

Pennsylvania Public School Employees' Retirement System



A Message From the Executive Director

November 06, 2020

On behalf of our Board of Trustees and PSERS pension professionals, I am pleased to present the Summary Annual Financial Report (SAFR) for the Pennsylvania Public School Employees' Retirement System (PSERS) for the fiscal year ended June 30, 2020 (FY 2020). This report summarizes the financial data and accomplishments from FY 2020 that are provided in greater detail in PSERS' Comprehensive Annual Financial Report (CAFR). PSERS' CAFR is available online at psers.pa.gov.

Providing \$6.9 Billion in Benefits

In FY 2020, PSERS distributed \$6.9 billion in total pension benefits. Of this amount, \$6.5 billion, or nearly 94%, went to retired members who reside in Pennsylvania. Those benefits then bolster the Commonwealth's economy when retirees use them to shop.

Receiving Full Funding

For the fourth consecutive year, PSERS received full actuarial funding from school employers and the Commonwealth after 15 previous years of underfunding the actuarially required amount. This is an essential step to bring PSERS back to fully funded status. Full actuarial funding from employers and the Commonwealth,



From left: Jennifer A. Mills, PSERS Deputy Executive Director of Benefits & Director of Defined Contribution Investments; Glen R. Grell, PSERS Executive Director; Joseph E. Wasiak Jr., PSERS Deputy Executive Director of Administration

along with members' contributions and investment income, are all necessary sources of funds that will pay down the unfunded liability of the System.

PSERS Adapted Quickly to Pandemic Impacts

Since March 16, 2020, most of PSERS employees have been working remotely from their homes. Over 250 laptops were deployed and PSERS staff adapted to migrating conditions, continuing to provide excellent service to our members without any major interruptions. More detail on PSERS' services to members during the pandemic are provided on page 3.

Successful Implementation of PSERS Defined Contribution Plan

The defined contribution plan enacted under Act 5 of 2017 was successfully implemented on July 1, 2019. School employees who become new members of PSERS on or after July 1, 2019, can choose from two plans consisting of defined benefit (DB) and defined contribution (DC) components or a stand-alone DC plan. As a part of this major implementation, PSERS not only modified its own systems but also worked with all of the public school employers across the Commonwealth to ensure a smooth transition for employer reporting and remittance.

PSERS professionals remain dedicated to maintaining the high quality and excellence standards of PSERS DB and DC plans in the years to come.

Respectfully,

Glu R. Grell

Glen R. Grell PSERS Executive Director

About PSERS

PSERS was established on July 18, 1917, and officially began operations on July 1, 1919, to provide retirement benefits to public school employees of the Commonwealth of Pennsylvania.

PSERS' role expanded upon the passage of Act 5 of 2017 to include oversight of two new classes consisting of defined benefit (DB) and defined contribution (DC) components and a standalone DC class. PSERS currently serves over 500,000 active, terminated vested, and retired public school employees.

PSERS is administered by a staff of 361 and has 770 reporting units as of June 30, 2020. PSERS is headquartered in Harrisburg, Pennsylvania and also has seven field offices in strategic areas of the Commonwealth to enable direct contact with the members and employers.

PSERS Defined Benefit (DB) Plan

A member's pension benefit is determined by a formula that includes a pension multiplier, years of service, and final average salary and is fully funded during their working lifetime.

A DB pension is guaranteed, regardless of market fluctuations.

Members in the DB Plan contribute between 4.50% and 10.30% of their pay to PSERS DB Plan depending on their class of membership. With the Shared Risk/Shared Gain provision, the contribution rate may change for some membership classes based on investment performance.

PSERS Defined Contribution (DC) Plan

A member's retirement is based on member and employer contributions, the investment performance on those contributions, and the fees and expenses deducted from the member's DC account.

Member and employer contributions have the potential to grow based on investment earnings, but are not guaranteed against loss in declining investment markets.

Members with a DC account contribute between 2.75% and 7.50% of their pay to PSERS DC Plan depending on the class of membership.

A Closer Look: PSERS' Active Members

As of June 30, 2020, PSERS had approximately 256,000 active members with an annual payroll of \$14.0 billion.

- The top five largest school employers are: Philadelphia City School District, Pittsburgh School District, Central Bucks School District, Allentown City School District, and North Penn School District.
- The average age of a PSERS active member is approximately 46 years with 12 years of service.
- The most years of service earned by a current active member is 59 years.
- The average salary of an active member increased from \$53,458 in 2019 to \$54,535 in 2020.

A Closer Look: PSERS' Retired Members

As of June 30, 2020, PSERS had approximately 240,000 retirees and beneficiaries who receive over \$520 million in pension and healthcare benefits each month.

- The average yearly benefit paid to retirees increased from \$25,498 in 2019 to \$25,753 in 2020.
- Over 72% of PSERS retirees receive an annual pension benefit of less than \$40,000.
- Six-figure pensions are rare, with fewer than one-half of 1% of PSERS retirees receiving an annual pension benefit over \$100,000 after serving an average of 38 years in public education.
- The oldest PSERS retiree is 107 years old.



PSERS Adapted Quickly to Impacts of COVID-19 Pandemic

The COVID-19 pandemic has certainly been a challenge for PSERS. Processes and communication methods had to rapidly change as the pandemic progressed. PSERS was able to continue to provide excellent service to our members without any major interruptions due to prior emergency planning and the ability to quickly adapt to migrating conditions.

Since March 16, 2020, most of PSERS employees have been working remotely from their homes with very limited visits to physical office locations. PSERS operations and processes had to be adjusted with staff working remotely, moving from a 100% on-site presence to a 95+% teleworking presence.

PSERS Information Technology Office deployed over 250 laptops. PSERS staff adapted to the situation and kept up their work with minimal delays in service. While office locations, including the member call center, were initially closed, PSERS continued to process daily and monthly benefit payrolls, invest assets, process retirements, respond to members inquiries through emails, and issue refunds, all while working remotely.



Continuing Service to PSERS Members and Employers

Since the March 16, 2020, office closure PSERS has:

- Remotely processed eight monthly benefit payrolls totaling over 1.8 million payments and about \$4.1 billion.
- Processed over 6,600 retirements
- Issued over 3,000 refunds
- Responded to over 38,500 emails
- Answered over 66,500 phone calls

PSERS Employer Service Center (ESC) has responded to nearly 17,800 emails from employers since working from home began.

Additionally, over 91,300 agency-wide workflows were created for class elections, retirement estimates, address changes, nomination of beneficiaries, power of attorney, disability, account verification, and many other types of services.

Email Volume Increases

When PSERS office locations closed, PSERS encouraged members to email, rather than call, the member service center. As a result, PSERS saw email volumes more than triple within weeks of closing. Email continues to be a medium being used by members at a higher than normal average, even though PSERS prioritized reopening the member service call center using remote technology in May. Moreover, regional offices were opened with additional safety precautions in place while maintaining minimal staffing to ensure safety while also being available to assist walk-ins at PSERS locations beginning in June.

Remote Retirement Exit Counseling Sessions Available

PSERS Retirement Exit Counseling (REC) sessions also needed to be migrated to remote technology. PSERS quickly converted REC sessions for members who are retiring, from small in-person group meetings of 8 to 10 members to small group online counseling sessions using Skype technology at the end of March. As of October 2020, over 659 small group online counseling sessions have been conducted with over 3,849 members attending these online retirement counseling sessions.



Budgetary and Financial Governance

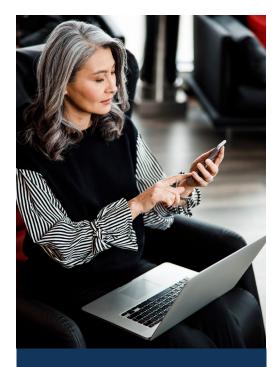
PSERS Saves \$6.4 Million Annually in Administrative Costs

PSERS participates in an annual independent, international benchmarking survey evaluating its costs and service performance in comparison to other public pension funds. Based on the most recent survey, PSERS had a 13% lower pension administration cost per member than the average cost for its peer group. By running a lean and efficient operation, PSERS saves the Commonwealth and school employers approximately \$6.4 million annually in administrative expenses compared to its peers.

PSERS' administrative budget is not funded by taxpayers through the Commonwealth's General Fund, but from investment earnings of the Fund itself. Historically, PSERS has underspent its approved budget, keeping more funds available to invest for PSERS' members.

PSERS continues to be a leader among large U.S. public pension funds in its effective control of expenses while providing necessary services to its membership. In the past two years, the System has added significantly to the number of active and retired members electing to receive newsletters, statement of accounts, 1099-Rs and other publications and documents electronically, which saves the agency more than \$200,000 per year in postage, printing, and paper costs.

During FY 2020 specifically, the agency achieved substantial savings in postage, reduced overtime, decreased rental of equipment and software, and lowered consultant and legal fees, all of which helps to maintain more investment earnings for the benefit of the Fund. In addition to these savings, PSERS purchased programming hours from its pension administration system vendor at a reduced prepaid rate to allow for vital changes in the future to the pension administration system.



By running a lean and efficient operation, PSERS saves the Commonwealth and school employers approximately \$6.4 million annually in administrative expenses compared to its peers.

FY 2020 Customer Service Highlights





Responded to 61,251
Member Emails



Counseled 5,970 Members for Retirement



2.8 Million

Monthly Benefit
Payments to Members



Processed 8,781 Retirement Applications



Prepared & Issued **263,716** 1099-R's

FY 2019 Customer Service Highlights - Comparative Data

Answered 160,885 Member Calls Responded to 29,174 Member Emails Counseled
6,312
Members for Retirement

Issued
2.8 Million
Monthly Benefit
Payments to Members

Processed 8,795 Retirement Applications Prepared & Issued **259,234** 1099-R's

Budgetary and Financial Governance (continued)

Member Self-Service Improvements

Members continued to benefit from improvements to the PSERS Member Self-Service (MSS) Portal, particularly during the pandemic. Even as offices were temporarily closed, the MSS Portal remained available and has continued to be a tremendous success.

Since being implemented in April 2018, more than 160,000 members have created their online account and conducted more than 200,000 transactions for themselves. The most common actions taken are to create their own retirement estimates, update their beneficiaries, update their address and generate their own income verification. MSS also allows members to "Go Green" and as a result, nearly 96% of all MSS accounts have opted to go paperless and receive information from PSERS electronically.

In July 2020, in an ongoing effort to ensure the protection of members' data, PSERS implemented Multi-Factor Authentication (MFA) in the MSS portal. MFA is an authentication method in which a user is granted account access only after successfully presenting two or more pieces of information. It provides additional security beyond requiring a standard username and password to ensure sensitive data remains secure.

Upcoming enhancements to the PSERS pension administration system will include secure message functionality, additional customer service functionality for improved call center interactions, and modifications to enable the calculation of benefits for Class T-G and Class T-H members who have a hybrid defined benefit/defined contribution retirement benefit.



Since its inception in April 2018, members have completed nearly 205,000 transactions online through their MSS Portal instead of using paper forms. Commonly completed transactions include:

80,212 Retirement Estimates
65,214 Nominations of Beneficiaries
30,735 Income Verifications
23,474 Address Changes

(as of June 30, 2020)



PSERS Health Options Program Prescription Drug Plan Earned High Rating

The PSERS Health Options Program (HOP) continues to see steady growth in enrollment and now has more than 120,000 PSERS retirees, spouses, and dependents enrolled as of June 30, 2020. Within the plan, there is a Dental Program offering which has eclipsed 21,000 enrollees. Additionally, efforts are currently underway to add a Vision Plan as an additional offering in conjunction with the Dental Program.

Once again, the HOP Prescription Drug Employer Group Waiver Plan earned a 4.5 star rating (out of 5 stars) from the Centers for Medicare and Medicaid Services (CMS) for the 2020 calendar year. Each year, CMS evaluates applicable health and prescription drug plans based on a plan's quality and performance. CMS uses a 5-star rating system that helps beneficiaries know how well a plan is doing. PSERS' HOP Prescription Drug Plan scored very high in its recent CMS evaluation in the following areas: Quality Improvement, Rating of Drug Plan, and Obtaining Needed Prescription Drugs. PSERS is committed to keeping the HOP prescription drug program affordable, offering meaningful member choice, and holding vendors accountable to provide our members with best-in-class service.

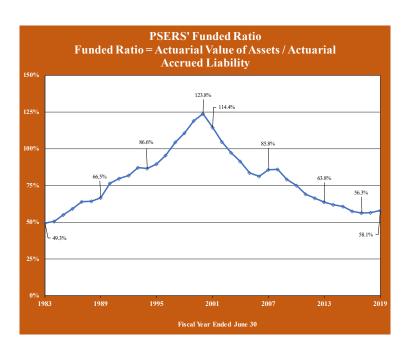


Financial Highlights



PSERS' Net Position

The fair value of the System's fiduciary net position totaled \$59.0 billion as of June 30, 2020. PSERS' total net position declined by \$0.1 billion from \$59.1 billion at June 30, 2019, to \$59.0 billion at June 30, 2020. The decrease in net position was due mostly to deductions for benefit and administrative expenses slightly exceeding net investment income plus member and employer contributions.



PSERS' Funded Ratio

An independent review of PSERS' assets and liabilities is performed annually. As part of this review, the progress toward funding PSERS' pension obligations is measured. This measurement is referred to as the funded ratio or funded status. For the second year in a row, the funded status of PSERS increased from 56.5% at June 30, 2018 to 58.1% at June 30, 2019. The unfunded accrued liability on an actuarial basis declined from \$44.9 billion at June 30, 2018 to \$44.1 billion at June 30, 2019.

Condensed Statements of Fiduciary Net Position June 30, 2020 and 2019 (\$ in millions)			
	2020	2019	
Member & Employer Receivables	\$ 1,742	\$ 1,670	
Investments	57,774	57,729	
Other Assets	5,386	5,466	
Total Assets	\$ 64,902	\$ 64,865	
Benefits Payable & Premium Advances	\$ 662	\$ 655	
Other Liabilities	5,210	5,075	
Total Liabilities	\$ 5,872	\$ 5,730	
Net Position restricted for pension, DC, and postemployment healthcare benefits	\$ 59,030	\$ 59,135	

Condensed Statements of Changes in Fiduciary Net Position Years ended June 30, 2020 and 2019 (\$ in millions)			
	2020	2019	
Member & Employer Contributions	\$ 5,877	\$ 5,666	
HOP Participant Premiums & Other	472	442	
Net Investment Income	1,007	3,635	
Total Additions	\$ 7,356	\$ 9,743	
Benefit Payments	\$ 7,365	\$ 7,237	
Administrative Expenses	96	100	
Total Deductions	\$ 7,461	\$ 7,337	
Net Increase (Decrease)	\$ (105)	\$ 2,406	
Net Position restricted for pension, DC, & postemployment healthcare benefits:			
Balance, beginning of year	\$ 59,135	\$ 56,729	
Balance, end of year	\$ 59,030	\$ 59,135	

Financial Highlights (continued)

PSERS Remains Committed to Transparency: Investment Manager Fee and Carried Interest Reports Now Available on PSERS Website

Investment Manager Fee Report (FY 2020)

The Investment Manager Fee Report covered costs related to the fund's use of internal investment professionals and external managers to invest the fund's assets of \$59 billion in FY2020. During that time, overall investment expenses increased from 0.82% to 0.90% of the total fund.

The report showed that internal management expenses increased by \$4 million to \$28 million as the System hired more investment professionals to reduce contracting costs with external managers. Additionally, PSERS saves over \$46 million per year in management fees by managing \$26.8 billion internally rather than externally.

Carried Interest Report (Calendar Year 2019)

Carried interest is a share of investment profits that is paid out when fund performance is strong. Contractually, the general partner only receives profit shares if it repays all of PSERS' start-up, investment and fixed management fees, and hits an annual preferred rate of return. Additionally, PSERS investment professionals have provided the Trustees with an end-of-the-year private markets report for more than two decades. This report, for the first time, provided a breakdown of base fees and profit sharing/carried interest by individual managers across PSERS' private equity, private credit and private real estate holdings.

PSERS Funding Sources



PSERS is funded through three sources:

- Contributions from employees (members)
- Employer contributions, which includes contributions from school employers and the Commonwealth
- Investment earnings from the System

Total member contributions slightly increased from \$1.06 billion in FY 2019 to \$1.08 billion in FY 2020 and increased from \$1.03 billion in FY 2018 to \$1.06 billion in FY 2019. The increase in both years was mainly due to an increase in member contributions from active member payroll.

Employer contributions increased from \$4.6 billion in FY 2019 to \$4.8 billion in FY 2020 due to the increase in the total employer contribution rate from 33.43% in FY 2019 to 34.29% in FY 2020. Net investment income decreased from \$3.6 billion in FY 2019 to \$1.0 billion in FY 2020, which is consistent with the decrease in the time-weighted investment rate of return from 6.68% for FY 2019 to 1.11% for FY 2020.

PSERS Internal Controls and Reporting

PSERS' management is responsible for and has implemented internal controls designed to provide reasonable assurances for the safeguarding of assets and the reliability of financial records. This report has been prepared in accordance with accounting principles generally accepted in the United States of America. The System maintains a full accrual accounting system.

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

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

In addition, each year PSERS undergoes a very thorough internal controls assessment. This past year the in-depth assessment reviewed five areas of PSERS operations: Benefit Processing, Communications, Healthcare, Investments, and Financial Reporting. Each internal control assessment was based on five major components. The five components included, Control Environment, Risk Assessment, Control Activities, Information and Communication, and Monitoring.

As required by the Commonwealth, PSERS submitted the assessment and monitoring plan in a timely manner to the Commonwealth's Office of Budget. No significant deficiencies were identified in this past year's internal control assessment; therefore no corrective action plan was needed.

Investment Highlights

PSERS Posts 1.11% Net Investment Return in FY 2020

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, and absolute return.

PSERS Earmed

1.11%

return on investment in FY 2020

The past fiscal year will be remembered as a tale of two halves with a net of fee return of 1.11%. The first half was highlighted by a strong period for equity returns while the second half was

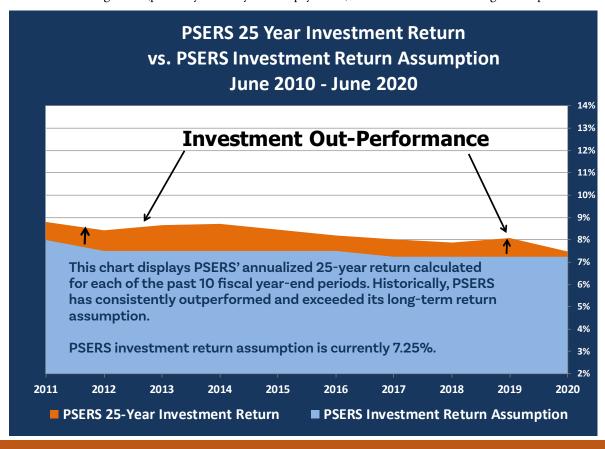
dominated by a global pandemic with many economies in the world completely shutting down and plunging the global economy into a recession. However, pension plans like PSERS are built to generate long-term returns, so one good (or bad) year is not going to make (or break) the Fund. The System focuses on long-term returns. For the past 10 years, the Fund's annualized net of fee return was 7.70%, above the actuarial assumed rate of return of 7.25%. The System has built a diversified allocation to allow it to collect risk premiums over the long-term. In the short-term, no one knows what will happen, and the System expects to go through years where returns are below 7.25%, perhaps significantly below.

PSERS posted annualized net of fee returns of:

- One-year: 1.11%, added \$1.0 billion in cumulative net investment income
- Five-year: 5.64%, added \$14.8 billion in cumulative net investment income
- 10-year: 7.70%, added \$37.7 billion in cumulative net investment income

Long-Term Investment Performance Exceeds PSERS' Return Assumption

Long-term returns continue to remain above PSERS' return assumption. PSERS posted a positive return of 7.48% for the 25-year period ended June 30, 2020. PSERS maintains a well-diversified asset allocation that can withstand the volatility in the markets, provide enough liquidity to meet cash flow obligations (primarily monthly benefit payments), and meet PSERS' earnings assumption over the long-term.



Investment Highlights (continued)

Risk-Balanced Asset Allocation

The asset allocation establishes a framework for PSERS that has a reasonable likelihood, in the judgment of the Board, of realizing PSERS' long-term investment objectives. In establishing the asset allocation for the System, the Board considers capital market expectations for expected return, volatility, and asset class correlations as discussed in the Investment Policy Statement (IPS). The Board also establishes Asset Allocation Targets and Ranges and reviews them annually. The Board undertakes a comprehensive strategic asset/liability review designed to assess the continuing appropriateness of the IPS at least every three years or when material changes to the liabilities take place (e.g., plan design changes, material changes in underlying assumptions, etc.). Such review will consider an asset-liability study of future benefit payments, liabilities, required funding, the appropriateness of the actuarial interest rate assumption and the prospective funded status of liabilities. It may also include a study of portfolio design for optimal diversification and comparisons with peer practices.

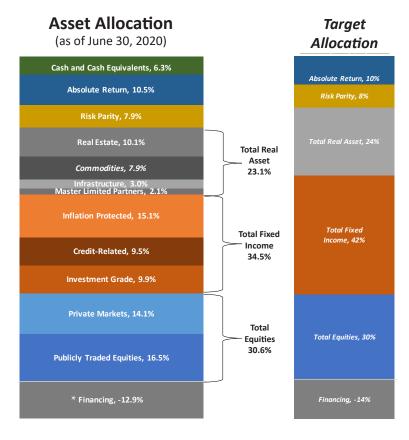
Given the significant net cash outflows, the Board has prudently reduced the risk profile of the System since the financial crisis in 2008. It has done so by decreasing its return dependence on the equity markets and increasing its risk exposures to asset classes that are less correlated to equity markets 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.

External Cash Flow History

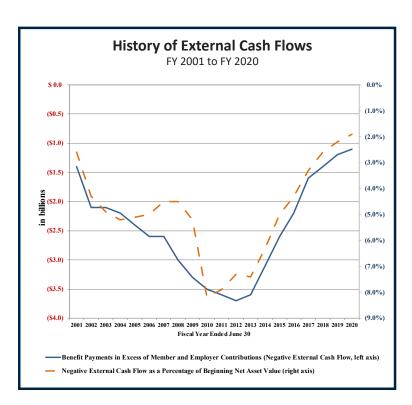
Over the past 20 fiscal years, the System has paid out \$49.4 billion more in benefits than it has received in member and employer contributions (i.e., the System has experienced negative cash flow).

The average negative external cash flow was approximately \$2.5 billion per year during this period. This annual funding deficiency has amounted to 2.1% or more of beginning net assets each year and represents the amount of investment return needed each year to make up the shortfall (i.e., if the System earned 3.0% in a given year with a 3.0% cash flow shortfall, then the net assets of the System will be unchanged).

The negative annual external cash flow has improved significantly since fiscal year 2012 due to the implementation of Act 120 in 2010 (see the History of External Cash Flows chart to the right). Act 120 provided for increased employer contributions to the actuarially required contribution levels. Due to receiving 100% of actuarially required contributions for the fourth consecutive year, the System's cash flow shortfall is now more favorable than the public fund average and will continue to improve over the next several years.



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



PSERS Commitment to Fee Transparency

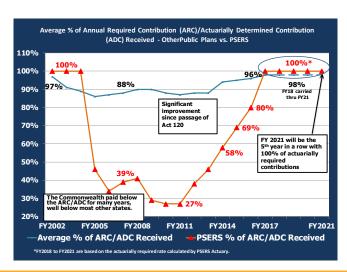
On December 6, 2019, PSERS Board of Trustees approved an investment transparency policy that codified many of the agency's long-standing methods of disseminating investment records to the public, press and policymakers in accordance with existing state laws, Commonwealth directives and best practices in government finance. The policy stresses that PSERS will abide by its legal and fiduciary obligations when using the agency's website and other means to release investment returns and fee data under the Pennsylvania Right to Know Law, Sunshine Act, Public School Retirement Code, various other state codes, and Institutional Limited Partners Association (ILPA) standards. The policy also states PSERS has the discretion to publicize voluntarily "additional financial and investment information" that may go beyond the above-mentioned laws, rules and standards.

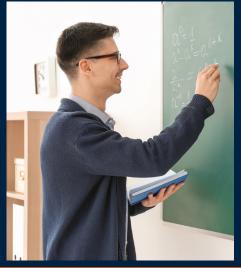
The policy also asserts that PSERS has the legal and fiduciary right to protect itself from demands for "additional fee disclosure" that could contain trade secrets and other non-public contractual agreements, which if exposed could hurt investment returns, lead to violations of state and federal statutes, or costly litigation. The policy also urges policymakers and stakeholders to defend the System against "false comparisons" with other pension funds that may not disclose similar data.

Additionally, PSERS investment professionals have provided the Trustees with an end-of-the-year private markets report for more than two decades. As part of PSERS' historic commitment to transparency, the report has evolved to provide more information on asset performance, profits and costs. For the second year in a row, the report tabulated cumulative carried interest paid and accrued across asset classes. Carried interest is a share of investment profits that is paid out when fund performance is strong. Contractually, the general partner only receives profit shares if it repays all of PSERS' start-up, investment and fixed management fees, and hits an annual preferred rate of return. For more information on PSERS Investment Manager Fee report and Carried Interest report, please see page 7.

Pension Funding Progress

Prior to Act 120, PSERS' Annual Required Contribution (ARC) percentage of contributions received under Governmental Accounting Standards Board (GASB) standards was only 27%. As a result of the Act 120 funding increases, on July 1, 2016, PSERS began receiving 100% of actuarially required contributions based on sound actuarial practices and principles for the first time in 15 years. This marked a significant milestone in PSERS' contribution history and establishes a path to full funding. PSERS received the actuarially required contributions from FY 2016 to FY 2020, and the large annual employer contribution rate increases that occurred from FY 2012 to FY 2018 are now complete. Employer contribution rate increases in the future are expected to be in line with inflation, barring major market fluctuations and major changes to the state law.





One Year of PSERS Defined Contribution Plan

The Defined Contribution (DC) Plan was successfully implemented with the assistance of Voya Institutional Plan Services (VIPS), as the Third Party Administrator for the DC plan, and Charles W. Cammack Associates, as the pension consultant. School employees who become new members of PSERS on or after July 1, 2019 can choose from three classes of membership: two consisting of defined benefit and defined contribution components and one that is a stand-alone defined contribution plan.

As of June 2020, over 16,000 participants were enrolled in the DC plan. Additionally, current members who were active on July 1, 2019 had a one-time option to elect prospectively into one of the new membership classes; only 10 current members made such election.

The Retirement Code requires the DC plan to provide no less than ten investment options offered by three or more investment providers. Currently, the DC plan has nine providers offering twelve investment options. As of June 2020, the total DC plan balance was approximately \$21 million.

PSERS Manages \$26.8 Billion Internally



From left: Thomas A. Bauer, Deputy Chief Investment Officer, Traditional Investments; Charles J. Spiller, Deputy Chief Investment Officer, Non-Traditional Investments; James H. Grossman Jr., PSERS Chief Investment Officer

PSERS uses both internal investment professionals and external investment managers to invest its assets. As of June 30, 2020, PSERS employed 50 internal investment professionals with a variety of professional credentials including: Chartered Financial Analysts, Certified Public Accountants, Masters of Business Administration, Chartered Alternative Investment Analyst, and a Professional Risk Manager.

During FY 2020, PSERS increased the amount of asset exposures managed internally from \$24.9 billion to \$26.8 billion of the System's exposures. Asset classes such as U.S. equities and publicly-traded infrastructure are entirely managed in-house by PSERS investment professionals. Other asset classes such as non-U.S. equities, fixed income, private markets, commodities, real estate, risk parity and master limited partnerships are partly managed in-house by PSERS investment professionals.

By bringing more assets in-house, PSERS generates investment management fee savings. When assets are assigned to PSERS' investment professionals, the total costs (e.g., employee salary and benefits, computers and office supplies) are much lower than the largest "very low fee" index mutual fund companies, giving PSERS a significant advantage.

PSERS' Investment Professionals Certifications and Education

Investment management is a dynamic profession that continuously adapts to new technologies and evolving professional standards. PSERS investment professionals demonstrate their commitment to continuing education through completion of recognized investment industry designation programs and degrees program.

PSERS Investment Professionals' Certifications & Education

- 22 Chartered Financial Analysts (CFA)
- 8 Certified Public Accountants (CPA)
- 7 Chartered Alternative Investment Analysts (CAIA)
- 4 Certified Treasury Professionals (CTP)
- 3 Financial Risk Managers (FRM)
- 2 Professional Risk Manager (PRM)
- 1 Certified Property Manager (CPM)

- 50 Bachelor's Degrees
- 16 Master's Degrees (MBA)
- 2 Juris Doctor

Numbers as of June 30, 2020

PSERS In-House Management Saves Over \$46 Million Annually

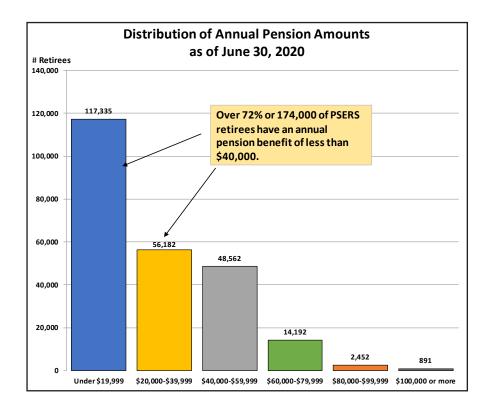
PSERS Investment Office received approval to increase its professional complement by ten during the past fiscal year. We are in the process of filling those positions with very capable investment professionals which will allow us to continue our efforts to bring additional assets in-house as well as provide additional depth to the investment team. The complement increase will allow the Investment Office to support the large amount of 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 34% to 39%, or by \$5.6 billion. The estimated fee savings from managing those assets in-house is over \$46 million per year.



Pension Benefit Amounts

The average PSERS retiree receives a modest pension of \$25,753 on an annual basis, a benefit earned through a lengthy career of 23 years in public education. During their career, members make mandatory contributions between 7.50% and 10.30% of their pay depending on their class of membership 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 such plans, members do not contribute and the employers bear 100% of the cost of the benefit.

Six-figure pensions are rare. At June 30, 2020, there were 891 retired members receiving an annual benefit over \$100,000 out of a total 240,000 PSERS retirees. These six-figure pension retirees spent an average of 38 years working in their public education careers and contributing to their benefit.



Awards for Financial Reporting

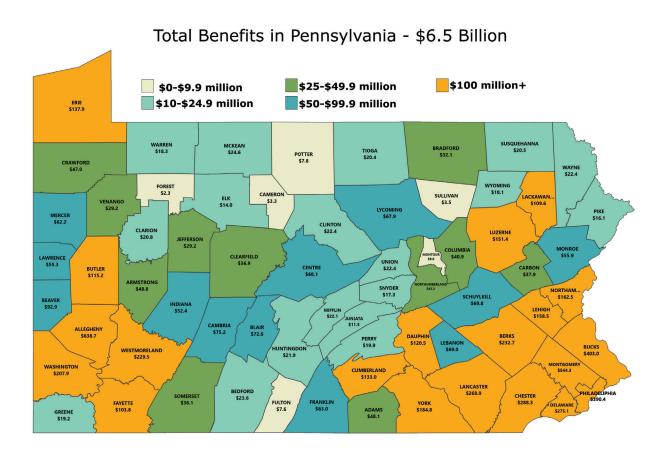
Government Finance Officers Association (GFOA) of the United States and Canada Certificate of Achievement for Excellence in Financial Reporting - The Certificate of Achievement awarded by the GFOA is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. PSERS has received a Certificate of Achievement for 37 consecutive years from FY 1983 to FY 2019.

GFOA Popular Annual Financial Reporting Award - GFOA has given an Award for Outstanding Achievement in Popular Annual Financial Reporting to PSERS for its Popular Annual Financial Report for the fiscal year ended June 30, 2019, which PSERS refers to as its Summary Annual Financial Report. The Award for Outstanding Achievement in Popular Annual Financial Reporting is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government popular reports. PSERS has received a Certificate of Achievement for four consecutive years from FY 2016 to FY 2019.

Public Pension Coordinating Council Public Pension Standards Award - The Public Pension Coordinating Council has awarded its Public Pension Standards Award to PSERS for 2019. This award is in recognition of meeting professional standards for plan design and administration.

Economic Impact in Pennsylvania

PSERS provides a stable source of revenue for local economies throughout Pennsylvania. Each year PSERS pays out billions in pension benefits to retired members who reside in Pennsylvania. In fiscal year 2020, PSERS pension benefits to retirees totaled approximately \$6.9 billion. Of this amount nearly 94%, or \$6.5 billion, went directly into state and local economies. These pension benefits are a significant economic driver that benefit the economy of the Commonwealth.



For More Information

This Summary Annual Financial Report (SAFR) is produced from information contained in PSERS' Comprehensive Annual Financial Report (CAFR) for the fiscal year ended June 30, 2020. All financial information contained in the SAFR conforms with Generally Accepted Accounting Principles (GAAP).

Both PSERS' SAFR and CAFR, which contains more detailed information, are available on PSERS' website at *psers.pa.gov* under "Financial Publications."



PSERS Board of Trustees



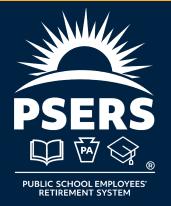
Seated, front row: Secretary Robin L. Wiessmann*; Melva S. Vogler, Susan C. Lemmo; Deborah J. Beck
Standing, second row: Honorable Francis X. Ryan; Miriam Fox** designee for Honorable Matthew D. Bradford; Stacey Connors, designee for
Honorable Patrick M. Browne; Jonathan Berger Designee for Nathan G. Mains; Christopher SantaMaria, Board Chairman; Honorable Joseph M.
Torsella; Jason M. Davis; Patrick Lord, designee for Secretary Pedro A. Rivera; Honorable John P. Blake
Not pictured: Eric DiTullio and Acting Secretary Richard Vague

* Robin Wiessmann, former Secretary of Banking and Securities, was replaced by Acting Secretary Richard Vague in February 2020.

** Miriam Fox, designee for the Honorable Matthew D. Bradford, retired effective December 2019.

PSERS Board Education and Training Program

Act 5 of 2017 required PSERS Board of Trustees to receive 8 hours of investment-related education each year. We are pleased to report that in 2019, our 15 Board members and their designees completed over 360 hours of investment- related education and ethics training. On average, each board member and designee received over 11 hours of education, far exceeding the education requirement.



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