	315
Munder Capital Management	Birmingham	MI	132
Oberweis Asset Management, Inc.	North Aurora	IL	837

## Investment Managers' Fees Fiscal Year Ended June 30, 2011

<u>Manager</u>	<b>Location</b>		Amount
Non - U.S. Equity (continued)			
Pareto Investment Management, Ltd.	New York	NY	\$ 1,851
Pyramis Global Advisors	Boston	MA	944
Shah Capital Management, Inc.	Raleigh	NC	929
Templeton Investment Counsel, Inc.	Nassau	Bahamas	570
Wasatch Advisors, Inc.	Salt Lake City	UT	3,339
Wellington Management Company, L.L.P.	Boston	MA	1,100
Westwood Global Investments, L.L.C.	Boston	MA	597
William Blair & Company, L.L.C.	Chicago	IL	289
Total - Non - U.S. Equity			30,002
Fixed Income			
Aberdeen Asset Management, Inc.	Philadelphia	PA	415
BlackRock Financial Management, Inc.	New York	NY	11,077
BlackRock Mortgage (Offshore) Investors, L.P.	New York	NY	5,000
Bridgewater Associates, Inc.	Westport	CT	12,758
Brookfield Asset Management, Inc.	New York	NY	3,001
Fischer Francis Trees & Watts, Inc.	New York	NY	388
Franklin Templeton Investments	Nassau	Bahamas	2,293
LBC Credit Partners II, L.P.	Philadelphia	PA	4,874
MacKay-Shields Financial Corporation	New York	NY	1,573
Mariner Investment Group	Harrison	NY	5,821
Oaktree Loan Fund, L.P.	Los Angeles	CA	1,520
Pacific Investment Management Company (PIMCO)	Newport Beach	CA	729
Piedmont Investment Advisors	Durham	NC	116
Pugh Capital Management, Inc.	Seattle	WA	69
Rogge Global Partners	London	UK	460
Sankaty Advisors, L.L.C.	Wilmington	DE	2,939
Sankaty Credit Opportunities IV, L.P.	Wilmington	DE	9,229
Sankaty Middle Markets Opportunity Fund	Wilmington	DE	348
Stone Harbor Investment Partners, L.P.	New York	NY	2,300
TCW Credit Opportunities Fund, L.P.	Dover	DE	15
Western Asset Management Company	Pasadena	CA	519
Total - Fixed Income			65,444

## Investment Managers' Fees Fiscal Year Ended June 30, 2011

<u>Manager</u>	<b>Location</b>		Amount
Commodities			
Credit Suisse Asset Management, L.L.C.	New York	NY	\$ 636
Deutsche Asset Management Americas, Inc.	New York	NY	3,619
Neuberger Berman Alternative Fund Mgmt., L.L.C.	New York	NY	3,047
Schroder Investment Management North America, Inc.	New York	NY	3,478
Wellington Management Company, L.L.P.	Boston	MA	_5,830
Total - Commodities			16,610
Absolute Return			
Acorn Derivatives Management Corporation	White Plains	NY	397
AQR Capital Management, L.L.C.	Greenwich	CT	12,476
BlackRock Financial Management, Inc.	San Francisco	CA	24,944
Boston Company Asset Management, L.L.C.	Boston	MA	3,922
Brevan Howard Fund, Ltd.	George Town	Cayman Islands	8,108
Bridgewater Associates, Inc.	Westport	CT	22,006
Brigade Capital Management, L.L.C.	New York	NY	23,516
Capula Investment Management, L.L.P.	London	UK	2,610
Caspian Capital Advisors, L.L.C.	New York	NY	1,137
Denali Advisors, L.L.C.	San Diego	CA	323
First Quadrant, L.P.	Greenwich	CT	1,927
FX Concepts, Inc.	New York	NY	4,000
Lazard Asset Management	New York	NY	2,987
Pacific Investment Management Company (PIMCO)	Newport Beach	CA	27,232
Pareto Investment Management, Ltd.	London	UK	3,200
Zacks Investment Management	Chicago	IL	146
Total - Absolute Return			138,931
Real Estate-Publicly Traded			
Morgan Stanley Investment Management, Inc.	New York	NY	14
Subtotal - Real Estate-Publicly Traded			14

## **Investment Managers' Fees Fiscal Year Ended June 30, 2011**

<u>Manager</u>	<b>Location</b>		<u>Amount</u>
Real Estate-Direct Ownership			
Charter Oak Advisors, Inc.	King of Prussia	PA	\$ 753
GF Management, Inc.	Philadelphia	PA	131
Grandbridge Real Estate Capital, L.L.C.	Charlotte	NC	3
Grosvenor Investment Management U.S., Inc.	Philadelphia	PA	21
L & B Realty Advisors, L.L.P.	Dallas	TX	41
Subtotal - Real Estate-Direct Ownership			949
Real Estate-Partnerships/Funds			
Apollo European Real Estate Fund III, L.P.	Purchase	NY	1,723
Apollo Real Estate Finance Corporation	New York	NY	1,614
Apollo Value Enhancement Fund VII, L.P.	Purchase	NY	6,911
AREFIN Co-Invest Corporation	New York	NY	349
AvalonBay Value Added Fund, L.P.	Alexandria	VA	883
AvalonBay Value Added Fund II, L.P.	Alexandria	VA	416
Avenue Real Estate Fund Parallel, L.P.	New York	NY	1,250
Beacon Capital Strategic Partners V, L.P.	Boston	MA	2,338
Berwind Investment Partnership V, L.P.	Philadelphia	PA	176
Berwind Investment Partnership VI, L.P.	Philadelphia	PA	331
Blackstone Real Estate Partners Europe III, L.P.	New York	NY	3,471
Blackstone Real Estate Partners V.TE.1, L.P.	New York	NY	1,951
Blackstone Real Estate Partners VI.TE.1, L.P.	New York	NY	4,971
BPG Co-Investment Partnership, L.P.	Philadelphia	PA	188
Broadway Partners Parallel Fund P II, L.P.	New York	NY	542
Broadway Partners Parallel Fund P III, L.P.	New York	NY	618
Cabot Industrial Value Fund III, L.P.	Boston	MA	1,612
Carlyle Europe Real Estate Partners III-A, L.P.	Washington	DC	2,144
Carlyle Realty Partners III, L.P.	Washington	DC	162
Carlyle Realty Partners IV, L.P.	Washington	DC	1,102
Carlyle Realty Partners V, L.P.	Washington	DC	2,875
Cornerstone Patriot Fund, L.P.	Hartford	CT	635
CS Strategic Partners IV RE, L.P.	New York	NY	563
CSFB Strategic Partners II RE, L.P.	New York	NY	146
CSFB Strategic Partners III RE, L.P.	New York	NY	41
DLJ Real Estate Capital Partners II, L.P.	New York	NY	220

## Investment Managers' Fees Fiscal Year Ended June 30, 2011

Manager	<b>Location</b>		Amour
Real Estate-Partnerships/Funds (continued)			
DLJ Real Estate Capital Partners III, L.P.	New York	NY	\$ 1,13
DLJ Real Estate Capital Partners IV, L.P.	New York	NY	3,12
DRA Growth and Income Fund VI, L.P.	New York	NY	2,51
Fillmore West Fund, L.P.	San Francisco	CA	86
Five Arrows Realty Securities V, L.P.	New York	NY	42
Fortress Investment Fund IV, L.P.	New York	NY	69
Fortress Investment Fund V (Fund A), L.P.	New York	NY	1,99
Hines U.S. Office Value Added Fund, L.P.	Houston	TX	51
JPMCB Strategic Property Fund	New York	NY	17
LCCG High Yield CMBS Fund III, L.L.C.	Irving	TX	(44
LCCG RE Special Situations Mortgage Fund, L.L.C.	Irving	TX	(335
Legg Mason Real Estate Capital, Inc.	Los Angeles	CA	12
Legg Mason Real Estate Capital II, Inc.	Los Angeles	CA	1,21
LEM Real Estate Mezzanine Fund II, L.P.	Philadelphia	PA	93
LF Strategic Realty Investors II, L.L.C.	New York	NY	82
Lubert-Adler Real Estate Fund II, L.P.	Philadelphia	PA	1
Lubert-Adler Real Estate Fund IV, L.P.	Philadelphia	PA	1,46
Lubert-Adler Real Estate Fund V, L.P.	Philadelphia	PA	1,13
Lubert-Adler Real Estate Fund VI, L.P.	Philadelphia	PA	3,09
Madison Marquette Retail Enhancement Fund, L.P.	Washington	DC	76
MGPA Asia Fund III, L.P.	Hamilton	Bermuda	2,08
MGPA Europe Fund III, L.P.	London	UK	1,92
Morgan Stanley Real Estate Fund IV Special Dom., L.P.	New York	NY	12
Morgan Stanley Real Estate Fund IV Special Int'l, L.P.	New York	NY	23
Morgan Stanley Real Estate Fund V Special Int'l, L.P.	New York	NY	82
Morgan Stanley Real Estate Fund V Special U.S., L.P.	New York	NY	14
Morgan Stanley Real Estate Fund VI Special Int'l, L.P.	New York	NY	2,33
Morgan Stanley Real Estate Fund VII Global, L.P.	New York	NY	51
O' Connor North American Property Partners, L.P.	New York	NY	1,07
O' Connor North American Property Partners II, L.P.	New York	NY	1,59
Paladin Realty Latin America Investors III, L.P.	Los Angeles	CA	1,67
Peabody Global Real Estate Partners, L.P.	New York	NY	3
Prime Property Fund, L.L.C.	New York	NY	39
PRISA	Parsippany	NJ	68
ProLogis North American Industrial Fund, L.P.	Denver	CO	1,67
RCG Longview Debt Fund IV, L.P.	New York	NY	2,06

<sup>()</sup> Represents reversal of amount accrued in prior fiscal year.

## Investment Managers' Fees Fiscal Year Ended June 30, 2011

Manager	Location		<u>Amount</u>
Peal Fetete Partmarshing/Funds (continued)			
Real Estate-Partnerships/Funds (continued)	New York	NIN	¢ 501
RCG Longview Equity Fund, L.P.		NY	\$ 591
RREEF America REIT II, Inc.	Chicago	IL NY	31
Silverpeak Legacy Pension Partners II, L.P.	New York	NY	1,554
Silverpeak Legacy Pension Partners III, L.P.	New York	NY	1,212
Silverpeak/PSERS Real Estate, L.P.	New York	NY	660
Stockbridge Real Estate Fund, L.P.	New York	NY	2,090
Stockbridge Real Estate Fund II, L.P.	New York	NY	1,111
Stockbridge Real Estate Fund III, L.P.	New York	NY	1,877
Strategic Partners Value Enhancement Fund, L.P.	Los Angeles	CA	752
UBS (US) Trumbull Property Fund, L.P.	Hartford	CT	632
Whitehall Street Real Estate L.P. VII &VIII	New York	NY	10
William E. Simon & Sons Realty Partners, L.P.	Los Angeles	CA	<u>373</u>
Subtotal - Real Estate-Partnerships/Funds			86,148
Real Estate-Farmland			
Prudential Agricultural Group	Lisle	IL	<u> 182</u>
Subtotal - Real Estate-Farmland			182
Total Real Estate			87,293
Private Equity			
ABS Capital Partners II, L.P.	Baltimore	MD	9
Actis Emerging Markets 3, L.P.	London	UK	4,000
Allegheny New Mountain Partners, L.P.	New York	NY	494
Apax Europe VII-B, L.P.	St. Peter Port	Guernsey	2,918
Baring Asia Private Equity Fund III, L.P.	Hong Kong	China	2,149
Baring Asia Private Equity Fund IV, L.P.	Hong Kong	China	6,098
Baring Asia Private Equity Fund V, L.P.	Hong Kong	China	2,333
Blue Point Capital Partners II (B), L.P.	Cleveland	ОН	784
Bridgepoint Europe II-A, L.P.	London	UK	1,131
Bridgepoint Europe III-A, L.P.	London	UK	1,826
Bridgepoint Europe IV, L.P.	London	UK	5,533
Capital International Private Equity Fund V, L.P.	San Francisco	CA	2,238
Capital International Private Equity Fund VI, L.P.	San Francisco	CA	125
Catterton Growth Partners, L.P.	Greenwich	CT	1,049
Catterton Partners V, L.P.	Greenwich	CT	882
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## Investment Managers' Fees Fiscal Year Ended June 30, 2011

Manager	<b>Location</b>		<u>Amount</u>
Private Equity (continued)			
Catterton Partners VI, L.P.	Greenwich	СТ	\$ 1,917
Cinven Fund (Fourth), L.P. (The)	London	UK	2,341
Clarity Partners, L.P.	Beverly Hills	CA	1,463
Clarity Partners II, L.P.	Beverly Hills	CA	348
Credit Suisse First Boston Equity Partners, L.P.	New York	NY	65
Credit Suisse First Boston Int'l Equity Partners, L.P.	New York	NY	6
Crestview Capital Partners, L.P.	New York	NY	1,915
Crestview Partners II (PF), L.P.	New York	NY	3,459
CS Strategic Partners IV, L.P.	New York	NY	750
CSFB Strategic Partners II, L.P.	New York	NY	779
CSFB Strategic Partners III-B, L.P.	New York	NY	500
CVC Capital Partners Asia III Pacific, L.P.	George Town	Cayman Islands	3,416
CVC European Equity Partners V (A), L.P.	George Town	Cayman Islands	3,879
DLJ Merchant Banking Partners III, L.P.	New York	NY	379
DLJ Strategic Partners, L.P.	New York	NY	500
Edgewater Growth Capital Partners, L.P.	Chicago	IL	153
Edgewater Private Equity Fund III, L.P.	Chicago	IL	189
Evergreen Pacific Partners, L.P.	Seattle	WA	86
Evergreen Pacific Partners II, L.P.	Seattle	WA	1,186
First Reserve Fund XI, L.P.	Greenwich	CT	1,253
First Reserve Fund XII, L.P.	Greenwich	CT	3,027
Graham Partners Investments (B), L.P.	Newtown Square	PA	120
Greenpark International Investors III, L.P.	London	UK	1,285
Greenwich Street Capital Partners II, L.P.	New York	NY	15
Halifax Capital Partners, L.P	Wilmington	DE	28
Headland Private Equity Fund 6, L.P.	George Town	Cayman Islands	3,460
Irving Place Capital Partners III, L.P.	New York	NY	2,032
Jefferies Capital Partners IV, L.P.	New York	NY	836
KKR 2006 Fund, L.P.	New York	NY	2,938
Landmark Equity Partners XIII, L.P.	Simsbury	CT	1,000
Landmark Equity Partners XIV, L.P.	Simsbury	CT	1,396
Landmark Mezzanine Partners, L.P.	Simsbury	СТ	11
Lindsay Goldberg & Bessemer, L.P.	New York	NY	571
Milestone Partners III, L.P.	Rosemont	PA	637
Morgan Stanley Dean Witter Capital Partners IV, L.P.	New York	NY	189
Navis Asia Fund V, L.P.	Kuala Lumpur	Malaysia	1,462

## Investment Managers' Fees Fiscal Year Ended June 30, 2011

Manager	<b>Location</b>		Amount
Private Equity (continued)			
New Mountain Partners, L.P.	New York	NY	\$ 192
New Mountain Partners III, L.P.	New York	NY	4,060
New York Life Capital Partners, L.P.	New York	NY	245
New York Life Capital Partners II, L.P.	New York	NY	550
New York Life Capital Partners III, L.P.	New York	NY	2,000
New York Life Capital Partners IV, L.P.	New York	NY	1,000
Nordic Capital VII Beta L.P.	St. Helier	Guernsey	3,227
PAI Europe III, L.P.	Paris	France	906
PAI Europe IV, L.P.	Paris	France	1,147
PAI Europe V, L.P.	St. Peter Port	Guernsey	1,960
Palladium Equity Partners II-A, L.L.C.	New York	NY	87
Partners Group Secondary 2008, L.P.	St. Peter Port	Guernsey	2,610
Permira IV, L.P.	London	UK	2,297
PNC Equity Partners, L.P.	Pittsburgh	PA	59
PNC Equity Partners II, L.P.	Pittsburgh	PA	170
Providence Equity Partners VI, L.P.	Providence	RI	1,534
Quadrangle Capital Partners, L.P.	New York	NY	575
Quadrangle Capital Partners II, L.P.	New York	NY	2,359
Sterling Capital Partners, L.P.	Northbrook	IL	540
TPG Partners V, L.P.	Fort Worth	TX	788
TPG Partners VI, L.P.	Fort Worth	TX	2,797
Trilantic Capital Partners IV, L.P.	New York	NY	1,153
US Equity Partners II, L.P.	New York	NY	822
Wicks Communications & Media Partners L.P.	New York	NY	467
Subtotal - Private Equity			106,705
Private Debt			
Avenue Asia Special Situations Fund III, L.P.	New York	NY	157
Avenue Asia Special Situations Fund IV, L.P.	New York	NY	3,581
Avenue Europe Special Situations Fund, L.P.	New York	NY	4,176
Avenue Special Situations Fund IV, L.P.	New York	NY	555
Avenue Special Situations Fund V, L.P.	New York	NY	3,071
Avenue Special Situations Fund VI, L.P.	New York	NY	224
Cerberus Institutional Partners, L.P. (Series Two)	New York	NY	306

## Investment Managers' Fees Fiscal Year Ended June 30, 2011

<u>Manager</u>	<b>Location</b>		<u>Amount</u>
Private Debt (continued)			
Cerberus Institutional Partners, L.P. (Series Three)	New York	NY	\$ 627
Cerberus Institutional Partners, L.P. (Series Four)	New York	NY	5,615
Gleacher Mezzanine Fund, L.P.	New York	NY	57
Gleacher Mezzanine Fund II, L.P.	New York	NY	1,320
Gold Hill Venture Lending 03-A, L.P.	Santa Clara	CA	218
GSC Partners CDO Investors IV, L.P.	New York	NY	1,302
GSC Recovery III, L.P.	New York	NY	1,611
NYLIM Mezzanine Partners Parallel Fund, L.P.	New York	NY	198
NYLIM Mezzanine Partners Parallel Fund II, L.P.	New York	NY	1,875
OCM Opportunities Fund VII, L.P.	Los Angeles	CA	1,047
OCM Opportunities Fund VII-B, L.P.	Los Angeles	CA	3,293
Versa Capital Fund, L.P.	Philadelphia	PA	1,097
Versa Capital Fund II, L.P.	Philadelphia	PA	831
Windjammer Senior Equity Fund III, L.P.	Newport Beach	CA	582
Subtotal - Private Debt	•		31,743
Venture Capital			
Aisling Capital II, L.P.	New York	NY	564
Aisling Capital III, L.P.	New York	NY	916
Co-Investment 2000 Fund, L.P. (The)	Radnor	PA	239
Co-Investment Fund II, L.P. (The)	Radnor	PA	1,341
Cross Atlantic Technology Fund, L.P.	Radnor	PA	61
Cross Atlantic Technology Fund II, L.P.	Radnor	PA	71
CS Strategic Partners IV VC, L.P.	New York	NY	375
CSFB Strategic Partners III-VC, L.P.	New York	NY	333
Franklin Capital Associates III, L.P.	Franklin	TN	66
Jefferson Partners Fund IV, L.P.	Toronto	Canada	414
KBL Partnership, L.P.	New York	NY	195
LLR Equity Partners, L.P.	Philadelphia	PA	233
LLR Equity Partners II, L.P.	Philadelphia	PA	903
LLR Equity Partners III, L.P.	Philadelphia	PA	3,282
Novitas Capital, L.P.	Wayne	PA	115
Perseus-Soros BioPharmaceutical Fund, L.P.	New York	NY	514
Psilos Group Partners III, L.P.	New York	NY	1,116
Quaker BioVentures, L.P.	Philadelphia	PA	1,243
Quaker BioVentures II, L.P.	Philadelphia	PA	1,989

## **Investment Managers' Fees Fiscal Year Ended June 30, 2011**

(Dollar Amounts in Thousands) (continued)

Manager	Location		Amount
Venture Capital (continued)			
SCP Private Equity Partners II, L.P.	Wayne	PA	\$ 1,031
Starvest Partners II, L.P.	New York	NY	1,288
Sterling Venture Partners, L.P.	Baltimore	MD	243
Tenaya Capital IV-P, L.P.	New York	NY	687
Tenaya Capital V-P, LP	New York	NY	<u>1,313</u>
Subtotal - Venture Capital			18,532
Total Alternative Investments			156,980
Total External Management			500,186
Total Internal Management			<u>9,790</u> *
Total Investment Management			\$ <u>509,976</u>

<sup>\*</sup>Internal Management fees include salaries and fringe benefits of \$4,490 and operating expenses of \$5,300.



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## **Internal Equity Trading Desk**

One of the benefits of managing a significant amount of assets internally is that PSERS can have its own trading desk. A majority of the U.S. equity trades for the Fund are executed by PSERS' internal trading desk. The internal U.S. equity managers as well as a number of the external U.S. equity managers utilize the trading desk to execute trades. The objectives of PSERS' internal trading desk include:

- to obtain best execution;
- to pay the lowest possible commissions consistent with obtaining best execution; and
- to provide market information/data to portfolio managers

The trading desk provides PSERS with access to information on the markets from sell-side brokers and monitoring business news services which helps in the management of the investments of the Fund. The trading desk also provides portfolio transition management services to the System. When equity portfolio managers are terminated, the trading desk handles the liquidation of the portfolio or the transition from one portfolio manager to another, minimizing the costs of those transitions.

The order flow generated by the trading desk provides the System with access to initial public offerings (IPOs). This can be a source of incremental returns since most IPOs generally trade higher after being issued. This IPO access generated \$1,371,597 in profits for PSERS during the calendar year ending December 31, 2011.

PSERS' trading desk executed approximately 21,000 U.S. and Non-U.S. orders for the purchase and sale of stock, currency, futures, and options during the fiscal year ended June 30, 2011. The total dollar amount of U.S. and Non-U.S. orders traded during the fiscal year ended June 30, 2011 was approximately \$35 billion.



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## PSERS' Public Market Emerging Investment Manager (PMEIM) Program (as of December 31, 2011)

The Public Market Emerging Investment Manager (PMEIM) Program is a sub-section of PSERS' U.S. Equity, Non-U.S. Equity, Absolute Return, and Fixed Income investment classes.

#### **Policy**

Consistent with its fiduciary responsibilities, the Board has established the PMEIM Program to:

- locate and fund managers with successful histories of generating positive alpha with risk commensurate with the alpha generated (positive risk adjusted returns);
- 2. provide a source of potential managers for the main fund; and
- 3. assist public market emerging investment management firms grow through the use of the System's name in the managers' marketing efforts.

The Board has allocated up to \$1 billion to the PMEIM Program. Funding for each investment manager will come from assets allocated within the main fund similar to or most closely related to the investment manager's mandate. The maximum number of investment managers in the program at any one time shall not exceed 25. The program may run with less than 25 investment managers.

Investment managers desiring to participate in the program must meet the following required criteria:

- Firms must be registered under the Investment Advisors Act of 1940 or be exempt therefrom (and will maintain such registration or exemption);
- Firms must provide transparency of positions and transactions;

- Firms must provide at least monthly liquidity;
- Firms, the portfolio manager, or any combination thereof must have a three-year historical, performance record verified by at least one consultant or accounting firm in accordance with the Global Investment Performance Standards (GIPS):
- Firms must have no more than \$1.5 billion of total assets under management when hired (existing investment managers will be terminated within a reasonable period of time from the PMEIM Program when the total assets under management exceeds \$3.0 billion); and
- For performance based fee accounts, the managers must have a hurdle rate and they must exceed this rate to earn the performance-based fee.

Preference will be given to investment managers deemed as able to meet the objectives, goals, and required criteria noted above plus having one or more of the following characteristics:

- Pennsylvania investment management firms headquartered or incorporated within the Commonwealth; and/or
- Minority and/or women-owned investment management firms approved by the Office of Minority and Women Business Enterprise in accordance with the criteria established by Executive Order No. 1987-18 and 4 Pennsylvania Code, Section 68.204.

**Market Value as of December 31, 2011:** \$ 743.1 million or 1.6 % of the total market value of the Fund.

**Number of External Investment Managers:** PSERS had contracts with 14 external investment managers in the PMEIM Program.

## **PSERS' PMEIM Investment Managers**

(Market Value in Millions) (unaudited, as of December 31, 2011)

External Manager	<u>PA-</u>	<u>Based</u>		men- ned	Mino own	•	<u>Ot</u>	<u>her</u>	<u>To</u>	<u>otal</u>
U.S. Equity Large Cap										
Hellman, Jordan Management Co., Inc.							\$	31.7	\$	31.7
EDMP, Inc.			\$	46.5						46.5
U.S. Equity Mid and Small Cap										
AH Lisanti Capital Growth, LLC				56.4						56.4
Conestoga Capital Advisors, Inc.	\$	61.6								61.6
Harvest Fund Advisors, LLC		97.7								97.7
Opus Capital Management, Inc.					\$	61.7				61.7
II S. Fauito Miono Can										
U.S. Equity Micro Cap  Ativo Capital Management, Inc.						19.8				19.8
Ativo Capitai Management, Inc.						19.8				19.8
Non-U.S. Equity Large Cap										
John Hsu Capital Group, Inc.						66.5				66.5
Shah Capital Management, Inc.						39.3				39.3
Non-U.S. Equity Emerging Markets										
Glovista Investments						26.1				26.1
Westwood Global Investments, LLC								61.0		61.0
U.S. Core Plus Fixed Income										
Piedmont Investment Advisors						49.3				49.3
Pugh Capital Management, Inc.						86.1				86.1
Absolute Return										
Denali Advisors, LLC						39.4				39.4
Total PSERS' PMEIM Portfolios	<u>\$</u>	<u>159.3</u>	<u>\$</u>	102.9	<u>\$</u>	388.2	<u>\$</u>	92.7.7	<u>\$</u>	743.1
Percentage by category	i	<u>21.4%</u>		<u>13.9%</u>	à	<u>52.2%</u>		<u>12.5%</u>		





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## Commitment to Pennsylvania-Based Investment Managers (as of December 31, 2011)

The members of the Board and Staff are fiduciaries and must act in the interests of the members of the System and for the exclusive benefit of the System's members. In creating the investment program, the Board hires both external investment managers and internal investment managers. The Board has determined that it is in the best interest of the System to manage assets internally when (1) the System's staff has the proven ability to internally manage portfolios at least as well as the external investment managers, and (2) the cost of investing those assets is no greater than the cost that would have been incurred to have those assets externally managed. The Board will also consider the diversification benefits that may be achieved by allocating assets to external portfolio managers even when conditions (1) and (2) are met.

The Board evaluates external mangers based on a variety of factors, including, (1) their expected future performance; (2) their investment philosophy and style; (3) their investment process; (4) their personnel; (5) cost; and (6) how their philosophy and style fits in with the existing investment structure. In selecting external managers, PSERS will show preference to Pennsylvania-based potential managers that demonstrate similar strengths to alternative managers without a Pennsylvania nexus.

PSERS has shown a tremendous commitment to Pennsylvania's financial services industry by having assets managed by firms based in Pennsylvania or by firms with offices in Pennsylvania. The following is a list of both the assets managed internally by PSERS and externally from offices located in Pennsylvania, as of December 31, 2011:

Pennsylvania-Based Manager	Market Value (in millions,	
Internal Management		
US. Equity:		
S&P 500 Index	\$ 3,816.3	8.1%
S&P 400 Index	267.6	0.6%
S&P 600 Index	230.2	2 0.5%
Non-U.S. Equity:		
ACW ex-U.S. Index	3,756.6	8.0%
World X-U.S. Small Cap	201.4	0.4%
Fixed Income:		
PSERS TIPS	1,479.5	3.1%
PSERS Active Aggregate	1,251.8	3 2.7%
Cash & Cash Equivalents:		
STIF	2,185.4	4.7%
Total Internal Management	13,188.8	3 27.9%
External Management		
U.S. Equity:		
Conestoga Capital Advisors	61.6	0.1%
Fixed Income:		
LBC Credit Partners II, LP	154.2	0.3%
Real Estate:		
BPG Co-Investment Partnership, LP	15.6	0.0%
BPG Investment Partnership VI, LP	35.2	0.1%
BPG Investment Partnership V	16.8	3 0.0%
Charter Oak Advisors, Inc.	112.6	0.2%

# Commitment to Pennsylvania-Based Investment Managers (as of December 31, 2011) (continued)

Pennsylvania-Based Manager	Market Value (in millions)	Percentage of the Fund
Real Estate (continued)		
GF Management, Inc.	\$ 55.2	0.1%
Grosvenor Investment Mgmt. U.S., Inc.	8.4	0.0%
LEM Real Estate Mezzanine Fund II, LP	44.7	0.1%
Lubert-Adler Real Estate Fund III, LP	8.5	0.0%
Lubert-Adler Real Estate Fund IV, LP	19.7	0.0%
Lubert-Adler Real Estate Fund V, LP	31.4	0.1%
Lubert-Adler Real Estate Fund VI, LP	55.8	0.1%
Private Equity and Debt:		
Graham Partners, LP	22.7	0.0%
Milestone Partners II, LP	18.2	0.0%
Milestone Partners III, LP	58.6	0.1%
Milestone Partners IV, LP	7.4	0.0%
PNC Equity Partners I, LP	4.8	0.0%
PNC Equity Partners II, LP	44.2	0.1%
Versa Capital Fund I, LP	96.2	0.2%
Versa Capital Fund II, LP	66.5	0.1%
Venture Capital:		
Adams Capital Management, LP	1.9	0.0%
Co-Investment Fund 2000, LP	50.2	0.1%
Co-Investment Fund II, LP	70.9	0.2%
Cross Atlantic Technology Fund, LP	6.0	0.0%
Cross Atlantic Technology Fund II, LP	9.0	0.0%
LLR Equity Partners, LP	5.9	0.0%
LLR Equity Partners II, LP	41.6	0.1%
LLR Equity Partners III, LP	88.1	0.2%
NEPA Venture Fund II, LP	1.2	0.0%
Novitas Capital, LP	5.5	0.0%
Novitas Capital II, LP	3.3	0.0%
P/A Fund, LP	0.6	0.0%
Quaker BioVentures, LP	19.9	0.0%
Quaker BioVentures II, LP	36.9	0.1%
SCP Private Equity Partners, LP	0.3	0.0%
SCP Private Equity Partners II, LP	66.8	0.1%
TDH III, LP	0.2	0.0%
Total External Management	1,346.6	2.9%
Fotal Investment Portfolios Managed in PA	\$ 14,535.4	30.8%

In FY 2011, investment manager fees paid to external firms managing PSERS' assets from offices located in Pennsylvania amounted to \$ 26.8 million, or 5.4% of the total external investment manager fees.

# Summary of Investments in Pennsylvania

(as of December 31, 2011)

Where investment characteristics including yield, risk, and liquidity are equivalent, the Board's policy favors investments that have a positive impact on the economy of Pennsylvania. The Board, in managing the investment portfolio, will also be cognizant of concentration risk to any one region, including Pennsylvania. The Fund will continue to seek investments in Pennsylvania-based companies when the investment characteristics are equivalent to other favorable investments, subject to diversification considerations.

The following is a table of Pennsylvania-based investments and other statistics at December 31, 2011 (\$'s in millions):

and a Co-Investment Fund) managed by BPG Properties, Ltd., located in Philadelphia. PSERS has committed \$550 million in five funds (Lubert-Adler Funds II, III, IV, V and VI) managed by Lubert-Adler, another Pennsylvania-based real estate manager. Finally, PSERS has committed \$75 million in one fund (LEM Real Estate Mezzanine Fund II) managed by LEM Mezzanine Partners, located in Philadelphia.

As of December 31, 2011, PSERS' Pennsylvania real estate portfolio contained 52.8 million square feet of office, retail, and warehouse space and 35,653 apartment, hotel and condominium units. The gross market value of the Pennsylvania real estate portfolio investments totaled \$3.1 billion, of which PSERS' ownership share was \$209.4 million. The portfolio contains numerous notable Pennsylvania real estate investments, including:

Asset Class	Mari	otal PA ket Value ' Portion)	Mar	Fotal PA ket Value Invested)	# of People Employed	Payroll
U.S. Equities	\$	98.8	\$	98.8	*	\$ *
Fixed Income		54.9		54.9	*	*
Private Real Estate		209.4		3,060.5	1,780	45.5
Private Markets:						
Venture Capital		93.9		425.4	5,520	273.7
Private Equity		923.6		22,396.1	30,983	1,004.9
Private Debt		259.1		4,642.5	10,964	_553.3
Total	\$	<u>1,639.7</u>	\$	<u>30,678.2</u>	<u>49,247</u>	\$ <u>1,877.4</u>

<sup>\*</sup> Statistics for publicly traded companies not included due to the difficulty in obtaining the information.

#### **U.S.** Equities

PSERS invests in the stock of Pennsylvania-based companies through the various U.S. Equity portfolios managed by external and internal portfolio managers. PSERS has always had substantial investments in large national firms located in Pennsylvania, a list of which is included later in this section.

#### **Fixed Income Securities**

PSERS invests in the debt of Pennsylvania-based companies through the various Fixed Income portfolios managed by external and internal portfolio managers. PSERS has always had substantial investments in large national firms located in Pennsylvania, a list of which is included later in this section.

#### **Private Real Estate**

PSERS has investments in limited partnerships that have invested in Pennsylvania real estate properties. PSERS has committed \$207.5 million in three funds (Fund V, Fund VI,

- <u>5 North Fifth Street</u> PSERS owns a 100% interest in this major downtown Harrisburg, PA, office building that contains 70,693 square feet of office space. The building is PSERS' headquarters and is fully occupied by PSERS.
- Brixmor Blackstone Real Estate Partners VI made an investment in a nationwide portfolio of neighborhood shopping centers, comprising over 90 million square feet of gross leasable area in 39 states. There are approximately 40 centers comprising over 6.75 million square feet of this portfolio located in Pennsylvania.
- The National at Old City This condominium complex is located in Philadelphia, PA. The National at Old City consists of 153 units and contains 208,919 square feet of condominium space. This investment was made by SilverPeak Legacy Partners II.
- <u>Kenmawr</u> This investment is a part of a long-term joint venture relationship between Lubert-Adler and Philadelphia Management and Companies

## Summary of Investments in Pennsylvania

(as of December 31, 2011) (continued)

(PMC) that specializes in adaptive re-use of vacant buildings into stable, high quality rental apartments within and outside of Pennsylvania. The Kenmawr investment is located in Pittsburgh, PA and consists of 206 apartment units and 44 commercial units. The Kenmawr investment was made in Lubert-Adler Real Estate Funds V and VI.

Brandywine Office Portfolio – The Brandywine Office Portfolio consists of 29 properties totaling 1.6 million square feet and is located in the Lehigh Valley. This investment was made by DRA Growth and Income Fund VI.

#### **Venture Capital**

PSERS' Venture Capital program has committed \$2.2 billion to 50 partnerships since the inception of the program. In addition to the current international scope of venture capital investments, a historical objective of this program has been to target partnerships that demonstrate an ability to invest in Pennsylvania-based companies. Selected partnerships offer diversification according to geographic region and financing stage within Pennsylvania. From the inception of this program to December 31, 2011, 27 of the 50 venture capital partnerships were headquartered in Pennsylvania.

PSERS' is generally the lead investor in many of the venture capital funds in which PSERS invests. As a lead investor, PSERS provides Pennsylvania with capital from numerous out-of-state investors. As of December 31, 2011, PSERS' Venture Capital partnerships invested in 132 Pennsylvania locations employing 5,520 employees with a combined payroll of \$273.7 million. The market value of these investments is \$425.4 million, of which PSERS' share is \$93.9 million.

A key objective of PSERS' venture capital program is to attract both national and regional funds into the Pennsylvania small business community. Venture capital investments serve to accelerate economic growth in both the business sector and the community due to an increase in employment and revenues within the Commonwealth. Following are a sample of Pennsylvania companies invested in by PSERS through the Venture Capital program:

<u>E-Duction, Inc.</u>, Blue Bell, PA - E-Duction was launched to capitalize on a growing trend that has emerged in payment technology - payroll deduction. In 2002, E-Duction introduced the first payroll deduction card that gives employees interest-free

purchasing power, 365 days per year. Employees purchase goods and services, at no interest, everywhere credit cards are accepted. Payments are deducted over a series of paychecks. E-Duction earns income from annual card member fees, interchange fees from every transaction, and preferred merchant promotional fees. Novitas Capital made this investment.

- Garnet BioTherapeutics, Inc. (formerly Neuronyx, Inc.), Malvern, PA Garnet is a clinical state biotechnology company focused on applications with stem cells derived from adult bone marrow. Garnet uses genetically modified cells for specific applications in the development of neuroprotective agents for use in the treatment of major diseases. Garnet has developed a proprietary process for isolating and expanding adult bone marrow stem cells to provide extremely large, homogeneous populations with desirable therapeutic characteristics. Novitas Capital made this investment.
- PetFood Direct, Montgomeryville, PA PetFood Direct is one of the largest online retailers of pet food and related products. With over 11,000 products and 400 brands, the Company meets the needs of pet owners by offering selection, discount prices and convenient delivery. The Company also provides value-added services for its customers, including an auto-ship program and information on pet healthcare and nutrition. LLR Equity Partners made this investment.
- Amkor Technology, Inc., West Chester, PA Amkor is one of the world's largest subcontractors of semiconductor packaging and test services. The semiconductors that Amkor packages and tests ultimately become components in electronic systems used in communications, computing, consumer, industrial and automotive applications. Amkor maintains production facilities in China, Korea, Japan, the Philippines and the US, and has long-standing relations with a broad spectrum of major semiconductor manufacturers including IBM, Intel Corp, Samsung and Texas Instruments. SCP Private Equity Partners made this investment.

#### **Private Equity**

PSERS Private Equity program has committed \$16.1 billion to 111 partnerships since the inception of the program. PSERS' is the lead investor in many of the private equity funds in which it invests. As a lead investor, PSERS provides Pennsylvania with capital from numerous out-of-state investors. As of December 31, 2011, PSERS' Private Equity partnerships invested in 1,018 Pennsylvania locations employing 30,983 employees with a combined payroll of \$1,004.9 million. The market value of these investments is \$22.4 billion, of which PSERS' share

## Summary of Investments in Pennsylvania

## (as of December 31, 2011) (continued)

is \$923.6 million. From the inception of this program to December 31, 2011, 6 of the 110 partnerships were headquartered in Pennsylvania.

The following companies are a sample of Pennsylvania investments funded through PSERS' private equity partnerships:

- AirClic, Newtown, PA AirClic is a global provider of mobile software products that improve the performance of an organization's supply chain, logistics and field services operations. The company has more than 500 global customers across multiple vertical markets. Using AirClic-enabled wireless devices, managers and workers can easily and economically capture, exchange, and access critical data that represent people, assets and activity. AirClic is driving new levels of accountability and improved customer service for many of the world's leading companies. Edgewater Private Equity Fund III made this investment.
- CODi, Inc., Harrisburg, PA CODi, Inc. is a provider of lightweight, high-quality laptop computer cases and information technology accessories to Fortune 500 companies. CODi's accumulated knowledge dealing with the "corporate road warrior" allows the company to uniquely service corporate and consumer needs with precision. CODi uses a direct sales force to its competitive advantage, allowing a one-stop solution for customers in a market where distributors and value-added resellers are the norm. This one-stop approach allows high profitability as it captures up to three levels of contributions margins. The investment was brought about through Milestone Partners II.
- Gorell Enterprises, Indiana, PA Gorell Enterprises is a manufacturer of specially engineered, custom-manufactured vinyl windows for replacement and new-construction applications, patio doors, aluminum storm windows and doors, sunrooms, and conservatories. Gorell is well known in the industry for placing strong emphasis on designing and manufacturing strong, durable high-quality products. Gorell was the national winner of the 2006 ENERGY STAR® "Sustained Excellence" Award, given for their new window models to make homes more energy efficient as well as secure. PNC Equity Partners made this investment.
- ICG Commerce, Inc., King of Prussia, PA ICG Commerce is a leading procurement services provider exclusively focused on helping companies

- achieve greater control and increased value from their procurement organization. The company offers sourcing and on-going operational buying services that enable companies to better manage procurement spending by providing consulting, automation and ongoing purchasing solutions. Graham Partners Investments made this investment.
- Interface Solutions, Inc., Lancaster, PA Interface Solutions Inc. (ISI) is a leading manufacturer of fiber-based flooring felt and intermediate gasket materials and a fabricator of finished fiber, graphite and metal gaskets. Acquisitions, expansions, and capital investments in research facilities empower ISI to offer both OEM and aftermarket customers unmatched technical and design support and application testing. ISI has an extraordinary depth of experience and engineering knowledge, with roots to predecessor companies dating back over 90 years. ISI was created as an independent, private corporation in 1999, formed from the organization previously known as Armstrong Industrial Specialties Inc. (AISI). PNC Equity Partners L.P. made this investment.

#### **Private Debt**

PSERS Private Debt program has committed \$4.1 billion to 26 partnerships since the inception of the program. PSERS' is the lead investor in many of the private debt funds in which PSERS invests. PSERS has committed \$225 million to the two Pennsylvania-based Versa Capital Partners funds (formerly known as Chrysalis Capital Partners) managed by Versa Capital Management, located in Wayne, Pennsylvania. As of December 31, 2011, PSERS' private debt partnerships invested in 201 Pennsylvania locations employing 10,964 employees with a combined payroll of \$553.3 million. The market value of these investments is \$4.6 billion, of which PSERS' share is \$259.1 million. From the inception of this program to December 31, 2011, 2 of the 25 private debt partnerships were headquartered in Pennsylvania.

The following companies are a sample of a Pennsylvania investments made through PSERS' Private Debt Program:

PQ Corporation, Berwyn, PA - PQ Corporation is a leading producer of silicate, zeolite, and other performance materials serving the detergent, pulp and paper, chemical, petroleum, catalyst, water treatment, construction, and beverage markets. It is a global enterprise, operating in 19 countries on five continents. Potters Industries, a wholly owned subsidiary, is a leading producer of engineered glass materials serving the highway safety, polymer additive, metal finishing, and conductive particle markets. OCM Opportunities Fund VII, LP made this investment.

# Summary of Investments in Pennsylvania

(as of December 31, 2010) (continued)

- <u>David's Bridal</u>, Ardmore, PA David's Bridal is the leading bridal gown and bridal accessory retailer in the United States operating through the David's Bridal and Priscilla's of Boston divisions. The David's Bridal division is a value-oriented provider while Priscilla's of Boston is a luxury brand that caters to the more affluent segments of the market. This investment was made through New York Life Investment Management Mezzanine Partners II.
- <u>DynaVox</u>, Pittsburgh, PA DynaVox, a former division of Sunrise Medical spun-out in May 2004, is the market leader in the alternative and augmentative communication industry, developing and selling devices and software for individuals affected by speech disabilities resulting from traumatic, congenital or degenerative conditions. This investment was made through New York Life Investment Management Mezzanine Partners I.
- Simplexity (Adeptio INPC Holdings, LLC), Wayne, PA Simplexity is the leading independent online seller of wireless services, representing all major wireless carriers and selling primarily through proprietary websites (principally its flagship site, www.wirefly.com) and partner websites (e.g. Radioshack.com, Staples.com, Overstock.com). This investment was made through Versa Capital Fund I.
- Keane & Sons Drilling Corp., Wayne, PA Keane & Sons Drilling provides oilfield services in the Appalachian Basin, including top hole drilling and hydraulic fracturing services to major operators in the Marcellus Shale basin and across the U.S. This investment was made through Cerberus Institutional Partners, L.P. Series Four.



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## Pennsylvania-Based Publicly Traded Stocks (as of December 31, 2011)

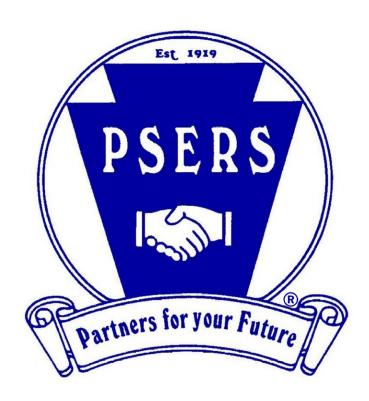
Security	Shares Outstanding	Market Value
Air Products & Chemicals, Inc.	106,126	\$ 9,040,874
Airgas, Inc.	19,236	1,501,947
Alcoa, Inc.	299,648	2,591,955
Allegheny Technologies, Inc.	29,945	1,431,371
Amerigas Partners	14,200	651,922
Amerisourcebergen Corp.	72,735	2,705,015
Black Box Corp.	29,550	828,582
Comcast Corp. Class A	767,163	18,189,435
Consolidated Energy, Inc.	217,518	7,982,911
Dentsply International, Inc.	39,854	1,394,491
Endo Pharmaceuticals Holdings, Inc.	31,800	1,098,054
EQT Corp.	126,425	6,926,826
Federated Investors, Inc. Class B	152,701	2,313,420
FMC Corp.	19,827	1,705,915
H.J. Heinz Company	90,160	4,872,246
Hershey Company	43,099	2,662,656
Interdigital, Inc.	98,900	4,309,073
Kenexa Corp.	23,225	620,108
Mylan Labs, Inc.	120,082	2,576,960
PNC Financial Services Group, Inc.	163,144	9,408,514
PPG Industries, Inc.	76,961	6,425,474
PPL Corp.	162,817	4,790,076
Quaker Chemical Corp.	3,300	128,337
Sunoco, Inc.	36,092	1,480,494
Triumph Group, Inc.	11,060	646,457
II-VI, Inc.	34,200	627,912
United States Steel Corp.	40,542	1,072,741
Urban Outfitters, Inc.	31,261	861,553
Total		\$ <u>98,845,319</u>

## Pennsylvania-Based Bonds (as of December 31, 2011)

	Interest Rate	Maturity		
Security	(%)	Date	Par Value	Market Value
Airgas, Inc.	7.125	10/01/2018	1,920,000	\$ 2,055,418
Alcoa, Inc.	6.150	08/15/2020	425,000	441,567
Allegheny Energy Supply Co., LLC	5.750	10/15/2019	390,000	417,105
Allegheny Ludlum Corp.	6.950	12/15/2025	300,000	339,675
Allegheny Technologies, Inc.	9.375	06/01/2019	885,000	1,130,216
Allegheny Technologies, Inc.	5.950	01/15/2021	450,000	478,301
Allentown PA Taxable	0.000	10/01/2024	2,605,000	1,160,371
Allentown PA Taxable	0.000	10/01/2025	3,660,000	1,507,810
Amerigas Partners	6.250	08/20/2019	1,245,000	1,238,775
Comcast Corp.	6.500	01/15/2015	40,000	45,346
Comcast Corp.	5.875	02/15/2018	200,000	231,254
Comcast Corp.	5.700	05/15/2018	1,350,000	1,553,526
Comcast Corp.	5.650	06/15/2035	40,000	44,189
Comcast Corp.	6.450	03/15/2037	180,000	218,203
Comcast Corp.	6.950	08/15/2037	30,000	38,169
Comcast Corp.	6.400	03/01/2040	432,000	537,002
Consolidated Energy, Inc.	8.000	04/01/2017	2,170,000	2,376,150
Duquesne Light Company	6.700	04/15/2012	4,190,000	4,253,018
Endo Pharmaceuticals Holdings, Inc.	7.000	07/15/2019	530,000	564,450
Endo Pharmaceuticals Holdings, Inc.	7.250	01/15/2022	250,000	265,938
H.J. Heinz Company	6.000	03/15/2012	12,150,000	12,263,481
Hershey Company	6.950	08/15/2012	500,000	517,105
Koppers, Inc.	7.875	12/01/2019	1,245,000	1,319,700
Mylan, Inc.	7.625	07/15/2017	1,745,000	1,904,231
Mylan, Inc.	7.875	07/15/2020	700,000	772,625
New Enterprise Stone & Lime Company	11.000	09/01/2018	2,180,000	1,787,600
Penn Virginia Corp.	7.250	04/15/2019	830,000	771,900
PHEAA	0.448	07/25/2016	396,453	396,148
PHEAA	1.018	04/25/2019	3,273,693	3,275,166
PNC Funding Corp.	2.300	06/22/2012	3,500,000	3,534,895
PNC Funding Corp.	5.125	02/08/2020	1,950,000	2,203,442
PNC Mortgage Acceptance	6.800	03/12/2034	1,800,000	1,803,418
Sungard Data Systems, Inc.	4.875	01/15/2014	240,000	240,300
Sungard Data Systems, Inc.	10.625	05/15/2015	1,080,000	1,150,200
Verizon Pennsylvania, Inc.	8.350	12/15/2030	400,000	499,528
West Penn Power Company	5.950	12/15/2017	1,885,000	2,226,524
Wyoming PA Area School District	5.280	09/01/2014	1,280,000	1,323,840
Total				\$ <u>54,886,586</u>

## Real Estate Separate Account Pennsylvania Properties (as of December 31, 2011)

Real Estate Separate Account Pennsylvania Properties				
Property	Location	Description	Manager	
5 North Fifth Street	Harrisburg	5 story office building	Grosvenor	
(PSERS headquarters)				
Total market value (unaudi	ited) of Pennsylvania-bas	ed properties was \$8.4 million as of I	December 31, 2011.	



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## Pennsylvania-Based Private Equity/Venture Capital/Private Debt General Partners

(Dollar Amounts in Millions)

(Since the inception of the program as of December 31, 2011)

Partnership	Location	PSERS Maximum Capital Commitment
Adams Capital Management, L.P.	Sewickley	\$ 12.5
APA/Fostin Venture Fund I (closed)	King of Prussia	20.0
CEO Venture Fund I (closed)	Pittsburgh	1.0
CEO Venture Fund II (closed)	Pittsburgh	15.0
Co-Investment 2000 Fund, L.P.	Wayne	135.0
Co-Investment Fund II, L.P.	Wayne	135.0
Commonwealth Venture Partners I (closed)	Philadelphia	20.0
Commonwealth Venture Partners II (closed)	Philadelphia	10.0
Cross Atlantic Technology Fund, L.P.	Radnor	30.1
Cross Atlantic Technology Fund II, L.P.	Radnor	21.1
Graham Partners Investments, L.P.		56.7
	Newtown Square Philadelphia	0.1
Keystone Minority Capital Fund (closed)	•	7.8
Keystone Venture Fund IV (closed)	Philadelphia	
LLR Equity Partners, L.P.	Wayne	62.5
LLR Equity Partners II, L.P.	Wayne	75.0
LLR Equity Partners III, L.P.	Wayne	187.5
Loyalhanna Venture Fund (closed)	Pittsburgh	15.0
Milestone Partners II, L.P.	Rosemont	29.9
Milestone Partners III, L.P.	Rosemont	60.0
Milestone Partners IV, L.P.	Rosemont	24.3
NEPA Venture Fund I (closed)	Bethlehem	1.0
NEPA Venture Fund II	Bethlehem	5.0
Novitas Capital I, L.P.	Wayne	30.0
Novitas Capital II, L.P.	Wayne	75.0
P/A Fund	King of Prussia	30.0
PNC Equity Partners, L.P.	Pittsburgh	43.2
PNC Equity Partners II, L.P.	Pittsburgh	68.1
Quaker BioVentures, L.P.	Wayne	69.4
Quaker BioVentures II, L.P.	Wayne	100.0
SCP Private Equity Partners I, L.P.	Wayne	62.5
SCP Private Equity Partners II, L.P.	Wayne	125.0
TDH III, L.P.	Rosemont	7.4
Technology Leaders, L.P. (closed)	Wayne	10.0
TL Ventures III, L.P.	Wayne	50.0
Versa Capital Partners, L.P. (f/k/a Chrysalis)	Wayne	75.0
Versa Capital Partners III, L.P.	Wayne	<u> 150.0</u>
Total		<u>\$ 1,820.1</u>





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### **Health Options Program**

Pursuant to Section 8701 et. seq. of the Public School Retirees' Health Insurance Act, 24 Pa. C.S. § 8701 et. seq. PSERS sponsors a group health insurance program called the Health Options Program (HOP) for individuals who are annuitants or survivor annuitants or the spouse or dependents of an annuitant or survivor annuitant. The HOP is funded by and for eligible participants. The following is a summary of HOP initiatives during the period July 1, 2010 through June 30, 2011.

The Retirement Board issued an Invitation For Application (IFA) to allow qualified insurance carriers to apply to PSERS to offer a fully insured Medicare Advantage group insurance plan and accompanying Pre-65 group insurance plan to PSERS retirees who participate in the Health Options Program (HOP). The effective date of the insurance is January 1, 2012. As a result of the IFA, PSERS is expecting the following carriers to participate in HOP:

Aetna

Capital Blue Cross/Keystone Health Plan Central

Geisinger Health Plan

Highmark

Independence Blue Cross (IBC)/ Keystone Health Plan East

**UPMC** 

» The Retirement Board submitted an application with Health and Human Services (HHS) for the Early Retiree Reinsurance Program (ERRP). ERRP was established by section 1102 of the Patient Protection and Affordable Care Act (the Affordable Care Act), P.L. 111-148, enacted on March 23, 2010. The Congress appropriated funding of \$5 billion for the temporary program. The program provides reimbursement to participating employment-based plans for a portion of the cost of health benefits for early retirees and their spouses, surviving spouses and dependents. HHS will reimburse plans for certain claims between \$15,000 and \$90,000 (with those amounts being indexed for plan years starting on or after October 1, 2011). The purpose of the reimbursement is to make health benefits more affordable for plan participants and sponsors so that health benefits are accessible to more Americans than they would otherwise be without this program.

- The Retirement Board issued a Request for Proposal (RFP) for the Medicare Prescription Drug Program Support Services and Pharmacy Benefit Management Services effective January 1, 2012. The Retirement Board saved members enrolled in the Basic and Enhanced Medicare Rx Options \$10 million by rejecting the results of the Request for Proposal for a Pharmacy Benefit Manager. The incumbent vendor agreed to a one year extension of the current contract until January 1, 2013.
- » The Retirement Board continues to expand the capabilities of the HOPbenefits.com website. Currently the website gives HOP Medical Plan participants access to personal health information and provides them with the ability to inquire and receive updates on the status of their claims. The website is scheduled to provide all HOP participants access to their 2012 plan options for the open enrollment period.

## **Health Options Program**

(continued)

#### Plans Available Through HOP

HOP offers participants a choice among a supplement to Medicare, various Medicare prescription drug plans, and Medicare Advantage plans. Participants under age 65 and not eligible for Medicare may elect to enroll in a high deductible health insurance plan without prescription drug coverage or a managed care plan. These options were available to new enrollees or HOP participants electing to change coverage during the 2012 option selection period conducted in the fall of 2011. The following is a list of HOP plans as of January 1, 2012:

For Individuals Eligible for Medicare:	For Individuals Not Eligible for Medicare
	Tof Individuals Not English for Medicare
Enhanced Medicare Rx Option (Medicare Part D)	
Basic Medicare Rx Option (Medicare Part D)	HOP Pre-65 Medical Plan w/ Rx coverage
HOP Medical Plan (Medicare supplement)	HOP Pre-65 Medical Plan
Medicare Advantage Plans	Companion Pre-65 Managed Care Plans
Aetna Medicare PPO	Aetna PPO Plan
Capital Blue Cross SeniorBlue PPO	Capital Blue Cross PPO
Geisinger Gold Preferred PPO	Geisinger Choice PPO
Highmark FreedomBlue PPO	Highmark PPO Blue
Independence Blue Cross-Keystone 65 HMO	Independence Blue Cross-Keystone HMO
UPMC for Life HMO	UPMC Health Plan

#### **HOP Premiums**

#### Paid By Individuals ELIGIBLE for Medicare

The premiums paid by participants eligible for Medicare generally vary by geographical area. The exceptions are the premiums for the HOP Medicare Rx Options. The following is a summary of the 2011 and 2012 premium costs in Pennsylvania for single coverage:

Southeastern Region: Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties	2011	2012	Increase/ (Decrease)
Medicare Supplement Plan			
HOP Medical Plan	\$ 199	\$ 199	0%
w/ Basic Rx	\$ 226	\$ 226	0%
w/ Enhanced Rx	\$ 274	\$ 280	2%
Medicare Advantage Plans (compared with 2010 legacy plan)			
Aetna Medicare 15 Special PPO	\$ 306	\$ 315	3%
Highmark FreedomBlue PPO	\$ 541	\$ 556	
Independence Blue Cross / Keystone East HMO	\$ 351	\$ 368	5%
Legacy Medicare Advantage Plans (no new participants)			
Aetna Medicare 10 Special Plan HMO	\$ 397	\$ 389	(2)%
IBC's Personal Choice 65 PPO	\$ 598	\$ 636	6%

## Health Options Program (continued)

Southwestern Region: Allegheny, Fayette, Greene, Indiana, Washington, and Westmoreland Counties	2011	2012	Increase
Medicare Supplement Plan			
HOP Medical Plan	\$ 195	\$ 195	0%
w/ Basic Rx	\$ 222	\$ 222	0%
w/ Enhanced Rx	\$ 270	\$ 276	2%
Medicare Advantage Plans (compared with 2010 legacy plan)			
Aetna Medicare 15 Special PPO	N/A	\$ 306	N/A
Highmark FreedomBlue PPO	\$ 246	\$ 261	6%
UPMC for Life HMO	\$ 211	\$ 211	0%
Legacy Medicare Advantage Plans (no new participants)			
Aetna Medicare 15 Special Plan HMO	\$ 308	\$ 384	25%
Highmark SecurityBlue HMO	\$ 237	\$ 252	6%

North & Central Region: All other counties in Pennsylvania	2011		2011 2012		Increase/ (Decrease)
Medicare Supplement Plan					
HOP Medical Plan	\$	164	\$	164	0%
w/ Basic Rx	\$	191	\$	191	0%
w/ Enhanced Rx	\$	239	\$	245	2%
Medicare Advantage Plans (compared with 2010 legacy plan)					
Aetna Medicare 15 Special PPO		N/A	\$	212	N/A
Capital Blue Cross SeniorBlue PPO	\$	210	\$	210	0%
Geisinger Gold Preferred PPO	\$	181	\$	191	6%
Highmark FreedomBlue PPO	\$	226	\$	241	7%
UPMC for Life HMO	\$	211	\$	211	0%
Legacy Medicare Advantage Plans (no new participants)					
Aetna Medicare 10 Special Plan HMO	\$	223	\$	232	4%
Capital Blue Cross / Keystone Central SeniorBlue HMO	\$	209	\$	252	6%
Highmark SecurityBlue HMO	\$	237	\$	209	(12)%

Medicare Prescription Drug Plans All Regions	2011	2012	Increase
Basic Medicare Rx Only	\$ 27	\$ 27	0%
Enhanced Medicare Rx Only	\$ 75	\$ 81	8%

## **Health Options Program**

(continued)

## **HOP Premiums Paid By Individuals NOT ELIGIBLE** for Medicare

The premiums paid by participants not eligible for Medicare generally do not vary by geographical area. The exceptions are the regional managed care plans. The following is a summary of the 2011 and 2012 premium costs in Pennsylvania for single coverage:

All Regions	2011	2012	Increase
HOP Pre-65 Medical Plan (for comparison)			
HOP Pre-65 Medical Plan (Single Coverage)	\$ 621	\$ 650	5%
Pre-65 Medical Plan w/ Prescription Drugs	\$ 748	\$ 750	0.3%

Southeastern Region: Bucks, Chester, Delaware, Montgomery, and Philadelphia Counties	2011	2012	Increase
Active Managed Care Plan			
Aetna PPO	\$ 773	\$ 878	14%
Highmark PPOBlue	\$ 1,014	\$ 1,026	1%
Keystone East HMO	\$ 1,051	\$ 1,051	0%
Legacy Managed Care Plans (no new participants)			
Aetna Citizen HMO Plan	\$ 963	\$ 1,201	25%
IBC's Personal Choice PPO	\$ 1,248	\$ 1,248	0%

Southwestern Region: Allegheny, Fayette, Greene, Indiana, Washington, and Westmoreland Counties	2011	2012	Increase/ (Decrease)
Active Managed Care Plan			
Aetna PPO (not available in all counties)	N/A	\$ 878	N/A
Highmark PPOBlue	\$ 1,014	\$ 1,026	1%
UPMC HMO	\$ 1,341	\$ 1,967	47%
Legacy Managed Care Plans (no new participants)			
Aetna HMO	\$ 963	\$ 1,201	25%
Highmark HMO	\$ 1,441	\$ 1,285	(11)%

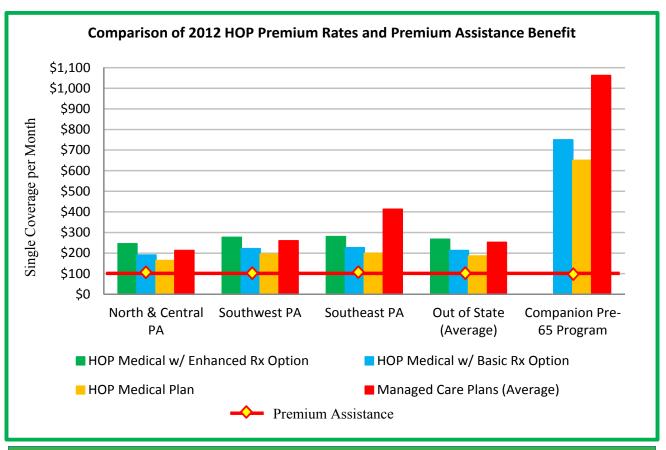
## **Health Options Program**

(continued)

North & Central Region: All other counties in Pennsylvania	2011	2012	Increase/ (Decrease)
Active Managed Care Plan			
Aetna PPO (not available in all counties)	N/A	\$ 878	N/A
Geisinger	\$ 651	\$ 957	47%
Highmark PPOBlue	\$ 1,014	\$ 716	(30)%
Keystone Central PPO	\$ 934	\$ 1,026	10%
UPMC EPO	\$ 1,341	\$ 1,967	47%
Legacy Managed Care Plans (no new participants)			
Aetna Patriot Plan HMO	\$ 963	\$ 1,201	25%
Highmark HMO	\$ 1,441	\$ 1,285	(11)%
Keystone Central HMO	\$ 872	\$ 968	11%

## **HOP Premiums Compared to the PSERS Premium Assistance Benefit**

The following charts illustrate the HOP premiums paid by PSERS retirees for single coverage compared with the PSERS Premium Assistance benefit. The premiums for 2-person and family coverage would be at least twice the cost of single coverage. Premium Assistance is an offset for the PSERS retiree's premium only.



## **Health Options Program**

(continued)

	_	Central Region	 uthwest Region	 outheast Region	 t of State werage)	I	mpanion Pre-65 cogram
HOP Medical w/ Enhanced Rx Option	\$	245	\$ 276	\$ 280	\$ 267		N/A
HOP Medical w/ Basic Rx Option	\$	191	\$ 222	\$ 226	\$ 213	\$	750
HOP Medical Plan	\$	164	\$ 195	\$ 199	\$ 186	\$	650
Managed Care Plans (Average)	\$	213	\$ 259	\$ 413	\$ 252	\$	1,062
Premium Assistance	\$	100	\$ 100	\$ 100	\$ 100	\$	100

The current Premium Assistance benefit will cover, on average, 42% of the fee-for-service premium and 44% of the managed care premium for retirees eligible for Medicare. The Premium Assistance benefit covers, on average, 12% of the premium for retirees not eligible for Medicare.



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## **Health Options Program**

(continued)

#### **HOP Enrollment**

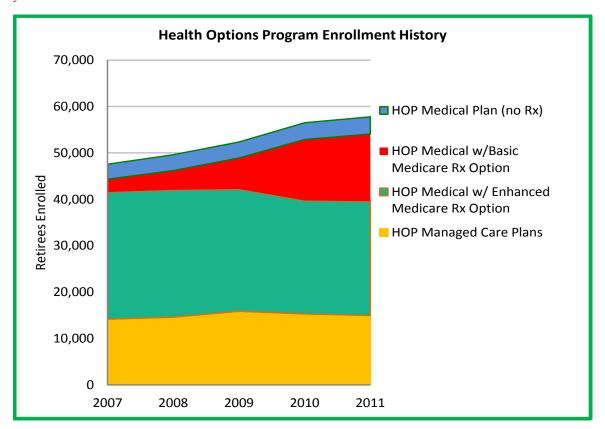
As of January 1, 2012 there are 74,624 participants (61,832 retirees plus their dependents) in the HOP. The majority of the HOP participants were enrolled in the HOP Medical Plan with Enhanced Medicare Rx Option. The total numbers of retirees by Option are:

Individuals Eligible for Medicare	Retirees	Participants
HOP Medical w/ Enhanced Medicare Rx Option	24,717	29,003
HOP Medical w/Basic Medicare Rx Option	16,821	20,080
HOP Medical Plan (no Rx)	3,833	4,286
HOP Enhanced Rx Only	70	86
HOP Basic Rx Only	222	291
Aetna PPO/Legacy HMO	792	982
Geisinger PPO	110	144
Highmark PPO/ Legacy HMO	12,361	16,167
Capital BC PPO/Keystone Central Legacy HMO	772	1,017
Keystone East HMO/IBC Legacy PPO	1,383	1,708
UPMC HMO	216	293
Total Medicare Eligible	61,297	74,057
Individuals Not Eligible for Medicare		
HOP Pre-65 Medical Plan	116	123
HOP Pre-65 Medical Plan w/Rx Coverage	196	200
Aetna PPO/Legacy HMO	27	32
Geisinger PPO	11	13
Highmark PPO	87	90
Capital BC PPO/Keystone Central Legacy HMO	24	25
Keystone East HMO/IBC Legacy PPO	70	80
UPMC HMO	4	4
Total Not Eligible for Medicare	535	567
Total in HOP	61,832	74,624

## **Health Options Program**

(continued)

The enrollment in the PSERS Health Options Program continues to increase. As illustrated by the following graph, the number of members has increased 21% over the past 5 years.



#### **Funding**

A majority of the premium income is deducted from the retiree's monthly retirement benefit and transferred to the plans (claims administrator for the self-funded Options). Approximately 5,000 retirees submit monthly premium payments to the HOP Administration Unit, as their monthly retirement benefits, if any, are insufficient to cover the premium cost. In addition, individuals enrolled in a Medicare Rx Option without HOP Medical Plan coverage must submit monthly premium payments.

## **Health Options Program**

(continued)

HOP income is projected to be \$253 million during the 2012 Plan Year. A majority of this income comes from premium payments from participants. Other sources of funding are Medicare prescription drug payments (for participants enrolled in a Medicare prescription drug plan) from the Center for Medicare and Medicaid Services (CMS), anticipated payment from the Early Retirement Reinsurance Program (ERRP) from Health and Human Services (HHS), and interest income. The following is a breakdown of these sources of income: (Dollar amounts in Millions):

Income	2011
Participant Contributions	\$ 218.0
CMS - Medicare Prescription Drug Payments	34.0
HHS – Early Retiree Reinsurance Program	0.5
Interest Income	0.5
Total	\$ 253.0

PSERS retirees enrolled in HOP, who meet the eligibility requirements for Premium Assistance, receive \$100 per month as a partial reimbursement for the out-of-pocket premium expense. Approximately 50,800 of the 78,500 HOP participants receive Premium Assistance. This accounts for about \$61 million of the \$94 million annual benefit expense of the Premium Assistance Program. The following Premium Assistance Program section provides additional information.

Contributions and interest income pay for the benefits provided to HOP participants plus administrative expenses. The following is a breakdown of the projected benefit expenses (Dollar amounts in Millions):

Benefit Expenses	2011
Self-funded Hospital, Medical & Major Medical Benefits	\$ 99.0
Self-funded Prescription Drug Benefits	78.0
Managed Care Contributions	61.0
Total	\$ 238.0

In addition to the benefit expenses identified above, the HOP will pay \$6 million in enrollment and administrative expenses including reimbursing PSERS for its expenses.

As of June 30, 2011, HOP had net assets of \$122 million held in trust to pay the expenses of HOP for the exclusive benefit of participants.



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#### **Premium Assistance Program**

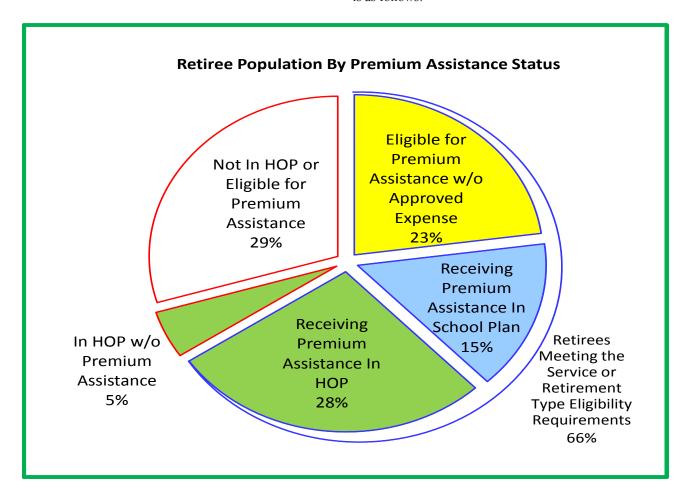
In accordance with Section 8509 of the Public School Employees' Retirement Code 24 Pa. C.S. § 8509, PSERS provides up to \$100.00 per month in Premium Assistance to eligible retirees to help cover the cost of their health insurance. The eligibility requirements for premium assistance are as follows:

- 24.5 years of credited service, or
- 15 years of credited service if termination of employment and retirement occurred after age 62, or
- Receiving a Disability annuity from PSERS; and
- Have an out-of-pocket premium expense from their former school employer's health plan or the PSERS sponsored Health Options Program (HOP).

#### Enrollment

As of June 30, 2011, PSERS had 183,665 retirees (excluding survivor annuitants and beneficiaries) receiving a monthly benefit. Of these retirees 120,458 meet the service, service and age at termination of school service, or retirement type (disability) eligibility requirements for the premium assistance program. Of the retirees meeting these requirements, 41,964 are not receiving premium assistance payments because they do not have an out-of-pocket premium expense from an approved plan. Of the 78,494 retirees receiving premium assistance benefits, 50,808 are enrolled in HOP and 27,686 are participating in their former school employer's health plan and have an out-of-pocket premium expense.

A breakdown of retirees by their premium assistance status is as follows:



## **Premium Assistance Program**

(continued)

June 30, 2011	Number	Percentage
Eligible for Premium Assistance w/o Approved Expense	41,964	22.8%
Receiving Premium Assistance In School Plan	27,686	15.1%
Receiving Premium Assistance In HOP	50,808	27.7%
In HOP w/o Premium Assistance	8,747	4.8%
Not In HOP or Eligible for Premium Assistance	54,460	29.6%
<b>Total Retiree Population</b>	183,665	100.0%

<sup>1</sup> Meeting the service, service and age at termination of school employment or retirement type requirements.

#### **Funding**

The Premium Assistance Program is funded by employer contributions. The PSERS Actuary determined that the contribution needed during the 2012/13 fiscal year is 0.86% of payroll. For the year ended June 30, 2011, employer contributions equaled \$89.2 million and net investment income equaled \$0.7 million. During this period, PSERS paid Premium Assistance benefits equaling \$93.5 million and incurred administrative expenses of \$2 million.

As of June 30, 2011, the Premium Assistance Program had net assets of \$111.2 million.

<sup>2</sup> As of June 30, 2011 Actuarial Valuation (Excludes Survivor Annuitants and Beneficiaries)

