

BUDGET REPORT HIGHLIGHTS

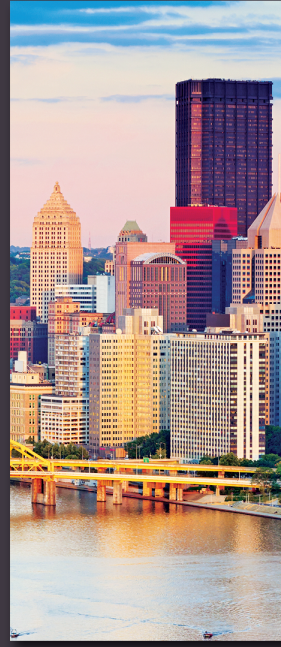
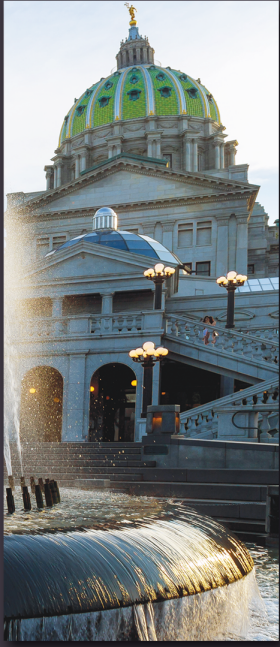
PSERS on Point

Fiscal Year
2019-2020



PENNSYLVANIA PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

A Component Unit of the Commonwealth of Pennsylvania



What's Inside

Budget Report Highlights

- 1 Celebrating 100 Years of Retirement Security
- 2 Commonwealth and School Employer Contributions are Making a Positive Difference
- 3 Implementation Update on Act 5 of 2017
- 4 Enhancing Processes to Increase Efficiency and Improve Customer Service
- 5 PSERS Administrative Costs are Significantly Below Peers; Saves \$8.2 Million Annually
- 6 Economic Impact to Pennsylvania: \$12.7 Billion
- 7 Increasing Fee Transparency and Internally-Managed Assets
- 8 Diversified Assets Limit Risk in Volatile Markets
- 9 Long-Term Investment Performance Consistently Outperforms
- 10 Payment for Past Service Debt is More than 75% of the Employer Contribution Rate
- 11 PSERS Members Help Fund Their Own Retirement Benefit
- 12 Awards Received During the Past Fiscal Year

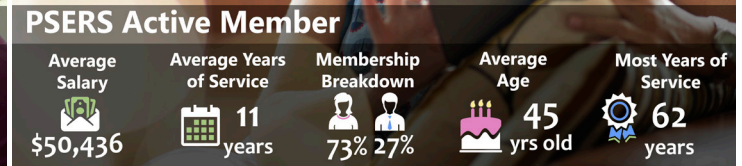
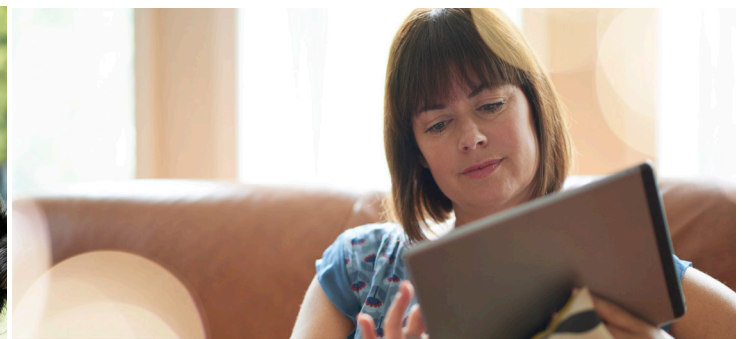
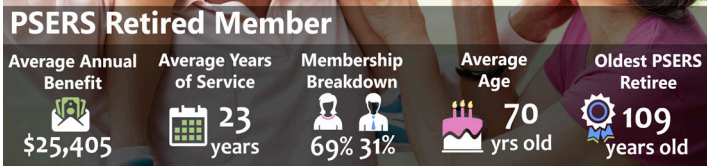
Celebrating 100 Years of Retirement Security

PSERS was established on July 18, 1917, and began operations in 1919 to provide retirement benefits to public school employees in the Commonwealth of Pennsylvania. PSERS' total plan net assets as of September 30, 2018, were approximately \$56.6 billion.

Today, PSERS provides a secure retirement to over half a million current and retired public school employees.

The plan is funded through three sources:

- Employer contributions
- Member contributions
- Investment earnings



PSERS administers two postemployment healthcare programs. The Health Options Program is a group health insurance program funded solely by eligible participants. As of December 31, 2018, there were over 117,000 participants. PSERS also provides up to \$100 per month in Premium Assistance to eligible retirees to help cover the cost of their health insurance. As of June 30, 2018, Premium Assistance is offered to 93,000 members.



PSERS is proud to be an equal opportunity employer supporting workforce diversity!

- Women hold 53.5% of management positions.
- 51.1% of individuals who identify as a protected minority group hold management positions.

PSERS SNAPSHOT

PSERS is the 15th Largest State-Sponsored Defined Benefit Public Pension Plan with:

233,000
Retired
Members

256,000
Active
Members

25,000
Terminated
Vested Members

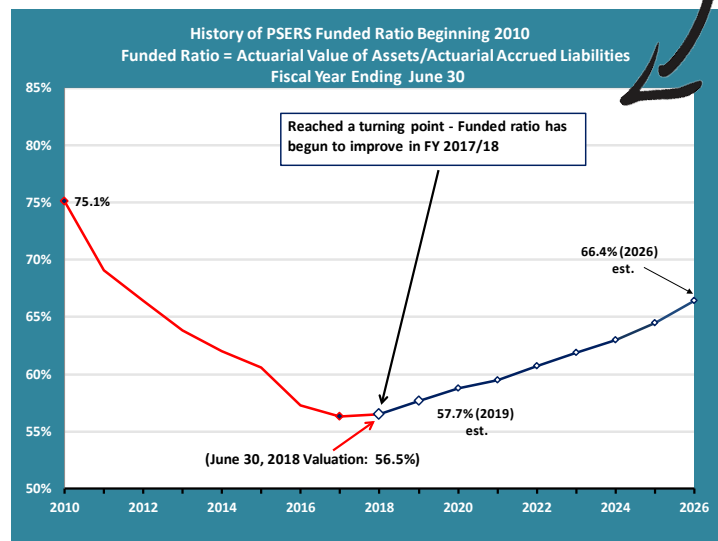
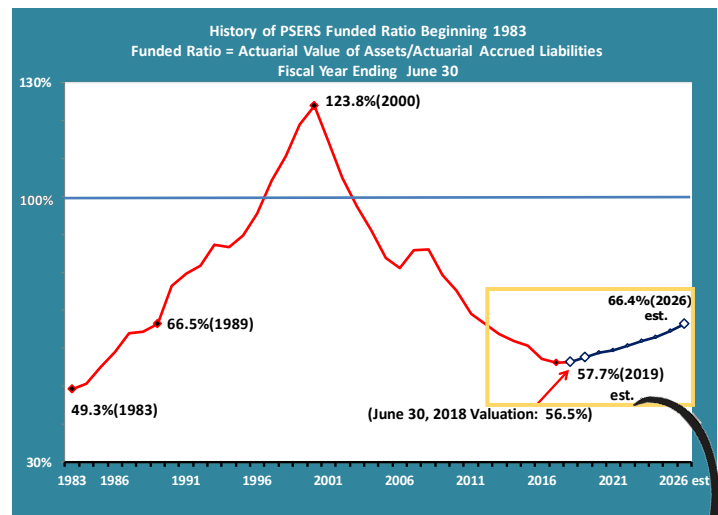
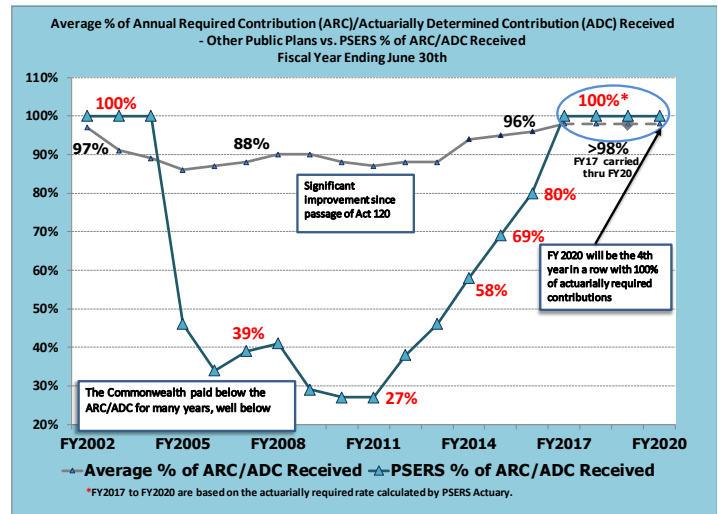
775
School
Employers

332
PSERS
Staff

Commonwealth and School Employer Contributions are Making a Positive Difference

As a result of legislated contribution increases under Act 120 and the continued commitment of the Commonwealth and school employers to pay the full actuarially-required amount of employer contributions, PSERS has now reached a major turning point.

- Full funding is making a positive difference.** Since FY 2017, the Commonwealth and school employers have remained committed to paying the full actuarially required amount of employer contributions which is needed to pay down the existing pension debt that built up over 15 years of underfunding the System.
- Funded ratio improves one year earlier than projected.** Due to fully funded employer contributions, favorable demographic experience, and positive investment returns, the funded ratio on an actuarial value basis improved a year sooner than expected. The 56.5% actuarial funded ratio as of June 30, 2018, is a significant turning point for the System as future funded ratio projections are now expected to rise, reversing years of decline since the 123.8% funded peak at June 30, 2000. On a market value basis, PSERS' funded ratio, which began to improve in 2016, also continues to slowly and steadily increase.
- PSERS' Unfunded Liability, on a market value basis, has declined by over \$3.5 billion over the last two fiscal years.**
- PSERS' Negative External Cash Flow (NECF) percentage is more favorable than the public fund average for the first time in many years.** Full actuarially required funding from the Commonwealth and school employers has improved and increased PSERS' NECF to -2.5%, which is better than the public fund average of -2.8%. A lower NECF allows more investment earnings to be reinvested and improves the Fund's ability to grow assets in the future.



Paying Actuarially Required Rate is Vital to the System

While budgetary issues continue as the employer contribution rate remains high, paying the actuarially required rate is a vital step that will begin to address the already accumulated pension debt. Currently over 75% of the total pension contribution rate is for past service, a debt already earned that must be paid.

Implementation Update on Act 5 of 2017

On June 12, 2017, Governor Wolf signed Act 5 of 2017 into law. This pension legislation represents a substantial change to PSERS' operations and made significant changes to PSERS' benefit structure for future members.

Under Act 5 of 2017, school employees who become new members of PSERS on July 1, 2019 and thereafter will choose one of three new retirement plan options for their retirement benefits. The new plan design options include two hybrid plans consisting of defined benefit and defined contribution components and a stand-alone defined contribution plan. The current stand-alone defined benefit plan will no longer be available to new members.

- PSERS began a major effort to implement the new plan designs by the implementation date of July 1, 2019. Voya Institutional Plan Services (VIPS) was selected as the Third Party Administrator for the defined contribution (DC) plan. Additionally, after extensive research and analysis by PSERS investment professionals and pension consultant Charles W. Cammack Associates, PSERS Board selected T. Rowe Price Retirement Blend Target Date Funds as the default investment option for the DC plan. Eleven additional funds have been selected to round out the initial investment offerings to participants.
- PSERS also completed and submitted the draft Plan Document for the new DC plan for approval to the Internal Revenue Service (IRS) on behalf of the PSERS Board of Trustees. It is anticipated that PSERS will have the Plan Document, as approved by the IRS, ready for final review and ratification by early 2019.
- PSERS professionals are dedicated to maintaining the high quality and excellence standards of PSERS current defined benefit plan while implementing new DC features. Much work remains to implement the new benefit plan, but PSERS professionals, together with these two vendors, will successfully meet this challenge.
- Act 5 required PSERS Board of Trustees to receive 8 hours of investment-related education each year. We are pleased to report that our 15 Board members and their designees completed over 600 hours of investment-related education and ethics training. On average, each board member and designee received over 21 hours of education, far exceeding the education requirement.



New Members

School employees who become new members of PSERS on July 1, 2019 and thereafter will choose one of three new retirement plan options for their retirement benefits. The current stand-alone defined benefit plan will no longer be available to new members.

Active Members

All members active on July 1, 2019, will have the option to switch from their current defined benefit plan to one of the three new retirement plan options if they so choose.



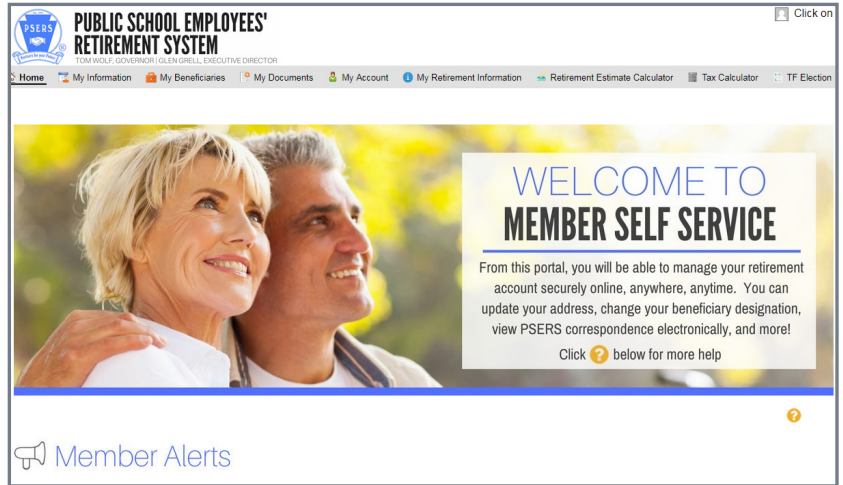
Retired Members

Act 5 does not affect already retired members or those whose retirement date was prior to June 12, 2017.



Enhancing Processes to Increase Efficiency and Improve Customer Service

Pension Administration System Upgrade Completed - The multi-year effort to upgrade the pension administration system was successfully completed in March 2018. This mission critical system is used by PSERS' professionals and employers to execute PSERS' primary pension administration functions for its members. This upgrade allows members and employers to conduct transactions for themselves which would have previously required employee intervention. Members can now view correspondence from PSERS such as letters, newsletters, Statement of Accounts, and 1099Rs securely online.








Continuing to Reduce Mailing Costs and Environmental Impact

Since April 2018, more than 110,000 members have created a Member Self-Service (MSS) account and have conducted more than 78,000 transactions for themselves. The most common action taken was to update their nomination of beneficiaries. This new system also enables members to select their preference for how they would like PSERS to communicate with them. To date, more than 98% of all MSS accounts have opted to go paperless and receive information from PSERS electronically.

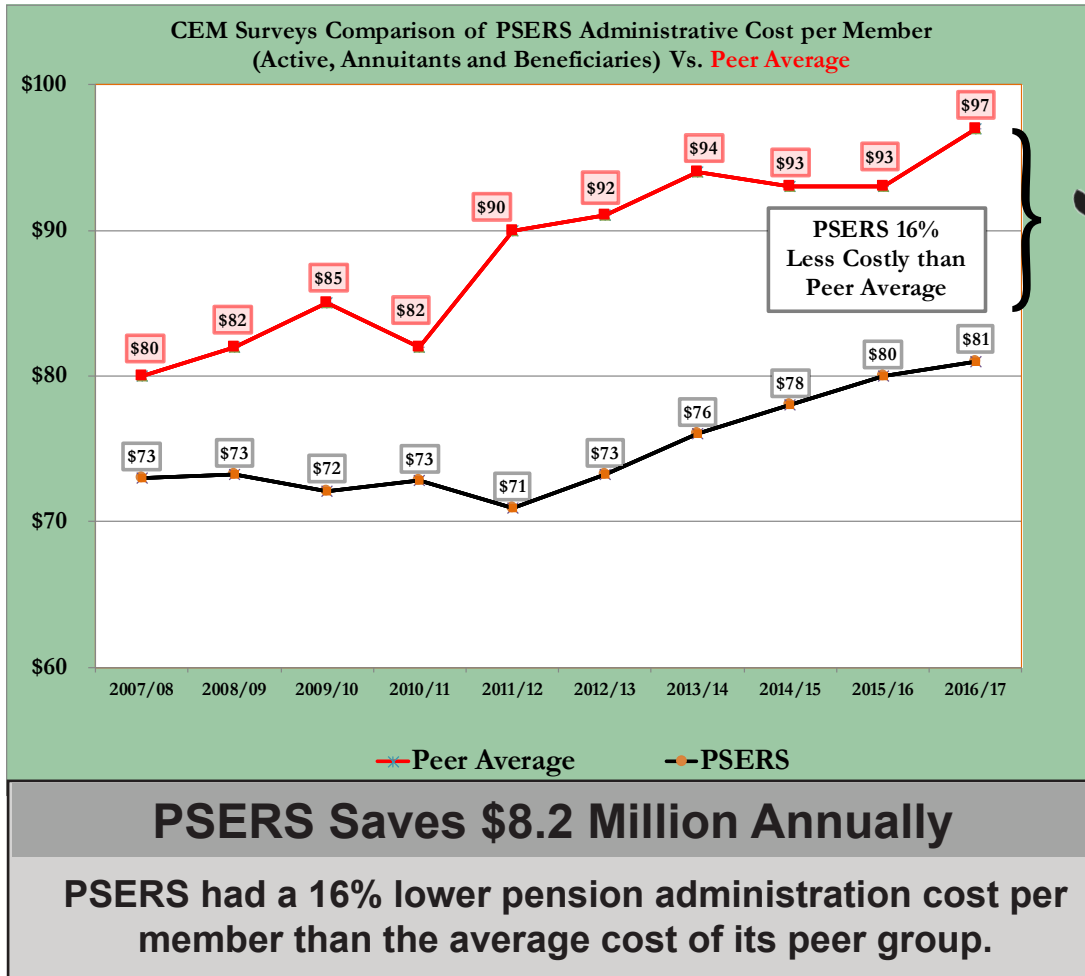


CALENDAR YEAR 2018 CUSTOMER SERVICE HIGHLIGHTS

 Answered 194,000 Member Calls	 Responded to 25,000 Member Emails	 Served 6,000 Members in Counseling Sessions	 Issued 2.7 Million Monthly Benefit Payments to Members	 Processed 9,100 Retirement Applications	 Prepared & Issued 259,000 1099-R's
--	--	--	---	--	---

PSERS Administrative Costs are Significantly Below Peers; Saves \$8.2 Million Annually

PSERS remains prudent in its use of funds and managing its annual budget. PSERS participates in an independent, international benchmarking survey evaluating its costs and service performance in comparison to other similar public pension funds. PSERS has 33% fewer full-time equivalent employees per member than the peer group average. By running a lean and efficient operation, PSERS saves the Commonwealth and school employers approximately \$8.2 million annually in administrative expenses compared to its peers.



PSERS FY 2019-2020 Budget Summary

PSERS' administrative budget is not funded from the Commonwealth's General Fund. It is funded from the investment earnings of the Fund and member and employer contributions. PSERS' FY 2019-20 budget submission contains an Administrative budget request of \$51,644,000 and a Defined Contribution budget request of \$2,450,000. PSERS also manages non-appropriated funds that cover expenses for Directed Commissions, Health Insurance Account, Health Options Program, and Investment-Related Expenses. PSERS' FY 2019-20 budgets, including non-appropriated funds, total \$94,747,000.

<i>Appropriation</i>	<i>PSERS' Budget Submission (000s)</i>
Administrative	\$ 51,644
Investment-Related	35,278
Defined Contribution	2,450
Directed Commissions	2,000
Health Insurance Account (HIA)	1,967
HIA Health Options Program	1,408
Total	\$ 94,747

Increasing Fee Transparency and Internally-Managed Assets

PSERS is one of the most transparent among large public pension funds in the nation for the disclosure of management fees. For example, certain pension funds report very little or no management fees for alternative investments because they are considered part of the cost of the investment and are netted against performance rather than shown separately. PSERS, however, gathers management fee information from each of its limited partnerships and collective trust fund investments, even if it is not specifically disclosed in the fund's standard reports or specifically identified in capital call requests. Such management fee information includes both base and performance fees obtained from either the fund's administrator statement, capital account statement or financial statements. This information is then utilized to report all relevant management fees in the System's financial statements. While the national debate over what constitutes a "fee" continues, PSERS will endeavor to remain transparent and report fees in accordance with current GASB standards and prevailing public pension industry practice to keep PSERS' financial statements both meaningful and comparative to its peers. In addition, PSERS reports all other investment expenses, including employee compensation and overhead, consultant, legal, and bank expenses incurred.

Additionally, PSERS has made using the ILPA (Institutional Limited Partners Association) reporting template a mandatory side letter term for all private manager contracts approved by the Board since May 2016.

Public Pension Management and Asset Investment Review Commission (PPMAIRC)

The PPMAIRC was created under Act 5 of 2017 to study three areas of PSERS and the State Employees' Retirement System (SERS) including:

- Fee transparency & stress testing
- Evaluating benchmarks
- Developing recommendations to reduce external investment fees

PSERS Board and professionals are conducting a detailed review of the final PPMAIRC report and its proposed recommendations.

PSERS Increased Internally Managed Assets to 37%; Saves \$43 Million Annually in Fees



The Investment Office received approval to increase its professional complement by seven during the past fiscal year. We were pleased to have all positions filled with very capable investment professionals by the fiscal year end with all but one starting prior to June 30, 2018. The complement increase allowed the Investment Office to support a large increase in assets managed in-house at a significantly lower cost than if those assets were managed externally.

Over the past three years, the Investment Office increased the amount of assets managed internally from 30% to 37%, or by \$6.9 billion. The estimated savings from managing those assets in-house is over \$43 million per year.

From FY 2013 to FY 2018, total investment expenses have decreased by 16% from \$558 million to \$468 million.

New Fee Reduction Plan Saves \$2.4 Billion

PSERS investment professionals and the PSERS Board's investment consultants developed and presented an investment fee savings plan at the August 2018 PSERS Board Meeting as directed by the Board.

PSERS investment professionals took a two-pronged approach to generate fee savings. The first was to establish a plan to renegotiate management fee arrangements to create a better alignment of interest between PSERS and each investment manager. The second was to expand internal management and bring additional assets in-house at a lower cost than external management.

Together, the cumulative fee savings are \$2.4 billion compounded over 30 years, which represent a 9.6% annual reduction in base management fees. The detailed fee reduction plan is posted on PSERS website.

Diversified Assets Limit Risk in Volatile Markets

PSERS Board reviews and approves the long-term asset allocation annually. The Board consults with its actuary, investment consultants, and PSERS investment professionals to formulate the asset allocation plan. With interest rates on cash investments around 2%, PSERS needs to take prudent risk to achieve its long-term goal of a 7.25% return. The level of risk taken by PSERS is largely determined by the Board's strategic asset allocation plan.

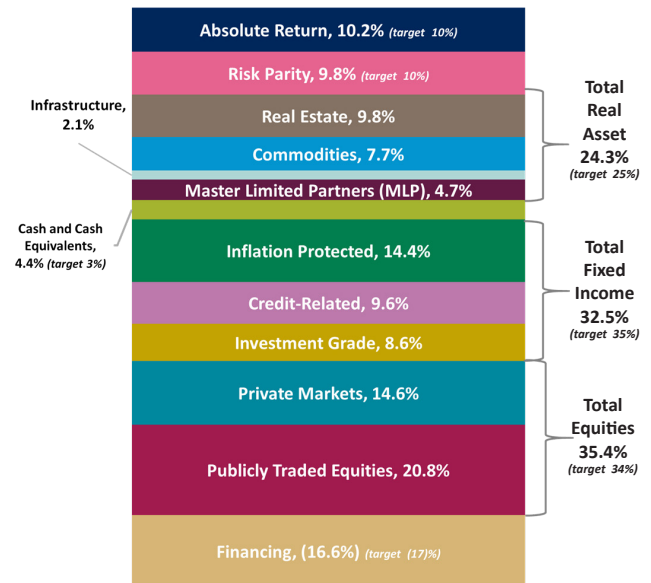
The Board takes the following factors into consideration:

- PSERS' investment time horizon;
- Demographics of the PSERS membership;
- Cash flow needs;
- PSERS' actuarial assumptions;
- PSERS' funded status;
- School employers' and the Commonwealth's financial strength and,
- The Board's willingness to take risk.

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

Asset Allocation

(as of June 30, 2018)



**PSERS uses financing to achieve increased economic exposure to diversifying asset classes to manage overall portfolio risk while maintaining an allocation designed to achieve the long-term goals of the System.*

For a Closer Look at PSERS Investments, visit the “Investment Program” page at psers.pa.gov

Other Financial Reports & Resources on PSERS web include:

“Financial Publications” page:

- Comprehensive Annual Financial Report (CAFR) & Summary Annual Financial Report (SAFR)
- Quarterly Financial Statements
- Budget Hearing Reports & Budget Report Highlights
- Actuarial Valuation
- Financial Asset Listing
- Employer Contribution Rates
- PA Pension Benefit Payments Map

“Investment Program” page:

- Carried Interest Report
- Quarterly Investment Performance
- Manager Fee Information

“Board of Trustees” page:

- Board Resolutions
- Adjudications

Long-Term Investment Performance Consistently Outperforms

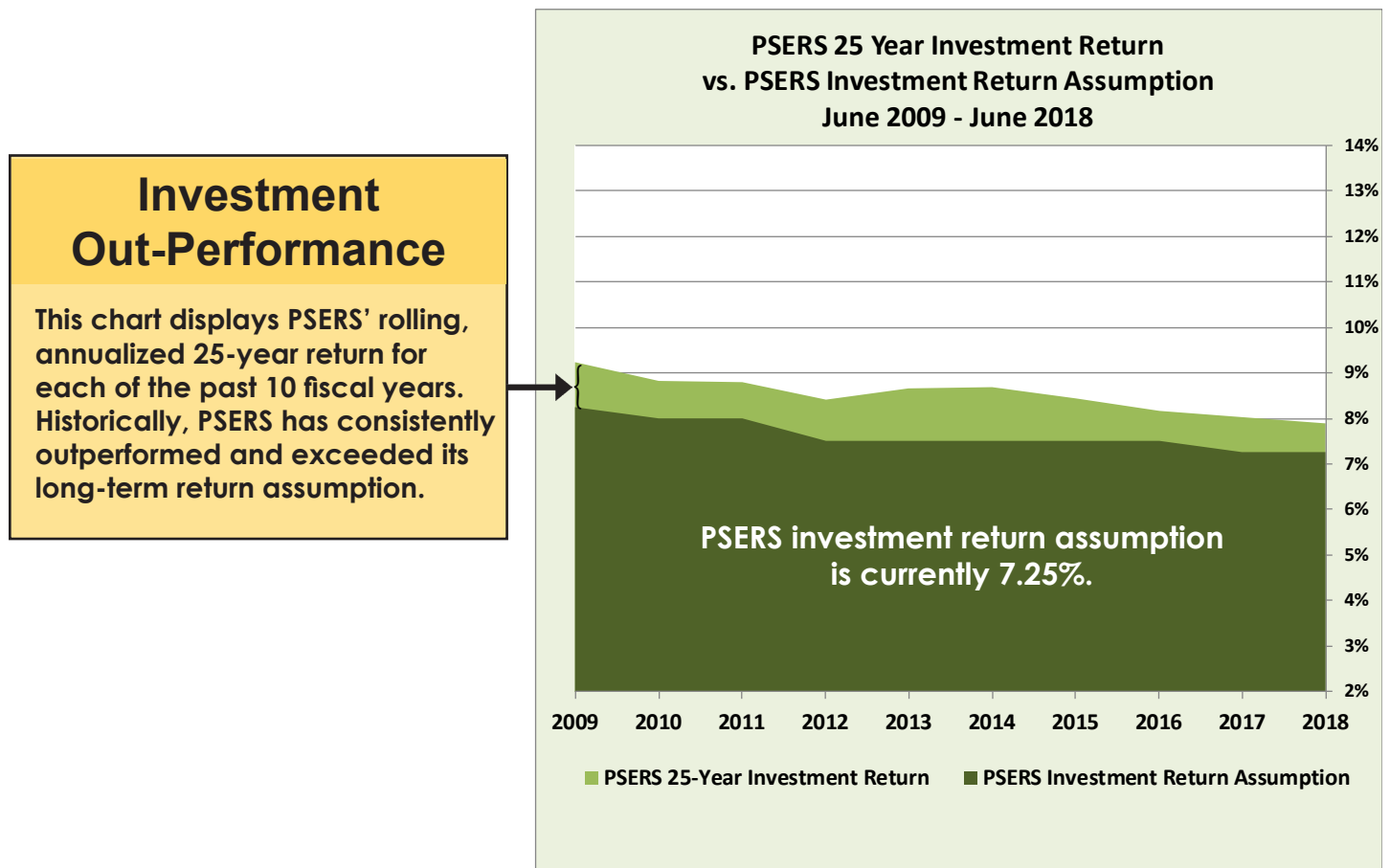
PSERS is a long-term investor and manages the Fund with long-term objectives (i.e., 25 to 30 years) in mind. The System has built a diversified asset allocation that positions the Fund to earn its return assumption of 7.25% over the long-term although annual fluctuations will occur. PSERS believes the best way to achieve its long-term objectives is to maintain a very diversified portfolio which includes all asset classes available to it, such as equities, fixed income, real assets, risk parity and absolute return.

The past fiscal year can be characterized by a risk-on period where taking concentrated equity risk, specifically U.S. equity risk, paid off as opposed to holding a diversified portfolio of assets. Improving economic fundamentals, improving global growth, low but rising inflation, U.S. tax reform, and improving corporate profitability were all contributors to strong equity performance.

This past fiscal year, investment performance was solid and for the period ended June 30, 2018, PSERS posted annualized net of fee returns of:

- One-year: 9.27%, added \$4.7 billion in cumulative net investment income
- Five-year: 7.62%, added \$18.6 billion in cumulative net investment income
- 10-year: 5.03%, added \$23.0 billion in cumulative net investment income

Since the end of the Great Recession, PSERS annualized net of fee return for that nine-year period was 9.28%, comfortably above the return assumption of 7.25%.



Payment for Past Service Debt is More Than 75% of the Employer Contribution Rate (ECR)

The majority of the employer contribution rate in FY 2019-2020, more than 75%, is for payment of the debt from past service (unfunded liability), and is not due to the payment of the current cost of benefits (employer normal cost) being earned by active members.



School employers are reimbursed by the Commonwealth for no less than 50% of the ECR.



School employers contribute full ECR amount to PSERS.



ECR Rate for FY 2019-20: 34.29%



Every ECR Dollar is Broken into Three Parts



75.6% of every dollar for **Past Services Payment** (Unfunded Liability)



21.9% of every dollar for **Current Services Payment**

2.5% of every dollar for **Healthcare Premium Assistance***

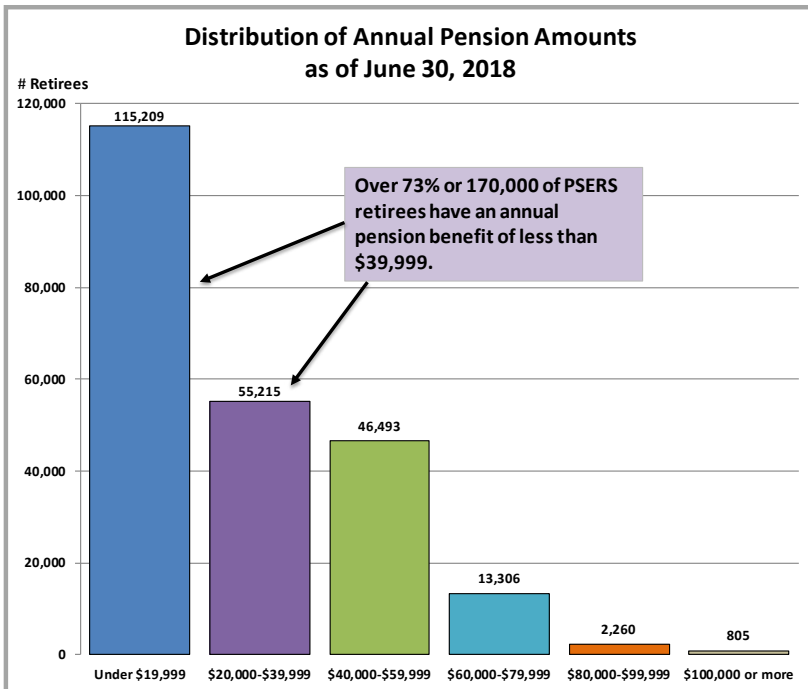


*per § 8509 in the Retirement Code

PSERS Members Help Fund Their Own Retirement Benefit

The average PSERS retiree receives a modest pension of \$25,405 on an annual basis, a benefit earned through a lengthy career of 23 years in public education. During their career, members make mandatory contributions to PSERS to help fund their own retirement benefit. In accordance with Act 120, new members as of July 1, 2011 and thereafter are funding the majority of the cost of their benefit. This is in contrast to many non-public (private) pension plans. In over 90% of private pension plans, members do not contribute and the employers bear 100% of the cost of the benefit.*

Six-figure pensions are rare. At June 30, 2018, there were 805 retired members receiving an annual benefit over \$100,000 out of a total 233,000 PSERS retirees. These six-figure pension retirees spent an average of 38 years working in their public education careers and contributing to their benefit. In fact, over 73% of retirees have an annual benefit of less than \$39,999.



PSERS' member contribution rate is one of the highest among U.S. public pension plans that participate in Social Security.**

Most members contribute between 7.50% and 10.30% of their pay depending on their class of membership to help fund their own retirement benefit. Members also share the investment risk.***

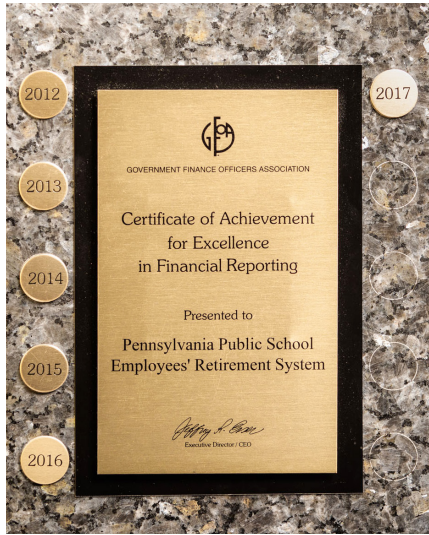


* Based on a query of private plan IRS Form 5500 filings

** According to recent National Association of State Retirement Administrators (NASRA) data, PSERS member contribution rate is the 12th highest member contribution rate among 84 large U.S. public pension plans that participate in Social Security.

*** Member contribution rates for members hired on or after July 1, 2011, are subject to change every three years, based on the investment performance of the retirement fund.

Awards Received During the Past Fiscal Year



Government Finance Officers Association of the United States and Canada (GFOA) Certificate of Achievement for Excellence in Financial Reporting – This prestigious national award recognizes conformance with the highest standards for preparation of state and local government financial reports. PSERS has received this award for 35 consecutive years from FY 1983 to FY 2017.

GFOA Popular Annual Financial Reporting Award – This prestigious national award recognizes conformance with the highest standards for preparation of state and local government popular reports. PSERS has received a Certificate of Achievement for two consecutive years from FY 2016 to FY 2017.

Public Pension Coordinating Council Public Pension Standards Award - The Public Pension Coordinating Council has awarded its Public Pension Standards Award to PSERS for 2018 in recognition of meeting professional standards for plan design and administration.

January 2019 PSERS Board of Trustees

Melva S. Vogler, Chairman
Nathan G. Mains, Vice Chairman
Deborah J. Beck
Honorable Matthew D. Bradford
House of Representatives
Honorable John P. Blake
Senate of Pennsylvania

Honorable Patrick M. Browne
Senate of Pennsylvania
Jason M. Davis
Eric O. DiTullio
Honorable Frederick B. Keller
House of Representatives
Susan C. Lemmo

Pedro A. Rivera
Secretary of Education
Christopher SantaMaria
Ambassador Martin J. Silverstein (*resigned 1/2/2019*)
Honorable Joseph M. Torsella
Treasurer of Pennsylvania
Robin L. Wiessmann
Secretary of Banking and Securities

Contact PSERS

This document and PSERS Budget Report are available on the "Financial Publications" page on PSERS' website at psers.pa.gov



Toll-Free: 1.888.773.7748
Local Phone: 717.787.8540
Email Address: ContactPSERS@pa.gov
Website: psers.pa.gov

5 North 5th Street | Harrisburg, PA 17101-1905