

PA Public School Employees' Retirement System

ANNUAL COMPREHENSIVE FINANCIAL REPORT

Fiscal Years Ended June 30, 2024 and 2023

A Component Unit of the Commonwealth of Pennsylvania

Pennsylvania Public School Employees' Retirement System

A Component Unit of the Commonwealth of Pennsylvania

5 North 5th Street
Harrisburg, Pennsylvania 17101-1905

Telephone:

Toll-Free 888-773-7748
888-PSERS4U

Local 717-787-8540

Annual Comprehensive Financial Report

for the

Fiscal Years Ended June 30, 2024 and 2023

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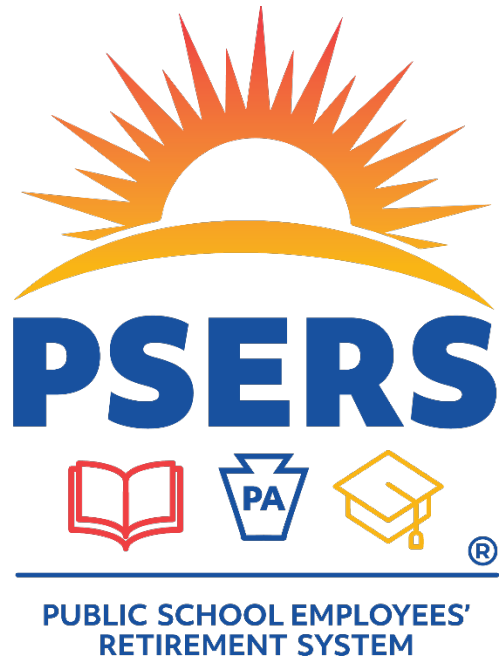
*Report prepared by the Public School Employees' Retirement System
Office of Financial Management Staff with support from many areas of PSERS*

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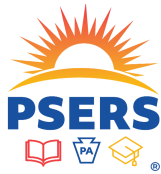


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INTRODUCTORY SECTION



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Harrisburg PA 17101-1905

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

*Toll-Free - 1-888-773-7748
(1-888-PSERS4U)
Local - 717-787-8540
Web Address: www.pa.gov/PSERS*

December 13, 2024

The Honorable Joshua D. Shapiro, Governor of Pennsylvania
Members of the PA General Assembly
Members of the Retirement System
Members of the Boards of PSERS' Employers
Pennsylvania Public School Employees' Retirement System Board of Trustees

Dear Governor Shapiro, Legislators, Members, Employers' Board Members, and PSERS' Board of Trustees:

We are pleased to present the 105th edition of the Annual Comprehensive Financial Report (ACFR) for the Pennsylvania Public School Employees' Retirement System (PSERS or System) for the fiscal years ended June 30, 2024, (FY 2024) and 2023 (FY 2023). This report provides financial, investment, actuarial, and statistical information in a single publication in accordance with the Government Finance Officers Association standards. Please refer to "PSERS at a Glance" starting on page 14, for further details regarding the System and statistical information related to benefit payments.

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

PSERS was established by law as an independent administrative board directed by a 15-member governing board of trustees (Board), which exercises control and management of the System, including the investment of its assets. PSERS is considered a component unit of the Commonwealth of Pennsylvania as defined by the Governmental Accounting Standards Board (GASB). An annual audit of the System by an independent certified public accounting firm is required by the Retirement Code. PSERS has contracted with SB & Company, LLC for the fiscal year 2024 audit of its financial statements and has received an unmodified opinion as evidenced in the Report of Independent Public Accountants in the Financial Section of this ACFR. An unmodified opinion means that PSERS' financial statements fairly present, in all material respects, its financial condition. No significant findings were noted during the audit and, therefore, a management letter was not issued. This is the fifteenth consecutive year that a management letter was not issued by the independent auditors and is reflective of the hard work and dedication of PSERS' Board and staff to continue to improve the internal controls, operations, and efficiency of the System.

Management's Discussion and Analysis, beginning on page 27, provides an overview of PSERS' financial position and changes thus helping readers to understand the financial statements.

Major Initiatives

Organizational Changes and Developments in 2024

Organizational changes and implementation of governance reforms continued during FY 2024, as several key staff vacancies were filled and meaningful progress on the agency's strategic plan was achieved. FY 2024 included the hiring of a new Chief Financial Officer and a Director of Government Affairs & Stakeholder Engagement.

- **Brian Lyman** joined PSERS as Chief Financial Officer (CFO) in February of 2024 following an extensive nationwide search that took place over several months. As CFO, he oversees the Office of Financial Management (OFM) and interfaces with the Governor's Office of the Budget, various state agencies, public school employers, and independent actuarial and auditing consultants. The office is responsible for budgeting, accounting, employer and member payroll collections and annuitant operations associated with the System's defined benefit and contribution plans, as well as two post-employment healthcare plans.
- **Mark Fetzko** was hired as PSERS' first Director of Government Affairs & Stakeholder Engagement in January of 2024. He oversees the Communications and Legislative Affairs Office, which is responsible for effective collaboration and engagement with PSERS' many key stakeholders, including the General Assembly, and oversight of agency internal and external communications. Staff within this office also serve as liaisons to members of the General Assembly in responding to legislative inquiries, performing legislative research, and coordinating agency responses to proposed legislation.

Strategic Plan

In late 2022, PSERS hired a consultant to assist PSERS with developing a strategic plan for the Agency. The Board formally adopted a strategic plan framework for our organization in August 2023. The strategic plan represents months of hard work by both members of the Board and staff to better define and plan the work the agency is committed to doing each and every day, now and into the future.

The Board identified six strategic priorities:

- Enhance member satisfaction throughout the customer experience.
- Enhance comprehensive and transparent financial reporting and forecasting.
- Develop the organizational culture and staff/leadership competencies to meet the demands of the future.
- Implement a robust enterprise risk management program.
- Enhance communications, collaboration, and the education of all critical stakeholders.
- Align all organizational units and functions with PSERS' strategic priorities.

These strategic priorities are supported by 25 initiatives, many of which are either already under way or will begin soon. These clearly articulated priorities and initiatives provide the focus we need to efficiently work together on the right things at the right time. PSERS strategic plan is available on PSERS website at www.pa.gov/PSERS.

Member Communication and Services

PSERS continues to make improvements to its member service offerings, its pension administration system, and the associated online functionality. Aligned with several strategic priorities, there were several key enhancements completed this past year to better serve our more than 500,000 members.

Member Customer Service

PSERS has continued to offer virtual and in-person opportunities for its member counseling and member and employer education programs. These dual efforts continue to be positively received and while it has not been determined if there is a direct correlation, PSERS has been experiencing an increase in attendance at retirement counseling sessions compared to previous years.

Through the years, PSERS has experienced steady growth in our interactions with members. Since the onset of the pandemic and coupled with the continued increasing utilization of online services, these communications have grown exponentially and have impacted customer service levels. As a result, PSERS performed a staffing study to identify areas of improvement and needed resources to meet the changing needs of our membership. Based on this study, the PSERS' Board of Trustees approved a significant increase in staffing complement for the Bureau of Communications and Counseling of up to 20 full-time positions. PSERS has begun the first phase of a multi-year plan to implement this staffing increase. These positions will focus on member counseling and communication services, such as answering phones and emails and providing in-person and virtual education and counseling. The increased staffing will improve the call center experience and provide opportunities for enhancing customer service provided to members.

PSERS finalized a process of providing an annual notification to terminated, non-vested members to advise them that their contributions and interest are still with PSERS. This new process is based on the recommended "best practices" for fiduciary compliance issued by the Department of Labor to proactively take steps to ensure that participants and beneficiaries get the benefits they have earned in a timely fashion. These communications will ensure that we maintain up-to-date demographic information of former members to minimize outreach efforts when members reach the required beginning date for minimum distributions.

Member Self-Service

The PSERS' Member Self-Service (MSS) Portal continues to be a tremendous success. Since being implemented in April 2018, more than 250,000 members have created an online account and conducted nearly 500,000 transactions using the MSS Portals. The most common actions taken include creating their own retirement estimates, updating their beneficiaries, address, and generating their own income verification. Nearly 91% of all MSS accounts have elected to go paperless and receive information from PSERS electronically.

PSERS continues to enhance MSS security and functionality. In August 2023, PSERS added functionality to its secure online member portal that enables members to change or add bank account information for electronic funds transfer (EFT). To date, nearly 5,000 members have used this feature, resulting in faster processing times.

PSERS is also in the process of moving to a cloud-based pension administration system. This is anticipated to enhance system performance and provide the opportunity for improved services to our members and employers.

Status of Pension Funding Initiatives

The ongoing budgetary commitment of Governor Josh Shapiro and the Legislature authorizing state and school employers to pay the full amount of the actuarially determined contributions continues to help improve PSERS' funded status.

From FY 2017 to FY 2024, PSERS received full actuarial funding from school employers and the Commonwealth after 15 years of underfunding. Full actuarial funding from employers, along with member contributions and investment income, are each necessary sources of funding that will pay down the unfunded liability and return PSERS to fully funded status.

The Commonwealth reimburses all school entity employers (school districts, intermediate units and vocational technical schools) at least 50% of all employer contributions paid to the System. This reimbursement is referred to as the "Commonwealth Share" of employer contributions. The Commonwealth reimburses certain school entity employers at a rate greater than 50% based on the Commonwealth of Pennsylvania Department of Education's Market Value/Personal Income Aid Ratio and other factors. The Commonwealth also remits 50% of the total employer contributions for employers other than school entities directly to the System. Total employer contributions are comprised of the Commonwealth Share and remaining contributions, which are referred to as the school and non-school entity share.

For FY 2024, the Commonwealth Share of total employer contributions was \$3.0 billion and the school and non-school entity share of total employer contributions was \$2.4 billion, for a total of \$5.4 billion.

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

On an actuarial basis, the funded ratio was 63.6% as of June 30, 2023, the most recent actuarial valuation. Subject to future investment returns and continued commitment to making employer contributions, the actuarial funded ratio is expected to climb to over 80% by 2032. The System's funded ratio on a market-value basis was 64.63% as of June 30, 2024. The FY 2024 funded ratio increased on a market-value basis due to higher investment returns in FY 2024. The longer-term trends remain positive. Since June 30, 2016, when full actuarial funding began, the System's market value unfunded ratio increased from 50.14% to 64.63% at June 30, 2024.

The results of PSERS' latest published actuarial valuation (as of June 30, 2023) indicated that the rates of contribution payable by the members and employers, when taken together with the current assets of the System, are adequate to fund the actuarial liabilities for all benefits payable under the System at that date.

(Additional comparative information on the funded status of PSERS can be found in the Financial and Actuarial Sections of this report.)

Economic Summary

PSERS' investment philosophy focuses on diversification among various asset classes as an effective method to realize its goals while addressing uncertainty across capital markets from shifting macroeconomic and geopolitical environments. The past year witnessed a continuation of several such shifts, with three themes (rising interest rates, tighter credit markets, and geopolitical uncertainty) having particular significance.

Rising Interest Rates

Interest rates remained relatively high over this fiscal year with overnight interest rates ranging from 5.00%-5.25%. This represents a continuation of restrictive rates as the Federal Reserve works to address concerns over higher inflation rates resulting from the fiscal responses to COVID-19 and supply-chain challenges. While inflation concerns have subsided somewhat from their highs, the resulting higher rates on cash have implications across the entire PSERS portfolio, most notably on the return for holding cash, the cost for employing leverage, and risk-return value proposition for all other asset classes relative to cash.

Tighter Credit Markets

Partially because of the higher interest rates described above, we continue to see a shift towards tighter credit markets, particularly for Commercial Real Estate (CRE), as regional banks demonstrated a reduced appetite for this long-term debt given the short-term, and potentially uncertain nature of deposits relied on to fund such debt. Lending for office and retail related inventory has been most acutely impacted as employers have proven reluctant to require employees to return to the office following the shift to online working that occurred in response to COVID-19. Fewer employees coming into the traditional office centers has also translated into less foot traffic for traditional retail located in these centers. The implications of tighter credit markets, together with higher interest rates, lower occupancies and less foot traffic presents risk to the equity holders, particularly where the degree of leverage underlying such properties is high and the related maturities are relatively near. However, this disruption among bank lenders, continues to present opportunity for lenders with longer term capital to be more discerning within the sectors of real estate that offer better outlooks, such as multifamily and industrial use properties.

Geopolitical Uncertainty

While Russia's invasion of Ukraine most directly impacted capital markets in prior fiscal years, the resulting geopolitical uncertainty has influenced how investors frame investment choices across geographic regions. The long-standing theme of globalization based on the economics of comparative advantages, has more recently given way to more pragmatic discussions regarding supply chain resiliency or nearshoring/onshoring of activities that had previously been offshored. This further complicates the assessment of relative value across regional classifications, which were already clouded given difference in sector composition, financial reporting transparency, and basic investor rights across jurisdictions. Accordingly, some investors (including PSERS) have revisited and revised long standing strategic over/underweights to certain geographical regions (e.g., Public U.S. relative to Emerging Market equity allocations). We believe this trend will influence the flow of capital across regional classifications and likely impact relative market valuations over the next several years.

Investments

The Board has continued to fulfill its mission to maintain the stability and the long-term optimum value of the System. This is evidenced in the long-term growth of the System's assets and the actuarial soundness of the Defined Benefit Pension Plan. The annualized time-weighted rate of return for the 10-year period ended June 30, 2024, was 6.82% and is below the System's current long-term investment rate of return assumption (7.00%). Of utmost importance to the Board, is the assurance that the required reserves are available for payment of retirement benefits.

The Board approves the investment policies for the System and the Investment Office professionals are responsible for implementing those policies. The overall investment objectives of the System are as follows:

- to generate returns to support the System's actuarial soundness so it may provide its members with benefits as required by law;
- to earn a long-term total return, net of fees, and investment and administrative expenses, that equals or exceeds the actuarial assumed rate approved by the Board (currently 7.00%);
- to earn a long-term total return, net of fees and investment expenses, that equals or exceeds the Policy Index approved by the Board; and
- to prudently manage investment risks that are related to the achievement of investment goals.

Income from the investment portfolio represents a major source of revenue to the System, accounting for 52% of total revenues over the 25-year period from FY 2000 to FY 2024. The investment portfolio, which is one part of the System's net position, totaled \$75.6 billion, at fair value, as of June 30, 2024. For FY 2024, the time-weighted net rate of return on the System's investments was 8.14%.

FY 2024 was a time of continued development in the Investment Office. Leadership continues to focus on improving internal controls while focusing on implementing the Strategic Asset Allocation (SAA) targets approved by the PSERS Board, on October 25, 2024, effective December 1, 2024. The new targets add 2% to equities and 0.5% to fixed income assets and offset the increases with a decrease of 2.5% within real assets.

Leadership also continues to focus on delivering results more efficiently. As a result of implementing the Board's directive to prudently reduce allocations to more expensive strategies, investment related expenses relative to net position continues to decline. Between FY 2020 and FY 2024, investment related costs declined from 87 basis points (bps) to 53 bps.

As of June 30, 2024, internally managed assets were approximately \$44 billion. The investment staff has continued to focus on internal management of assets, when it results in lower investment related expenses overall without compromising return expectations. The investment staff also continues to seek external managers where doing so is more efficient. For example, after the end of the fiscal year, PSERS completed the outsourcing of its derivative exposure management, due primarily to increased operational costs and evolving regulatory controls associated with this type of strategies. Outsourcing derivatives management resulted in reduced overall cost to PSERS, while greatly enhancing the internal control environment over this activity.

(Additional information on the System's investments is contained in the Investment Section of this report.)

Internal Controls and Reporting

PSERS' management is responsible for internal controls which are designed to provide reasonable assurances for the safeguarding of assets and the reliability of financial records. This report has been prepared in accordance with accounting principles generally accepted in the United States of America. The System maintains a full accrual accounting system. (More specific accounting information is detailed in the Summary of Significant Accounting Policies (Note 2) in the notes to the financial statements found in the Financial Section of this report.)

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

As required by the Commonwealth, PSERS annually submits an internal controls assessment and monitoring plan to the Commonwealth's Office of Budget in September of each year. No significant deficiencies have been identified in past internal control assessments.

PSERS has started a multi-year plan to conduct a SOC 1/Type 2 Review and Audit, a rigorous review/audit of operations and controls. This initiative is on the agency's strategic plan and the audit is scheduled to finish in 2025.

Budgetary and Financial Governance

PSERS manages multiple budget appropriations which support its ongoing operations. Each October, the agency submits its budget requests to the Governor's Office of the Budget. PSERS' Administrative and Defined Contribution budgets require legislative approval. None of PSERS' budgets are funded from the Commonwealth's General Fund, but rather from the earnings of the System's investments or participant charges. For FY 2024, the budgets for the System's two largest appropriations, the Administrative and the Investment Related Expenses, were \$57.5 million and \$41.1 million, respectively. Historically, the agency has underspent its approved budgets, keeping more funds available to invest on PSERS' members' behalf.

PSERS continues to be a leader among large U.S. public pension funds of similar size and complexity in its effective control of expenses while providing necessary services to its membership. During the last several years, the number of active and retired members electing to receive newsletters, statement of accounts, 1099-Rs, and other publications electronically has continued to grow, which saves the agency over \$275,000 per year in postage, printing, and paper costs. During FY 2024, the agency reduced real estate rental and electricity expenses, decreased postage costs, and lowered consultant and legal fees, all of which preserve more of PSERS' assets for the benefit of the System and its members.

PSERS participates in an independent, international benchmarking survey evaluating its costs and service performance in comparison to other similar public pension funds. Based on the most recent survey, the agency had an 18% 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 \$11.5 million annually in administrative expenses compared to its peers.

PSERS Health Options Program

Since 1994, PSERS has offered a voluntary, self-funded retiree health care plan to public school retirees, their spouses, and their dependents. It has expanded throughout the years to offer a variety of plans and services. PSERS sponsors a group health insurance program called the Health Options Program (HOP) for individuals who are annuitants or the spouse or dependents of an annuitant or survivor annuitant. Participation in the HOP is voluntary and benefits are financed by the premiums paid by plan participants, Federal subsidies, and drug manufacturer rebates. Participants may select from among two self-insured Medicare supplement plans, three Medicare Rx plans, and multiple Medicare Advantage plans from multiple managed care plans for those eligible for Medicare. Participants not eligible for Medicare have a choice between a self-insured pre-65 indemnity plan. The HOP also offers a fitness program (SilverSneakers) and a dental and vision option through fully insured carriers.

The HOP had 123,859 participants (103,284 retirees plus their dependents) in HOP's medical and Medicare Part D prescription drug plans as of January 1, 2024 with nearly 100,000 participants in the prescription drug plan, totaling over \$540 million in annual health plan budget. HOP's voluntary Dental and Vision Program had 36,126 participants (30,946 retirees plus their dependents) as of the same date.

PSERS' health program offerings continue to be well-received by members and are routinely honored for their excellence as evidenced by:

- In October 2023, PSERS was informed that HOP's prescription drug plan received a near perfect consumer-services rating from the federal government for the 2024 plan year. The Centers for Medicare and Medicaid Services (CMS) bestowed a 4.5 Star Rating on HOP's Prescription Drug Employer Group Waiver Plan for the third straight year. By comparison, the average CMS plan rating was 3.11 in CMS' annual review of 48 prescription drug plan (PDP) reviews. PSERS' HOP program was one of only six plans evaluated to rate at 4.5 Stars or higher. CMS' Medicare Star rating program evaluates Medicare Advantage (MA) and Prescription Drug Programs (PDP) based on a number of metrics around quality and performance. Rating criteria is based on a 1-to-5 point system. The ratings help members select the best plans for themselves and their families.
- In May 2024, PSERS' Health Options Program Prescription Drug Plan received the Pharmacy Quality Alliance (PQA) Excellence in Quality Award. The award is based on a high-quality rating system employed by the federal Centers for Medicare & Medicaid Services (CMS).

Defined Contribution Plan

The Defined Contribution (DC) Plan has continued to rapidly grow. As of June 30, 2024, there were approximately 80,000 participants with a total DC Plan balance of nearly \$356 million. The Retirement Code requires the DC Plan to provide no less than 10 investment options offered by three or more investment providers. Currently, the DC Plan lineup includes seven providers offering six asset classes and a portfolio of target funds, totaling 19 investment options among which participants can choose to diversify their portfolio. If participants do not select individual investment options for themselves, they are automatically enrolled into a T. Rowe Price target date investment based on their date of birth.

In building upon the communication efforts within the relatively new defined contribution program, PSERS continues to create multiple new education pieces on topics varying from general plan overviews, diversification, data security, maximizing savings and retirement readiness. PSERS also continues to solicit feedback and conduct specialized surveys to better understand participants' opinions regarding their financial wellness and investment preferences.

Other Information

In compliance with the Retirement Code, actuarial tables and the computational procedures used by the System in calculating annuities and other benefits were published in the Pennsylvania Bulletin (Vol. 52, No. 26). This information can be found at: <http://pacodeandbulletin.gov/Display/pabull?file=/secure/pabulletin/data/vol52/52-26/967.html>.

Acknowledgments

The preparation of this report reflects the combined efforts of PSERS' staff under the direction of the PSERS' Board. Our sincere appreciation is extended to all who assisted in and contributed to the completion of this document. This report is intended to provide complete and reliable information in conformance with accepted standards and to document responsible stewardship of the System's assets.

We embrace our responsibilities of being prudent stewards and to proactively prepare for the future. We will continue to work closely with our Board, members, employers and stakeholders and are committed to a collaborative, positive approach to move the Agency forward for the benefit of our members.

Respectfully submitted,



Terrill J. Sanchez
Executive Director



Brian T. Lyman, CPA
Chief Financial Officer

PSERS at a Glance

The Public School Employees' Retirement System (PSERS) is one of the oldest pension plans in the United States. Since 1917, PSERS has been serving the public school employees of the Commonwealth of Pennsylvania (Commonwealth). PSERS is a governmental, cost-sharing, multiple-employer pension plan to which public school employers, the Commonwealth, and school employees (members) contribute. PSERS was created by statute through the Public School Employees' Retirement Code (Retirement Code) as a Defined Benefit Plan; a qualified trust under Section 401(a) of the Internal Revenue Service Code (DB Plan; Fund). PSERS' role expanded upon the passage of Act 5 of 2017, effective July 1, 2019, to include oversight of the School Employees' Defined Contribution Plan, a separate qualified 401(a) Defined Contribution Plan (DC Plan; Trust).

PSERS is the 34th largest plan among U.S. corporate and public pension plans, and the 21st largest state-sponsored public pension fund in the nation based on total plan assets according to a February 12, 2024, Pension & Investments survey. As of June 30, 2024, PSERS fiduciary net position was approximately \$76.5 billion.

As of June 30, 2024, PSERS had approximately 256,000 active members. The annuitant membership was comprised of approximately 254,000 retirees and beneficiaries, who received pension disbursements totaling \$7.7 billion. The average yearly pension benefit paid to annuitants was \$26,392. As of June 30, 2024, PSERS had 763 participating school employers.

In addition to retirement benefits, PSERS administers a Premium Assistance Program and a PSERS Health Options Program. The Premium Assistance Program provides a health insurance premium subsidy of up to \$100 per month for those retirees who qualify. As of June 30, 2024, there were approximately 92,000 retirees who receive this benefit. PSERS Health Options Program is a voluntary, statewide plan that provides group health insurance coverage for school retirees, their spouses, and eligible dependents. The Health Options Program is entirely funded through participating member premiums with approximately 123,000 annuitants and their dependents as of June 30, 2024.

500k + Members
256k Active Members and Participants
254k Retired Members and Beneficiaries

**763
Participating
Employers**

OUR MISSION

To be a partner with our members to fulfill the promise of a secure retirement.

OUR VISION

To be a trusted partner in delivering exceptional retirement services and benefits.

OUR VALUES

Public accountability and transparency

Staff growth and development

Exceptional level of service

Respect for our members, stakeholders, and staff

Stewardship of resources and investments

\$26,392
in Average Annual Benefits

\$7.7 Billion
in Benefits paid in FY2023-24

\$76.5 Billion
in Net Position as of 6/30/2024

Pension Benefits by County Fiscal Year 2024 (Dollar Amounts in Millions)

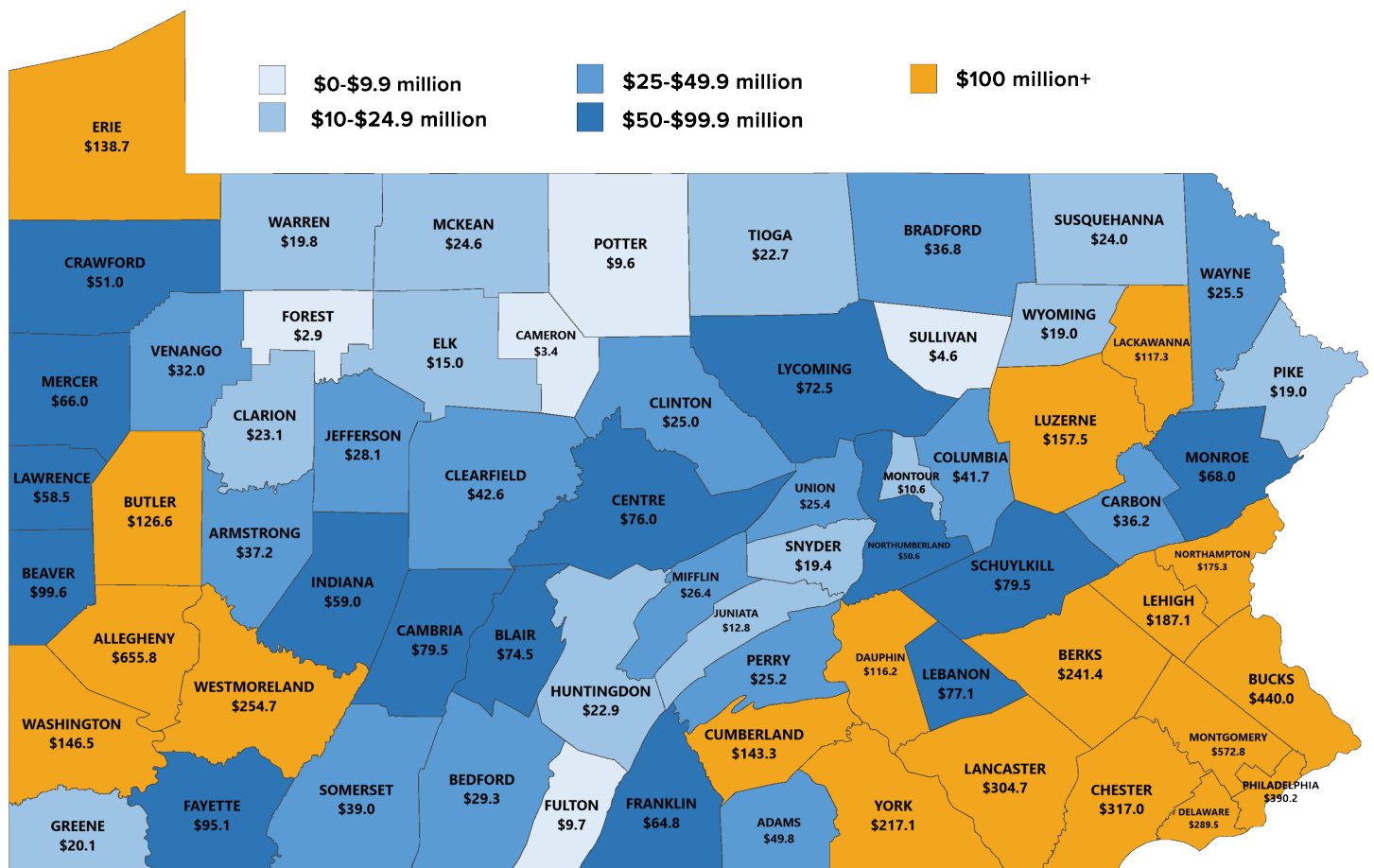
In fiscal year 2024, on a cash basis PSERS paid \$7.6 billion in pension benefits to all retirees. Of that total, nearly 90%, or \$6.8 billion, went to Pennsylvanians.

These benefits are depended upon as steady revenue sources by our members, affording them an improved quality of life, while providing local businesses, venues and shopping centers a customer base.

The cumulative financial reciprocity of PSERS' benefits is spread across the Commonwealth's 67 counties as the accompanying map and chart show.

Top 10 Counties Based on Pension Benefits (Dollars in Millions)	
Allegheny	\$655.8
Montgomery	\$572.8
Bucks	\$440.0
Philadelphia	\$390.2
Chester	\$317.0
Lancaster	\$304.7
Delaware	\$289.5
Westmoreland	\$254.7
Berks	\$241.4
York	\$217.1

Total Benefits Payments Made In Pennsylvania - \$6.8 Billion



Pension Benefit Amounts

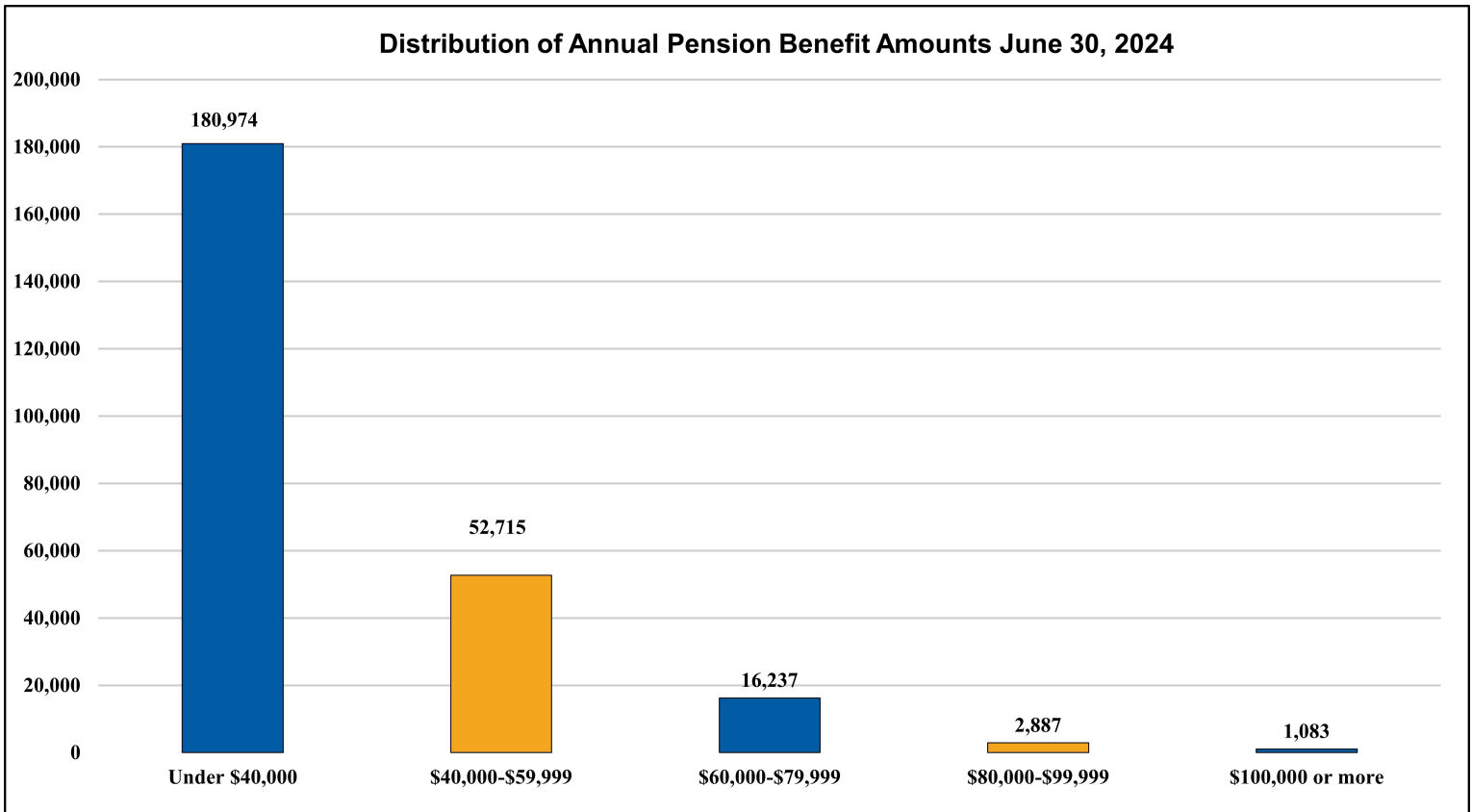
The average PSERS retiree receives a modest pension of \$26,392 after working 23 years in public education. Throughout their careers, PSERS' members must make contributions mostly ranging between 7.50% and 10.80% of their pay to help fund their own retirement benefit. This contribution is calculated based upon the individual's class of membership. New members hired as of July 1, 2011 and July 1, 2019, fund the majority of their benefit, in accordance with Act 120 and Act 5 of 2017, respectively. 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.*

While approximately three quarters of PSERS' retirees receive an annual benefit below \$40,000, approximately 0.4% of retirees' pension benefits exceed \$100,000. As of June 30, 2024, there were 1,083 retired members receiving an annual benefit over \$100,000 out of approximately 254,000 PSERS retirees. These six-figure pension retirees spent an average of 37 years working in their public education careers and contributing to their benefit.

\$26,392
Average Annual Pension

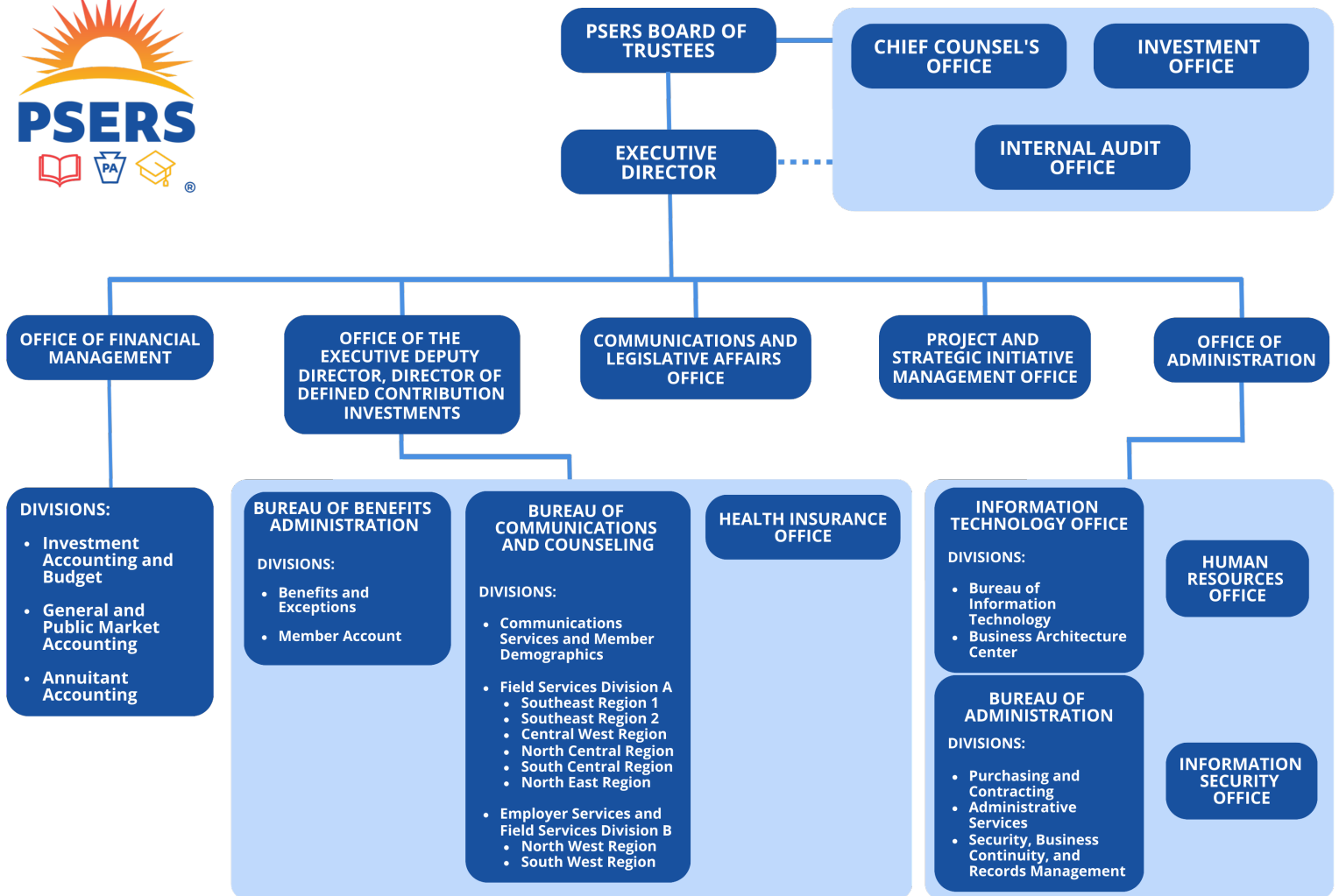
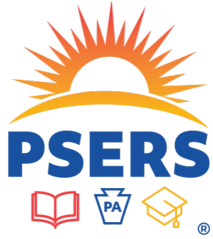
71%
Receive Annual Benefit < \$40,000

0.4%
Receive Annual Benefit > \$100,000



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

PSERS Organizational Structure



Executive Office

The Executive Office is led by the Executive Director, who serves as the chief executive officer with overall responsibility for the management of the agency to achieve the objectives and strategic initiatives as established by the Board. The position's primary duty is to lead PSERS' employees in meeting the agency mission by partnering with our members to fulfill the promise of a secure retirement and being a trusted partner in delivering exceptional retirement services and benefits. This position is responsible for providing leadership, advice, and counsel to the Board, and ensuring public trust and confidence in the agency.

As of June 30, 2024

Investment Office

Led by the Chief Investment Officer (CIO), the Investment Office is responsible for the investment activities of the agency. In compliance with the investment policy established by the Board, PSERS' investment assets are diversified across several asset classes, managed both internally by the Investment Office professionals and by external investment managers. The CIO serves as the Board's liaison and senior staff administrator on managing and overseeing the investments of the System.

Office of Chief Counsel

Led by the Chief Counsel, this office provides legal services through a team of professionals in collaboration with PSERS' Executive Director and the Board. The legal staff is responsible for representing the System in all administrative hearings and other litigation matters and providing counsel in a wide variety of matters, including the interpretation of the Retirement Code, form and legality of all contracts, corporate governance issues and the structure and implementation of the varied financial investments.

Internal Audit Office

Led by the Chief Audit Officer (CAO), the Internal Audit Office provides a wide range of independent internal auditing services for the Audit, Compliance and Risk Committee of the Board and executive management. It performs independent assessments of the systems of risk management, internal controls and operating efficiency, guided by professional standards and using innovative approaches. The office also routinely monitors compliance with established laws, rules, regulations, policies, and procedures.

Office of Financial Management

Led by the Chief Financial Officer (CFO), this office oversees accounting and financial reporting for the agency in conformance with accounting principles generally accepted in the United States of America. The Office is also responsible for PSERS' budgetary matters, annuitant payroll, investment accounting, treasury operations, and taxation. This position oversees the General and Public Market Accounting Division, Investment Accounting and Budget Division, Annuitant Accounting Division, and Employer Accounting Division.

Communications and Legislative Affairs Office

Led by the Director of Government Affairs and Stakeholder Engagement, this office is responsible for effective collaboration and engagement with PSERS' many key stakeholders, including the General Assembly, and oversight of agency internal and external communications, including coordination with the Bureau of Communications and Counseling to develop a member communication plan and strategy. Staff within this office also maintain the agency's external website as well as serve as a liaison to members of the General Assembly in responding to legislative inquiries, performing legislative research, and coordinating agency responses to proposed legislation.

Project and Strategic Initiative Management Office

Led by the Director of Governance and Strategic Initiatives, this office oversees and facilitates projects that support the implementation of the agency's strategic plan. Leveraging a governance-based framework, the office assists the Executive Director in supporting Board governance; facilitating the development, evaluation, and revisions to Board and agency policies; and ensuring projects align with the agency strategic plan. Guided by the Executive Director and Board, the office also oversees agency risk and performance management functions, including identifying, evaluating, monitoring, reporting on, and mitigating risks.

Office of Administration

Led by the Deputy Executive Director for Administration, this office provides comprehensive leadership to assist the Executive Director in accomplishing the agency's mission by maintaining oversight of PSERS' administrative and information technology and security-related services for the agency. This includes managerial responsibility for the following areas: information technology; information security; human resources; physical security; facilities;

contracting and procurement; business continuity; safety; records management; and mail, imaging, and printing services.

Office of the Deputy Executive Director and Director of Defined Contribution Investments

Led by the Deputy Executive Director and Director of Defined Contribution Investments, this office provides comprehensive leadership and oversight to assist the Executive Director in accomplishing the agency mission by maintaining oversight of the Bureau of Benefits Administration, Bureau of Communications and Counseling, the Health Insurance Office, and the agency Appeals Coordinator. This includes managerial responsibility for PSERS' membership related benefit functions for the Defined Benefit (DB) plan, the Defined Contribution (DC) plan, and the post-employment healthcare programs, namely: member and employer communications; member retirement counseling; member and employer data administration; benefits determinations and processing; member appeals; knowledge management of benefit policies and procedures; health insurance retirement programs including premium assistance; third-party contractor administration, and defined contribution contract investment management. This office also oversees seven regional offices located throughout the Commonwealth that provide services to both active and retired PSERS members and over 763 public school employers. Among these services are regularly scheduled informational presentations on various topics relating to retirement benefits and programs.

Professional Services

Professional consultants are appointed by the Board of Trustees to perform services essential to the efficient operation of the System. An annual audit by an independent certified public accounting firm, SB & Company, LLC, and an annual valuation by Buck Global LLC attest to the financial and actuarial soundness of PSERS. The investment performance of the System was calculated by investment valuation firm, Verus Advisory, Inc. on a quarterly basis. The Board's general investment consultant was Verus Advisory, Inc. (*For Schedules of Fees and Commissions please refer to the Financial section page 89 and Investment section page 103.* Other consultants who provided services to the System are listed in the Financial Section and Investment Section of this report.)

PSERS Regional Offices

Northwest

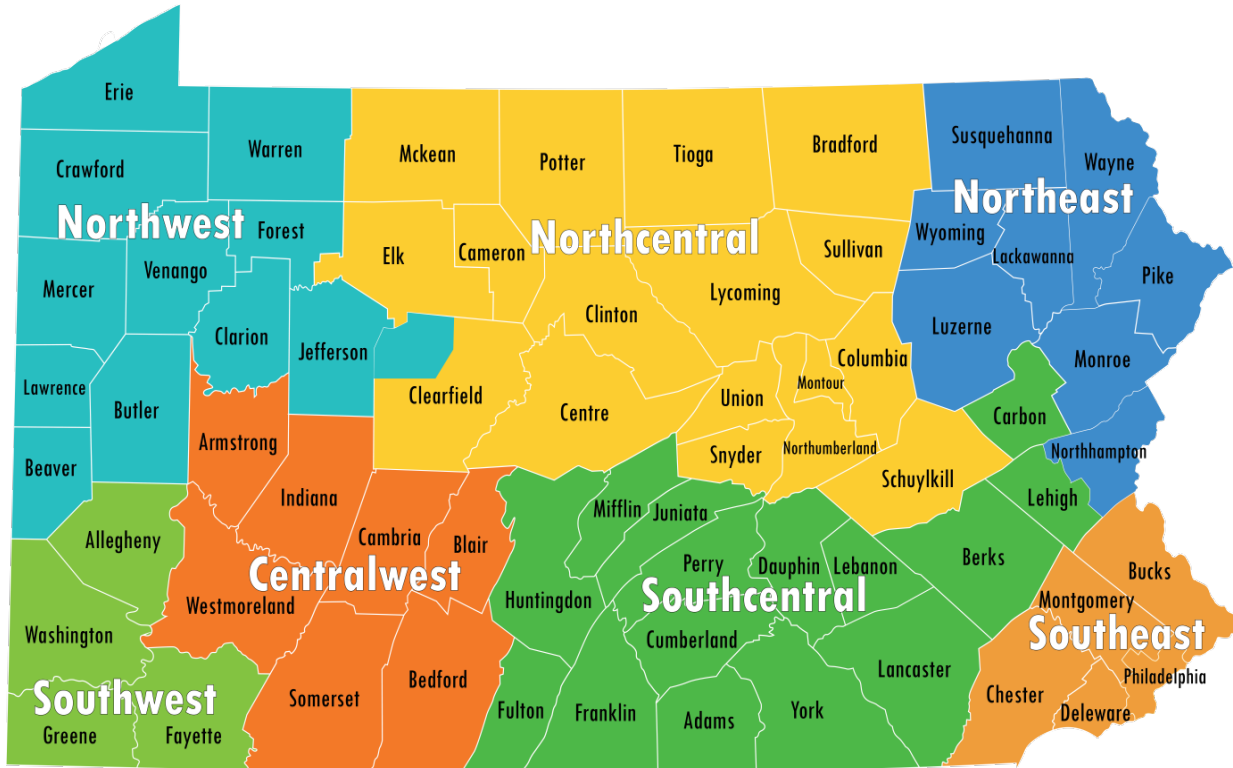
Franklin Penn Wood Center
464 Allegheny Boulevard, Suite C
Franklin, PA 16323-6210

Northcentral

300 Bellefonte Avenue
Suite 201
Lock Haven, PA 17745-1903

Northeast

417 Lackawanna Avenue, Suite 201
Scranton, PA 18503-2013



Southwest

300 Cedar Ridge Drive
Suite 301
Pittsburgh, PA 15205-1159

Centralwest

219 West High Street
Ebensburg, PA 15931-1540

Southcentral

5 North 5th Street
Harrisburg, PA 17101-1905

Southeast

605 Louis Drive, Suite 500
Warminster, PA 18974-2830

PSERS Board of Trustees

PSERS is managed and controlled within applicable state and federal laws by a 15-member Board of Trustees (Board). The Board is an independent administrative board of the Commonwealth that stands in a fiduciary relationship to the members of the DB Plan and the DC Plan regarding the investments and disbursements of moneys. The members of the Board have exclusive control and management of the System and full power to invest, subject to observance of such standards of fiduciary conduct. The Board also performs other functions as are required for the administration of the System, including the payment of benefits.

PSERS BOARD MEMBERS - JUNE 2024	
CHAIR Richard Vague Governor Appointee	VICE CHAIR Susan Lemmo Elected Retired Member
MEMBERS	
The Honorable Matt D. Bradford Pennsylvania House of Representatives	
Dr. Pamela Brown Elected Active Certified Member	
Jason M. Davis Elected Active Certified Member	
Eric O. DiTullio Elected by Pennsylvania Public School Boards	
The Honorable Torren Ecker Pennsylvania House of Representatives	
The Honorable Stacy Garrity Treasurer of Pennsylvania	
Nathan G. Mains Chief Executive Officer of the Pennsylvania School Boards Association, Inc.	
Ann Monaghan Elected Active Non-Certified Member	
The Honorable Dr. Khalid N. Mumin Secretary of Education	
The Honorable Katie J. Muth Pennsylvania State Senate	
Brian A. Reiser Elected Active Certified Member	
The Honorable Greg Rothman Pennsylvania State Senate	
The Honorable Wendy Spicher Secretary of Banking and Securities	

PSERS Awards



Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to PSERS for its Annual Comprehensive Financial Report for the fiscal year ended June 30, 2023. The Certificate of Achievement is a prestigious national award recognizing conformance with the highest standards for preparation of state and local government financial reports. To be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized annual comprehensive financial report whose contents conform to program standards. Such an annual comprehensive financial report must satisfy both generally accepted accounting principles and applicable legal requirements.

PSERS has received this Certificate of Achievement for 41 consecutive years, from FY 1983 to FY 2023.

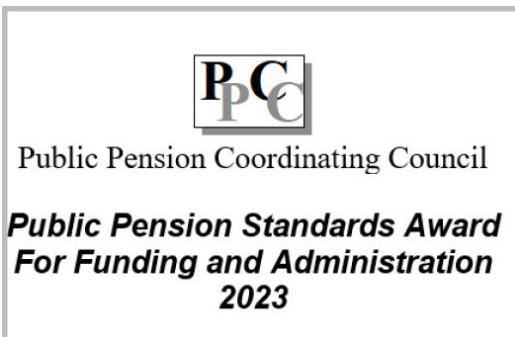


Popular Annual Financial Reporting Award

GFOA bestowed 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, 2023, 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.

In order to receive an Award for Outstanding Achievement in Popular Annual Financial Reporting, a governmental unit must publish a Popular Annual Financial Report, which conforms to program standards of creativity, presentation, understandability, and reader appeal.

PSERS has received a Certificate of Achievement for 8 consecutive years, from FY 2016 to FY 2023.



Public Pension Coordinating Council Public Pension Standards Award

The Public Pension Coordinating Council presented its Public Pension Standards Award for Funding and Administration to PSERS for 2023. This award is in recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards. Achievement of the Funding portion of this award is in recognition of the Governor's and General Assembly's commitment to fund 100% of the actuarially determined contributions certified by the PSERS' Board of Trustees.

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REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

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

Report on the Audit of the Financial Statements

Opinions

We have audited the accompanying statements of fiduciary net position of the Commonwealth of Pennsylvania Public School Employees' Retirement System (PSERS), a component unit of the Commonwealth of Pennsylvania, as of June 30, 2024 and 2023, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of PSERS, as of June 30, 2024 and 2023, and the respective changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are required to be independent of PSERS and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about PSERS' ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

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



Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal controls. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal controls relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of PSERS' internal controls. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about PSERS' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal controls-related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, schedule of changes in the employer net pension liability, schedule of employer net pension liability, schedule of employer pension contributions, schedule of changes in the employer net OPEB (premium assistance) liability, schedule of employer net OPEB (premium assistance) liability, schedule of employer OPEB (premium assistance) contributions, and schedule of investment returns – pension and OPEB, be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our

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



inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise PSERS' basic financial statements. The schedule of administrative and investment expenses, summary of investment expenses, and schedule of payments to non-investment consultants are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The accompanying supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the accompanying supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual comprehensive financial report (ACFR). The other information comprises the introductory, investment, actuarial, and statistical sections, but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon. In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Philadelphia, Pennsylvania
September 30, 2024

Management's Discussion and Analysis

Management's Discussion and Analysis (MD&A) of the Commonwealth of Pennsylvania Public School Employees' Retirement System (PSERS; System) for the fiscal year ended June 30, 2024 (FY 2024) provides a narrative summary of PSERS' financial position and performance, including highlights and comparative data. The MD&A is presented as required supplementary information to the financial statements and should be read in conjunction with the financial statements, the notes to financial statements, and the supplementary schedules.

Overview of Financial Statements

PSERS administers a governmental, cost-sharing, multiple-employer pension plan for public school employees. PSERS is also required to oversee two employee classes who can select Defined Benefit (DB) and Defined Contribution (DC) components or a stand-alone DC class. Other statutes direct PSERS to administer two voluntary postemployment healthcare programs, the Health Insurance Premium Assistance Program (Premium Assistance) and the Health Options Program (HOP), for its annuitants.

The **Statements of Fiduciary Net Position** provide a snapshot of the financial position of PSERS at June 30, 2024 and 2023. Amounts are shown for the most recent and previous fiscal years for comparison and analysis of changes in individual line items.

The **Statements of Changes in Fiduciary Net Position** summarize PSERS' financial activities that occurred during the fiscal period from July 1, 2023, to June 30, 2024, and from July 1, 2022, to June 30, 2023,. Amounts are shown for the most recent and previous fiscal years for comparison and analysis of changes in individual line items.

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

The **Required Supplementary Information**, immediately following the notes to financial statements, provides seven schedules illustrating the Changes in the Employer Net Pension Liability; Employer Net Pension Liability; Employer Pension Contributions; Changes in the Employer Net OPEB (Premium Assistance) Liability; Employer Net OPEB (Premium Assistance) Liability; Employer OPEB (Premium Assistance) Contributions; and Investment Returns - Pension and OPEB.

The **Other Supplementary Information** provide additional detailed information concerning the administrative expenses, investment expenses, and payments to non-investment consultants. These schedules emphasize the long-term nature of the pension and premium assistance plans and show the PSERS' progress in accumulating assets sufficient to pay benefits when due. This supplementary information is considered useful in understanding and evaluating PSERS' financial activities.

Management's Discussion and Analysis (continued)

Analysis of Fiduciary Net Position Defined Benefit Pension Plan (Dollar Amounts in Thousands)					
Summary of Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Assets:					
Receivables	\$ 2,474,949	\$ 12,802	\$ 2,462,147	\$ 88,816	\$ 2,373,331
Investments	75,572,631	4,570,768	71,001,863	693,290	70,308,573
Securities lending collateral pool	—	(6,147,770)	6,147,770	(3,680,820)	9,828,590
Capital assets	54,831	18,951	35,880	20,994	14,886
Miscellaneous	33,702	(11,011)	44,713	13,290	31,423
Total Assets	78,136,113	(1,556,260)	79,692,373	(2,864,430)	82,556,803
Liabilities:					
Payables and other liabilities	1,643,119	210,846	1,432,273	(767,698)	2,199,971
Obligations under securities lending	—	(6,147,770)	6,147,770	(3,680,820)	9,828,590
Total Liabilities	1,643,119	(5,936,924)	7,580,043	(4,448,518)	12,028,561
Net Position	\$76,492,994	\$ 4,380,664	\$ 72,112,330	\$ 1,584,088	\$70,528,242
Summary of Changes in Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Additions:					
Contributions	\$ 6,460,585	\$ 36,987	\$ 6,423,598	\$ 291,635	\$ 6,131,963
Net investment income (loss)	5,704,271	2,908,975	2,795,296	3,062,546	(267,250)
Total Additions	12,164,856	2,945,962	9,218,894	3,354,181	5,864,713
Deductions:					
Benefit expenses	7,728,745	147,762	7,580,983	326,611	7,254,372
Administrative expenses	55,447	1,624	53,823	4,372	49,451
Total Deductions	7,784,192	149,386	7,634,806	330,983	7,303,823
Changes in Net Position	4,380,664	2,796,576	1,584,088	3,023,198	(1,439,110)
Balance, Beginning of Year	72,112,330	1,584,088	70,528,242	(1,439,110)	71,967,352
Balance, End of Year	\$76,492,994	\$ 4,380,664	\$ 72,112,330	\$ 1,584,088	\$70,528,242

Defined Benefit Pension Plan

PSERS administers a governmental, cost-sharing, multiple-employer pension plan for public school employees. The following paragraphs and summary financial data provide supplementary information to the financial statements that contain the financial position and activities for Defined Benefit Pension Plan.

Financial Highlights

- The time-weighted rate of return on Defined Benefit Pension Plan investments was 8.14% for FY 2024; 3.54% for the fiscal year ended June 30, 2023 (FY 2023); and 2.23% for the fiscal year ended June 30, 2022 (FY 2022). The Defined Benefit Pension Plan return for the 20-year period ended June 30, 2024, was 7.05%, which exceeded the 7.00% actuarial investment rate of return assumption. Unless otherwise noted, all rates of return are net of fees.
- Defined Benefit Pension Plan net position increased \$4.4 billion from \$72.1 billion at June 30, 2023, to \$76.5 billion at June 30, 2024. The increase at June 30, 2024 was due mostly to positive net investment income. Defined Benefit Pension Plan net position increased \$1.6 billion from \$70.5 billion at June 30, 2022, to \$72.1 billion at June 30, 2023. The increase at June 30, 2023, was due mostly to positive net investment income. See analysis and discussion on Defined Benefit Pension Plan investments on pages 8 through 12.
- Defined Benefit Pension Plan employer contributions remained consistent at \$5.3 billion in FY 2023 and FY 2024. This was primarily attributable to employer payroll growth that was offset by a decrease in the pension portion of the employer contribution rate from 34.31% in FY 2023 to 33.09% in FY 2024.

Management’s Discussion and Analysis (continued)

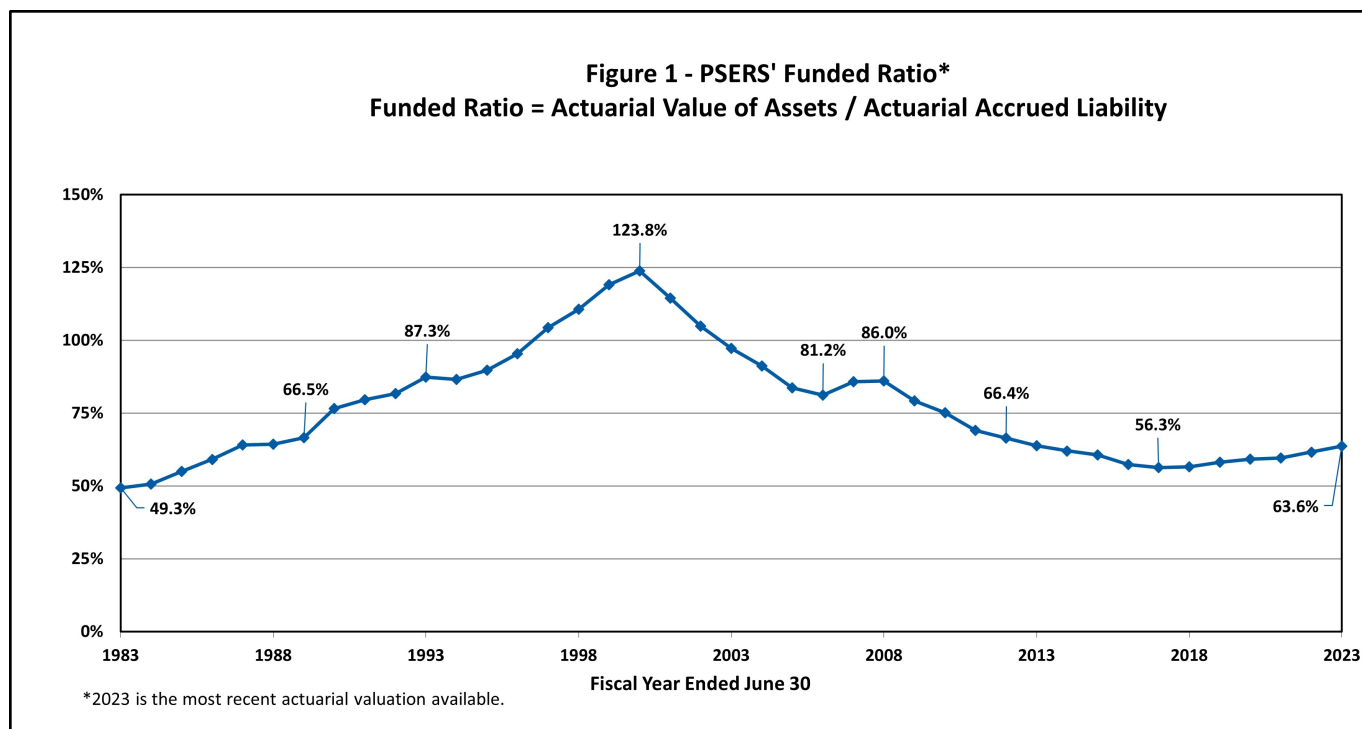
- PSERS’ employers fully funded the actuarially determined contributions from FY 2016 to FY 2024. These contributions continue to make a positive difference in PSERS’ longer term funding trends as PSERS Net Pension Liability has declined by approximately 16% from \$49.6 billion at June 30, 2016 to \$41.9 billion at June 30, 2024.
- Defined Benefit Pension Plan benefit expense increased from \$7.6 billion in FY 2023 to \$7.7 billion in FY 2024. This is due to increases in the average monthly pension benefit and the number of members receiving benefits in FY 2024.

Funded Status

PSERS uses an actuarial reserve type of funding that is financed by member contributions, employer contributions, and earnings from invested assets. Pennsylvania’s Public School Retirement Code requires PSERS Board of Trustees to conduct an annual independent actuarial valuation of assets and liabilities. 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.

PSERS’ actuarial funded ratio increased from 61.6% at June 30, 2022 to 63.6% as of June 30, 2023, the most recent actuarial valuation, due to full actuarially determined employer contributions, favorable demographic experience, and positive investment returns. Figure 1 illustrates a 40-year history of PSERS’ funded status. The actuarial funded ratio improved to 63.6% as of June 30, 2023, after reaching a significant turning point at June 30, 2017, when it fell to a low of 56.3%. After years of decline since the 123.8% peak at June 30, 2000, the funded ratio is steadily improving and is projected to continue to rise in the future. FY 2024 operational results will be reflected in the actuarial valuation for the year ended June 30, 2024. Due to the normal lag time for completion of the actuarial valuation, the resulting actuarial funded status will be available at the end of the 2024 calendar year and will be reported in the financial statements for the fiscal year ending June 30, 2025 (FY 2025). Based on positive investment performance for the 10-year period ended June 30, 2024, and due to receiving the full actuarially determined contributions, the funded ratio at June 30, 2024 is expected to improve.

Under GASB 67, the market value funded ratio, which is referred to as the plan fiduciary net position as a percentage of total pension liability, increased from 61.85% at June 30, 2023, to 64.63% at June 30, 2024 due to PSERS receiving the full actuarially determined contributions and positive investment returns. Unlike the actuarial funded ratio, which recognizes the investment performance over 10 years, the market-value funded



(Dollar Amounts in Thousands)						
Asset Class	2024	%	2023	%	2022	%
Short-term	\$ 6,572,484	8.7	\$ 6,118,812	8.6	\$ 8,915,210	12.7
Fixed income	17,155,399	22.7	15,658,641	22.0	13,752,793	19.6
Equity	24,356,583	32.2	21,506,295	30.3	17,136,393	24.4
Collective trust funds	905,424	1.2	2,117,309	3.0	5,481,102	7.8
Real estate	8,146,596	10.8	7,437,732	10.5	7,122,100	10.1
Alternative investments	18,436,145	24.4	18,163,074	25.6	17,900,975	25.4
Total	\$ 75,572,631	100.0	\$ 71,001,863	100.0	\$ 70,308,573	100.0

ratio is expected to fluctuate more year-to-year due to the immediate recognition of the Defined Benefit Pension Plan’s fiscal-year investment performance.

Over the past eight years, the longer term trend of the market value funded ratio increased from 50.14% at June 30, 2016, to 64.63% at June 30, 2024, due primarily to PSERS receiving the full actuarially determined contributions and strong positive investment returns. Based on the current actuarial assumptions, PSERS remains on a path to full funding.

Defined Benefit Pension Plan Investments

Defined Benefit Pension Plan investments of \$75.6 billion represents an increase of \$4.6 billion over the previous fiscal year end amount. Total Defined Benefit Pension Plan investment performance for FY 2024 was a time-weighted rate of return of 8.14%.

The asset distribution of the Defined Benefit Pension Plan’s investment portfolio at June 30, 2024, is presented in Figure 2 and Table 1. For comparison purposes, the prior two fiscal years also are presented in Table 1.

FY 2024

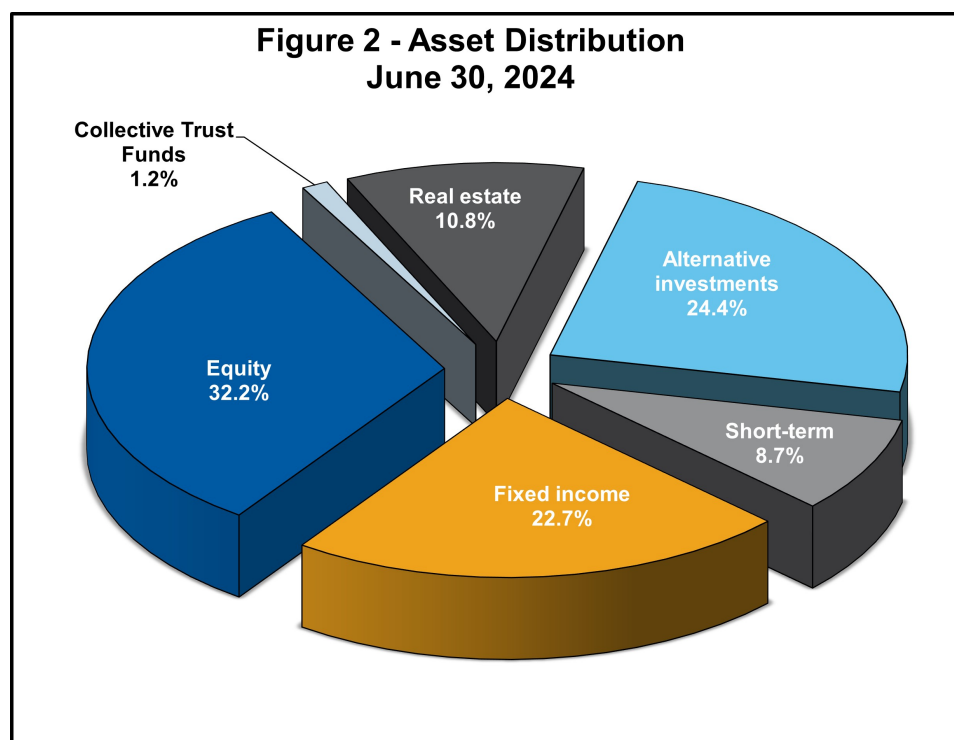
- **Short-term investments** (cash and cash equivalents) increased by \$0.5 billion from \$6.1 billion at June 30, 2023, to \$6.6 billion June 30, 2024, mainly due to a reallocation of exposure from other asset classes.
- **Fixed income investments** increased by \$1.5 billion from \$15.7 billion at June 30, 2023, to \$17.2 billion at June 30, 2024, mainly due to positive investment performance and a reallocation of exposure from other asset classes.

- **Equity investments** increased by \$2.9 billion from \$21.5 billion at June 30, 2023, to \$24.4 billion at June 30, 2024, mainly due to positive investment performance offset by reallocation of exposure to other asset classes.
- **Collective trust funds** decreased by \$1.2 billion from \$2.1 billion at June 30, 2023, to \$0.9 billion at June 30, 2024, due to the unwinding of the absolute return program.
- **Real estate investments** increased by \$0.7 billion from \$7.4 billion at June 30, 2023, to \$8.1 billion at June 30, 2024, due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings, which exceeded significant distributions.
- **Alternative investments** increased by \$0.2 billion from \$18.2 billion at June 30, 2023, to \$18.4 billion at June 30, 2024, due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings, which exceeded significant distributions.

FY 2023

- **Short-term investments** (cash and cash equivalents) decreased by \$2.8 billion from \$8.9 billion at June 30, 2022, to \$6.1 billion June 30, 2023, mainly due to a reallocation of exposure to other asset classes.
- **Fixed income investments** increased by \$1.9 billion from \$13.8 billion at June 30, 2022, to \$15.7 billion at June 30, 2023, mainly due to a reallocation of exposure from other asset classes, which was offset by negative investment performance.
- **Equity investments** increased by \$4.4 billion from \$17.1 billion at June 30, 2022, to \$21.5 billion at June 30, 2023, mainly due to a reallocation of exposure from other asset classes and investment performance.

Management's Discussion and Analysis (continued)



- **Collective trust funds** decreased by \$3.4 billion from \$5.5 billion at June 30, 2022, to \$2.1 billion at June 30, 2023, due to the unwinding of the absolute return program.
- **Real estate investments** increased by \$0.3 billion from \$7.1 billion at June 30, 2022, to \$7.4 billion at June 30, 2023, due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings, which exceeded significant distributions.
- **Alternative investments** increased by \$0.3 billion from \$17.9 billion at June 30, 2022, to \$18.2 billion at June 30, 2023, due to contributions to new and existing partnerships combined with valuation increases in partnership portfolio holdings, which exceeded significant distributions.

Securities Lending

The Defined Benefit Pension Plan's net income from securities lending activities decreased by \$19.4 million from \$23.1 million in FY 2023 to \$3.7 million in FY 2024. Lending income and expense both decreased significantly due to the securities lending program being suspended as of October 31, 2023.

Contributions

Defined Benefit Pension Plan Employer contributions remained consistent from \$5.3 billion in FY 2023 to

\$5.3 billion in FY 2024. This was primarily attributable to employer payroll growth that was offset by a decrease in the employer contribution rate from 34.31% in FY 2023 to 33.09% in FY 2024. Employer contributions increased from \$5.0 billion in FY 2022 to \$5.3 billion in FY 2023. This increase was primarily attributable to employer payroll growth and a small increase in the employer contribution rate from 33.99% in FY 2022 to 34.31% in FY 2023.

Defined Benefit Pension Plan member contributions increased from \$1.17 billion in FY 2023 to \$1.20 billion in FY 2024 mainly due to an increase in member contributions from active member payroll. Pension portion of member contributions increased from \$1.13 billion in FY 2022 to \$1.17 billion in FY 2023 mainly due to an increase in member contributions from active member payroll.

See Figure 4 for a history of member and employer contribution rates as a percentage of payroll.

Investment Income

Defined Benefit Pension Plan net investment income of \$5.70 billion in FY 2024 increased from net investment income of \$2.80 billion in FY 2023. As depicted in Figure 3, investment earnings provided 52% of PSERS' total funding over the past 25 years, a majority of which is related to the Defined Benefit Pension Plan. Net

Figure 3 - PSERS' Sources of Funding 25- Year History (2000-2024)

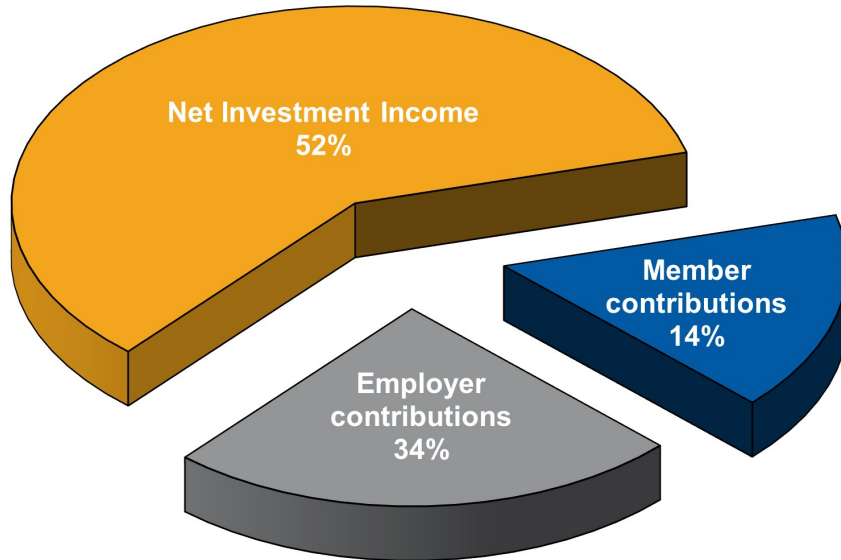
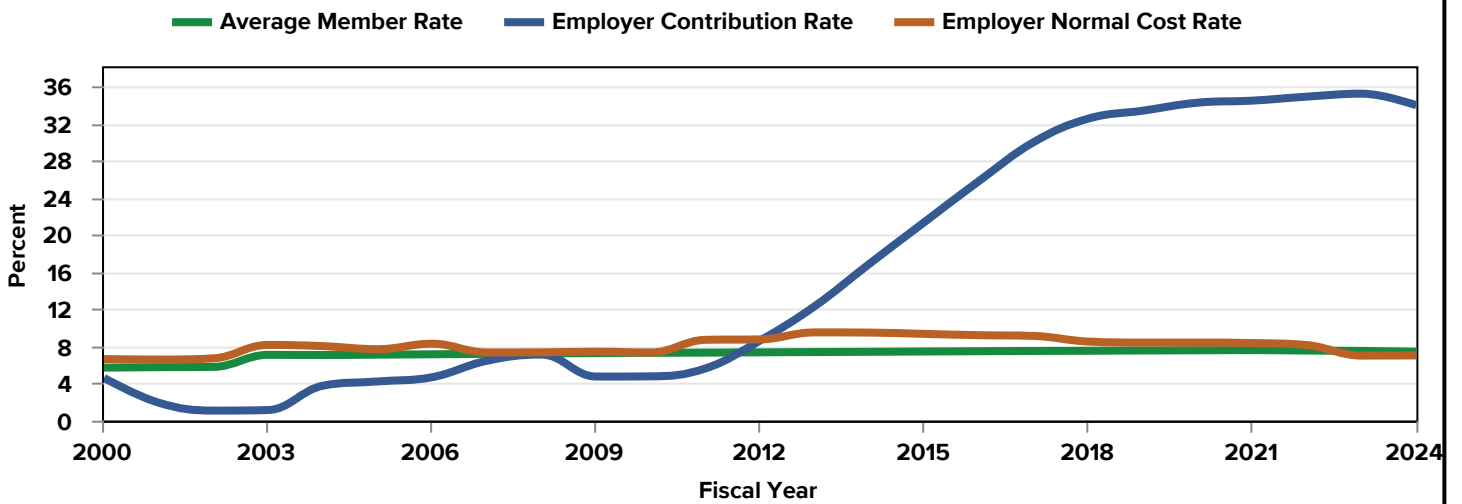
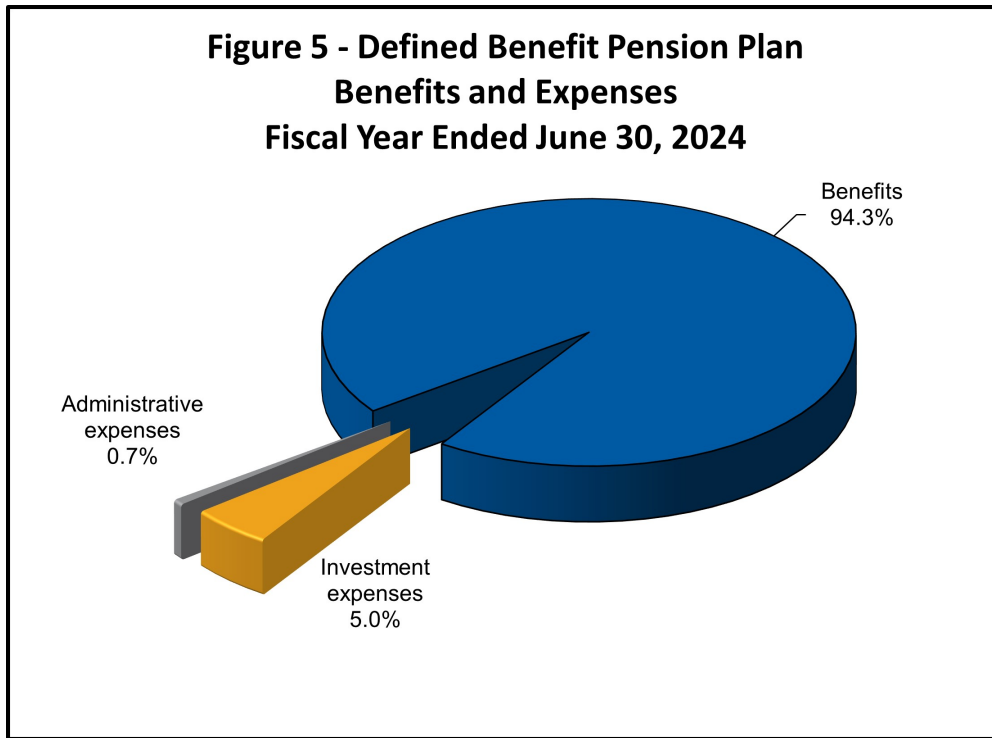


Figure 3 includes Defined Benefit Pension Plan & Premium Assistance.

Figure 4-History of PSERS' Contribution Rates as a Percent of Payroll*

Fiscal Year Ending June 30





investment income also includes investment expenses as a deduction. The “Defined Benefit Pension Plan Benefits and Expenses” section that follows includes an analysis of investment expenses.

Defined Benefit Pension Plan Benefits and Expenses

The primary expense source during FY 2024 was for the payment of pension benefits approximating \$7.7 billion. Figure 5 illustrates the significant portion of expenses attributable to Defined Benefit Pension Plan benefit payments. Defined Benefit Pension Plan benefits increased from \$7.6 billion in FY 2023 to \$7.7 billion in FY 2024. The increase is attributable to an ongoing increase to the average monthly benefit. The average monthly benefit increase is attributable to the increase to the number of members receiving a benefit payment. Pension benefits payable increased from \$656.4 million at June 30, 2023 to \$789.8 million at June 30, 2024. This increase was mainly attributable to an increase in pension payments payable from a higher number of retirements in the 4th quarter of FY 2024. Defined Benefit Pension Plan benefits increased from \$7.3 billion in FY 2022 to \$7.6 billion in FY 2023. The increase is attributable to an ongoing increase to the average monthly benefit. Pension benefits payable increased from \$542.0 million at June 30, 2022, to \$656.4 million at June 30, 2023. The increase was mainly attributable to an increase in pension payments payable

from a higher number of retirements in the 4th quarter of FY 2023.

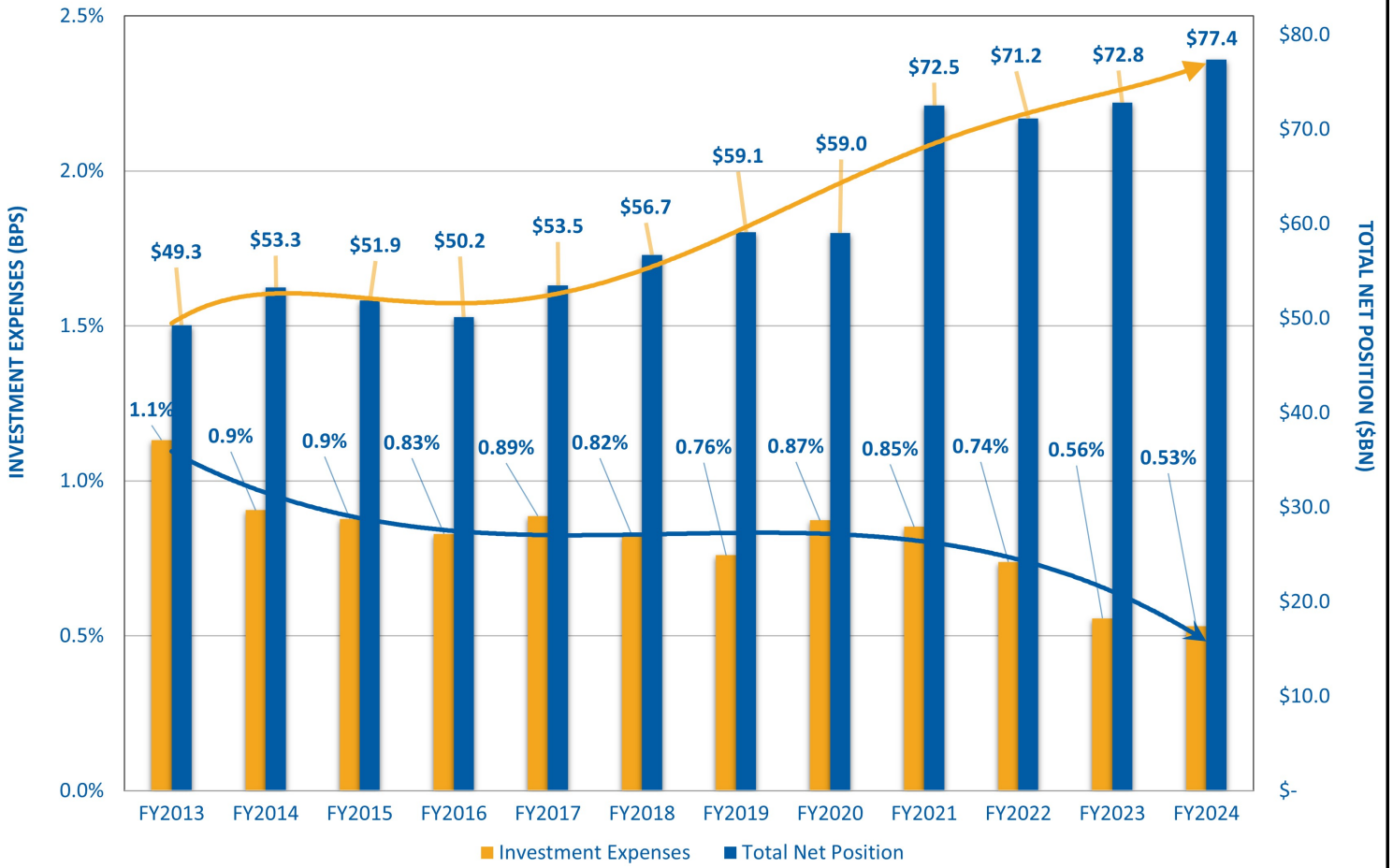
Investment expenses increased by \$5.2 million from \$405.2 million in FY 2023 to \$410.4 million in FY 2024 mainly due to a increase in real estate manager fees of \$14 million, which was partially offset by a decrease in fixed income fees of \$10 million. As a percentage of defined benefit pension plan benefits, investment expense remained consistent at 5.0% in both FY 2023 and FY 2024.

Defined Benefit Pension Plan administrative expenses increased by \$1.6 million from \$53.8 million during FY 2023 to \$55.4 million during FY 2024. This increase was mainly attributable to an increase in personnel costs. As depicted in Figure 5, Defined Benefit Pension Plan administrative expenses represent 0.7% of total benefits.

As a percentage of total PSERS benefits, investment expense has decreased from a high of 8.2% in FY 2013 to 5.0% in FY 2024. During this same period, total PSERS net position increased \$28.1 billion from \$49.3 billion at June 30, 2013, to \$77.4 billion at June 30, 2024, as depicted in Figure 6. Correspondingly, investment expenses as a percentage of total net position also have decreased from a high of 1.1% in FY 2013 to 0.53% in FY 2024.

Figure 6 includes Defined Benefit Pension Plan, Premium Assistance, DC, & Health Options Program.

**Figure 6- PSERS
Investment Expenses to Total Net Position
FY2013-FY2024**



Management's Discussion and Analysis (continued)

Analysis of Fiduciary Net Position Defined Contribution Plan (Dollar Amounts in Thousands)					
Summary of Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Assets:					
Receivables	\$ 1,365	\$ 431	\$ 934	\$ 333	\$ 601
Investments	<u>356,248</u>	<u>153,482</u>	<u>202,766</u>	<u>103,128</u>	<u>99,638</u>
Total Assets	357,613	153,913	203,700	103,461	100,239
Liabilities:					
Payables and other liabilities	<u>1,293</u>	<u>(526)</u>	<u>1,819</u>	<u>551</u>	<u>1,268</u>
Total Liabilities	1,293	(526)	1,819	551	1,268
Net Position	\$ 356,320	\$ 154,439	\$ 201,881	\$ 102,910	\$ 98,971

Summary of Changes in Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Additions:					
Contributions	\$ 123,544	\$ 33,540	\$ 90,004	\$ 31,705	\$ 58,299
Net investment income (loss)	<u>44,415</u>	<u>22,881</u>	<u>21,534</u>	<u>37,347</u>	<u>(15,813)</u>
Total Additions	167,959	56,421	111,538	69,052	42,486
Deductions:					
Distributions	<u>9,982</u>	<u>3,812</u>	<u>6,170</u>	<u>2,540</u>	<u>3,630</u>
Administrative expenses	<u>3,538</u>	<u>1,080</u>	<u>2,458</u>	<u>297</u>	<u>2,161</u>
Total Deductions	13,520	4,892	8,628	2,837	5,791
Changes in Net Position	154,439	51,529	102,910	66,215	36,695
Balance, Beginning of Year	201,881	102,910	98,971	36,695	62,276
Balance, End of Year	\$ 356,320	\$ 154,439	\$ 201,881	\$ 102,910	\$ 98,971

Defined Contribution Plan (DC)

PSERS administers a Defined Contribution Plan for employees hired as of July 1, 2019. The following paragraphs and summary financial data provide supplementary information to the financial statements that contain the financial position and activities for the Defined Contribution Plan.

Financial Highlights

Total net position increased by \$154.4 million from June 30, 2023, to June 30, 2024. This increase is primarily due to participant and employer contributions and investments (additions) exceeding the benefits and administrative expenses (deductions).

Contributions

Total member (participant) contributions increased from \$50.7 million to \$69.7 million, while total employer contributions increased from \$39.3 million to \$53.8 million for the years ended June 30, 2023, and 2024, respectively. Contributions increased due to an increase in participants from 63,700 on June 30, 2023, to 79,800 on June 30, 2024, resulting in an increase in employee and employer contributions. Additionally, employee contributions increased due to a 107.4% increase in participants with voluntary post tax contributions and a 58.8% increase in participants with rollover contributions.

Investment Income (Loss)

Total net investment income increased from \$21.5 million to \$44.4 million for the years ended June 30, 2023, and 2024, respectively. Investment performance was driven by artificial intelligence and technology, a robust labor market, consumer and business spending, and a favorable fiscal backdrop.

Benefits and Expenses

Overall deductions increased from \$8.6 million to \$13.5 million for the years ended June 30, 2023, and 2024, respectively. Total distributions increased by \$3.8 million due to a 27.9% increase in the number of participants receiving distributions and an increase in the average distribution of 26.2% offset by refunds of expenditures due to stale-dated checks. Overall DC administrative expenses increased due to an increase in the total number of participants in the plan and an increase in PSERS personnel cost.

Management's Discussion and Analysis (continued)

Analysis of Fiduciary Net Position Premium Assistance (Dollar Amounts in Thousands)					
Summary of Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Assets:					
Receivables	\$ 29,435	\$ (3,516)	\$ 32,951	\$ (1,222)	\$ 34,173
Investments	109,873	1,506	108,367	6,460	101,907
Total Assets	139,308	(2,010)	141,318	5,238	136,080
Liabilities:					
Payables and other liabilities	2,860	2,258	602	(2)	604
Total Liabilities	2,860	2,258	602	(2)	604
Net Position	\$ 136,448	\$ (4,268)	\$ 140,716	\$ 5,240	\$ 135,476

Summary of Changes in Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Additions:					
Contributions	\$ 102,211	\$ (12,510)	\$ 114,721	\$ (2,457)	\$ 117,178
Net investment income	6,184	1,710	4,474	4,158	316
Total Additions	108,395	(10,800)	119,195	1,701	117,494
Deductions:					
Benefit expenses	111,659	(1,211)	112,870	(837)	113,707
Administrative expenses	1,004	(81)	1,085	259	826
Total Deductions	112,663	(1,292)	113,955	(578)	114,533
Changes in Net Position	(4,268)	(9,508)	5,240	2,279	2,961
Balance, Beginning of Year	140,716	5,240	135,476	2,961	132,515
Balance, End of Year	\$ 136,448	\$ (4,268)	\$ 140,716	\$ 5,240	\$ 135,476

Analysis of Fiduciary Net Position Health Options Program (Dollar Amounts in Thousands)					
Summary of Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Assets:					
Receivables	\$ 60,057	\$ 12,672	\$ 47,385	\$ (16,990)	\$ 64,375
Investments	457,617	36,737	420,880	26,262	394,618
Miscellaneous	242	72	170	34	136
Total Assets	517,916	49,481	468,435	9,306	459,129
Liabilities:					
Payables and other liabilities	131,587	50,166	81,421	12,081	69,340
Total Liabilities	131,587	50,166	81,421	12,081	69,340
Net Position	\$ 386,329	\$ (685)	\$ 387,014	\$ (2,775)	\$ 389,789

Summary of Changes in Fiduciary Net Position	FY 2024	Increase (Decrease)	FY 2023	Increase (Decrease)	FY 2022
Additions:					
Participant and CMS premiums	\$ 510,761	\$ 31,900	\$ 478,861	\$ (1,982)	\$ 480,843
Net investment income	17,127	8,039	9,088	8,742	346
Total Additions	527,888	39,939	487,949	6,760	481,189
Deductions:					
Benefit expenses	487,975	36,991	450,984	28,198	422,786
Administrative expenses	40,598	858	39,740	450	39,290
Total Deductions	528,573	37,849	490,724	28,648	462,076
Changes in Net Position	(685)	2,090	(2,775)	(21,888)	19,113
Balance, Beginning of Year	387,014	(2,775)	389,789	19,113	370,676
Balance, End of Year	\$ 386,329	\$ (685)	\$ 387,014	\$ (2,775)	\$ 389,789

Management's Discussion and Analysis (continued)
Postemployment Healthcare

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

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

- Total net position decreased by \$4.3 million in FY 2024 due to an employer contribution rate decrease partially offset by a decrease in benefit payments and an increase in net investment income. The total net position continues to be sufficient to fund one full year of benefits. The employer contribution rate decreased by 14.67% from 0.75% in FY2023 to 0.64% in FY2024. The change from June 30, 2022, to June 30, 2023, of a \$5.2 million increase was due to net investment income and employer contributions exceeding benefit expense deductions and administrative expenses.

Contributions

Employer contributions decreased from \$114.7 million in FY 2023 to \$102.2 million in FY 2024 due to a lower contribution rate (0.75% to 0.64%) partially offset by growth in employer payroll.

Investment Income

Net investment income for Premium Assistance increased to \$6.2 million for FY 2024 vs. \$4.5 million for FY 2023. This is due to increased short-term interest rates.

Benefits and Expenses

Premium Assistance total deductions decreased slightly from \$114.0 million in FY 2023 to \$112.7 million in FY 2024. Premium assistance benefit payments decreased from \$112.9 for FY2023 to \$111.7 million in FY 2024. Based on a count comparative analysis, the number of members dropped by nearly 1% which correlates to the slight decrease in Premium Assistance benefit payments.

**Health Options Program
(HOP)**
Financial Highlights

- Total net position decreased slightly by \$0.7 million in FY 2024 due to increasing benefit and administrative expenses outpacing revenues.
- Total receivables increased from \$47.4 million at June 30, 2023, to \$60.1 million at June 30, 2024. This is due to a increase in CMS reinsurance receivables and an increase in prescription drug rebate receivables due to higher prescription drug costs. The net position change from June 30, 2022, to June 30, 2023, was a decrease of \$2.8 million due to increased medical claims, prescription and administrative costs outpacing revenues.
- Investments increased from \$420.9 million at June 30, 2023, to \$457.6 million at June 30, 2024, due to delayed processing of medical claims resulting in increasing cash flow.
- Total liabilities increased from \$81.4 million at June 30, 2023, to \$131.6 million at June 30, 2024. This is due to a \$50 million increase in medical claims payable resulting from a delay in CMS processing their initial portion of the claims.

Participant and CMS Premiums

Total Participant and CMS premiums for HOP increased from \$478.9 million for FY 2023 to \$510.8 million for FY 2024 due to a \$23.5 million increase in CMS revenue and an \$8.4 million increase in member premiums.

Investment Income

Net investment income increased from \$9.1 million for FY 2023 to \$17.1 million in FY 2024 due to increased short-term interest rates.

Benefits and Expenses

HOP total deductions increased by 7.7% from \$490.7 million in FY2023 to \$528.6 million in FY2024. This is due to an increase in claim, net prescription and administrative costs.

Statements of Fiduciary Net Position
June 30, 2024 and 2023
(Dollar Amounts in Thousands)

	2024				Totals
	Pension	Defined Contribution (DC)	Postemployment Healthcare		
			Premium Assistance	Health Options Program	
Assets:					
Receivables:					
Members	\$ 374,663	\$ 751	\$ 1,518	\$ 126	\$ 377,058
Employers	1,449,523	591	27,426	—	1,477,540
Investment income	320,934	23	491	1,189	322,637
Investment proceeds	326,159	—	—	—	326,159
CMS Part D and prescriptions	—	—	—	58,742	58,742
Interfund receivable	3,670	—	—	—	3,670
Total Receivables	2,474,949	1,365	29,435	60,057	2,565,806
Investments, at fair value:					
Short-term	6,572,484	13,713	109,873	457,617	7,153,687
Fixed income	17,155,399	—	—	—	17,155,399
Equity	24,356,583	—	—	—	24,356,583
Collective trust funds	905,424	342,535	—	—	1,247,959
Real estate	8,146,596	—	—	—	8,146,596
Alternative investments	18,436,145	—	—	—	18,436,145
Total Investments	75,572,631	356,248	109,873	457,617	76,496,369
Capital assets (net of accumulated depreciation \$72,272)	54,831	—	—	—	54,831
Miscellaneous	33,702	—	—	242	33,944
Total Assets	78,136,113	357,613	139,308	517,916	79,150,950
Liabilities:					
Accounts payable and accrued	90,764	114	230	5,742	96,850
Benefits payable	789,804	—	50	89,899	879,753
HOP participant premium advances	—	—	—	35,552	35,552
Investment purchases and other	567,751	483	—	—	568,234
Interfund payable	—	696	2,580	394	3,670
Other liabilities	194,800	—	—	—	194,800
Total Liabilities	1,643,119	1,293	2,860	131,587	1,778,859
Net position restricted for pension, DC and postemployment healthcare benefits	\$76,492,994	\$ 356,320	\$ 136,448	\$ 386,329	\$ 77,372,091

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

Statements of Fiduciary Net Position
June 30, 2024 and 2023
(Dollar Amounts in Thousands)

	2023				
	Pension	Defined Contribution (DC)	Postemployment Healthcare		Totals
			Premium Assistance	Health Options Program	
Assets:					
Receivables:					
Members	\$ 404,819	\$ 509	\$ 1,541	\$ 133	\$ 407,002
Employers	1,418,716	399	30,880	—	1,449,995
Investment income	335,907	26	530	1,178	337,641
Investment proceeds	301,559	—	—	—	301,559
CMS Part D and prescriptions	—	—	—	46,074	46,074
Interfund receivable	1,146	—	—	—	1,146
Total Receivables	2,462,147	934	32,951	47,385	2,543,417
Investments, at fair value:					
Short-term	6,118,812	11,231	108,367	420,880	6,659,290
Fixed income	15,658,641	—	—	—	15,658,641
Equity	21,506,295	—	—	—	21,506,295
Collective trust funds	2,117,309	191,535	—	—	2,308,844
Real estate	7,437,732	—	—	—	7,437,732
Alternative investments	18,163,074	—	—	—	18,163,074
Total Investments	71,001,863	202,766	108,367	420,880	71,733,876
Securities lending collateral pool	6,147,770	—	—	—	6,147,770
Capital assets (net of accumulated depreciation \$57,100)	35,880	—	—	—	35,880
Miscellaneous	44,713	—	—	170	44,883
Total Assets	79,692,373	203,700	141,318	468,435	80,505,826
Liabilities:					
Accounts payable and accrued expenses	96,521	203	205	1,829	98,758
Benefits payable	656,401	—	78	38,456	694,935
HOP participant premium advances	—	—	—	40,884	40,884
Investment purchases and other payables	490,388	1,041	—	—	491,429
Obligations under securities lending	6,147,770	—	—	—	6,147,770
Interfund payable	—	575	319	252	1,146
Other liabilities	188,963	—	—	—	188,963
Total Liabilities	7,580,043	1,819	602	81,421	7,663,885
Net position restricted for pension, DC and postemployment healthcare benefits	\$ 72,112,330	\$ 201,881	\$ 140,716	\$ 387,014	\$ 72,841,941

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

Statements of Changes in Fiduciary Net Position
Years Ended June 30, 2024 and 2023
(Dollar Amounts in Thousands)

	2024				Totals
	Pension	Defined Contribution (DC)	Postemployment Healthcare		
			Premium Assistance	Health Options Program	
Additions:					
Contributions:					
Members	\$ 1,197,871	\$ 69,748	\$ —	\$ —	\$ 1,267,619
Employers	5,262,714	53,796	102,211	—	5,418,721
Total contributions	6,460,585	123,544	102,211	—	6,686,340
HOP participant premiums	—	—	—	421,491	421,491
Centers for Medicare & Medicaid Services premiums	—	—	—	89,270	89,270
Investment income:					
From investing activities:					
Net appreciation in fair value of investments	4,312,722	44,304	—	—	4,357,026
Short-term	303,821	248	6,233	17,171	327,473
Fixed income	594,978	—	—	—	594,978
Equity	502,176	—	—	—	502,176
Collective trust funds	—	386	—	—	386
Real estate	119,403	—	—	—	119,403
Alternative investments	277,795	—	—	—	277,795
Total investment activity income	6,110,895	44,938	6,233	17,171	6,179,237
Investment expenses	(410,354)	(523)	(49)	(44)	(410,970)
Net income from investing activities	5,700,541	44,415	6,184	17,127	5,768,267
From securities lending activities:					
Securities lending income	90,050	—	—	—	90,050
Securities lending expense	(86,320)	—	—	—	(86,320)
Net income from securities lending activities	3,730	—	—	—	3,730
Total net investment income	5,704,271	44,415	6,184	17,127	5,771,997
Total Additions	12,164,856	167,959	108,395	527,888	12,969,098
Deductions:					
Benefits	7,683,019	—	111,659	487,975	8,282,653
Refunds of contributions	45,726	—	—	—	45,726
Distributions	—	9,982	—	—	9,982
Administrative expenses	55,447	3,538	1,004	40,598	100,587
Total Deductions	7,784,192	13,520	112,663	528,573	8,438,948
Net increase (decrease)	4,380,664	154,439	(4,268)	(685)	4,530,150
Net position restricted for pension, DC and postemployment healthcare benefits:					
Balance, beginning of year	72,112,330	201,881	140,716	387,014	72,841,941
Balance, end of year	\$76,492,994	\$ 356,320	\$ 136,448	\$ 386,329	\$77,372,091

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

Statements of Changes in Fiduciary Net Position
Years Ended June 30, 2024 and 2023
(Dollar Amounts in Thousands)

	2023				Totals
	Pension	Defined Contribution (DC)	Postemployment Healthcare		
				Premium Assistance	Health Options Program
Additions:					
Contributions:					
Members	\$ 1,174,580	\$ 50,676	\$ —	\$ —	\$ 1,225,256
Employers	5,249,018	39,328	114,721	—	5,403,067
Total contributions	6,423,598	90,004	114,721	—	6,628,323
HOP participant premiums	—	—	—	413,136	413,136
Centers for Medicare & Medicaid Services premiums	—	—	—	65,725	65,725
Investment income:					
From investing activities:					
Net appreciation in fair value of investments	1,315,367	21,437	—	—	1,336,804
Short-term	262,890	214	4,513	9,122	276,739
Fixed income	663,883	—	—	—	663,883
Equity	445,086	—	—	—	445,086
Collective trust funds	823	158	—	—	981
Real estate	188,922	—	—	—	188,922
Alternative investments	300,455	—	—	—	300,455
Total investment activity income	3,177,426	21,809	4,513	9,122	3,212,870
Investment expenses	(405,217)	(275)	(39)	(34)	(405,565)
Net income from investing activities	2,772,209	21,534	4,474	9,088	2,807,305
From securities lending activities:					
Securities lending income	402,300	—	—	—	402,300
Securities lending expense	(379,213)	—	—	—	(379,213)
Net income from securities lending activities	23,087	—	—	—	23,087
Total net investment income	2,795,296	21,534	4,474	9,088	2,830,392
Total Additions	9,218,894	111,538	119,195	487,949	9,937,576
Deductions:					
Benefits	7,537,873	—	112,870	450,984	8,101,727
Refunds of contributions	43,110	—	—	—	43,110
Distributions	—	6,170	—	—	6,170
Administrative expenses	53,823	2,458	1,085	39,740	97,106
Total Deductions	7,634,806	8,628	113,955	490,724	8,248,113
Net increase (decrease)	1,584,088	102,910	5,240	(2,775)	1,689,463
Net position restricted for pension, DC and postemployment healthcare benefits:					
Balance, beginning of year	70,528,242	98,971	135,476	389,789	71,152,478
Balance, end of year	\$ 72,112,330	\$ 201,881	\$ 140,716	\$ 387,014	\$ 72,841,941

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

Notes to Financial Statements Years Ended June 30, 2024 and 2023

1. Organization and Description of the System

(A) Organization

Pennsylvania Public School Employees' Retirement System (PSERS or System) was established on July 18, 1917, under the provisions of Pamphlet Law 1043, No. 343, as a governmental, cost-sharing, multiple-employer plan to which public school employers, the Commonwealth of Pennsylvania (Commonwealth), and school employees (members) contribute. PSERS was created by statute through the Public School Employees' Retirement Code (Retirement Code) as a defined benefit plan; a qualified trust under Section 401(a) of the Internal Revenue Service Code (DB Plan; Pension). PSERS' role expanded upon the passage of Act 5 of 2017 (Act 5), effective July 1, 2019, to include oversight of the School Employees' Defined Contribution Plan, a separate qualified 401(a) defined contribution plan (DC Plan; Trust). At June 30, 2024, there were 763 participating employers, generally school districts.

The Public School Employees' Retirement Board (Board) is established by state law as an independent administrative board of the Commonwealth. The Board exercises control and management of the System, including the investment of its assets, and the DC Plan. The Board has 15 members including the Commonwealth's Secretary of Education; the Commonwealth's Secretary of Banking and Securities; the State Treasurer; the Executive Director of the Pennsylvania School Boards Association; one member appointed by the Governor; six elected members (three from among the System's certified members, one from among the System's noncertified members, one from among the System's annuitants; and one from among school board members in Pennsylvania); two members from the Senate; and two members from the House of Representatives.

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

Office (IFO) providing an estimate of the cost and actuarial effect of the proposed change. The IFO's actuarial note must be published prior to a second vote on pension-related legislation in the House or Senate.

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

(B) DB and DC Retirement Plans

i. Membership Classes

Individuals who became a member prior to July 1, 2011 are Membership Class T-C (Class T-C) or Membership Class T-D (Class T-D). Act 120 of 2010 (Act 120) created two new membership classes, Membership Class T-E (Class T-E) and Membership Class T-F (Class T-F), for individuals who first became new members on or after July 1, 2011 through June 30, 2019.

For individuals who first become new members on or after July 1, 2019, Act 5 allows the employee to elect one of two membership classes consisting of defined benefit (DB) and defined contribution (DC) components (Membership Class T-G (Class T-G) and Membership Class T-H (Class T-H)) or a standalone DC membership class. Membership at June 30, 2024, the most recent year for which actual amounts are available, is presented in Table 2.

Table 2 - Membership as of June 30, 2024	
Active members:	
Vested	141,266
Nonvested	113,552
DC Only	834
Total active members	255,652
Inactive members:	
Retirees and beneficiaries currently receiving benefits	253,896
Inactive members and vestees entitled to but not receiving benefits	26,331
Total retirees and other members	280,227
Total number of members	535,879

The normal retirement age, vesting period and final average salary for virtually all members are presented below:

Membership Class	Normal Retirement Age	Pension Multiplier	Vesting	Final Average Salary
T-C	Age 62, or Age 60 with 30 years of service, or 35 years of service regardless of age.	2.00%	5 Years	For any 3 years of service
T-D		2.50%	5 Years	For any 3 years of service
T-E	Age 65 with a minimum of three years of service credit, or Any combination of age and service that totals 92 with at least 35 years of credited service.	2.00%	10 Years	For any 3 years of service
T-F		2.50%	10 Years	For any 3 years of service
T-G	Age 67 with a minimum of three years of service credit, or Any combination of age and service that totals 97 with at least 35 years of credited service.	1.25%	10 Years	For any 5 years of service
T-H	Age 67 with a minimum of three years of credited service.	1.00%	10 Years	For any 5 years of service

ii. DB Benefits

As summarized in the table above, DB benefits are generally between 1% to 2.5%, depending upon membership class, of the member's final average salary (as defined in the Code) multiplied by the number of years of credited service. A member's right to a DB benefit is vested in 5 to 10 years depending on membership class as summarized in the table above.

To qualify for normal retirement, Class T-C and Class T-D members must work until age 62 with a minimum of one year of service, age 60 with 30 years of service, or attain 35 years of service regardless of age. To qualify for normal retirement, Class T-G and Class T-H members must work until age 67 with a minimum of 3 years of credited service. Class T-G may also qualify for normal retirement by attaining a total combination of age and service that is equal to or greater than 97 with a minimum of 35 years of credited service.

Active DB members may purchase credit for various types of school and non-school service on a lump-sum, installment purchase basis, or through an actuarially calculated benefit reduction. Class T-E, Class T-F, Class T-G, and Class T-H members must purchase Non-Qualifying Part Time service and most other types of non-school or non-state service credit at full actuarial cost. Members have one year after enrollment in the System to purchase service for Non-Qualifying Part Time service.

In addition to regular retirement benefits, the System also provides for disability retirement benefits and death benefits. Members are eligible for disability retirement benefits after completion of five years of credited service.

Such benefits are generally between 33.33% to 40% of the member's final average salary, depending upon membership class.

Death benefits are payable upon the death of an active member who has reached age 62 with at least one year of credited service or who has at least five years of credited service for Class T-C and Class T-D members; age 65 with at least three years of credited service for Class T-E and Class T-F members; age 67 with at least three years of credited services for Class T-G and Class T-H members or 10 years of credited service for Class T-E, Class T-F, Class T-G, and Class T-H members. The death benefit is actuarially equivalent to the present value of the benefit as if the member retired on the day before death.

Members with credited service in the Commonwealth of Pennsylvania State Employees' Retirement System (SERS) may have 365 days from enrollment in the System to elect to have their state service combined with service in the Public School Employees' Retirement System upon commencement of employment in the public school system. Similarly, a member with credited service in the System may elect to combine such service with SERS within 365 days of becoming a member of that system.

All DB members are fully vested in their individual balance of member contributions and interest in the Members' Savings Account, which is described in Note 3. All non-vested members may receive a refund of their individual balance of member contributions and interest from the Members' Savings Account upon termination of public school employment. Vested members may elect to receive a return of their accumulated contributions and interest from the Members' Savings Account upon their retirement which results in a reduced monthly annuity.

iii. DB Contributions

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

According to requirements established in Act 29 of 1994, the Commonwealth reimburses school entity employers a portion of the employer contributions paid to the System. All school entity employers are reimbursed by the Commonwealth at least 50% of the total employer contributions based on the total contribution rate. The Commonwealth reimburses certain school entity employers at a rate greater than 50% based on the Commonwealth of Pennsylvania Department of Education's Market Value/Personal Income Aid Ratio and other factors. School entities remit 100% of total employer contributions directly to the System. The Commonwealth then remits 50% of the total employer contributions for employers other than school entities directly to the System. All contributions from employers and the Commonwealth are shown as employer contributions on the Statements of Changes in Fiduciary Net Position.

The Commonwealth Share of total employer contributions for FY 2024 and FY 2023 was \$3.0 billion. The school and non-school entity share of total employer contributions for FY 2024 and FY 2023 was \$2.4 billion. For FY 2024 and FY 2023 total employer contributions were \$5.4 billion.

Contribution rates for active members are set by law PSERS members contribute between 4.5% and 10.3% of their pay depending on their class of membership to help fund their own retirement benefit. The average contribution rate payable by members for the current year (FY2023-24) is 7.44%.

Rates for members hired on and after July 1, 2011 are subject to a shared risk/shared gain contribution rate. With a shared risk/shared gain contribution rate, members can benefit when PSERS' investments are doing well and share some of the risk when PSERS' investments underperform. DB contribution rates may increase or decrease by 0.50% or 0.75% within the specified range every three years.

The member contribution rate will stay within the ranges specified in the shared risk summary table but can fluctuate by the shared risk increment every three years depending on the investment performance of PSERS.

The investment performance calculations utilized for the shared risk/shared gain contribution rate member risk share assessment are performed by the System's general investment consultant, consistent with current investment policy, and use quarter lagged values for private market investments.

The contribution rates based on qualified member compensation for virtually all members are presented below:

Member Contribution Rates for Fiscal Year Ended June 30, 2024				
Membership Class	Continuous Employment Since	Defined Benefit (DB) Contribution Rate	DC Contribution Rate	Total Contribution Rate
T-C	Prior to July 22, 1983	5.25%	N/A	5.25%
T-C	On or after July 22, 1983	6.25%	N/A	6.25%
T-D	Prior to July 22, 1983	6.50%	N/A	6.50%
T-D	On or after July 22, 1983	7.50%	N/A	7.50%
T-E	On or after July 1, 2011	7.50% base rate	N/A	Prior to 7/1/21: 7.50% After 7/1/21: 8.00%
T-F	On or after July 1, 2011	10.30% base rate	N/A	Prior to 7/1/21: 10.30% After 7/1/21: 10.80%
T-G	On or after July 1, 2019	5.50% base rate	2.75%	Prior to 7/1/21: 8.25% After 7/1/21: 9.00%
T-H	On or after July 1, 2019	4.50% base rate	3.00%	Prior to 7/1/21: 7.50% After 7/1/21: 8.25%
DC	On or after July 1, 2019	N/A	7.50%	7.50%

Shared Risk Summary				
Membership Class	Defined Benefit (DB) Base Rate	Shared Risk Increment	Minimum	Maximum
T-E	7.50%	+/-0.50%	5.50%	9.50%
T-F	10.30%	+/-0.50%	8.30%	12.30%
T-G	5.50%	+/-0.75%	2.50%	8.50%
T-H	4.50%	+/-0.75%	1.50%	7.50%

iv. Defined Contribution Plan

Act 5 allows the employee to elect one of three Membership Class T-G (Class T-G) and Membership Class T-H (Class T-H) or a standalone DC membership class. The table below shows the current membership of the DC Plan.

The financial statements for FY 2024 and FY 2023 reflect the DC Plan activities for the fourth and fifth years of operations.

Defined Contribution Plan Membership at June 30, 2024	
Active participants	74,770
Inactive participants entitled to but not receiving distributions	5,059
Total number of participants	79,829

v. DC Benefits

The DC component of the retirement is based on the statutory rate of contributions made by the participant and the employer, voluntary contributions (rollovers and after-tax contributions), the investment performance on those contributions, and the fees, costs, and expenses deducted from the PSERS DC Plan account. Contributions have the potential to grow based on investment earnings but are not guaranteed against loss in declining investment markets.

DC participants are always 100% vested in their own mandatory before-tax, after-tax, and rollover contributions in the DC plan. DC participants who have at least three eligibility points become vested and eligible for employer DC contributions made on their behalf. Participants with fewer than three eligibility points are not eligible to receive the employer DC contributions. Each eligibility point is earned the first day a contribution is made to the plan on behalf of a DC participant in a school year (July 1 – June 30). Only one eligibility point may be credited in a school year.

Death benefits are payable upon the death of an active DC participant equal to the vested portion of the participant’s DC account. There is no disability benefit with the DC Plan.

vi. DC Contributions

DC participant and employer contributions rates are set by statute. A participant may elect to make additional voluntary post-tax member contributions and rollovers.

(C) Postemployment Healthcare Plans

i. Health Insurance Premium Assistance Program

(a) Premium Assistance Benefits

Beginning July 1, 1992, the System provides a Health Insurance Premium Assistance program (Premium Assistance) for all eligible annuitants who qualify and elect to participate. Effective January 1, 2002, participating eligible annuitants are entitled to receive premium assistance payments equal to the lesser of \$100 per month or their out-of-pocket monthly health insurance premium.

The eligibility requirements for premium assistance are as follows:

- 24.5 years of credited service (for Class DC members, Medicare eligibility with at least 24.5 eligibility points), or
- 15 years of credited service if termination of employment and retirement occurred after superannuation age , 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 HOP.

As of June 30, 2024, there were no assumed future benefit increases to participating eligible annuitants in the Premium Assistance program. Membership at June 30, 2023, the most recent year for which actual amounts are available, is presented in Table 3.

(b) Contributions

A portion of the employer contribution rate to the System includes the funding of Premium Assistance. The Premium Assistance contribution rate is set at a level necessary to establish reserves sufficient to provide Premium Assistance payments for all participating eligible members for the subsequent fiscal year. The portion of the total contribution rate for employers used to fund Premium Assistance was 0.64% for the year ended June 30, 2024, and 0.75% for the year ended June 30, 2023. Members do not contribute to Premium Assistance.

Retirees and beneficiaries currently receiving benefits	92,638
Inactive members and vestees entitled to but not receiving benefits	644
Total retirees and other inactive members	93,282
Total active members	255,652
Total number of members	348,934

ii. Health Options Program

The Health Options Program (HOP) is a PSERS-sponsored voluntary health insurance program for the sole benefit of annuitants of PSERS, spouses of annuitants, survivor annuitants and their dependents who participate in HOP. The HOP is a separate trust funded exclusively by the premiums paid by its participants for the benefit coverage they elect.

The HOP offers several health plans. Participants may select among two self-funded Medicare supplement plans, three Medicare Rx plans, and multiple Medicare Advantage plans for those eligible for Medicare. Participants not eligible for Medicare have a choice between a self-funded high deductible indemnity plan and multiple managed-care plans. Pre-65 Medical Plan or a companion managed care plan offered through Medicare Advantage carriers are available to retirees residing in the plan's service area. The Medicare supplements and pre-65 high deductible plan are self-funded and claims are adjudicated by a third-party administrator. The Medicare Rx Options and the prescription drug benefit of the pre-65 high deductible plan are also self-funded and claims are adjudicated by a pharmacy benefits manager. The Medicare Advantage and managed-care plans are provided by private insurance companies or managed care organizations and benefits are fully insured. HOP also offers a fitness program and a dental and vision option through fully insured carriers.

Effective January 1, 2006, PSERS entered into an Employer/Union Entity contract with the Centers for Medicare and Medicaid Services (CMS) to operate a voluntary Medicare Prescription Drug Plan (PDP). The PDP covers approximately 97,000 participants. CMS provides partial funding of the PDP in the form of monthly per capita payments and reinsurance. An independent actuarial consulting firm sets the rates for the self-funded benefits. The HOP maintains reserves for claims that are Incurred But Not Reported (IBNR) and for claim fluctuation for the self-funded benefit plans. At June 30, 2024 and 2023, PSERS recorded \$24,857,000

and \$23,092,600, respectively, in IBNR. The IBNR is included in benefits payable.

2. Summary of Significant Accounting Policies

(A) Basis of Accounting

The System's financial statements are prepared on the accrual basis of accounting under which expenses are recorded when the liability is incurred, revenues are recorded in the accounting period in which they are earned and become measurable, and investment purchases and sales are recorded as of their trade date. Member and employer contributions are recognized in the period for which employees' salaries are reported. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

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

(B) Investments

The System's investments are reported at fair value. Fair value is the amount that the System can reasonably expect to receive for an investment in a current sale between a willing buyer and a willing seller, that is, other than in a forced or liquidation sale. See Note 4(B) for the description of the Fair Value of Investments.

Net appreciation (depreciation) is determined by calculating the change in fair value of investments between the beginning of the year and end of the year, less purchases of investments at cost, plus sales of investments at fair value.

Investment purchases and sales are recorded as of the trade date. Interest income is comprised of dividend, interest, and other investment income. Dividend income is recognized on the ex-dividend date. Interest and other investment income is recognized when earned.

Investment expenses consist of investment manager fees and those administrative expenses directly related to the System's investment operations. Investment proceeds receivable generally include unsettled

investment sales. Unsettled investment purchases are included in investment purchases and other payables.

(C) Capital Assets

PSERS maintains three categories of capital assets: tangible capital assets, intangible capital assets, and intangible right-to-use assets.

Tangible capital assets consist primarily of data processing equipment and software. Internally developed computer software is recognized as intangible capital assets. Capital assets are depreciated using the straight-line method over an estimated useful life of five years.

Intangible Right to Use Assets	
Costs	(Dollar Amounts in Thousands)
Balances as of June 30, 2023	\$ 34,564
Balances as of June 30, 2024	\$ 68,514
Accumulated depreciation and amortization	
Depreciation and Amortization Expense	\$ (23,466)
Balances June 30, 2024	(23,466)
Net right to use assets June 30, 2024	\$ 45,048

Intangible capital assets are amortized using the straight-line method over an estimated useful life of twenty years for assets purchased prior to July 1, 2012 and up to 10 years for assets purchased after June 30, 2012.

Intangible right-to-use leases are recorded at net present value of lease payments. Intangible right-to-use lease assets and related liabilities are recorded at the commencement date of the related contract. Lease liabilities, included in Other Liabilities on the Statement of Fiduciary Net Position, are measured at the present value of expected payments over the contract term. Lease assets are amortized over the shorter of the term of the contract or the useful life of the underlying assets. Interest expense is recognized over the contract term.

Intangible right-to-use Subscription-Based Information Technology Arrangements (SBITA) are recorded under GASB Statement No. 96, Subscription-Based Information Technology Arrangements. Intangible right-to-use SBITA assets and related liabilities are recorded at the commencement date of the related contract. SBITA liabilities, included in Other Liabilities on the Statement

of Fiduciary Net Position, are measured at the present value of expected payments over the contract term. SBITA assets are amortized over the shorter of the term of the contract or the useful life of the underlying assets. Interest expense is recognized over the contract term.

(D) Benefits Payable

Benefits payable represents the obligations of the System, on an accrual basis, at the end of the fiscal year. It includes the estimated retirement and death benefits payable, federal taxes withheld but not yet due to the IRS, premium assistance benefits payable, and the HOP IBNR claims for its participants.

(E) Pensions for Employees of the System

For purposes of measuring the net pension liability, deferred outflows of resources, deferred inflows of resources, and pension expense, information about the fiduciary net position of the Pennsylvania State Employees’ Retirement System (SERS) and additions to/ deductions from SERS’ fiduciary net position have been determined on the same basis as they are reported by SERS. Please refer to Note 8 for additional information regarding SERS. PSERS’ net pension liability for its employees to SERS is reported in Other liabilities. Deferred inflows of resources are reported in Other liabilities. Deferred outflows of resources are reported in Miscellaneous assets. Pension expense is reported in administrative expenses and is detailed on the Schedule of Administrative and Investment Expenses Supplementary Schedule.

(F) Postemployment Healthcare Plan for Employees of the System

For purposes of measuring the net OPEB liability, deferred outflows of resources, deferred inflows of resources and OPEB expense, information about the fiduciary net position of the Commonwealth of Pennsylvania Retired Employees Health Program (REHP) and additions to/deductions from REHP fiduciary net position have been determined on the same basis as they are reported by the REHP. Please refer to Note 9 for additional information regarding the REHP. PSERS’ net OPEB liability for its employees to the REHP is reported in Other liabilities. Deferred inflows of resources are reported in Other liabilities. Deferred outflows of resources are reported in Miscellaneous assets. OPEB expense is reported in administrative expenses and is detailed on the Schedule of Administrative and Investment Expenses Supplementary Schedule.

(G) Compensated Absences

The System uses the accrual basis of accounting for measuring vacation, sick leave, and other compensated absences liabilities. Employees of the System are paid for accumulated vacation leave upon termination or retirement. Retiring employees of the System that meet service, age, or disability requirements are paid between 30% and 100% of sick days available at retirement, up to 161 maximum days paid. At June 30, 2024 and 2023, \$5,424,000 and \$6,810,000, respectively, were accrued for unused vacation and sick leave for the System's employees and are included in Accounts payable and accrued expenses on the Statements of Fiduciary Net Position.

(H) Participant Premium Advances

Premium advances at June 30, 2024 and 2023, are for HOP premiums related to health care coverage to be provided in July of 2024 and 2023, respectively.

(I) Federal Income Taxes

PSERS is exempt from federal income taxes under section 501 (a) of the Internal Revenue Code.

(J) Risk Management

The System is exposed to various liabilities and risks of loss, including, without limitation, the ordinary risks of investment losses, risks related to theft or destruction of assets, liabilities resulting from injuries to employees, and liabilities resulting from court challenges to fiduciary decisions. As an administrative agency of the Commonwealth of Pennsylvania, the System is accorded sovereign immunity. For claims not shielded by sovereign immunity, the System participates in certain Commonwealth pooled insurance programs and requires asset managers to carry certain insurance coverage for the protection of the System. The System has implemented a self-insurance program for fiduciary and director and officer liability coverage. During the past three fiscal years, insurance settlements did not exceed insurance coverage. In addition, the DC plan has its own fiduciary insurance through a third-party.

The Health Options Program maintains a reserve equal to approximately 11 to 12 months of self-funded benefits and expenses. Reserves are recommended for all self-insured group health plans to cover the potential for unexpected claim volatility (high amount claim events) and unanticipated economic changes (excessive inflation). Further, The Health Options Program, as a Medicare Supplement Plan, has limited exposure to high

cost claims, which reduces the potential for excess risk. Medicare is the primary payer for most medical claims in the HOP Medical and Value Medical plans, and the Medicare Prescription Drug Program is protected by Medicare Part D Catastrophic coverage. Benefits for members who are not eligible for Medicare are limited to \$300,000 per year in medical benefits, and \$1,000,000 over a member's lifetime. Medical and Prescription drug benefits provided by Managed Care Organizations are fully insured by those providers. For these reasons, the Health Options Program is sufficiently reserved and reinsurance (stop loss coverage) is not needed or recommended at this time.

(K) Members Receivables

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

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

The following is a summary of member receivables at June 30, 2024 and 2023:

	(Dollar Amounts in Thousands)	
	2024	2023
Pension:		
Member Contributions	\$ 82,173	\$ 88,253
Purchase of Service	284,947	305,797
Other	7,543	10,769
Total Pension	\$ 374,663	\$ 404,819
Defined Contribution Plan	\$ 751	\$ 509
Postemployment Healthcare:		
Premium Assistance	\$ 1,518	\$ 1,541
Health Options Program	\$ 126	\$ 133

(L) Interfund Transactions and Balances

Interfund transfers of assets take place on a regular recurring basis between Pension, Premium Assistance, HOP and Defined Contribution. The transfers occur

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

(M) Adoption of New Accounting Standards

PSERS reviews the requirements of all new GASB pronouncements and assesses the potential impact to the System. There were no new GASB standards that materially impacted PSERS’ financial statements for the fiscal year ended June 30, 2024.

3. Description of Accounts

The Code requires the System to maintain the following accounts which represent reserves held for future and current benefit payments as follows and as illustrated in Table 4.

Table 4 - Account Balance		
	(Dollar Amounts in Thousands)	
	2024	2023
Pension:		
State Accumulation Account	\$ (7,561,460)	\$ (9,242,681)
Members' Savings Account	19,630,600	19,188,548
Annuity Reserve Account	64,423,854	62,166,463
	\$ 76,492,994	\$ 72,112,330
Defined Contribution Plan	\$ 356,320	\$ 201,881
Postemployment Healthcare:		
Health Insurance Account	\$ 136,448	\$ 140,716
Account	\$ 386,329	\$ 387,014

(A) State Accumulation Account

The State Accumulation Account is credited with contributions from the Commonwealth and the employers. Additionally, interest earnings of the System (after crediting the Members’ Savings Account with 4% interest and the reserve for retirement with 5.50% statutory interest) are credited to this account. Each year, the necessary amounts, as determined by the actuary for the payment of retirement, disabilities, and death benefits, are transferred from the State Accumulation Account to the Annuity Reserve Account increasing the reserve credit to the 7.00% valuation assumption rate determined by the actuary. All administrative expenses necessary for the operation of the System, except for Premium Assistance, HOP, and Defined Contribution Plan expenses, are paid from the State Accumulation Account.

(B) Members’ Savings Account

The Members’ Savings Account is credited with all contributions made by active members of the System. Interest is added to the member’s individual account at an annual rate of 4%. Upon a member’s death or retirement, the accumulated contributions plus interest are transferred to the Annuity Reserve Account for subsequent payment of benefits.

(C) Annuity Reserve Account

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

(D) School Employees’ Defined Contribution Trust (Defined Contribution Plan)

The School Employees’ Defined Contribution Trust accumulates DC participants and employer contributions, investment earnings and DC plan expenses of the School Employees’ Defined Contribution Plan. The trust is comprised of individual investment accounts, all assets in those accounts and any assets held that are not allocated to the individual investment accounts. The assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries and may be used for payment of fees, costs and expenses related to the administration and investment of the plan and the trust.

(E) Health Insurance Account

The Health Insurance Account is credited with contributions from the employers for Premium Assistance. The Health Insurance Account pays all administrative expenses necessary to operate the Premium Assistance Program.

(F) Health Insurance Program Account

The Health Insurance Program Account is credited with premiums from members of the HOP and from CMS. All benefits related to the HOP (premium payments to the insurance companies and self-funded benefits) are paid from this account. The Health Insurance Program Account pays all administrative expenses necessary to operate the HOP.

4. Investments

(A) Summary of Investments

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

The Board invests the funds of the System using the Prudent Investor Standard, as articulated in the Code, which means "the exercise of that degree of judgment, skill and care under the circumstances then prevailing which persons of prudence, discretion, and intelligence who are familiar with such matters exercise in the management of their own affairs not in regard to speculation, but in regard to the permanent disposition of the fund, considering the probable income to be derived therefrom as well as the probable safety of their capital." The Board has adopted its investment policy to formally document investment objectives and responsibilities. This policy, as well as applicable state law, establishes guidelines for permissible investments of the System.

(B) Fair Value of Investments

i. Fair Value Levels

PSERS measures and records its investments using fair value measurement guidelines established by generally accepted accounting principles. These guidelines recognize a three-tiered fair value hierarchy as follows:

- **Level 1 inputs:** Level 1 inputs are quoted prices (unadjusted) for identical assets or liabilities in active markets. A quoted price for an identical asset or liability in an active market (e.g., an equity security traded on a major exchange) provides the most reliable fair value measurement and, if available, should be used to measure fair value in that particular market.
- **Level 2 inputs:** Level 2 inputs are prices that are observable either directly or indirectly. Level 2 inputs may include quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model- derived valuations in which all significant inputs are observable, such as interest rates, yield curves, implied volatilities, credit spreads, or market-corroborated inputs.
- **Level 3 inputs:** Reporting entities may use unobservable inputs to measure fair value if relevant observable inputs are not available, allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date. These unobservable inputs are considered Level 3.

Debt, equity, and derivative instrument securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of the fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices and recently published security specific trading levels. Short-term securities are carried at cost, which approximates fair value, unless they have published market prices or quotations from national securities exchanges or securities pricing services, in which case they are valued at the published market price. Fixed income securities and equities are generally valued based on published market prices and quotations from national securities exchanges or securities pricing services. Securities which are not traded on a national securities exchange are valued by the respective fund manager or other third parties based on similar sales.

For Collective Trust Fund (CTF) investments, PSERS' management, in consultation with investment advisors has determined the fair value based upon the reported share value of the respective fund. The reported share value of the fund is based upon each respective fund's administrator statement.

Private equity, private equity real estate, private credit, private infrastructure, and absolute return are generally organized as limited partnerships. The fair value of investments, which are organized as limited partnerships, and have no readily available daily fair value, have been determined by using the net asset value per share (or its equivalent) of PSERS' ownership interest in partners' capital. These net asset values are based on the individual investor's June 30, 2024, capital account balance reported at fair value by the general partner of the respective limited partnership, or the most recently available reporting period, adjusted for subsequent contributions, distributions, management fees, changes in values of foreign currency, and published market prices for certain securities.

The limited partnerships' annual financial statements, which include estimates of fair values, are audited by independent certified public accounting firms. It is

possible that these estimates could change in the near-term, or upon the sale of the assets, resulting in valuations that could differ from the June 30, 2024, reported net asset value.

Directly-owned real estate investments are valued based upon the June 30th financial statements completed by the asset manager. The directly-owned real estate investments are appraised annually by an independent third-party appraiser as of calendar year-end.

Derivative instruments classified in Level 1 of the fair value hierarchy are valued using observable exchange, dealer, or broker market pricing.

1.) Pension

i. Investments at Net Asset Value (NAV)

- (a) Collective trust fund investments consist primarily of domestic and international institutional funds. The CTF's fair value is based on the reported share value of the respective fund by the fund administrator. Redemption frequency for these assets range from monthly, to quarterly, to annual.
- (b) Private equity real estate is implemented through investment structures that provide limited liability to PSERS. These investments are across multiple asset types such as industrial, multi-family, office, retail, hotels, agriculture (permanent crops), and other real estate related assets.

Private equity real estate investments utilize core, value-added, and opportunistic strategies. Core real estate strategies are expected to deliver a significant percentage of their return from income and should demonstrate lower volatility than opportunistic and value-added strategies due to lower leverage, higher levels of occupancy, and asset location in primary markets. Value-added real estate strategies typically have near-term leasing, repositioning, and/or renovation risk. Value-added strategies are expected to have modest initial operating revenues with potential for substantial income growth and will likely encounter greater volatility than core strategies, but lower volatility than opportunistic strategies. Opportunistic real estate strategies typically have significant development, lease-up, financial restructuring, and/or liquidity risk with little or no initial operating income. Opportunistic real estate strategies typically utilize higher levels of leverage, are expected to achieve most of the return from future

capital gains, and are likely to encounter greater volatility than core and value-added strategies. The fair value of these investments have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments cannot be easily redeemed. Distributions may be received as: cash flows from operations or return of capital from dispositions, which can take, on average, up to 10 years.

- (c) Private equity is implemented through investment structures that provide limited liability to PSERS. Strategies include buyout, growth equity, venture capital, and special situations strategies. Buyout strategies typically seek controlling interests in established companies that are further along in the business cycle. Venture capital strategies typically target companies in early phases of the business cycle and may be classified as seed, early, middle or late stage. These companies generally are not yet profitable and therefore are higher on the risk/return spectrum. Growth equity strategies sit between buyout and venture capital, and typically consist of companies with high revenue growth, free cash flow generation, and are typically profitable. Special situations strategies typically refer to mezzanine and distressed debt-for-control. The fair value of these investments have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments cannot be easily redeemed. Distributions may be received as: cash flows from operations or return of capital from dispositions, which can take, on average, up to 10 years.
- (d) Private credit is implemented through investment structures that provide limited liability to PSERS. Private credit strategies include direct lending, mezzanine lending, distressed and special situations, specialty finance, structured credit, real estate credit, and real assets credit. Direct lending is focused on providing senior secured loans to middle-market businesses. Mezzanine is primarily focused on providing subordinated debt capital to private businesses. Distressed and special situations is focused on issuing loans to companies undergoing financial challenges or that are in need of a solution to optimize a capital structure or purchasing publicly listed, stressed securities. Specialty finance is a set of niche lending strategies that provide financing to consumers, small businesses, and other borrowers. Structured credit is a set of strategies that target investments in

securitized debt obligations, such as collateralized loan obligations and collateralized debt obligations. Real estate credit is focused on commercial real estate collateral or residential mortgage origination. Real assets credit is focused on providing debt capital to companies operating within the real asset space with loans typically secured by real assets. The fair value of these investments have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments cannot be easily redeemed. Distributions may be received as: cash flows from operations or return of capital from dispositions, which can take, on average, up to 10 years.

- (e) Private infrastructure is implemented through investment structures that provide limited liability to PSERS. Investments generally consist of private companies and assets that provide essential services to the economy, including regulated assets, contracted energy assets, and transportation assets with high barriers to entry and stable and predictable long-term cash flows. Regulated assets generally include electricity transmission and distribution facilities, gas distribution systems, pipelines, water distribution, and wastewater collection and processing facilities. Contracted energy assets generally include renewable and conventional generation, pipelines, and storage. Transportation assets generally include toll roads, bridges and tunnels, airports, seaports, parking facilities, and rail lines. The fair value of these investments have been determined using the NAV per share (or its equivalent) of the System's ownership interest in partners' capital. These investments cannot be easily redeemed. Distributions may be received as: cash flows from operations or return of capital from dispositions, which can take, on average, up to 10 years.
- (f) Absolute return is implemented through investment structures that provide limited liability to PSERS. Absolute return includes investments that are private investment funds that seek to produce absolute returns generally using event-driven, tactical trading, and relative value strategies. Event-driven funds seek to gain an advantage from pricing inefficiencies that may occur before or after a corporate action or related event, such as a merger, spinoff, earnings call, bankruptcy, or restructuring. Tactical trading

funds invest their holdings in indexes, commodities, interest rate instruments, and currencies as a result of relative value or directional forecasts from a systematic or discretionary approach. Relative value strategies use a range of fixed income arbitrage, insurance linked, long-short credit, and/or quantitative strategies that seek to take advantage of price differentials. The fair values of the investments in this type have been determined using the NAV per share of the investments. With the most recently approved strategic asset allocation, the absolute return portfolio is in liquidation. While many of the investments can be redeemed within 12 months of June 30, 2024, there are investments that include restrictions that do not allow for redemption during the next 12 months and could take longer.

(2.) Defined Contribution

i. Investments at Net Asset Value (NAV)

- (a) DC Collective Trust Fund investments (DC-CTF) consist primarily of domestic and international institutional funds. The fair value of DC-CTF is based on the reported share value of the respective fund. DC-CTF are managed by state chartered banks for which various state banking departments have regulatory oversight and investment advisors for which regulatory agencies such as the Securities and Exchange Commission have regulatory oversight. Investments that are not subject to this oversight are subject to annual independent audits. Redemption frequency for these assets range from monthly, to quarterly, to annual.

(C) Deposit and Investment Risk Disclosures

i. Deposits

Custodial credit risk for deposits is the risk that, in the event of a financial institution failure, the System would not be able to recover the value of the deposits. The Commonwealth's Treasury Department is the custodian of the System's funds. Commonwealth Treasury Department deposits must be held in insured depositories approved by the Commonwealth's Board of Finance and Revenue and must be fully collateralized. The deposit and investment policies of the Treasury Department are governed by Sections 301, 301.1, and 505 of the Pennsylvania Fiscal Code (Act of 1929, P.L. 343), and Section 321.1 of the Pennsylvania Administrative Code (Act of 1929, P.L. 177, No. 175).

The System, through its third-party administrator, maintains certain bank deposits for the operation of its voluntary HOP. These deposits are not required to be collateralized by statute or policy. These deposits totaled \$356,653,000 and \$324,187,000, at June 30, 2024 and 2023, respectively, and are under the custody of M&T Bank which has a BB+ rating by Standard and Poor's (S&P) and an Baa3 rating by Moody's Investor Services (Moody's).

ii. Investment Risks

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

At June 30, 2024, the System had the following recurring fair value measurements in the Pension Plan.

Pension Investments

Investments and Derivative Instruments Measured at Fair Value (Dollar Amounts in Thousands)

	2024	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 6,039,011	\$ 4,341,913	\$ 1,697,098	\$ —
Other domestic short-term	482,003	421,951	60,052	—
International short-term	51,470	43,410	8,060	—
	6,572,484	4,807,274	1,765,210	—
Fixed:				
Domestic asset-backed and mortgage-backed securities	712,763	—	712,763	—
U.S. government and agency obligations	11,810,875	11,229,405	581,470	—
Domestic corporate and taxable municipal bonds	1,777,152	928,831	848,321	—
International fixed income	336,531	—	336,531	—
	14,637,321	12,158,236	2,479,085	—
Equity:				
Domestic equity	13,767,270	13,767,220	50	—
International equity	8,164,642	8,164,642	—	—
	21,931,912	21,931,862	50	—
Directly-owned real estate	1,482,406	—	—	1,482,406
Total investments by fair value level	44,624,123	\$ 38,897,372	\$ 4,244,345	\$ 1,482,406
Investments measured at the net asset value (NAV)				
Collective trust funds - Fixed income	2,518,078			
Collective trust funds - Equity	2,424,671			
Collective trust funds - Other	905,424			
Private equity real estate	4,220,550			
Private infrastructure	2,443,640			
Alternative investments:				
Private equity	12,481,672			
Private credit	5,700,508			
Absolute return	253,965			
	18,436,145			
Total investments measured at the NAV	30,948,508			
Total investments measured at fair value	\$ 75,572,631			
Investment derivative instruments				
Futures	\$ 62,547	\$ 62,547	\$ —	\$ —
Total return type swaps	(16,880)	(16,880)	—	—
Foreign exchange contracts	40,745	40,745	—	—
Options	4,157	4,157	—	—
Total investment derivative instruments	\$ 90,569	\$ 90,569	\$ —	\$ —

At June 30, 2023, the System had the following recurring fair value measurements in the Pension Plan.

Pension Investments

Investments and Derivative Instruments Measured at Fair Value (Dollar Amounts in Thousands)

	2023	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 4,834,819	\$ 2,986,284	\$ 1,848,535	\$ —
Other domestic short-term	1,259,656	1,150,294	109,362	—
International short-term	24,337	9,946	14,391	—
	6,118,812	4,146,524	1,972,288	—
Fixed income:				
Domestic asset-backed and mortgage-backed securities	579,899	—	579,899	—
U.S. government and agency obligations	10,993,228	10,987,314	5,914	—
Domestic corporate and taxable municipal bonds	1,494,012	538,188	955,824	—
International fixed income	289,365	—	289,365	—
	13,356,504	11,525,502	1,831,002	—
Equity:				
Domestic equity	11,753,219	11,753,219	—	—
International equity	7,604,593	7,604,593	—	—
	19,357,812	19,357,812	—	—
Directly-owned real estate	1,496,700	—	—	1,496,700
Total investments by fair value level	40,329,828	\$ 35,029,838	\$ 3,803,290	\$ 1,496,700
Investments measured at the net asset value (NAV)				
Collective trust funds - Fixed Income	2,302,137			
Collective trust funds - Equity	2,148,483			
Collective trust funds - Other	2,117,309			
Private equity real estate	4,258,716			
Private infrastructure	1,682,316			
Alternative investments:				
Private equity	12,789,319			
Private credit	5,175,199			
Absolute return	198,556			
	18,163,074			
Total investments measured at the NAV	30,672,035			
Total investments measured at fair value	\$ 71,001,863			
Investment derivative instruments				
Futures	\$ 43,857	\$ 43,857	\$ —	\$ —
Total return type swaps	(85,897)	(85,897)	—	—
Foreign exchange contracts	33,865	33,865	—	—
Options	2,291	2,291	—	—
Total investment derivative instruments	\$ (5,884)	\$ (5,884)	\$ —	\$ —

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) at June 30, 2024 and 2023 are presented in the following tables.

Pension Investments				
Fair Value of Investments				
Investments measured at the NAV				
(Dollar Amounts in Thousands)				
	2024			
	Fair Value	Unfunded Commitments	Redemption Frequency*	Redemption Notice Period*
	\$ 2,518,078	\$ —	see note (a)	see note (a)
Collective trust funds - Equity (a)	2,424,671	—	see note (a)	see note (a)
Collective trust funds - Other (a)	905,424	—	see note (a)	see note (a)
Private equity real estate (b)	4,220,550	2,221,484	see note (b)	see note (b)
Private infrastructure (e)	2,443,640	2,102,767	see note (e)	see note (e)
Alternative investments:				
Private equity (c)	12,481,672	3,274,555	see note (c)	see note (c)
Private credit (d)	5,700,508	3,106,344	see note (d)	see note (d)
Absolute return (f)	253,965	—	see note (f)	see note (f)
	18,436,145			
Total investments measured at the NAV	\$ 30,948,508			

Pension Investments				
Fair Value of Investments				
Investments measured at the NAV				
(Dollar Amounts in Thousands)				
	2023			
	Fair Value	Unfunded Commitments	Redemption Frequency*	Redemption Notice Period*
Collective trust funds - Fixed income (a)	\$ 2,302,137	\$ —	see note (a)	see note (a)
Collective trust funds - Equity (a)	2,148,483	—	see note (a)	see note (a)
Collective trust funds - Other (a)	2,117,309	—	see note (a)	see note (a)
Private equity real estate (b)	4,258,716	2,508,928	see note (b)	see note (b)
Private infrastructure (e)	1,682,316	1,276,473	see note (e)	see note (e)
Alternative investments:				
Private equity (c)	12,789,319	3,777,403	see note (c)	see note (c)
Private credit (d)	5,175,199	3,083,132	see note (d)	see note (d)
Absolute return (f)	198,556	207,733	see note (f)	see note (f)
	18,163,074			
Total investments measured at the NAV	\$ 30,672,035			

*See note 4(B)(a)(ii) (a) through (f) for additional details.

At June 30, 2024, the System had the following recurring fair value measurements in the Premium Assistance Program.

Premium Assistance Investments
 Investments Measured at Fair Value
 (Dollar Amounts in Thousands)

	2024	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 109,873	\$ 78,999	\$ 30,874	\$ —
Total investments measured at fair value	\$ 109,873	\$ 78,999	\$ 30,874	\$ —

At June 30, 2023, the System had the following recurring fair value measurements in the Premium Assistance Program.

Premium Assistance Investments
 Investments Measured at Fair Value
 (Dollar Amounts in Thousands)

	2023	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 108,367	\$ 66,934	\$ 41,433	\$ —
Total investments measured at fair value	\$ 108,367	\$ 66,934	\$ 41,433	\$ —

At June 30, 2024, the System had the following recurring fair value measurements in the Health Options Program.

Health Options Program Investments

Investments Measured at Fair Value

(Dollar Amounts in Thousands)

	2024	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 100,964	\$ 72,593	\$ 28,371	\$ —
Other domestic short-term	356,653	356,653	—	—
Total investments measured at fair value	\$ 457,617	\$ 429,246	\$ 28,371	\$ —

At June 30, 2023, the System had the following recurring fair value measurements in the Health Options Program.

Health Options Program Investments

Investments Measured at Fair Value

(Dollar Amounts in Thousands)

	2023	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 96,693	\$ 59,724	\$ 36,969	\$ —
Other domestic short-term	324,187	324,187	—	—
Total investments measured at fair value	\$ 420,880	\$ 383,911	\$ 36,969	\$ —

At June 30, 2024, the System had the following recurring fair value measurements in the DC Plan.

Defined Contribution Plan Investments

Investments Measured at Fair Value
(Dollar Amounts in Thousands)

	2024	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 4,079	\$ 2,933	\$ 1,146	\$ —
Other domestic short-term	9,634	9,634	—	—
Total investments by fair value level	13,713	12,567	1,146	\$ —
Investments measured at the net asset value (NAV)				
Collective trust funds	342,535			
Total investments measured at the NAV	342,535			
Total investments measured at fair value	\$ 356,248			

At June 30, 2023, the System had the following recurring fair value measurements in the DC Plan.

Defined Contribution Plan Investments

Investments Measured at Fair Value
(Dollar Amounts in Thousands)

	2023	Fair Value Measurements Using		
		Level 1	Level 2	Level 3
Investments by fair value level				
Short-term:				
PSERS Short-Term Investment Fund	\$ 4,843	\$ 2,991	\$ 1,852	\$ —
Other domestic short-term	6,388	6,388	—	—
Total investments by fair value level	11,231	\$ 9,379	\$ 1,852	\$ —
Investments measured at the net asset value (NAV)				
Collective trust funds	191,535			
Total investments measured at the NAV	191,535			
Total investments measured at fair value	\$ 202,766			

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) at June 30, 2024 is presented in the following table.

Defined Contribution Plan Investments

Fair Value of Investments

Defined Contribution Plan investments measured at the NAV

(Dollar Amounts in Thousands)

	2024			
	Fair Value	Commitments	Redemption Frequency	Redemption Notice Period
Collective trust funds (g)	\$ 342,535	\$ —	see note (g)	see note (g)
Total investments measured at the NAV	<u>\$ 342,535</u>			

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) at June 30, 2023 is presented in the following table.

Defined Contribution Plan Investments

Fair Value of Investments

Defined Contribution Plan investments measured at the NAV

(Dollar Amounts in Thousands)

	2023			
	Fair Value	Commitments	Redemption Frequency	Redemption Notice Period
Collective trust funds (g)	\$ 191,535	\$ —	see note (g)	see note (g)
Total investments measured at the NAV	<u>\$ 191,535</u>			

The following table discloses aggregate market value for the System's Short-term and Fixed Income assets by credit quality rating category. Many securities have ratings from more than one NRSRO*** and sometimes those ratings differ from one NRSRO to another. The data listed below uses the rating (expressed as S&P equivalent) available from Moody's and/or S&P that indicates the lowest credit quality at June 30, 2024 and 2023.

Quality Rating	(Dollar Amounts in Thousands)	
	2024 Fair Value	2023 Fair Value
AAA	\$ 1,731,000	\$ 541,764
AA	2,225,626	3,204,630
A	707,925	791,723
BBB	361,271	312,250
BB and Below	674,883	881,233
NR*	3,949,095	5,427,923
Total Exposed to Credit Risk	9,649,800	11,159,523
U.S. Government Guaranteed**	14,659,286	11,158,408
Total Fixed Income and Short-Term Investments	\$ 24,309,086	\$ 22,317,931

*Not Rated securities include \$828,136 and \$2,518,078 in collective trust funds and \$1,171,432 and \$93,853 in PSERS Short-Term Investment Fund assets at June 30, 2023 and 2024 respectively.

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

***nationally recognized statistical rating organizations (NRSRO)

At June 30, 2024 and 2023, the System's fixed income portfolio had the following option-adjusted durations by fixed income sector:

Investment Type	(Dollar Amounts in Thousands)			
	Option-Adjusted Duration	2024 Fair Value	Option-Adjusted Duration	2023 Fair Value
Domestic asset-backed and mortgage-backed	0.9	\$ 712,763	0.2	\$ 579,899
U.S. government and agency obligations	10.0	11,810,875	11.1	10,993,228
Domestic corporate and taxable municipal bonds	1.2	1,777,152	0.5	1,494,012
International fixed income	4.2	336,531	1.9	289,365
Collective trust funds*	11.9	2,518,078	10.1	2,302,137
PSERS Short-Term Investment Fund	0.1	6,253,927	0.1	5,044,722
Other Short-Term Assets	0.1	899,760	0.1	1,614,568
Total	6.3**	\$ 24,309,086	6.6**	\$ 22,317,931

* Represents funds holding fixed income assets.

** Fixed income investment managers enter into futures contracts to adjust the durations of their portfolios as a whole rather than any particular investment type within the portfolio. In total, the futures contracts have adjusted PSERS' total portfolio duration upward by 0.1 at June 30, 2024 and 2023. The total portfolio option adjusted duration is calculated by weighting each investment type by fair value.

(a) Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the System’s investment in a single issuer. As of June 30, 2024 and 2023, the System had no single issuer that exceeded 5% of total investments. Investments issued or explicitly guaranteed by the U.S. government and investments in mutual funds, external investment pools, and other pooled investments were excluded.

(b) Custodial Credit Risk

Custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the System would not be able to recover the value of investment or collateral securities that are in the possession of an outside party. In accordance with a contractual relationship between the Commonwealth’s Treasury Department and its custodial agent, substantially all investments, where securities are used as evidence of the investment, are held by the custodian in book-entry form in the System’s name. Those investments are defined as insured or registered investments for which the securities are held by the System or its agent and, therefore, have a very minimal level of custodial credit risk. The remaining investments, which do not have securities that are used as evidence of the investment, are primarily in collective trust funds and limited partnerships, which include real estate and alternative investments.

(c) Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The credit risk of a debt instrument is measured by nationally recognized statistical rating organizations (NRSRO) such as Moody’s, and S&P. Annually, the Board establishes an asset allocation plan. This plan manages the overall credit risk of the fixed income asset class through a clearly defined long-term asset allocation policy. This policy establishes a long-term target allocation of the fixed income asset class at 33.5% of the investment portfolio. The fixed income target allocation consists of:

- An allocation of 14.0% of the portfolio has been made to the investment grade segment of the fixed income asset class benchmarked to the Bloomberg U.S. Aggregate Bond TR Index (6.0%) and the Bloomberg U.S. Long Treasury TR Index (8.0%). Within this segment, the U.S. long treasury allocation (8.0%) is composed of primarily long duration U.S. Treasury securities issued by the U.S. government. The U.S. core fixed allocation (6.0%) is

composed of primarily investment grade, relatively liquid, public domestic and government-related bonds with an overall weighted-average NRSRO credit rating of A or better.

- An allocation of 6.0% of the portfolio has been made to the private fixed income segment of the fixed income asset class benchmarked to the S&P LSTA U.S. Leveraged Loan TR Index plus 200 basis points one quarter lagged. The private fixed income allocation is composed of primarily investments in limited partnerships focusing on direct lending, mezzanine, distressed and special situations, speciality finance and structured credit strategies.
- An allocation of 9.0% of the portfolio has been made to the inflation protected segment of the fixed income asset class benchmarked to the Bloomberg U.S. Government Inflation-Linked Bond All Maturities TR Index which is composed of primarily government issued Treasury Inflation Protected Securities (TIPS) with an overall weighted-average NRSRO credit rating of AA or better. The portfolio manager is permitted to leverage the portfolio using TIPS total return swaps up to 3:1.
- An allocation of 4.5% of the portfolio has been made to the credit-related segment of the fixed income asset class with 3.5% benchmarked to the Bloomberg U.S. Corporate High Yield Bond Index and 1.0% benchmarked to the JP Morgan EMD Aggregate Total Return Index.

For derivatives exposed to credit risk, the table below presents aggregate market value by the least favorable credit rating provided by NRSROs at June 30, 2024 and 2023.

(Dollar Amounts in Thousands)

Quality Rating	2024	2023
	Fair Value	Fair Value
A	\$ (16,880)	\$ (85,897)
Total Swaps - Total Return	\$ (16,880)	\$ (85,897)

PSERS applies leverage opportunistically in implementing its asset allocation policy, providing an additional mechanism to increase expected volatility in order to target higher expected return when warranted. Total Leverage is allocated at (4.5%); Leverage is benchmarked to 3-Month Term SOFR, and is netted against the System’s Cash allocation of 4.5% for a Net Leverage Allocation of (0.0%).

- An allocation of 4.50% of the portfolio has been made to cash benchmarked to the ICE BofAML 0-3 Month U.S. Treasury Bill Index composed of primarily investment grade, relatively liquid U.S. public bonds with an overall weighted-average NRSRO credit rating of AA or better.

(d) Interest Rate Risk

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

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

(e) Foreign Currency Risk

Foreign currency risk is the risk that fluctuations in exchange rates will adversely affect the fair value of an investment. As part of the System's program to manage risk and enhance returns, the System invests in non-U.S. markets. Investment managers in non-U.S. equity and global fixed income may hedge their non-U.S. foreign currency exposure back to U.S. dollars. In addition, the System partially hedges non-U.S. developed market currency exposure not hedged by the investment managers back to U.S. dollars.

(D) Securities Lending

The System participated in a securities lending program with a third party agent for part of the fiscal year ended June 30, 2024, and for the entire fiscal year ended June 30, 2023. The securities lending program was suspended as of October 31, 2023. Under this program, the lending agent loaned securities (equities, fixed income, and money market instruments) to independent brokers and dealers in exchange for U.S. dollar cash collateral, which was required to be in an amount not less than 102% of the fair value of any securities loaned. Collateral was marked-to-market daily. If the fair value of the held collateral fell below the minimum guidelines for securities loaned, additional collateral was obtained.

The lending agent invested the cash collateral in accordance with reinvestment guidelines approved by the System.

The System minimized its credit risk exposure by requiring borrowers to provide collateralization in excess of 100% of the fair value of the securities loaned. Under the securities lending program, the lending agent provided indemnification to the System if a borrower failed to return borrowed securities (and the collateral was inadequate to replace the loaned securities) or failed to pay income distributions on them. The lending agent also provided indemnification to the System if investment of cash collateral resulted in investment loss. There were no losses during the fiscal years ended June 30, 2024 and 2023, resulting from a default of the borrowers or the lending agent.

All securitized loans can be terminated on demand by either the System or the borrower, although the average term of the loan was one day. There were no term loans as of June 30, 2024 and 2023.

Cash collateral was invested in a tri-party repurchase agreement that was managed by the lending agent, was segregated from all other clients of the lending agent, and was not subject to custodial credit risk. The System's securities lending income represented the earnings from the cash collateral provided by the borrower less a fee paid to the third-party agent minus a negotiated rebate of a portion of the earnings on the cash collateral. The weighted-average maturity of the investments in the pool was one day at June 30, 2023. During the fiscal years ended June 30, 2024 and 2023, the mismatch between the maturities of the investments made with cash collateral and the maturities of the securities loans may have posed some interest rate risk to the System. In the event of a default, the lending agent had the ability to use the collateral to replace the loaned securities.

As of June 30, 2024, the fair value of loaned securities was \$0. As of June 30, 2023, the fair value of loaned securities was \$6,021,858,000, and the fair value of the associated collateral was \$6,147,770,000, all of which was cash.

Non-U.S. currency exposures at June 30, 2024 and 2023:

2024**						
(Dollar Amounts in Thousands)						
Currency	Equity	Fixed Income	Alternative Investments & Real Estate	Short-Term*	Currency Hedge	Total Fair Value
British pound sterling	\$ 961,996	\$ —	\$ 489,277	\$ 1,191	\$ (930,064)	\$ 522,400
Japanese yen	1,212,571	9,817	81,425	2,922	(869,659)	437,076
Euro	1,933,415	52,444	1,362,036	58,065	(3,060,081)	345,879
Indian rupee	235,615	—	—	(376)	—	235,239
Taiwan new dollar	226,965	—	—	(1,575)	—	225,390
Canadian dollar	856,061	—	—	1,048	(714,214)	142,895
Danish krone	205,200	—	—	2,867	(81,401)	126,666
Swiss franc	397,657	—	—	7,099	(305,392)	99,364
South Korean Won	97,627	—	—	(240)	—	97,387
Other non-U.S. currencies	1,438,232	102,667	—	11,200	(1,059,846)	492,253
Total	\$ 7,565,339	\$ 164,928	\$ 1,932,738	\$ 82,201	\$ (7,020,657)	\$ 2,724,549

2023**						
(Dollar Amounts in Thousands)						
Currency	Equity	Fixed Income	Alternative Investments & Real Estate	Short-Term*	Currency Hedge	Total Fair Value
Japanese yen	\$ 1,110,755	\$ 5,389	\$ 69,674	\$ 1,880	\$ (816,392)	\$ 371,306
British pound sterling	821,241	—	411,382	(2,331)	(868,736)	361,556
Euro	1,721,140	43,767	1,342,955	15,791	(2,873,229)	250,424
Taiwan new dollar	203,295	—	—	557	(254)	203,598
Indian rupee	189,367	—	—	483	—	189,850
Canadian dollar	848,246	—	—	6,088	(700,736)	153,598
Swiss franc	397,407	—	—	5,690	(293,153)	109,944
Danish krone	155,910	—	—	2,421	(62,991)	95,340
Hong Kong dollar	262,260	—	—	1,445	(177,068)	86,637
Other non-U.S. currencies	1,270,939	106,455	—	19,930	(974,046)	423,278
Total	\$ 6,980,560	\$ 155,611	\$ 1,824,011	\$ 51,954	\$ (6,766,605)	\$ 2,245,531

* Includes investment receivables and payables

** To determine the level of currency risk, the currency hedge program uses a country of risk method. This table is prepared using currency risk based on investments held in a foreign currency.

The following table summarizes the System’s foreign exchange contracts by currency at June 30, 2024 and 2023:

Currency	2024 (Dollar Amounts in Thousands)			
	Buys	Unrealized Gain/(Loss)	Sells	Unrealized Gain/(Loss)
Euro	\$ 3,187	\$ 2	\$ 3,063,268	\$ 8,280
Japanese yen	2,074	(1)	871,734	18,643
Swiss franc	—	—	305,005	5,372
Australian dollar	—	—	559,439	(444)
Swedish krona	627	—	100,960	1,609
Canadian dollar	334	—	714,548	(1,562)
Singapore dollar	61	—	61,394	254
Hong Kong dollar	407	—	141,979	58
British pound sterling	2,736	(1)	931,068	6,649
New Zealand dollar	—	—	151,470	1,136
Other non-U.S. currencies	1,729	(3)	128,197	753
Total	\$ 11,155	\$ (3)	\$ 7,029,062	\$ 40,748

Currency	2023 (Dollar Amounts in Thousands)			
	Buys	Unrealized Gain/(Loss)	Sells	Unrealized Gain/(Loss)
Euro	\$ 6,678	\$ —	\$ 2,879,907	\$ 4,531
Japanese yen	7,669	—	824,061	15,979
Swiss franc	662	—	296,058	(557)
Australian dollar	802	(1)	606,391	9,651
Swedish krona	1,159	(2)	93,133	365
Canadian dollar	684	1	698,213	28
Singapore dollar	—	—	75,325	558
Hong Kong dollar	—	—	177,068	192
British pound sterling	—	—	872,569	1,426
New Zealand dollar	—	—	160,594	920
Other non-U.S. currencies	6,722	21	104,418	753
Total	\$ 24,376	\$ 19	\$ 6,787,737	\$ 33,846

5. Derivative and Other Similar Investments

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

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

Futures contracts are contracts in which the buyer agrees to purchase and the seller agrees to make delivery of a specific financial instrument at a predetermined date and price. Gains and losses on futures contracts are settled daily based on a notional (underlying) principal value and do not involve an actual transfer of the specific instrument. Futures contracts are standardized and are traded on exchanges. The exchange assumes the risk that a counterparty will not pay and generally requires margin payments to minimize such risk. In addition, the System enters into short sales, sales of securities it does not presently own, to neutralize the market risk of certain equity positions. Initial margin requirements on futures contracts and collateral for short sales are provided by investment securities pledged as collateral and by cash held by various brokers. Although the System has the right to access individual pledged securities, it must maintain the amount pledged by substituting other securities for those accessed. The value of securities pledged and the amount of cash held at June 30, 2024 and 2023

represent a restriction on the amount of assets available at year-end for other purposes.

Option contracts provide the option purchaser with the right, but not the obligation, to buy or sell the underlying security at a set price during a period or at a specified date. The option writer is obligated to buy or sell the underlying security if the option purchaser chooses to exercise the option. The System generally uses exchange listed currency, index, stock, and futures options. In FY2024, the System purchased over-the-counter put options on the S&P 500 Index and call options on the CBOE Volatility Index. In FY2023, the System purchased over-the-counter put options on the S&P 500 Index. The fair value of these option contracts of \$4,157,000 and \$2,291,000, at June 30, 2024 and 2023, respectively, is included in the Statements of Fiduciary Net Position.

Foreign exchange contracts involve an agreement to exchange the currency of one country for the currency of another country at an agreed-upon price and settlement date. To reduce the risk of counterparty non-performance, the investment managers generally enter into these contracts with institutions regarded as meeting high standards of credit worthiness. The contracts reported in Table 5 primarily include forwards. The \$7,040,217,000 of foreign currency contracts outstanding at June 30, 2024, consist of "buy" contracts, which represent the U.S. dollar equivalents of commitments to purchase foreign currencies of \$11,155,000 and "sell" contracts, which represent U.S. dollar equivalents of commitments to sell foreign currencies of \$7,029,062,000. The \$6,812,113,000 of foreign currency contracts outstanding at June 30, 2023, consist of "buy" contracts of \$24,376,000 and "sell" contracts of \$6,787,737,000. The unrealized gain on contracts of \$40,745,000 and \$33,865,000 at June 30, 2024 and 2023, respectively, is included in the Statements of Fiduciary Net Position and represents the fair value of the contracts.

Swap agreements provide for periodic payments at predetermined future dates between parties based on the change in value of underlying securities, indexes, or interest rates. During the year ended June 30, 2024 and 2023, the System entered into total return type swaps. Under the total return type swap arrangements, the System receives the net return of certain equity securities or indexes in exchange for a short-term rate minus a spread or a predetermined fixed charge. The payable on the total return type swap contracts of \$(16,880,000) and \$(85,897,000) at June 30, 2024 and

Table 5 - Notional Amounts of Derivatives

The table presented below summarizes the aggregate notional or contractual amounts for the System's derivative financial instruments at June 30, 2024 and 2023.

	(Dollar Amounts in Thousands)	
	2024	2023
Futures contracts - long:		
Treasury futures	\$ 323,652	\$ 234,651
U.S. equity futures	173,375	258,299
Commodity futures	471,939	443,132
Futures contracts - short:		
Treasury futures	6,894	—
Foreign exchange forward and spot contracts, gross	7,040,217	6,812,113
Options - puts purchased	7,145,000	4,325,000
Options - calls purchased	(2,000)	—
Swaps - total return type	6,366,903	9,873,910

The fair values of derivative instruments outstanding at June 30, 2024 and 2023 are classified by type and by the changes in fair value of the derivative instrument in the table below.

Investment Derivative Type	(Dollar Amounts in Thousands)			
	Change in Fair Value Gain/(Loss) FY 2024		Fair Value at June 30, 2024	
	Classification	Amount	Classification	Amount
Futures	Investment income	\$ 62,547	Receivable/(Payable)	\$ 62,547
Total return type swaps	Investment income	(16,880)	Receivable/(Payable)	(16,880)
Foreign exchange contracts	Investment income	40,745	Receivable/(Payable)	40,745
Options	Investment income	(3,855)	Investment	4,157
Total		\$ 82,557		\$ 90,569
Investment Derivative Type	(Dollar Amounts in Thousands)			
	Change in Fair Value Gain/(Loss) FY 2023		Fair Value at June 30, 2023	
	Classification	Amount	Classification	Amount
Futures	Investment income	\$ 43,857	Receivable/(Payable)	\$ 43,857
Total return type swaps	Investment income	(85,897)	Receivable/(Payable)	(85,897)
Foreign exchange contracts	Investment income	33,865	Receivable/(Payable)	33,865
Options	Investment income	(4,939)	Investment	2,291
Total		\$ (13,114)		\$ (5,884)

2023, respectively, is included in the Statements of Fiduciary Net Position and represents the fair value of the contracts. The contracts have varying maturity dates ranging from July 31, 2024 to June 30, 2025.

The System also invests in mortgage-backed securities (MBS) such as CMOs and MBS forwards to maximize yields. These securities are sensitive to prepayments of mortgages, which may result from a drop in interest rates. The MBS forwards are subject to credit risk in the event of nonperformance by counterparties. The fair value of CMOs at June 30, 2024 and 2023 is \$686,504,000 and \$128,344,000, respectively.

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

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

6. Net Pension Liability of Participating Employers

The components of the net pension liability of the participating employers at June 30, 2024 were as follows: (Dollar amounts in thousands)	
Total pension liability	\$ 118,347,937
Less: Plan fiduciary net position	76,492,994
Employer net pension liability	\$ 41,854,943
Plan fiduciary net position as a percentage of the total pension liability	64.63%

Actuarial Assumptions

The total pension liability at June 30, 2024 was determined by rolling forward the System’s total pension liability at June 30, 2023 to June 30, 2024 using the following actuarial assumptions, which are applied to all periods included in the measurement:

- Actuarial cost method - Entry Age Normal - level % of pay.
- Investment return - 7.00%, includes inflation at 2.50%.
- Salary growth - Effective average of 4.50%, comprised of inflation of 2.50% and 2.00% for real wage growth and for merit or seniority increases.

- Payroll growth assumption 3.25%.
- Mortality rates were modified from the RP-2014 Mortality Tables for Males and Females to a blended table based on 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 (Total General Employees data), adjusted to reflect PSERS’ experience and projected using a modified version MP-2020.
- PSERS Board-approved new actuarial assumptions effective for the June 30, 2021 actuarial valuation. The new assumptions were used to calculate the net pension liability at June 30, 2024 and are reflected above.

Investments

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

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

For the year ended June 30, 2024, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 8.08%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. Table 6 shows the Board’s adopted asset allocation policy and best estimates of geometric real rates of return for each major asset class at June 30, 2024.

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current contribution rate and that contributions from employers will be made at actuarially determined rates. Based on those assumptions, the pension plan’s fiduciary net position was projected to be available to make all the projected future benefit payments of current plan

members to determine the total pension liability. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Pension -Asset Class	Target Allocation	Long-Term Expected Real Rate of Return
Global public equity	30.0%	4.8 %
Private equity	12.0%	6.7 %
Fixed income	33.5%	3.9 %
Commodities	5.0%	2.5 %
Infrastructure	10.0%	6.4 %
Real estate	9.5%	5.9 %
	100.0%	

Sensitivity of the Net Pension Liability

Table 7 presents the net pension liability as of June 30, 2024, calculated using the discount rate of 7.00%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	1% Decrease	Current Discount	1% Increase
	6.00%	7.00%	8.00%
Net pension liability	\$55,135,720	\$41,854,943	\$30,640,267

For additional information on the total pension liability, net pension liability, plan fiduciary net position as a percentage of the total pension liability, actuarial assumptions, and money-weighted returns please refer to the multiple year Required Supplementary Information Schedule 1, Schedule 2, Schedule 3, Schedule 7 and Notes to Required Supplementary Information.

7. Net Other Postemployment Benefits (OPEB) Liability of Participating Employers

The components of the net OPEB liability of the participating employers at June 30, 2024 were as follows:	
(Dollar amounts in thousands)	
Total OPEB liability	\$1,912,907
Less: Plan fiduciary net position	136,448
Employer net OPEB liability	\$1,776,459
Plan fiduciary net position as a percentage of the total OPEB liability	7.13%

Postemployment Healthcare Plans

PSERS provides a Health Insurance Premium Assistance program funded by employer contributions, which makes up the OPEB liability.

HOP is a PSERS sponsored voluntary health insurance program funded exclusively by the premiums paid by its participants for benefit coverage they elect. The HOP is not part of the OPEB liability.

Change in Actuarial Assumptions

The following change in assumption was used in the measurement of the Total OPEB Liability beginning June 30, 2024. The Investment Rate of Return was adjusted from 4.13% to 4.21% which represents the S&P 20-Year Municipal Bond Rate.

Actuarial Assumptions

The total OPEB liability at June 30, 2024, was determined by rolling forward the System’s total OPEB liability at June 30, 2023, to June 30, 2024, using the following actuarial assumptions, which are applied to all periods included in the measurement:

- Actuarial cost method - Entry Age Normal - level % of pay.
- Investment return - 4.21% - S&P 20-Year Municipal Bond Rate.
- Salary growth - Effective average of 4.50%, comprised of inflation of 2.50% and 2.00% for real wage growth and for merit or seniority increases.
- Payroll growth assumption 3.25%.
- Premium Assistance reimbursement is capped at \$1,200 per year.
- Assumed Healthcare cost trends were applied to retirees with less than \$1,200 in premium assistance per year.
- Mortality rates were modified from the RP-2014 Mortality Tables for Males and Females to a blended table based on 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 (Total General Employees data), adjusted to reflect PSERS’

experience and projected using a modified version MP-2020.

- PSERS Board-approved new actuarial assumptions effective for the June 30, 2021 actuarial valuation. The new assumptions were used to calculate the net pension liability at June 30, 2024 and are reflected above.

Investments

The Board's policy for its Other Post-Employment Benefits (OPEB) asset allocation consists primarily of short-term assets designed to protect the principal of the plan assets. Table 8 reflects the System's OPEB asset allocation policy and best estimates of geometric real rates of return for each asset class at June 30, 2024.

Under the program, employer contribution rates for Premium Assistance are established to provide reserves in the Health Insurance Account that are sufficient for the payment of Premium Assistance benefits for each succeeding year.

For the year ended June 30, 2024, the annual money-weighted rate of return on OPEB plan investments, net of OPEB plan investment expense, was 5.72%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Discount Rate

The discount rate used to measure the total OPEB liability was 4.21%. The Health Insurance Premium Assistance Program is funded by employer contributions. Under the plan's funding method, the OPEB plan's fiduciary net position was not projected to be sufficient to meet projected future benefit payments. Therefore, the plan is considered a "pay-as-you go" plan and a discount rate of 4.21%, which represents the S&P 20-year Municipal Bond Rate at June 30, 2024 was applied to all projected benefit payments to measure the total OPEB liability.

OPEB - Asset Class	Target Allocation	Long Term Expected Real Rate of Return
Cash	100.0%	1.7%
	100.0%	

Sensitivity of the Net OPEB Liability

Table 9 presents the net OPEB liability, calculated using the discount rate of 4.21%, as well as what the net OPEB

liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage point higher than the current rate:

	1% Decrease	Current Discount Rate	1% Increase
	3.21%	4.21%	5.21%
Net OPEB liability	\$ 2,006,859	\$ 1,776,459	\$ 1,583,510

Healthcare Cost Trend Rates

Healthcare cost trends were applied to retirees with less than \$1,200 in Premium Assistance per year. Premium Assistance is capped at a maximum of \$1,200 per year. At June 30, 2024, there were 92,149 members receiving the maximum amount allowed of \$1,200 in Premium Assistance per year and their Premium Assistance benefits are not subject to future healthcare cost increases. At June 30, 2024, there were 489 members receiving less than the maximum amount allowed of \$1,200 per year. The actual number of retirees receiving less than the \$1,200 per year cap is a small percentage of the total population and has a minimal impact from Healthcare Cost Trends, as depicted in Table 10, which discloses the effect of a 1% increase or decrease in the rate.

	1% Decrease	Current Discount Rate	1% Increase
Net OPEB liability	\$ 1,776,302	\$ 1,776,459	\$ 1,776,586

For additional information on the total OPEB liability, net OPEB liability, plan fiduciary net position as a percentage of the total OPEB liability, actuarial assumptions, and money-weighted returns please refer to the multiple year Required Supplementary Information Schedule 4, Schedule 5, Schedule 6, Schedule 7 and Notes to Required Supplementary Information.

8. Pension Plan for Employees of the System

(A) SERS' Plan Description

As an employer, the System contributes to SERS, a cost-sharing multiple-employer Defined Benefit Pension Plan established by the Commonwealth to provide pension benefits for employees of state government and certain independent agencies. SERS is a component unit of the

Commonwealth and is included in the Commonwealth’s financial report as a pension trust fund.

Membership in SERS is mandatory for most state employees. SERS provides retirement, death, and disability benefits. Article II of the Commonwealth’s Constitution assigns the authority to establish and amend the benefit provision of the plan to the General Assembly.

(B) SERS Benefits Provided to Employees of the System

SERS member retirement benefits are generally determined by taking years of credited service times final average salary times 1.0%, 1.25%, 2% or 2.5%, depending on date of hire. The normal retirement age ranges from 50 - 65, depending on the membership class. According to the State Employees’ Retirement Code (SERC), all obligations of SERS will be assumed by the Commonwealth should SERS terminate.

(C) Contributions to SERS

The contribution requirements of SERS plan members is mandated by Commonwealth statute. The member contribution rate for the majority of SERS’ members is 6.25%. At December 31, 2023 and 2022 the blended employer contribution rates were 28.42% and 27.64%, respectively. PSERS’ contributed \$10.9 million to SERS for FY 2024.

(D) Proportionate Share of Pension Liabilities, Pension Expense, and Deferred Inflows of Resources and Deferred Outflows of Resources

At June 30, 2024, PSERS reported a liability of \$91.5 million and \$97.3 million at June 30, 2023, for its proportionate share of the net pension liability for the SERS plan in Other liabilities on the Statement of Fiduciary Net Position. The net pension liability was measured at December 31, 2023 and 2022, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation at December 31, 2023 and 2022. PSERS’ proportion of the net pension liability was calculated utilizing a projected-contribution method. At December 31, 2023, PSERS’ proportion was 0.43285471 percent and 0.42564084 percent at December 31, 2022.

PSERS’ recognized total pension expense of \$12.8 million in FY 2024 and is included in the Statement of Changes in Fiduciary Net Position. Of the \$12.8 million of pension expense, \$7.7 million was reflected in Pension

administrative expenses, \$0.3 million in Postemployment Healthcare, \$0.2 million in Defined Contribution and \$4.6 million was reflected in Investment Expenses. Deferred inflows of resources of \$632,000 and \$944,000 at June 30, 2024, and June 30, 2023, respectively, are reported in Other liabilities on the Statement of Fiduciary Net Position. Deferred outflows of resources of \$22.8 million and \$30.8 million at June 30, 2024, and 2023, respectively, are reported in Miscellaneous assets. Of the \$22.8 million of deferred outflows of resources at June 30, 2024, PSERS recorded \$5.9 million for contributions subsequent to the measurement date which will be recognized as a reduction of the net pension liability in the year ending June 30, 2025. Other amounts reported as deferred outflows of resources and deferred inflows of resources will be recognized in pension expense as follows:

Years Ending June 30:	Dollar Amounts in Thousands
2025	\$ 3,967
2026	5,872
2027	4,662
2028	7,018
Thereafter	(780)

(E) SERS’ Pension Plan Fiduciary Net Position

Detailed information about SERS’ fiduciary net position is available in SERS’ Annual Comprehensive Financial Report which can be found on SERS’ website at www.SERS.pa.gov.

9. Postemployment Healthcare Plan for Employees of the System

(A) REHP Plan Description

As an employer, PSERS participates in the Commonwealth’s REHP (Retired Employees Health Program). The REHP is a single employer plan and provides certain healthcare benefits to qualifying individuals meeting specified age and/or service requirements. The Commonwealth’s Office of Administration (OA), in its sole discretion, determines available REHP benefits on an ongoing basis. The Pennsylvania Employees Benefit Trust Fund (PEBTF) is a third-party administrator for the REHP under the provisions of an Administration Agreement between OA and PEBTF.

(B) OPEB Benefits Provided to Employees of the System

The Commonwealth sponsors the REHP for eligible retirees and their dependents to receive subsidized health coverage for the retiree's lifetime. The REHP is provided as part of collective bargaining agreements with most Commonwealth labor unions. All policy decisions, types and levels of benefits for the REHP fall under the purview of the Commonwealth's Executive Board and the Secretary of Administration.

(C) Contributions to the REHP

Employer costs for retiree healthcare benefits are charged as a component of payroll expenditures, on a "pay as you go" basis. All employing agencies and certain plan members contributed \$275 per biweekly pay period for each current REHP eligible active employee during fiscal year ended June 30, 2024 to the REHP Trust. PSERS' contributed \$2.4 million to the REHP for FY 2024. Plan members who retired after June 30, 2005, contribute to the plan based on a percentage of their final annual gross base salary at the time of retirement. Plan member contribution rates vary based on their REHP enrollment date.

(D) Proportionate Share of OPEB Liabilities, OPEB Expense and Deferred Inflows of Resources and Deferred Outflows of Resources

At June 30, 2024, PSERS reported a liability of \$30.3 million and \$44.7 million at June 30, 2023 for its proportionate share of net OPEB liability for the REHP plan in Other Liabilities on the Statement of Fiduciary Net Position. The current liability portion of the net OPEB liability is \$1.1 million. The net OPEB liability was measured at June 30, 2023, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation at June 30, 2023. Since the REHP has insufficient assets to meet next year's projected benefit payments, the discount rate used to measure the total OPEB liability is based on the 20-year tax-exempt general obligation municipal bond index rate, which was 5.65% on June 30, 2024. PSERS' proportion of the net OPEB liability was calculated utilizing a contribution method. At June 30, 2023, PSERS' proportion was 0.389070 percent and at June 30, 2022 PSERS' proportion was 0.453418 percent.

REHP had a decrease in Total OPEB Liability of approximately \$1.96 billion. The primary cause was due to changes in actuarial assumptions driven by an increase in the discount rate from 4.67% to 5.65%, and

positive experience gains from decreases in per capita claims costs.

PSERS recognized total OPEB expense of \$(5.1) million in FY 2024 is included in the Statement of Changes in Fiduciary Net Position. Of the \$(5.1) million of OPEB expense, \$(4.2) million was reflected in Pension administrative expenses, \$0.1 million in Postemployment Healthcare, \$0.1 million in Defined Contribution and \$(1.1) million was reflected in Investment Expenses. Deferred outflows of resources of \$10.9 million and \$13.9 million at June 30, 2024 and 2023, respectively, are reported in Miscellaneous assets. Of the \$10.9 million of deferred outflows at June 30, 2024, PSERS recorded \$2.4 million for contributions subsequent to the measurement date which will be recognized as a reduction of the net OPEB liability in the year ending June 30, 2024. Deferred inflows of resources of \$25.5 million and \$21.6 million at June 30, 2024 and 2023, respectively, are reported in Other liabilities on the Statement of Fiduciary Net Position and will be recognized in OPEB expense as follows:

Years Ending June 30:	Dollar Amounts in Thousands
2025	\$(4,282)
2026	(2,861)
2027	(3,543)
2028	(2,445)
Thereafter	—

(E) REHP Plan Fiduciary Net Position

Detailed information about the REHP fiduciary net position is available in the Commonwealth's Annual Comprehensive Financial Report which can be found at www.budget.pa.gov.

10. Litigation and Contingencies

The System is subject to various threatened and pending lawsuits. These lawsuits include issues related to benefit calculations and eligibility. The System is also exposed to various other liabilities and risks related to fiduciary responsibilities of directors and officers.

In 2021, the System received subpoenas from the Department of Justice ("DOJ") and the Securities and Exchange Commission ("SEC") regarding the certification of the shared risk member contribution rate in December 2020, as well as the purchase and valuation of certain directly held properties. PSERS' Board retained outside counsel to conduct an

independent internal investigation of the shared risk calculation and the purchase and valuation of certain directly held properties. The independent internal investigation concluded in January 2022 with no findings of wrongdoing. In August 2022, PSERS was informed by the DOJ that it has closed its investigation of PSERS with no criminal or civil charges. In January of 2024, the SEC informed PSERS by letter that based on the information received to date, it has concluded its investigation of PSERS without recommending any enforcement actions be taken.

It is the opinion of management that the ultimate liability arising from such threatened, pending litigation and investigations will not have a material effect on the financial position of the System.

Required Supplementary Information

Schedule 1 Schedule of Changes in the Employer Net Pension Liability Unaudited – See Accompanying Independent Public Accountant’s Report (Dollar Amounts in Thousands)

	2024	2023	2022	2021	2020
Total pension liability					
Service cost	\$ 1,833,996	\$ 1,822,768	\$ 1,826,693	\$ 1,963,645	\$ 1,949,427
Interest	8,024,358	7,915,834	7,789,946	7,703,465	7,546,367
Changes of benefit terms	—	—	—	—	—
Differences between expected and actual experience	(380,382)	(545,873)	(399,385)	40,322	(339,969)
Changes of assumptions	—	—	—	2,655,180	—
Benefit payments	(7,728,745)	(7,580,983)	(7,254,372)	(7,134,332)	(6,876,515)
Net change in total pension liability	1,749,227	1,611,746	1,962,882	5,228,280	2,279,310
Total pension liability - beginning	116,598,710	114,986,964	113,024,082	107,795,802	105,516,492
Total pension liability - ending (a)	<u>\$ 118,347,937</u>	<u>\$ 116,598,710</u>	<u>\$ 114,986,964</u>	<u>\$ 113,024,082</u>	<u>\$ 107,795,802</u>
Plan fiduciary net position					
Contributions - employer	\$ 5,262,714	\$ 5,249,018	\$ 4,997,912	\$ 4,759,189	\$ 4,676,413
Contributions - member	1,197,871	1,174,580	1,134,051	1,080,701	1,067,957
Net investment income	5,704,271	2,795,296	(267,250)	14,754,624	1,001,846
Benefit payments	(7,728,745)	(7,580,983)	(7,254,372)	(7,134,332)	(6,876,515)
Administrative expense	(55,447)	(53,823)	(49,451)	(49,616)	(46,799)
Net change in plan fiduciary net position	4,380,664	1,584,088	(1,439,110)	13,410,566	(177,098)
Plan fiduciary net position - beginning	72,112,330	70,528,242	71,967,352	58,556,786	58,733,884
Effect of change in accounting principle	—	—	—	—	—
Plan fiduciary net position - beginning restated	72,112,330	70,528,242	71,967,352	58,556,786	58,733,884
Plan fiduciary net position - ending (b)	<u>\$ 76,492,994</u>	<u>\$ 72,112,330</u>	<u>\$ 70,528,242</u>	<u>\$ 71,967,352</u>	<u>\$ 58,556,786</u>
Employer net pension liability - ending (a)-(b)	<u>\$ 41,854,943</u>	<u>\$ 44,486,380</u>	<u>\$ 44,458,722</u>	<u>\$ 41,056,730</u>	<u>\$ 49,239,016</u>

See accompanying independent auditor’s report and notes to the required supplementary information.

Required Supplementary Information

Schedule 1
Schedule of Changes in the Employer Net Pension Liability
(continued)
(Unaudited – See Accompanying Independent Public Accountant’s Report)
(Dollar Amounts in Thousands)

	2019	2018	2017	2016	2015
Total pension liability					
Service cost	\$ 1,921,417	\$ 1,890,906	\$ 1,873,844	\$ 1,932,401	\$ 1,926,539
Interest	7,465,228	7,334,484	7,110,987	7,028,292	6,857,497
Changes of benefit terms	—	—	(449)	—	—
Differences between expected and actual experience	(1,477,660)	(745,306)	644,051	(348,429)	(223,437)
Changes of assumptions	—	—	—	2,236,118	—
Benefit payments	(6,761,172)	(6,655,146)	(6,473,579)	(6,360,325)	(6,220,601)
Net change in total pension liability	1,147,813	1,824,938	3,154,854	4,488,057	2,339,998
Total pension liability - beginning	104,368,679	102,543,741	99,388,887	94,900,830	92,560,832
Total pension liability - ending (a)	<u>\$ 105,516,492</u>	<u>\$ 104,368,679</u>	<u>\$ 102,543,741</u>	<u>\$ 99,388,887</u>	<u>\$ 94,900,830</u>
Plan fiduciary net position					
Contributions - employer	\$ 4,487,520	\$ 4,249,611	\$ 3,832,773	\$ 3,189,510	\$ 2,596,731
Contributions - member	1,064,043	1,026,375	1,013,847	989,266	984,634
Net investment income	3,628,710	4,714,158	4,995,362	473,206	1,328,516
Benefit payments	(6,761,172)	(6,655,146)	(6,473,579)	(6,360,325)	(6,220,601)
Administrative expense	(48,931)	(46,544)	(45,127)	(45,118)	(42,331)
Net Change in plan fiduciary net position	2,370,170	3,288,454	3,323,276	(1,753,461)	(1,353,051)
Plan fiduciary net position - beginning	56,363,714	53,155,336	49,832,060	51,585,521	52,980,115
Effect of change in accounting principle	—	(80,076)	—	—	(41,543)
Plan fiduciary net position - beginning restated	56,363,714	53,075,260	49,832,060	51,585,521	52,938,572
Plan fiduciary net position - ending (b)	<u>\$ 58,733,884</u>	<u>\$ 56,363,714</u>	<u>\$ 53,155,336</u>	<u>\$ 49,832,060</u>	<u>\$ 51,585,521</u>
Employer net pension liability - ending (a)-(b)	<u>\$ 46,782,608</u>	<u>\$ 48,004,965</u>	<u>\$ 49,388,405</u>	<u>\$ 49,556,827</u>	<u>\$ 43,315,309</u>

See accompanying independent auditor's report and notes to the required supplementary information.

Required Supplementary Information

Schedule 2 Schedule of Employer Net Pension Liability Unaudited – See Accompanying Independent Public Accountant’s Report (Dollar Amounts in Thousands)

	2024	2023	2022	2021	2020
Total pension liability	\$118,347,937	\$116,598,710	\$114,986,964	\$113,024,082	\$107,795,802
Less: Plan fiduciary net position	76,492,994	72,112,330	70,528,242	71,967,352	58,556,786
Employer Net Pension liability	<u>\$ 41,854,943</u>	<u>\$ 44,486,380</u>	<u>\$ 44,458,722</u>	<u>\$ 41,056,730</u>	<u>\$ 49,239,016</u>
Plan fiduciary net position as a percentage of the total pension liability	64.63%	61.85%	61.34%	63.67%	54.32%
Covered Payroll	<u>\$ 15,872,930</u>	\$15,320,427	\$ 14,704,344	\$ 14,176,097	\$ 14,036,006
Employer net pension liability as a percentage of covered payroll	263.69%	290.37%	302.35%	289.62%	350.81%

	2019	2018	2017	2016	2015
Total pension liability	\$105,516,492	\$104,368,679	\$102,543,741	\$ 99,388,887	\$ 94,900,830
Less: Plan fiduciary net position	58,733,884	56,363,714	53,155,336	49,832,060	51,585,521
Employer Net Pension liability	<u>\$ 46,782,608</u>	<u>\$ 48,004,965</u>	<u>\$ 49,388,405</u>	<u>\$ 49,556,827</u>	<u>\$ 43,315,309</u>
Plan fiduciary net position as a percentage of the total pension liability	55.66%	54.00%	51.84%	50.14%	54.36%
Covered Payroll	\$13,791,197	\$13,466,526	\$ 13,313,900	\$ 12,951,077	\$ 12,866,473
Employer net pension liability as a percentage of covered payroll	339.22%	356.48%	370.95%	382.65%	336.65%

Required Supplementary Information

Schedule 3 Schedule of Employer Pension Contributions Unaudited – See Accompanying Independent Public Accountant’s Report (Dollar Amounts in Thousands)

	2024	2023	2022	2021	2020
Actuarially determined contribution	\$5,249,563	\$ 5,237,092	\$ 4,985,571	\$ 4,752,338	\$ 4,671,931
Less: Contributions in relation to the actuarially determined contribution (1)	5,249,563	5,237,092	4,985,571	4,752,338	4,671,931
Contribution deficiency	\$ —	\$ —	\$ —	\$ —	\$ —
Covered payroll	\$15,872,930	\$15,320,427	\$14,704,344	\$14,176,097	\$14,036,006
Contributions as a percentage of covered payroll	33.07%	34.18%	33.91%	33.52%	33.29%

(1) Same as contractually required contributions.

See accompanying independent auditor’s report and notes to the required supplementary information.

Required Supplementary Information

Schedule 3 Schedule of Employer Pension Contributions (continued)

Unaudited – See Accompanying Independent Public Accountant’s Report
(Dollar Amounts in Thousands)

	2019	2018	2017	2016	2015
Actuarially determined contribution	\$ 4,478,236	\$ 4,243,328	\$ 3,824,908	\$ 3,540,304	\$ 3,289,615
Less: Contributions in relation to the actuarially determined contribution (1)	4,478,236	4,243,328	3,824,908	3,181,438	2,582,114
Contribution deficiency	\$ —	\$ —	\$ —	\$ 358,866	\$ 707,501
Covered payroll	\$ 13,791,197	\$ 13,466,526	\$ 13,313,900	\$ 12,951,077	\$ 12,866,473
Contributions as a percentage of covered payroll	32.47%	31.51%	28.73%	24.57%	20.07%

(1) Same as contractually required contributions.

See accompanying independent auditor’s report and notes to the required supplementary information.

Required Supplementary Information

Schedule 4 Schedule of Changes in the Employer Net OPEB (Premium Assistance) Liability Unaudited – See Accompanying Independent Public Accountant’s Report (Dollar Amounts in Thousands)

Total OPEB liability	2024	2023	2022	2021	2020	2019	2018	2017
Service cost	\$ 27,445	\$ 27,596	\$ 47,563	\$ 44,699	\$ 42,643	\$ 40,201	\$ 37,809	42,038
Interest	79,384	79,672	54,361	60,632	62,452	65,319	67,091	61,404
Differences between expected and actual experience	(15,262)	(12,047)	(11,835)	7,272	11,987	1,435	15,019	—
Changes of assumptions	(16,943)	(8,656)	(502,733)	212,419	35,284	50,166	38,456	(110,610)
Benefit payments	(111,659)	(112,870)	(113,707)	(113,538)	(113,279)	(112,777)	(111,847)	(110,229)
Net change in total OPEB liability	(37,035)	(26,305)	(526,351)	211,484	39,087	44,344	46,528	(117,397)
Total OPEB liability - beginning	1,949,942	1,976,247	2,502,598	2,291,114	2,252,027	2,207,683	2,161,155	2,278,552
Total OPEB liability - ending (a)	<u>\$ 1,912,907</u>	<u>\$ 1,949,942</u>	<u>\$ 1,976,247</u>	<u>\$ 2,502,598</u>	<u>\$ 2,291,114</u>	<u>\$ 2,252,027</u>	<u>\$ 2,207,683</u>	<u>\$ 2,161,155</u>
Plan fiduciary net position								
Contributions - employer	\$ 102,211	\$ 114,721	\$ 117,178	\$ 116,519	\$ 117,907	\$ 114,829	\$ 111,986	\$ 110,985
Net investment income	6,184	4,474	316	260	1,752	2,313	1,455	663
Benefit payments	(111,659)	(112,870)	(113,707)	(113,538)	(113,279)	(112,777)	(111,847)	(110,229)
Administrative expense	(1,004)	(1,085)	(826)	(1,143)	(1,148)	(1,914)	(2,602)	(2,239)
Net change in plan fiduciary net position	(4,268)	5,240	2,961	2,098	5,232	2,451	(1,008)	(820)
Plan fiduciary net position - beginning	140,716	135,476	132,515	130,417	125,185	122,735	123,743	124,563
Plan fiduciary net position - ending (b)	<u>\$ 136,448</u>	<u>\$ 140,716</u>	<u>\$ 135,476</u>	<u>\$ 132,515</u>	<u>\$ 130,417</u>	<u>\$ 125,185</u>	<u>\$ 122,735</u>	<u>\$ 123,743</u>
Employer net OPEB liability - ending (a) - (b)	<u>\$ 1,776,459</u>	<u>\$ 1,809,226</u>	<u>\$ 1,840,771</u>	<u>\$ 2,370,083</u>	<u>\$ 2,160,697</u>	<u>\$ 2,126,842</u>	<u>\$ 2,084,948</u>	<u>\$ 2,037,412</u>

Required Supplementary Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditor’s report and notes to the required supplementary information.

Required Supplementary Information

Schedule 5 Schedule of Employer Net OPEB (Premium Assistance) Liability Unaudited – See Accompanying Independent Public Accountant’s Report (Dollar Amounts in Thousands)

	2024	2023	2022	2021
Total OPEB Liability	\$ 1,912,907	\$ 1,949,942	\$ 1,976,247	\$ 2,502,598
Less: Plan fiduciary net position	136,448	140,716	135,476	132,515
Employer Net OPEB Liability	<u>\$ 1,776,459</u>	<u>\$ 1,809,226</u>	<u>\$ 1,840,771</u>	<u>\$ 2,370,083</u>
Plan fiduciary net position as a percentage of the total OPEB liability	7.13%	7.22%	6.86%	5.30%
Covered Payroll	\$15,872,930	\$15,320,427	\$ 14,704,344	\$ 14,176,097
Employer net OPEB liability as a percentage of covered payroll	11.19%	11.81%	12.52%	16.72%

	2020	2019	2018	2017	2016
Total OPEB Liability	\$ 2,291,114	\$ 2,252,027	\$ 2,207,683	\$ 2,161,155	\$ 2,278,552
Less: Plan fiduciary net position	130,417	125,185	122,734	123,743	124,563
Employer Net OPEB Liability	<u>\$ 2,160,697</u>	<u>\$ 2,126,842</u>	<u>\$ 2,084,949</u>	<u>\$ 2,037,412</u>	<u>\$ 2,153,989</u>
Plan fiduciary net position as a percentage of the total OPEB liability	5.69%	5.56%	5.56%	5.73%	5.47%
Covered Payroll	\$14,036,006	\$ 13,791,197	\$13,466,526	\$13,313,900	\$ 12,951,077
Employer net OPEB liability as a percentage of covered payroll	15.39%	15.42%	15.48%	15.30%	16.63%

Required Supplementary Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditor’s report and notes to the required supplementary information.

Required Supplementary Information

Schedule 6 Schedule of Employer OPEB (Premium Assistance) Contributions Unaudited – See Accompanying Independent Public Accountant’s Report (Dollar Amounts in Thousands)

	2024	2023	2022	2021
Actuarially determined contribution	\$ 113,769	\$ 119,084	\$ 147,312	\$ 133,971
Less: Contributions in relation to the actuarially determined contribution (1)	<u>101,879</u>	<u>114,358</u>	<u>116,773</u>	<u>116,365</u>
Contribution deficiency	<u>\$ 11,890</u>	<u>\$ 4,726</u>	<u>\$ 30,539</u>	<u>\$ 17,606</u>
Covered payroll	<u>\$ 15,872,930</u>	<u>\$ 15,320,427</u>	<u>\$ 14,704,344</u>	<u>\$ 14,176,097</u>
Contributions as a percentage of covered payroll	0.64%	0.75%	0.79%	0.82%

	2020	2019	2018	2017	2016
Actuarially determined contribution	\$ 138,776	\$ 139,484	\$ 134,607	\$ 125,694	\$ 129,494
Less: Contributions in relation to the actuarially determined contribution (1)	<u>117,723</u>	<u>114,571</u>	<u>111,724</u>	<u>110,558</u>	<u>112,557</u>
Contribution deficiency	<u>\$ 21,053</u>	<u>\$ 24,913</u>	<u>\$ 22,883</u>	<u>\$ 15,136</u>	<u>\$ 16,937</u>
Covered payroll	<u>\$14,036,006</u>	<u>\$ 13,791,197</u>	<u>\$ 13,466,526</u>	<u>\$13,313,900</u>	<u>\$12,951,077</u>
Contributions as a percentage of covered payroll	0.84%	0.83%	0.83%	0.83%	0.87%

(1) Same as contractually required contributions.

Required Supplementary Schedules are intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditor’s report and notes to the required supplementary information.

Required Supplementary Information

Schedule 7

Schedule of Investment Returns - Pension and OPEB

Unaudited – See Accompanying Independent Public Accountant’s Report

	2024	2023	2022	2021	2020	2019	2018	2017	2016	2015
Annual money-weighted rate of return, net of investment expense-Pension	8.08%	3.54%	2.40%	24.57%	1.14%	6.58%	9.30%	10.15%	1.11%	3.08%
Annual money-weighted rate of return, net of investment expense-OPEB	5.72%	4.36%	0.35%	0.31%	1.97%	2.68%	1.63%	0.90%	0.65%	0.30%

See accompanying independent auditor’s report and notes to the required supplementary information.

**Notes to Required Supplementary Information
for the Years Ended June 30, 2015 thru June 30, 2024**

Pension

Changes in benefit terms

With the passage of Act 5 on June 12, 2017, class T-E & T-F members are now permitted to elect a lump sum payment of member contributions upon retirement.

Changes in assumptions used in measurement of the Total Pension Liability beginning June 30, 2022, June 30, 2023, and June 30, 2024

None.

Changes in assumptions used in measurement of the Total Pension Liability beginning June 30, 2021

The Discount Rate decreased from 7.25% to 7.00%. The inflation assumption was decreased from 2.75% to 2.50%. Payroll growth assumption decreased from 3.50% to 3.25%.

Salary growth changed from an effective average of 5.00%, which was comprised of inflation of 2.75%, real wage growth and for merit or seniority increases of 2.25%, to an effective average of 4.50%, comprised of inflation of 2.50% and 2.00% for real wage growth and for merit or seniority increases.

Mortality rates were modified from the RP-2014 Mortality Tables for Males and Females to a blended table based on 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 (Total General Employees data), adjusted to reflect PSERS' experience and projected using a modified version MP-2020.

For disabled annuitants the rates were modified from the RP-2014 Mortality Tables for Males and Females to Pub-2010 Disability Mortality Non-Safety Headcount Weighted table, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2020.

Changes in assumptions used in measurement of the Total Pension Liability beginning June 30, 2017, beginning June 30, 2018, beginning June 30, 2019 & beginning June 30, 2020

None.

Changes in assumptions used in measurement of the Total Pension Liability beginning June 30, 2016

The Investment Rate of Return was adjusted from 7.50% to 7.25%. The inflation assumption was decreased from 3.00% to 2.75%.

Salary growth changed from an effective average of 5.50%, which was comprised of inflation of 3.00%, real wage growth and for merit or seniority increases of 2.50%, to an effective average of 5.00%, comprised of inflation of 2.75% and 2.25% for real wage growth and for merit or seniority increases.

Mortality rates were modified from the RP-2000 Combined Healthy Annuitant Tables (male and female) with age set back 3 years for both males and females to the RP-2014 Mortality Tables for Males and Females, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2015 Mortality Improvement Scale. For disabled annuitants the RP-2000 Combined Disabled Tables (male and female) with age set back 7 years for males and 3 years for females to the RP-2014 Mortality Tables for Males and Females, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2015 Mortality Improvement Scale.

Method and assumptions used in calculations of actuarially determined contributions

The actuarially determined contributions are calculated as of the June 30 preceding the fiscal year in which contributions are made. That is, the contribution calculated as of the June 30, 2023 actuarial valuation will be made during the fiscal year ending June 30, 2025. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule.

**Notes to Required Supplementary Information
for the Years Ended June 30, 2015 thru June 30, 2024 (continued)**

Pension

- Investment return - 7.00%, includes inflation at 2.50% and the real rate of return 4.50%.
- Salary growth - Effective average of 4.50%, which reflects an allowance for inflation of 2.50%, real wage growth and merit or seniority of 2.00%.
- Benefit payments - no postretirement benefit increases assumed in the future.
- Mortality Tables for Males and Females to a blended table based on 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 (Total General Employees data), adjusted to reflect PSERS' experience and projected using a modified version MP-2020.

Changes in assumptions used in measurement of the Total Pension Liability beginning June 30, 2015

None.

Method and assumptions used in calculations of actuarially determined contributions

The actuarially determined contributions are calculated as of the June 30 preceding the fiscal year in which contributions are made. That is, the contribution calculated as of the June 30, 2014 actuarial valuation will be made during the fiscal year ended June 30, 2016. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

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

The Accounting Valuation

The GASB 67 accounting valuation can be found on PSERS' website at www.pa.gov/PSERS.

**Notes to Required Supplementary Information
for the Years Ended June 30, 2016 thru June 30, 2024**

OPEB

Changes in benefit terms

None.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2024

The Discount Rate increased from 4.13% to 4.21%.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2023

The Discount Rate increased from 4.09% to 4.13%.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2022

The Discount Rate increased from 2.18% to 4.09%.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2021

The Discount Rate decreased from 2.66% to 2.18%. The inflation assumption was decreased from 2.75% to 2.50%. Payroll growth assumption decrease from 3.50% to 3.25%.

Salary growth changed from an effective average of 5.00%, which was comprised of inflation of 2.75%, real wage growth and for merit or seniority increases of 2.25%, to an effective average of 4.50%, comprised of inflation of 2.50% and 2.00% for real wage growth and for merit or seniority increases.

Mortality rates were modified from the RP-2014 Mortality Tables for Males and Females to a blended table based on 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 (Total General Employees data), adjusted to reflect PSERS' experience and projected using a modified version MP-2020.

For disabled annuitants the rates were modified from the RP-2014 Mortality Tables for Males and Females to Pub-2010 Disability Mortality Non-Safety Headcount Weighted table, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2020.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2020

The Discount Rate decreased from 2.79% to 2.66%.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2019

The Discount Rate decreased from 2.98% to 2.79%.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2018

The Discount Rate decreased from 3.13% to 2.98%.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2017

The Discount Rate increased from 2.71% to 3.13%.

Changes in assumptions used in measurement of the Total OPEB Liability beginning June 30, 2016

Salary growth changed from an effective average of 5.50%, which was comprised of inflation of 3.00%, real wage growth and for merit or seniority increases of 2.50%, to an effective average of 5.00%, comprised of inflation of 2.75% and 2.25% for real wage growth and for merit or seniority increases.

Mortality rates were modified from the RP-2000 Combined Healthy Annuitant Tables (male and female) with age set back 3 years for both males and females to the RP-2014 Mortality Tables for Males and Females, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2015 Mortality Improvement Scale. For disabled annuitants the RP-2000 Combined Disabled Tables (male and female) with age set back 7 years for males and 3

**Notes to Required Supplementary Information
for the Years Ended June 30, 2016 thru June 30, 2024 (continued)**

OPEB

years for females to the RP-2014 Mortality Tables for Males and Females, adjusted to reflect PSERS' experience and projected using a modified version of the MP-2015 Mortality Improvement Scale.

Method and assumptions used in calculations of actuarially determined contributions

The actuarially determined contributions are calculated as of the June 30 preceding the fiscal year in which contributions are made. That is, the contribution calculated as of the June 30, 2022 actuarial valuation will be made during the fiscal year ended June 30, 2024. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule:

- Investment return - 4.21% - 20-year S&P Municipal Bond Rate.
- Salary growth - Effective average of 4.50%, which reflects an allowance for inflation of 2.50%, real wage growth and merit or seniority of 2.00%.
- Benefit payments - no postretirement benefit increases assumed in the future.
- Mortality Tables for Males and Females to a blended table based on 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 (Total General Employees data), adjusted to reflect PSERS' experience and projected using a modified version MP-2020.
- Assumed Healthcare cost trends were applied to retirees with less than \$1,200 in premium assistance per year.

10-year reporting requirements

Required Supplementary Schedules 4-7, as related to OPEB, are intended to show information for 10 years. Additional years will be displayed as they become available.

The Accounting Valuation

The GASB 74 accounting valuation can be found on PSERS' website at www.pa.gov/PSERS.

Supplementary Schedule 1
Schedule of Administrative and Investment Expenses
Year Ended June 30, 2024
(Dollar Amounts in Thousands)

	Administrative Expenses			Investment Expenses (2)	Total
	Pension	Defined Contribution	Postemployment Healthcare (1)		
Personnel costs:					
Salaries and wages	\$ 21,448	\$ 523	\$ 573	\$ 11,415	\$ 33,959
Employee benefits	13,532	386	344	5,544	19,806
Total personnel costs	34,980	909	917	16,959	53,765
Operating costs:					
Investment managers' fees	—	—	—	374,874	374,874
Custodian fees	—	—	—	2,702	2,702
Specialized services	77	2,396	141	—	2,614
Investment systems	—	—	—	2,285	2,285
Third-party administrator	—	—	32,777	—	32,777
Fitness program administrator	—	—	856	—	856
Healthcare project management	—	—	3,847	—	3,847
Real estate rental, electricity	1,457	—	247	253	1,957
Consultant and legal fees	3,720	97	1,322	6,365	11,504
Treasury and other Commonwealth services	1,926	—	—	212	2,138
Postage	561	—	138	—	699
Contracted maintenance and repair services	3,427	—	—	341	3,768
Printing and office supplies	270	—	18	—	288
Equipment and software rental	2,301	—	994	—	3,295
Travel and training	181	2	94	57	334
Telecommunications	451	—	29	94	574
Equipment (non-capital assets)	491	—	—	—	491
Subscriptions	130	—	—	1,483	1,613
Miscellaneous	1,306	23	138	172	1,639
Total operating costs	16,298	2,518	40,601	388,838	448,255
Other charges:					
Depreciation	9,093	—	—	6,079	15,172
Total Administrative and Investment Expenses Before Pension, OPEB Expense					
	60,371	3,427	41,518	411,876	517,192
Pension expense (3)	1,158	27	38	692	1,915
OPEB expense (4)	(6,082)	84	46	(1,598)	(7,550)
Total Administrative and Investment Expenses	\$ 55,447	\$ 3,538	\$ 41,602	\$ 410,970	\$ 511,557

- (1) Administrative expenses for Postemployment Healthcare includes \$1,004 related to Premium Assistance and \$40,598 related to Health Options Program for the fiscal year ended June 30, 2024.
- (2) Includes investment expenses of \$49 related to Postemployment Healthcare Premium Assistance, \$44 related to Health Options Program and \$523 for DC for the fiscal year ended June 30, 2024 and does not include \$3,123 in capitalized broker commissions for the fiscal year ended June 30, 2024.
- (3) Total GASB 68 pension expense is \$12.8 million and is reflected under Employee benefits and Pension expense. Employer contributions of \$10.9 million are included as Employee benefits under Personnel costs and \$1.9 million is reflected as Pension expense.
- (4) Total GASB 75 OPEB expense is \$(5.1) million and is reflected under Employee benefits and OPEB expense. Employer contributions of \$2.4 million are included as Employee benefits under Personnel costs and \$(7.6) million is reflected as OPEB expense.

Supplementary Schedule 2
Summary of Investment Expenses*
Year Ended June 30, 2024
(Dollar Amounts in Thousands)

	Investment Management		Other Expenses	Total
	Base	Performance		
External management:				
Public Equity	\$ 22,148	\$ 32,152	\$ —	\$ 54,300
Private Equity	110,916	—	—	110,916
Public Fixed Income	13,087	8,719	—	21,806
Private Fixed Income	58,108	—	—	58,108
Public Real Assets	6,105	—	—	6,105
Private Real Assets	79,290	—	—	79,290
Absolute Return	24,480	15,987	—	40,467
Tail Risk Mitigation	3,363	—	—	3,363
Defined Contribution	519	—	—	519
Total external management	318,016	56,858	—	374,874
Total internal management	—	—	27,029	27,029
Total investment management	318,016	56,858	27,029	401,903
Custodian fees	—	—	2,702	2,702
Consultant and legal fees	—	—	6,365	6,365
Total investment expenses	\$ 318,016	\$ 56,858	\$ 36,096	\$ 410,970

*External investment management fees classified on an asset allocation basis.

Supplementary Schedule 3
Schedule of Payments to Non-Investment Consultants
Year Ended June 30, 2024
(Dollar Amounts Greater than \$100,000)

Non-Investment Consultants	Fees	Services Provided
Luminare Administration	\$ 32,777,135	Postemployment Healthcare benefits Administration and claims adjudication
Optum Rx, Inc.	7,288,091	Administration of post employment healthcare benefits and prescription drug plan
Vitech Systems Group, Inc.	5,917,106	Pension administration system services
The Segal Company, Inc.	3,988,529	Actuarial services and consulting for HOP and prescription drug plan
Gallagher Benefit Services, Inc.	1,313,019	Pharmacy benefit consulting services
OST Inc.	977,297	Information technology, training, testing, and consulting services
Tivity Health	855,985	Administration of the Silver Sneakers Fitness program
Buck Global, LLC	377,990	Pension benefit actuarial services

INVESTMENT SECTION



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Report on Investment Activity and Policies For Fiscal Year July 1, 2023 through June 30, 2024

Authority and Fiduciary Standard

The Board has the responsibility to invest the System's funds in accordance with guidelines and limitations set forth in the Retirement Code and other applicable state law and Board Policy. Pursuant to the Board's enabling legislation, the members of the Board, employees of the Board, and their agents are fiduciaries to the System's members and beneficiaries and must invest and manage the fund for exclusive benefit of the System's members and beneficiaries (24 Pa. C. S. §8521(e)).

In performance of their duties, the trustees shall exercise "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." (24 Pa. C.S. §8521(a)).

The System shall, at all times, be managed in accordance with all applicable state and federal laws, rules, and regulations, as well as the Investment Policy Statement and other applicable policies of the Board.

Policies and Objectives

The Board approves the investment policies for the System and the Investment Office professionals are responsible for implementing those policies. The overall investment objectives of the System are as follows:

- to generate returns to support the System's actuarial soundness so it may provide its members with benefits as required by law;
- to earn a long-term total return, net of fees, and investment and administrative expenses, that equals or exceeds the actuarial assumed rate approved by the Board (currently 7.00%);
- to earn a long-term total return, net of fees and investment expenses, that equals or exceeds the Policy Index approved by the Board; and
- to prudently manage investment risks that are related to the achievement of investment goals.

Assets are managed in accordance with allocation plan and investment policies by internal Investment Office professionals and external investment management firms acting as agents for the system.

Roles and Responsibilities

The Board, via its Investment Committee, provides direction and oversight of investment activities. The Investment Committee generally conducts six meetings per year and may meet more frequently as needed. Investment Office professionals, as well as external consultants, external investment managers, Investment Accounting professionals, Internal Audit professionals, and the Executive team assist the Board in achieving investment objectives and monitoring compliance with investment policies.

As of June 30, 2024, the Board's consultants include the following: Verus Advisory, Inc., serves as the general investment consultant, assisting the Board and Professional Staff in formalizing investment objectives, establishing an asset allocation, conducting investment manager due diligence, calculating and reviewing performance, and commenting on compliance with investment policies; Aksia, LLC, serves as private markets consultant; and IQ-EQ (f.k.a. Constellation Advisers LLC), provides investment compliance services.

Investment Office professionals implement investment decisions within the guidelines established in the Investment Policy Statement, Objectives and Guidelines regarding asset allocation, manager selection, security selection, and other objectives directed by the Board.

The Board employs both external investment management firms and internal investment managers to manage the investment portfolio of the System. At fiscal year-end, \$10.0 billion in assets were managed by external public markets managers, and \$44.2 billion in assets were managed by internal investment managers, with the balance invested with private market and absolute return focused partnerships.

Asset Allocation

The Board reviews the long-term asset allocation targets of the System on a periodic basis. The Board consults with its actuary, consultants, Investment Office professionals, and other sources of information it deems appropriate in formulating the asset allocation. The level of risk assumed by the System is largely a result of the asset allocation. The Board, in determining its long-term asset allocation, takes the following factors into consideration:

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

In approving the asset allocation for the System, the Board considers capital market expectations for expected return, volatility, and asset class correlations for each asset class, as prepared by its general investment consultant.

PSERS asset allocation targets as of June 30, 2024, are as follows:

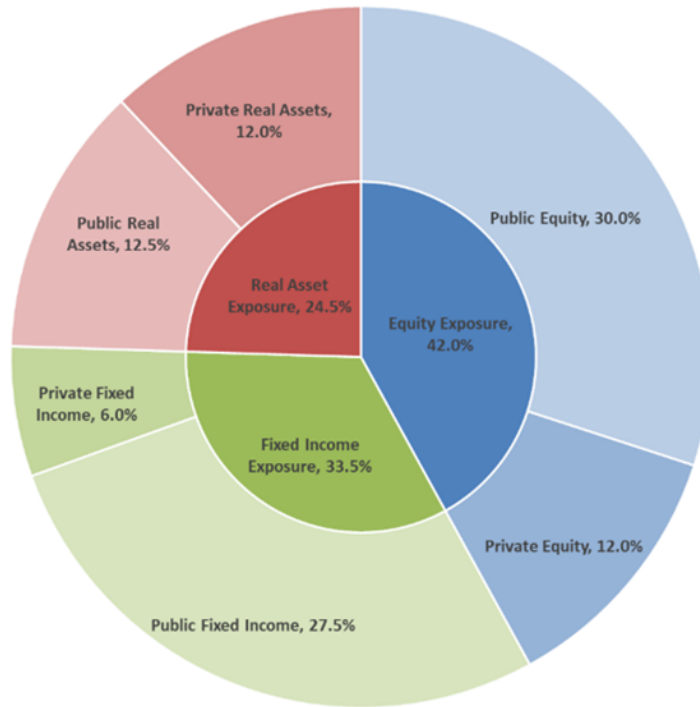
The equity target allocation was 42%, comprised of 30% public equity and 12% private equity. Public equity consisted of a split between U.S. equity 18% and non-U.S. equity 12%. Within U.S. equity, the allocation was diversified across small, mid, and large capitalization equity. Within non-U.S. equity, exposure included international developed markets and emerging markets. Non-U.S. developed markets equity exposure was partially currency-hedged back to the U.S. dollar.

The fixed income target allocation was 33.5%, comprised of 14% investment grade exposure, 4.5% public credit-related exposure, 6% private credit-related exposure, and 9% Inflation-protected exposure. Investment grade exposure consisted of U.S. core fixed income 6% and U.S. long-term treasury bonds 8%. Public credit-related exposure consisted of high yield bonds 3.5% and emerging markets debt 1%. The real assets target allocation was 24.5%, comprised of 12.5% public real assets including real estate 2.5%, infrastructure 5%, commodities 2.5% and gold 2.5%. Private real asset exposure of 12% was broken out between private real estate 7% and private infrastructure 5%.

Leverage was utilized in the asset allocation as a means of gaining exposure to a portion of the above fixed income and real assets asset classes. Leverage was deployed through use of derivative instruments (typically total return swaps) that allow the System to gain market exposure.

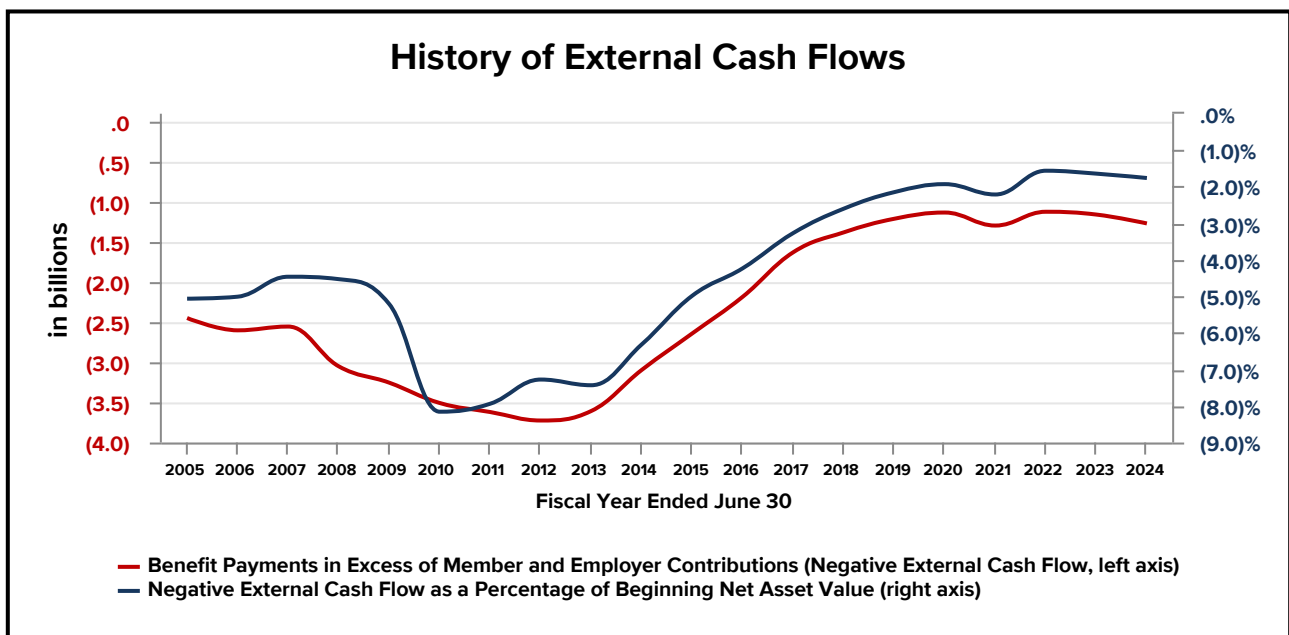
Finally, the System had a 4.5% allocation to cash, consisting of short-duration, liquid, high quality securities, resulting in a Net leverage target of 0.0%.

Asset Allocation as of June 30, 2024



Liquidity and Cash Flow

The System’s asset allocation and risk profile are, in part, driven by its liquidity needs. Over the past 20 fiscal years, the System has paid out \$46.5 billion more in benefits than it has received in member and employer contributions (i.e., the System has experienced negative external cash flow). The average negative external cash flow was approximately \$1.3 billion per year during this period. This annual funding deficiency represents the amount of investment return needed each year to make up the shortfall (For example, if in a given year the System earned 3% on its investments and had a 3% external cash flow shortfall, then the net assets of the System will be unchanged for that year). The negative annual external cash flow has improved significantly since fiscal year 2012 due to the implementation of Act 120 in 2010 (see chart below). Act 120 provided for increased employer contributions to the actuarially determined contribution levels.



The Economy and Investment Markets During The Past Fiscal Year

A primary element of PSERS' investment philosophy is diversification among various asset classes as an effective method to realize its goals while addressing uncertainty across capital markets from shifting macroeconomic and geopolitical environments. Over the past year, several such shifts emerged, with three themes (rising interest rates, tighter credit markets, and geopolitical uncertainty) having particular significance.

Rising Interest Rates – Interest rates remained relatively high over this fiscal year with over-night interest rates ranging from 5.00%-5.25%. This represents a continuation of restrictive rates as the Federal Reserve works to address concerns over higher inflation rates resulting from the fiscal responses to COVID-19 and supply-chain challenges. While inflation concerns have subsided somewhat from their highs, the resulting higher rates on cash have implications across the entire PSERS portfolio, most notably on the return for holding cash, the cost for employing leverage, and risk-return value proposition for all other asset classes relative to cash.

Tighter Credit Markets – Partially because of the higher interest rates described above, we continue to see a shift towards tighter credit markets, particularly for Commercial Real Estate (CRE), as regional banks demonstrated a reduced appetite for this long-term debt given the short-term, and potentially uncertain nature of deposits relied on to fund such debt. Lending for office and retail related inventory has been most acutely impacted as employers have proven reluctant to require employees to return to the office following the shift to online working that occurred in response to COVID-19. Fewer employees coming into the traditional office centers has also translated into less foot traffic for traditional retail located in these centers. The implications of tighter credit markets, together with higher interest rates, lower occupancies and less foot traffic presents risk to the equity holders, particularly where the degree of leverage underlying such properties is high and the related maturities are relatively near. However, this disruption among bank lenders, presents opportunity for lenders with longer term capital to be more discerning within sectors of real estate with better outlooks, such as multifamily and industrial use properties.

Geopolitical Uncertainty – While Russia's invasion of Ukraine most directly impacted capital markets in prior fiscal years, the resulting geopolitical uncertainty has influenced how investors frame investment choices across geographic regions. The long-standing theme of globalization based on the economics of comparative advantages, has more recently given way to more pragmatic discussions regarding supply chain resiliency or nearshoring/onshoring of activities that had previously been offshored. This further complicates the assessment of relative value across regional classifications, which were already clouded given difference in sector composition, financial reporting transparency, and basic investor rights across jurisdictions. Accordingly, some investors (including PSERS) have revisited and revised long standing strategic over/underweights to certain geographical regions (e.g., Public U.S. relative to Emerging Market equity allocations). We believe this trend will influence the flow of capital across regional classifications and likely impact relative market valuations over the next several years.

The table below summarizes the relative public market benchmark performance for the fiscal year grouped by three of PSERS' major asset classes.

Indices	FY 23-24
Public Equity	
S&P 500	24.6%
S&P 400	13.6%
S&P 600	8.7%
MSCI ACWI x-US IMI Net	11.6%
MSCI Emerging Market IMI	13.6%
Public Fixed Income	
Bloomberg US Aggregate	2.6%
Bloomberg US Long Treasury	(5.6%)
PSERS Blended Emerging Markets Bond	6.0%
Bloomberg US Corporate High Yield	10.4%
Bloomberg US TIPS	2.5%
Public Real Assets	
FTSE Developed Core 50/50	2.7%
Bloomberg Commodity Total Return	5.0%
Bloomberg Gold Total Return	20.6%
FTSE EPRA/NAREIT Developed	4.5%

Investment Results

For the one-year period ended June 30, 2024, the System generated a total net of fee return of 8.14%. This return exceeded the total fund Policy Index return of 7.07% by 1.07%. Annualized total net-of-fee returns for the three-, five- and ten-year periods ended June 30, 2024 were 4.61%, 7.60% and 6.82%, respectively. The three-, five- and ten-year returns exceeded the total fund Policy Index returns by 1.08%, 0.95%, and 0.43%, respectively. Performance is calculated using a time-weighted return methodology.

Asset classes that were significant positive contributors to PSERS performance this past fiscal year included:

- Public Global Equity: 19.5%
- Private Infrastructure: 17.4%
- Public Credit-Related Fixed Income: 13.0%
- Public Commodities: 12.9%

Asset classes that were modest detractors from PSERS performance this past fiscal year included:

- Public Investment Grade Fixed Income: -4.0%
- Private Real estate : -4.3%

Current Priorities

The Investment Office priorities are in alignment with the PSERS agency-wide strategic plan framework, which were adopted at the August 11th, 2023, Board meeting. The three specific initiatives for the Investment Office for the 2023/2024 fiscal year are the continued preparation for the SOC 1, Type 2 review, IBOR/ABOR alignment, and Global Investment Performance Standards (GIPS) compliance. Additionally, we continue to focus on moving towards PSERS revised asset allocation targets, which were ratified at the October 25th, 2024 Board meeting for implementation on December 1st, 2024.

**Prepared by PSERS Investment Office:
Ben Cotton, Chief Investment Officer**

Annualized Time-Weighted Returns (%) Net of Fees¹				
Periods Ended June 30, 2024				
	1 Year	3 Years	5 Years	10 Years
PSERS Total Fund Portfolio	8.14	4.61	7.60	6.82
Blended Policy (Total Plan)	7.07	3.53	6.65	6.39
Peer Group Median (InvMetrics Public DB Plan >\$5Bn)	9.82	3.89	7.88	6.83
US Equity Portfolio	22.90	8.73	14.25	12.19
Blended Policy (Tot US Eq)	23.23	8.68	14.05	12.13
Non-US Equity Portfolio (Hedged)	15.82	0.62	7.80	7.37
Blended Policy (Tot Non-US Eq) (Hedged)	14.10	1.10	6.43	5.95
Private Equity Portfolio (Hedged)²	6.04	9.55	14.64	12.02
MSCI Burgiss Private Equity ²	5.62	8.90	13.83	12.50
Public Fixed Income Portfolio	1.76	(3.31)	0.35	N/A
Blended Policy (Public Fixed Income)	0.90	(4.13)	(0.39)	N/A
Private Credit Portfolio (Hedged)²	7.08	7.74	7.80	7.08
Blended Policy (Private Credit) ²	10.67	7.41	7.09	5.89
Public Real Estate Portfolio (Hedged)³	8.14	(1.50)	1.03	3.49
Blended Policy (PTRES) (Hedged) ³	6.22	(2.21)	0.91	3.06
Public Infrastructure Portfolio (Hedged)³	5.45	4.72	0.31	N/A
Blended Policy (Infrastructure x Private Hedged) ³	4.68	4.45	0.26	N/A
Public Commodities Portfolio³	12.86	7.10	7.49	2.73
Blended Policy (Commodities) ³	11.14	6.72	6.28	0.21
Private Real Estate Portfolio²	(4.33)	9.64	9.22	10.03
Blended Policy (PTRES) ²	(7.62)	5.34	5.24	7.84
Private Infrastructure Portfolio (Hedged)²	17.35	17.89	N/A	N/A
FTSE Developed Core Infra 50/50 Hedged ²	3.30	4.99	N/A	N/A
Private Commodities Portfolio²	2.40	10.94	10.31	N/A
Absolute Return Portfolio	7.67	6.00	5.96	4.65
Blended Policy (Absolute Return)	7.99	4.56	6.20	5.48

¹ For more specific details on policy indices, refer to PSERS Investment Policy Statement at www.pa.gov/PSERS.

² Returns reported on a one-quarter lag.

³ Returns are presented on an unleveraged basis for comparability purposes to the Policy Index.

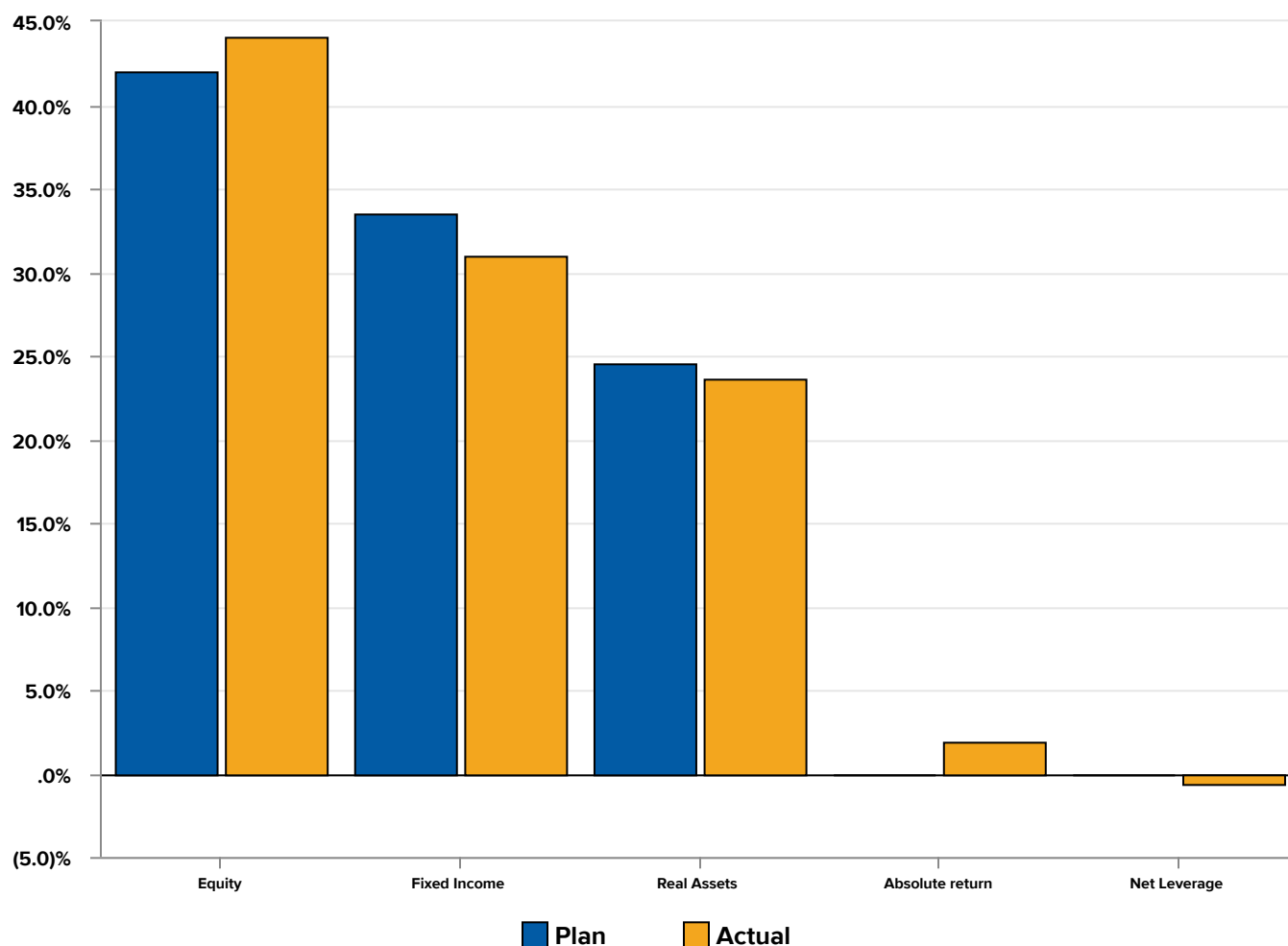
Portfolio Summary Statistics
Asset Allocation Basis
As of June 30, 2024
(Dollar Amounts in Thousands)

Pension investments	Fair Value	% Total
Equity Exposure:		
Public Equity	\$ 20,593,700	27.5 %
Private Equity	12,107,400	16.1
Total Equity	32,701,100	43.6
Fixed Income Exposure:		
Public Fixed Income	17,771,500	23.6
Private Fixed Income	5,583,400	7.4
Total Fixed Income	23,354,900	31.0
Real Asset Exposure:		
Public Real Assets	9,411,300	12.5
Private Real Assets	8,378,900	11.1
Total Real Asset	17,790,200	23.6
Tail Risk Mitigation	371,400	0.5
Absolute Return	1,466,800	1.9
Leverage:		
Leverage	(3,730,900)	(5.0)
Cash and Cash Equivalents	3,312,100	4.4
Total Net Leverage	(418,800)	(0.6)
Total Pension investments*	75,265,600	100.0
Postemployment Healthcare investments	567,490	100.0
Defined Contribution Plan investments	357,613	100.0

*PSERS investments on the Statements of Fiduciary Net Position for financial reporting purposes are not based on the above asset allocation. PSERS asset allocation is for investment reporting purposes only and is based on the PSERS Investment Office Allocation Report. As such, there may be differences between the Financial Section and the Investment Section.

Comparison of Actual Portfolio Distribution to Asset Allocation Plan - Pension Investments* As of June 30, 2024

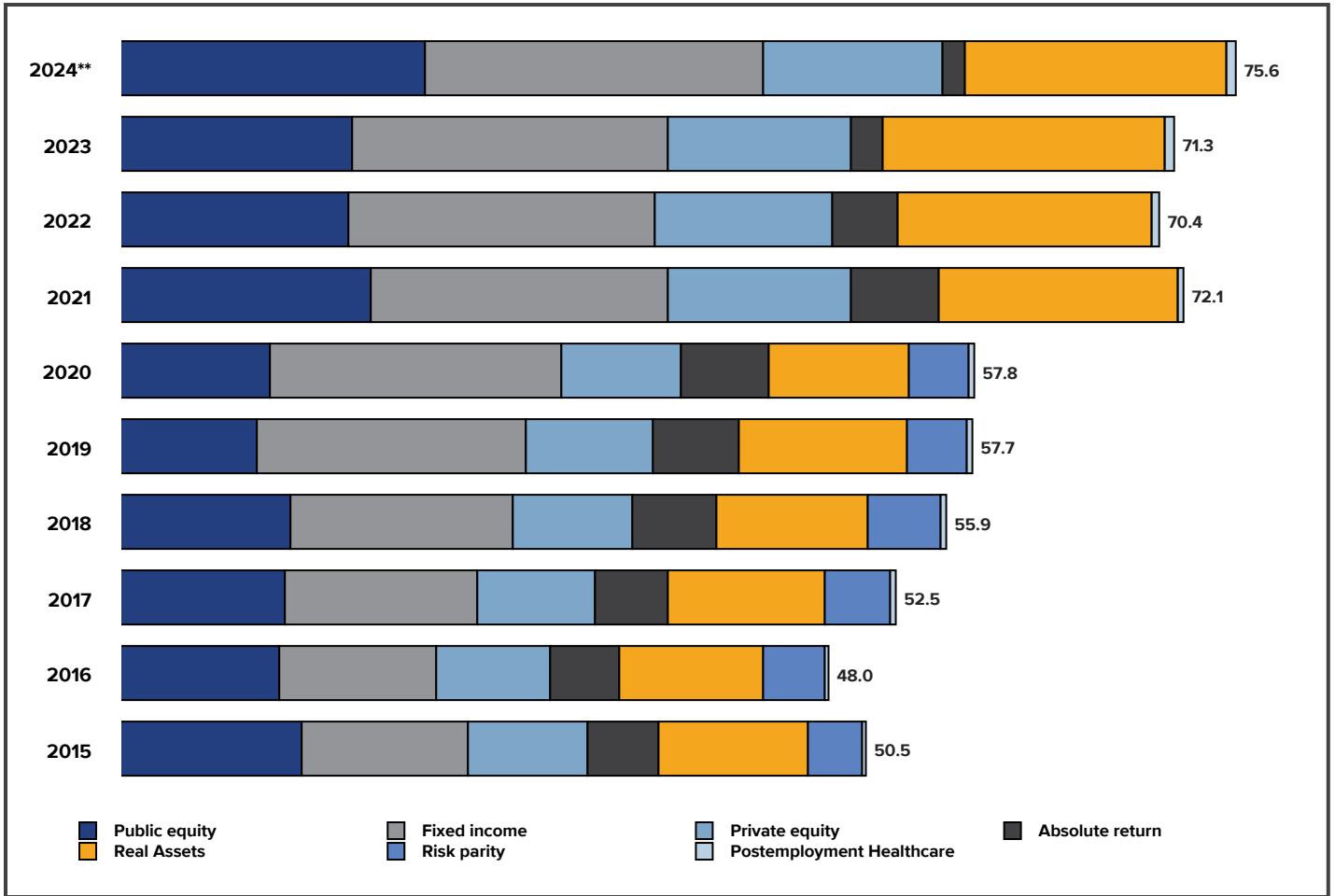
Asset Category	Plan	Actual
Equity	42.0%	44.1%
Fixed Income	33.5	31.0
Real Assets	24.5	23.6
Absolute return	—	1.9
Net Leverage	—	(0.6)
Total	100.0%	100.0%



*Defined Contribution Plan, Premium Assistance and Health Options Program are not included in the above chart. Tail Risk has been included with Equity.

Portfolio Capital Distribution 10 Year Trend*

(Fair Value - Dollar Amounts in Billions)



*Defined Contribution Plan and Tail Risk Mitigation are not included in the above chart.

**2024 is based on the PSERS Investment Office Allocation Report

Equity

10 Largest Holdings in Descending Order by Fair Value

As of June 30, 2024

(Dollar Amounts and Shares in Thousands)

Description	No. of Shares	Fair Value
Microsoft Corporation	1,633	\$ 729,652
NVIDIA Corporation	5,403	667,493
Apple Inc.	3,166	666,835
Alphabet, Inc.	2,364	431,896
Amazon.com, Inc.	2,012	388,727
NextEra Energy, Inc.	3,930	278,261
Meta Platforms, Inc.	481	242,708
Aena S.M.E., S.A.	1,057	213,033
Transurban Group	23,049	190,879
The Southern Company	2,197	170,407
Total of 10 Largest Holdings		\$ 3,979,891

Fixed Income

10 Largest Holdings in Descending Order by Fair Value

As of June 30, 2024

(Dollar Amounts and Shares in Thousands)

Description	No. of Shares	Fair Value
iShares J.P. Morgan USD Emerging Markets Bond ETF, December 31, 2049	3,380	\$ 299,040
U.S.A. Treasury Bond, 4.75%, November 15, 2053	168,000	173,723
U.S.A. TIPS 0.125%, January 15, 2032	193,706	167,730
U.S.A. Treasury Bond, 4.25%, February 15, 2054	173,000	164,783
U.S.A. Treasury Note, 1.75%, January 15, 2034	169,215	164,294
U.S.A. TIPS 1.125%, January 15, 2033	177,053	163,847
U.S.A. TIPS 0.5%, January 15, 2028	167,933	158,293
U.S.A. TIPS 0.125%, January 15, 2031	172,026	151,867
U.S.A. TIPS 0.125%, January 15, 2030	167,476	150,840
U.S.A. Treasury Bond, 4.125%, August 15, 2053	160,500	149,491
Total of 10 Largest Holdings		\$ 1,743,908

Postemployment Healthcare Investments

Holdings in Descending Order by Fair Value

As of June 30, 2024

(Dollar Amounts in Thousands)

Description	No. of Shares	Fair Value
Wilmington US Government MM	N/A	\$ 284,429
PSERS Short-Term Investment Fund	210,838	210,838
Total Holdings*		\$ 495,267

*Excludes Cash on Deposit

Defined Contribution Plan Investments

10 Largest Holdings in Descending Order by Fair Value

As of June 30, 2024

(Dollar Amounts and Shares in Thousands)

Description	No. of Shares	Fair Value
T Rowe Price Target Date 2060	5,543	\$ 99,062
T Rowe Price Target Date 2065	4,361	63,980
T Rowe Price Target Date 2055	2,628	44,591
T Rowe Price Target Date 2050	2,063	34,994
T Rowe Price Target Date 2045	1,705	28,798
T Rowe Price Target Date 2040	1,389	22,924
T Rowe Price Target Date 2035	1,176	18,754
T Rowe Price Target Date 2030	847	12,960
Vanguard® Treasury Money Market	9,151	9,151
T. Rowe Price Target Date 2025	417	6,154
Total of 10 Largest Holdings		\$ 341,368

Information on the complete holdings of the System can be downloaded from the PSERS website at www.pa.gov/PSERS.

Comparison of Investment Activity Income

Fiscal Years Ended June 30, 2024 and 2023

(Dollar Amounts in Thousands)

Investment Activity	2024	2023
Net appreciation in fair value of investments	\$ 4,357,026	\$ 1,336,804
Short-term	327,473	276,739
Fixed income	594,978	663,883
Equity	502,176	445,086
Collective trust funds	386	981
Real estate	119,403	188,922
Alternative investments	277,795	300,455
Total investment activity income	\$ 6,179,237	\$ 3,212,870

Brokers' fees on equity investment transactions for the fiscal year ended June 30, 2024, were \$3.1 million. The System has commission recapture contracts with several brokers. These contracts generally stipulate that the brokers rebate a percentage of commissions earned on investment transactions directly to the System. During the fiscal year ended June 30, 2024, the System earned \$33,432 from a commissions recapture program. A list of the individual brokers receiving fees in excess of \$100,000 during the fiscal year, as well as all other brokers (receiving fees less than \$100,000) is as follows:

Schedule of Broker Commissions

Fiscal Year Ended June 30, 2024

Brokerage Firm	Commissions Paid	Shares	Average Commission Per Share
Instinet LLC	\$ 337,015	114,315,561	\$ 0.003
Macquarie Bank Ltd	300,908	75,617,069	0.004
Bank of America Merrill Lynch	294,746	77,806,237	0.004
Fimat USA Inc.	261,790	104,433	2.507
Liquidnet Inc.	163,783	17,753,357	0.009
Mizuho Securities	117,810	539,790	0.218
MKM Partners	114,180	22,830,096	0.005
All other brokers (less than \$100,000)	1,532,437	479,675,298	0.003
Total	\$ 3,122,669	788,641,841	\$ 2.753

Professional Consultants

Roster of Investment Managers, Advisors, and Consultants As of June 30, 2024

Public Equity Managers

- Acadian Asset Management, LLC
- Baillie Gifford Overseas, Ltd.
- BlackRock Institutional Trust Company, N.A.
- Cederberg Capital
- Effissimo Capital Management Pte. Ltd.
- Marathon Asset Management Limited
- Oberweis Asset Management, Inc.
- Steadview Capital Partners, LP
- The Children's Investment Fund, LP
- Wasatch Advisors, Inc.
- HgCapital
- Huntsman Gay Global Capital, LLC
- Incline Management Corp
- Insight Venture Management, LLC
- IPC Advisors
- K1
- K4 Capital Advisors
- L Catterton Management Company, LLC
- Lindsay Goldberg & Bessermer
- LLR Partners
- Milestone Partners

Private Equity Fund Managers

- Actis, LLP
- Adams Capital Management, Inc.
- Aisling Capital, LLC
- Aksia, LLC
- APAX Partners, LLP
- Apogem Capital, LLC
- Apollo Global Management, LLC
- Ares Management Corporation
- Avenue Capital Group
- Bain Capital Investors, LLC
- Baring Private Equity Asia Limited
- Black Diamond Capital Management, LLC
- Blackstone Group
- Blue Point Capital Partners, LLC
- Bridgepoint Capital, Ltd.
- Bryn Mawr Trust
- Capital Group
- Cerberus Capital Management, LLC
- Cinven
- Clayton, Dubilier & Rice, LLC
- Clearlake Capital Group, LP
- Collier Investment Management, Ltd.
- Crestview Advisors, LLC
- Cross-Atlantic Capital Partners
- CVC Capital Partners Group
- Denham Capital
- Energy & Mineral Group, The
- Equistone Partners Europe Limited
- First Reserve Corporation
- Greenoaks Capital
- Hahn & Co.
- Morgan Stanley
- New Mountain Investments
- NGP Energy Capital Management
- Oak HC/FT Management Company, LLC
- OceanSound Partners, LP
- Odyssey Investment Partners, LLC
- Orchid Asia
- PAI Europe
- Palladium Equity Partners
- Partners Group
- Platinum Equity Advisors, LLC
- Polaris Capital Group, Ltd.
- Portfolio Advisors, LLC
- Sante Ventures
- SCP Private Equity Partners
- Searchlight Capital Partners, LP
- StarVest Associates
- StepStone Group
- Sterling Partners
- Summit Partners
- TDR Capital, LLP
- Tenaya Capital
- Trilantic Capital Management, LLC
- Tulco Management, LLC
- Valar Ventures, LLC
- Venor Capital Management, LP
- Versa Capital Management, LLC
- Webster Capital Management, LLC

Professional Consultants (continued)

Public Fixed Income Managers

U.S. Core Fixed Income Manager

- Garcia Hamilton & Associates, LP
- JP Morgan Asset Management

U.S. High Yield Fixed Income Managers

- Bain Capital Credit, LP
- BlackRock Institutional Trust Company, N.A.
- Caspian Capital, LP

Emerging Markets Debt Manager

- Franklin Templeton Investments

LIBOR-Plus Short-Term Investment Pool Manager

- Radcliffe Capital Management

Private Fixed Income Managers

- Apollo Global Management, LLC
- Ares Management Corporation
- Avenue Capital Group
- Bain Capital Investors, LLC
- Carlyle Group, The
- Cerberus Business Finance, LLC
- Clearlake Capital Group, LP
- Dawson Partners
- Galton Capital Group, LLC
- Hayfin Capital Management, LLP
- Intermediate Capital Group
- LaSalle Mortgage Real Estate Investors
- LBC Credit Management, LP
- Newmarket Investment Management, LP
- Pacific Investment Management Company, LLC
- Park Square Capital, LLC
- Sixth Street Partners, LLC
- Summit Partners
- TCI Fund Management Limited
- Värde Partners, Inc.

Public Real Assets Managers

Commodity Managers

- Gresham Investment Management, LLC

Publicly Traded Real Estate Securities Manager

- Security Capital Research & Management, Inc

Private Real Assets Managers

Infrastructure Managers

- Blackstone Group
- Brookfield Asset Management, Inc.
- CIM Group, LLC
- DIF Capital Partners
- GCM Grosvenor
- I Squared Capital
- LS Power Group
- Newmarket Global Management, LP

Commodity Managers

- Denham Capital Management, LP
- NGP Energy Capital Management

Real Estate Fund Managers

- Almanac Realty Investors, LLC
- Angelo, Gordon & Co., LP
- Ares Management Corporation
- Avenue Capital Group
- Bell Partners, Inc.
- BlackRock
- Blackstone Group
- Brookfield Asset Management, Inc.
- Cabot Properties, Inc.
- Carlyle Group, The
- DRA Advisors, LLC
- EQT
- Fortress Investment Group
- GF Management, LLC
- Island Capital Group, LLC
- L&B Realty Advisors
- LaSalle Mortgage Real Estate Investors
- LEM Capital Partners, LP
- O'Connor Capital
- O'Connor Real Estate Advisors, LLC

Professional Consultants (continued)

Real Estate Fund Managers (continued)

- Paramount Group, Inc.
- PGIM Real Estate
- Property Management, Inc.
- RCG Longview Management, LLC
- Stockbridge Capital Partners
- UBS Realty Investors, LLC

Absolute Return Managers

- Aeolus Capital Management, Ltd.
- Carlyle Aviation Partners
- Falko Regional Aircraft Limited
- Garda Capital Partners, LP
- HS Group (Hong Kong) Limited
- Nephila Capital, Ltd.
- One William Street Capital Management, LP
- RenaissanceRe Fund Management, Ltd.
- Venor Capital Management, LP

Tail Risk Mitigation Manager

- Capstone

Currency Hedging Manager

- Insight Investment International Limited

Custodian Bank

- The Bank of New York Mellon Corporation

Investment Accounting Application Service Provider

- STP Investment Services, LLC

Proxy Voting Agent

- Glass, Lewis & Co., LLC

Board & General Investment Consultant

- Verus Advisory, Inc.

Absolute Return, Private Equity, Private Real Estate, Private Credit, and Private Infrastructure Investment Consultant

- Aksia, LLC

Risk Management System

- BlackRock Solutions

ACTUARIAL SECTION



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May 21, 2024

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

Re: Actuary's Certification Letter

Members of the Board:

An actuarial valuation of the Pennsylvania Public School Employees' Retirement System (Retirement System or PSERS) is performed annually to measure the ongoing costs and progress towards the funding goals of the Retirement System over time. The most recent actuarial valuation was completed as of June 30, 2023. The financing objectives of the Retirement System are to:

- Fully fund all current costs based on the normal contribution rate determined under the funding method,
- Liquidate the unfunded accrued liability based on level percentage of pay amortization schedules required by the Public School Employees' Retirement Code, 24 Pa. C.S. §8101 et. seq. (Retirement Code), which requires amortization over 24 years of the unfunded accrued liability as of June 30, 2010, and of each change in the unfunded accrued liability due to actuarial experience after the June 30, 2010 valuation. Any increases in the unfunded liability arising from legislation enacted after June 30, 2010, are to be amortized over 10 years; and
- As directed by Act 5 of 2017, contribute 2.25% of pay for future Class T-G members and 2.00% of pay for future Class T-H members and DC only participants to the School Employees' Defined Contribution Plan (Act 5 DC contributions).

The contribution policy of the Retirement System is set by statute. The Commonwealth's General Assembly has the authority to amend the benefit terms and funding policy for the Retirement System by passing bills in the Senate and House of Representatives and sending them to the Governor for approval.

Based on the June 30, 2023 actuarial valuation, a total contribution rate of 33.90% (32.92% Pension plus 0.63% Health Insurance Premium Assistance and 0.35% for Act 5 DC contributions) of payroll payable by employers for fiscal year 2024/2025, when taken together with the contributions payable by the members, current assets, and expected future asset returns, is sufficient to achieve the financing objective. The Act 120 minimum employer pension rate is the employer pension normal cost rate of 5.68%. The 0.35% Act 5 DC contribution rate is an estimated average employer DC contribution rate. The actual DC contribution rate applicable to each employer will be based on the employer's Class T-G, Class T-H, and Class-DC-only membership/participation.

As required by the Retirement Code, the valuation takes into account all of the promised benefits to which members are entitled as of June 30, 2023, including pension and survivor benefits, as the basis for the pension contribution rate for the fiscal year ended June 30, 2025.

There were no legislative or administrative changes made to the benefits payable by PSERS since the prior valuation.

As required under Section 8502(j) of the Retirement Code, experience studies are performed for PSERS every five years, the most recent having been made as of June 30, 2020. This valuation was prepared on the basis of



the demographic and economic assumptions that were recommended on the basis of the July 1, 2015 – June 30, 2020 Experience Review and approved by the Board of Trustees at its March 5, 2021, June 11, 2021 and August 6, 2021 meetings, which includes a 7.00% per annum rate of investment return.

Annually, the actuary reviews the assumptions through discussions with the PSERS staff and analyzing actuarial gain/ loss experience. In the case of the Board's selection of the valuation interest rate, or expected return on assets ("EROA"), the actuary has also reviewed the analysis provided by the Retirement System's investment advisors, as well as Buck's Financial Risk Management ("FRM") practice, and determined the EROA assumption together with the Retirement System's other economic and demographic assumptions do not conflict with what, in the actuary's professional judgment, is reasonable for the purpose of the measurement.

In our opinion, the actuarial assumptions used for funding purposes are reasonably related to the experience of the Retirement System and to reasonable long-term expectations. These assumptions were selected in accordance with applicable Actuarial Standards of Practice published by the Actuarial Standards Board.

The actuarial assumptions and methods used by PSERS for financial reporting meet the requirements set forth in Governmental Accounting Standards Board (GASB) Statement No. 67. The Health Insurance funding provisions of the Retirement Code differ from the GASB 74 disclosure requirements. For funding purposes, the actuarial liability equals the assets in the health insurance account, and a contribution is determined to provide for solvency of the account through the third fiscal year following the valuation date. For GASB 74 purposes the Health Insurance actuarial liability and normal cost requirements are determined under the entry age actuarial cost method. The entry age actuarial cost method meets the GASB 74 requirements for determining actuarial liability and normal cost and is the cost method specified by the Retirement Code for the PSERS pension plan.

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

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

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

The following supporting schedules in the Actuarial Section were prepared by Buck Global, LLC (Buck):

- Summary of Results of Actuarial Valuation as of June 30, 2023
- History of Contribution Rates and Funded Ratios
- Description of Actuarial Assumptions and Methods
- Schedule of Active Member Valuation Data
- Schedule of Retired Members and Beneficiaries Added To and Removed From Rolls

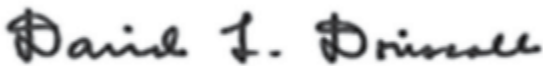
- Solvency Test for Pensions
- Schedule of Funding Progress for Pensions
- Analysis of Past Financial Experience - Reconciliation of Employer Contribution Rates

In addition, Buck prepared the “Schedule of Changes in the Employer Net Pension Liability”, “Schedule of Employer Net Pension Liability”, “Schedule of Employer Pension Contributions”, “Schedule of Changes in the Employer Net OPEB (Premium Assistance) Liability”, “Schedule of Employer Net OPEB (Premium Assistance) Liability”, and the “Schedule of Employer OPEB (Premium Assistance) Contributions” in the Financial Section.

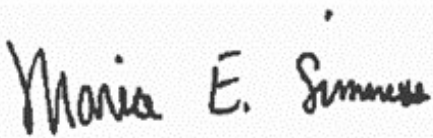
This report was prepared solely for the Pennsylvania Public School Employees’ Retirement System for the purposes herein stated and may not be appropriate to use for other purposes. Buck does not intend to benefit and assumes no duty or liability to other parties who receive this work. Use of this report for any other purposes or by anyone other than PSERS and its auditors may not be appropriate and may result in mistaken conclusions because of failure to understand applicable assumptions, methods, or inapplicability of the report for that purpose. The attached pages should not be provided without a copy of this cover letter. Buck should be asked to review any statement to be made on basis of the results contained in this report. Buck will accept no liability for any such statement made without prior review by Buck.

David L. Driscoll and Maria E. Simmers are Fellows of the Society of Actuaries and Members of the American Academy of Actuaries. Salvador Nakar is a Member of the American Academy of Actuaries. We meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions concerning it.

Respectfully submitted,



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



Maria E. Simmers, FSA, EA, MAAA, FCA
Director, Actuary



Salvador Nakar, EA, MAAA, FCA
Senior Consultant, Actuary

SUMMARY OF RESULTS OF ACTUARIAL VALUATION
AS OF JUNE 30, 2023⁶
(Dollar Amounts in Thousands)

Item	June 30, 2023	June 30, 2022
Member Data		
1. Number of Members		
a) Active Members	250,820	247,873
b) DC-Only Participants	912	520
c) Vestees ¹	26,776	26,836
d) Annuitants, Beneficiaries and Survivor Annuitants ²	249,724	246,901
e) Total	528,232	522,130
2. Annualized Salaries ³	\$ 15,030,750	\$ 14,415,795
3. Annual Annuities	\$ 6,542,014	\$ 6,438,598
Valuation Results		
4. Present Value of Future Pension Benefits		
a) Active Members	\$ 67,251,381	\$ 66,333,616
b) Inactive Members	424,535	383,991
c) Vestees	2,713,915	2,549,763
d) Annuitants, Beneficiaries and Survivor Annuitants	62,344,050	61,869,159
e) Total	\$ 132,733,881	\$ 131,136,529
5. Present Value of Future Pension Normal Cost		
a) Active Members	\$ 9,786,472	\$ 9,737,095
b) Employer	6,704,196	6,922,633
c) Total	\$ 16,490,668	\$ 16,659,728
6. Pension Accrued Liability		
a) Active Members (4a) - (5c)	\$ 50,760,713	\$ 49,673,888
b) Inactive Members	424,535	383,991
c) Vestees	2,713,915	2,549,763
d) Annuitants, Beneficiaries and Survivor Annuitants	62,344,050	61,869,159
e) Total	\$ 116,243,213	\$ 114,476,801
7. Health Insurance Assets for Premium Assistance	\$ 140,716	\$ 135,476
8. Total Accrued Liability for Funding (6) + (7)	\$ 116,383,929	\$ 114,612,277
9. Actuarial Value of Assets	\$ 74,044,124	\$ 70,646,769
10. Funded Status (9) / (8)	63.6%	61.6%
11. Unfunded Accrued Liability (8) - (9)	\$ 42,339,805	\$ 43,965,508
12. Total Normal Cost Rate	13.05%	13.30%
13. Member Contribution Rate	7.37%	7.44%
14. Employer Normal Cost Rate (12) - (13)	5.68%	5.86%
Employer Annual Funding Requirement		
15. Employer Contribution Rate Calculated by Actuary		
a) Normal Cost	5.68%	5.86%
b) Unfunded Accrued Liability	27.24	27.23
c) Preliminary Pension Rate	32.92%	33.09%
d) Health Insurance Premium Assistance	0.63	0.64
e) Act 5 DC ⁴	0.35	0.27
f) Total Rate ⁵ = (15c) + (15d) + (15e)	33.90%	34.00%

- Excludes 156,636 and 148,999 inactive members and non-members as of June 30, 2023 and June 30, 2022, respectively, who are no longer participating and are valued for their accumulated deductions only.
- Excludes 2,433 and 1,776 beneficiaries as of June 30, 2023 and June 30, 2022, respectively, who are only entitled to a pending lump sum distribution.
- The salaries shown represent an annual rate of pay for members and DC-only participants who were in active service on the valuation date.
- Average DC contribution rate. Actual rate will vary by employer based on Class T-G, Class T-H, and Class DC-only memberships.
- The Act 120 minimum pension rate is 5.68% for the June 30, 2023 valuation and is 5.86% for the June 30, 2022 valuation.
- The prior year amounts have been reclassified to current year presentation.

HISTORY OF CONTRIBUTION RATES AND FUNDED RATIOS

Fiscal Year Ending June	Budgeted Total Employer Payroll (Thousands)	Contribution Rates ¹								Funded Ratio
		Employee	Employer Normal Cost	Employer Unfunded Liability	Preliminary Employer Pension	Final Employer Pension ²	Act 5 Employer DC ⁶	Employer Health Insurance	Total Employer	
2014 ³	\$ 13,720,000	7.43%	8.57%	15.25%	23.82%	16.00%	N/A	0.93%	16.93%	62.0%
2015	13,482,000	7.46	8.46	17.51	25.97	20.50	N/A	0.90	21.40	60.6
2016	13,375,000	7.49	8.38	19.44	27.82	25.00	N/A	0.84	25.84	57.3
2017	13,549,000	7.52	8.31	20.89	29.20	29.20	N/A	0.83	30.03	56.3
2018 ⁴	13,449,000	7.54	7.70	24.04	31.74	31.74	N/A	0.83	32.57	56.5
2019	13,775,000	7.57	7.59	25.01	32.60	32.60	N/A	0.83	33.43	58.1
2020	13,880,000	7.59	7.49	25.87	33.36	33.36	0.09 %	0.84	34.29	59.2
2021	14,078,000	7.61	7.37	26.14	33.51	33.51	0.18	0.82	34.51	59.6
2022	14,289,000	7.56	7.20	26.79	33.99	33.99	0.15	0.80	34.94	61.6
2023 ⁵	14,497,000	7.52	6.07	28.24	34.31	34.31	0.20	0.75	35.26	63.6
2024	15,260,000	7.44	5.86	27.23	33.09	33.09	0.27	0.64	34.00	*
2025	15,590,000	7.37	5.68	27.24	32.92	32.92	0.35	0.63	33.90	*

- In general, the Preliminary Employer Pension Rate equals the sum of the rates for the Employer Normal Cost and the Unfunded Liability; and the Final Employer Pension Rate is the greater of the Preliminary Pension Rate and any Pension Rate Floor or Collar stated in the Retirement Code. The Total Employer Rate is the sum of the Final Employer Pension Rate, Act 5 Employer DC Rate and the Employer Health Insurance Premium Assistance Rate.
- The Final Employer Pension rate is limited by the Act 120 of 2010 pension rate collars for fiscal years 2014 through 2016.
- Revised actuarial assumptions based on a five-year experience review ended June 30, 2010 were used to determine the contributions for the fiscal years ending June 30, 2014, and thereafter, which include an interest rate of 7.50%.
- Revised actuarial assumptions based on a five-year experience review ended June 30, 2015 were used to determine the contributions for the fiscal year ending June 30, 2018, and thereafter, which include an interest rate of 7.25%.
- Revised actuarial assumptions based on a five-year experience review ended June 30, 2020, were used to determine the contributions for the fiscal year ending June 30, 2023 and thereafter, which include an interest rate of 7.00%.
- Act 5 new member assumptions for new members after:

Valuation	Class T-G	Class T-H	DC Only
2018 - 2019	65%	30%	5%
After 2019	98%	1%	1%

The above rate is an average DC contribution rate. Actual rate will vary by employer based on Class T-G, Class T-H, and Class DC only memberships.

* Not Available

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

ASSUMPTIONS

Interest Rate: 7.00% per annum, compounded annually (adopted as of June 30, 2021). The components are 2.50% for inflation and 4.50% for the real rate of return. Actuarial equivalent benefits are determined based on an interest rate of 4.00% per year (since 1960) except, in accordance with Act 5 of 2017, an interest rate of 7.00% per year is used for Class T-E, Class T-F, Class T-G and Class T-H members' Option 4 partial withdrawal of accumulated member contributions and certain Class T-G and Class T-H early retirement factors.

Discount Rate for GASB 67 Accounting: 7.00% as of June 30, 2022 and June 30, 2023. Rates were

determined in accordance with the methods prescribed in GASB Statement No. 67.

Discount Rate for GASB 74 Accounting: 4.09% as of June 30, 2022 and 4.13% as of June 30, 2023. The rates represents the S&P 20-Year Municipal Bond Rate. Rates were determined in accordance with the methods prescribed in GASB Statement No. 74.

Separation from Service: Illustrative rates of assumed separation from service are shown in the following table (adopted as of June 30, 2021).

Age	Class T-C and Class T-D Annual Rate of:						
	Withdrawal Less Than 5 Years of Service	Withdrawal		Death ¹	Disability	Early Retirement ²	Superannuation Retirement
		Between 5 and 10 Years of Service	10 or More Years of Service				
MALES							
25	21.83%	9.22%	4.55%	0.022%	0.01%		
30	14.93	3.84	4.55	0.029	0.01		
35	15.17	3.77	1.68	0.038	0.04		
40	16.04	4.44	1.42	0.053	0.06		
45	15.12	5.17	1.41	0.082	0.11		19.00%
50	15.81	4.96	1.89	0.129	0.23		19.00
55	15.54	4.96	3.63	0.194	0.37	14.50%	25.00
60	13.85	6.37	5.49	0.289	0.37	14.50	29.00
65				0.447	0.11		23.00
70				0.699	0.08		20.00
75				1.076	0.08		25.00
79				1.701	0.08		25.00
FEMALES							
25	18.33%	7.47%	3.90%	0.008%	0.01%		
30	15.16	5.92	3.90	0.013	0.02		
35	14.66	5.68	2.83	0.019	0.03		
40	12.86	5.16	1.67	0.030	0.06		
45	12.82	5.25	1.60	0.046	0.11		16.00%
50	13.02	5.23	2.08	0.069	0.18		16.00
55	13.43	5.31	3.66	0.102	0.29	14.50%	16.00
60	13.81	7.53	5.94	0.154	0.24	15.00	31.00
65				0.251	0.07		28.00
70				0.431	0.09		23.00
75				0.766	0.09		25.00
79				1.239	0.09		25.00

1. These base mortality tables will then be projected on a generational basis using the Buck Modified scale MP-2020. Refer to the pre-retirement mortality description below.
2. Early Retirement - Age 55 with 25 years of service, but not eligible for Superannuation retirement.

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

Age	Class T-E, Class T-F, Class T-G and Class T-H Annual Rate of:					
	Withdrawal		Death ¹	Disability	Early Retirement ²	Superannuation Retirement
	Less Than 10 Years of Service	10 or More Years of Service				
MALES						
25	17.02%	4.55%	0.022%	0.01%		
30	11.25	4.55	0.029	0.01		
35	12.09	1.68	0.038	0.04		
40	13.14	1.42	0.053	0.06		
45	13.87	1.41	0.082	0.11		
50	13.67	1.89	0.129	0.23		
55	11.91	3.63	0.194	0.37	14.50%	16.30%
60	11.19	5.49	0.289	0.37	14.50	16.30
65	11.19		0.447	0.11		16.30
70	11.19		0.699	0.08		16.30
75	11.19		1.076	0.08		16.30
79	11.19		1.701	0.08		16.30
FEMALES						
25	14.54%	3.90%	0.008%	0.01%		
30	11.68	3.90	0.013	0.02		
35	12.39	2.83	0.019	0.03		
40	11.53	1.67	0.030	0.06		
45	10.99	1.60	0.046	0.11		
50	10.72	2.08	0.069	0.18		
55	10.75	3.66	0.102	0.29	14.50%	19.50%
60	11.62	5.94	0.154	0.24	15.00	19.50
65	11.62		0.251	0.07		19.50
70	11.62		0.431	0.09		19.50
75	11.62		0.766	0.09		19.50
79	11.62		1.239	0.09		19.50

1. These base mortality tables will then be projected on a generational basis using the Buck Modified scale MP-2020. Refer to the pre-retirement mortality description below.
2. Early Retirement - prior to eligibility for Superannuation retirement.

Death before Retirement:

Male participants: 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 Employee (Total General Employees dataset) Amount Weighted Male Tables, with a 99.0% adjustment, generationally projected with Buck Modified scale MP-2020.

Female participants: 50% PubT-2010 Employee (Total Teacher dataset) and 50% PubG-2010 Employee (Total General Employees dataset) Amount Weighted Female Tables, with a 88.6% adjustment, generationally projected with Buck Modified scale MP-2020.

Death after Retirement:

Male annuitants: 50% PubT-2010 Retiree (Total Teacher

dataset) and 50% PubG-2010 Retiree (Total General Employees dataset) Amount Weighted Male Tables, with a 99.7% adjustment, generationally projected with Buck Modified scale MP-2020.

Female annuitants: 50% PubT-2010 Retiree (Total Teacher dataset) and 50% PubG-2010 Retiree (Total General Employees dataset) Amount Weighted Female Tables, with a 95.4% adjustment, generationally projected with Buck Modified scale MP-2020.

Male disabled annuitants: Pub-2010 Disability Mortality Non-Safety Amount Weighted Male Table, with a 105.4% adjustment, generationally projected with Buck Modified scale MP-2020.

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

Female disabled annuitants: Pub-2010 Disability Mortality Non-Safety Amount Weighted Female Table, with a 95.0% adjustment, generationally projected with Buck Modified scale MP-2020.

Male contingent annuitants: Pub-2010 Contingent Survivor Amount Weighted Male Table, with a 106.0% adjustment, generationally projected with Buck Modified scale MP-2020.

Female contingent annuitants: Pub-2010 Contingent Annuitant Amount Weighted Female Table, with a 116.2% adjustment, generationally projected with Buck Modified scale MP-2020.

For determination of actuarial equivalence, a unisex table based on 25% males and 75% females blend of the Board-approved base mortality tables to be used for actuarial valuations beginning June 30, 2021, generationally projected to 2025 with the Buck Modified MP-2020 improvement scale.

Salary Increase: Effective average of 4.50% per annum, compounded annually (adopted as of June 30, 2021). The components are 2.50% for inflation, and 2.00% for real wage growth and merit or seniority increases. Representative values are as follows:

Age	Annual Rate of Salary Increase
20	9.65%
30	7.15
40	5.15
50	3.15
55	2.75
60	2.75
65	2.75
Over 65	2.75

Payroll Growth: A 3.25% per annum payroll growth assumption is used to liquidate the unfunded accrued liability based on level-percent-of-pay amortization schedules required by the Retirement Code.

MISCELLANEOUS

Option 4 - Refund of Contributions Elections: 75% of Class T-C and Class T-D and 50% of Class T-E, Class T-F, Class T-G and Class T-H members are assumed to elect a refund of contributions and a reduced annuity.

Withdrawal Annuity: 50% of members are assumed to commence payment immediately and 50% are assumed to defer payment to superannuation age.

Optional Forms of Annuity Payment at Retirement: Anticipated active member elections of optional forms of payment at retirement as follows:

- 45% will elect Maximum Straight Life Annuity (MSLA)
- 25% will elect OPTION 1 (Straight life annuity with guaranteed payments equal to present value of MSLA)
- 20% will elect OPTION 2 (100% Joint and Survivor with males 3 years older than females)
- 10% will elect OPTION 3 (50% Joint and Survivor with males 3 years older than females)
- 0% will elect OPTION 4 annuity

Optional Forms of Payment Factors: Actuarial equivalent benefits are determined based on a statutorily specified interest rate of 4.00% per year or 7.00% per annum, as applicable. The mortality basis is a blend of 25% males and 75% females blend of the Board-approved base mortality tables to be used for actuarial valuations beginning June 30, 2021, generationally projected to 2025 with the Buck Modified MP-2020 improvement scale.

Health Insurance Premium Assistance:

Elections: 60% of eligible retirees are assumed to elect premium assistance.

Administrative Expenses: Assumed equal to \$1,269,000 for fiscal year 2023/2024, \$1,307,000 for fiscal year 2024/2025 and \$1,346,000 for fiscal year 2025/2026.

Summary of Changes since the June 30, 2022 Valuation: Beginning in fiscal year 2023/2024, 60% of eligible retirees are assumed to elect premium assistance.

Assumed administrative expenses for the Health Insurance Premium Assistance plan changed from \$1,054,000 to \$1,269,000 for fiscal year 2023/2024, from \$1,085,000 to \$1,307,000 for fiscal year 2024/2025, and the amount of \$1,346,000 was added for the fiscal year 2025/2026.

METHODS

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

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS (Continued)

Asset Valuation Method: A ten-year moving market average value of assets that recognizes the 7.00% (7.25% prior to June 30, 2021 and 7.50% prior to June 30, 2016) actuarial expected investment return immediately and spreads the difference between the actual return on the market value of assets and the expected return on the actuarial value of the assets over a period of ten years. The actuarial value of assets can be no less than 70% and no more than 130% of the market value of assets.

Actuarial Cost Method for Pension Funding: Entry Age Normal Cost Method (modified slightly as of June 30, 2005 to use a pay-weighted average normal contribution rate). The gross normal cost rate is determined as of the valuation date. It is the ratio of the gross normal cost amount to the anticipated total salary during the first year, which is adjusted to the beginning of the year by one-half of the effective average salary increase assumption of 4.50% per annum. This method produces a gross normal cost rate that is consistent with the Retirement System's past annual valuations.

The results of each June 30 valuation determine the employer contribution rate for the second succeeding fiscal year. In accordance with the Retirement Code, the outstanding balance of the unfunded accrued liability as of June 30, 2010, including changes in the unfunded accrued liability due to the funding reforms of Act 120-2010, is to be amortized over a 24-year period, as a level percent of pay, beginning July 1, 2011. Future valuation gains and losses, and changes in the unfunded accrued liability resulting from changes in actuarial assumptions and methods, are amortized over a 24-year period, as a level percent of pay. However, future increases in the unfunded accrued liability due to benefit enhancement legislation will be amortized over a 10-year period, as a level percent of pay. The employer pension contribution requirements are subject to collars on the rate for fiscal years ending June 30, 2012, June 30, 2013, and on or after June 30, 2014; the pension contribution rate was limited to 3.00%, 3.50% and 4.50%, respectively, of total compensation of all active members, greater than the prior year's final contribution rate. Beginning with the fiscal year ending June 30, 2017, the actuarially determined contribution rate was less than the collared rate and the final contribution rate was the actuarially determined contribution rate. However, the final contribution rate cannot be less than the employer normal contribution rate.

In accordance with Act 5-2017, member shared-risk contributions cannot be used to offset the employer normal contribution rate. Instead, any increase or decrease in the unfunded accrued liability due to

member shared-risk contributions shall be recognized as part of the Retirement System's actuarial experience and amortized as a level percentage of compensation over a period of 24 years beginning with the July 1 second succeeding the actuarial valuation in which the shared-risk contribution was recognized.

In the actuary's professional judgment, the Retirement System's funding policy meets the Actuarial Standard of Practice No. 4 standards for a reasonable Actuarially Determined Contribution.

Actuarial Cost Method for Health Insurance Premium Assistance Funding: The actuarial liability equals the assets in the health insurance account, and the results of the June 30 valuation determine the contribution rate for the second succeeding fiscal year. The rate so determined is the rate necessary to establish reserves sufficient to cover administrative expenses and provide premium assistance payments for all participating eligible annuitants during the third fiscal year that follows the valuation date.

Employer DC Contributions: An average DC contribution rate is determined based on the anticipated employer contributions for DC participants and Retirement System appropriation payroll for the second succeeding fiscal year after the June 30 valuation date. It is assumed that among new employees hired on or after July 1, 2023, that 98% will become Class T-G members, 1% will become Class T-H members and 1% will become Class DC-only participants. The actual rate will vary by employer based on Class T-G, Class T-H, and Class DC-only memberships.

Actuarial Cost Method for GASB 74 Accounting for Health Insurance: The actuarial liability and service cost are determined under the entry age actuarial cost method.

Summary of Changes since the June 30, 2022 Valuation: None.

DATA

Census and Assets: The valuation was based on members of the Retirement System as of June 30, 2023, and does not take into account future members. All census data was supplied by the Retirement System and was subject to reasonable consistency checks. The actuaries adjust the data to account for service and pay earned by members on or before the valuation that is not reported by the Retirement System until after the

actuarial valuation is performed. Asset data was supplied by the Retirement System.

For employer DC contributions, it is assumed among new employees hired on or after July 1, 2023, that 98% will become Class T-G members, 1% will become Class

T-H members and 1% will become Class DC only participants. This is the same assumption that was used for the June 30, 2022, valuation. The assumption reflects the actual Class T-G, Class T-H and Class DC only elections as of June 30, 2020.

30-YEAR HISTORICAL INTEREST RATE ASSUMPTION

June 30 Valuation	Interest Rate
2022	7.00%
2021	7.00
2020	7.25
2019	7.25
2018	7.25
2017	7.25
2016	7.25
2015	7.50
2014	7.50
2013	7.50

June 30 Valuation	Interest Rate
2012	7.50%
2011	7.50
2010	8.00
2009	8.00
2008	8.25
2007	8.50
2006	8.50
2005	8.50
2004	8.50
2003	8.50

June 30 Valuation	Interest Rate
2002	8.50%
2001	8.50
2000	8.50
1999	8.50
1998	8.50
1997	8.50
1996	8.50
1995	8.50
1994	8.50
1993	8.50

SCHEDULE OF ACTIVE MEMBERS VALUATION DATA

Valuation as of June 30	Number of Participating Employers	Number of Active Members*	Annual Compensation (Thousands)*	Average Compensation*	% Increase in Average
2023	764	250,820	\$ 14,995,870	\$ 59,787	2.94%
2022	770	247,873	14,397,002	58,082	2.50
2021	769	248,091	14,057,526	56,663	3.90
2020	770	256,246	13,974,295	54,535	2.01
2019	773	255,749	13,671,927	53,458	2.43
2018	775	256,362	13,379,041	52,188	2.48
2017	775	255,945	13,033,919	50,924	1.87
2016	781	257,080	12,851,289	49,989	2.46
2015	784	259,868	12,678,213	48,787	1.79
2014	784	263,312	12,620,862	47,931	1.92

* Excludes DC only members.

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

Valuation Date as of June 30	Added to Rolls		Removed from Rolls		Rolls at End of Year		% Increase in Annual Allowance	Average Annual Allowance
	Number	Annual Allowance (Millions)	Number	Annual Allowance (Millions)	Number	Annual Allowance ¹ (Millions)		
2023	10,606	\$ 278.0	7,783	\$ 147.2	249,724	\$ 6,542.0	1.61%	\$ 26,197
2022	11,493	309.9	7,431	120.4	246,901	6,438.6	2.01	26,078
2021	11,682	320.2	8,457	135.9	242,839	6,311.8	2.28	25,992
2020	9,708	256.1	7,433	115.6	239,614	6,170.9	1.97	25,753
2019	10,553	246.6	6,502	107.0	237,339	6,051.6	2.11	25,498
2018	11,806	235.3	8,532	98.6	233,288	5,926.7	1.90	25,405
2017	12,876	274.2	7,690	102.1	230,014	5,816.4	2.65	25,287
2016	12,686	267.1	7,633	93.5	224,828	5,666.4	2.64	25,203
2015	15,017	297.3	9,142	91.7	219,775	5,520.6	3.39	25,119
2014	15,225	300.5	8,878	84.9	213,900	5,339.5	3.74	24,962

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

**POSTEMPLOYMENT BENEFITS OTHER THAN PENSIONS
SCHEDULE OF RETIRED MEMBERS ADDED TO AND REMOVED FROM ROLLS**

Valuation Date as of June 30	Added to Rolls		Removed from Rolls		Rolls at End of Year		% Increase/ (Decrease) in Annual Premium Assistance	Average Annual Premium Assistance
	Number ²	Annual Premium Assistance (Millions)	Number ²	Annual Premium Assistance (Millions)	Number ²	Annual Premium Assistance (Millions)		
2023	5,829	\$ 4.2	6,645	\$ 4.8	155,248	\$ 111.8	(3.70)%	\$ 1,200
2022	6,601	4.9	4,505	3.4	156,064	116.1	(0.26)	1,200
2021	6,734	5.1	5,431	4.1	153,968	116.4	0.87	1,200
2020	5,979	4.5	4,230	5.0	152,665	115.4	1.14	1,200
2019	5,673	4.3	3,999	3.0	150,916	114.1	1.15	1,200
2018	5,501	4.2	3,770	2.9	149,242	112.8	1.17	1,200
2017	5,821	4.4	3,806	2.9	147,511	111.5	1.36	1,200
2016	5,758	4.4	3,516	2.7	145,496	110.0	0.00	1,200
2015	6,516	5.0	3,635	2.8	143,254	110.0	0.46	1,200
2014	4,969	3.9	2,289	1.8	140,373	109.5	0.37	1,200

2. Number of retired members eligible to participate in the Health Insurance Premium Assistance; 60% of eligible retirees are assumed to elect premium assistance as of June 30, 2023; 62% of eligible retirees are assumed to elect premium assistance as of June 30 2022; 63% of eligible retirees are assumed to elect premium assistance as of June 30, 2016 to June 2021; 64% of eligible retirees are assumed to elect premium assistance as of June 30, 2015; 65% of eligible retirees are assumed to elect premium assistance as of June 30, 2014.

SOLVENCY TEST FOR PENSIONS
COMPARATIVE SUMMARY OF ACCRUED LIABILITY AND
ACTUARIAL VALUE OF ASSETS
(Dollar Amounts in Thousands)

Valuation as of June 30	Accrued Liabilities for			Actuarial Value of Assets	Portion of Accrued Liability Covered by Valuation Assets		
	(1) Active Member Contributions	(2) Retirees and Beneficiaries	(3) Active Member Employer Financed		(1)	(2)	(3)
2023	\$ 19,188,548	\$ 62,344,050	\$ 34,710,615	\$ 73,903,408	100%	88%	0%
2022	18,802,945	61,869,159	33,804,697	70,511,293	100	84	0
2021	18,156,350	61,168,172	33,326,303	67,116,157	100	80	0
2020	17,558,412	58,415,383	31,859,604	63,798,937	100	79	0
2019	16,839,956	57,413,088	30,946,461	61,065,304	100	77	0
2018	16,120,538	56,742,925	30,127,445	58,135,539	100	74	0
2017	15,500,215	56,184,146	30,164,456	57,336,856	100	74	0
2016	14,907,731	55,314,858	29,766,812	57,265,506	100	77	0
2015	14,079,658	52,739,489	27,757,563	57,240,946	100	82	0
2014	13,554,229	51,425,295	27,373,459	57,231,799	100	85	0

SCHEDULE OF FUNDING PROGRESS FOR PENSIONS ¹
(Dollar Amounts in Thousands)

Valuation as of June 30	Actuarial Value of Assets	Actuarial Accrued Liability	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll ²	Unfunded Accrued Liability as a Percentage of Covered
2023	\$ 73,903,408	\$ 116,243,213	\$ 42,339,805	63.6%	\$ 14,995,870	282.3%
2022	70,511,293	114,476,801	43,965,508	61.6	14,397,002	305.4
2021	67,116,157	112,650,825	45,534,668	59.6	14,057,526	323.9
2020	63,798,937	107,833,399	44,034,462	59.2	13,974,295	315.1
2019	61,065,304	105,199,505	44,134,201	58.0	13,671,927	322.8
2018	58,135,539	102,990,908	44,855,369	56.4	13,379,041	335.3
2017	57,336,856	101,848,817	44,511,961	56.3	13,033,919	341.5
2016	57,265,506	99,989,401	42,723,895	57.3	12,851,289	332.4
2015	57,240,946	94,576,710	37,335,764	60.5	12,678,213	294.5
2014	57,231,799	92,352,983	35,121,184	62.0	12,620,862	278.3

1. The amounts reported include assets and liabilities for Pensions.

2. The salaries shown represent an annual rate of pay for the year ended June 30th for members who were in active service on June 30th.

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF EMPLOYER CONTRIBUTION RATES

Fiscal Year Ending June 30	2025	2024	2023	2022	2021	2020	2019	2018	2017	2016
Effective Prior Year Contribution Rate	34.00%	35.26%	34.94%	34.51%	34.29%	33.43%	32.57%	30.03%	25.84%	21.40%
Prior Year Adjustment for Legislation	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.82	5.47
Net Change Due to:										
Change in Normal Rate	(0.18)	(0.21)	(0.18)	(0.17)	(0.12)	(0.10)	(0.11)	(0.23)	(0.07)	(0.08)
Payroll Growth and Liability Experience	(0.15)	(1.08)	0.12	0.39	0.25	(0.12)	(0.17)	0.96	0.14	0.58
Investment Loss/(Gain)	0.16	0.07	(0.01)	0.26	0.02	0.98	1.22	1.08	0.83	0.66
Health Insurance Contribution Change	(0.01)	(0.11)	(0.05)	(0.02)	(0.02)	0.01	0.00	0.01	(0.01)	(0.06)
Assumption/Method Change	N/A	N/A	0.39	N/A	N/A	N/A	(0.08)	0.44	N/A	N/A
Act 5 Benefit and Funding Reforms ²	0.08	0.07	0.05	(0.03)	0.09	0.09	N/A	N/A	N/A	N/A
Amortization of Prior Legislation Deferrals	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.48	0.69
Legislation Deferrals:										
Act 120 Collar ¹	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	(2.82)
Actual Contribution Rate:		34.00%	35.26%	34.94%	34.51%	34.29%	33.43%	32.57%	30.03%	25.84%

1. The Final Employer Pension rate is limited by the Act 120 of 2010 pension rate collar. For the fiscal year ending June 30, 2016, the pension contribution rate could be no more than 4.50% of total compensation of all active members greater than the prior year's final contribution rate. Beginning with the fiscal year 2017, the actuarially determined contribution rate is less than the collared rate and the final contribution rate is the actuarially determined contribution rate, provided that the final contribution rate is not less than the employer normal contribution rate.

2. Act 5 Defined Contribution rate. The above rate is an average DC contribution rate. Actual rate will vary by employer.

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Statistical Section Narrative

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

Financial Trends

The Financial Trend Schedules and Graphs provide detailed information to present how PSERS' financial position has changed over time.

The following Financial Trend Schedules are presented:

- Schedule of Trend Data
- Total Changes in Fiduciary Net Position - Pension
- Total Changes in Fiduciary Net Position - Postemployment Healthcare Plans
- Total Changes in Fiduciary Net Position - DC

Demographic and Economic Information

Some of the following schedules listed are dependent upon an actuarial valuation. For those schedules, the most recent information is presented as of the year ended June 30, 2023, the date of PSERS' most current actuarial valuation completed at the time of publication.

- Summary Membership Data
- Summary Annuity Data
- Pension Benefit and Refund Deductions from Fiduciary Net Position
- Average Monthly Pension Benefit Payments
- Average Monthly Pension Benefit Payments and Average Final Average Salary
- Average Monthly Premium Assistance Benefit Payments and Average Final Average Salary

Operating Information

- Ten Largest Employers
- Schedule of Employers

Schedule of Trend Data

10 Year

(Dollar Amounts in Thousands)*

For years ended June 30	2024	2023	2022	2021	2020
Contribution Rates:					
Total Pension	33.09%	34.31%	33.99%	33.51%	33.36%
Health Insurance Premium Assistance	0.64%	0.75%	0.80%	0.82%	0.84%
Defined Contribution	0.27%	0.20%	0.15%	0.18%	0.09%
Total Employer	34.00%	35.26%	34.94%	34.51%	34.29%
Average Member	7.44%	7.52%	7.56%	7.61%	7.59%
Total Employer Contributions ***	\$5,364,925	\$ 5,363,739	\$ 5,115,090	\$ 4,875,708	\$ 4,794,320
Market Value of Assets ***	\$76,629,000	\$ 72,253,000	\$ 70,664,000	\$ 72,100,000	\$ 58,687,000
Actuarial Value of Assets	**	\$ 74,044,100	\$ 70,647,000	\$ 67,249,000	\$ 63,929,000
Accrued Actuarial Liability	**	\$116,383,900	\$114,612,000	\$112,783,000	\$107,964,000
Actuarial Funded Ratio	**	63.60%	61.60%	59.60%	59.20%
Total Benefits & Refunds	\$8,338,361	\$8,151,007	\$7,794,495	\$7,631,376	\$7,365,198
Average Pension *	\$ 26,392	\$ 26,197	\$ 26,078	\$ 25,992	\$ 25,753
Annuitants & Beneficiaries	253,896	249,724	246,901	242,839	239,614
Average Annual Member Compensation *	\$ 61,319	\$ 59,709	\$ 58,076	\$ 56,663	\$ 54,535
Active Members	255,652	251,732	248,393	248,410	256,246
Retirements	9,396	10,080	9,356	9,411	8,290

For years ended June 30	2019	2018	2017	2016	2015
Contribution Rates:					
Total Pension	32.60%	31.74%	29.20%	25.00%	20.50%
Health Insurance Premium Assistance	0.83%	0.83%	0.83%	0.84%	0.90%
Total Employer	33.43%	32.57%	30.03%	25.84%	21.40%
Average Member	7.57%	7.54%	7.52%	7.49%	7.46%
Total Employer Contributions ***	\$ 4,602,349	\$ 4,361,597	\$ 3,943,758	\$ 3,302,817	\$ 2,713,539
Market Value of Assets ***	\$ 58,859,000	\$ 56,486,000	\$ 53,279,000	\$ 49,957,000	\$ 51,706,000
Actuarial Value of Assets	\$ 61,190,000	\$ 58,258,000	\$ 57,461,000	\$ 57,390,000	\$ 57,362,000
Accrued Actuarial Liability	\$105,325,000	\$103,114,000	\$101,973,000	\$100,114,000	\$ 95,945,000
Actuarial Funded Ratio	58.10%	56.50%	56.30%	57.30%	60.60%
Total Benefits & Refunds	\$ 7,237,244	\$ 7,143,341	\$ 6,923,904	\$ 6,779,577	\$ 6,614,154
Average Pension *	\$ 25,498	\$ 25,405	\$ 25,287	\$ 25,203	\$ 25,119
Annuitants & Beneficiaries	237,339	233,288	230,014	224,828	219,775
Average Annual Member Compensation *	\$ 53,458	\$ 52,188	\$ 50,925	\$ 49,989	\$ 48,787
Active Members	255,749	256,362	255,945	257,080	259,868
Retirements	8,746	9,840	9,479	10,135	10,813

* All dollar amounts are in thousands, except Average Annual Member Compensation and Average Pension.

** Data for these categories relate to the actuarial valuation for fiscal year ended June 30, 2024. Results for this valuation were not available at publication date.

*** Excludes Health Options Program and Defined Contribution Plan.

Total Changes in Fiduciary Net Position - Pension 10 Year Trend

(Dollar Amounts in Thousands)

Additions to Fiduciary Net Position					
Year Ended June 30	Member Contributions	Employer Contributions	Net Investment Income (Loss)	Total Additions	
2024	\$ 1,197,871	\$ 5,262,714	\$ 5,704,271	\$ 12,164,856	
2023	1,174,580	5,249,018	2,795,296	9,218,894	
2022	1,134,051	4,997,912	(267,250)	5,864,713	
2021	1,080,701	4,759,189	14,754,624	20,594,514	
2020	1,067,957	4,676,413	1,001,846	6,746,216	
2019	1,064,043	4,487,520	3,628,710	9,180,273	
2018	1,026,375	4,249,611	4,714,158	9,990,144	
2017	1,013,847	3,832,773	4,995,362	9,841,982	
2016	989,266	3,189,510	473,206	4,651,982	
2015	984,634	2,596,731	1,328,516	4,909,881	

Deductions from Fiduciary Net Position									
Benefit Payments									
Year Ended June 30	Annuities	Lump Sums**	Refunds	Administrative	Gross Receipts	Gross Payments	Net Transfers*	Total Deductions	Net Increase / (Decrease)
2024	\$ 6,553,139	\$1,121,821	\$ 45,726	\$ 55,447	\$ (4,499)	\$ 12,558	\$ 8,059	\$ 7,784,192	\$ 4,380,664
2023	6,426,706	1,108,373	43,110	53,823	(5,145)	7,940	2,794	7,634,806	1,584,088
2022	6,306,428	906,337	36,560	49,451	(5,272)	10,319	5,047	7,303,823	(1,439,110)
2021	6,181,330	917,539	26,925	49,616	(6,264)	14,802	8,538	7,183,948	13,410,566
2020	6,051,233	794,675	27,463	46,799	(6,539)	9,683	3,144	6,923,314	(177,098)
2019	5,925,048	808,016	27,027	48,931	(4,566)	5,647	1,081	6,810,103	2,370,170
2018	5,813,139	814,384	19,881	46,544	(5,679)	13,421	7,742	6,701,690	3,288,454
2017	5,673,309	780,015	20,928	45,127	(11,015)	10,342	(673)	6,518,706	3,323,276
2016	5,522,662	815,131	20,069	45,118	(9,916)	12,379	2,463	6,405,443	(1,753,461)
2015	5,356,085	840,167	20,920	42,331	(9,687)	13,116	3,429	6,262,932	(1,353,051)

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

** Lump-Sums includes both pension and death lump sums.

Total Changes in Fiduciary Net Position - Postemployment Healthcare Plans

10 Year Trend

(Dollar Amounts in Thousands)

Premium Assistance

Year Ended June 30	Additions to Fiduciary Net Position		
	Employer Contributions	Net Investment Income	Total Additions
2024	\$ 102,211	\$ 6,184	\$ 108,395
2023	114,721	4,474	119,195
2022	117,178	316	117,494
2021	116,519	260	116,779
2020	117,907	1,752	119,659
2019	114,829	2,313	117,142
2018	111,986	1,455	113,441
2017	110,985	663	111,648
2016	113,307	542	113,849
2015	116,808	215	117,023

Year Ended June 30	Deductions from Fiduciary Net Position			
	Benefits	Administrative	Total Deductions	Net Increase / (Decrease)
2024	\$ 111,659	\$ 1,004	\$ 112,663	\$ (4,268)
2023	112,870	1,085	113,955	5,240
2022	113,707	826	114,533	2,961
2021	113,538	1,143	114,681	2,098
2020	113,279	1,148	114,427	5,232
2019	112,777	1,914	114,691	2,451
2018	111,847	2,603	114,450	(1,009)
2017	110,229	2,239	112,468	(820)
2016	108,273	1,656	109,929	3,920
2015	106,298	2,142	108,440	8,583

Total Changes in Fiduciary Net Position - Postemployment Healthcare Plans 10 Year Trend (continued)

(Dollar Amounts in Thousands)

Health Options Program

Additions to Fiduciary Net Position						
Year Ended June 30	Participant Premiums	CMS Contributions	Net Investment Income	Total Additions		
2024	\$ 421,491	\$ 89,270	\$ 17,127	\$ 527,888		
2023	413,136	65,725	9,088	487,949		
2022	409,361	71,482	346	481,189		
2021	402,945	67,812	214	470,971		
2020	390,883	81,248	2,464	474,595		
2019	376,449	60,379	3,654	440,482		
2018	359,896	63,998	1,960	425,854		
2017	336,646	73,771	678	411,095		
2016	308,132	51,034	299	359,465		
2015	281,855	42,436	152	324,443		

Deductions from Fiduciary Net Position						
Year Ended June 30	Benefits	Administrative	Total Deductions	Net Increase / (Decrease)		
2024	\$ 487,975	\$ 40,598	\$ 528,573	\$ (685)		
2023	450,984	39,740	490,724	(2,775)		
2022	422,786	39,290	462,076	19,113		
2021	382,466	39,051	421,517	49,454		
2020	381,536	39,029	420,565	54,030		
2019	363,295	45,515	408,810	31,672		
2018	376,348	41,853	418,201	7,653		
2017	340,096	37,071	377,167	33,928		
2016	310,979	33,457	344,436	15,029		
2015	287,255	28,027	315,282	9,161		

Total Changes in Fiduciary Net Position-Defined Contribution (DC) Plan 10 Year Trend

(Dollar Amounts in Thousands)

Year Ended June 30	Additions to Fiduciary Net Position			
	Participant Contributions	Employer Contributions	Net Investment Income (Loss)	Total Additions
2024	\$ 69,748	\$ 53,796	\$ 44,415	\$ 167,959
2023	50,676	39,328	21,534	111,538
2022	32,875	25,424	(15,813)	42,486
2021	19,282	14,946	9,314	43,542
2020	8,343	6,586	655	15,584

Year Ended June 30	Deductions from Fiduciary Net Position			
	Benefits	Administrative	Total Deductions	Net Increase / (Decrease)
2024	\$ 9,982	\$ 3,538	\$ 13,520	\$ 154,439
2023	6,170	2,458	8,628	102,910
2022	3,630	2,161	5,791	36,695
2021	1,040	1,587	2,627	40,915
2020	12	3,167	3,179	12,405

Defined Contribution table is intended to show information for 10 years. Additional years will be displayed as they become available.

Summary Membership Data 10 Year Trend

For year ended June 30	Male			Female			Total Number of Active Members
	Average Age	Average Service	Average Annual Salaries	Average Age	Average Service	Average Annual Salaries	
2024	45.5	12.0	65,192	45.2	11.8	59,842	255,652
2023	45.6	12.2	63,940	45.3	11.9	58,106	251,732
2022	45.6	12.3	62,541	45.4	12.0	56,393	248,393
2021	45.6	12.4	61,388	45.5	12.0	54,874	248,410
2020	45.6	12.1	59,699	45.5	11.7	52,599	256,246
2019	45.3	12.0	58,960	45.5	11.6	51,395	255,749
2018	45.2	11.8	57,722	45.4	11.4	50,115	256,362
2017	45.0	11.7	56,369	45.3	11.3	48,879	255,945
2016	44.8	11.6	55,518	45.2	11.1	47,912	257,080
2015	44.6	11.5	54,269	45.0	11.0	46,720	259,868

Summary Annuity Data 10 Year Trend

For year ended June 30	Number of Annuitants & Beneficiaries	Total Annual Annuities (In Thousands)	Average Annual Annuity
2024	253,896	\$ 6,700,704	\$ 26,392
2023	249,724	6,542,014	26,197
2022	246,901	6,438,598	26,078
2021	242,839	6,311,758	25,992
2020	239,614	6,170,896	25,753
2019	237,339	6,051,632	25,498
2018	233,288	5,926,658	25,405
2017	230,014	5,816,388	25,287
2016	224,828	5,666,392	25,203
2015	219,775	5,520,620	25,119

Pension Benefits and Refund Deductions from Fiduciary Net Position

10 Year Trend

(Dollar Amounts in Thousands)

For year ended June 30	Retirements				
	Normal	Early	Disability	Pension Lump Sum Benefits	Survivor and Beneficiary**
2024	\$ 3,960,671	\$ 2,314,738	\$ 186,809	\$ 1,008,115	\$ 204,627
2023	3,871,686	2,275,803	185,692	1,008,341	193,557
2022	3,795,603	2,243,335	184,686	806,300	182,841
2021	3,725,656	2,187,995	175,004	821,512	188,702
2020	3,621,470	2,171,691	182,731	702,122	167,894
2019	3,485,370	2,111,663	181,178	700,911	253,942
2018	3,357,416	2,114,708	191,527	734,989	228,883
2017	3,292,906	2,040,966	186,674	678,736	254,042
2016	3,203,542	2,007,372	182,320	686,988	257,571
2015	3,088,036	1,986,684	177,693	709,240	234,599

For year ended June 30	Net Transfers*	Total Pension Benefits Deductions	Regular Refunds	Death Refunds	Total Pension Benefits and Refund Deductions
2024	\$ 8,059	\$ 7,683,019	\$ 45,360	\$ 366	\$ 7,728,745
2023	2,794	7,537,873	42,723	387	7,580,983
2022	5,047	7,217,812	36,131	429	7,254,372
2021	8,538	7,107,407	26,818	107	7,134,332
2020	3,144	6,849,052	27,328	135	6,876,515
2019	1,081	6,734,145	26,901	126	6,761,172
2018	7,742	6,635,265	19,833	47	6,655,146
2017	(673)	6,452,651	20,886	42	6,473,579
2016	2,463	6,340,256	20,032	37	6,360,325
2015	3,429	6,199,681	20,841	79	6,220,601

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

** Survivor and Beneficiary includes both death lump sums and survivor annuities.

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

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

Fiscal year ended June 30, 2024										
Normal and Early	4,460	20,951	27,356	24,033	25,030	29,119	49,128	37,494	10,898	228,469
	\$ 93	\$ 218	\$ 417	\$ 908	\$ 1,551	\$ 2,343	\$ 3,317	\$ 4,278	\$ 4,597	\$ 1,969
Disability	17	1,787	2,040	1,771	1,711	1,369	396	15	—	9,106
	\$ 2,296	\$ 842	\$ 1,209	\$ 1,682	\$ 2,425	\$ 3,234	\$ 4,007	\$ 3,636	\$ —	\$ 2,416
Beneficiary and Survivor	634	675	1,313	1,178	1,320	1,374	2,419	2,345	776	12,034
	\$ 897	\$ 214	\$ 351	\$ 640	\$ 952	\$ 1,371	\$ 1,906	\$ 2,346	\$ 2,560	\$ 1,249

Fiscal year ended June 30, 2023										
Normal and Early	4,498	20,545	27,211	23,748	24,526	28,588	48,923	37,259	10,466	225,764
	\$ 95	\$ 215	\$ 412	\$ 897	\$ 1,535	\$ 2,315	\$ 3,296	\$ 4,261	\$ 4,592	\$ 1,958
Disability	17	1,819	2,054	1,748	1,706	1,347	389	17	—	9,097
	\$ 2,296	\$ 858	\$ 1,075	\$ 1,598	\$ 2,359	\$ 3,216	\$ 4,069	\$ 3,559	\$ —	\$ 2,114
Beneficiary and Survivor	674	660	1,279	1,155	1,300	1,326	2,354	2,273	756	11,777
	\$ 892	\$ 211	\$ 342	\$ 624	\$ 929	\$ 1,337	\$ 1,855	\$ 2,290	\$ 2,503	\$ 1,220

Fiscal year ended June 30, 2022										
Normal and Early	4,485	20,084	27,047	23,240	23,899	27,959	48,705	37,077	9,941	222,436
	\$ 92	\$ 207	\$ 399	\$ 870	\$ 1,499	\$ 2,279	\$ 3,276	\$ 4,245	\$ 4,584	\$ 1,939
Disability	17	1,827	2,034	1,757	1,695	1,354	391	17	—	9,092
	\$ 2,296	\$ 792	\$ 1,026	\$ 1,584	\$ 2,358	\$ 3,176	\$ 3,999	\$ 3,559	\$ —	\$ 2,088
Beneficiary and Survivor	705	629	1,257	1,137	1,259	1,291	2,250	2,179	756	11,463
	\$ 908	\$ 211	\$ 335	\$ 606	\$ 907	\$ 1,297	\$ 1,810	\$ 2,227	\$ 2,403	\$ 1,189

Fiscal year ended June 30, 2021										
Normal and Early	4,468	19,690	26,884	22,719	23,313	27,320	48,496	36,849	9,502	219,241
	\$ 88	\$ 206	\$ 390	\$ 853	\$ 1,475	\$ 2,265	\$ 3,265	\$ 4,235	\$ 4,592	\$ 1,930
Disability	16	1,842	2,057	1,698	1,659	1,363	380	17	1	9,033
	\$ 2,318	\$ 813	\$ 1,135	\$ 1,534	\$ 2,283	\$ 3,062	\$ 3,966	\$ 3,559	\$ 4,550	\$ 2,580
Beneficiary and Survivor	749	596	1,219	1,114	1,192	1,251	2,155	2,051	734	11,061
	\$ 907	\$ 209	\$ 325	\$ 579	\$ 875	\$ 1,252	\$ 1,757	\$ 2,167	\$ 2,310	\$ 1,153

Fiscal year ended June 30, 2020										
Normal and Early	4,498	19,335	26,748	22,391	22,666	26,725	48,227	36,688	9,153	216,431
	\$ 86	\$ 206	\$ 393	\$ 835	\$ 1,444	\$ 2,229	\$ 3,240	\$ 4,209	\$ 4,591	\$ 1,915
Disability	17	1,937	2,159	1,830	1,776	1,425	390	17	1	9,552
	\$ 2,197	\$ 746	\$ 972	\$ 1,593	\$ 2,311	\$ 3,062	\$ 3,960	\$ 3,559	\$ 4,550	\$ 2,550
Beneficiary and Survivor	783	571	1,180	1,102	1,148	1,191	2,031	1,972	717	10,695
	\$ 927	\$ 203	\$ 322	\$ 562	\$ 856	\$ 1,219	\$ 1,717	\$ 2,101	\$ 2,206	\$ 1,124

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

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

Fiscal year ended June 30, 2019

Normal and Early	4,504	18,870	26,468	22,032	22,088	26,182	47,919	36,550	8,757	213,370
	\$ 85	\$ 216	\$ 385	\$ 817	\$ 1,413	\$ 2,200	\$ 3,226	\$ 4,194	\$ 4,604	\$ 1,904
Disability	17	1,885	2,095	1,741	1,716	1,398	361	17	1	9,231
	\$ 2,197	\$ 750	\$ 965	\$ 1,628	\$ 2,265	\$ 3,017	\$ 3,475	\$ 3,559	\$ 4,550	\$ 2,490
Beneficiary and Survivor	786	545	1,143	1,084	1,123	1,150	1,963	1,901	700	10,395
	\$ 933	\$ 198	\$ 315	\$ 551	\$ 836	\$ 1,199	\$ 1,680	\$ 2,019	\$ 2,128	\$ 1,095

Fiscal year ended June 30, 2018

Normal and Early	4,491	18,293	26,168	21,619	21,551	25,664	47,527	36,395	8,352	210,060
	\$ 83	\$ 218	\$ 380	\$ 807	\$ 1,388	\$ 2,176	\$ 3,210	\$ 4,180	\$ 4,572	\$ 1,890
Disability	19	1,884	2,088	1,708	1,694	1,417	353	21	1	9,185
	\$ 2,322	\$ 784	\$ 956	\$ 1,631	\$ 2,189	\$ 3,032	\$ 3,260	\$ 3,562	\$ 4,550	\$ 2,476
Beneficiary and Survivor	826	519	1,113	1,055	1,096	1,088	1,885	1,825	682	10,089
	\$ 945	\$ 196	\$ 308	\$ 528	\$ 806	\$ 1,178	\$ 1,636	\$ 1,953	\$ 2,047	\$ 1,066

Fiscal year ended June 30, 2017

Normal and Early	4,417	17,616	25,734	21,177	20,989	24,996	47,090	36,155	8,019	206,193
	\$ 81	\$ 222	\$ 382	\$ 793	\$ 1,357	\$ 2,145	\$ 3,193	\$ 4,161	\$ 4,539	\$ 1,875
Disability	18	1,831	2,001	1,634	1,639	1,381	346	6	1	8,857
	\$ 2,449	\$ 778	\$ 948	\$ 1,638	\$ 2,208	\$ 3,024	\$ 3,240	\$ 3,951	\$ 4,550	\$ 2,532
Beneficiary and Survivor	864	507	1,104	1,025	1,074	1,085	1,800	1,756	669	9,884
	\$ 953	\$ 195	\$ 301	\$ 505	\$ 781	\$ 114	\$ 1,586	\$ 1,880	\$ 1,960	\$ 919

Fiscal year ended June 30, 2016

Normal and Early	4,437	19,030	25,603	21,411	21,273	25,037	46,029	36,489	5,534	204,843
	\$ 93	\$ 189	\$ 373	\$ 798	\$ 1,383	\$ 2,200	\$ 3,247	\$ 4,250	\$ 4,616	\$ 1,905
Disability	—	1,829	2,149	1,714	1,567	1,337	554	17	9	9,176
	\$ —	\$ 777	\$ 1,001	\$ 1,342	\$ 1,985	\$ 2,807	\$ 3,588	\$ 3,078	\$ 2,353	\$ 1,881
Beneficiary and Survivor	—	6,100	580	574	593	609	1,008	943	402	10,809
	\$ —	\$ 1,256	\$ 278	\$ 421	\$ 613	\$ 902	\$ 1,233	\$ 1,452	\$ 1,508	\$ 851

Fiscal year ended June 30, 2015

Normal and Early	4,360	17,744	24,820	20,719	20,682	24,379	45,677	36,248	5,532	200,161
	\$ 94	\$ 186	\$ 359	\$ 772	\$ 1,344	\$ 2,153	\$ 3,218	\$ 4,222	\$ 4,564	\$ 1,879
Disability	—	1,841	2,134	1,686	1,534	1,332	550	19	9	9,105
	\$ —	\$ 762	\$ 980	\$ 1,306	\$ 1,937	\$ 2,773	\$ 3,602	\$ 3,235	\$ 2,353	\$ 1,883
Beneficiary and Survivor	—	5,481	619	621	628	648	1,067	1,018	427	10,509
	\$ —	\$ 1,219	\$ 271	\$ 399	\$ 611	\$ 883	\$ 1,221	\$ 1,420	\$ 1,497	\$ 836

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

	Years of Credited Service								
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+
Fiscal year ended June 30, 2024									
Number of retired members	179	885	921	954	835	746	637	301	73
Final Average Salary	\$ 22,217	\$ 30,042	\$ 40,162	\$ 49,336	\$ 54,997	\$ 72,695	\$ 85,729	\$ 89,608	\$ 66,204
Monthly Benefit	\$ 114	\$ 297	\$ 667	\$ 1,297	\$ 1,883	\$ 2,999	\$ 4,258	\$ 5,184	\$ 4,567
Fiscal year ended June 30, 2023									
Number of retired members	195	901	1,000	1,041	1,078	931	850	377	66
Final Average Salary	\$ 22,183	\$ 28,396	\$ 39,643	\$ 49,857	\$ 59,972	\$ 70,629	\$ 84,743	\$ 90,191	\$ 80,547
Monthly Benefit	\$ 119	\$ 275	\$ 688	\$ 1,336	\$ 2,068	\$ 2,961	\$ 4,207	\$ 5,195	\$ 5,399
Fiscal year ended June 30, 2022									
Number of retired members	199	896	963	906	871	630	576	253	73
Final Average Salary	\$ 20,801	\$ 29,994	\$ 36,567	\$ 45,363	\$ 54,314	\$ 68,144	\$ 79,417	\$ 81,632	\$ 77,212
Monthly Benefit	\$ 112	\$ 290	\$ 635	\$ 1,177	\$ 1,866	\$ 2,872	\$ 3,937	\$ 4,685	\$ 5,194
Fiscal year ended June 30, 2021									
Number of retired members	194	939	1,077	1,023	1,037	753	734	299	84
Final Average Salary	\$ 18,606	\$ 27,782	\$ 37,252	\$ 46,464	\$ 54,096	\$ 68,005	\$ 78,032	\$ 78,324	\$ 75,778
Monthly Benefit	\$ 105	\$ 262	\$ 654	\$ 1,228	\$ 1,875	\$ 2,892	\$ 3,887	\$ 4,612	\$ 5,192
Fiscal year ended June 30, 2020									
Number of retired members	172	850	821	711	641	471	405	181	70
Final Average Salary	\$ 21,714	\$ 30,682	\$ 37,547	\$ 46,199	\$ 54,113	\$ 64,876	\$ 71,857	\$ 76,131	\$ 79,480
Monthly Benefit	\$ 124	\$ 291	\$ 620	\$ 1,202	\$ 1,858	\$ 2,721	\$ 3,613	\$ 4,438	\$ 5,331
Fiscal year ended June 30, 2019									
Number of retired members	212	1,322	1,329	1,439	1,321	1,201	1,212	517	169
Final Average Salary	\$ 19,164	\$ 29,025	\$ 36,844	\$ 47,538	\$ 57,936	\$ 67,160	\$ 79,421	\$ 82,570	\$ 82,190
Monthly Benefit	\$ 104	\$ 272	\$ 648	\$ 1,258	\$ 2,017	\$ 2,822	\$ 3,967	\$ 4,910	\$ 5,510
Fiscal year ended June 30, 2018									
Number of retired members	263	1,482	1,494	1,582	1,412	1,405	1,336	665	208
Final Average Salary	\$ 20,236	\$ 31,055	\$ 37,759	\$ 46,933	\$ 58,435	\$ 67,357	\$ 77,429	\$ 82,396	\$ 81,987
Monthly Benefit	\$ 104	\$ 275	\$ 680	\$ 1,230	\$ 2,034	\$ 2,849	\$ 3,906	\$ 4,944	\$ 5,575
Fiscal year ended June 30, 2017									
Number of retired members	265	1,614	1,482	1,446	1,220	1,307	1,155	709	160
Final Average Salary	\$ 18,974	\$ 30,501	\$ 37,885	\$ 45,909	\$ 56,379	\$ 66,588	\$ 77,070	\$ 79,036	\$ 84,568
Monthly Benefit	\$ 111	\$ 279	\$ 651	\$ 1,217	\$ 2,000	\$ 2,839	\$ 3,929	\$ 4,736	\$ 5,806
Fiscal year ended June 30, 2016									
Number of retired members	373	1,865	1,576	1,443	1,334	1,352	1,160	775	181
Final Average Salary	\$ 18,335	\$ 31,100	\$ 37,355	\$ 48,242	\$ 56,310	\$ 68,557	\$ 75,449	\$ 79,529	\$ 78,836
Monthly Benefit	\$ 129	\$ 269	\$ 634	\$ 1,302	\$ 1,964	\$ 2,958	\$ 3,890	\$ 4,845	\$ 5,464
Fiscal year ended June 30, 2015									
Number of retired members	393	2,099	1,649	1,469	1,381	1,412	1,286	961	234
Final Average Salary	\$ 17,942	\$ 30,693	\$ 37,628	\$ 47,743	\$ 57,560	\$ 67,961	\$ 76,491	\$ 80,236	\$ 79,194
Monthly Benefit	\$ 113	\$ 264	\$ 637	\$ 1,274	\$ 2,031	\$ 2,929	\$ 3,995	\$ 4,884	\$ 5,402

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

	Years of Credited Service								
	< 5	5 - 9	10 - 14	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40+
Fiscal year ended June 30, 2024									
Number of retired members	—	2	—	121	157	178	200	92	33
Final Average Salary	\$ —	\$ 22,776	\$ —	\$ 56,474	\$ 61,145	\$ 77,542	\$ 92,018	\$ 95,992	\$ 67,547
Monthly Benefit	\$ —	\$ 100	\$ —	\$ 99	\$ 99	\$ 98	\$ 99	\$ 98	\$ 100
Fiscal year ended June 30, 2023									
Number of retired members	—	—	2	163	253	277	285	136	42
Final Average Salary	\$ —	\$ —	\$ 43,620	\$ 57,414	\$ 64,820	\$ 72,333	\$ 91,063	\$ 92,998	\$ 92,117
Monthly Benefit	\$ —	\$ —	\$ 100	\$ 99	\$ 100	\$ 100	\$ 99	\$ 99	\$ 99
Fiscal year ended June 30, 2022									
Number of retired members	—	1	1	120	207	209	192	83	39
Final Average Salary	\$ —	\$ 43,256	\$ 25,553	\$ 50,295	\$ 59,139	\$ 67,466	\$ 85,152	\$ 82,408	\$ 82,455
Monthly Benefit	\$ —	\$ 100	\$ 100	\$ 100	\$ 100	\$ 97	\$ 99	\$ 99	\$ 100
Fiscal year ended June 30, 2021									
Number of retired members	—	1	—	186	270	278	261	107	43
Final Average Salary	\$ —	\$ 49,634	\$ —	\$ 52,262	\$ 55,535	\$ 69,202	\$ 78,565	\$ 80,486	\$ 75,087
Monthly Benefit	\$ —	\$ 100	\$ —	\$ 100	\$ 99	\$ 99	\$ 99	\$ 100	\$ 100
Fiscal year ended June 30, 2020									
Number of retired members	—	2	5	124	161	172	167	82	30
Final Average Salary	\$ —	\$ 34,396	\$ 45,093	\$ 48,660	\$ 55,672	\$ 67,434	\$ 72,738	\$ 79,472	\$ 82,504
Monthly Benefit	\$ —	\$ 100	\$ 100	\$ 100	\$ 99	\$ 96	\$ 99	\$ 99	\$ 100
Fiscal year ended June 30, 2019									
Number of retired members	—	3	7	323	457	578	618	283	100
Final Average Salary	\$ —	\$ 41,862	\$ 59,557	\$ 53,896	\$ 63,581	\$ 70,831	\$ 80,662	\$ 81,735	\$ 80,136
Monthly Benefit	\$ —	\$ 100	\$ 100	\$ 100	\$ 99	\$ 99	\$ 99	\$ 99	\$ 100
Fiscal year ended June 30, 2018									
Number of retired members	—	4	11	407	488	686	719	397	129
Final Average Salary	\$ —	\$ 50,976	\$ 51,460	\$ 54,563	\$ 62,642	\$ 69,894	\$ 78,859	\$ 82,780	\$ 84,484
Monthly Benefit	\$ —	\$ 100	\$ 100	\$ 100	\$ 99	\$ 99	\$ 99	\$ 99	\$ 99
Fiscal year ended June 30, 2017									
Number of retired members	—	8	11	407	478	691	697	428	111
Final Average Salary	\$ —	\$ 42,397	\$ 44,435	\$ 52,914	\$ 62,343	\$ 70,886	\$ 77,638	\$ 80,600	\$ 88,119
Monthly Benefit	\$ —	\$ 98	\$ 100	\$ 99	\$ 99	\$ 99	\$ 98	\$ 98	\$ 99
Fiscal year ended June 30, 2016									
Number of retired members	—	11	18	364	490	751	679	477	119
Final Average Salary	\$ —	\$ 49,259	\$ 54,492	\$ 55,542	\$ 61,110	\$ 71,925	\$ 76,944	\$ 82,180	\$ 80,265
Monthly Benefit	\$ —	\$ 100	\$ 98	\$ 99	\$ 99	\$ 99	\$ 99	\$ 99	\$ 99
Fiscal year ended June 30, 2015									
Number of retired members	—	9	23	375	505	779	729	632	154
Final Average Salary	\$ —	\$ 43,082	\$ 49,673	\$ 55,760	\$ 61,127	\$ 71,418	\$ 79,086	\$ 80,931	\$ 78,375
Monthly Benefit	\$ —	\$ 98	\$ 100	\$ 100	\$ 98	\$ 99	\$ 99	\$ 98	\$ 99

Ten Largest Employers

(Based on number of reported members)

As of June 30, 2024		
Employer	Number of Reported Members	Percentage of Total
1. Philadelphia City School District	19,857	7.79%
2. Pittsburgh School District	3,714	1.46%
3. Central Bucks School District	3,004	1.18%
4. Allentown City School District	2,205	0.87%
5. North Penn School District	2,152	0.84%
6. Bethlehem Area School District	1,979	0.78%
7. Reading School District	1,935	0.76%
8. Commonwealth Charter Academy	1,893	0.74%
9. Downingtown Area School District	1,807	0.71%
10. Lower Merion School District	1,775	0.70%

As of June 30, 2015		
Employer	Number of Reported Members	Percentage of Total
1. Philadelphia City School District	17,422	6.20%
2. Pittsburgh School District	4,099	1.46%
3. Central Bucks School District	2,738	0.98%
4. North Penn School District	2,213	0.79%
5. Allentown City School District	2,062	0.73%
6. Bethlehem Area School District	1,949	0.69%
7. Reading School District	1,855	0.66%
8. Council Rock School District	1,820	0.65%
9. Lower Merion School District	1,765	0.63%
10. Pennsbury School District	1,713	0.61%

Schedule of Employers for FY 2024

School Districts

A

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

B

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

Brookville Area
Brownsville Area
Burgettstown Area
Burrell
Butler Area

C

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

Cornell
Cornwall-Lebanon
Corry Area
Coudersport Area
Council Rock
Cranberry Area
Crawford Central
Crestwood
Cumberland Valley
Curwensville Area

D

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

E

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

F

Fairfield Area
Fairview
Fannett Metal
Farrell Area
Ferndale Area

Schedule of Employers (Continued)

Fleetwood Area
 Forbes Road
 Forest Area
 Forest City Regional
 Forest Hills
 Fort Cherry
 Fort Leboeuf
 Fox Chapel Area
 Franklin Area
 Franklin Regional
 Frazier
 Freedom Area
 Freeport Area

G

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

H

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

I

Indiana Area
 Interboro
 Iroquois

J

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

K

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

L

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

M

Mahanoy Area
 Manheim Central
 Manheim Township
 Marion Center Area

Marple Newtown
 Mars Area
 McGuffey
 Mckeesport Area
 Mechanicsburg Area
 Mercer Area
 Methacton
 Meyersdale Area
 Mid Valley
 Middletown Area
 Mid-West
 Midland Borough
 Mifflin County
 Mifflinburg Area
 Millcreek Township
 Millersburg Area

Millville Area
 Milton Area
 Minersville Area
 Mohawk Area
 Monessen
 Moniteau
 Montgomery Area
 Montour
 Montoursville Area
 Montrose Area
 Moon Area
 Morrisville Borough
 Moshannon Valley
 Mount Carmel Area
 Mount Pleasant Area
 Mount Union Area
 Mountain View
 Mt Lebanon
 Muhlenberg
 Muncy

N

Nazareth Area
 Neshaminy
 Neshannock Township
 New Brighton Area
 New Castle Area
 New Hope-Solebury
 New Kensington-Arnold
 Newport
 Norristown Area
 North Allegheny
 North Clarion County
 North East
 North Hills
 North Penn
 North Pocono

Schedule of Employers (Continued)

North Schuylkill
 North Star
 Northampton Area
 Northeast Bradford
 Northeastern York
 Northern Bedford County
 Northern Cambria
 Northern Lebanon
 Northern Lehigh
 Northern Potter
 Northern Tioga
 Northern York County
 Northgate
 Northwest Area
 Northwestern
 Northwestern Lehigh
 Norwin

O

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

P

Palisades
 Palmerton Area
 Palmyra Area
 Panther Valley S
 Parkland
 Pen Argyl Area
 Penn Cambria
 Penn Hills
 Penn Manor
 Penncrest
 Penn-Delco
 Pennridge
 Penns Manor
 Penns Valley Area
 Pennsbury
 Penn-Trafford
 Pequea Valley
 Perkiomen Valley
 Peters Township
 Philadelphia City
 Philipsburg-Osceola Area
 Phoenixville Area
 Pine Grove Area
 Pine-Richland

Pittsburgh
 Pittston Area
 Pleasant Valley
 Plum Borough
 Pocono Mountain
 Port Allegany
 Portage Area
 Pottsgrove
 Pottstown
 Pottsville Area
 Punxsutawney Area
 Purchase Line

Q

Quaker Valley
 Quakertown Community

R

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

S

Saint Clair Area
 Saint Marys Area
 Salisbury Township
 Salisbury-Elk Lick
 Saucon Valley
 Sayre Area
 Schuylkill Haven Area
 Schuylkill Valley
 Scranton
 Selinsgrove Area
 Seneca Valley
 Shade Central City
 Shaler Area
 Shamokin Area
 Shanksville-Stonycreek
 Sharon City
 Sharpsville Area

Shenandoah Valley
 Shenango Area
 Shikellamy
 Shippensburg Area
 Slippery Rock Area
 Smethport Area
 Solanco
 Somerset Area
 Souderton Area
 South Allegheny
 South Eastern
 South Fayette Township
 South Middleton
 South Park
 South Side Area
 South Western
 South Williamsport Area
 Southeast Delco
 Southeastern Greene
 Southern Columbia Area
 Southern Fulton
 Southern Huntingdon
 Southern Lehigh
 Southern Tioga
 Southern York County
 Southmoreland
 Spring Cove
 Spring Grove Area
 Springfield
 Springfield Township
 Spring-Ford Area
 State College Area
 Steel Valley
 Steelton-Highspire
 Sto-Rox
 Stroudsburg Area
 Sullivan County
 Susquehanna Community
 Susquehanna Township
 Susquenita

T

Tamaqua Area
 Titusville Area
 Towanda Area
 Tredyffrin-Easttown
 Trinity Area
 Tri-Valley
 Troy Area
 Tulpehocken Area
 Tunkhannock Area
 Turkeyfoot Valley Area
 Tuscarora

Schedule of Employers (Continued)

Tussey Mountain
Twin Valley
Tyrone Area

U

Union
Union Area
Union City Area
Uniontown Area
Unionville-Chadds Ford
United
Upper Adams
Upper Darby
Upper Dauphin Area
Upper Dublin
Upper Merion Area
Upper Moreland Township
Upper Perkiomen
Upper Saint Clair

V

Valley Grove
Valley View

W

Wallenpaupack Area
Wallingford-Swarthmore
Warren County
Warrior Run
Warwick
Washington
Wattsburg Area
Wayne Highlands
Waynesboro Area
Weatherly Area
Wellsboro Area
West Allegheny
West Branch Area
West Chester Area
West Greene
West Jefferson Hills
West Middlesex Area
West Mifflin Area
West Perry
West Shore
West York Area
Western Beaver County

Western Wayne
Westmont Hilltop
Whitehall-Coplay
Wilkes Barre Area
Wilkesburg Borough
William Penn
Williams Valley
Williamsburg Community
Williamsport Area
Wilmington Area
Wilson
Wilson Area
Windber Area
Wissahickon
Woodland Hills
Wyalusing Area
Wyoming Area
Wyoming Valley West
Wyomissing Area

Y

York City
York Suburban
Yough

Area Vocational Technical Schools

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

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

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

Schedule of Employers (Continued)

Intermediate Units

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

Colleges / Universities

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

Other

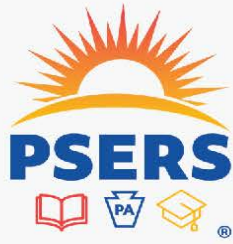
Berks County Earned Income Tax Bureau	Pennsylvania School for the Deaf
Department of Education - Commonwealth of Pennsylvania	Western Pennsylvania School for Blind Children
Lancaster County Academy	Western Pennsylvania School for the Deaf
Overbrook School for the Blind	York Adams Academy
Pennsylvania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

Charter Schools

21st Century Cyber	Bucks County Montessori	Community Academy of Philadelphia
Achievement House	California Academy of Learning	Crispus Attucks Youthbuild
Ad Prima	Casa	Discovery
Agora Cyber	Center for Student Learning Charter School at Pennsbury	Dr. Robert Ketterer
Alliance For Progress	Central Pennsylvania Digital Learning Foundation	Environmental Charter School at Frick Park
Antonia Pantoja	Centre Learning Community	Esperanza Academy
Arts Academy	Christopher Columbus	Esperanza Cyber
Aspira Bilingual Cyber	Circle of Seasons	Eugenio Maria de Hostos Community
Avon Grove	City Charter High School	Evergreen Community
Baden Academy	Collegium	Fell
Bear Creek Community	Commonwealth Charter Academy	First Philadelphia Charter School for Literacy
Belmont		Folk Arts - Cultural Treasures
Boys' Latin of Philadelphia		

Statistical Section

Franklin Towne Charter Elementary School	Nittany Valley	West Philadelphia Achievement Charter
Franklin Towne Charter High School	Northwood Academy	Elementary School
Frederick Douglas Mastery	Pan American Academy	Wissahickon
Freire	Passport Academy	York Academy Regional
Gettysburg Montessori	Penn Hills C S for Entrepreneurship	Young Scholars
Gillingham	Pennsylvania Cyber	Young Scholars of Central Pennsylvania
Global Leadership Academy	Pennsylvania Distance Learning	Young Scholars of Western Pennsylvania
Global Leadership Academy C S- Huey	Pennsylvania Leadership	
Green Woods	Pennsylvania Steam Academy	
Hardy Williams Academy	Pennsylvania Virtual	
Hope for Hyndman	People for People	
Howard Gardner Multiple Intelligence	Perseus House Charter School of	
IMHOTEP Institute	Excellence	
Independence	Philadelphia Academy	
Infinity	Philadelphia Charter School for Arts &	
Inquiry	Sciences at H.R. Edmunds	
Insight PA Cyber	Philadelphia Electrical & Technology	
Keystone Academy	Charter High School	
Keystone Education Center	Philadelphia Harambee Institute of Science	
Kipp Academy	and Technology	
La Academia: The Partnership	Philadelphia Montessori	
Laboratory	Philadelphia Performing Arts	
Lehigh Valley Academy Regional	Premier Arts & Science	
Lehigh Valley Charter School for the	Preparatory Charter School of Mathematics,	
Performing Arts	Science, Technology & Careers	
Lehigh Valley Dual Language	Propel Charter School - Braddock Hills	
Lincoln	Propel Charter School - East	
Lincoln Leadership Academy	Propel Charter School - Hazelwood	
Lincoln Park Performing Arts	Propel Charter School - Homestead	
Lindley Academy	Propel Charter School - McKeesport	
Manchester Academic	Propel Charter School - Montour	
Mariana Bracetti Academy	Propel Charter School - Northside	
Maritime Academy	Propel Charter School - Pitcairn	
Mastery Charter High School	Renaissance Academy - Edison	
Mastery Charter School - Cleveland	Richard Allen Preparatory	
Elementary	Robert Benjamin Wiley Community	
Mastery Charter School - Clymer	Roberto Clemente	
Elementary	Russell Byers	
Mastery Charter School - Francis D	Sankofa Freedom Academy	
Pastorius Elementary	School Lane	
Mastery Charter School - Harrity	Seven Generations	
Elementary	Souderton Charter School Collaborative	
Mastery Charter School - John Wister	Spectrum	
Elementary	Sugar Valley Rural	
Mastery Charter School - Mann Elementary	Sylvan Heights Science	
Mastery Charter School - Pickett Campus	Tacony Academy	
Mastery Charter School - Shoemaker	Tidioute Community	
Campus	Universal Alcorn	
Mastery Charter School - Simon Gratz	Universal Audenried	
Mastery Charter School - Smedley Campus	Universal Creighton	
Mastery Charter School - Thomas Campus	Universal Institute	
Math Civics and Sciences	Universal Vare	
Mathematics, Science & Technology	Urban Academy Greater Pittsburgh	
Community	Urban Pathways 6-12	
Memphis Street Academy C S - J.P. Jones	Urban Pathways K - 5 College	
Montessori Regional	Vida	
Multi-Cultural Academy	West Oak Lane	
New Day		
New Foundations		



CONTACT



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1.888.773.7748



5 N 5th Street

Harrisburg, PA 17101-1905

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