



School Employees Retirement System of Ohio
Serving the People Who Serve Our Schools®



2023

**ANNUAL COMPREHENSIVE
FINANCIAL REPORT**

For the Year Ended
June 30, 2023

OHIO AUDITOR OF STATE
KEITH FABER



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Columbus, Ohio 43215
IPAReport@ohioauditor.gov
(800) 282-0370

Retirement Board
School Employees Retirement System of Ohio
300 E. Broad Street, Suite 100
Columbus, Ohio 43215

We have reviewed the *Independent Auditor's Report* of the School Employees Retirement System of Ohio, Franklin County, prepared by Plante & Moran, PLLC, for the audit period July 1, 2022 through June 30, 2023. Based upon this review, we have accepted these reports in lieu of the audit required by Section 117.11, Revised Code. The Auditor of State did not audit the accompanying financial statements and, accordingly, we are unable to express, and do not express an opinion on them.

Our review was made in reference to the applicable sections of legislative criteria, as reflected by the Ohio Constitution, and the Revised Code, policies, procedures and guidelines of the Auditor of State, regulations and grant requirements. The School Employees Retirement System of Ohio is responsible for compliance with these laws and regulations.

A handwritten signature in black ink that reads "Keith Faber".

Keith Faber
Auditor of State
Columbus, Ohio

December 14, 2023

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**SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO
ANNUAL COMPREHENSIVE FINANCIAL REPORT**

For the year ended June 30, 2023

Prepared by SERS Staff
Richard Stensrud, Executive Director
300 E. Broad St., Suite 100, Columbus, Ohio 43215-3746

www.ohsers.org

Serving the People Who Serve Our Schools®

Mission

To provide our membership with valuable lifetime pension benefit programs and services

Vision

Through the continuous pursuit of excellence and innovative solutions, we will partner with our stakeholders so that our membership will understand and achieve security in retirement

Values

- Focus on Service
- Be Accountable
- Support Collaboration
- Respect Differences and Practice Inclusion
- Remain Resourceful and Embrace Change

Core Beliefs

- We are here to serve.
- We are open and honest.
- We are professional.
- We are dedicated.
- We are enthusiastic.
- We are high performers.
- We are valuable partners.
- We are member advocates.
- We are innovators.
- **WE ARE SERS.**

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“ SERS’ primary objective is to assure that at the time benefits commence, sufficient funds will be available to provide retirement, disability, and survivor benefits for its members. ”

– Richard Stensrud, *Executive Director*



159,873
Members



81,833
Retirees & Beneficiaries



39,656
Total Covered Lives (Health)



1,069
Contracted Employers

For every dollar in employer contributions invested in SERS’ retirement benefits last year, \$2.45 was returned to local economies.



Seated (front row, left to right): Hugh W. Garside Jr., Barbra M. Phillips, Jeffrey T. DeLeone, Catherine P. Moss
Standing (back row left to right): Richard Stensrud - Executive Director, James H. Haller, Daniel L. Wilson, James A. Rossler Jr.,
Frank A. Weglarz, Matthew King

Jeffrey T. DeLeone
Chair, Appointed Member
Term Expires 12/5/2024

James H. Haller
Employee-Member
Term Expires 6/30/2025

Barbra M. Phillips
Employee-Member
Term Expires 6/30/2025

Frank A. Weglarz
Vice-Chair, Retiree-Member
Term Expires 6/30/2025

Matthew King
Employee-Member
Term Expires 6/30/2024

James A. Rossler Jr.
Appointed Member
Term Expires 11/4/2024

Hugh W. Garside Jr.
Employee-Member
Term Expires 6/30/2023

Catherine P. Moss
Retiree-Member
Term Expires 6/30/2024

Daniel L. Wilson
Appointed Member
Term Expires 9/27/2024



Richard Stensrud
Executive Director



Karen Roggenkamp
Deputy Executive Director



Joseph Bell
Chief Risk Officer



Jeff Davis
Chief Audit Officer



Marni Hall
Chief Financial Officer



Farouki Majeed
Chief Investment Officer



Joseph Marotta
General Counsel



John Grumney
Director - Member
Services



Mike McManaway
Assistant Director -
Building Services



Michelle Miller
Director - Administrative
Services

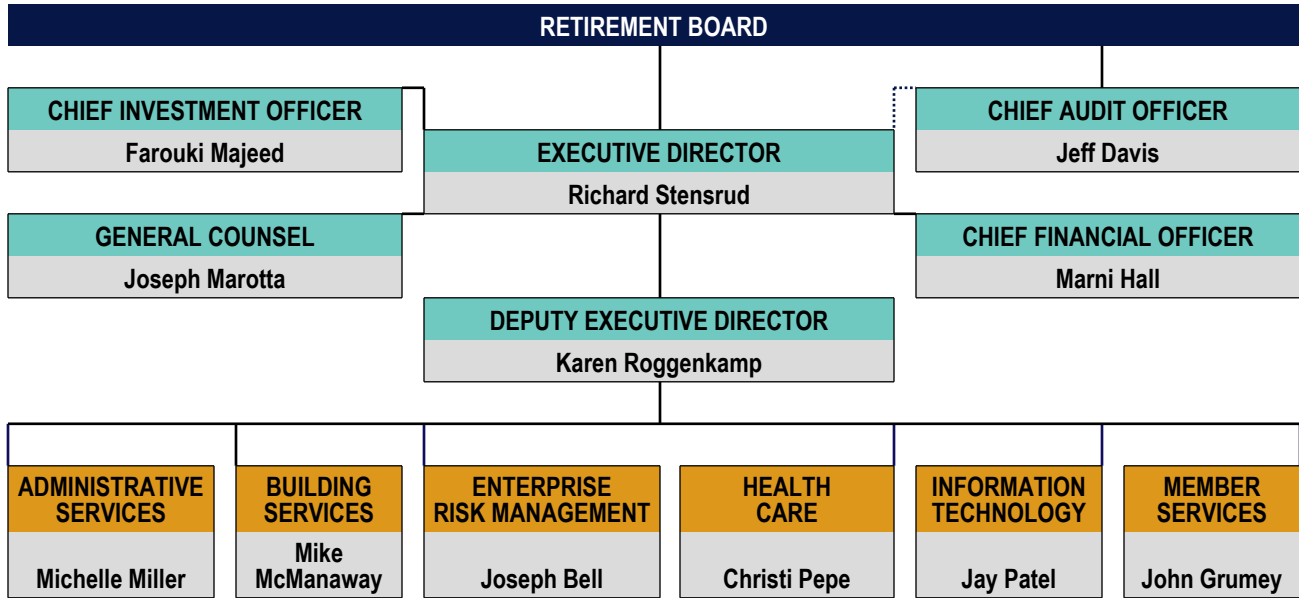


Jay Patel
Chief Technology
Officer



Christi Pepe
Director - Health Care
Services

Organizational Chart and Advisors to the Retirement Board



Advisors to the Retirement Board

Investment Consultant

Wilshire Associates, Inc.
Santa Monica, California

Actuary

Cavanaugh Macdonald Consulting, LLC
Kennesaw, Georgia

Medical Advisor

Dr. Glen Borchers
Columbus, Ohio

Independent Auditor

(under contract with the Auditor of State)

Plante & Moran, PLLC
Toledo, Ohio

Investment Consultants and Investment Managers and Brokers' Fees - see pages 74 - 75



Government Finance Officers Association

Certificate of
Achievement
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School Employees Retirement System of Ohio

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2022

Christopher P. Morill

Executive Director/CEO



Public Pension Coordinating Council

**Public Pension Standards Award
For Funding and Administration
2023**

Presented to

School Employees Retirement System of Ohio

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

Alan H. Winkle

Alan H. Winkle
Program Administrator



SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

300 E. BROAD ST., SUITE 100 • COLUMBUS, OHIO 43215-3746
614-222-5853 • Toll-Free 800-878-5853 • www.ohsers.org

RICHARD STENSRUD
Executive Director

KAREN ROGGENKAMP
Deputy Executive Director

December 6, 2023

Dear Chair and Members of the Retirement Board:

On behalf of all management and staff, we are pleased to submit the *Annual Comprehensive Financial Report* of the School Employees Retirement System of Ohio (SERS) for the fiscal year ended June 30, 2023. We are responsible for the accuracy of the contents, and the completeness and fairness of the presentation, including disclosures. A narrative overview and analysis to accompany the basic financial statements is presented as Management's Discussion and Analysis (MD&A); it can be found immediately following the report of the independent auditor in the Financial Section. This letter of transmittal is designed to complement the MD&A.

Established in 1937 by an act of the Ohio General Assembly, SERS provides pensions and benefits to public and charter school employees who are not required to possess a certificate issued pursuant to sections 3319.22 to 3319.31 of the Ohio Revised Code in order to perform their duties. By statute, benefit plans include retirement for age and service, disability benefits, and survivor benefits that are paid upon the death of a member before retirement. A post-retirement health care program also is provided, although it is not required by law.

A system of internal accounting controls ensures the security of member and employer contributions and provides reasonable, but not absolute, assurance that assets are properly safeguarded, transactions are properly executed, and financial statements are reliable. Our independent external auditors have conducted an audit of the basic financial statements in accordance with auditing standards generally accepted in the United States of America. They have full and unrestricted access to you to discuss their audit and related findings concerning the integrity of financial reporting and adequacy of internal controls.

MAJOR INITIATIVES AND HIGHLIGHTS

Celebrating SERS' 85th Anniversary On September 1, 2022, SERS celebrated its 85th anniversary. Staff chose the theme of "gratitude for where we've been and what's to come" to engage with members via social media throughout the month. At least twice a week, staff posted trivia questions about SERS' past, shared historical photos, and provided insight into SERS' operations through its social media accounts.

Sustainability Discussions Prompt Health Care Changes In March, as part of the Board's health care sustainability discussions, they voted to equalize the health care premium subsidy rates for non-Medicare disability recipients and service retirees based on years of service.

This change takes effect beginning January 1, 2024. With expanded Marketplace plan subsidies and SERS' Wraparound Health Reimbursement Arrangement, non-Medicare recipients have access to coverage and affordability that meets or exceeds that offered by SERS. Representatives from UMR, previously HealthSCOPE Benefits, will assist disability and service retirees in selecting Marketplace plans that best meet their health care needs and budget.

Finally, SERS will implement an amended health care administrative rule that requires new retirees and disability benefit recipients who are not eligible for Medicare to receive Marketplace counseling before enrolling in SERS' health care coverage. Counseling will be provided by SERS' vendor, UMR, whose staff is licensed to enroll individuals in federal Marketplace plans. This requirement became effective on June 1, 2023, for everyone with a benefit effective date on or after

that date, and it applies to those who have previously waived SERS' coverage but wish to enroll on or after that date due to a qualifying event.

Benefit Inflation Control Tool Approved by State Legislature The Contribution Based Benefit Cap (CBBC) proposal approved by the SERS Board in September 2021, was drafted as a benefit inflation control (anti-spiking) statutory provision.

The Ohio Retirement Study Council (ORSC) endorsed the proposal and Senators Kirk Schuring and Jay Hottinger introduced stand-alone legislation (S.B. 347) of the SERS CBBC proposal in 2022. Because this legislation did not get passed by the end of the year, staff had to begin the process over again in 2023.

As the new legislative year began, SERS staff worked closely with ORSC member, Representative Adam Bird, on reintroduction of the CBBC as H.B. 146 in the new General Assembly. SERS provided proponent testimony on H.B. 146 before the House Pensions committee in May. The committee voted out the CBBC legislation unanimously at a subsequent hearing.

As H.B. 146 was moving through the legislative process, staff also pursued an opportunity to include the CBBC language in the State Operating Budget (H.B. 33). Staff worked closely with Senators Schuring and Louis Blessing, and Representative Bird on amendment language for H.B. 33. SERS' CBBC proposal was included as an amendment to H.B. 33 and signed into law by the Governor with an effective date of August 1, 2024.

SERS Increases Outreach to Members and Employers Using New Technology Even though SERS has returned to its pre-pandemic in-person member and employer meeting schedules, virtual meetings continue to be a viable way for SERS staff to connect with people all over the state. Our surveys indicate that members are becoming more comfortable using virtual technology tools such as Zoom to attend meetings and the overall experience is positive. For SERS, hosting virtual meetings allows the System to expand its educational outreach and keep costs low.

In FY2023, SERS' Member Services Department held 25 virtual meetings with more than 2,000 total attendees. The Employer Services Department held 22 virtual meetings with more than 800 total attendees. Both departments added new virtual offerings during the year.

In August, Employer Services debuted *Sound Bite Wednesdays*, which is a once-a-month, 20-minute lunchtime webinar that focuses on one employer topic. Topics covered this year included payroll schedules, salary estimates, penalties, employer statements, surcharge, the web user maintenance application in eSERS, and how to read a foundation deduction letter.

In November, Member Services kicked off a new virtual series called *Lunch Break* targeted toward members with less than 10 years of service. This 30-minute webinar is scheduled during the lunch hour, which allows members to attend without having to set aside time after work or on the weekend. It provides an overview of contributions, Social Security, the difference between defined benefit and defined contribution plans, refunds, disability benefits, retirement requirements, and the importance of supplemental retirement savings.

Streamlining SERS' Digital Information Storage and Retention SERS' Information Governance (IG) Department completed several projects that reduced SERS' digital storage footprint and implemented new tools and policies that will reduce future retention of transitory data and email.

The IG staff and Digital Workplace team completed the migration of all departments to Microsoft Teams and SharePoint Online (SPO). This included reviewing and deleting approximately 850,000 documents from shared storage drives and 350,000 files from the legacy SharePoint site. These changes make the user experience better, improve information security, and are in alignment with SERS' disaster recovery plan.

In addition, after all departments reviewed their contract libraries, IG assisted with the migration of files into a new centralized contracts site that stores all active contracts by department or business unit. Separate libraries were created for inactive contracts that are still within retention requirements and must be maintained. A new naming convention was also applied to all active contracts so that the library is easier to navigate.

In March 2023, IG applied a retention policy to the Deleted Items folder on all staff's Outlook email. The retention policy will automatically delete messages more than 180 days old that remain in the Deleted Items folder. Deleting these emails will significantly reduce the amount of email SERS' system maintains.

Mandatory Direct Deposit On July 1, 2022, SERS switched to direct deposit for all benefit recipients. While direct deposit had been mandatory for all new benefit recipients since 2013, the SERS Board authorized staff to make it mandatory for everyone. This change affected about 3,000 recipients.

The rationale for implementing mandatory direct deposit is that it eliminates risks such as theft and fraud to benefit recipients and reduces SERS' costs associated with providing paper checks and reissuing checks that are lost or stolen.

INVESTMENTS

SERS' investment portfolio is diversified by asset class, investment approach, and individual investments within each asset class to reduce overall portfolio risk and volatility. At year end, SERS' investment portfolio at fair value was \$17.9 billion. The time weighted investment return was 7.4% (net), for the fiscal year exceeding the policy benchmark by 0.3%. The actuarial rate of return was 7.00%. Net investment income was \$1.2 billion compared to a net investment loss of \$0.3 billion in FY2022. The SERS Investment Committee structure was fully operational and represents a leading practice in investment operations. For more information on SERS' portfolio performance and investment strategy and policy, please turn to the Investment Section of this report.

SERS' investment staff, with support from Wilshire Associates, Inc., the Board investment consultant, continually monitor the asset allocation and recommends to the Board asset allocation changes as needed. No changes were made to the allocation schedule for FY2023. The FY2023 allocation is 45% for global equities, 12% for global private equity, 19% for global fixed income, 17% for global real assets, 5% for global private credit, and 2% for cash equivalents.

FUNDING

SERS' primary objective is to assure that at the time benefits commence, sufficient funds will be available to provide retirement, disability, and survivor benefits for its members. In addition, SERS is committed to sustaining contribution rates that remain level from generation to generation.

SERS' benefits are separated to comply with various sections of the Internal Revenue Code (IRC), and then reported and valued for funding purposes in accordance with relevant GASB statements. For FY2023, the funded ratios for the three benefits mandated by statutes (basic benefits) increased, as designed by the funding policy. The funding level for basic benefits increased from 75.5% over a 22-year period to 76.6% over a 21-year period. The funding level for discretionary health care benefits increased from 45.4% to 46.1% over a 30-year period. The Health Care Fund is projected to remain solvent through 2062, a 39-year solvency period as of June 30, 2023. Historical information related to progress on meeting the funding objective can be found in the Required Supplementary Information in the Financial Section of this report.

AWARDS AND ACKNOWLEDGMENTS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to SERS for its *Annual Comprehensive Financial Report* (ACFR) for the fiscal year ended June 30, 2022. This was the 38th consecutive year that SERS has received this prestigious award. A Certificate of Achievement is valid for a period of one year only. We believe that our current ACFR continues to meet the Certificate of Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The GFOA gave SERS an Award for Outstanding Achievement in Popular Annual Financial Reporting for its *Summary Annual Financial Report* (SAFR) for the fiscal year ended June 30, 2022. SERS first issued the SAFR for fiscal year ended June 30, 2013 and has received this award for ten consecutive years. An Award for Outstanding Achievement in Popular Annual Financial Reporting is valid for one year only.

We believe that our current SAFR continues to meet the Award for Outstanding Achievement Program's requirements, and we are submitting it to the GFOA to determine its eligibility for another certificate.

The Public Pension Coordinating Council (PPCC) awarded to SERS the Public Pension Standards Award for 2023. Developed by the PPCC to promote excellence in meeting professional standards for plan funding and administration among state and local public retirement systems, the Public Pension Standards are the benchmark for measuring current practices of defined benefit plans. The PPCC is a coalition of three national associations that represent public retirement systems and administrators: the National Association of State Retirement Administrators, the National Council on Teacher Retirement, and the National Conference on Public Employee Retirement Systems.

This report represents the collaboration of SERS' staff and advisors. Our sincere appreciation is extended to all those who contributed to the completion of this report. This report is intended to provide complete and reliable information as a basis for management decisions, for compliance with legal requirements, and as a measurement of the responsible stewardship of SERS' assets.

In closing, we recognize that our strength is a reflection of the quality of our staff. We value their efforts that enable us to maintain effective internal controls while at the same time deliver high quality service to our members, retirees, and employers.

Respectfully submitted,

Richard Stensrud
Executive Director

Marni Hall, CPA
Chief Financial Officer

Legislative Summary

SERS and its members can be significantly affected by legislation enacted by the Ohio General Assembly and Congress. SERS closely monitors legislative and regulatory activities, and when appropriate, provides testimony or otherwise educates Ohio legislators, congressional representatives, and regulatory agencies on the impact of those proposals.

State Legislation

From the 134th General Assembly:

H.B. 539 STATE RETIREMENT SYSTEMS - PUBLIC BROADCAST (11/16/2022 House Insurance Committee, First Hearing)

To require the state retirement systems to publicly broadcast board meetings.

H.B. 540 STATE RETIREMENT SYSTEMS – FINANCIAL INFORMATION (11/16/2022 House Insurance Committee, Second Hearing)

To require the state retirement system boards to disclose certain financial information regarding alternative investments.

H.B. 541 STATE RETIREMENT SYSTEMS – FORMER EMPLOYEES (11/16/2022 House Insurance Committee, Second Hearing)

Regarding the prohibition against the state retirement systems doing business with a former state retirement system employee, officer, or board member.

S.B. 367 REGARDING STATE GOVERNANCE POLICIES (11/30/2022 Referred to Senate Finance Committee) Regarding environmental, social, and corporate governance policies with respect to the state retirement systems, Bureau of Workers' Compensation, and state institutions of higher education.

From the 135th General Assembly:

H.B. 33 FY24-25 STATE OPERATING BUDGET (7/3/2023, Signed by Governor) To make operating appropriations for the biennium beginning July 1, 2023, and ending June 30, 2025, to levy taxes, and to provide authorization and conditions for the operation of state programs. SERS' CBBC provisions, which were identical to H.B. 146, were included as an amendment to H.B. 33.

H.B. 146 SERS BENEFIT CAP (5/16/2023, Reported out of House Pensions Committee) To establish a contribution-based benefit cap (CBBC) in calculating a School Employees Retirement System member's retirement benefit. SERS testified in support of the CBBC proposal.

H.C.R. 6 URGE CONGRESS - REPEAL WINDFALL ELIMINATION PROVISION (5/16/2023, Reported out of House Pensions Committee) To urge Congress to repeal the Windfall Elimination Provision (WEP) and Government Pension Offset (GPO) SERS provided written testimony to the committee in support of H.C.R. 6.

S.B. 6 ESG POLICIES-STATE ENTITIES (5/10/2023 Passed Ohio Senate, 5/23/2023 Referred to House Financial Institutions Committee) Regarding environmental, social, and corporate governance (ESG) policies with respect to the state retirement systems, Bureau of Workers' Compensation, and state institutions of higher education. SERS provided written interested party testimony to the Senate Finance Committee.

Federal Legislation

From the 117th Congress:

H.R. 2954 SECURING A STRONG RETIREMENT ACT of 2021 (3/29/2022 Passed House, 03/30/2022 Received in the Senate and read twice and referred to the Committee on Finance) Referred to as SECURE Act 2.0, the legislation would make several changes to retirement savings programs including raising the required minimum distribution (RMD) age to 75. Similar provisions included in the Enhancing American Retirement Now also called the EARN Act (6/22/2022 passed Senate Finance Committee). Included as part of year-end \$1.7 trillion omnibus spending bill approved by U.S. Senate "Consolidated Appropriations Act, 2023" (H.R. 2617 as amended) on 12/22/22 by a vote of 68-29. The House followed suit, approving the legislation 12/23/22 by a vote of 225-201. Signed by the President on 12/29/22, became Public Law No: 117-328.

H.R. 5376 INFLATION REDUCTION ACT of 2022 (8/16/2022 Became Public Law No: 117-169) Provides funding, establishes programs, and otherwise modifies provisions relating to a broad array of areas, including health care policy, especially impacting Medicare:

- Drug Pricing Negotiations – Requires the Centers for Medicare & Medicaid Services (CMS) to negotiate prices for some top-selling drugs covered under Medicare Part D. CMS would negotiate prices for 10 Part D drugs in 2026, 15 Part D drugs in 2027 and 2028, and 20 Part D drugs in 2029 and each year thereafter.
- Drug Rebates – Requires drug manufacturers to pay a rebate if prices increase faster than inflation for drugs used by Medicare beneficiaries. Manufacturers that do not pay the required rebates would face a financial penalty.
- Medicare Part D Reform – Eliminates a 5% coinsurance for catastrophic coverage in Medicare Part D, adds a \$2,000 cap on Part D out-of-pocket spending in 2025, and limits annual increases in Part D premiums for 2024-2030. This section includes language protecting Employer Group Waiver Plans (EGWPs) like the one SERS provides.

- ACA Subsidies – Extends the enhanced ACA premium tax credits provided under the American Rescue Plan for three years through 2025 to increase generosity for individuals with household incomes below 400% of the federal poverty level (FPL) and expand eligibility for taxpayers above 400% of the FPL.

From the 118th Congress:

H.R. 82 SOCIAL SECURITY FAIRNESS ACT OF 2021 (1/09/2023 Referred to the House Committee on Ways and Means) This bill would repeal the GPO and WEP. Companion bill to S. 597.

H.R. 4260 PUBLIC SERVANTS PROTECTION AND FAIRNESS ACT (6/21/2023 Referred to the House Committee on Ways and Means) This bill would amend title II of the Social Security Act to provide an equitable Social Security formula for individuals with non-covered employment and to provide relief for individuals currently affected by the WEP.

Regulatory Activity

On August 31, 2022, SERS wrote a comment letter to the Centers for Medicare & Medicaid Services, in response to their request for information regarding various aspects of the Medicare Advantage program. Although SERS believes the Medicare Advantage program is already an excellent option for our retirees, we also believe there are ways to improve our members' experience as described in the letter. SERS' letter argued that group Medicare Advantage enrollees would benefit from a prohibition on traditional marketing, or some pre-notification to the enrolling group plan of a request to change, or an alternative that offers protection and full information unique to retiree group plan enrollees.

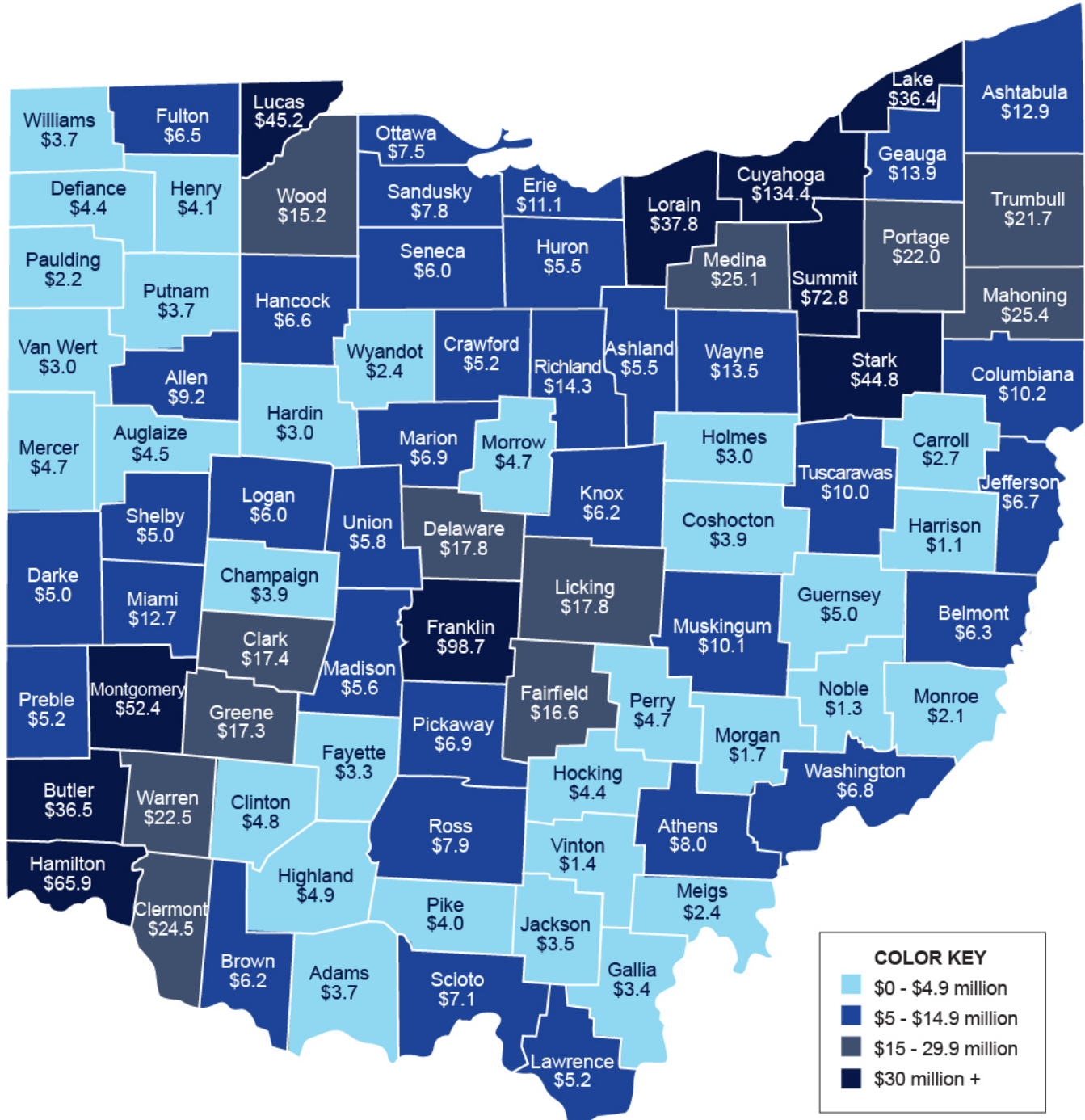
SERS also submitted a comment letter to the Centers for Medicare & Medicaid Services, on March 6, 2023, responding to their advance notice of methodological changes in calendar year 2024 for Medicare Advantage Capitation Rates and Part C and Part D Payment Policies, urging them to delay implementation and allow stakeholders the opportunity to participate in evaluating their impact.

Economic Impact

Pension Benefits by County FY2023 (\$ in millions)

Public pensions positively impact Ohio's economy. Of the 81,833 individuals receiving pension benefits from SERS, nearly 91% live in Ohio.

In FY2023 alone, benefit payments of approximately \$1.25 billion were distributed among Ohio's 88 counties, positively impacting the state's economy. For every dollar in employer contributions invested in SERS' retirement benefits last year, \$2.45 was returned to local economies.



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\$18.3 BILLION

Net Position

↑ 7.4%

Net Rate of Return

\$1.3 BILLION

Annual Pension
Benefit Payments



76.61%

Funded as of June 30, 2023
(Basic Pension Benefits)



Plante & Moran, PLLC
3434 Granite Circle
Toledo, OH 43617
Tel: 419.843.6000
Fax: 419.843.6099
plantemoran.com

Independent Auditor's Report

To the Retirement Board
School Employees Retirement System of Ohio

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of School Employees Retirement System of Ohio (SERS) as of and for the year ended June 30, 2023 and the related notes to the financial statements, which collectively comprise SERS' basic financial statements, as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of SERS as of June 30, 2023 and the changes in its financial position for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. 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 SERS 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 opinion.

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 control 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 SERS' ability to continue as a going concern for 12 months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

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 opinion. 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 and *Government Auditing Standards* 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 control. 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.



To the Retirement Board
School Employees Retirement System of Ohio

In performing an audit in accordance with GAAS and *Government Auditing Standards*, 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 control 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 SERS' internal control. 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 SERS' 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 control-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 and other required supplementary information, as identified in the table of contents, 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, which considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise SERS' basic financial statements. The other supplementary information, as identified in the table of contents, is presented for the purpose of additional analysis and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other 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 financial report. The other information comprises the introductory, investment, actuarial, statistical, and plan summary sections, as listed in the table of contents, but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

Independent Auditor's Report

To the Retirement Board
School Employees Retirement System of Ohio

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 whether 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.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated December 5, 2023 on our consideration of SERS' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements, and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SERS' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SERS' internal control over financial reporting and compliance.

Plante & Moran, PLLC

December 5, 2023

Introduction

This section presents Management's Discussion and Analysis of the School Employees Retirement System of Ohio's financial performance for fiscal year ended June 30, 2023. This information is based on SERS' financial statements, which begin on page 24. We encourage readers to consider the information presented here in conjunction with the information in our Letter of Transmittal, which begins on page 6 in the Introductory Section of this report. In addition to historical information, Management's Discussion and Analysis includes forward-looking statements that involve certain risks and uncertainties. Actual results, performance, and achievements may differ from those expressed or implied in such forward-looking statements, due to a wide range of factors, including changes in the securities markets, general economic conditions, and legislative changes, as well as other factors.

FINANCIAL HIGHLIGHTS

- SERS' total assets at June 30, 2023 were \$18.5 billion, an increase of \$0.6 billion, or 3.2%, compared to FY2022 assets. Cash and Short Term Investments are 19.3% lower than FY2022. Investments increased by \$0.7 billion, or 4.1%, after the FY2023 7.39% net investment return. Prepaid and Other Assets increased by \$96.3 million in FY2023 after the July 1, 2023 benefit payments were prepaid due to July 1, 2023 falling on a weekend.
- Deferred outflows from SERS' participation in OPERS increased from FY2022 to FY2023. Deferred outflows from pensions increased \$7.2 million and deferred outflows from other postemployment benefits (OPEB) increased \$1.9 million. The deferred outflows increase resulted from OPERS' investments experiencing a loss in FY2022 compared to the 6.9% assumed rate of return.
- SERS' total liabilities at June 30, 2023 were \$197.5 million, a decrease of \$102.8 million, or 34.2%, compared to FY2022 liabilities. The decrease is attributed to a decrease in investments payable, which fluctuate due to the timing of investment purchases.
- Deferred inflows decreased from FY2022 to FY2023 from SERS' participation in OPERS and GASB Statement No. 87, Leases. Deferred inflows from pensions decreased by \$9.7 million and deferred inflows from OPEB decreased by \$3.1 million. Deferred inflows from tenant leases decreased by \$0.3 million. The decrease in deferred inflows is primarily due to the difference between the OPERS projected 6.9% investment rate of return and the OPERS actual FY2022 investment losses. This difference transitioned the balance to a net deferred outflow as noted above.
- Total additions to plan net position were \$2.3 billion, comprised of contributions of \$1.0 billion, \$0.1 billion of other income and net investment income of \$1.2 billion. Net investment income increased \$1.5 billion in FY2023 due to market performance. Investments experienced a 7.39% time weighted net return in FY2023 as compared to a 0.49% net loss in FY2022.
- Total deductions from plan net position for FY2023 totaled \$1.6 billion, including benefits payments of \$1.5 billion and administrative expenses of \$33.2 million, an increase of 4.3% from FY2022 deductions. Included in administrative expenses are personnel, professional, communication, computer support, facility expenses, and depreciation.
- The net increase in plan net position was \$691.4 million compared to a net decrease of \$866.3 million in FY2022. The majority of the variance is due to investment earnings in FY2023 and a volatile market in FY2022.

CONDENSED SUMMARY OF TOTAL FIDUCIARY NET POSITION				
<i>(\$ in millions)</i>				
ASSETS	2023	2022	Change	
			Amount	Percent
Cash	\$774.7	\$959.4	(\$184.7)	(19.3%)
Receivables	196.3	217.8	(21.5)	(9.9)
Investments	17,329.9	16,650.0	679.9	4.1
Capital Assets, Net	51.6	55.2	(3.6)	(6.5)
Prepaid & Other Assets	101.1	4.8	96.3	2,006.3
Total Assets	18,453.6	17,887.2	566.4	3.2
DEFERRED OUTFLOWS OF RESOURCES				
Deferred Outflows	11.6	2.5	9.1	364.0
LIABILITIES				
Benefits & Accounts Payable	40.8	25.6	15.2	59.4
Other Liabilities	156.7	274.7	(118.0)	(43.0)
Total Liabilities	197.5	300.3	(102.8)	(34.2)
DEFERRED INFLOWS OF RESOURCES				
Deferred Inflows	2.0	15.1	(13.1)	(86.8)
Fiduciary Net Position	\$18,265.7	\$17,574.3	\$691.4	3.9%

CONDENSED SUMMARY OF CHANGES IN TOTAL FIDUCIARY NET POSITION				
<i>(\$ in millions)</i>				
ADDITIONS	2023	2022	Change	
			Amount	Percent
Contributions	\$1,013.4	\$954.1	\$59.3	6.2%
Other Income	134.3	97.4	36.9	37.9
Net Investment Income (Loss)	1,183.0	(346.4)	1,529.4	441.5
Total Additions	2,330.7	705.1	1,625.6	230.5
DEDUCTIONS				
Benefits	1,498.6	1,456.6	42.0	2.9
Refunds & Transfers	107.5	90.2	17.3	19.2
Admin. Expenses	33.2	24.6	8.6	35.0
Total Deductions	1,639.3	1,571.4	67.9	4.3
Net Increase (Decrease)	691.4	(866.3)	1,557.7	179.8
Balance, Beginning of Year	17,574.3	18,440.6	(866.3)	(4.7)
Balance, End of Year	\$18,265.7	\$17,574.3	\$691.4	3.9%

OVERVIEW OF FINANCIAL STATEMENTS

SERS' financial statements are prepared in accordance with generally accepted accounting principles in the United States of America. Management's Discussion and Analysis is intended to serve as an introduction to SERS' financial statements, which are prepared using the accrual basis of accounting. Following Management's Discussion and Analysis are the basic financial statements. Reviewing these statements, along with the accompanying notes, gives the reader a better understanding of SERS' financial position.

The Statement of Fiduciary Net Position is a point-in-time snapshot of SERS' assets, deferred outflows of resources, liabilities, deferred inflows of resources, and net position at fiscal year-end. Net position represents the amount of total assets and deferred outflows of resources less total liabilities and deferred inflows of resources.

The Statement of Changes in Fiduciary Net Position presents the additions and deductions for the fiscal year. Major sources of additions are contributions and investment income. Major sources of deductions are benefits, refunds, and administrative expenses.

The Notes to Financial Statements supply additional information that is essential for a full understanding of the data provided in the financial statements. The notes describe the history and purpose of the plans; present information about accounting policies; and disclose material risks, subsequent events, and contingent liabilities, if any, that may significantly impact SERS' financial position.

In addition to the financial statements and notes, the following supplementary information is also provided:

- Required supplementary information that presents SERS' employer proportion of collective net pension liability based on statutory requirements, including employer contributions and notes;
- Required supplementary information that presents SERS' employer proportion of collective OPEB liability based on statutory requirements, including employer contributions and notes;
- Required supplementary information that presents SERS' proportionate share of the Ohio Public Employees Retirement System (OPERS) net pension liability;
- Required supplementary information that presents SERS' proportionate share of the OPERS net OPEB liability (asset); and
- Optional supplementary schedules that present information related to administrative expenses, investment-related expenses, and non-investment related consulting fees.

The financial statements, notes, and Required Supplementary Information (RSI) are presented in compliance with generally accepted accounting principles.

In accordance with GASB Statement No. 68, *Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27* (GASB 68), the net pension liability equals SERS' proportionate share of OPERS' unfunded actuarial accrued liability. However, SERS is not responsible for certain key factors affecting the balance of this liability. In Ohio, the employee shares the obligation of funding pension benefits with the employer. Both employer and employee member contribution rates are capped by state statute. A change in these caps requires action of both houses of the general assembly and approval by the governor. Benefit provisions also are determined by state statute. In Ohio, public employers are not legally bound to pay off the unfunded liabilities of the public pension systems. The pension systems are solely responsible for the prudent fiscal administration of their plans.

In accordance with GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB 75), the net OPEB liability (asset) equals SERS' proportionate share of the OPERS unfunded liability (asset). However, SERS is not responsible for certain key factors affecting the balance of this liability (asset). OPERS' Board of Directors determines on an annual basis the percentage of total employer contributions to be allocated to health care. The portion of Traditional Pension Plan employer contributions was 0% for calendar year 2022. The portion of Combined Plan employer contributions allocated to health care was 0% from January 1, 2022 to June 30, 2022 and was 2% from July 1, 2022 to December 31, 2022. In Ohio, health care is a discretionary benefit; it is not guaranteed by statute. Public employers are also not legally bound to pay off the OPEB liabilities of the public pension systems. The pension systems are solely responsible for the prudent fiscal administration of their plans.

Most long-term liabilities have set repayment schedules or, in the case of compensated absences (i.e., sick and vacation leave), are satisfied through paid time-off or termination payments. There is no repayment schedule for the net pension liability or the net OPEB liability (asset). Changes in pension benefits, OPEB benefits, contribution rates, and return on investments affect the balance of the net pension liability and the net OPEB liability (asset), but are outside the control of SERS. In the event that contributions, investment returns, and other changes are insufficient to keep up with required pension payments, state statute does not assign/identify the responsible party for the unfunded portion.

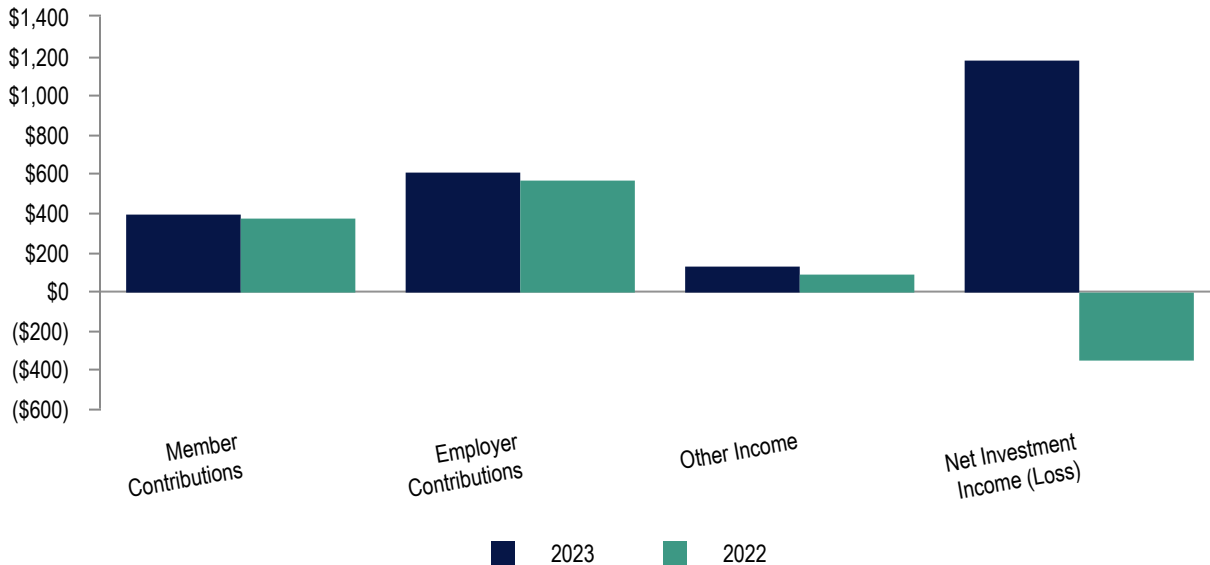
FINANCIAL ANALYSIS

A statewide defined benefit public pension plan, such as SERS, has a long-term perspective on financial activities. SERS' primary responsibility is to assure that sufficient funds will be available to provide retirement, disability, and survivor benefits, Medicare Part B premium reimbursements, and lump sum death benefits. Laws governing SERS' financing intend the contribution rates to remain approximately level from generation to generation.

A Condensed Summary of Total Fiduciary Net Position and a Condensed Summary of Changes in Total Fiduciary Net Position as of June 30, 2023 and 2022, are shown on page 17.

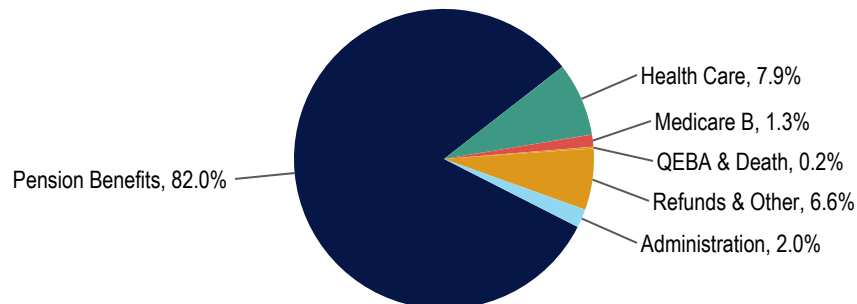
SERS is comprised of five separate funds – the Pension Trust Fund, the Medicare B Fund, the Death Benefit Fund, the Qualified Excess Benefit Arrangement (QEBA) Fund, and the Health Care Fund. Pension benefits are funded through a combination of member and employer contributions and investment income. Medicare Part B premium reimbursements and death benefits are funded through employer contributions and investment income. The QEBA, a separate plan under Internal Revenue Code §415, is funded by contributions from the retiree's last employer and invested separately in a short-term investment fund. Funding for the Health Care Fund comes from employers, retiree premium payments, federal subsidies, other receipts, and investment income. The graph, "Comparative Additions by Source FY2023 and FY2022", depicts the proportion that each source added to the fund's assets.

Comparative Additions by Source FY2023 and FY2022
 (\$ in millions)



Expenses were incurred primarily for the purpose for which SERS was created: the payment of benefits to non-teaching Ohio public school, community school, and community college employees. Included in the deductions from fiduciary net position were benefit payments, refunds of contributions due to member terminations or deaths, net transfers to other Ohio retirement systems to provide benefits for those members who had membership in more than one system, and administrative expenses.

Deductions from Total Plan Fiduciary Net Position FY2023



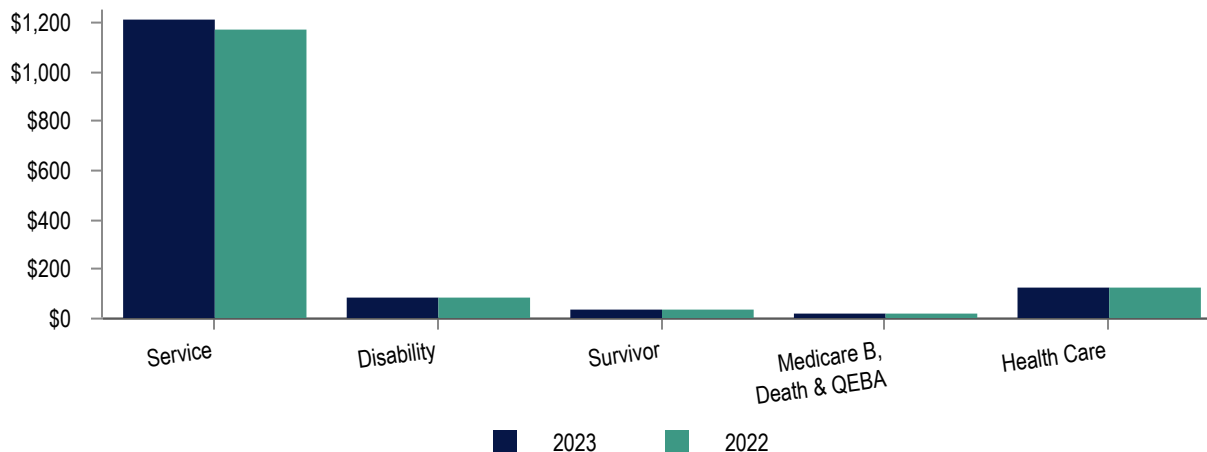
Management's Discussion and Analysis (unaudited)

SERS' fiduciary net position increased by \$691.4 million during FY2023, compared to a net decrease of \$866.3 million in FY2022.

- For financial statement purposes, member contributions consist of 10% of reported payroll, and member purchases of restored and optional service credits. Employer contributions include 14% of reported payroll, the employer's share of optional and compulsory purchased service credit, early retirement incentives, and the health care surcharge which is capped at 1.5% of statewide payroll. Employer contributions in excess of those required to support the Pension, Medicare B, and Death Benefit Funds may be allocated to the Health Care Fund.
- Member and employer contributions, excluding the health care surcharge, increased 6.2% in FY2023 from FY2022. The number of active members in FY2023 increased by 4,810, or 3.1%, compared to FY2022 for a total of 159,873 members. Most schools returned to a full-year of in-classroom learning after two years of virtual and hybrid education. This resulted in higher payroll for our members.
- Employer contributions to the Health Care Fund are derived from two sources. The first source is an allocation of the employers' 14% contribution after pension benefits are funded. Because of SERS' funding policy, a maximum of 0.50% of the employer contribution was available for the Board to allocate to the Health Care Fund in FY2023; however, the Board voted to allocate 100% of the employer contribution to fund pension benefits during FY2023. The second source is a health care surcharge for members who earn less than an actuarially determined minimum salary, which is established annually by the Board based on the actuary's recommendation. Regardless of the minimum compensation amount, legislated limits on SERS' surcharge revenue restrict the actual surcharge to 1.5% of statewide payroll, and no employer pays more than 2.0% of the district's payroll. The surcharge increased from \$53.8 million in FY2022 to \$57.5 million in FY2023.
- Along with employer contributions and investment income, additions to the Health Care Fund include health care premiums paid by benefit participants. Enrollment and total premiums decreased 1.2% and 3.7%, respectively, from FY2022 to FY2023.
- Other sources of additions to the Health Care Fund include net reimbursements from the federal program for Medicare Part D qualified prescription drug plans (PDP) and our primary Medicare Advantage provider, risk sharing refunds, and prescription drug rebates. Total additions from these programs in FY2023 were \$73.8 million versus additions of \$34.5 million in FY2022. The increase is mainly due to a change in reporting in FY2023 to show all items as gross revenue versus netting against health care expenses.
- Investment income is allocated to all funds. It is presented net of investment fees and is comprised of interest, dividends, and realized and unrealized investment gains and losses. Investment expense is comprised of external manager, custody, and master record keeper fees, and internal investment and accounting expenses. SERS' investment portfolio, with the exception of cash and short-term investments, is managed by external investment managers. Following the FY2022 economic uncertainties amid 40-year high inflation, SERS had net investment income of \$1.2 billion in FY2023 compared to a loss of \$0.3 billion in FY2022. The FY2023 Federal Reserve interest rate hikes produced a decline in inflation, but the volatility in the markets remains. Income from interest and dividends decreased by \$25.0 million to \$485.6 million and investment expenses, including investment administrative expenses, increased \$4.9 million, or 4.4%, in FY2023.
- Total payments to service, disability, and survivor benefit recipients increased \$41.3 million, or 3.1% during FY2023. Service retirement payments increased 3.6%, disability payments decreased 2.2%, and survivor benefits payments increased 2.0%. A 2.5% simple COLA was adopted for CY2022 and CY2023, which applied to FY2023.

Comparative Benefit Payments FY2023 and FY2022

(\$ in millions)



- Total refunds paid increased 18.8% from FY2022 to FY2023. The increase is due to the number of refund applications received, which was 19,513 in FY2023 compared to 15,019 in FY2022. A lump sum of member contributions was only distributed to members who had terminated public employment, applied for a refund, and waited for expiration of the 90-day waiting period that begins with the last day of service. SERS' members cannot take partial distributions. Reemployed retirees who are eligible for an annuity may elect a lump sum distribution, which includes the member's contributions, a portion of the employer's contributions, and interest.
- If a member has been employed in a job covered by the State Teachers Retirement System of Ohio (STRS) or the Ohio Public Employees Retirement System (OPERS) defined-benefit plans, as well as in a job covered by SERS, the member may receive a retirement benefit independently from each system, if eligible, or combine the service credit and accounts in all the systems to receive one benefit at retirement. The system that holds the greatest service credit will calculate and pay the benefit; the member's full contributions and a share of the employer contributions and interest are transferred to the paying system. Net transfers to other Ohio systems increased in FY2023 when compared to FY2022.
- SERS reimburses a portion, \$45.50, of the Medicare Part B monthly premium to retirees eligible for SERS' health care program who provide proof of enrollment in Medicare Part B. The reimbursement amount, established by statute, has not changed since 2001; therefore, changes in expense are driven by eligible retirees' enrollment in Medicare Part B or termination of the benefit. Medicare Part B expenses remained substantially the same in FY2023. The eligibility of new retirees to receive Medicare Part B reimbursement is now tied to enrollment in one of SERS' health care plans.
- SERS pays a \$1,000 death benefit to the designated beneficiary of service and disability retirees. Death benefit payments increased 4.5% in FY2023.
- Most retirees and dependents choosing SERS' health care coverage are over the age of 65 and enrolled in a fully-insured Medicare Advantage plan; however, SERS maintains a traditional, self-insured preferred provider organization for its non-Medicare retiree population. For both groups, SERS offers a self-insured prescription drug program. Health care expenses increased by \$0.6 million, or 0.5%, to \$129.4 million. Goals for the non-Medicare program are to provide access to quality coverage at an affordable cost. SERS has offered a Marketplace Wraparound HRA since 2017, which has offered a more affordable option. Health care is a benefit that is permitted, not mandated, by statute. SERS' funding policy is to maintain the Health Care Fund with a 20-year solvency period to ensure that the fluctuations in the cost of health care do not cause an interruption in the program. If the health care surcharge, which is capped at 1.5% of statewide employer payroll, is received and all other actuarial assumptions are met, the Health Care Fund is projected to remain solvent through 2062, or a 39-year solvency period, as of June 30, 2023.

ACTUARIAL

The annual actuarial valuation measures the total liability for all benefits earned to date. The accrued liability is a present value estimate of all the benefits that have been earned to date but not yet paid. The actuarial accrued liability (AAL) for the four funds changed as follows:

ACTUARIAL ACCRUED LIABILITY (\$ in millions)				
Fund	FY2023	FY2022	Increase/ (Decrease)	% Change
Pension	\$22,656	\$21,941	\$715	3.3%
Medicare B	386	389	(3)	(0.8)
Death	42	41	1	2.4
Health Care	1,532	1,348	184	13.6

The unfunded accrued liability (UAL) is the present value of the future benefits payable that are not covered by the actuarial value of assets as of the valuation date. The funded ratio reflects the percentage of the accrued liability covered by the actuarial value of assets. A decrease in the UAL indicates progress toward funding. The unfunded liability and the funded ratio changed as follows:

UNFUNDED ACCRUED LIABILITY (\$ in millions)						
Fund	FY2023	FY2022	Increase/ (Decrease)	% Change	Funded Ratio FY2023	Funded Ratio FY2022
Pension	\$5,272	\$5,330	(\$58)	(1.1%)	76.7%	75.7%
Medicare B	116	143	(27)	(18.9)	69.9	63.2
Death	11	11	—	—	74.4	71.7
Health Care	825	736	89	12.1	46.1	45.4

Management's Discussion and Analysis (unaudited)

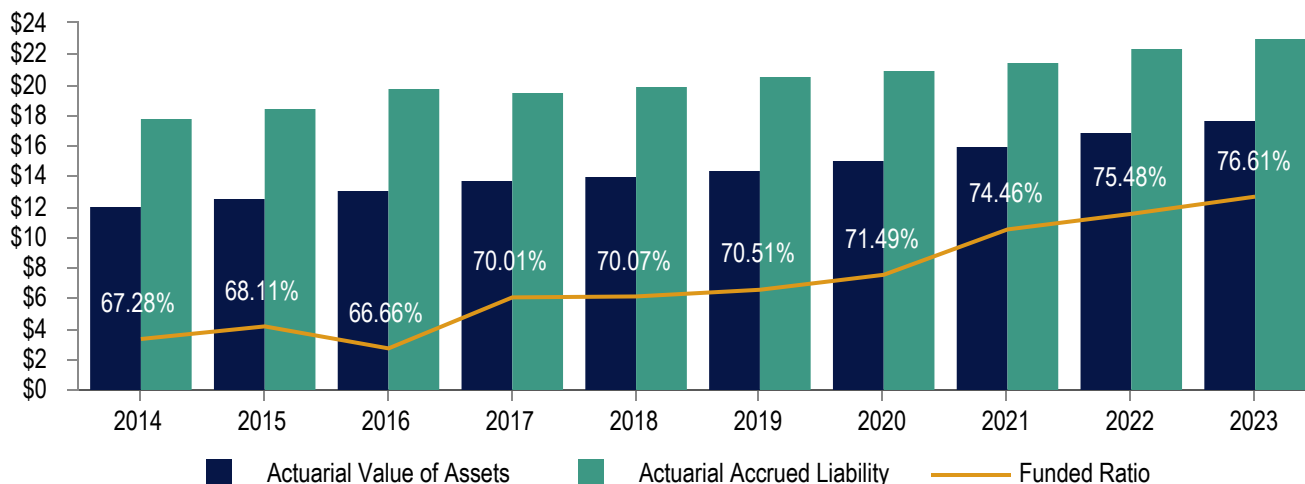
To completely understand the funding status of SERS, it is important to analyze actuarial data in combination with financial data. The actuarial data provided in the two previous tables are presented using an actuarial or funding basis. The funding basis uses an actuarial value of assets that smooths market gains and losses over a closed four-year period subject to a 20% market corridor. This differs from an accounting basis (utilized in accordance with GASB Statement No. 67, *Financial Reporting for Pension Plans—an amendment of GASB Statement No. 25* and GASB 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pensions*) that calculates the funding status using the fair value of assets.

As a result of actuarial smoothing, the fair value of assets may be more than or less than the actuarial or funding value of assets at a given point in time. In periods of protracted market decline, the fair value of assets will usually be less than the actuarial or funding value of assets. In contrast, during periods of protracted market gains, the fair value of assets will generally be greater than the actuarial or funding value of assets.

To ensure the funding value of assets and the fair value of assets remain within reasonable proximity of each other, SERS uses a 20% market corridor in conjunction with its four-year smoothing. This policy ensures that the funding value of assets is neither lower than 80%, nor higher than 120% of the fair value of the assets. At the end of FY2022, the fair value of assets was higher than the funding value by \$0.1 billion. At the end of FY2023, the funding value was higher than the fair value by \$0.1 billion.

As of June 30, 2023, the date of the latest actuarial valuation, the funded ratio for basic pension benefits, which include pension, Medicare B, and death benefits, was 76.61%. In general, this means that for every dollar of future pension liability, SERS had accumulated approximately \$0.77 to meet that obligation. The funded ratio for basic pension increased from June 30, 2022 by 1.13%. The June 30, 2023 actuarial report indicates that if all actuarial assumptions are met, SERS would accumulate sufficient assets to pay all pension liabilities for active members and retirees within 21 years compared to 22 years at June 30, 2022.

Basic Pension Funding (\$ in billions)
Last 10 fiscal years



CONDITIONS EXPECTED TO AFFECT FINANCIAL POSITION OR RESULTS OF OPERATIONS

SERS' primary objective is to assure that at the time benefits commence, sufficient funds will be available to provide retirement, disability, and survivor benefits for its members. In addition, SERS is committed to sustaining contribution rates that remain level from generation to generation.

SERS, with the assistance of its actuary, annually evaluates pension sustainability by reviewing all the variables in the current pension model. This includes investment returns, contribution levels, contribution rates, service credit rates, minimum age requirements, along with a variety of other variables. Through the pension sustainability work, legislation was passed in FY2023 to reduce the risk of benefit inflation. The legislation requires SERS to implement a Compensation Based Benefit Cap (CBCB) effective August 1, 2024. CBCB ensures that a member's career contributions support their pension benefit.

A five-year actuarial experience study was performed in the spring of FY2021. Results from this study provided the Board with useful insight on adjustments to actuarial assumptions used in valuations. As a result of the study, new actuarial assumptions were adopted by the Board for the June 30, 2021 actuarial valuations for Pension and Health Care. While assumptions are reviewed annually, they are mostly updated during the five-year actuarial experience study cycle unless there is a compelling reason to adjust assumptions mid-cycle.

Markets are expected to remain volatile over the next several years. The Strategic Investment Plan has been designed to add value relative to the benchmark returns and to manage risks. High interest rates and slowing growth pose significant risks to expected returns.

While the COVID-19 national emergency ended May 11, 2023, the long-term impact to financial markets, schools, and the overall economy is unknown.

REQUEST FOR INFORMATION

This financial report is designed to provide the Retirement Board, our membership, employers, and investment managers with a general overview of SERS' finances. Questions concerning any of the information provided in this report or requests for additional financial information should be directed to:

School Employees Retirement System of Ohio
Finance Department
300 East Broad Street, Suite 100
Columbus, Ohio 43215-3746

Basic Financial Statements

STATEMENT OF FIDUCIARY NET POSITION AS OF JUNE 30, 2023

	Pension Trust Fund	Medicare B Fund	Death Benefit Fund	QEBA Fund	Health Care Fund	TOTAL
ASSETS						
Cash & Operating Short Term Investments	\$646,332,931	\$18,731,765	\$1,165,330	\$135,195	\$108,351,064	\$774,716,285
Receivables						
Contributions						
Employer	4,715,703	4,312,200	480,407	—	57,545,644	67,053,954
Member	2,560,121	—	—	—	—	2,560,121
Investments Receivable	99,455,903	1,479,307	177,826	—	3,214,594	104,327,630
Other Receivables	4,041,864	—	—	—	18,290,996	22,332,860
Total Receivables	110,773,591	5,791,507	658,233	—	79,051,234	196,274,565
Investments at Fair Value						
US Equity	4,704,274,641	69,971,386	8,411,210	—	152,050,641	4,934,707,878
Non-US Equity	2,285,819,000	33,999,275	4,087,028	—	73,881,793	2,397,787,096
Private Equity	2,286,320,347	34,006,732	4,087,925	—	73,897,997	2,398,313,001
Fixed Income	3,813,590,862	56,723,355	6,818,673	—	123,262,135	4,000,395,025
Real Estate	3,397,018,744	50,527,261	6,073,846	—	109,797,773	3,563,417,624
Total Investments at Fair Value	16,487,023,594	245,228,009	29,478,682	—	532,890,339	17,294,620,624
Securities Lending Collateral at Fair Value	33,616,928	500,018	60,107	—	1,086,560	35,263,613
Capital Assets						
Land	3,315,670	—	—	—	—	3,315,670
Property & Equipment, at Cost	97,473,816	—	—	—	—	97,473,816
Accumulated Depreciation and Amortization	(49,207,126)	—	—	—	—	(49,207,126)
Property & Equipment, Book Value	51,582,360	—	—	—	—	51,582,360
Prepaid and Other Assets	101,113,663	—	—	—	210	101,113,873
TOTAL ASSETS	17,430,443,067	270,251,299	31,362,352	135,195	721,379,407	18,453,571,320
DEFERRED OUTFLOWS OF RESOURCES						
Deferred Outflows - Pension	9,657,610	—	—	—	—	9,657,610
Deferred Outflows - OPEB	1,935,451	—	—	—	—	1,935,451
LIABILITIES						
Accounts Payable & Accrued Expenses	30,025,686	—	—	—	9,766,386	39,792,072
Benefits Payable	1,026,312	—	—	—	—	1,026,312
Investments Payable	115,772,269	1,721,997	207,000	—	3,741,969	121,443,235
Obligations under Securities Lending	33,583,872	499,527	60,048	—	1,085,491	35,228,938
TOTAL LIABILITIES	180,408,139	2,221,524	267,048	—	14,593,846	197,490,557
DEFERRED INFLOWS OF RESOURCES						
Deferred Inflows - Pension	296,998	—	—	—	—	296,998
Deferred Inflows - OPEB	221,756	—	—	—	—	221,756
Deferred Inflows - Leases	1,432,848	—	—	—	—	1,432,848
FIDUCIARY NET POSITION RESTRICTED FOR PENSION	\$17,259,676,387	\$268,029,775	\$31,095,304	\$135,195	\$—	\$17,558,936,661
FIDUCIARY NET POSITION RESTRICTED FOR OTHER POSTEMPLOYMENT BENEFITS	\$—	\$—	\$—	\$—	\$706,785,561	\$706,785,561
FIDUCIARY NET POSITION RESTRICTED FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS	\$17,259,676,387	\$268,029,775	\$31,095,304	\$135,195	\$706,785,561	\$18,265,722,222

See accompanying notes to the basic financial statements.

**STATEMENT OF CHANGES IN FIDUCIARY NET POSITION
FOR THE YEAR ENDED JUNE 30, 2023**

	Pension Trust Fund	Medicare B Fund	Death Benefit Fund	QEBA Fund	Health Care Fund	TOTAL
ADDITIONS						
Contributions						
Employer	\$528,038,431	\$26,635,054	\$1,987,715	\$354,569	\$57,483,842	\$614,499,611
Member	398,907,335	—	—	—	—	398,907,335
Other Income						
Health Care Premiums	—	—	—	—	60,544,459	60,544,459
Federal Subsidies & Other Receipts	—	—	—	—	73,815,170	73,815,170
	<u>926,945,766</u>	<u>26,635,054</u>	<u>1,987,715</u>	<u>354,569</u>	<u>191,843,471</u>	<u>1,147,766,575</u>
Income from Investment Activity						
Net Appreciation in Fair Value	777,043,566	11,425,924	1,396,566	—	24,371,133	814,237,189
Interest and Dividends	463,422,028	6,818,408	834,098	1,825	14,565,635	485,641,994
	<u>1,240,465,594</u>	<u>18,244,332</u>	<u>2,230,664</u>	<u>1,825</u>	<u>38,936,768</u>	<u>1,299,879,183</u>
Investment Expenses	(103,125,266)	(1,516,390)	(185,345)	—	(3,234,413)	(108,061,414)
Investment Administrative Expenses	(7,475,046)	(108,899)	(13,454)	—	(225,776)	(7,823,175)
Net Income from Investment Activity	<u>1,129,865,282</u>	<u>16,619,043</u>	<u>2,031,865</u>	<u>1,825</u>	<u>35,476,579</u>	<u>1,183,994,594</u>
Income (Loss) from Securities Lending Activity						
Gross Income	101,478	1,492	182	—	3,184	106,336
Rebate Expense	(960,591)	(14,125)	(1,726)	—	(30,128)	(1,006,570)
Management Fees	(132,250)	(1,945)	(238)	—	(4,147)	(138,580)
Net Income (Loss) from Securities Lending Activity	<u>(991,363)</u>	<u>(14,578)</u>	<u>(1,782)</u>	<u>—</u>	<u>(31,091)</u>	<u>(1,038,814)</u>
Total Investment Income, Net	<u>1,128,873,919</u>	<u>16,604,465</u>	<u>2,030,083</u>	<u>1,825</u>	<u>35,445,488</u>	<u>1,182,955,780</u>
TOTAL ADDITIONS	2,055,819,685	43,239,519	4,017,798	356,394	227,288,959	2,330,722,355
DEDUCTIONS						
Benefits						
Retirement	1,215,742,249	20,329,498	—	272,652	—	1,236,344,399
Disability	86,650,975	1,101,768	—	—	—	87,752,743
Survivor	41,674,640	673,127	—	—	—	42,347,767
Death	—	—	2,718,918	—	—	2,718,918
Health Care Expenses	—	—	—	—	129,424,430	129,424,430
	<u>1,344,067,864</u>	<u>22,104,393</u>	<u>2,718,918</u>	<u>272,652</u>	<u>129,424,430</u>	<u>1,498,588,257</u>
Refunds and Lump Sum Payments	97,668,607	—	—	—	—	97,668,607
Net Transfers to Other Ohio Systems	9,866,201	—	—	—	—	9,866,201
Administrative Expenses	30,482,587	7,011	50,960	2,582	2,653,377	33,196,517
	<u>138,017,395</u>	<u>7,011</u>	<u>50,960</u>	<u>2,582</u>	<u>2,653,377</u>	<u>140,731,325</u>
TOTAL DEDUCTIONS	1,482,085,259	22,111,404	2,769,878	275,234	132,077,807	1,639,319,582
Net Increase	<u>573,734,426</u>	<u>21,128,115</u>	<u>1,247,920</u>	<u>81,160</u>	<u>95,211,152</u>	<u>691,402,773</u>
FIDUCIARY NET POSITION RESTRICTED FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS						
Fiduciary Net Position, Beginning of Year	16,685,941,961	246,901,660	29,847,384	54,035	611,574,409	17,574,319,449
Fiduciary Net Position Restricted For Pension	\$17,259,676,387	\$268,029,775	\$31,095,304	\$135,195	\$—	\$17,558,936,661
Fiduciary Net Position Restricted For Other Postemployment Benefits	\$—	\$—	\$—	\$—	\$706,785,561	\$706,785,561
Fiduciary Net Position, End of Year	\$17,259,676,387	\$268,029,775	\$31,095,304	\$135,195	\$706,785,561	\$18,265,722,222

See accompanying notes to the basic financial statements.

1. Summary of Significant Accounting Policies

Basis of Accounting The financial statements of the School Employees Retirement System of Ohio (SERS) are prepared using the economic resources measurement focus and accrual basis of accounting. Member and employer contributions are recognized in the period in which the contributions are due based on statutory or contractual requirements. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

Use of Estimates In preparing financial statements in conformity with governmental accounting principles generally accepted in the United States of America, SERS' management makes estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities at the date of the financial statements, as well as the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates and assumptions. Certain SERS investment assets, in particular Global Real Assets, Global Private Equity, and Opportunistic and Tactical investments, use estimates in reporting fair value in the financial statements. These estimates are subject to uncertainty in the near term, which could result in changes in the values reported for those assets in the Statement of Fiduciary Net Position.

Allocation of Expenses to Plans Direct expenses are charged to the fund for which they are incurred. All indirect expenses are paid by the Pension Trust Fund and are reimbursed by the Medicare B, Death Benefit, and Health Care funds in proportion to their use of the assets.

Investments Investment purchases and sales are recorded as of the trade date. Dividend income is recognized on the ex-dividend date. Other investment income is recognized when earned.

Investments are reported at fair value. Fair value is the amount reasonably expected to be received for an investment in a current sale between a willing buyer and a willing seller. Fixed income securities, real estate investment trusts (REITs), derivative instruments, and common and preferred stocks are valued based on published market prices and quotations from national security exchanges and securities pricing services. International stocks are then adjusted to reflect the current exchange rate of the underlying currency. Investments for which no national exchanges or pricing services exist, such as private equity assets, are valued at fair value by the investment partnership based on the valuation methodology outlined in the partnership agreement. Real estate may be valued by the manager or independent appraisers.

Commingled assets that are not traded on a national exchange are valued by the commingled manager. SERS performs due diligence reviews of the investment pricing, process, and infrastructure of private equity, commingled, and real estate investments to assure that the asset values provided by the managers are reasonable. These investments are valued using net asset values supplied by the commingled manager.

Net appreciation (depreciation) is determined by calculating the change in the fair value of investments between the beginning of the year and the end of the year, less purchases of investments at cost, plus sales of investments at fair value. Investment expenses consist of external expenses directly related to SERS' investment operations, as well as the internal administrative expenses associated with SERS' investment program.

The monies held by the Pension Trust, Medicare B, Death Benefit, and Health Care funds are pooled for the purpose of the investment of those funds. Each fund holds units of the investment pool, which are adjusted on a monthly basis. The value of one unit of the pool on June 30, 2023, was \$3,508.02. The unit holdings and net value of each of the funds at the close of the fiscal year were:

INVESTMENT POOL AS OF JUNE 30, 2023		
	Units	Value
Pension Trust Fund	4,863,000	\$17,059,509,706
Medicare B Fund	72,332	253,743,168
Death Benefits Fund	8,695	30,502,283
Health Care Fund	157,181	551,394,122
Total	5,101,208	\$17,895,149,279

Office Building, Equipment, and Fixtures (Non-Investment Assets) The cost of equipment and fixtures in excess of \$5,000 and with a useful life greater than 1 year is capitalized at cost when acquired. Improvements that increase the useful life of the property are capitalized. Maintenance and repairs are charged to expense as incurred. Software costs in excess of \$25,000 are capitalized. Intangible assets, such as internally-developed software, are capitalized in accordance with GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets*. Depreciation and amortization have been provided using the straight-line method over the following useful lives:

Description	Estimated Lives
Furniture, Equipment, and Software	3-7 years
Building and Improvements	40 years
Internally-developed Software	17 years

Reserves Ohio Revised Code Section 3309.60 establishes various reserves to account for future and current benefit payments. These are:

- **Employees' Savings Fund** Accumulated members' contributions are held in trust pending refund or transfer to another account other than the Guarantee Fund or Expense Fund.
- **Employers' Trust Fund** Accumulated employer contributions are held for future benefit payments.
- **Annuity and Pension Reserve Fund** This reserve contains the monies set aside to pay all annuities and pensions. Money is transferred to this fund from the Employees' Savings Fund, Employers' Trust Fund, and Guarantee Fund at the time of retirement.
- **Survivors' Benefit Fund** Monies in this account are set aside to finance payments to beneficiaries of deceased members. Money is transferred to this fund from the Employees' Savings Fund, Employers' Trust Fund, and Guarantee Fund in an amount to fund all liabilities at the end of each year.
- **Guarantee Fund** Income derived from the investment pool and any gifts or bequests are accumulated in this fund. The balance in this fund is transferred to other reserves to aid in the funding of future benefit payments and administrative expenses.
- **Expense Fund** This fund provides for the payment of annual administrative expenses with the necessary money allocated to it from the Guarantee Fund. This is a pass through fund, therefore it maintains a zero balance.

RESERVE BALANCES AS OF JUNE 30, 2023

	Reserve Amount Totals
Employees' Savings Fund	\$3,754,028,595
Employers' Trust Fund	178,717,704
Annuity and Pension Reserve Fund	13,952,980,407
Survivors' Benefit Fund	379,995,516
Guarantee Fund	—
Expense Fund	—
Total	\$18,265,722,222

2. Description of the System

Organization SERS is a statewide, cost-sharing, multiple-employer defined benefit public pension plan. Established by state law in 1937, SERS provides retirement, disability, and survivor benefits to non-teaching employees of Ohio's public K-12 school districts, vocational, technical, and community schools, community colleges, and the University of Akron.

The Retirement Board is responsible for the general administration and management of the System. The Board comprises nine members: four elected employee members; two elected retiree members; and three appointed investment expert members. One investment expert is appointed by the Governor, a second one by the State Treasurer, and a third one jointly by the Speaker of the House and President of the Senate.

Several separate funds comprise the Retirement System. The pension funds include the Pension Trust Fund, the Medicare B Fund, the Death Benefit Fund, and the Qualified Excess Benefit Arrangement (QEBA) Fund. The Pension Trust Fund holds the funds to pay the basic retirement, disability, and survivor benefits authorized under state law, Ohio Revised Code (ORC) Chapter 3309. The Medicare B Fund reimburses a portion of the Medicare Part B premiums paid by eligible benefit recipients as permitted under ORC Section 3309.69. The current reimbursement is \$45.50 per month. The Death Benefit Fund pays \$1,000 to a designated beneficiary of a deceased retiree or disability benefit recipient as allowed under ORC Section 3309.50. The QEBA Fund pays benefits as allowed by federal tax law to retirees whose SERS benefits exceed Internal Revenue Code (IRC) 415(b) limits. A fifth fund, the Health Care Fund, provides money for payment of health care expenses under SERS' health care coverage for retirees and other benefit recipients.

Pension Benefits Following the passage of Senate Bill 341, SERS' pension reform legislation, new age and service requirements for retirement became effective January 7, 2013. For members who retired on or after August 1, 2017, the new requirements are:

- age 67 with 10 years of service credit, or age 57 with 30 years of service credit, to retire with full benefits; or
- age 62 with 10 years of service credit, or age 60 with 25 years of service credit, to retire early with actuarially-reduced benefits.

To protect the benefits of longtime members, SERS included an exemption provision and a buy-up option that gave members the opportunity to retire under the previous age and service credit requirements after August 1, 2017.

The exemption provision allowed members, who attained 25 years of service on or before August 1, 2017, to retire under the previous age and service credit eligibility requirements.

These age and service requirements were:

- any age with 30 years of service credit to retire with full benefits; or
- age 60 with 5 years of service credit, or age 55 with 25 years of service credit to retire with actuarially-reduced benefits.

The buy-up option allowed members with fewer than 25 years of service credit as of August 1, 2017, to retire under the previous retirement eligibility requirements if they paid the actuarial difference between the benefit they would have received under the new requirements and the benefit they would have received under the previous requirements. Members who wanted to buy-up must have completed their payment on or before August 1, 2017.

The current formula used in calculating an annual retirement benefit is as follows: number of years of service credit up to 30 years x 2.2% of the member's final average salary (FAS) + number of years of service credit over 30 years x 2.5% of FAS. For SERS, FAS equals the average of the highest three years of salary. If the member does not meet the age and service requirements to retire with full benefits, the annual benefit is reduced to cover a longer period of retirement.

If a member has been employed in a job covered by the State Teachers Retirement System of Ohio (STRS) or the Ohio Public Employees Retirement System (OPERS) as well as in a job covered by SERS, at retirement the member may receive a retirement benefit independently from each of the systems, if eligible, or may combine the service credit and accounts in all the systems to receive one benefit. The system with the greatest service credit will be the system that will calculate and pay the benefit. While the salaries in one year will be added together, if the member has service credit in each system for the same year, the member cannot be credited with more than one year of service credit.

If a retiree from OPERS, SERS, STRS, Ohio Police & Fire, or Ohio State Highway Patrol is employed in a SERS-covered position, then member and employer contributions are required for the new position. The retiree accrues a new benefit in the form of an annuity based on the contributions paid by the retiree and the employer payable at age 65 or termination of employment, whichever is later. This is separate from the original SERS benefit. There are no other benefits available and the retiree does not accrue any additional service credit for the period of reemployment. Prior to age 65 and after termination of employment, a reemployed retiree may request a refund of the member contributions for the reemployed period.

EMPLOYER AND EMPLOYEE MEMBERSHIP DATA

(as of June 30, 2023)

Employer Members

Local	371
City	191
Educational Service Center	52
Village	49
Higher Education	15
Vocational/Technical	49
Community Schools	319
Other	23
Total	1,069

Employee Members and Retirees

Retirees and Beneficiaries Currently Receiving Benefits	81,833
Inactive Employee Members Entitled to But Not Yet Receiving Benefits	6,413
Total	88,246

Active Employee Members

Vested Active Employee Members	42,715
Non-vested Active Employee Members	117,158
Total	159,873

3. Contributions

State retirement law requires contributions by covered employee members and their employers, and limits the maximum rate of contributions. The Retirement Board sets contribution rates within the allowable limits. The adequacy of employer contribution rates is determined annually by actuarial valuation using the entry age normal cost method. During FY2023, members and their employers were required to contribute 10% and 14%, respectively, of active member payroll.

Employer (excluding surcharge discussed below) and member contributions were \$557.0 million and \$398.9 million, respectively, in FY2023. The contribution amounts also included contributions for purchased service credit.

The Retirement Board, acting with the advice of the actuary, allocates the current employer contribution rate among the funds of the System. For FY2023, the allocation of the employer contribution rate to pension plan benefits was established as the rate necessary to cover normal cost and amortize the unfunded accrued liability. The 14% contribution rate paid by employers was allocated to the funds as follows:

Pension Trust Fund	13.28%
Medicare B Fund	0.67%
Death Benefit Fund	0.05%
Health Care Fund	0.00%

The portion of the employer contribution not required to actuarially fund the pension plans (Pension Trust Fund, Medicare B Fund, and Death Benefit Fund) may be available for the Health Care Fund, depending on funded ratios. The funded ratio for the basic pension benefits in FY2023 was 76.61%, which was above the 70% funded ratio that would permit an allocation to the Health Care Fund. The amount of employer contributions directed to the Health Care Fund in FY2023 was zero in order to direct more contributions toward paying down pension liabilities. A health care surcharge on employers was collected for employee members earning less than an actuarially determined minimum compensation amount, and was pro-rated according to service credit earned during the year. Statutes provide that no employer shall pay a health care surcharge greater than 2.0% of that employer's SERS-covered payroll; nor may SERS collect in aggregate more than 1.5% of total statewide SERS-covered payroll for the health care surcharge. For FY2023, the minimum compensation level was established at \$25,000. The surcharge accrued for FY2023 and included in employer contributions in the Statement of Changes in Fiduciary Net Position is \$57.5 million.

4. Funding Policy

Statute sets a contribution cap of 24% of payroll; 14% from employers and 10% from employee members. Employer contributions in excess of those required to support the basic benefits may be allocated to retiree health care funding. If the funded ratio is less than 70%, the entire 14% employers' contribution shall be allocated to SERS' basic benefits. If the funded ratio is 70% but less than 80%, at least 13.50% of the employers' contribution shall be allocated to SERS' basic benefits, with the remainder (if any) allocated to the Health Care Fund. If the funded ratio is 80% but less than 90%, at least 13.25% of the employers' contribution shall be allocated to SERS' basic benefits, with the remainder (if any) allocated to the Health Care Fund. If the funded ratio is 90% or greater, the Health Care Fund may receive any portion of the employers' contribution that is not needed to fund SERS' basic benefits.

5. Fair Value Measurement

SERS investments are measured at fair value within the fair value hierarchy established by GASB Statement No. 72, *Fair Value Measurement and Application*. This Statement established a three-tier, hierarchical reporting framework which ranks the level of market price observations used in measuring fair value. The hierarchy is based on the valuation inputs used to measure the fair value of the investment and gives the highest ranking to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest ranking to unobservable inputs (Level 3). Inputs refer to the assumptions that market participants would use in valuing the asset or liability, including assumptions about risk, for example, the risk inherent in a particular valuation technique used to measure fair value (such as a pricing model) and/or the risk inherent in the inputs to the valuation technique. The categorization of the investments within the hierarchy is based upon the valuation transparency of the instrument and should not be perceived as the particular investment's risk. The three-tier hierarchy is summarized as follows:

Level 1 – Unadjusted quoted prices for identical instruments in active markets.

Level 2 – Quoted prices 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.

Level 3 – Valuations reflect practices where significant inputs are unobservable.

Investments in certain entities that calculate a net asset value (NAV) per share (or its equivalent) sometimes do not have a readily determinable fair value. For these investments, governmental accounting standards permit establishment of fair value using a practical expedient based on the NAV per share (or its equivalent).

The table on page 31, presents the fair value hierarchy of SERS' investment portfolio as of June 30, 2023.

Equity, US Corporate Obligations, US Government, and derivative instruments classified in Level 1 are valued using prices quoted in active markets for those securities.

Bond Mutual Funds classified in Level 2 include investments in money market-type securities that are reported at either fair value or at cost plus accrued interest, which approximates market or fair value.

Debt and derivative instruments classified in Level 2 are valued using either a bid evaluation or a matrix based pricing technique. Bid evaluations are typically based on market quotations, yields, maturities, call features, and ratings. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Index linked debt securities are valued by multiplying the external market price by the applicable day's Index Ratio. Level 2 debt securities have non-proprietary information that was readily available to market participants, from multiple independent sources, which are known to be actively involved in the market.

Equity and equity derivative instruments classified in Level 2 are securities whose values are derived daily from associated traded securities.

Debt, equities, and investment derivative instruments classified in Level 1 of the fair value hierarchy are valued directly from a predetermined primary external pricing vendor. Assets classified in Level 2 are subject to pricing by an alternative pricing source due to lack of information available by the primary vendor.

The fair values of investments in certain Commingled Funds, Hedge funds and Private Funds are based on the investments' net asset value provided by the investee. Investments that are measured at fair value using the net asset value as practical expedient are not classified in the fair value hierarchy.

INVESTMENTS AND SHORT-TERM HOLDINGS MEASURED AT FAIR VALUE (<i>\$ in thousands</i>)				
Investments by Fair Value Level	6/30/2023	Fair Value Measurements Using		
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Debt Securities				
Bond Mutual Funds	\$539,351	\$—	\$539,351	\$—
Certificates of Deposit	5,109	—	5,109	—
Foreign Obligations	293,655	1,353	292,302	—
Mortgage and Asset Backed	169,151	—	169,151	—
Municipal Obligations	23,273	—	23,273	—
US Corporate Obligations	485,794	—	483,548	2,246
US Government	1,048,347	431,859	616,488	—
Total Debt Securities	2,564,680	433,212	2,129,222	2,246
Equity Securities				
Foreign Common & Preferred Stock	1,906,512	1,906,476	—	36
US Common & Preferred Stock	3,921,643	3,899,994	21,649	—
Total Equity Securities	5,828,155	5,806,470	21,649	36
Total Investments by Fair Value Level	\$8,392,835	\$6,239,682	\$2,150,871	\$2,282
Investments Measured at the net asset value (NAV)				
Commingled Bond Funds	\$135,463			
Commingled Equity Funds	1,506,561			
Hedge Funds	434,814			
Private Credit Funds	1,403,463			
Private Equity Funds	2,398,313			
Private Real Estate Funds	3,563,418			
Total Investments Measured at the NAV	9,442,032			
Total Investments Measured at Fair Value	\$17,834,867			
Investment Derivative Instruments				
Foreign Equity Derivatives	\$449	\$449	\$—	
Foreign Fixed Derivatives	(419)	(61)	(358)	
US Equity Derivatives	(1,045)	(1,045)	—	
US Fixed Derivatives	(1,789)	(1,790)	1	
Total Investment Derivative Instruments	(\$2,804)	(\$2,447)	(\$357)	
Reconciliation of Investments to Statement of Fiduciary Net Position				
Investments Measured at Fair Value		\$17,834,867,577		
Investment Derivative Instruments		(2,803,720)		
Bond Mutual Funds		(539,351,321)		
Foreign Obligations		1,907,830		
Rounding		258		
Investments at Fair Value (Statement of Fiduciary Net Position)		\$17,294,620,624		

INVESTMENTS MEASURED AT THE NET ASSET VALUE *(\$ in thousands)*

Investments by Fair Value Level	6/30/2023	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Bond Funds ¹	\$135,463	\$—	Monthly	1-10 Days
Commingled International Equity Funds ¹	1,506,561	—	Daily, Semi-Monthly, Monthly	1-120 Days
Hedge Funds				
Event Driven ²	10,902	—	Monthly, Quarterly	45-90 Days
Multi-Strategy / Risk Focus ³	14,387	—	Daily, Monthly	1-45 Days
Relative Value ⁴	255,979	—	Quarterly	60-90 Days
Tactical Trading ⁵	153,546	—	Quarterly	30 Days
Private Credit Funds ⁶	1,403,463	1,238,942	Not Eligible	Not Eligible
Private Equity Funds ⁶	2,398,313	1,438,774	Not Eligible	Not Eligible
Private Real Estate Funds ⁶	3,563,418	300,502	Not Eligible	Not Eligible
Total Investments Measured at the NAV	\$9,442,032			

¹ *Commingled Bond Funds, Equity Funds, and Real Estate Investment Trust Funds* Nine bond funds, 27 equity funds, and one real estate investment trust fund are considered to be commingled in nature. These investments are used to gain exposure in bonds, international equity and real estate through a pooled investment vehicle.

² *Event Driven Hedge Funds* Consisting of six funds, this strategy seeks to gain an advantage from pricing inefficiencies that may occur in the onset or aftermath of a corporate action or related event. These investments are valued at NAV per share. Due to contractual lock-up restrictions, approximately 20% of the value of these investments are eligible for redemption in the next six months. The remaining 80% of these investments remains restricted through the next year. SERS is currently in the process of liquidating these investments.

³ *Multi-Strategy / Risk Focus Hedge Funds* Twelve funds included in this group aiming to pursue varying strategies in order to diversify risks and reduce volatility. The investments are valued at NAV per share, and are redeemable within a month or less, as they are not subject to lock-up restrictions.

⁴ *Relative Value Hedge Funds* Consisting of three funds, this strategy's main focus is to benefit from valuation discrepancies that may be present in related financial instruments by simultaneously purchasing or selling these instruments. These investments are valued at NAV per share. 100% of these investments are eligible for redemption in the next six months.

⁵ *Tactical Trading Hedge Funds* The primary focus of the two funds within this group is to invest across multiple strategies based upon the outcomes of economic and technical analyses, with the goal of long-term benefit. These investments are valued at NAV per share. 100% of these investments are eligible for redemption in the next six months.

⁶ *Private Credit, Private Equity, and Private Real Estate Funds* SERS' Private Credit portfolio consists of 19 private partnerships providing exposure to distressed debt. SERS' Private Equity portfolio consists of 73 funds, investing primarily in Buyout Funds, with some exposure to Distressed Funds, Special Situations, Structured Debt, and Venture Capital. The Real Estate portfolio, comprised of 32 funds, invests mainly in U.S. commercial real estate. The fair values of these funds are measured at net asset value, and are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of five to ten years.

6. Cash Deposits and Investments

Custodial Credit Risk, Deposits Custodial credit risk for deposits is the risk that in the event of a bank failure, SERS' deposits may not be returned. In accordance with state law, the Board of Deposit designates SERS' depository bank, and the Treasurer of State serves as custodian and contracts depository services for all of SERS' deposits. Therefore, SERS does not have a policy for deposit custodial credit risk.

At June 30, 2023, the carrying amounts of SERS' operating and investment cash deposits totaled \$235,364,965, and the corresponding bank balances totaled \$177,036,897. Of the bank balances, the Federal Deposit Insurance Corporation insured \$1,892,204. In accordance with state law, bank balances of \$100,042,708 were collateralized at 56% with securities held in the name of SERS' pledging financial institutions. The remaining bank deposits of \$75,101,985 were uninsured and uncollateralized.

Custodial Credit Risk, Investments Custodial credit risk for investments is the risk if the securities are uninsured, are not registered in the name of the SERS, and are held by either the counterparty or the counterparty's trust department or agent. As of June 30, 2023, approximately \$9.4 billion of SERS' assets are not held by the custodians or registered in the SERS name.

Credit Risk Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. ORC 3309.15 and the Board's *Statement of Investment Policy* direct that the funds of SERS will be invested following the prudent person standard. This fiduciary standard dictates that the Board consider the probable safety of investments, avoid speculative investments, and invest as persons of

Notes to the Basic Financial Statements June 30, 2023

prudence, discretion, and intelligence would manage their own affairs. The Board accomplishes this through a combination of internal and external investment professionals.

Concentration of Credit Risk Concentration of credit risk is the risk of loss attributed to the magnitude of a plan's investment in a single issuer. SERS does not hold investments representing 5% or more of plan investment portfolio in any one issuer.

Interest Rate Risk Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. SERS does not have a policy for managing interest rate risk.

At June 30, 2023, SERS held interest-only strips that had a total fair value of \$9,946,979. These securities are based on cash flows from interest payments on underlying mortgages. Therefore, they are sensitive to prepayments by mortgagees, which may result from a decline in interest rates. SERS also held principal-only strips that had a total fair value of \$815,262. These principal-only strips are sensitive to interest rate increases that may result in decreasing mortgage prepayments, thus increasing the average maturity of this investment.

Foreign Currency Risk Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. SERS' exposure to foreign currency risk derives from its positions in foreign currency and foreign currency denominated investments.

FAIR VALUE SUBJECT TO COUNTERPARTY CREDIT RISK (\$ in thousands)		
	S&P Credit Quality Rating	Fair Value
Foreign Fixed Derivatives	A	(\$817)
	A+	(218)
	A-	219
	AA-	537
	BBB+	(79)
Total		(358)
US Fixed Derivatives	A	1
Total		1
Total		(\$357)

* Futures and Options contracts are transacted via clearinghouse and are not subject to counterparty risk.

FAIR VALUE SUBJECT TO INTEREST RATE RISK		
Investment	Fair Value (\$ in thousands)	Option Adjusted Duration (in years)
Bond Mutual Funds	\$539,351	0.01
Certificates of Deposit	5,109	3.17
Foreign Obligations ¹	295,563	4.93
Mortgage and Asset Backed	169,151	2.23
Municipal Obligations	23,273	6.41
US Corporate Obligations	485,794	5.90
US Government & Agency Obligations	1,048,347	6.58
Total	\$2,566,588	4.58

¹ Excludes Pending FX

FAIR VALUE SUBJECT TO ISSUER CREDIT RISK (\$ in thousands)											
Fair Value Based Upon S&P Credit Quality Rating											
	AAA	AA	A	BBB	BB	B	CCC	CC	D	Not Rated	Total
Bond Mutual Funds	\$—	\$77,614	\$172,682	\$—	\$—	\$—	\$—	\$—	\$—	\$289,055	\$539,351
Certificates of Deposit	—	—	997	4,112	—	—	—	—	—	—	5,109
Foreign Obligations	6,564	7,327	43,036	123,556	42,776	12,399	5,894	—	1,706	52,305	295,563
Mortgage and Asset Backed	47,471	22,794	15,590	11,408	930	1,617	721	444	173	68,003	169,151
Municipal Obligations	—	8,744	10,963	—	—	—	—	—	—	3,566	23,273
US Corporate Obligations	2,333	12,761	112,353	302,924	40,395	10,312	733	—	—	3,983	485,794
US Government & Agency Obligations	816	995,944	—	—	—	—	—	—	—	51,587	1,048,347
Total	\$57,184	\$1,125,184	\$355,621	\$442,000	\$84,101	\$24,328	\$7,348	\$444	\$1,879	\$468,499	\$2,566,588

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FAIR VALUE SUBJECT TO FOREIGN CURRENCY RISK (\$ in thousands)

Type	Currency	Foreign Common & Preferred Stock	Foreign Equity Derivatives	Foreign Obligations	Foreign Fixed Derivatives	Commingled Equity Funds	Private Equity Funds	Private Real Estate Funds	Hedge Funds
Argentinean Peso	\$5	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—
Australian Dollar	149	34,040	(23)	—	(6)	254	—	—	—
Brazilian Real	132	22,201	—	956	17	—	—	—	—
British Pound	1,251	229,800	(33)	238	(12)	—	50,037	—	—
Canadian Dollar	1,112	67,097	48	—	—	—	—	—	—
Chilean Peso	—	471	—	1,384	(8)	—	—	—	—
Chinese Yuan	38	75,804	—	2,334	—	—	—	—	—
Colombian Peso	—	—	—	794	(51)	—	—	—	—
Czech Koruna	(32)	—	—	3,246	—	—	—	—	—
Danish Krone	351	39,033	—	—	—	—	—	—	—
Egyptian Pound	215	—	—	—	—	—	—	—	—
Euro	1,332	396,147	119	3,889	(15)	—	215,655	30,518	11,307
Hong Kong Dollar	784	113,832	(3)	—	—	—	—	—	—
Hungarian Forint	—	68	—	1,099	—	—	—	—	—
Indian Rupee	457	25,173	—	—	—	—	—	—	—
Indonesian Rupiah	—	5,111	—	6,198	—	—	—	—	—
Israeli Shekel	86	1,564	—	—	—	—	—	—	—
Japanese Yen	2,014	340,934	7	—	(9)	—	—	—	—
Malaysian Ringgit	—	—	—	3,619	—	734	—	—	—
Mexican Peso	326	7,550	—	9,109	(242)	—	—	—	—
Norwegian Krone	222	9,468	—	—	—	—	—	—	—
Peruvian New Sol	—	—	—	2,446	—	—	—	—	—
Polish Zloty	5	972	—	1,586	(17)	—	—	—	—
Romanian Leu	1	—	—	—	—	—	—	—	—
Saudi Riyal	—	4,076	—	—	—	—	—	—	—
Singapore Dollar	112	14,802	—	—	7	—	—	—	—
South African Rand	78	4,576	—	4,402	(33)	—	—	—	—
South Korean Won	48	88,477	—	2,899	(8)	—	—	—	—
Swedish Krona	185	21,473	3	—	—	—	—	—	—
Swiss Franc	105	109,823	—	—	—	—	—	—	—
Taiwan Dollar	250	38,900	—	—	—	—	—	—	—
Thailand Baht	—	4,500	—	2,912	—	—	—	—	—
Turkish Lira	103	6,669	—	—	—	—	—	—	—
United Arab Emirates	—	2,018	—	—	—	—	—	—	—
Total	\$9,329	\$1,664,579	\$118	\$47,111	(\$377)	\$988	\$265,692	\$30,518	\$11,307

Derivative Instruments Derivative instruments are investment instruments whose cash flows or fair values are derived from the value of some other asset or index. SERS uses a variety of derivative instruments primarily to maximize yields and offset volatility due to interest rate and currency fluctuations. SERS is exposed to various types of credit, market, and legal risks related to these investments. The investment staff continually monitors these types of investments.

Foreign exchange forward currency contracts are legal agreements between two parties to purchase and sell a foreign currency, for a price specified at the contract date, with delivery and settlement in the future. SERS enters into these contracts to hedge the foreign currency movements of assets held in the underlying funds. The contracts do not subject SERS to risk due to exchange rate movements since gains and losses on the contracts offset gains and losses on the transactions being hedged. SERS could be at risk for replacing these contracts at current market rates, should the counterparty default. SERS seeks to control this risk through contracting only with counterparties that meet certain credit guidelines. A futures contract is a contract to buy or sell units of an index or financial instrument on a specified future date at a price agreed upon when the contract is originated. SERS uses equity and fixed income futures during the fiscal year to rebalance its asset allocation and overlay its cash exposure in the US and Non-US equity portfolios. Only the most liquid futures are used by SERS to overlay the temporary and transactional cash held, and to rebalance asset allocations between asset classes.

Options give buyers the right, but not the obligation, to buy or sell an asset at a predetermined strike price over a specified period. The option premium is usually a small percentage of the underlying asset's value. When writing an option, SERS receives a premium up front and bears the risk of an unfavorable change in the price of the underlying asset during the option's life.

Swaps represent an agreement between two or more parties to exchange a sequence of cash flows during a predetermined timeframe. SERS utilizes swaps to manage interest rate fluctuations, default by a borrower, and to gain market exposure without having to actually own the asset.

FAIR VALUE OF FORWARD CURRENCY *(\$ in thousands)*

As of June 30, 2023 and 2022	FY2023	FY2022
Forward Currency Purchases	\$4,309,846	\$4,414,339
Forward Currency Sales	4,307,938	4,442,566
Unrealized gain (loss)	(1,908)	28,227

SWAP CONTRACTS *(\$ in thousands)*

As of June 30, 2023 and 2022	FY2023		FY2022	
	Notional Value	Fair Value	Notional Value	Fair Value
Credit Default	\$20,936	\$3	\$24,857	(\$114)
Interest Rate	20,172	(355)	80,530	(643)
Zero Coupon	100,070	(5)	63,971	4,619

Notes to the Basic Financial Statements June 30, 2023

FUTURES CONTRACTS *(\$ in thousands)*

As of June 30, 2023 and 2022	FY2023			FY2022		
	Type	Number of Contracts	Notional Value	Contract Value	Number of Contracts	Notional Value
Equity Features						
International Equity Index Futures - Long	345	\$33,359	\$118	(64)	(\$3,501)	(\$36)
International Commodity Futures - Long	21	2,942	(9)	21	3,041	(78)
US Commodity Futures - Short				(8)	(846)	9
US Stock Index Futures - Long	1,495	162,637	3,499	50	9,548	43
US Stock Index Futures - Short	(643)	(144,297)	(4,544)	(71)	(7,015)	(75)
Fixed Income / Cash Equivalent Futures						
Cash Equivalent (3 Month) Futures - Long	104	24,974	(44)	81	20,260	(17)
Cash Equivalent (3 Month) Futures - Short	(134)	(31,704)	375	(40)	(9,705)	(10)
Cash Equivalent (Eurodollar) Futures - Long				366	88,264	(1,077)
Cash Equivalent (Eurodollar) Futures - Short				(66)	(16,035)	115
International Fixed Income Index Futures - Long	47	4,469	(30)	38	3,539	(25)
International Fixed Income Index Futures - Short	(5)	(2,512)	(22)	(4)	(669)	33
US Treasury Futures - Long	2,520	313,874	(2,664)	2,198	264,371	(1,664)
US Treasury Futures - Short	(641)	(84,225)	1,096	(1,441)	(201,134)	868
Total Futures (Net)	3,109	\$279,517	(\$2,225)	1,060	\$150,118	(\$1,914)

OPTIONS CONTRACTS *(\$ in thousands)*

As of June 30, 2023 and 2022	FY2023			FY2022		
	Type	Number of Contracts	Notional Value	Fair Value	Number of Contracts	Notional Value
Fixed Income Options						
Fixed Income Call Options on Futures (non-dollar) - Purchased	—	\$—	\$—	314	\$—	\$35
Fixed Income Call Options on Futures (non-dollar) - Written	—	—	—	(690)	—	(204)
Fixed Income Put Options on Futures (non-dollar) - Written	—	—	—	(137)	—	(568)
Fixed Income Call Options on US Interest Rate Swap - Purchased	—	—	—	29,000,000	29,000	9
Fixed Income Call Options on US Interest Rate Swap - Written	—	—	—	(50,950,000)	(50,950)	(10)
Fixed Income Call Options on US Futures - Purchased	204	—	31	23	—	44
Fixed Income Call Options on US Futures - Written	(264)	—	(81)	(91)	—	(93)
Fixed Income Put Options on US Futures - Purchased	784	—	352	—	—	—
Fixed Income Put Options on US Futures - Written	(704)	—	(524)	(76)	—	(10)

Securities Lending SERS participates in a securities lending program that directly holds equity and fixed income investments using Goldman Sachs Agency Lending (GSAL) as a third-party lending agent. Securities are loaned to independent broker/dealers in exchange for cash collateral equal to approximately 102% of the fair value of domestic securities on loan and 105% of the fair value of international securities on loan, with a simultaneous agreement to return the collateral for the same securities in the future. At the same time, SERS records a liability for the collateral held in the securities lending program. The total net loss on the securities lending program was \$1,038,814 during FY2023.

At June 30, 2023, SERS had no credit risk exposure on the securities lending collateral because the collateral exceeded the value of the securities loaned. SERS also had no credit risk exposure on the securities lending collateral reinvested as the reinvested value exceeded the collateral value.

Under the terms of the lending agreement, SERS is fully indemnified against losses that might occur in the program due to the failure of a broker to return a security that was borrowed where the collateral is inadequate to replace the security. SERS is also indemnified should the borrower fail to pay distributions of earnings on the securities lent.

Securities on loan can be recalled on demand by SERS or returned by the borrower at any time. There is no matching of the securities lent with the invested cash collateral. The lending agent mitigates risk by focusing on intrinsic value lending, and BNY Mellon reinvests the cash collateral in accordance with contractual investment guidelines that are designed to ensure the safety of principal and obtain a moderate rate of return. Earnings generated from the collateral investments, less the amount of rebates paid to the dealers, result in the gross earnings from lending activities, which is then split on an 85%/15% basis with GSAL. SERS is at risk to contribute additional funds should the earnings from the invested SERS collateral not be sufficient to pay the negotiated dealer rebate. At June 30, 2023, the GSAL collateral portfolio had an average weighted maturity of three days. SERS receives pro-rated income from participation in the securities lending program of a commingled investment. SERS has no direct responsibility for this program and the collateral held by this securities lending program is not held in SERS' name. Total net direct proceeds from the commingled investment during FY2023 were \$69,584.

SECURITIES LENDING (*\$ in thousands*)

As of June 30, 2023	Fair Value of Securities on Loan	Collateral Value (Cash)	Collateral Reinvest Value
Cash Equivalents (Repurchase Agreement)	\$—	\$—	\$35,264
Foreign Stocks	10,678	11,247	—
US Common & Preferred Stock	14,217	14,564	—
US Corporate Obligations	9,227	9,418	—
Total	\$34,122	\$35,229	\$35,264

7. Capital Assets (Non-Investment Assets)

CAPITAL ASSETS ACTIVITY (*for the year ended June 30, 2023*)

Cost:	Land	Office Building & Improvements	Furniture & Equipment	Internally-Developed Software	Total Capital Assets
Balances, June 30, 2022	\$3,315,670	\$54,281,003	\$8,373,826	\$34,979,428	\$100,949,927
Additions	—	266,088	—	—	266,088
Disposals	—	—	(426,529)	—	(426,529)
Balances, June 30, 2023	3,315,670	54,547,091	7,947,297	34,979,428	100,789,486
Accumulated Depreciation:					
Balances, June 30, 2022	—	27,458,371	7,836,082	10,472,220	45,766,673
Additions	—	1,410,051	399,318	2,057,613	3,866,982
Disposals	—	—	(426,529)	—	(426,529)
Balances, June 30, 2023	—	28,868,422	7,808,871	12,529,833	49,207,126
Net Capital Assets, June 30, 2023	\$3,315,670	\$25,678,669	\$138,426	\$22,449,595	\$51,582,360

8. Net Pension Liability and Actuarial Information – Defined Benefit Plan

The components of the net pension liability as of June 30, 2023:

PLAN FUNDS

Total Pension Liability (a)	\$23,084,316,697
Fiduciary Net Position (b)	17,558,801,466
Net Pension Liability (Surplus) (a) - (b)	\$5,525,515,231
Fiduciary Net Position as a Percent of Total Pension Liability (b) / (a)	76.06%

The total pension liability is determined by SERS' actuaries in accordance with GASB 67, as part of their annual actuarial valuation for each defined benefit retirement plan. Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts (e.g., salaries, credited service) and assumptions about the probability of occurrence of events far into the future (e.g., mortality, disabilities,

Notes to the Basic Financial Statements June 30, 2023

retirements, employment terminations). Actuarially determined amounts are subject to continual review and potential modifications, as actual results are compared with past expectations and new estimates are made about the future.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employers and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing benefit costs between the employers and plan members to that point. The projection of benefits for financial reporting purposes does not explicitly incorporate the potential effects of legal or contractual funding limitations. Future benefits for all current plan members were projected through 2137.

Actuarial calculations reflect a long-term perspective. For a newly hired employee, actuarial calculations will take into account the employee's entire career with the employer and also take into consideration the benefits, if any, paid to the employee after termination of employment until the death of the employee and any applicable contingent annuitant. In many cases, actuarial calculations reflect several decades of service with the employer and the payment of benefits after termination.

The long-term return expectation for the Pension Plan Investments has been determined by using a building-block approach and assumes a time horizon, as defined in the *Statement of Investment Policy*. ORC 3309.15 and the Board-adopted Investment Policy govern investment activity at SERS. A forecasted rate of inflation serves as the baseline for the return expectation. Various real return premiums over the baseline inflation rate have been established for each asset class. The long-term expected nominal rate of return has been determined by calculating an arithmetic weighted average of the expected real return premiums for each asset class, adding the projected inflation rate, and adding the expected return from rebalancing uncorrelated asset classes.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2023 are summarized in the following table:

ASSET CLASS	TARGET ALLOCATION	LONG-TERM EXPECTED REAL RATE OF RETURN (GEOMETRIC)
Cash	2.00%	0.75%
US Equity	24.75	4.82
Non-US Equity Developed	13.50	5.19
Non-US Equity Emerging	6.75	5.98
Fixed Income / Global Bonds	19.00	2.24
Private Equity	12.00	7.49
Real Estate / Real Assets	17.00	3.70
Private Debt / Private Credit	5.00	5.64

Total pension liability was calculated using the discount rate of 7.00%. The discount rate determination did not use a municipal bond rate. The projection of cash flows used to determine the discount rate assumed that employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 21-year amortization period of the unfunded actuarial accrued liability. The actuarially determined contribution rate of FY2023 was 14%. Projected inflows from investment earnings were calculated using the long-term assumed investment rate of return, 7.00%. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefits to determine the total pension liability. The annual money-weighted rate of return, calculated as the internal rate of return on pension plan investments, for FY2023 was 6.90%.

Net pension liability is sensitive to changes in the discount rate, and to illustrate the potential impact the table presents the net pension liability calculated using the discount rate of 7.00%, as well as what the plan's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00%), or one percentage point higher (8.00%) than the current rate.

NET PENSION LIABILITY SENSITIVITY TO CHANGES IN DISCOUNT RATE	
1% Decrease (6.00%)	\$8,155,377,885
Current Discount Rate (7.00%)	\$5,525,515,231
1% Increase (8.00%)	\$3,310,356,527

The annual actuarial valuation performed as of June 30, 2023 (the measurement date) was used as the basis for determining the total pension liability, using the following key methods and assumptions applied to all periods included in the measurement date.

KEY METHODS AND ASSUMPTIONS USED IN VALUATION OF TOTAL PENSION LIABILITY

Valuation Date	June 30, 2023
Actuarial Cost Method	Entry Age Normal (Level Percent of Payroll)
Actuarial Assumptions:	
Experience Study Date	Period of 5 years ended June 30, 2020
Investment Rate of Return	7.00%, net of investment expenses
Cost of Living Increases (COLA) or "Ad Hoc" COLA	2.00%, on and after April 1, 2018, COLA's for future retirees will be delayed for three years following commencement.
Future Salary Increases, Including Inflation	3.25% - 13.58%
Inflation	2.40%
Mortality Assumptions	<p>SERVICE RETIREMENT: PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.</p> <p>DISABLED RETIREMENT: PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 years and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.</p> <p>CONTINGENT SURVIVOR: PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2017 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.</p>

9. Pension Plans and OPEB for Employees of SERS

All SERS Ohio employees are required to participate in a contributory retirement plan administered by Ohio Public Employees Retirement System (OPERS). OPERS is a cost-sharing, multiple-employer public employee retirement system that administers three pension plans that include a defined benefit plan, a defined contribution plan, and a combined plan. Participation in these plans is a choice members make at the time their employment commences.

In 2012, the Ohio Legislature passed Senate Bill 343 to improve the financial condition of OPERS. In the legislation, members were categorized into three groups with varying provisions of the law applicable to each group. Retirement benefits are specific to each group and members must meet the eligibility requirements based on their age and years of service, within the group. The key components to OPERS' pension plan changes are:

- Age and service requirements for retirement increased.
- Final average salary calculation increased to five years from three years.
- Calculation used to determine the benefit amount for service retirement was modified.
- COLA is based on the annual percentage change in the Consumer Price Index with a 3% cap.
- Calculation used for an early retirement benefit is determined by OPERS' actuary.

Details about OPERS' plan changes and when they become effective can be found on its website at www.opers.org.

Notes to the Basic Financial Statements June 30, 2023

The member and employer contribution rates are 10.0% and 14.0% of covered payroll, respectively. The required employer contributions for the current year and the two preceding years are shown in the following table.

SERS REQUIRED EMPLOYER CONTRIBUTIONS TO OPERS

Year Ended June 30	Annual Required Contribution	Percent Contributed
2021	\$2,137,785	100%
2022	\$2,243,214	100%
2023	\$2,455,208	100%

GASB Statement No. 68 requires SERS to record a net pension liability based on its proportionate share of OPERS' total net pension liability. SERS' proportionate share of the net pension liability for OPERS' Traditional Plan is \$26.1 million and is included in Accounts Payable & Accrued Expenses of the Statement of Fiduciary Net Position. The net pension asset for OPERS' Combined Plan is \$0.4 million and is included in Other Assets of the Statement of Fiduciary Net Position. Likewise, SERS' proportionate share of OPERS' deferred outflows and deferred inflows of resources related to pensions and pension expense are recorded in the Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position for the fiscal year ending June 30, 2023.

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of OPERS and additions to/deductions from OPERS' fiduciary net position have been determined on the same basis as they are reported by OPERS. For this purpose, benefits and refunds are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

OPERS also provides postemployment health care coverage which is considered an OPEB as described in GASB Statement No. 75 and requires SERS to record a net OPEB liability based on its proportionate share of OPERS' total net OPEB liability. SERS' proportionate share of the net OPEB liability for OPERS' is \$0.6 million and is included in Accounts Payable & Accrued Expenses of the Statement of Fiduciary Net Position. In addition to the legislation that made changes to the pension plan, the OPERS Board approved changes to the retiree health care plan with phased-in implementation dates over the next several years. OPERS has the discretion to direct a portion of employer contributions to fund retiree health care. The Revised Code provides statutory authority for employer contributions. The portion of Traditional Pension Plan employer contributions was 0% for calendar year 2022. The portion of Combined Plan employer contributions allocated to health care was 0% from January 1, 2022 to June 30, 2022 and 2% from July 1, 2022 to December 31, 2022. The portion of the employer rate allocated to postemployment health care in the defined contribution plan was 4% for calendar 2022.

For purposes of measuring the net OPEB liability, deferred outflows of resources and deferred inflows of resources related to OPEB, and OPEB expense, information about the OPEB fiduciary net position of OPERS and additions to/deductions from the OPEB fiduciary net position of OPERS have been determined on the same basis as they are reported by OPERS. For this purpose, health care benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

Historical trend information showing the progress of OPERS in accumulating sufficient assets to pay pension and OPEB benefits when due is presented in the OPERS *Annual Comprehensive Financial Report*. OPERS issues a publicly available financial report for the plans. The report may be found on its website at www.opers.org.

10. Compensated Absences

As of June 30, 2023, and 2022, \$3,381,061 and \$3,035,395, respectively, were accrued for the unused vacation leave of all employees and the unused sick leave of SERS' employees who are eligible to retire within five years with the following limitations. Employees who retire or become disabled after five years of service are entitled to receive payment for all unused sick time up to 960 hours. If an employee accumulated unused sick time in excess of 960 hours as of June 30, 2018, then compensation of 50% of the excess hours of their unused sick time balance as of June 30, 2018, will also be paid. Unused sick leave pay is forfeited upon resignation or termination. Employees who retire or separate employment from SERS are entitled to full compensation for all earned unused vacation. If an employee dies after five years of service, the beneficiaries are entitled to receive the same unused vacation and sick leave benefits as an employee who retires.

11. Self-insured Health Care for Employees of SERS

SERS is self-insured for employee benefits for dental, medical, and hospitalization. A third-party administrator manages the program. SERS holds a stop-loss policy of \$250,000 per employee per year. SERS also accrues incurred claims from the current fiscal year that have not yet been billed in the current fiscal year. The amount accrued in FY2022 was \$320,000, and the amount accrued in FY2023 was \$120,000.

12. Federal Income Tax Status

The SERS Pension Trust Fund is a qualified plan under Internal Revenue Code (IRC) Section 401(a) and is therefore exempt from federal income taxes. The Medicare B Fund is established pursuant to IRC Section 401(h). The Death Benefit Fund is an insurance fund and is in compliance with IRC Section 101(a). The QEBA Fund is a qualified entity, created in accordance with IRC Section 415(b). The Health Care Fund is structured to meet the requirements of IRC Section 105(e).

13. Risk Management

SERS is exposed to various risks of loss, including theft or destruction of assets, general liability, employee injuries, and legal challenges to fiduciary decisions. SERS self-insures some risks through deductibles and retention, and purchases insurance for the remainder. For the past seven years, there has been no reduction in coverage, and no claims have exceeded purchased limits.

14. Leases

At the end of FY2023, SERS was the lessor of three third-party lease contracts noted in the following table. Effective August 31, 2022, the lease contract for Plunkett & Cooney, PC ended and was not renewed. The lease contract for Stratos Wealth Partners, Ltd ended January 31, 2023 and was not renewed. SERS recognized \$352,625 in lease revenue and \$38,589 in interest revenue during the fiscal year related to lease payments. As of June 30, 2023, SERS' lease receivable (included in other receivables) for lease payments was \$1,753,778. Also, SERS has a deferred inflow of resources associated with these leases that will be recognized as revenue over the lease term. As of June 30, 2023, the balance of the deferred inflow - leases was \$1,432,848.

LEASES (as of June 30, 2023)						
Lessee Name	Current Lease Start Date	Lease Term (months)	Lease Revenue	Interest Revenue	Lease Receivable Balance	Deferred Inflow Balance
Law Offices of Craig Scott & Company	02/01/2022	84	\$50,967	\$6,292	\$291,028	\$284,568
Plunkett & Cooney, PC	05/01/2013	112	14,555	45	—	—
Poling & Associates Co., L.P.A.	04/01/2022	119	107,303	25,255	1,204,847	929,962
Stratos Wealth Partners, Ltd	02/01/2018	60	44,650	377	—	—
Zambito Executive Search, LLC (ZSG)	04/01/2022	36	135,150	6,620	257,903	218,318
Totals			\$352,625	\$38,589	\$1,753,778	\$1,432,848

15. Contingent Liabilities

There are no contingent liabilities.

16. Net Other Postemployment Benefits (OPEB) Liability and Actuarial Information - Defined Benefit Plan

Plan Administration SERS administers School Employees Retirement System of Ohio Health Care Plan – a cost-sharing, multiple-employer, defined benefit OPEB plan that provides various levels of health care to retired and disabled members, surviving beneficiaries, and eligible dependents of non-teaching personnel of Ohio schools, the University of Akron, ten community colleges, and four technical colleges. The Board administers the program in accordance with Chapter 3309 of the Ohio Revised Code.

Plan Membership At June 30, 2023, SERS' Health Care Plan's membership consisted of the following:

PLAN MEMBERSHIP	
Currently Receiving Benefits:	
Retirees, or Their Beneficiaries	34,572
Inactive Members Entitled to But Not Yet Receiving Benefits	6,413
Active Members	159,873
Total	200,858

Notes to the Basic Financial Statements June 30, 2023

Benefits Provided SERS' Health Care program provides health care benefits to eligible individuals receiving retirement, disability, and survivor benefits, and to their eligible dependents. Members who retire after June 1, 1986 need 10 years of service credit, exclusive of most types of purchased credit, to qualify to participate in SERS' health care coverage. The following types of credit purchased after January 29, 1981 do not count toward health care coverage eligibility: military, federal, out-of-state, municipal, private school, exempted, and early retirement incentive credit. In addition to age and service retirees, disability benefit recipients and beneficiaries who are receiving monthly benefits due to the death of a member or retiree are eligible for SERS' health care coverage. Most retirees and dependents choosing SERS' health care coverage are over the age of 65 and, therefore, enrolled in a fully insured Medicare Advantage plan; however, SERS maintains a traditional, self-insured preferred provider organization for its non-Medicare retiree population. For both groups, SERS offers a self-insured prescription drug program. Health care is a benefit that is permitted, not mandated, by statute.

Contributions The Health Care program is financed through a combination of employer contributions, recipient premiums, investment returns, and any funds received on behalf of SERS' participation in Medicare programs. The System's goal is to maintain a health care reserve account with a 20-year solvency period in order to ensure that fluctuations in the cost of health care do not cause an interruption in the program. However, during any period in which the 20-year solvency period is not achieved, the System shall manage the Health Care Fund on a pay-as-you-go basis.

Investment Policy The Health Care Fund follows the same investment policy as the Pension Plan, as defined in the *Statement of Investment Policy*. ORC 3309.15 and the Board-adopted Investment Policy govern investment activity at SERS.

Discount Rate (SEIR) The discount rate used to measure the total OPEB liability at June 30, 2023, was 4.27%. The discount rate used to measure total OPEB liability prior to June 30, 2023, was 4.08%. The projection of cash flows used to determine the discount rate assumed that contributions will be made from members and the System at the contribution rate of 1.50% of projected covered payroll each year, which includes a 1.50% payroll surcharge and no contributions from the basic benefits plan. Based on these assumptions, the OPEB plan's fiduciary net position is projected to be depleted in 2048 by SERS' actuaries. The Fidelity General Obligation 20-year Municipal Bond Index Rate was used in the determination of the single equivalent interest rate for both the June 30, 2022 and the June 30, 2023 total OPEB liability. The Municipal Bond Index Rate is the single rate that will generate a present value of benefit payments equal to the sum of the present value determined by the long-term expected rate of return, and the present value determined by discounting those benefits after the date of depletion. The Municipal Bond Index Rate was 3.86% at June 30, 2023 and 3.69% at June 30, 2022.

Rate of Return The long-term expected rate of return is reviewed as part of the regular experience studies prepared every five years for SERS. The most recent five-year experience study was performed for the period covering fiscal years 2016 through 2020, and was adopted by the Board on April 15, 2021. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a long-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return, 7.00%, by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The assumption is intended to be a long-term assumption and is not expected to change absent a significant change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

Periods of Projected Benefit Payments Future benefit payments for solvency on all current plan members were projected to 2123.

Assumed Asset Allocation The target asset allocation and best estimates of arithmetic real rates of return for each major asset class as of June 30, 2023 are summarized as follows:

ASSET CLASS	TARGET ALLOCATION	LONG-TERM EXPECTED REAL RATE OF RETURN (GEOMETRIC)
Cash	2.00%	0.75%
US Equity	24.75	4.82
Non-US Equity Developed	13.50	5.19
Non-US Equity Emerging	6.75	5.98
Fixed Income / Global Bonds	19.00	2.24
Private Equity	12.00	7.49
Real Estate / Real Assets	17.00	3.70
Private Debt / Private Credit	5.00	5.64

Net OPEB Liability of SERS The components of the net OPEB liability of SERS at June 30, 2023, were as follows:

PLAN FUNDS	
Total OPEB Liability (a)	\$2,354,230,872
Plan Fiduciary Net Position (b)	706,785,561
SERS' Net OPEB Liability (a) - (b)	\$1,647,445,311
Plan Fiduciary Net Position as a Percent of Total OPEB Liability (b) / (a)	30.02%

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate and Health Care Cost Trend Rate The following table presents the net OPEB liability of SERS, as well as what SERS' net OPEB liability would be if it were calculated using a discount rate that is 1% lower (3.27%) and higher (5.27%) than the current discount rate of 4.27%.

NET OPEB LIABILITY	
1% Decrease (3.27%)	\$2,105,906,165
Current Discount Rate (4.27%)	\$1,647,445,311
1% Increase (5.27%)	\$1,285,929,916

The following table presents the OPEB liability of SERS, as well as what SERS' net OPEB liability would be based on health care cost trend rates that are 1% lower (5.75% decreasing to 3.40%) and 1% higher (7.75% decreasing to 5.40%) than the current rate.

NET OPEB LIABILITY		
1% Decrease (5.75% decreasing to 3.40%)	Health Care Cost Trend Rates (6.75% decreasing to 4.40%)	1% Increase (7.75% decreasing to 5.40%)
\$1,210,321,040	\$1,647,445,311	\$2,226,693,896

Actuarial Assumptions The total OPEB liability was determined by an actuarial valuation as of June 30, 2023. The actuarial assumptions used in the valuation were based on results from the most recent actuarial experience study, which covered the five-year period ending June 30, 2020. The experience study report was dated April 2021.

Notes to the Basic Financial Statements June 30, 2023

The annual actuarial valuation performed as of June 30, 2023 (the measurement date) was used as the basis for determining the total OPEB liability, using the following actuarial assumptions applied to all periods included in the measurement date. Roll forward procedures were not used.

ACTUARIAL ASSUMPTIONS USED IN VALUATION OF TOTAL OPEB LIABILITY

Long-term Rate of Return, Net of Investment Expenses, Including Price Inflation	7.00%
Price Inflation	2.40%
Wage Increases, Including Price Inflation	3.25% - 13.58%
Municipal Bond Index Rate	
Prior Measurement Date	3.69%
Measurement Date	3.86%
Year Fiduciary Net Position is Projected to be Depleted	2048
Single Equivalent Interest Rate (SEIR), Net of Investment Expenses, Including Price Inflation	
Prior Measurement Date	4.08%
Measurement Date	4.27%
Medical Trend Assumption	6.75% - 4.40%
Base Mortality	
HEALTHY RETIREES - PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females.	
DISABLED RETIREES - PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 years and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females.	
CONTINGENT SURVIVORS - PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2017 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females.	
ACTIVES - PUB-2010 General Amount Weighted Below Median Employee mortality table.	
Mortality Projection	
Mortality rates are projected using a fully generational projection with Scale MP-2020.	

17. Recently Issued Accounting Pronouncements

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements*. The requirements of this Statement will take effective for financial statements starting with the fiscal year that ends June 30, 2023. This Statement provides guidance on the accounting and financial reporting for subscription-based information technology arrangements (SBITAs) for government end users. This Statement (1) defines a SBITA; (2) establishes that a SBITA results in a right-to-use subscription asset - and intangible asset - and a corresponding subscription liability; (3) provides the capitalization criteria for outlays other than subscription payments, including implementation costs of a SBITA; and (4) requires note disclosures regarding a SBITA. To the extent relevant, the standards for SBITAs are based on the standards established in Statement No. 87, *Leases*, as amended. These requirements will improve financial reporting by establishing a definition for SBITAs and providing uniform guidance for accounting and financial reporting for transactions that meet that definition. Management performed a detailed analysis of SERS' SBITA contracts and concluded that individually, and collectively, they were not material to SERS' financial statements.

In June 2022, GASB issued Statement No. 100, *Accounting Changes and Error Corrections*. The requirements of this Statement are effective for fiscal years beginning after June 15, 2023. The primary objective of this Statement is to enhance accounting and financial reporting requirements for accounting changes and error corrections to provide more understandable, reliable, relevant, consistent, and comparable information for making decisions or assessing accountability. This Statement defines accounting changes as changes in accounting principles, changes in accounting estimates, and changes to or within the financial reporting entity and describes the transactions or other events that constitute those changes. This Statement requires that (a) changes in accounting principles and error

corrections be reported retroactively by restating prior periods, (b) changes to or within the financial reporting entity be reported by adjusting beginning balances of the current period, and (c) changes in accounting estimates be reported prospectively by recognizing the change in the current period. The requirements of this Statement for changes in accounting principles apply to the implementation of a new pronouncement in absence of specific transition provisions in the new pronouncement. This Statement also requires that the aggregate amount of adjustments to and restatements of beginning net position, fund balance, or fund net position, as applicable, be displayed by reporting unit in the financial statements. This Statement requires disclosure in notes to financial statements of descriptive information about accounting changes and error corrections, such as their nature, and addresses how information that is affected by a change in accounting principle or error correction should be presented in required supplementary information. The impact of the requirements of this Statement to SERS is still being determined by management.

In June 2022, GASB issued Statement No. 101, *Compensated Absences*. The requirements of this Statement are effective for fiscal years beginning after December 15, 2023. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. This Statement requires that a liability for certain types of compensated absences not be recognized until the leave commences. This Statement also requires that a liability for specific types of compensated absences not be recognized until the leave is used, and establishes guidance for measuring a liability for leave that has not been used, generally using an employee's pay rate as of the date of the financial statements. The impact of the requirements of this Statement to SERS is still being determined by management.

Required Supplementary Pension Information (unaudited)

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY

	2023	2022	2021	2020
Total pension liability				
Service Cost	\$460,216,525	\$434,605,440	\$373,675,302	\$369,976,273
Interest	1,514,327,908	1,457,466,508	1,525,995,298	1,488,777,887
Benefit changes	—	—	—	—
Difference between expected and actual experience	177,650,685	330,257,785	(155,871,041)	1,562,953
Changes of assumptions	37,078,750	36,995,852	126,558,803	—
Benefit payments	(1,378,757,376)	(1,335,404,562)	(1,302,035,913)	(1,280,910,125)
Refunds of contributions	(97,668,607)	(82,209,215)	(72,374,764)	(72,849,117)
Net change in total pension liability	712,847,885	841,711,808	495,947,685	506,557,871
Total pension liability – beginning	22,371,468,812	21,529,757,004	21,033,809,319	20,527,251,448
Total pension liability – ending (a)	\$23,084,316,697	\$22,371,468,812	\$21,529,757,004	\$21,033,809,319
Plan fiduciary net position				
Contributions – employer	\$556,661,200	\$524,356,285	\$483,851,685	\$491,557,790
Contributions – member	398,907,335	375,838,354	346,781,820	352,343,063
Net investment income	1,147,508,467	(338,351,099)	3,976,995,866	413,108,397
Benefit payments	(1,378,757,376)	(1,335,404,562)	(1,302,035,913)	(1,280,910,125)
Administrative expense	(30,540,558)	(21,585,745)	(12,770,334)	(28,002,623)
Refunds of contributions	(97,668,607)	(82,209,215)	(72,374,764)	(72,849,117)
Other	—	—	—	—
Net change in plan fiduciary net position	596,110,461	(877,355,982)	3,420,448,360	(124,752,615)
Plan fiduciary net position – beginning	16,962,691,005	17,840,046,987	14,419,598,627	14,544,351,242 *
Plan fiduciary net position – ending (b)	17,558,801,466	16,962,691,005	17,840,046,987	14,419,598,627
Net pension liability – ending (a) – (b)	\$5,525,515,231	\$5,408,777,807	\$3,689,710,017	\$6,614,210,692

* Beginning Fiduciary Net Position was restated in FY2015 due to the implementation of GASB 68, in FY2018 due to the implementation of GASB 75, and in FY2020 due to the implementation of GASB 87.

See accompanying notes to the required supplementary information.

Required Supplementary Pension Information (unaudited)

2019	2018	2017	2016	2015	2014
\$355,452,912	\$368,167,321	\$335,918,449	\$344,059,634	\$338,060,547	\$332,975,336
1,449,726,066	1,420,093,605	1,436,626,290	1,385,878,598	1,341,777,662	1,296,763,757
—	(357,618,668)	(998,484,758)	—	—	—
60,411,674	286,313,613	275,031,424	50,307,199	78,749,615	53,951,305
—	—	—	668,216,579	—	—
(1,260,400,360)	(1,248,097,556)	(1,170,689,006)	(1,110,694,355)	(1,076,498,383)	(993,355,839)
(75,639,810)	(59,575,036)	(60,692,833)	(70,340,495)	(60,635,651)	(55,668,466)
529,550,482	409,283,279	(182,290,434)	1,267,427,160	621,453,790	634,666,093
19,997,700,966	19,588,417,687	19,770,708,121	18,503,280,961	17,881,827,171	17,247,161,078
\$20,527,251,448	\$19,997,700,966	\$19,588,417,687	\$19,770,708,121	\$18,503,280,961	\$17,881,827,171
\$464,683,489	\$435,103,620	\$467,796,738	\$436,421,681	\$395,804,105	\$405,029,627
345,212,684	324,842,074	336,627,658	314,325,716	303,866,076	295,690,550
831,584,377	1,242,021,081	1,613,368,560	106,543,126	441,455,552	1,888,288,396
(1,260,400,360)	(1,248,097,556)	(1,170,689,006)	(1,110,694,355)	(1,076,498,383)	(993,355,839)
(31,880,024)	(26,993,893)	(24,403,350)	(21,808,880)	(19,305,477)	(19,582,190)
(75,639,810)	(59,575,036)	(60,692,833)	(70,340,495)	(60,635,651)	(55,668,466)
—	—	—	—	1,874,997	—
273,560,356	667,300,290	1,162,007,767	(345,553,207)	(13,438,781)	1,520,402,078
14,270,515,748	13,603,215,458 *	12,451,630,823	12,797,184,030	12,810,622,811 *	11,300,482,029
14,544,076,104 *	14,270,515,748	13,613,638,590 *	12,451,630,823	12,797,184,030	12,820,884,107 *
\$5,983,175,344	\$5,727,185,218	\$5,974,779,097	\$7,319,077,298	\$5,706,096,931	\$5,060,943,064

Required Supplementary Pension Information (unaudited)

SCHEDULE OF THE NET PENSION LIABILITY (*\$ in millions*)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	\$23,084	\$22,372	\$21,530	\$21,034	\$20,527	\$19,998	\$19,588	\$19,771	\$18,503	\$17,882
Plan fiduciary net position	17,559	16,963	17,840	14,420	14,544	14,271	13,614	12,452	12,797	12,821
Net pension liability	\$5,526	\$5,409	\$3,690	\$6,614	\$5,983	\$5,727	\$5,974	\$7,319	\$5,706	\$5,061
Ratio of plan fiduciary net position to total pension liability	76.06%	75.82%	82.86%	68.55%	70.85%	71.36%	69.50%	62.98%	69.16%	71.70%
Covered payroll	\$3,965	\$3,734	\$3,449	\$3,478	\$3,463	\$3,332	\$3,303	\$2,932	\$2,845	\$2,922
Net pension liability as a percentage of covered payroll	139.37%	144.84%	106.97%	190.20%	172.80%	171.86%	180.90%	249.61%	200.53%	173.18%

See accompanying notes to the required supplementary information.

SCHEDULE OF EMPLOYER CONTRIBUTIONS (*\$ in millions*)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined employer contribution	\$556.7	\$524.4	\$483.9	\$491.6	\$464.7	\$435.1	\$467.8	\$436.4	\$395.8	\$405.0
Actual employer contributions	556.7	524.4	483.9	491.6	464.7	435.1	467.8	436.4	395.8	405.0
Annual contribution deficiency (excess)	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0	\$0.0
Covered payroll	\$3,964.7	\$3,734.3	\$3,449.3	\$3,477.6	\$3,462.5	\$3,332.4	\$3,302.8	\$2,932.2	\$2,845.4	\$2,922.3
Actual contributions as a percentage of covered payroll	14.04%	14.04%	14.03%	14.14%	13.42%	13.06%	14.16%	14.88%	13.91%	13.86%

See accompanying notes to the required supplementary information.

SCHEDULE OF INVESTMENT RETURNS

<i>Year ended June 30</i>	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Annual money weighted rate of return, net of investment expense	6.90%	(1.93%)	28.18%	2.91%	5.96%	9.37%	13.27%	0.81%	3.45%	17.21%

See accompanying notes to the required supplementary information.

Notes to Required Supplementary Pension Information June 30, 2023

Changes of Benefit Terms

- No changes of benefit terms were implemented in FY2023.

2018

- With the authority granted to the Board under S.B. 8, the Board enacted a three-year COLA delay for future benefit recipients commencing on or after April 1, 2018.

2017

- The COLA was changed from a fixed 3.00% to a COLA that is indexed to CPI-W not greater than 2.50% with a floor of 0.0% beginning January 1, 2018. In addition, with the authority granted to the Board under H.B. 49, the Board enacted a three-year COLA suspension for benefit recipients in calendar years 2018, 2019, and 2020.

Changes of Assumptions in the following June 30th actuarial valuations

2023

- Cost-of-Living-Adjustment was increased from 2.00% to 2.50% for calendar year 2024.

2022

- Cost-of-Living-Adjustment was increased from 2.00% to 2.50% for calendar year 2023.

2021

- Assumed rate of inflation was reduced from 3.00% to 2.40%.
- Payroll growth assumption was reduced from 3.50% to 1.75%.
- Assumed real wage growth was increased from 0.50% to 0.85%.
- Cost-of-Living-Adjustment was reduced from 2.50% to 2.00% for calendar year 2022.
- The discount rate was reduced from 7.50% to 7.00%
- Rates of withdrawal, compensation, participation, spouse coverage assumption, retirement, and disability were updated to reflect recent experience.
- Mortality rates among active members, service retirees and beneficiaries, and disabled members were updated.

2016

- Assumed rate of inflation was reduced from 3.25% to 3.00%.
- Payroll Growth Assumption was reduced from 4.00% to 3.50%.
- Assumed real wage growth was reduced from 0.75% to 0.50%.
- Rates of withdrawal, retirement, and disability were updated to reflect recent experience.
- Mortality rates among active members, service retirees and beneficiaries, and disabled members were updated.

Required Supplementary Pension Information (unaudited)

Additional Actuarial Information

The following actuarial methods and assumptions (from the June 30, 2022 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for FY2023 in the Schedule of Employer Contributions:

Actuarial cost method:	Entry age normal
Amortization method:	Level percent of payroll
Asset valuation method:	4-year smoothed market
Inflation:	2.40%
Salary increase, including price inflation:	3.25% - 13.58%
Investment rate of return:	7.00%, net of System expenses, including inflation

Mortality:

DEATH AFTER RETIREMENT: These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

SERVICE RETIREMENT: PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

DISABLED RETIREMENT: PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 years and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

CONTINGENT SURVIVOR: PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2017 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

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Required Supplementary Health Care Information (unaudited)

SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY¹

	2023	2022	2021	2020
Total OPEB liability				
Service Cost	\$123,416,320	\$170,026,723	\$159,635,250	\$164,641,764
Interest	80,830,711	55,840,796	69,007,716	94,783,974
Benefit changes	(19,096,028)	—	—	—
Difference between expected and actual experience	(231,260,850)	(211,615,083)	(67,242,883)	(772,465,329)
Changes of assumptions	453,635,839	(425,649,309)	(260,284,207)	260,375,382
Benefit payments ²	(68,879,971)	(65,930,429)	(64,142,473)	(69,997,414)
Net change in total OPEB liability	338,646,021	(477,327,302)	(163,026,597)	(322,661,623)
Total OPEB liability - beginning	2,015,584,851	2,492,912,153	2,655,938,750	2,978,600,373
Total OPEB liability - ending (a)	\$2,354,230,872	\$2,015,584,851	\$2,492,912,153	\$2,655,938,750
Plan fiduciary net position				
Contributions - employer ²	\$57,483,842	\$53,766,548	\$53,533,333	\$48,187,050
Contributions - non-employer ²	73,815,170	34,516,422	20,059,596	32,349,114
Net investment income	35,445,488	(8,096,503)	111,580,200	11,139,059
Benefit payments ³	(68,879,971)	(65,930,429)	(64,142,473)	(69,997,414)
Administrative expense	(2,653,377)	(3,011,817)	(3,311,946)	(2,877,010)
Net change in plan fiduciary net position	95,211,152	11,244,221	117,718,710	18,800,799
Plan fiduciary net position - beginning	611,574,409	600,330,188	482,611,478	463,810,679
Plan fiduciary net position - ending (b)	706,785,561	611,574,409	600,330,188	482,611,478
Net OPEB liability - ending (a) - (b)	\$1,647,445,311	\$1,404,010,442	\$1,892,581,965	\$2,173,327,272

¹ Additional years will be added to the schedule as they become available.

² Contributions - employer has been updated from prior fiscal years to include only actual employer contributions. Contributions - non-employer has been added.

³ Benefit payments are net of retiree contributions.

See accompanying notes to the required supplementary information.

SCHEDULE OF THE NET OPEB LIABILITY¹ (\$ in millions)

	2023	2022	2021	2020	2019	2018	2017
Total OPEB liability	\$2,354.2	\$2,015.6	\$2,492.9	\$2,655.9	\$2,978.6	\$3,209.9	\$3,065.8
Plan fiduciary net position	706.8	611.6	600.3	482.6	463.8	435.6	382.1
Net OPEB liability	\$1,647.4	\$1,404.0	\$1,892.6	\$2,173.3	\$2,514.8	\$2,774.3	\$2,683.7
Ratio of plan fiduciary net position to total OPEB liability	30.02%	30.34%	24.08%	18.17%	15.57%	13.57%	12.46%
Covered payroll	\$3,964.7	\$3,734.3	\$3,449.3	\$3,477.6	\$3,462.5	\$3,332.4	\$3,303.1
Net OPEB liability as a percentage of covered payroll	41.55%	37.60%	54.87%	62.50%	72.63%	83.25%	81.25%

¹ Additional years will be added to the schedule as they become available.

See accompanying notes to the required supplementary information.

Required Supplementary Health Care Information (unaudited)

2019	2018	2017
\$160,601,083	\$155,385,800	\$178,649,865
117,411,967	109,982,145	101,409,264
—	—	—
(653,300,118)	53,656,583	—
217,194,383	(102,900,217)	(295,667,088)
(73,206,711)	(72,071,363)	(86,257,389)
(231,299,396)	144,052,948	(101,865,348)
3,209,899,769	3,065,846,821	3,167,712,169
\$2,978,600,373	\$3,209,899,769	\$3,065,846,821
\$65,877,673	\$63,539,354	\$47,672,886
16,067,175	36,517,382	17,341,005
22,009,627	28,167,652	35,730,747
(73,206,711)	(72,071,363)	(86,257,389)
(2,566,722)	(2,632,948)	(2,582,204)
28,181,042	53,520,077	11,905,045
435,629,637	382,109,560	370,204,515
463,810,679	435,629,637	382,109,560
\$2,514,789,694	\$2,774,270,132	\$2,683,737,261

SCHEDULE OF EMPLOYER CONTRIBUTIONS – OPEB¹ (\$ in millions)

	2023	2022	2021	2020	2019	2018	2017	2016	2015	2014
Actuarially determined employer contribution	\$99.5	\$91.9	\$126.6	\$161.0	\$190.1	\$189.4	\$178.0	\$161.6	\$164.2	\$190.4
Actual employer contributions	57.5	53.8	53.5	48.2	65.9	63.5	47.7	44.9	68.9	46.1
Annual contribution deficiency (excess)	\$42.0	\$38.1	\$73.1	\$112.8	\$124.2	\$125.9	\$130.3	\$116.7	\$95.3	\$144.3
Covered payroll	\$3,964.7	\$3,734.3	\$3,449.3	\$3,477.6	\$3,462.5	\$3,332.4	\$3,303.1	\$2,932.2	\$2,845.4	\$2,759.3
Actual contributions as a percentage of covered payroll	1.45%	1.44%	1.55%	1.39%	1.90%	1.91%	1.44%	1.53%	2.42%	1.67%

¹ Schedule has been updated from prior fiscal years to include only actual employer contributions, removing non-employer contributions.

See accompanying notes to the required supplementary information.

SCHEDULE OF INVESTMENT RETURNS – OPEB¹

Year ended June 30	2023	2022	2021	2020	2019	2018	2017
Annual money weighted rate of return, net of investment expense	5.93%	(1.40%)	24.85%	2.54%	5.41%	8.05%	11.59%

¹ Additional years will be added to the schedule as they become available.

See accompanying notes to the required supplementary information.

Required Supplementary Health Care Information (unaudited)

Notes to Required Supplementary Health Care Information June 30, 2023

Changes of Benefit and Funding Terms

Effective January 1, 2024, the non-Medicare disability health care subsidy amounts will change to reflect amounts equal to that of service retirees by years of service.

Changes of Assumptions in the following June 30th actuarial valuations

2023

- Discount rate changed from 4.08% to 4.27%.
- Health care trend rates were updated.
- Assumption for percentage of pre-Medicare eligible retirees who choose the Wraparound plan was increased from 10% to 20%.
- Health care trend assumption on retiree premiums was updated to not apply the trend to the \$35 surcharge.
- Assumption was added to assume that 15% of pre-65 retirees who waive health care will elect coverage upon Medicare eligibility.
- Morbidity factors were updated based on the society of Actuaries' June 2013 research report, Health Care Costs—From Birth to Death by Dale Yamamoto, and from the Actuarial Standards of Practice (ASOP) 6 practice note developed by the American Academy of Actuaries.

2022

- Discount rate changed from 2.27% to 4.08%.
- Health care trend rates were updated.

2021

- Discount rate changed from 2.63% to 2.27%.
- Investment rate of return was reduced from 7.50% to 7.00%.
- Assumed rate of inflation was reduced from 3.00% to 2.40%.
- Payroll Growth Assumption was reduced from 3.50% to 1.75%.
- Assumed real wage growth was increased from 0.50% to 0.85%.
- Health care trend rates were updated.
- Rates of withdrawal, retirement, and disability were updated to reflect recent experience.
- Rates of health care participation for future retirees and spouses were updated to reflect recent experience.
- Mortality rates among active members, service retirees and beneficiaries, and disabled members were updated. Mortality rates are projected using a fully generational projection with Scale MP-2020.

2020

- Discount rate changed from 3.22% to 2.63%.

2019

- Discount rate changed from 3.70% to 3.22%.
- Health care trend rates were updated.

2018

- Discount rate changed from 3.63% to 3.70%.
- Health care trend rates were updated.

2017

- Discount rate changed from 2.98% to 3.63%.

2016

- Assumed rate of inflation was reduced from 3.25% to 3.00%.
- Payroll Growth Assumption was reduced from 4.00% to 3.50%.
- Assumed real wage growth was reduced from 0.75% to 0.50%.
- Rates of withdrawal, retirement, and disability were updated to reflect recent experience.
- Mortality rates among active members, service retirees and beneficiaries, and disabled members were updated.

Required Supplementary Health Care Information (unaudited)

Additional Actuarial Information

The following actuarial methods and assumptions (from the June 30, 2022 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for FY2023 in the Schedule of Employer Contributions – OPEB:

Actuarial cost method:	Entry age normal
Amortization method:	Level percent of payroll
Asset valuation method:	Fair value
Inflation:	2.40%
Salary increase, including price inflation:	3.25% - 13.58%
Investment rate of return:	7.00%, net of System expenses, including inflation
Medical trend assumptions:	7.00% - 4.40%

Mortality:

DEATH AFTER RETIREMENT: These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

SERVICE RETIREMENT: PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

DISABLED RETIREMENT: PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 years and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

CONTINGENT SURVIVOR: PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2017 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

OPERS Related Required Supplementary Pension Information (unaudited)

SCHEDULES OF SERS' PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

Ohio Public Employees Retirement Plan - Traditional Pension Plan

Last 10 Fiscal Years*	2023	2022	2021	2020	2019
SERS' proportion of the net pension liability (asset)	0.0883558%	0.0921448%	0.0909161%	0.0923731%	0.0958985%
SERS' proportionate share of the net pension liability (asset)	\$26,100,343	\$8,016,966	\$13,462,691	\$18,258,172	\$26,288,404
SERS' covered payroll	13,696,163	13,372,990	12,805,035	12,996,795	12,963,846
SERS' proportionate share of the net pension liability (asset) as a % of its covered payroll	191%	60%	105%	140%	203%
Plan fiduciary net position as a % of the total pension liability	75.74%	92.62%	86.88%	82.17%	74.70%

* The amounts presented were determined as of 12/31 of the prior calendar year. GASB 68 was implemented in 2015. Additional years will be added to the schedule as they become available.

Ohio Public Employees Retirement Plan - Combined Pension Plan

Last 10 Fiscal Years*	2023	2022	2021	2020	2019
SERS' proportion of the net pension liability (asset)	0.1834134%	0.2096088%	0.1994927%	0.1942455%	0.0217249%
SERS' proportionate share of the net pension liability (asset)	(\$432,287)	(\$825,869)	(\$575,863)	(\$405,048)	(\$242,933)
SERS' covered payroll	790,227	955,597	879,164	864,692	929,157
SERS' proportionate share of the net pension liability (asset) as a % of its covered payroll	(55%)	(86%)	(66%)	(47%)	(26%)
Plan fiduciary net position as a % of the total pension liability	137.14%	169.88%	157.67%	145.28%	126.64%

* The amounts presented were determined as of 12/31 of the prior calendar year. GASB 68 was implemented in 2015. Additional years will be added to the schedule as they become available.

SCHEDULES OF CONTRIBUTIONS

Ohio Public Employees Retirement Plan - Traditional Pension Plan

Last 10 Fiscal Years*	2023	2022	2021	2020	2019
Contractually required contribution	\$2,026,566	\$1,868,582	\$1,805,747	\$1,825,245	\$1,781,661
Contributions in relation to the contractually required contribution	2,026,566	1,868,582	1,805,747	1,825,245	1,781,661
Contribution deficiency (excess)	—	—	—	—	—
SERS' covered payroll	\$14,475,473	\$13,347,012	\$12,898,191	\$13,037,464	\$12,726,150
Contributions as a % of covered payroll	14%	14%	14%	14%	14%

* The amounts presented were determined as of 6/30 of the fiscal year. GASB 68 was implemented in 2015. Additional years will be added to the schedule as they become available.

Ohio Public Employees Retirement Plan - Combined Pension Plan

Last 10 Fiscal Years*	2023	2022	2021	2020	2019
Contractually required contribution	\$131,770	\$130,617	\$121,992	\$126,307	\$127,825
Contributions in relation to the contractually required contribution	131,770	130,617	121,992	126,307	127,825
Contribution deficiency (excess)	—	—	—	—	—
SERS' covered payroll	\$941,211	\$932,981	\$871,375	\$902,194	\$913,034
Contributions as a % of covered payroll	14%	14%	14%	14%	14%

* The amounts presented were determined as of 6/30 of the fiscal year. GASB 68 was implemented in 2015. Additional years will be added to the schedule as they become available.

OPERS Related Required Supplementary Pension Information (unaudited)

2018	2017	2016	2015
0.0973540%	0.0956142%	0.0937745%	0.0925739%
\$15,272,959	\$21,712,365	\$16,242,931	\$11,165,446
11,946,483	10,594,473	10,003,875	9,728,270
128%	205%	162%	115%
84.66%	77.25%	81.08%	86.45%

2018	2017	2016	2015
0.2256010%	0.2277590%	0.2364605%	0.2391363%
(\$307,116)	(\$126,764)	(\$115,067)	(\$92,073)
857,951	759,911	737,594	749,257
(36%)	(17%)	(16%)	(12%)
137.28%	116.55%	116.90%	114.83%

2018	2017	2016	2015
\$1,616,321	\$1,517,599	\$1,457,881	\$1,382,808
1,616,321	1,517,599	1,457,881	1,382,808
—	—	—	—
\$11,545,152	\$10,839,992	\$10,413,435	\$9,877,201
14%	14%	14%	14%

2018	2017	2016	2015
\$116,006	\$110,430	\$109,964	\$106,502
116,006	110,430	109,964	106,502
—	—	—	—
\$828,612	\$788,786	\$785,457	\$760,728
14%	14%	14%	14%

OPERS Related Required Supplementary OPEB Information (unaudited)

SCHEDULE OF SERS' PROPORTIONATE SHARE OF THE NET OPEB LIABILITY (ASSET)

Ohio Public Employees Retirement Plan					
Last 10 Fiscal Years*	2023	2022	2021	2020	2019
SERS' proportion of the net OPEB liability (asset)	0.0993089%	0.1040415%	0.1007839%	0.1014843%	0.0104825%
SERS' proportionate share of the net OPEB liability (asset)	\$626,161	(\$3,258,739)	(\$1,795,546)	\$14,017,613	\$13,666,743
SERS' covered payroll	567,283	541,604	445,100	420,175	375,863
SERS' proportionate share of the net OPEB liability (asset) as a % of its covered payroll	110%	(602%)	(403%)	3,336%	3,636%
Plan fiduciary net position as a % of the total OPEB liability	94.79%	128.23%	115.57%	47.80%	46.33%

* The amounts presented were determined as of 12/31 of the prior calendar year. GASB 75 was implemented in 2018. Additional years will be added to the schedule as they become available.

SCHEDULE OF OPEB CONTRIBUTIONS

Ohio Public Employees Retirement Plan					
Last 10 Fiscal Years*	2023	2022	2021	2020	2019
Contractually required contribution	\$79,420	\$75,825	\$62,314	\$58,824	\$125,775
Contributions in relation to the contractually required contribution	79,420	75,825	62,314	58,824	125,775
Contribution deficiency (excess)	—	—	—	—	—
SERS' covered payroll	\$592,478	\$540,160	\$446,267	\$417,722	\$898,395
Contributions as a % of covered payroll	14%	14%	14%	14%	14%

* The amounts presented were determined as of 6/30 of the fiscal year. GASB 75 was implemented in 2018. Additional years will be added to the schedule as they become available.

OPERS Related Required Supplementary OPEB Information (unaudited)

2018	2017
0.1060842%	0.1047274%
\$11,519,966	\$10,577,819
1,338,357	2,243,369
861%	472%
54.14%	54.05%

2018	2017
\$262,029	\$295,539
262,029	295,539
—	—
\$1,871,633	\$2,110,993
14%	14%

Other Supplementary Information

SCHEDULE OF ADMINISTRATIVE EXPENSES for the year ended June 30, 2023

	General Expenses	Investment Related Expenses	Total
Personnel Services			
Salaries	\$15,406,888	\$3,304,524 *	\$18,711,412
Retirement Contributions	2,510,820	399,062	2,909,882
Insurance	2,479,651	261,034	2,740,685
Total Personnel Services	20,397,359	3,964,620	24,361,979
Professional Services			
Actuarial Advisors	373,710		373,710
Audit Services	186,971		186,971
Custodial Banking	186,968	1,019,206	1,206,174
Master Recordkeeper		1,011,276	1,011,276
Investment Related Consulting	58,429	1,366,124	1,424,553
Medical	45,000		45,000
Technical	1,329,216	159,371	1,488,587
Total Professional Services	2,180,294	3,555,977	5,736,271
Communications			
Postage	608,330		608,330
Telecommunications Services	254,255		254,255
Member / Employer Education	12,597		12,597
Printing and Publication	132,278		132,278
Total Communications	1,007,460		1,007,460
Other Services			
Computer Support Services	1,980,420	148,114	2,128,534
Office Equipment and Supplies	161,228	345	161,573
Training	104,230	11,387	115,617
Transportation and Travel	86,524	77,789	164,313
Memberships and Subscriptions	112,150	64,943	177,093
Property and Fiduciary Insurance	519,591		519,591
Facilities Expense	1,066,175		1,066,175
Maintenance	52,339		52,339
Staff Support	127,011		127,011
Ohio Retirement Study Council	48,386		48,386
Miscellaneous	1,486,369		1,486,369
Total Other Services	5,744,423	302,578	6,047,001
Total Administrative Expenses before Depreciation	29,329,536	7,823,175	37,152,711
Depreciation			
Furniture and Equipment	3,835,537		3,835,537
Building	31,444		31,444
Total Depreciation	3,866,981		3,866,981
Total Administrative Expenses	\$33,196,517	\$7,823,175	\$41,019,692

* Includes salary and incentive payments for investment staff.

See accompanying independent auditor's report.

SCHEDULE OF INVESTMENT EXPENSES for the year ended June 30, 2023

Description of Expenses	Net Assets Under Management	Direct Fees
Global Equities	\$7,492,526,497	\$18,551,431
Global Real Assets	3,593,736,459	29,940,752
Global Private Equity	2,373,409,512	24,759,001
Global Private Credit	1,074,493,283	12,150,511
Cash Equivalents	469,694,333	9,733,246
Opportunistic and Tactical	572,882,795	7,001,883
Global Fixed Income	2,318,371,725	5,924,590
Total Investment Management Fees		\$108,061,414
Custody Service Fees		1,019,206
Master Recordkeeper Fees		1,011,276
Investment Consulting and Performance/Analytics Fees		1,379,994
Other Investment Administrative Expenses		4,434,724
Total Other Investment Expenses		7,845,200
Total Investment Expenses		\$115,906,614

SCHEDULE OF PAYMENTS TO CONSULTANTS

SERS paid the following non-investment related consulting fees in FY2023:

Actuarial Advisors	\$373,710
Audit Services	186,971
Legal Counsel	153,001
Medical Consultant	45,000
Information Technology Consultants	747,093
Health Care Consultants	144,776
Other Consultants	529,743
Total	\$2,180,294

See accompanying independent auditor's report.

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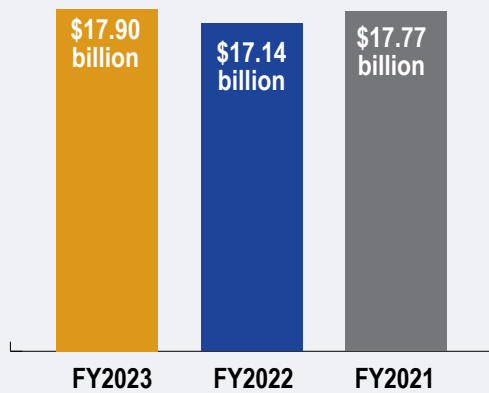
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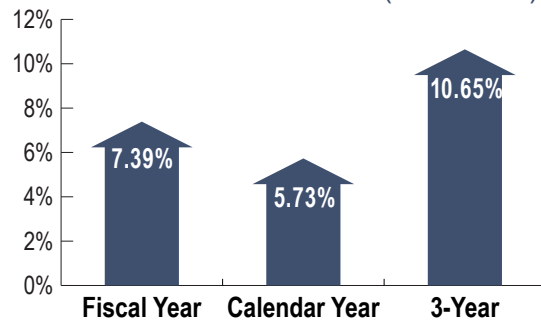
Investment Highlights

For fiscal year end June 30, 2023, SERS' gross investment rate of return was 8.14% with \$17.90 billion in assets. The Fund's net return was 7.39% and outperformed the policy benchmark by 0.30%. SERS maintains a diversified investment portfolio including global equities, global private equity, global fixed income, global private credit, global real assets, and short-term securities.

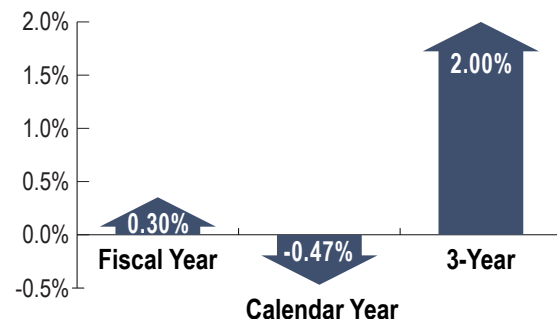
TOTAL INVESTMENT FUND BALANCE



TOTAL RATE OF RETURN (net of fees)



TOTAL FUND EXCESS RETURN VS BENCHMARK (net of fees)





SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

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RICHARD STENSRUD
Executive Director

KAREN ROGGENKAMP
Deputy Executive Director

December 1, 2023

Retirement Board, Members, Retirees, and Beneficiaries of the Retirement System:

On behalf of the SERS Investment Department, I respectfully submit the Investment Section of the *Annual Comprehensive Financial Report* for the year ended June 30, 2023. Information in this section was compiled by SERS' Investment and Finance Staff, and BNY Mellon Global Risk Solutions. Investment results are based upon a time-weighted rate of return methodology, and assets are shown at fair value.

US economic growth turned positive and was resilient through FY2023 despite two negative quarters in the first half of 2022. GDP grew at 2.1% in 2022 followed by 2.0% annualized rate in Q1 2023 and 2.1% in Q2 2023 despite the Fed's 5% points tightening since March 2022. Headline inflation declined significantly from 9.1% in June 2022 to 4.0% in May 2023. However, core inflation remains sticky, and consumer price index is higher than the Fed's 2.0% target level. The labor market continued to be strong with 3.8 million jobs added in FY2023, and the unemployment rate remained historically low at 3.6% as of June 2023. The equity markets posted strong returns in FY2023. US equity led with a 19.0% gain, followed by non-US developed markets at 17.4%; emerging markets lagged with a 1.75% return for the respective market indices. Bond returns were negatively impacted by rising interest rates and the US fixed income Bloomberg Aggregate index was down 0.94% for FY2023.

SERS' Total Fund generated a net of fees return of 7.4% in FY2023, exceeding the policy benchmark by 0.3%. The total return was helped by strong return(s) of 15.6% net of fees from Global Equity while returns for all other asset classes were below the total fund return. Positive excess return of total fund was contributed by strong excess returns in Private Equity at 6.6% followed by Real Assets at 2.9%, Fixed Income at 1.7%, and Opportunistic at 1.6%. The Total Fund five-year return of 8.3% net of fees exceeded the policy benchmark by 1.1%, while the ten-year return of 8.5% net of fees exceeded the benchmark by 0.9%. Implementation of the investment program has added value to the fund over one-, three-, five-, ten-, and twenty-year periods relative to the Total Fund benchmark, and exceeded the actuarial rate of 7.0%. SERS returns ranked in the top decile (10%) in Wilshire's public fund universe on a gross of fee basis for the three-, five-, and ten-year periods.

Staff will continue to remain focused on implementing the portfolio to add value relative to the benchmark and to manage risks which are expected to remain elevated in the near term. High interest rates and slowing growth pose significant risks to expected returns which could be below the 7.0% actuarial rate in the near term.

I wish to thank the Investment staff for their dedication and accomplishments this year, and I appreciate the support of the Board and the Executive team. We look forward to working with the Board and the Executive team in the coming year to serve our members with excellence.

Respectfully,

Farouki Majeed
Chief Investment Officer

Chapter 3309 of the Ohio Revised Code and the Board-adopted Investment Policy govern investment activity at the School Employees Retirement System of Ohio (SERS). The Board is responsible for managing the assets of the Fund effectively, prudently, and for the exclusive benefit of SERS' members and beneficiaries.

INVESTMENT POLICY

The Board approves the *Statement of Investment Policy*. The purpose of the policy is to set forth SERS' investment philosophy and objectives. The policy establishes investment policies and describes the organization and division of responsibilities necessary to implement the Board's philosophy and objectives prudently; and establishes a framework for making investment decisions, monitoring investment activity, and promoting effective communication between the Board, Staff, and other involved parties.

INVESTMENT OBJECTIVES

The primary objective of the investment portfolio is to achieve investment returns exceeding the return of our Policy Benchmark within prudent risk parameters. Over the long term, it is expected that investment returns also should meet or exceed the Board-approved actuarial assumed rate of 7.00%.

INVESTMENT STRATEGIES

Asset Allocation FY2023 SERS' strategic asset allocation targets and its corresponding benchmarks were as follows:

Asset Class	FY2023 Policy	Benchmark Measure
Global Equities	45%	MSCI All Country World Index (ACWI) (net dividends)
Global Private Equity	12%	Burgiss All Private Equity (BAPE) (one quarter in arrears)
Global Fixed Income	19%	Bloomberg US Aggregate Bond Index
Global Private Credit	5%	90-day Treasury Bill Rate +4.5%
Global Real Assets	17%	NCREIF Property Index (one quarter in arrears)
Cash Equivalents	2%	FTSE 30-day T-Bill Index
Strategy		Benchmark Measure
Opportunistic and Tactical Investments	0%	Bloomberg US Aggregate Bond Index +2.0%
Total	100%	

Leverage SERS Board has approved the use of leverage up to 10% of total fund value through the use of equity / bond derivatives, when conditions are favorable. Currently this has not been implemented

Diversification Broad diversification within an investment portfolio is used to control the level of risk and volatility within the portfolio over the long term. SERS has adopted a broadly diversified asset allocation policy, and the strategies used within each asset class also have been diversified.

Besides the broad diversification of assets and strategies within SERS' portfolio, SERS also employs a diverse group of investment managers with the goal of outperforming the respective benchmark while managing relative risks.

Wilshire Associates, Inc., SERS' general investment consultant, assists the Board on matters of investment policy and asset allocation recommendations. Wilshire also reports to the Board on quarterly performance reviews of the Fund and each portfolio.

Proxy Voting In 2012, the Board adopted SERS' Corporate Governance Principles. The Board authorizes the Proxy Review Committee, which consists of staff members from Executive and Investments, to vote proxies according to SERS Proxy Voting Guidelines. This committee implements a process for voting proxies as described in the Proxy Voting Policy and Procedures document. Staff hires a proxy voting advisor, Institutional Shareholder Services (ISS), to vote proxies according to SERS' custom vote policy and provide advice on corporate governance-related matters.

Sustainability and Corporate Governance Good governance of markets and entities comprising the markets improves outcomes for investors. SERS' Board and Staff will exercise corporate ownership responsibly and with the best fiduciary interest of members and stakeholders. SERS' Board and Staff must be attentive to important environmental, social, and governance issues that affect markets and promote its interests in a responsible manner in the best fiduciary interest of members and stakeholders.

Global Equities

Global equity markets rebounded strongly in FY2023 thanks to the positive growth of the global economy, supported by decelerating inflation and a resilient labor market. The global equity markets, MSCI ACWI, returned 16.5% for FY2023. All major regional markets delivered positive returns for FY2023. The Global Equities portfolio returned 15.6% net of fees, underperforming the MSCI ACWI benchmark by 0.9%. The global composite within the Global Equities portfolio gained 16.8% net of fees, outperforming the benchmark by 0.3% while the regional composite returned 15.4% net of fees, lagging the benchmark by 1.1%. The Global Equities portfolio outperformed the benchmark for the three-, five-, ten-, and twenty-year periods.

The US market, (Russell 3000 Index), returned 18.9% for FY2023 as the risks from the March 2023 regional bank crisis receded and high expectations from Artificial Intelligence buoyed the market. However, the US market's strong return was concentrated in a few of the largest stocks. High beta stocks were in favor during this market environment. The US Equity portfolio returned 17.0% net of fees, underperforming the Russell 3000 index benchmark by 1.9% for FY2023 due to defensive beta in contrast to its 0.6% outperformance in the FY2022 down-market environment. The large cap and small cap composites underperformed their respective Russell 1000 and Russell 2000 benchmarks.

The Non-US Developed Equity markets, (MSCI World ex-US index) delivered 17.4% for FY2023 vs. (16.8%) for FY2022. The Non-US Developed portfolio returned 18.4% net of fees, outperforming the MSCI World ex-US benchmark by 1.0% in FY2023. Positive excess returns were contributed from most managers in the portfolio. The large cap composite outperformed its benchmark by 1.7% and the small cap composite outperformed its benchmark by 1.4%.

The Non-US Emerging markets, MSCI Emerging Markets Index, returned 1.8% for FY2023, lagging the developed markets. The main detractor was China market's underperformance. While occupying 30% of the MSCI Emerging Markets index, China's market was down 16.9%. The Emerging Markets Equity portfolio returned (4.0%) net of fees, underperforming the benchmark by 5.8% due to negative stock selection and China overweight. The portfolio is under reconstruction with two managers hired during FY2023.

Global Private Equity

Despite a number of headwinds that included the war in Ukraine, inflation, and growing tension between the US and China, private equity continued to expand its record-breaking run of deal activity during the first six months of the year. However, the Federal Reserve's decision to raise interest rates by 75 basis points and then to continue raising them signaled the end of cheap debt in the buyout markets. The combination of concerns about inflation and rate increases drove speculation about a recession, which in turn caused banks to be more cautious about providing debt to private equity backed companies. As a result, year-end totals for private equity deals, exits and fund raising were all down considerably. Transactions fell to \$657 billion in CY2022. Although still a large number, this was well below the record of \$1.1 trillion set in CY2021. The volume of deals completed in CY2022 fell to 2,318. Fund-raising also declined last year by approximately 16% with a total of \$347 billion in capital raised resulting in a total of approximately \$3.7 trillion of dry powder available across all fund types and all geographies at the end of CY2021. The intense competition for assets that has led to growth in purchase price multiples made it very difficult for private equity firms to find and purchase companies continued in CY2022. Purchase price multiples have risen from approximately 9.0 times earnings in CY2011 to an average of 11.9 times earnings in CY2022, slightly down from 12.3 in 2021 but still ahead of prior periods. The change in conditions also impacted exits in CY2022. Exits declined from over 1,500 exits in 2021 to approximately 600 exits totaling \$565 billion in 2022. Economic uncertainty combined with elevated purchase valuations and a steady flow of dry powder once again underscores the importance of identifying and backing high quality private equity managers that remain disciplined in their process, due diligence, and selection criteria throughout investment cycles. SERS' Global Private Equity portfolio generated a net return of 2.5% for FY2023, beating the benchmark return of (4.0%) by 6.5%.

Global Fixed Income

For FY2023, the Global Fixed Income portfolio generated a net return of 0.7% relative to the Bloomberg US Aggregate Bond Index return of (0.9%). The underweight to duration during a rising interest rate environment contributed to portfolio outperformance. The best performing sector was high yield debt at 9.1%, helped by a below average default rate and credit spread compression in FY2023. Investment grade corporate bonds returned 1.6% with a positive impact from a 5.8% yield that was offset by a drop in value due to rising interest rates. Asset-backed securities returned 1.2% and continued to benefit from strong spending as consumers continued to spend down excess savings. Residential and commercial mortgages had negative performance, returning (1.5%) and (1.7%), respectively. Residential mortgage spreads widened during the year as the Fed continued to reduce its mortgage exposure. Commercial mortgages were impacted by the regional banking crisis in March as banks were selling commercial mortgages to repair their balance sheets. Finally, US Treasuries were the worst performing sector returning (2.1%) as rising interest rates continued to drive losses in the sector. A 50/50 blend of local currency and US dollar emerging market debt returned 4.0% US dollar bonds outperformed local currency bonds by 3.4% as the dollar strengthened in the first half of CY2023 after weakening in Q4 2022.

Global Private Credit

The Global Private Credit portfolio generated a net return of 6.1% during FY2023 versus the benchmark return of 8.3%. While the portfolio trailed the benchmark, it still contributed positively to the Total Fund return on an absolute basis. The private credit market began to experience valuation markdowns during CY2022, primarily due to mark-to-market movements impacting broader public markets. In addition, the rapid increase in interest rates by the Federal Reserve led to higher base rates on the underlying loans, which took time to be reflected in the loans within the portfolio. The private credit market continued to grow in CY2022 and reached an estimated \$1.4 trillion in assets under management, which was higher than earlier forecasts. The private credit market is forecast to reach over \$2 trillion in the next several years. During CY2022, fundraising activity slowed given the economic uncertainty and rapidly increasing interest rates as the Federal Reserve shifted its monetary policy. Many investors paused on new investments within the private credit space given the uncertainty of corporate earnings growth, rising inflation, and the ability of companies to service debt obligations. Nonetheless, over \$200 billion was raised within private credit funds during CY2022. The leveraged loan market faced a sharp decline in new issuances throughout most of the year as traditional banks pulled back from lending to the middle-market. Loan defaults also began to increase across the credit markets and the level of U.S. distressed loans increased drastically to an estimated \$100 billion towards the end of CY2022. It is estimated that loan default rates will continue to trend upwards in the coming years as companies need to recapitalize balance sheets to deal with rising costs and interest rates. However, deal activity continued to remain strong within the private credit market since many companies had no alternative source of financing, which led to a lender-friendly market with tighter covenants and better pricing terms for investors. While rising rates may negatively impact other assets classes, it can add to returns within the private credit asset class since most loans are structured with a floating interest rate. During FY2023, a total of \$355 million was deployed and SERS' Global Private Credit portfolio ended the fiscal year above the 5% target allocation.

Global Real Assets

During FY2023, market conditions for commercial real estate were negatively impacted by higher interest rates and tight credit markets, while infrastructure continued to provide consistent performance. The Real Assets allocation was above the previous 17% target allocation during the fiscal year but stayed within its policy range of 14-22%. Within real estate, industrial and multifamily property types continued to be relative outperformers because of strong fundamentals. Retail centers with grocery anchor tenants continue to outperform malls. Older offices have been impacted by high vacancy due to structural changes related to "work from home trends" and tenants' preferences for LEED-certified buildings with updated amenities. Core real estate return for FY2023 was (1.1%) net of fees, well below the long-term average of 8.5% to 9.5% as many assets were repriced due to capital markets volatility (higher interest and cap rates). Current market conditions and fundamentals are expected to support multi-family, industrial, and select niche property types like storage and single-family rentals. Infrastructure assets, particularly renewable energy, utilities, energy, and digital infrastructure, performed well during the fiscal year, while many transportation assets showed signs of recovering as travel rebounds globally. For the next two to three years, real estate total returns are expected to be below long-term averages, while infrastructure is expected to be in-line with forecast returns of 8-10% gross IRR. Income returns are expected to play a more important role for real estate and infrastructure. SERS' Global Real Assets portfolio generated a net return of 1.3% for FY2023, beating the benchmark return of (1.6%), and its one-year income return as of June 30, 2023, was approximately 3.2% gross of fees.

Cash Equivalents

The Cash Equivalents portfolio consists primarily of short-term cash and any gains or losses of the overlay program. Short-term cash is a source of liquidity for the Total Fund. For FY2023, the short-term cash returned 3.8% net of fees, outperforming the FTSE 30-day T-Bill Index by 0.1%. The return on cash has increased significantly over the last year as the Fed continued to aggressively hike interest rates to bring down high inflation. As of June 30, 2023, the weight of cash equivalents was 2.6% of the Total Fund.

Opportunistic and Tactical Investments

The Opportunistic and Tactical portfolio returned 2.7% net of fees. The Opportunistic portfolio is comprised of non-traditional investment opportunities which do not fit neatly within SERS' strategic asset classes. Opportunistic investments are defined as tactical or non-traditional investment opportunities. Such investments may involve capitalizing on short-term market dislocations or other unique situations or innovative strategies such as tactical allocation. The Opportunistic portfolio has a 0.0% policy target allocation with a maximum allocation of 5%, giving Staff flexibility to invest only when market conditions present attractive opportunities. SERS made two opportunistic investments in FY2023, committing a total of \$100 million to a global macro fund and an opportunistic credit fund.

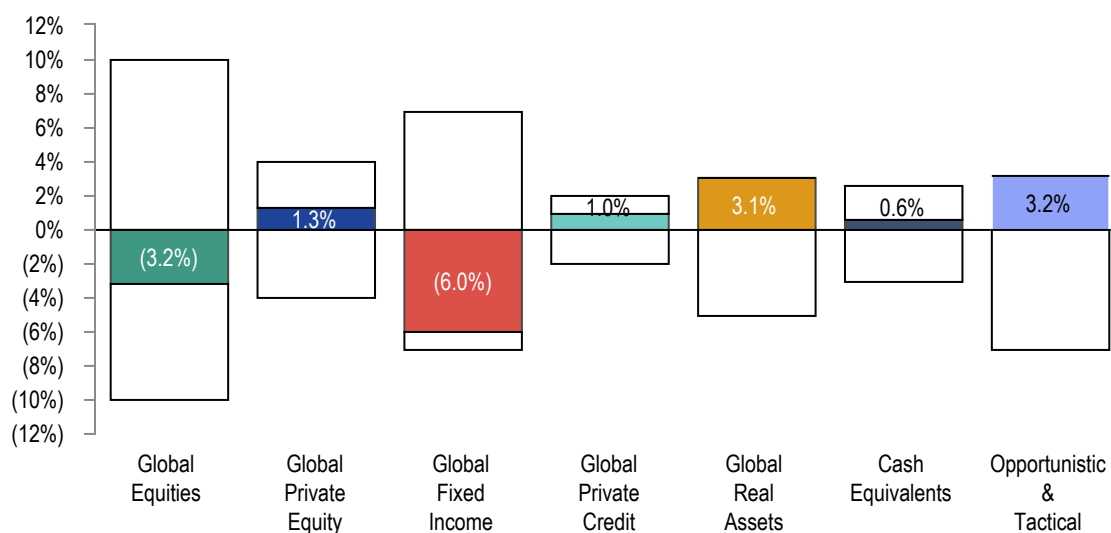
Overlay Program

The overlay program, comprised of the enhanced asset allocation and active currency programs, aims to add value by taking active long/short positions in the broad asset classes and foreign exchange markets, with a tight risk budget. For FY2023, the overlay program had losses and reduced the Total Fund net of fees return by four basis points but has added value since inception. These programs do not require full cash funding except for the margin requirements since they are implemented through futures and forward contracts.

Investment Summary as of June 30, 2023

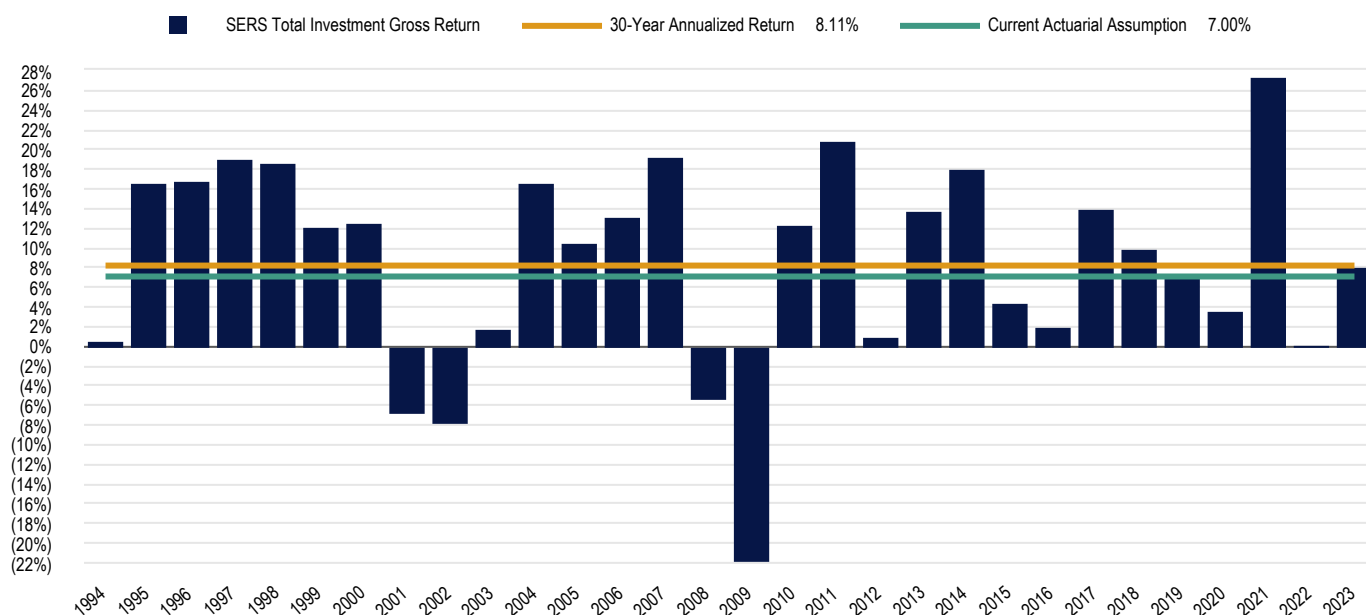
	Fair Value	% of Fair Value	Policy	Range
Global Equities	\$7,492,526,497	41.8%	45.0%	35% - 55%
Global Private Equity	2,373,409,512	13.3	12.0	8 - 16
Global Fixed Income	2,318,371,725	13.0	19.0	12 - 26
Global Private Credit	1,074,493,283	6.0	5.0	3 - 7
Global Real Assets	3,593,736,459	20.1	17.0	14 - 20
Cash Equivalents	469,694,333	2.6	2.0	0 - 7
Opportunistic and Tactical	572,882,795	3.2	0.0	0 - 5
Total Portfolio	\$17,895,114,604	100.0%	100.0%	

Asset Allocation vs. Policy



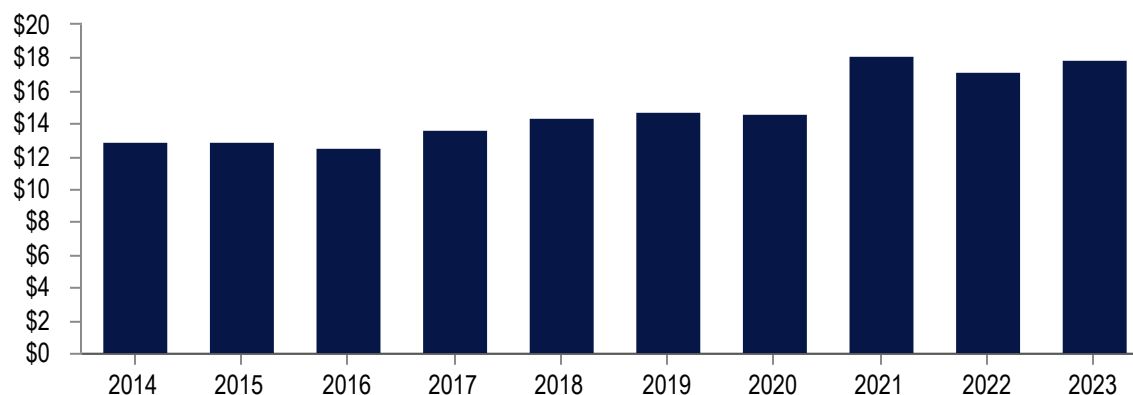
Note: Boxes represent permissible ranges around target weights.

SERS Total Investment Return (Gross of Fees)



Investments

Total Investment Fund at Fair Value (\$ in billions)



Schedule of Investment Results for the years ended June 30 (Gross of Fees)

	2023	2022	2021	Annualized Rates of Return		
				3 Years	5 Years	10 Years
Global Equities						
SERS	15.9%	(15.6%)	41.9%	11.6%	8.5%	9.4%
Custom Global Equities Benchmark ⁽¹⁾	16.5	(16.4)	40.3	11.0	7.7	8.6
Global Private Equity						
SERS ⁽²⁾	4.2	36.3	48.1	28.1	20.6	20.1
Custom Global Private Equity Benchmark ⁽³⁾	(4.0)	22.3	47.3	21.7	15.1	14.3
Global Fixed Income						
SERS	1.0	(10.4)	3.9	(2.0)	2.1	2.5
Bloomberg US Aggregate Bond Index	(0.9)	(10.3)	(0.3)	(4.0)	0.8	1.5
Global Real Assets						
SERS ⁽⁴⁾	2.2	25.7	8.7	11.8	10.1	11.3
Custom Global Real Assets Benchmark ⁽⁵⁾	(1.6)	21.9	2.6	7.2	6.7	8.3
Opportunistic and Tactical Investments						
SERS ⁽⁶⁾	3.8	7.9	27.3	12.6	7.5	8.9
Policy Benchmark ⁽⁷⁾	1.1	(8.3)	1.7	(2.0)	0.8	4.4
Global Private Credit						
SERS ⁽⁸⁾	7.7	10.6	19.5	12.5	N/A	N/A
3-month Treasury Bill Rate +4.50% ⁽⁹⁾	8.3	4.7	4.8	5.9	N/A	N/A
Cash Equivalents						
SERS	4.3	16.5	2.6	7.6	5.7	3.6
FTSE 30-day Treasury Bill Index	3.7	0.2	0.1	1.3	1.5	0.9
Total Fund (Gross of Fees)						
SERS	8.1	0.2	27.5	11.4	9.0	9.2
Policy Benchmark ⁽¹⁰⁾	7.1	(3.6)	23.6	8.6	7.2	7.6
Total Fund (Net of Fees)						
SERS	7.4	(0.5)	26.8	10.7	8.3	8.5
Policy Benchmark ⁽¹⁰⁾	7.1	(3.6)	23.6	8.6	7.2	7.6

Source: BNY Mellon Global Risk Solutions

Investment results provided by BNY Mellon Global Risk Solutions are based upon a time-weighted rate of return methodology. Fair value adjustments made to global private equity, global real assets, opportunistic and tactical, and global private credit as of June 30 will be reflected in the investment returns in the next financial statement.

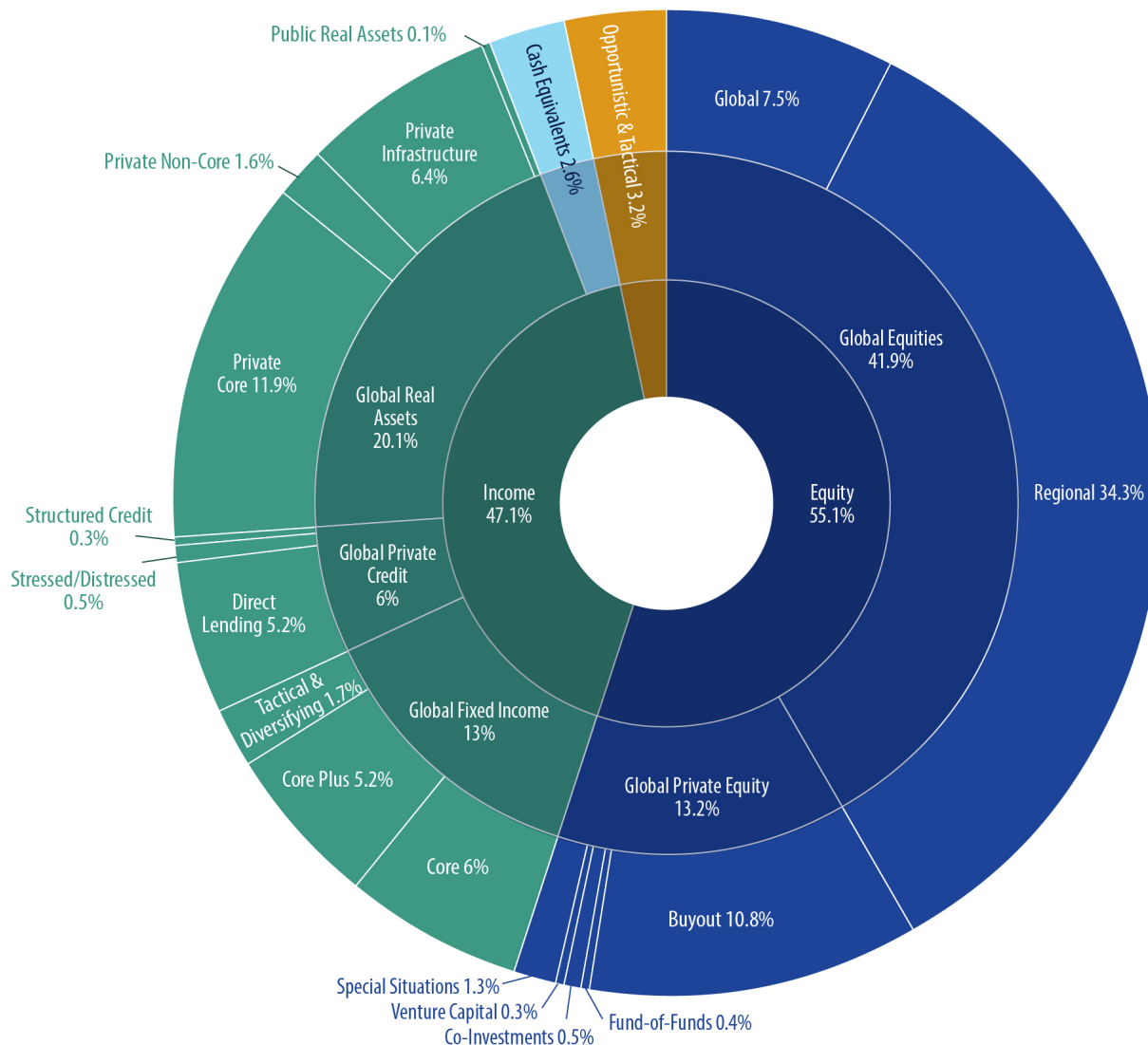
Notes to Investment Results

- (1) Custom Global Equities Benchmark:
- (a) Effective July 1, 2022
 - 100.00% MSCI All Country World Net Total Return Index
 - (b) Effective January 1, 2021
 - 55.00% Russell 3000 Index
 - 30.00% MSCI ACWI ex-US (net dividends) Index
 - 15.00% MSCI Emerging Markets Net Total Return Index
 - (c) Effective January 1, 2014
 - 50.00% Russell 3000 Index
 - 50.00% MSCI ACWI ex-US (net dividends) Index
 - (d) Effective July 1, 2013
 - 50.00% Russell 3000 Index
 - 50.00% MSCI ACWI ex-US (net dividends) Index (developed markets 50% hedged)
- (2) Global Private Equity returns are reported one quarter in arrears.
- (3) Custom Global Private Equity Benchmark:
- (a) Effective January 1, 2014 Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - (b) Prior to January 1, 2014 S&P 500 Index plus +3.0%
- (4) Global Real Asset partnership returns are reported one quarter in arrears. Public real asset returns are reported in the current quarter.
- (5) Custom Global Real Assets Benchmark:
- (a) Effective July 1, 2010 NCREIF Property Index (one quarter in arrears)
- (6) Opportunistic and Tactical inception date occurred in June 2013
- (7) Opportunistic and Tactical Benchmark:
- (a) Effective July 1, 2020 Bloomberg US Aggregate Bond Index +2.0%
 - (b) Prior to July 1, 2020 SERS Policy BM
- (8) Global Private Credit investments inception date occurred in July 2020
- (9) Global Private Credit Benchmark:
- (a) Effective February 1, 2022 90-Day Treasury Bill Rate +4.50%
 - (b) Prior to February 1, 2022 3-Month LIBOR +4.50%
- (10) SERS Policy Benchmark weightings for the past 10 years:
- (a) Effective July 1, 2022
 - 45.00% MSCI All Country World Net Total Return Index
 - 19.00% Bloomberg US Aggregate Bond Index
 - 17.00% NCREIF Property Index (one quarter in arrears)
 - 12.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 5.00% 90-day T-Bill +4.50%
 - 2.00% FTSE 30-day T-Bill Index
 - (b) Effective February 1, 2022
 - 24.75% Russell 3000 Index
 - 13.50% MSCI ACWI ex-US (net dividends) Index
 - 6.75% MSCI Emerging Markets ex-US (net dividends) Index
 - 19.00% Bloomberg US Aggregate Bond Index
 - 17.00% NCREIF Property Index (one quarter in arrears)
 - 12.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 5.00% 90-Day T-Bill +4.50%
 - 2.00% Citigroup 30-Day T-Bill Index
 - (c) Effective July 1, 2021
 - 24.75% Russell 3000 Index
 - 13.50% MSCI ACWI ex-US (net dividends) Index
 - 6.75% MSCI Emerging Markets ex-US (net dividends) Index
 - 19.00% Bloomberg US Aggregate Bond Index
 - 17.00% NCREIF Property Index (one quarter in arrears)
 - 12.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 5.00% 3-Month LIBOR +4.50%
 - 2.00% Citigroup 30-Day T-Bill Index
 - (d) Effective January 1, 2021
 - 24.75% Russell 3000 Index
 - 13.50% MSCI ACWI ex-US (net dividends) Index
 - 6.75% MSCI Emerging Markets ex-US (net dividends) Index
 - 19.00% Bloomberg US Aggregate Bond Index
 - 16.00% NCREIF Property Index (one quarter in arrears)
 - 11.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 4.00% HFRI Fund of Funds Composite Index +1.0%
 - 3.00% 3-Month LIBOR +4.50%
 - 2.00% Citigroup 30-Day T-Bill Index
 - (e) Effective July 1, 2020
 - 22.50% Russell 3000 Index
 - 22.50% MSCI ACWI ex-US (net dividends) Index
 - 19.00% Bloomberg US Aggregate Bond Index
 - 16.00% NCREIF Property Index (one quarter in arrears)
 - 11.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 4.00% HFRI Fund of Funds Composite Index +1.0%
 - 3.00% 3-Month LIBOR +4.50%
 - 2.00% Citigroup 30-Day T-Bill Index
 - (f) Effective January 1, 2016
 - 22.50% Russell 3000 Index
 - 22.50% MSCI ACWI ex-US (net dividends) Index
 - 19.00% Barclays Capital US Aggregate Bond Index
 - 15.00% NCREIF Property Index (one quarter in arrears)
 - 10.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 10.00% HFRI Fund of Funds Composite Index +1.0%
 - 1.00% Citigroup 30-Day T-Bill Index
 - (g) Effective January 1, 2015
 - 22.50% Russell 3000 Index
 - 22.50% MSCI ACWI ex-US (net dividends) Index
 - 19.00% Barclays Capital US Aggregate Bond Index
 - 12.00% NCREIF Property Index (one quarter in arrears)
 - 10.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 13.00% HFRI Fund of Funds Composite Index +1.0%
 - 1.00% Citigroup 30-Day T-Bill Index
 - (h) Effective July 1, 2014
 - 22.50% Russell 3000 Index
 - 22.50% MSCI ACWI ex-US (net dividends) Index
 - 19.00% Barclays Capital US Aggregate Bond Index
 - 15.00% NCREIF Property Index (one quarter in arrears)
 - 10.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 10.00% HFRI Fund of Funds Composite Index +1.0%
 - 1.00% Citigroup 30-Day T-Bill Index
 - (i) Effective January 1, 2014
 - 22.50% Russell 3000 Index
 - 22.50% MSCI ACWI ex-US (net dividends) Index
 - 19.00% Barclays Capital US Aggregate Bond Index
 - 12.00% NCREIF Property Index (one quarter in arrears)
 - 10.00% Burgiss All Private Equity Benchmark (BAPE) (one quarter in arrears)
 - 13.00% HFRI Fund of Funds Composite Index +1.0%
 - 1.00% Citigroup 30-Day T-Bill Index
 - (j) Effective July 1, 2013
 - 22.50% Russell 3000 Index
 - 22.50% MSCI ACWI ex-US (net dividends) Index (developed markets 50% hedged)
 - 19.00% Barclays Capital US Aggregate Bond Index
 - 12.00% NCREIF Property Index (one quarter in arrears)
 - 10.00% SERS Custom Private Equity Benchmark
 - 13.00% HFRI Fund of Funds Composite Index +1.0%
 - 1.00% Citigroup 30-Day T-Bill Index

Investments

SERS Detailed Asset Allocation

EQUITY	55.1%	INCOME	41.7%
Global Equities	41.9%	Global Fixed Income	13.0%
Global	7.5%	Core	6.0%
Regional	34.4%	Core Plus	5.2%
		Tactical & Diversifying	1.8%
Global Private Equity	13.2%	Global Private Credit	6.0%
Buyout	10.7%	Direct Lending	5.2%
Fund-of Funds	0.4%	Stressed/Distressed	0.5%
Co-Investments	0.5%	Structured Credit	0.3%
Venture Capital	0.3%		
Special Situations	1.3%		
		Global Real Assets	20.1%
OPPORTUNISTIC AND TACTICAL	3.1%	Private Core	12.0%
Opportunistic and Tactical	3.1%	Private Non-Core	1.5%
Opportunistic and Tactical	3.1%	Private Infrastructure	6.4%
		Public Real Assets	0.2%
		Cash Equivalents	2.6%
		Cash Equivalents	2.6%



Largest Public Equity Holdings as of June 30, 2023

Description	Country	Shares	Fair Value
1 Microsoft Corp.	United States	765,869	\$260,808,950
2 Apple, Inc.	United States	1,319,868	256,014,827
3 Meta Platforms, Inc.	United States	314,874	90,362,558
4 Amazon.com, Inc.	United States	667,480	87,012,638
5 Alphabet, Inc. Class A	United States	675,416	80,847,306
6 NVIDIA Corp.	United States	172,487	72,965,361
7 Alphabet, Inc. Class C	United States	557,357	67,423,462
8 Tesla, Inc.	United States	199,579	52,243,828
9 Oracle Corp.	United States	403,779	48,086,026
10 Home Depot, Inc.	United States	154,119	47,875,435

All monetary values stated in US dollars.

A complete listing of holdings is available upon request.

Largest Public Fixed Income Holdings as of June 30, 2023

Description	Rating	Par Value	Fair Value
1 iShares 7-10 Year US Treasury Bond ETF	AA+	\$230,201	\$22,237,417
2 US Treasury Bond 3.375% 08/15/2042	AA+	21,436,000	19,457,357
3 US Treasury Bond 2.375% 02/15/2042	AA+	21,239,000	16,535,723
4 US Treasury Note 2.250% 02/15/2027	AA+	16,916,000	15,729,898
5 US iShares MBS ETF	AA+	158,976	14,826,897
6 US Treasury Note 3.500% 02/15/2033	AA+	13,790,000	13,432,322
7 iShares US Treasury Bond ETF	AAA	539,182	12,347,268
8 US Treasury Note 3.000% 07/15/2025	AA+	11,810,000	11,382,349
9 FNMA TBA 3.500% 05/01/2052	AA+	11,834,033	10,808,186
10 US Treasury Note 2.500% 04/30/2024	AA+	10,805,000	10,547,115

All monetary values stated in US dollars.

A complete listing of holdings is available upon request.

Investment Consultants and Investment Managers as of June 30, 2023

Investment Consultants

Aksia LLC
Wilshire Associates, Inc.

Investment Managers - Opportunistic and Tactical Investments

Barings Global Advisers, Ltd.
BlackRock Institutional Trust Co., N.A.
GoldenTree Asset Management, LP
Intermediate Capital Group, PLC
Marathon Asset Management, LP
Oceanwood Capital Management, LLP
Pacific Investment Management Company, LLC
PanAgora Asset Management, Inc.
PGIM, Inc.
Schroder Investment Management North America Ltd.
Strategic Value Partners
Wellington Management Company, LLP

Investment Managers - Global Real Assets

Almanac Realty Investors, LLC
Beacon Capital Partners, LLC
BlackRock Institutional Trust Co., N.A.
Brookfield Asset Management
CBRE Global Investors, LLC
Clarion Partners, LLC
Core Farmland Fund, LP
Deutsche Asset & Wealth Management
DigitalBridge Group, Inc.
Fiera Infrastructure Inc.
Global Infrastructure Partners
Harrison Street Real Estate Capital, L.L.C.
Industry Fund Management Pty, Ltd.
J.P. Morgan Investment Management, Inc.
Lubert-Adler Management Company, LP
Mesa West Capital, LLC
Patrizia, AG
Pretium Partners, LLC
Prudential Real Estate
The Carlyle Group
UBS Realty Investors, LLC

Investment Managers - Global Private Equity

Altas Partners GP, LP
Bridgepoint Advisers Limited
Charterhouse Capital Partners
Cinven Capital Management Ltd.
Coller Investment Management Ltd.
FdG Associates, LLC
Ford Financial Fund, LP
Francisco Partners Management, LP
Freeman Spogli Management Co., LP
Goldman Sachs Asset Management, LP

Graham Partners
J.P. Morgan Investment Management, Inc.
KKR Credit Advisors (US) LLC
Kohlberg & Co.
Leonard Green & Partners
Levine Leichtman Capital Partners, Inc.
Lightspeed Venture Partners
Linsalata Capital Partners, LLC
Mason Wells, Inc.
Monomoy Capital Partners
NGP Energy Capital Management, LLC
Oak Hill Capital Partners
Oaktree Capital Management, LP
Odyssey Investment Partners
Primus Venture Partners
Quantum Energy Partners
Silver Lake Partners
Sole Source Capital
StepStone Group LP
Swander Pace Capital Partners
The Carlyle Group
TPG Inc.
Transportation Resource Partners
Warburg Pincus LLC

Investment Managers - Global Private Credit

Apollo Global Management
Arcmont Asset Management
Ares Management Corporation
Barings Global Advisers, Ltd.
Francisco Partners Management, LP
GoldenTree Asset Management, LP
Goldman Sachs Asset Management, LP
HPS Investment Partners, LLC
Invesco Credit Partners
KKR Credit Advisors (US) LLC
LBC Credit Partners
One William Street Credit Management, LP
The Carlyle Group

Investment Managers - Global Fixed Income

Aristeia Capital, LLC
BlackRock Institutional Trust Co., N.A.
C. S. McKee, LP
Dodge & Cox
Goldman Sachs Asset Management, LP
J.P. Morgan Investment Management, Inc.
Johnson Investment Counsel, Inc.
Loomis, Sayles & Co., L. P.
Ninety One Asset Management
Pharo Global Advisors Ltd.
Stone Harbor Investment Partners, LP
Western Asset Management Co.

Investment Managers - Global Equity

AllianceBernstein, LP
Arrowstreet Capital, LP
Axiom International Investors, LLC
BlackRock Institutional Trust Co., N.A.
Brown Capital Management, Inc.
City of London Investment Management Co. Ltd.
Coho Partners Ltd.
Connor, Clark & Lunn Investment Management Ltd.
D.E. Shaw & Co., LLC
Genesis Investment Management, LLC
GlobeFlex Capital, LP
J.P. Morgan Investment Management, Inc.
LSV Asset Management
Martingale Asset Management, LP
MFS Institutional Advisors, Inc.
Neumeier Poma Investment Counsel LLC
Newton Investment Management North America, LLC
PanAgora Asset Management
State Street Global Advisors Ltd.
Walter Scott & Partners Ltd.
WCM Investment Management, LLC

Investment Managers - Multi-Asset Strategies

Bain Capital, LP
Nephila Capital
Redwood Capital Management, LLC
Stark Offshore Management, LLC

Investment Manager - Overlay Futures

Russell Implementation Services, Inc.

Currency Overlay

AlphaEngine Global Investment Solutions LLC
P/E Global, LLC

Securities Litigation Monitor and Filing Agent

Financial Recovery Technology

Custodians

Fifth Third Bank, N.A.
The Bank of New York Mellon

Master Recordkeeper

BNY Mellon Asset Servicing

Investment Analytics

BNY Mellon Global Risk Solutions

Investment Proxy Manager

ISS

Tax Reclaim

Wtax

Summary Schedule of Broker Commissions for US and Non-US Equity Transactions for the Year Ended June 30, 2023

Broker Name	Fees Paid	# of Shares Traded	Avg. Commission per Share
Instinet, LLC	\$76,853	24,240,075	\$0.003
Jefferies, LLC	76,687	19,191,571	0.004
Macquarie Group Limited	75,521	30,462,048	0.002
J.P. Morgan Securities, LLC	56,791	20,695,801	0.003
State Street Global Markets, LLC	56,772	8,676,424	0.007
Stifel, Nicolaus & Co., Inc.	54,668	3,137,716	0.017
HSBC Securities, Inc.	54,258	30,312,798	0.002
ITG, Inc.	51,591	13,170,965	0.004
Piper Jaffray & Co.	48,415	6,592,750	0.007
Citigroup Global Markets, Inc.	37,850	26,715,427	0.001
All other brokers	584,583	170,014,104	0.003
Total	\$1,173,989	353,209,679	

Reconciliation to Statement of Fiduciary Net Position

Asset Class/Strategy	Fair Value	% of Total Fair Value
Global Equities	\$7,492,526,497	41.8%
Global Private Equity	2,373,409,512	13.3
Global Fixed Income	2,318,371,725	13.0
Global Real Assets	3,593,736,459	20.1
Opportunistic and Tactical Investments	572,882,795	3.2
Global Private Credit	1,074,493,283	6.0
Cash Equivalents	469,694,333	2.6
Net Portfolio Value	\$17,895,114,604	100.0%
Investments receivable, securities sold	(104,327,630)	
Investments payable, securities purchased	121,443,235	
Cash and cash equivalents	(617,609,585)	
Investments per Statement of Fiduciary Net Position	\$17,294,620,624	

Statement of Investment Policy

Statement of Investment Policy (effective July 1, 2022)

I. Purpose of Statement of Investment Policy

The purpose of this Statement of Investment Policy (SIP) is to set forth the investment philosophy and objectives of the Retirement Board (Board) for the School Employees Retirement System of Ohio (SERS).

This SIP:

- A. incorporates and is subject to all restrictions and obligations set forth in Chapter 3309 of the Ohio Revised Code;
- B. establishes investment policies and describes the organization and division of responsibilities necessary to implement the Board's philosophy and objectives prudently; and
- C. establishes a framework for making investment decisions, and monitoring investment activity, and promotes effective communication between the Board, Staff, and other involved parties.

This SIP is subject to change at any time by the Board. The Board will review the SIP and revise it periodically to assure it continues to reflect the investment philosophy, objectives and strategies of the Board.

II. Investment Philosophy

The Board recognizes the need to manage SERS assets prudently (the Total Fund) to meet its statutory and fiduciary obligations and to achieve or exceed its objectives. The Board's investment philosophy is grounded in fundamental, prudent investment principles, incorporating modern portfolio theory, risk management and portfolio management practices. These principles are incorporated in the following "Investment Beliefs". The Board believes it can provide consistent, long-term performance at appropriate levels of risk. By delineating responsibilities and defining policy objectives, this SIP reflects the Board's investment philosophy and governance.

SERS Investment Beliefs:

Financial Markets

- A. Capital markets are not perfectly efficient. Inefficiencies create opportunities that skilled investors could exploit to generate excess returns. Investment Staff will prudently attempt to add value by exploiting such inefficiencies across different assets selectively, although it is not easily achieved.
- B. Markets generally afford higher prospective returns for riskier assets, such as equity or credit risk premiums over the long term. Anomalies could occur in intermittent periods on account of shifting valuations. When valuations are elevated returns tend to be lower.

Investment Process

- C. Strategic asset allocation is the key determinant of risk and return and represents the Board's tolerance for risk in achieving funding goals. It is important to diversify across risk factors and return sources and to be explicit about the role of asset classes.
- D. Risk is the likelihood of loss or less than expected outcomes and is not fully captured by a single metric such as volatility. Risk has many dimensions, subjective and objective, which must be comprehensively assessed and managed in the investment process.
- E. Long-term horizon is an advantage as it enables SERS to tolerate volatility, capture illiquidity and other risk premia, and take advantage of trends and opportunities.
- F. Costs matter. Managing fees and transaction costs adds value to the Fund. Costs must be judged relative to expected value added.

Organizational Skills and Design

- G. Investment success is dependent on good governance, decision process, skill and judgment. Having an experienced and talented staff with appropriate decision authority is an advantage. SERS' Board will delegate authority as appropriate to staff to facilitate execution of the investment process, but retain policy and oversight powers.
- H. Explicit investment objectives, guidelines and collaborative teamwork among staff as well as external partners is essential for success.

Sustainability and Corporate Governance

- I. Good governance of markets and entities comprising the markets improves outcomes for investors. SERS Board and Staff will exercise corporate ownership responsibly and with the best fiduciary interest of members and stakeholders.

- J. SERS Board and Staff must be attentive to important environmental, social and governance issues that affect markets and promote its interests in a responsible manner in the best fiduciary interest of members and stakeholders.

III. Investment Objectives

The Investment Objectives of SERS are:

- A. to assure that SERS provides statutorily-mandated retirement benefits;
- B. to earn a net-of-fees total return that equals or exceeds over the long term the Actuarial Assumed Rate approved by the Board; and
- C. to enhance risk-adjusted investment returns of the Total Fund in a prudent and cost-effective manner.

IV. Risk Management

- A. The Board evaluates risk in terms of the probability of not earning the actuarial assumed rate over the long-term. Diversification across asset classes, within asset classes and across investment styles, sectors and securities is employed to manage overall portfolio risk and volatility.
- B. SERS utilizes a risk budgeting approach in management of volatility risk of investment portfolios. Active risk of the Total Fund, asset class and individual portfolios and their respective risk contribution to total risk are important factors in the management of the capital allocations to individual asset classes and portfolios. The Total Fund shall be managed within a forecast active risk (tracking error) range of 0% to 3.0% relative to the policy benchmark and within the asset allocation range specified elsewhere in this SIP. Active risk is determined by asset allocation deviations and active security selection decisions as well as underlying market volatility. Furthermore, active risk (tracking error) shall be inclusive of any applied leverage. In times of high market volatility, the active risk may exceed 3%. In any event, if the active risk exceeds 3% staff will discuss this with the Board and present appropriate recommendations. The realized tracking error is also expected to be below 3% over rolling three-year periods. Individual asset classes will be managed within the tracking error range specified in the respective asset class implementation guideline. Private asset classes (Private Equity, Private Credit and Real Assets) are excluded at this point from tracking error guidelines.
- C. Other risks, including but not limited to those such as interest rate risk, credit risk, and liquidity risk, will be managed and carefully monitored by Investment Managers and Investment Staff.

V. Implementation Approach

- A. The Board reserves certain responsibilities for itself, while delegating other responsibilities to the Executive Director, the Chief Investment Officer, the Investment Committee, Investment Staff, Investment Managers, Investment Consultants, the Investment Compliance Department, and other Investment Service Providers. These responsibilities are described in this SIP.
- B. In fulfilling its fiduciary duties, the Board utilizes a competent and qualified Staff to implement the investment program and to manage daily operations.
- C. The Board utilizes Investment Managers or Funds selected by Staff to invest most assets of the Total Fund. The Board recognizes that costs associated with external Investment Managers and Funds are typically higher than costs associated with internal management. However, the Board believes external Investment Managers that act as fiduciaries possess specialized investment expertise and economies of scale, and can generate higher returns on a net-of-fee basis.
- D. The Board requires regular reporting on the Total Fund's investment program to ensure compliance with its SIP.

VI. Investment Organization and Responsibilities

A. Responsibilities of the **Board**

The Board as a fiduciary is responsible for ensuring that Total Fund assets are managed prudently and effectively, in compliance with applicable laws and with this SIP, for the exclusive benefit of participants and beneficiaries.

Responsibilities of the Board include:

1. establishing controls and systems to ensure that Total Fund fiduciaries comply with applicable laws;
2. establishing asset allocation and investment policies for SERS assets;
3. appointing and discharging the Executive Director and Board Investment Consultants;
4. confirming or rejecting the Executive Director's proposed appointment of a Chief Investment Officer for SERS;

Statement of Investment Policy

5. designating the individual as Chief Investment Officer of SERS for purposes of R.C. 3309.043, and then notifying the Ohio Department of Commerce, Division of Securities in writing of the designation as required by the Ohio Revised Code;
6. monitoring and reviewing investment performance and policy compliance;
7. requesting, receiving and reviewing reports from Investment Staff, Board Consultants and other entities, if applicable;
8. approving an Annual Investment Plan;
9. approving Statement of Investment Policy and changes thereto; and
10. conducting an annual evaluation of the performance of the Board's Investment Consultant.

B. Responsibilities of **Staff**

Staff will administer Total Fund assets as fiduciaries in accordance with applicable federal and state laws and regulations, and in accordance with this SIP, ethics laws, codes of professional conduct (in particular, the CFA Code of Ethics and Standards of Professional Conduct), and other applicable codes and/or regulations. Staff will establish plans, policies and procedures to carry out these duties.

1. The **Executive Director** is responsible for:
 - a. ensuring that reports of the Total Fund's investment performance are presented on a timely basis;
 - b. retaining vendors, consultants and advisors as necessary to assist Staff, and assist the Board in the retention of Investment Consultants;
 - c. appointing, discharging and retaining the Chief Investment Officer and Investment Staff;
 - d. overseeing the investment function,
 - e. executing investment documents when necessary,
 - f. conducting a fiduciary audit of investment operations at least on a seven- to ten-year cycle unless circumstances require an audit to be conducted sooner.
2. The **Chief Investment Officer** is responsible for:
 - a. overseeing the investment program and keeping the Executive Director advised;
 - b. conducting periodic asset liability studies with the assistance of Investment Consultants and recommending asset allocation targets and ranges;
 - c. reviewing the SIP on an annual basis and recommending changes as needed for approval by the Board;
 - d. preparing and presenting the Annual Investment Plan to the Board for approval;
 - e. implementing the Annual Investment Plan;
 - f. investigating, researching and recommending new and emerging investment concepts and strategies, and implementing appropriate strategies in accordance with approved policies and procedures;
 - g. informing Investment Managers, Investment Consultants, and others providing investment services to SERS about the requirements of applicable laws and Board policies, and monitoring their compliance with said laws and policies;
 - h. adjusting allocations to Asset Classes, Investment Managers and Funds as needed, subject to any approved allocation ranges;
 - i. approving implementation guidelines for each asset class to establish allocation ranges for sub-strategies, risk parameters and risk limits, and providing such guidelines to the Board;
 - j. appointing and discharging Investment Managers and approving investments in or redemptions from Funds subject to conditions and guidelines in Section VII.;
 - k. executing investment documents;
 - l. approving Investment Manager guidelines, changes and additions;
 - m. hiring and supervising Investment Staff;

- n. monitoring and evaluating the effectiveness of executed securities transactions and reporting annually to the Board regarding the performance of agents who execute securities transactions on behalf of SERS; and
 - o. regularly reporting to the Board on market conditions, the status of the Total Fund, and its multi-period performance relative to benchmarks. Performance will be calculated on a gross-of-fees and net-of-fees basis.
3. The **Investment Committee** is responsible for:
- a. ensuring that a policy and procedure are in place defining the Committee's structure and establishing rules for reviewing and approving investments;
 - b. reviewing Investment Manager and Fund due diligence; and
 - c. approving Investment Managers or Funds.
4. The **Investment Staff** is responsible for:
- a. regularly reporting the status of the respective asset classes and Total Fund and its multi-period performance to the Chief Investment Officer;
 - b. periodically meeting and speaking with existing or potential Investment Managers to review and assess the quality of their investments and management of assets;
 - c. performing ongoing due diligence to evaluate and monitor Investment Manager capabilities relative to managing Total Fund assets;
 - d. recommending to the Chief Investment Officer implementation guidelines for the respective asset classes to establish allocation ranges for sub-strategies, risk parameters and risk limits, and managing the portfolio to the approved implementation guidelines;
 - e. recommending to the Chief Investment Officer any additions or withdrawals from Investment Manager accounts or Funds, or rebalancing of asset class allocations;
 - f. recommending to the Chief Investment Officer and the Investment Committee the appointment or discharge of Investment Managers and investments in or redemptions from Funds;
 - g. investing assets of the cash equivalents portfolio;
 - h. investigating and researching new and emerging investment concepts and strategies, and recommending those strategies to the Chief Investment Officer;
 - i. preparing periodic reports for the Chief Investment Officer on the performance of agents who execute securities transactions on behalf of SERS; and
 - j. maintaining a list of Ohio-qualified Investment Managers and their investment products.

C. Responsibilities of **Investment Service Providers**

Investment Service Providers who do business or seek to do business with SERS will act in the best interest of SERS when providing services to SERS or the Total Fund. Investment Service Providers will:

1. comply with all applicable federal and state laws and regulations, with this SIP, and with all applicable professional codes and regulations;
2. have established ethics and conflict of interest policies and procedures, and proper internal compliance controls in place as needed;
3. at the earliest opportunity disclose to Investment Staff any actual or potential conflict of interest;
4. as permitted by law, disclose any investigation of, or litigation involving, its operations to Investment Staff; and
5. provide annual or other periodic disclosures as required.

D. Responsibilities of **Investment Managers**

Investment Managers and Investment Staff managing assets internally are responsible as fiduciaries for investing prudently the Total Fund assets. In addition to those applicable responsibilities described in VI.B., Investment Managers and internal Investment Staff members will:

Statement of Investment Policy

1. manage assets within their control in compliance with all applicable federal and state laws and regulations, including but not limited to applicable ethics requirements, this SIP, contractual obligations, and applicable professional codes of conduct;
2. inform the Chief Investment Officer and Investment Staff of any substantial changes in investment strategy, portfolio structure, asset value, and of any organizational changes, including that of ownership, affiliation, organizational structure, financial condition, or changes in professional personnel staffing in the investment management organization;
3. present in-depth reports to Investment Staff;
4. recommend to Investment Staff changes to investment guidelines the Investment Manager believes would enhance investment performance on a risk adjusted basis; and
5. select such agents for the execution of transactions, at such prices, and at such commission rates as in the good faith judgment of the Investment Manager will be in the best interest of the Total Fund, taking into consideration in the selection of such agents not only the available prices and rates of brokerage commissions, but also other factors relevant to the transaction.

E. Responsibilities of **Investment Consultants**

Investment Consultants will:

1. provide services as fiduciaries and in accordance with all applicable federal and state laws and regulations, including but not limited to applicable ethics requirements; in accordance with this SIP and its written Agreement with SERS; and with all applicable professional codes and/or regulations;
2. provide independent and unbiased research, information and advice to the Board and Staff;
3. assist in the development and amendment of this SIP;
4. assist in the development of investment guidelines as may be requested by Staff;
5. assist in the development of strategic asset allocation targets and ranges;
6. assist in the development of performance measurement standards;
7. monitor and evaluate Investment Manager and Fund performance as appropriate on an ongoing basis;
8. recommend to Staff the retention or discharge of Investment Managers and investment in or redemption from Funds;
9. collaborate with Investment Staff on the due diligence of potential Investment Managers and Funds, and existing Investment Managers and Funds, as requested by Staff;
10. assist in the development of criteria for and procedures to be utilized in the selection of Investment Managers and Funds;
11. provide research, information and advice on investment topics and strategies considered relevant by the Investment Consultant, or when requested by the Board or Investment Staff;
12. provide those services delineated in the Advisory or Consultant Agreement;
13. provide any other advice or services that the Board, Executive Director or Chief Investment Officer determines are necessary, useful or appropriate to fulfill the objectives of this SIP; and
14. regularly report the status of the Total Fund and its multi-period performance to the Board. Performance will be calculated on a net-of-fee basis.

F. Responsibilities of the **Investment Compliance Department**

The Investment Compliance Department is responsible for:

1. monitoring and reporting compliance with this SIP and Board Resolutions;
2. ensuring that investment management agreements and related contracts comply with the SIP;
3. ensuring that Investment Service Providers and Investment Managers comply with Section VI., herein; and

4. identifying and, in concert with Investment Staff, resolving compliance violations by Investment Managers and Investment Staff relative to their respective investment guidelines. Staff will ensure that those accounts with guideline violations are efficiently and effectively brought back into compliance.

G. Responsibilities of the **Government Relations Officer**

The Government Relations Officer is responsible for:

1. promptly voting proxies and related actions in accordance with Board approved procedures, and maintaining detailed records of proxy votes and related actions for the Proxy Review Committee; and
2. reporting proxy voting activity to the Board on a quarterly basis and highlighting any emerging issues related to this activity.

H. Responsibilities of the **Investment Accounting Department**

Responsibilities of the Investment Accounting Department related to the Investments Department are defined in Policy FIN4-004 Investment Valuation.

VII. Conditions and Guidelines for Making Investments

A. Conditions

1. In cooperation with legal counsel, Staff will endeavor to ensure that the legal structure of each investment limits potential losses to no more than the amount invested;
2. Investments will be of institutional quality;
3. Investments will require the approval of the Chief Investment Officer and the Investment Committee;
4. Investment documents must be approved by SERS' Legal Department and the Investment Compliance Department;
5. The Investment Committee will develop and implement definitive procedures for approving investments in accordance with this SIP; and
6. The Chief Investment Officer or the Executive Director must sign the necessary investment documents when making investments.

B. Guidelines

1. Selected Investment Managers and Funds will have proven track records in the strategy;
2. Monthly reporting by the Fund or Investment Manager is preferred, but there shall be quarterly reporting at a minimum;
3. The liquidity of an investment will be prudent, both for the strategy and for the Total Fund;
4. The amount invested with an Investment Manager or in a Fund will be prudent for the strategy; and
5. Investment limits established by Board resolution remain in effect until modified or eliminated by the Board.

VIII. Implementation Strategies

A. Asset Allocation

The Board will conduct an asset and liability study every three- to five-years or sooner, if necessary, in order to establish allocation targets and ranges for asset classes within distinct capital markets. Staff, with the assistance of consultants, will review annually the market outlook and expected returns for asset classes with the Board. If there are significant changes in return assumptions, Staff will conduct an interim review of the Asset Allocation Policy.

In order to identify the investment horizon of SERS and its cash flow requirements, liability considerations will include but not be limited to current and expected future values of the benefits, contributions and total assets.

Statement of Investment Policy

After giving due consideration to an asset and liability study conducted by the Investment Consultant, which study meets the requirements of this SIP, the Board hereby recognizes and reaffirms the following asset allocation for SERS:

ASSET CLASS	TARGET	RANGE
Equity	57%	47% - 67%
Global Equities	45%	35% - 55%
Global Private Equity	12%	8% - 16%
Income	43%	38% - 48%
Global Fixed Income	19%	12% - 26%
Global Private Credit	5%	3% - 7%
Global Real Assets	17%	14% - 22%
Cash Equivalents	2%	0% - 5%
STRATEGY		
Opportunistic and Tactical Investments	0%	0% - 7%
Total	100%	
Leverage	0%	0% - 10%
Total Notional Exposure (Including Leverage)	100%	100% - 110%

B. Derivatives

The Board authorizes the use of derivatives in the Total Fund and authorizes the Chief Investment Officer, with the advice and assistance of the Investment Consultant, to develop and implement derivatives strategies as needed. The Chief Investment Officer will follow the derivatives policy setting forth general guidelines for the use of derivatives.

C. Leverage

The Board authorizes the use of leverage in the Total Fund and authorizes the Chief Investment Officer, with the advice and assistance of the Investment Consultant, to develop and implement certain leverage strategies. The Chief Investment Officer will follow the leverage policy setting forth general guidelines for the use of leverage. Leverage at the total fund level may be used to gain higher level of exposure than 100% of the above asset allocation targets subject to a limit of 10% of total fund. Economic leverage is obtained by the use of derivatives (equities, bond or other liquid assets) and may be employed to balance risk contribution and/or potentially enhance total fund return. Any active risk introduced by the total fund leverage shall be governed by the limits specified in Section IV. (Risk Management) above.

D. Rebalancing

The Total Fund rebalancing is conducted by the Chief Investment Officer within the active risk limit specified in Section IV. (Risk Management) as well as asset class portfolio ranges specified in Section VIII. Within individual asset classes, rebalancing is conducted based on the specific targets and ranges of the sub-strategies specified in the implementation guidelines subject to the overall tracking error limit of each asset class.

E. Currency Hedging

The Board authorizes currency hedging in the Total Fund and authorizes the Chief Investment Officer to develop and implement currency hedging strategies as needed. Currency hedging programs and managers shall be approved by the Investment Committee.

F. Transition Management

The Board authorizes the Executive Director and the Chief Investment Officer to hire Transition Managers as needed.

G. Proxy Voting

The Board authorizes the Proxy Review Committee, which consists of staff members from Executive and Investments, to vote proxies of common stock owned by SERS and to hire proxy services as required to implement this strategy. The Proxy Review Committee will follow a process for voting proxies as described in the Proxy Voting Procedures document.

H. Securities Lending

The Board authorizes Investment Staff to develop and implement a securities lending program which may involve the appointment or discharge of third party securities lending agents by the Executive Director or the Chief Investment Officer. The

Board recognizes that while the practice of securities lending can generate meaningful income for the Total Fund, it is not without investment risk. To mitigate investment risk the securities lending program will focus on intrinsic value lending and use conservative collateral reinvestment guidelines as outlined in the securities lending policy. If Staff determines the risk/reward relationship of the program is no longer advantageous for the Total Fund, the program will be discontinued.

I. Opportunistic and Tactical Investments

The Board authorizes Investment Staff to invest up to 5% of Total Assets in Opportunistic and Tactical Investment Strategies. These investments will comply with the Opportunistic and Tactical Investment Policy approved by the Chief Investment Officer.

J. Overlay Program

The Board authorizes Investment Staff to invest in an overlay program which includes tactical asset allocation and active currency strategies. The overlay program trades derivatives of the Total Fund's underlying assets and foreign currency exposures to enhance Total Fund's risk adjusted return. The net notional exposures of the tactical asset allocation should be zero and the gross notional exposure of the currency program is limited to 50% of the Non-US Equity portfolio value. The active risk (tracking error) of the overlay positions are governed by the overall tracking error limit for the Total Fund as stated in Section IV. (Risk Management).

K. Investment Managers and Funds

The Board authorizes the Chief Investment Officer and the Investment Committee to approve Investment Managers and Funds based upon recommendations of Investment Staff or Investment Consultants, as may be appropriate, and discussions with Managers. The Chief Investment Officer is authorized to discharge Investment Managers or Funds and report such actions to the Investment Committee or to present the discharge action to the Investment Committee for approval on a discretionary basis. Allocations to approved Investment Managers and Funds will be determined or adjusted by the Chief Investment Officer in accordance Section VI. Allocations and adjustments are subject to any maximum allocation amounts established by the Board.

Investment Managers will adhere to investment guidelines established by Investment Staff, as well as all applicable laws and policies. The Chief Investment Officer is authorized to establish and amend investment guidelines as needed.

It is a goal of the Board to increase the utilization of Ohio-qualified Investment Managers when an Ohio-qualified Investment Manager offers quality, services and safety comparable to other Investment Managers available to the Board, and the use of such Investment Manager is consistent with the Board's fiduciary duties.

The Board will require that a list of Ohio-qualified Investment Managers and their investment products be maintained, and that public notice be given to Ohio-qualified Investment Managers of Investment Manager searches and search criteria.

SERS will give equal consideration to minority owned and controlled firms, and firms owned and controlled by women.

L. Co-investments

The Board authorizes the Chief Investment Officer to approve co-investments in a single investment within a Fund investment previously approved by the Investment Committee. A single co-investment is limited to \$25 million. Such approvals shall be reported to the Investment Committee with supporting investment memoranda. The Chief Investment Officer may present the co-investment to the Investment Committee for approval (on a discretionary basis) if time permits.

M. Collective Investment Funds

To the extent SERS' assets are invested in a group trust described in IRS Revenue Ruling 81-100, the instruments governing such trusts, as they may be amended from time to time, are hereby incorporated by reference and made part of the SIP as if fully set forth herein.

N. Approved Brokers

Brokers (or broker/dealers) who may provide execution of securities transactions for SERS will be evaluated on the basis of financial soundness, underwriting capabilities, research services, execution costs, and any other capabilities necessary in the execution of such transactions. Investment Managers who use such brokers will use their good faith judgment to ensure that said brokers will perform in the best interest of the Total Fund.

It is a goal of the Board to increase its utilization of Ohio-qualified brokers for the execution of domestic equity and domestic fixed income trades when an Ohio-qualified broker offers quality, services, and safety comparable to other brokers available to the Board or its Investment Managers, and the use of such broker is consistent with the Board's fiduciary duties.

SERS will give equal consideration to minority owned and controlled firms, and firms owned and controlled by women.

Statement of Investment Policy

O. Soft Dollars

SERS allows investment managers to enter into limited soft dollar trading arrangements as governed by the “safe harbor” provision of Section 28(e) of the Securities and Exchange Act of 1934, and guided by the CFA Institute Soft Dollar Standards. SERS does not support any new soft dollar arrangements outside of these noted provisions.

P. Securities Litigation

SERS will follow the securities litigation policy and procedures as approved by the Board in setting out a course of action that best represents the interests of SERS’ participants and beneficiaries.

Q. Other

The strategies listed herein are not meant to constrain the Chief Investment Officer from managing the investment program in a prudent manner. The Chief Investment Officer may develop additional investment strategies as needed and will discuss such additional strategies with the Board prior to implementation.

IX. Performance

A. Performance Measurement Standard

Performance evaluation for the Total Fund will focus on total return, on an accrual accounting basis, including realized and unrealized capital gains and losses, and income. Valuations are to be made at least on a quarterly basis, and period returns are to be geometrically linked. Private market asset returns may be reported one quarter in arrears. Cash and cash equivalents will be included in the portfolio’s return. Performance will be calculated on a gross-of-fee and net-of-fee basis.

B. Performance Benchmark – Total Fund

Performance of the Total Fund relative to benchmarks will be examined monthly, and will be reported for multiple time periods as needed. The Board’s Investment Consultant will report performance net-of-fees on a quarterly basis.

The performance benchmark for the Total Fund will be the target-weighted average of the performance benchmark for each asset class and strategy grouping as stated in Section VIII., excluding leverage. Performance for the Total Fund shall be reported including total fund leverage.

In the event of a significant change in policy targets, the Board may approve interim targets for a period to move progressively toward the final target; interim targets may be used for the purpose of calculating the Total Fund policy benchmark in the interim period.

C. Performance Benchmarks – Asset Classes and Strategies

The long-term performance benchmark for each asset class is shown below. Performance benchmarks are determined as appropriate for SERS in cooperation with SERS’ Investment Consultant. For purposes of this section, long-term refers to rolling three- to five-year periods. Performance in each asset class should meet or exceed the Benchmark measure.

ASSET CLASS	BENCHMARK MEASURE
Global Equities	MSCI All Country World Net Total Return Index (USD)
Global Private Equity	Burgiss All Private Equity (BAPE) (one quarter in arrears)
Global Fixed Income	Bloomberg US Aggregate Bond Index
Global Private Credit	90-day Treasury Bill Rate +4.5%
Global Real Assets	NCREIF Property Index (one quarter in arrears)
Cash Equivalents	FTSE 30-day T-Bill Index
STRATEGY	BENCHMARK MEASURE
Opportunistic and Tactical Investments	Bloomberg US Aggregate Bond Index +2.0%

D. Performance Benchmarks – Individual Investment Managers

Investment Staff will establish performance benchmarks for each Investment Manager based on its respective style.

X. Review and Evaluation

The Board will review and evaluate periodic reports on the investment performance of Total Fund assets. Greater emphasis will be placed on three- to five-year results. The intended frequency for review and evaluation, subject to change by the Board, is as follows:

- A. Monthly – Investment Report including Total Fund market value, asset allocation, performance of the Total Fund and each asset class, and the Total Fund's compliance with this SIP.
- B. Quarterly – Summary Investment Report presented by the Investment Consultant, including highlights and commentary about market conditions, investment performance, asset composition and characteristics for each asset class, and relevant manager level information.

This policy supersedes the policy adopted August 2, 1985 and all revised policies dated 7/1/20; 9/17/15; 6/18/15; 12/18/14; 5/01/14; 1/01/14; 7/01/13; 1/19/12; 7/21/11; 7/01/10; 2/01/09; 8/01/08; 2/21/08; 10/01/07; 10/20/05; 9/15/00; 10/23/98; 6/19/98; 12/12/97; 7/25/97; 3/21/97; 12/20/96; 11/22/96; 6/21/96; 4/25/96; 9/15/95; 7/28/95; 6/16/95; 3/17/95; 1/20/95; 10/21/94; 5/20/94; 3/06/92; 4/07/89; 9/04/87; 1/09/87.

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MEMBERSHIP



159,873
Active Members



\$4,299 million
Annual Payroll



\$26,888
Annual Average Salary



Percent Increase
in Average Pay



46.9
Average Age:
Members



7.3
Active Average
Years of Service

RETIREES



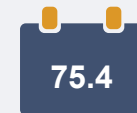
81,833
Retirees*



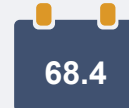
\$1,341 million
Annual Benefits**



\$16,382
Group Average
Annual Benefit**



75.4
Average Age:
Retirees and
Beneficiaries



68.4
Average Age:
Disabilities



72.7
Average Age:
Survivors

June 30, 2023 Data

*Number of Retirees include retirees, beneficiaries, disability, and survivors

**Group include retirees, beneficiaries, disability, and survivors



Cavanaugh Macdonald

CONSULTING, LLC

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November 9, 2023

Board of Trustees
School Employees Retirement System of Ohio
300 East Broad Street, Suite 100
Columbus, OH 43215-3746

Dear Board Members:

The basic financial objective of the School Employees Retirement System of Ohio (SERS) is to establish and receive contributions which, when expressed in terms of percent of active member payroll, will remain approximately level from generation to generation of members, and which, when combined with present assets and future investment returns, will be sufficient to meet the present and future financial obligations of SERS.

In order to measure progress toward this fundamental objective, SERS has an actuarial valuation performed each year. The valuation (i) measures present financial position, and (ii) establishes contribution rates that provide for the current cost and level percent of payroll amortization of the unfunded actuarial accrued liability over a reasonable period. The valuation performed as of June 30, 2023 indicates that a contribution rate of 10.57% of payroll for 159,873 school employees meets the basic financial objective over a 21-year period.

The statutory employer contribution is 14.00% of payroll. The funding policy establishes ranges of the funded ratio for basic benefits that restrict the allocation of employer contributions to the Health Care Fund. The funded ratio is equal to the actuarial value of assets divided by the actuarial accrued liability of promised benefits. The Board seeks to maintain a funded ratio of at least 90% for basic benefits. If the basic benefit funded ratio is less than 70%, the entire 14.00% of the employers' contribution shall be allocated to basic benefits. If the funded ratio is at least 70% but less than 80%, the minimum portion of the employers' contribution allocated to basic benefits is 13.50% of payroll, with the remainder (if any) allocated to the Health Care Fund. If the funded ratio is at least 80% but less than 90%, at least 13.25% of the employers' contribution shall be allocated to basic benefits, with the remainder (if any) allocated to the Health Care Fund. If the funded ratio is 90% or greater, the Health Care Fund may receive any portion of the employers' contribution that is not needed to fund basic benefits. The funding policy is intended to accelerate the pace at which SERS' basic benefits will achieve a funded ratio equal to 90%.

The funded ratio for basic benefits is 76.61%. Since the funded ratio is at least 70% but less than 80%, at least 13.50% of the employer's 14.00% of payroll contribution must be allocated toward basic benefits. Based on a Board Resolution dated September 21, 2023, the entire employer contribution rate of 14.00% will be allocated to SERS basic benefits.

The actuarial valuation of the pension benefits, the post-retirement death benefit, and the Medicare Part B reimbursement are based upon two factors. The first is financial and participant data as of the valuation date and the second is economic and demographic assumptions.

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Board of Trustees
November 9, 2023
Page 2

The valuation is based upon data concerning active, inactive and retiree members along with pertinent financial information. The data was furnished by the SERS staff and has been certified by the System's auditor. While not verifying the data at the source, we performed tests for consistency and reasonableness.

Economic assumptions address future rates of investment return and inflation; and demographic assumptions relate to future rates of retirement, turnover, death and disability among SERS members and their beneficiaries. We review the data for internal and year-to-year consistency as well as general reasonableness prior to its use in the actuarial valuations. It is also summarized and tabulated for the purpose of analyzing trends. The assumptions were adopted by the Board of Trustees and were based upon actual experience of SERS during the 2016-2020 fiscal years. Assets are valued according to a method that fully recognizes expected investment returns and averages unanticipated market return over a four-year period. The assumptions and methods used for funding purposes meet the parameters set by the Actuarial Standards of Practice (ASOPs).

In order to prepare the results in this report, we have utilized actuarial models that were developed to measure liabilities and develop actuarial costs. These models include tools that we have produced and tested, along with commercially available valuation software that we have reviewed to confirm the appropriateness and accuracy of the output. In utilizing these models, we develop and use input parameters and assumptions about future contingent events along with recognized actuarial approaches to develop the needed results.

The financial condition of health care is different and is being significantly affected by the provisions of Act 290 of 1988 and Act 270 of 2001. Act 290 established a health care surcharge, a program to determine a minimum annual pay for use in calculating employer contribution dollars. Act 270 placed limits on the amount of health care surcharge that can be assessed to each employer and in total.

On the basis of projections of health care fund activity and the surcharge limit established by Act 270, the allocated contributions are sufficient in the long-term to provide for a 20-year solvency period for the health care fund. This result is based on the projected claims and premium contributions for the next 20 years, as is described in the Statement of Funding Policy adopted by the Board. However, total claims are projected to exceed total contributions in future years beyond the 20-year period. It is currently anticipated that future fund amounts will be depleted in 2063, assuming all actuarial assumptions are met and there will be no health care cost increases due to Federal law changes or COVID-19 impact other than anticipated health care trend.

The current benefit structure is outlined in the Plan Summary. There have been no changes to the benefit structure since the last valuation.

We provided information used in the schedules of Actuarial Accrued Liabilities, Active Member Valuation Data, Retirees and Beneficiaries Added To and Removed From Rolls, Analysis of Financial Experience, the Schedule of Funding Progress, and the Schedule of Employer Contributions in the Financial Section.



Board of Trustees
November 9, 2023
Page 3

The main purpose of the Basic Benefits Valuation is to determine the System's funded status and the actuarially determined employer contribution rate as of June 30, 2023 necessary to satisfy the funding objectives of the Board. The Basic Benefit Valuation indicates the School Employees Retirement System of Ohio is expected to continue in sound condition in accordance with actuarial principles of level percent of payroll financing provided all actuarial assumptions for future experience are met. Should future adverse experience develop, SERS may find it necessary to seek benefit reductions and/or contribution rate increases from employers, members, or both. Upcoming detailed projection analyses will provide a more complete indication concerning the future actuarial condition of the System.

Sincerely,

A handwritten signature in blue ink that reads "Todd B. Green".

Todd B. Green ASA, EA, FCA, MAAA
President

A handwritten signature in blue ink that reads "Alisa Bennett".

Alisa Bennett, FSA, EA, FCA, MAAA
President

A handwritten signature in blue ink that reads "John Garrett".

John Garrett, ASA, FCA, MAAA
Principal and Consulting Actuary

PENSION

Summary of Actuarial Assumptions and Methods

The SERS Retirement Board adopted the following actuarial assumptions and methods April 15, 2021, on the recommendation of its actuary. These assumptions were based on an analysis of plan experience for the 5-year period July 1, 2015 through June 30, 2020, and were adopted for use in the valuation as of June 30, 2023.

Pension plan and health care provisions can be found in the Notes to the Basic Financial Statements beginning on page 26.

Funding Method Basic benefits are determined using the entry age normal actuarial cost method. Under this cost method, projected service retirement, termination, disability, and death benefits are determined for all active members. Cost factors, which are developed to produce level annual costs in each year from the age at hire (entry age) to the assumed retirement age, are applied to the projected benefits to determine the "normal cost." The normal cost is the portion of the total cost of the plan allocated to the current year. The normal cost for contribution refunds is assumed to end in the last year of the assumed eligibility, and is spread over all years of service.

The "actuarial accrued liability" for active members is then calculated as the portion of the total cost of the plan allocated to prior years. The actuarial accrued liability for retirees currently receiving benefits, for active members beyond the assumed retirement age, and for inactive members entitled to future benefits, is equal to the present value of the benefits expected to be paid.

The dollar amount of the total actuarial accrued liability in excess of the value of the plan fiduciary net position is called the "unfunded actuarial accrued liability." Funding requirements under the entry age actuarial cost method are determined by adding the normal cost and the cost to amortize the unfunded liability.

Actuarial assumptions are used to determine the projected benefits and cost factors. The effect of differences between these assumptions and the actual experience of the plan is calculated each year when the annual actuarial valuation is performed. These differences produce either actuarial gains or losses that result in an adjustment of the unfunded liability.

Funding Policy The Board adopted a new funding policy on June 18, 2015, effective with the June 30, 2015 valuation. The funding policy established ranges of the funded ratio for basic benefits that restrict the allocation of employer contributions to the Health Care Fund. The Board seeks to maintain a funded ratio of at least 90% for basic benefits. If the basic benefits funded ratio is less than 70%, the entire 14% of the employers' contributions shall be allocated to basic benefits. If the funded ratio is at least 70% but less than 80%, the minimum portion of the employers' contribution allocated to basic benefits is 13.50% of payroll; the remainder may be allocated to the Health Care Fund at the Board's discretion. If the funded ratio is at least 80% but less than 90%, at least 13.25% of the employers' contribution shall be allocated to basic benefits; the remainder may be allocated to the Health Care Fund at the Board's discretion. If the funded ratio is 90% or greater, the Health Care Fund may receive any portion of the employers' contribution that is not needed to fund basic benefits.

Contributions During FY2023, active members and their employers were required to contribute 10% and 14%, respectively, of active member payroll. The Board allocates the employer contribution rate of 14% among basic benefits (pension, Medicare B, and death benefit) and health care in accordance with its funding policy. For the year ended June 30, 2023, the policy required the determination of a rate for basic benefits to cover normal cost and to amortize the unfunded actuarial accrued liabilities over a 21-year period.

Pension Trust Fund	13.28%
Medicare B Fund	0.67%
Death Benefit Fund	0.05%
Health Care Fund	0.00%
	<u>14.00%</u>

The Ohio Revised Code (ORC) also provides for an employer contribution surcharge as an additional source of funding for health care. The surcharge is equal to 14% of the difference between a minimum pay amount and the member's pay, if below that minimum, it is prorated for partial service credit. For FY2023, the minimum pay amount is established at \$25,000. The employer surcharge cap is applied at 2.0% of each employer's payroll and at 1.5% of total payroll statewide.

Asset Valuation Method Differences between assumed and actual experience (actuarial gains and losses) become part of unfunded actuarial accrued liabilities. When these differences between assumed and actual experience have been observed to be sizeable and persistent, a change is made to the actuarial assumptions.

SERS' Board adopted a method of valuing investment assets that recognizes a "smoothed" fair value of those assets. The smoothed value of assets recognizes the difference between actual and expected performance for each year in equal amounts over a four-year period.

Actuarial

Economic Assumptions The following economic assumptions were used in the actuarial valuation as of June 30, 2023:

- **Investment Return** Net after all SERS' expenses, the return on investments is compounded annually at 7.00%.
- **Inflation Rate** The inflation assumption is 2.40% per year. The real rate of return is the portion of total investment return, which is more than the inflation rate. Considering inflation recognition of 2.40%, the 7.00% investment return rate translates to an assumed real rate of return of 4.60%.
- **Benefit increases** Cost-of-living adjustments of 2.00% per year on anniversary of retirement are assumed. On and after April 1, 2018, COLAs for future retirees are delayed until the fourth anniversary of benefit commencement.
- **Payroll Growth** Salary increases attributable to payroll growth of 1.75% are projected and compounded annually. Additional projected salary increases ranging from 0.0% to 10.00% per year are attributable to seniority and merit. Pay increase assumptions for individual active members are shown for service durations in the following table.

Years of Service	Merit & Seniority	Salary Inflation	Total
0	10.00%	3.25%	13.58%
1	3.00	3.25	6.35
2	1.75	3.25	5.06
3	1.25	3.25	4.54
4	1.00	3.25	4.28
5-9	0.75	3.25	4.02
10-15	0.50	3.25	3.77
16-17	0.25	3.25	3.51
18 & over	0.00	3.25	3.25

Non-Economic Assumptions

- **Retirements** Representative values of the assumed annual rates of service retirement are:

Annual Rates of Retirement								
Age	Eligible prior to 8/1/17				Eligible on or after 8/1/17			
	Reduced	Reduced (55/25)	First Eligible Unreduced	Subsequent Unreduced	Reduced	Reduced (60/25)	First Eligible Unreduced	Subsequent Unreduced
50			21%	19%				
55		10%	27	19				
57		10	27	19			30%	19%
60	43%	15	27	19		6%	30	19
62	43	15	27	19	5%	6	30	19
65			50	33	15	17	30	19
68			50	33			30	18
70			50	33			30	18
75			100	100			100	100

- **Death-in-Service and Disability Benefits** Separation from active service other than retirement or termination of employment assumed rates are:

Age	Annual Rates of Death*		Disability	
	Male	Female	Male	Female
20	0.041%	0.013%	0.020%	0.010%
25	0.041	0.012	0.039	0.010
30	0.052	0.019	0.071	0.028
35	0.068	0.030	0.127	0.059
40	0.096	0.047	0.214	0.106
45	0.143	0.072	0.313	0.180
50	0.218	0.107	0.414	0.300
55	0.320	0.157	0.530	0.450
60	0.466	0.238	0.590	0.450
65	0.682	0.380	0.533	0.300
70	1.025	0.627	0.300	0.200
74	1.461	0.937	0.300	0.200

* Pre-retirement mortality is based on the PUB-2010 General Amount Weighted Below Median Employee Mortality Table with fully generational projection using the MP-2020 projection scale. The rates in the table above represent the base rates used.

- **Death after Retirement** These assumptions are used to measure the probabilities of each benefit payment being made after retirement.

SERVICE RETIREMENT: PUB-2010 General Employee Amount Weighted Below Median Healthy Retiree mortality table projected to 2017 with ages set forward 1 year and adjusted 94.20% for males and set forward 2 years and adjusted 81.35% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

DISABLED RETIREMENT: PUB-2010 General Disabled Retiree mortality table projected to 2017 with ages set forward 5 years and adjusted 103.3% for males and set forward 3 years and adjusted 106.8% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

CONTINGENT SURVIVOR: PUB-2010 General Amount Weighted Below Median Contingent Survivor mortality table projected to 2107 with ages set forward 1 year and adjusted 105.5% for males and adjusted 122.5% for females. Future improvement in mortality rates is reflected by applying the MP-2020 projection scale generationally.

- **Marriage Assumption** Based on prior experience, it is assumed that 80% of retirees are married, with the husband 3 years older than his wife.

Actuarial Accrued Liabilities

Actuarial accrued liabilities are the present value of plan promises to pay benefits in the future, based upon service already rendered. A liability has been established or accrued because the service has been performed, but the resulting monthly cash benefit may not be payable until years in the future. Actuarial accrued liabilities are the result of complex mathematical calculations performed by the plan's actuaries. The results of the computed actuarial accrued liabilities, using the entry age normal actuarial cost method, are disclosed in the following schedule.

ACTUARIAL ACCRUED LIABILITIES AS OF JUNE 30, 2023

Present value of:	Pension Benefits	Medicare Part B	Post-Retirement Death Benefit	Total Basic Benefits
Future benefits to present retirees and survivors	\$13,326,930,088	\$204,804,627	\$32,251,533	\$13,563,986,248
Benefits and refunds to present inactive members	804,883,149	22,960,856	1,213,740	829,057,745
Allowances to present active members				
Service	7,891,775,351	140,994,951	7,824,892	8,040,595,194
Disability	290,934,728	5,276,558	343,083	296,554,369
Survivor benefits	182,005,249	2,976,292	—	184,981,541
Withdrawal	159,747,406	8,973,826	420,368	169,141,600
Total Active AAL	8,524,462,734	158,221,627	8,588,343	8,691,272,704
Total AAL	\$22,656,275,971	\$385,987,110	\$42,053,616	\$23,084,316,697

Active Member Valuation Data

Actuarial Valuation as of June 30	Number of Active Members*	Annual Payroll** (\$ in millions)	Average Annual Salary	% Increase in Average Salary
2023	159,873	\$4,299	\$26,888	4.4%
2022	155,063	3,995	25,762	4.3
2021	146,646	3,622	24,700	11.2
2020	156,579	3,478	22,210	2.2
2019	159,363	3,463	21,727	3.2
2018	158,343	3,332	21,045	0.7
2017	157,981	3,303	20,906	(11.2)
2016	124,540	2,932	23,545	1.7
2015	122,855	2,845	23,161	1.8
2014	121,251	2,759	22,757	0.8

* Beginning with FY2017, members with 0.25 or less years of service during the fiscal year are categorized as active members.

**Beginning with FY2021, the annual compensation reflects imputed salaries.

Pension Retirees and Beneficiaries Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls		Rolls at Year End		% Increase in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances		
2023	3,740	\$63,623,157	3,058	\$18,454,519	81,833	\$1,340,607,264	3.5%	\$16,382
2022	3,867	67,062,445	3,437	26,558,581	81,151	1,295,438,626	3.2	15,963
2021	3,928	70,415,860	4,058	49,823,424	80,721	1,254,934,762	1.7	15,547
2020	2,902	52,895,232	3,075	37,508,412	80,851	1,234,342,326	1.3	15,267
2019	3,055	56,557,169	3,363	49,537,299	81,024	1,218,955,506	0.6	15,044
2018	5,339	74,311,354	3,164	24,391,232	81,332	1,211,935,637	4.3	14,901
2017	5,499	70,973,748	2,622	(7,420,188)	79,157	1,162,015,515	7.2	14,680
2016	4,388	66,860,652	2,480	3,607,967	76,280	1,083,621,579	6.2	14,206
2015	4,909	70,608,680	3,142	8,777,486	74,372	1,020,368,894	6.5	13,720
2014	4,144	61,331,002	2,310	1,060,903	72,605	958,537,700	6.7	13,202

Medicare B Retirees and Beneficiaries Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls		Rolls at Year End		% Decrease in Annual Allowances	Average Annual Allowances
	No.	Annual Allowances	No.	Annual Allowances	No.	Annual Allowances		
2023	1,953	\$1,066,338	2,754	\$1,503,684	39,790	\$21,725,340	(2.0%)	\$546
2022	2,057	1,123,122	2,826	1,542,996	40,591	22,162,686	(1.9)	546
2021	1,996	1,089,816	3,100	1,692,600	41,360	22,582,560	(2.6)	546
2020	2,257	1,232,322	3,327	1,816,542	42,464	23,185,344	(2.5)	546
2019	2,222	1,213,212	2,333	1,273,818	43,534	23,769,564	(0.3)	546
2018	1,752	956,592	2,848	1,555,008	43,645	23,830,170	(2.5)	546
2017	1,853	1,011,738	3,278	1,789,788	44,741	24,428,586	(3.1)	546
2016	2,006	1,095,276	2,459	1,342,614	46,166	25,206,636	(1.0)	546
2015	1,853	1,011,738	2,532	1,382,472	46,619	25,453,974	(1.4)	546
2014	2,225	1,214,850	2,303	1,257,438	47,298	25,824,708	(0.2)	546

Actuarial

Schedule of Funding Progress *(\$ in millions)*

Valuation as of June 30	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Active Member Payroll (c)	UAAL as a % of Active Member Payroll (b - a) / (c)	Amortization Period (years)
PENSION							
2023	\$17,384	\$22,656	\$5,272	76.7%	\$4,299	122.6%	21
2022	16,611	21,941	5,330	75.7	3,995	133.4	22
2021	15,781	21,097	5,316	74.8	3,622	146.8	23
2020	14,811	20,601	5,790	71.9	3,478	166.5	24
2019	14,267	20,090	5,823	71.0	3,463	168.1	25
2018	13,824	19,559	5,735	70.7	3,332	172.1	26
2017	13,537	19,148	5,611	70.7	3,303	169.9	27
2016	13,015	19,331	6,316	67.3	2,932	215.4	28
2015	12,446	18,087	5,641	68.8	2,845	198.3	27
2014	11,882	17,457	5,575	68.1	2,759	202.1	28
MEDICARE B							
2023	\$270	\$386	\$116	69.9%	\$4,299	2.7%	21
2022	246	389	143	63.2	3,995	3.6	22
2021	223	391	168	56.9	3,622	4.6	23
2020	199	393	194	50.7	3,478	5.6	24
2019	180	397	217	45.3	3,463	6.3	25
2018	164	400	236	41.1	3,332	7.1	26
2017	153	402	249	38.0	3,303	7.5	27
2016	142	402	260	35.4	2,932	8.9	28
2015	134	381	247	35.3	2,845	8.7	27
2014	128	390	262	32.7	2,759	9.5	28
DEATH BENEFIT							
2023	\$31	\$42	\$11	73.8%	\$4,299	0.3%	21
2022	30	41	11	71.7	3,995	0.3	22
2021	28	41	13	67.7	3,622	0.4	23
2020	27	40	13	66.8	3,478	0.4	24
2019	26	40	14	64.5	3,463	0.4	25
2018	24	39	15	61.6	3,332	0.5	26
2017	23	38	15	61.0	3,303	0.5	27
2016	22	38	16	58.5	2,932	0.5	28
2015	21	35	14	60.8	2,845	0.5	27
2014	21	35	14	60.0	2,759	0.5	28

Short-Term Solvency Test

SERS' financing objective is to pay for pension benefits through contributions that remain approximately level from year to year as a percent of member payroll.

If the contributions are level in concept and soundly executed, SERS will pay all promised benefits when due, which is the ultimate test of financial soundness. Testing for level contribution rates is the long-term test. A short-term solvency test is one means of checking a system's progress under its funding program. In a short-term solvency test, the present assets (cash and investments) are compared with:

1. Active member contributions on deposit.
2. The liabilities for future benefits to present retired lives.
3. The liabilities for service already rendered by active members.

Under the level percent of payroll financing, liabilities for active member contributions on deposit and the liabilities for future benefits to present retirees and beneficiaries will be fully covered by present assets except in rare circumstances. In addition, liabilities for active member benefits earned or to be earned in the future will be partially covered by the remainder of present assets. Generally, because SERS has been using level cost financing, the funded portion of active member benefits will increase over time.

Valuation as of June 30	Aggregate Accrued Liabilities For (\$ in millions)			Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
PENSION							
2023	\$3,093	\$14,132	\$5,431	\$17,384	100.0%	100.0%	2.9%
2022	3,040	13,773	5,128	16,611	100.0	98.5	0.0
2021	2,986	13,434	4,677	15,781	100.0	95.2	0.0
2020	2,934	13,009	4,658	14,811	100.0	91.3	0.0
2019	2,842	12,666	4,582	14,268	100.0	90.2	0.0
2018	2,733	12,427	4,399	13,824	100.0	89.2	0.0
2017	3,010	11,690	4,449	13,537	100.0	90.0	0.0
2016	2,914	11,689	4,728	13,015	100.0	86.4	0.0
2015	2,979	11,046	4,062	12,446	100.0	86.0	0.0
2014	2,892	10,437	4,128	11,882	100.0	86.0	0.0
MEDICARE B							
2023	\$0	\$228	\$158	\$270	100.0%	100.0%	26.5%
2022	0	231	158	246	100.0	100.0	9.5
2021	0	238	154	223	100.0	93.7	0.0
2020	0	236	157	199	100.0	84.3	0.0
2019	0	244	153	180	100.0	73.8	0.0
2018	0	251	149	164	100.0	65.3	0.0
2017	0	251	151	153	100.0	61.0	0.0
2016	0	251	151	142	100.0	56.6	0.0
2015	0	252	130	134	100.0	53.0	0.0
2014	0	259	131	128	100.0	49.0	0.0
DEATH BENEFIT							
2023	\$0	\$33	\$9	\$31	100.0%	93.9%	0.0%
2022	0	33	8	30	100.0	90.9	0.0
2021	0	33	7	28	100.0	84.8	0.0
2020	0	31	8	27	100.0	87.1	0.0
2019	0	31	8	25	100.0	80.6	0.0
2018	0	31	8	24	100.0	77.4	0.0
2017	0	30	8	23	100.0	76.7	0.0
2016	0	30	8	22	100.0	73.3	0.0
2015	0	28	7	21	100.0	75.0	0.0
2014	0	27	8	21	100.0	76.0	0.0

Analysis of Financial Experience

Gains and Losses in Accrued Liabilities Resulting from Difference Between Assumed Experience and Actual Experience

(\$ in millions)

(continued through page 100)

Type of Risk Area	2023				2022				2021			
	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total
Age and Service Retirements If members retire at older ages, there is a gain. If younger ages, there is a loss.	(\$69.1)	\$3.3	\$0.7	(\$65.1)	(\$69.6)	\$2.7	\$1.1	(\$65.8)	(\$99.9)	\$2.9	\$0.8	(\$96.2)
Disability Retirements If disability claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.9)	(1.3)	0.0	(3.2)	(6.3)	(0.1)	0.0	(6.4)	(5.0)	0.0	0.0	(5.0)
Pre-Retirement Death Benefits If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(5.1)	(0.3)	0.0	(5.4)	(6.6)	(0.4)	0.0	(7.0)	(4.5)	(0.2)	0.0	(4.7)
Pay Increases If there are smaller pay increases than assumed, there is a gain. If greater increases, there is a loss.	(139.7)	0.0	0.0	(139.7)	(212.3)	0.0	0.0	(212.3)	136.7	0.0	0.0	136.7
Investment Income (Loss) If there is greater investment income than assumed, there is a gain. If less income, there is a loss.	153.3	2.1	0.3	155.7	264.7	3.5	0.4	268.6	425.4	5.2	0.7	431.3
Withdrawal From Employment If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, there is a loss.	(43.9)	3.6	0.2	(40.1)	(46.9)	3.2	0.2	(43.5)	(108.7)	1.1	0.1	(107.5)
New Members Additional accrued liability attributable to members who entered the plan since the last valuation.	(64.3)	(1.9)	(0.1)	(66.3)	(50.7)	(1.8)	(0.1)	(52.6)	(16.0)	(0.6)	0.0	(16.6)
Death After Retirement If retired members live longer than assumed, there is a loss. If not as long, there is a gain.	41.4	13.6	(0.5)	54.5	67.3	16.1	(0.7)	82.7	45.3	15.0	(0.5)	59.8
Other Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	86.2	1.7	(0.2)	87.7	(23.3)	(1.9)	0.0	(25.2)	186.4	2.7	0.1	189.2
Non-Recurring Items Adjustments for plan amendments, assumption changes, or method changes.	(37.1)	0.0	0.0	(37.1)	(37.0)	0.0	0.0	(37.0)	(120.9)	(4.5)	(1.1)	(126.5)
Total Gain (Loss) During Year	(\$80.2)	\$20.8	\$0.4	(\$59.0)	(\$120.7)	\$21.3	\$0.9	(\$98.5)	\$438.8	\$21.6	\$0.1	\$460.5

2020				2019				2018				2017			
Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total
(\$98.0)	\$3.0	\$1.0	(\$94.0)	\$3.4	\$3.8	\$0.6	\$7.8	(\$211.1)	\$1.2	\$0.3	(\$209.6)	(\$211.0)	(\$0.5)	(\$0.3)	(\$211.8)
(3.0)	(0.1)	0.0	(3.1)	(9.5)	0.0	0.0	(9.5)	(14.6)	(0.1)	0.0	(14.7)	(37.0)	(0.7)	(0.1)	(37.8)
(5.2)	(0.2)	0.0	(5.4)	(3.8)	(0.2)	0.0	(4.0)	(6.4)	(0.2)	0.0	(6.6)	(0.1)	0.0	0.0	(0.1)
136.2	0.0	0.0	136.2	20.3	0.0	0.0	20.3	85.2	0.0	0.0	85.2	(69.2)	0.0	0.0	(69.2)
6.4	0.7	0.0	7.1	(44.1)	0.1	(0.1)	(44.1)	(159.0)	(1.9)	(0.2)	(161.1)	(12.1)	0.1	0.0	(12.0)
(104.1)	(0.1)	0.0	(104.2)	(105.9)	(0.4)	0.0	(106.3)	(124.0)	(0.5)	0.0	(124.5)	21.7	0.2	0.0	21.9
(21.5)	(0.7)	0.0	(22.2)	(21.6)	(0.8)	0.0	(22.4)	(34.6)	(1.0)	(0.1)	(35.7)	(45.0)	(2.9)	(0.2)	(48.1)
15.6	13.6	(0.3)	28.9	(35.6)	10.7	0.0	(24.9)	4.6	10.5	(0.1)	15.0	85.3	14.0	(2.1)	97.2
59.3	2.9	0.1	62.3	75.7	2.7	0.0	78.4	(0.7)	5.5	(0.2)	4.6	(32.1)	1.8	3.6	(26.7)
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	357.6	0.0	0.0	357.6	998.5	0.0	0.0	998.5
(\$14.3)	\$19.1	\$0.8	\$5.6	(\$121.1)	\$15.9	\$0.5	(\$104.7)	(\$103.0)	\$13.5	(\$0.3)	(\$89.8)	\$699.0	\$12.0	\$0.9	\$711.9

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Actuarial

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Type of Risk Area	2016				2015				2014			
	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total
Age and Service Retirements If members retire at older ages, there is a gain. If younger ages, there is a loss.	(\$141.6)	\$0.7	(\$0.1)	(\$141.0)	(\$124.4)	\$1.5	(\$0.1)	(\$123.0)	(\$122.0)	(\$0.5)	(\$0.1)	(\$122.6)
Disability Retirements If disability claims are less than assumed, there is a gain. If more claims, there is a loss.	(49.9)	(0.6)	(0.1)	(50.6)	(52.4)	(0.6)	(0.1)	(53.1)	(55.3)	(0.6)	(0.1)	(56.0)
Pre-Retirement Death Benefits If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(27.9)	(0.6)	0.0	(28.5)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1
Pay Increases If there are smaller pay increases than assumed, there is a gain. If greater increases, there is a loss.	70.0	0.0	0.0	70.0	53.3	0.0	0.0	53.3	103.4	0.0	0.0	103.4
Investment Income (Loss) If there is greater investment income than assumed, there is a gain. If less income, there is a loss.	49.6	0.9	0.1	50.6	60.6	1.3	0.2	62.1	398.0	4.5	0.8	403.3
Withdrawal From Employment If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, there is a loss.	29.2	1.1	0.1	30.4	63.2	1.7	0.2	65.1	43.0	5.1	0.2	48.3
New Members Additional accrued liability attributable to members who entered the plan since the last valuation.	(42.3)	(1.6)	(0.1)	(44.0)	(46.0)	(1.5)	(0.1)	(47.6)	(26.7)	(1.4)	(0.1)	(28.2)
Death After Retirement If retired members live longer than assumed, there is a loss. If not as long, there is a gain.	104.4	10.6	(1.2)	113.8	39.0	16.9	(0.1)	55.8	2.5	0.5	0.1	3.1
Other Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(3.3)	1.0	1.6	(0.7)	(0.8)	0.4	0.3	(0.1)	(4.6)	2.3	0.2	(2.1)
Non-Recurring Items Adjustments for plan amendments, assumption changes, or method changes.	(643.5)	(22.4)	(2.3)	(668.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Gain (Loss) During Year	(\$655.3)	(\$10.9)	(\$2.0)	(\$668.2)	(\$7.5)	\$19.7	\$0.3	\$12.5	\$338.4	\$9.9	\$1.0	\$349.3

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HEALTH CARE

Summary of Actuarial Assumptions and Methods

Governmental Accounting Standards Board (GASB) Statement No. 74 and Statement No. 75 require actuarial valuations of retiree medical and other postemployment benefit plans.

Funding Method The medical and drug benefits of the plan are included in the actuarially calculated contribution rates, which are developed using the entry age normal actuarial cost method with the normal cost rate determined as a level percentage of payroll. GASB requires the discount rate used to value a plan to be based on the likely return of the assets held in trust to pay benefits. The discount rate used in this valuation is 7.00%.

Contributions Gains and losses are reflected in the unfunded accrued liability that is amortized by regular annual contributions as a level percentage of payroll within a 30-year period, on the assumption that payroll will increase 1.75% annually. The assumptions recommended by the actuary are, in the aggregate, reasonably related to the experience under the plan and to reasonable expectations of anticipated experience under the plan. They also meet the parameters for the disclosures under GASB Statement No. 74 and Statement No. 75.

Asset Valuation Method Fair Value

Economic Assumptions The following economic assumptions were used in the actuarial valuation as of June 30, 2023:

- **Investment Return** Net after all SERS' expenses, the return on investments is compounded annually at 7.00%.
- **Inflation Rate** The inflation assumption is 2.40% per year. The real rate of return is the portion of total investment return, which is more than the inflation rate. Considering inflation recognition of 2.40%, the 7.00% investment return rate translates to an assumed real rate of return of 4.60%.
- **Health Care Cost Trend Rates** The following is a chart detailing trend assumptions:

Calendar Year	Trend Rate
2023	6.75%
2024	6.50
2025	6.25
2026	6.00
2027	5.75
2028	5.50
2029	5.25
2030	5.00
2031	4.75
2032	4.50
2033 and beyond	4.40

Non-Economic Assumptions

- **Expected Annual Claims** Per capita costs are adjusted to reflect expected cost changes related to age. The relative value factors used were developed from the Society of Actuaries' June 2013 research report Health Care Costs—From Birth to Death by Dale Yamamoto and from the ASOP 6 practice note developed by the American Academy of Actuaries. Representative values of the expected annual claims based on expected service retiree plan elections are as follows:

Pre-65 Age	Retiree		Spouse	
	Male	Female	Male	Female
40	\$4,700	\$7,670	\$3,863	\$6,304
45	5,825	8,120	4,788	6,674
50	7,608	9,460	6,253	7,776
55	9,982	11,021	8,205	9,058
60	12,859	12,854	10,569	10,565
64	15,705	15,049	12,908	12,369

Post-65 Age	Retiree		Spouse	
	Male	Female	Male	Female
65	\$1,416	\$1,349	\$1,296	\$1,235
70	1,721	1,659	1,575	1,518
75	2,044	1,937	1,870	1,773
80	2,372	2,232	2,171	2,042
85	2,673	2,518	2,446	2,304
90	2,935	2,734	2,686	2,503

- **Anticipated Plan Participation** 25% of male and 25% of female retirees will choose spousal coverage.

Pre-65 Participants:			Post-65 Participants:		
Years of Service at Retirement	Service Retiree Participation	Disabled Retiree Participation	Years of Service at Retirement	Service Retiree Participation	Disabled Retiree Participation
1.5 - 4	N/A	N/A	1.5 - 4	N/A	N/A
5 - 9	N/A	25.0%	5 - 9	N/A	70.0%
10 - 14	25.0%	25.0	10 - 14	25.0%	70.0
15 - 19	25.0	45.0	15 - 19	45.0	70.0
20 - 24	45.0	50.0	20 - 24	70.0	75.0
25 - 29	50.0	75.0	25 - 29	75.0	75.0
30 - 34	75.0	75.0	30 - 34	85.0	85.0
35 and over	90.0	90.0	35 and over	90.0	90.0

Actuarial Accrued Liabilities

The results of the computed actuarial accrued liabilities, using the entry age normal actuarial cost method, are disclosed in the following schedule:

HEALTH CARE FUND ACTUARIAL ACCRUED LIABILITIES AS OF JUNE 30, 2023	
Present value of:	
Benefits payable on account of present retiree members and beneficiaries	\$606,867,180
Benefits payable on account of present active members	902,131,569
Benefits payable on account of deferred vested members	22,677,627
Total AAL	\$1,531,676,376

Analysis of Financial Experience

Gains and Losses in Accrued Liabilities Resulting from Differences Between Assumed Experience and Actual Experience in the Health Care Fund

(\$ in millions)

Type of Risk Area	2023	2022	2021	2020	2019	2018
Age and Service Retirements If members retire at older ages or participate in lower numbers, there is a gain. If younger ages or higher participation, there is a loss.	\$0.8	(\$1.0)	(\$3.9)	(\$6.6)	(\$3.9)	\$30.8
Disability Retirements If disability claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	(0.3)	1.2	1.2	(1.6)	(0.4)
Post-Retirement Death Benefits If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.6)	(1.5)	(1.5)	(1.7)	(2.0)	(1.9)
Claims Increases (Including Wrap Plan) If there are smaller claims increases than assumed, there is a gain. If greater increases, there is a loss.	107.8	69.4	(7.9)	491.4	415.3	(71.4)
Investment Income (Loss) If there is greater investment income than assumed, there is a gain. If less income, there is a loss.	(12.2)	(53.9)	82.7	(16.4)	(3.7)	4.7
Withdrawal From Employment If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, there is a loss.	29.3	21.5	19.7	17.5	17.9	39.2
Contribution Shortfall If there are more contributions than the ACR, there is a gain. If less contributions, there is a loss.	105.0	(10.3)	(60.9)	(82.6)	(111.0)	(78.9)
New Members Additional accrued liability attributable to members who entered the plan since the last valuation.	(12.8)	(10.3)	(12.8)	(18.1)	(20.5)	(21.2)
Death after Retirement If retired members live longer than assumed, there is a loss. If not as long, there is a gain.	12.4	15.9	14.4	16.0	16.3	35.4
Other Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(67.7)	22.8	42.3	55.1	63.4	9.2
Non-Recurring Items Adjustments for plan amendments, assumption changes, or method changes.	(253.4)	(106.2)	560.9	(16.4)	0.0	0.0
Total Gain (Loss) During Year	(\$92.4)	(\$53.9)	\$634.2	\$439.4	\$370.2	(\$54.5)

2017	2016	2015	2014
(\$4.8)	(\$10.6)	\$2.8	\$2.7
(5.1)	2.8	2.6	3.8
(2.4)	(1.0)	(0.7)	(1.5)
124.0	170.7	112.7	561.2
14.3	(21.0)	(12.5)	29.2
3.4	29.4	30.1	51.0
(116.0)	(86.4)	(77.2)	(118.1)
(39.0)	(24.7)	(18.2)	(31.4)
18.4	12.2	14.3	24.3
31.1	(2.9)	9.0	19.3
0.0	(72.1)	0.0	(36.1)
\$23.9	(\$3.6)	\$62.9	\$504.4

Actuarial

Health Care Schedule of Funding Progress *(\$ in millions)*

Valuation as of June 30	Value of Plan Assets (a)	Actuarial Accrued Liability (AAL) (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a / b)	Active Member Payroll (c)	UAAL as a % of Active Member Payroll (b - a) / (c)	Solvency Period (years)
2023	\$707	\$1,532	\$825	46.1%	\$4,299	19.2%	39
2022	612	1,348	736	45.4	3,995	18.4	38
2021	600	1,289	689	46.6	3,622	19.0	37
2020	483	1,797	1,314	26.9	3,478	37.8	34
2019	464	2,199	1,735	21.1	3,463	50.1	15
2018	436	2,525	2,089	17.3	3,332	62.7	17
2017	382	2,396	2,014	15.9	3,303	61.0	16
2016	370	2,407	2,037	15.4	2,932	69.5	8
2015	408	2,425	2,017	16.8	2,845	70.9	9
2014	414	2,476	2,062	16.7	2,759	74.7	15

Health Care Solvency Test *(\$ in millions)*

The following table provides the Health Care solvency test for SERS members:

Valuation as of June 30	Aggregate Accrued Liabilities For			Actuarial Value of Assets	Portion of Accrued Liabilities Covered by Reported Asset		
	(1) Active Member Contributions	(2) Retired Members & Beneficiaries	(3) Active Members (Employer Financed Portion)		(1)	(2)	(3)
2023	\$0	\$630	\$902	\$707	100.0%	100.0%	8.5%
2022	0	532	816	612	100.0	100.0	9.8
2021	0	544	745	600	100.0	100.0	7.6
2020	0	626	1,171	483	100.0	77.1	0.0
2019	0	813	1,386	464	100.0	57.0	0.0
2018	0	968	1,557	436	100.0	45.0	0.0
2017	0	916	1,480	382	100.0	41.7	0.0
2016	0	918	1,489	370	100.0	40.3	0.0
2015	0	979	1,507	408	100.0	41.7	0.0
2014	0	968	1,508	414	100.0	42.8	0.0

Health Care Retirees and Beneficiaries Added to and Removed from Rolls

Year Ended	Added to Rolls		Removed from Rolls*		Rolls at Year-End		% Change in Projected Benefits	Average Projected Benefits
	No.	Projected Benefits	No.	Projected Benefits	No.	Projected Benefits		
2023	2,155	\$5,780,866	2,630	\$3,716,184	39,656	\$59,374,856	(5.8%)	\$1,497
2022	2,245	6,676,697	3,011	4,299,770	40,131	63,016,244	(8.7)	1,570
2021	2,213	7,152,506	3,172	4,050,170	40,897	69,028,349	(0.8)	1,688
2020	2,058	6,645,569	2,749	4,275,713	41,856	69,600,381	(15.9)	1,663
2019	1,791	6,375,244	2,665	4,496,857	42,547	82,778,168	(8.7)	1,946
2018	2,383	7,833,624	2,820	5,004,204	43,421	90,696,175	(0.9)	2,089
2017	2,355	10,099,985	2,774	4,834,866	43,858	91,554,056	1.2	2,088
2016	2,820	10,209,470	2,650	4,258,016	44,277	90,484,518	(0.4)	2,044
2015	2,329	8,897,861	2,932	4,682,901	44,107	90,855,858	4.4	2,060
2014	2,251	8,658,731	2,873	4,834,922	44,710	87,007,272	(13.4)	1,946

* The benefits removed from rolls do not include subsidies that were changed due to premium changes, plan election changes, or reductions due to members obtaining Medicare eligibility.

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Statistical Section

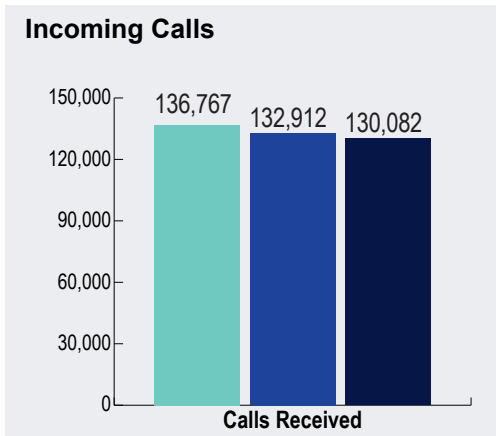
- Statistical Section Overview 110
- Fiduciary Net Position by Fund 111
- Total Fiduciary Net Position 111
- Changes in Fiduciary Net Position 112
- Benefit and Refund Deductions from Fiduciary Net Position by Type 116
- Employee and Employer Contribution Rates 118
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- Retired Members by Type of Benefit 120
- Retirees, Spouses, and Dependents Receiving Health Care Coverage 120
- Principal Participating Employers 121
- Average Benefit Payments - New Retirees (Service Only) 122

Member and Employer Interaction

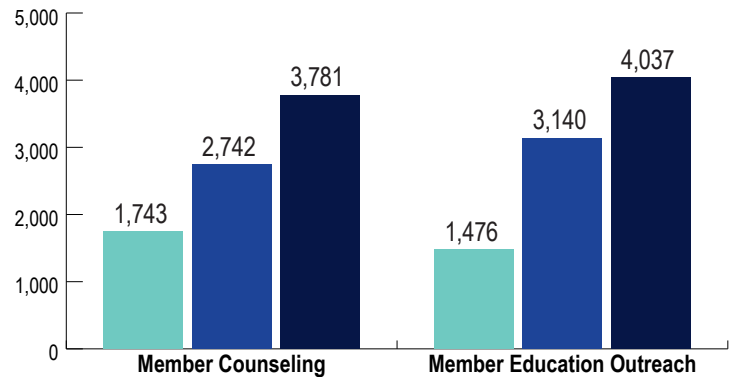
MEMBER

FY2021 FY2022 FY2023

Incoming Calls

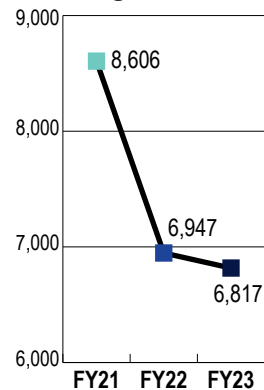


Counseling and Outreach

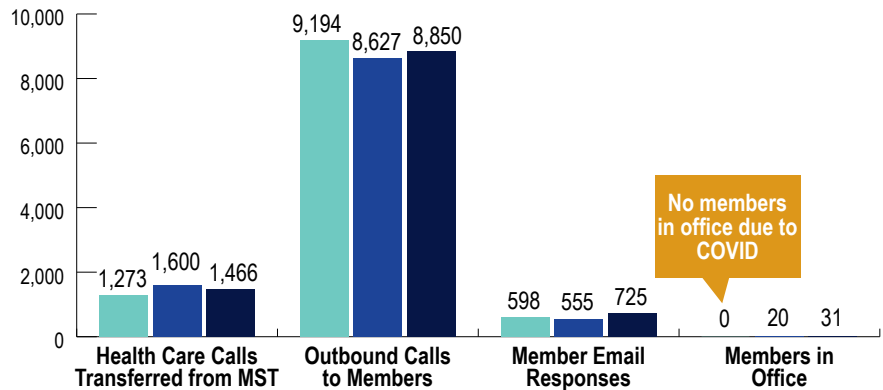


EMPLOYER

Incoming Calls



HEALTH CARE



Data from FY2023 Annual Ops Report



Statistical Section

The objectives of the statistical section are to provide additional historical perspective, context, and relevant details to assist readers in using information in the financial statements, notes to the financial statements, and required supplementary information in order to understand and assess SERS' overall financial condition.

The schedules and graphs beginning on page 111 show financial trend information about the change in SERS' assets for the past 10 years. These schedules provide detailed information about the trends of key sources of asset additions and deductions, which assist in providing a context framing how SERS' financial position has changed over time. The financial trend schedules presented are:

- Fiduciary Net Position by Fund
- Total Fiduciary Net Position
- Changes in Fiduciary Net Position
- Benefit and Refund Deductions from Fiduciary Net Position by Type

The schedules beginning on page 118 show demographic and economic information. This information is designed to assist in understanding the environment in which SERS operates. The demographic and economic information and the operating information presented include:

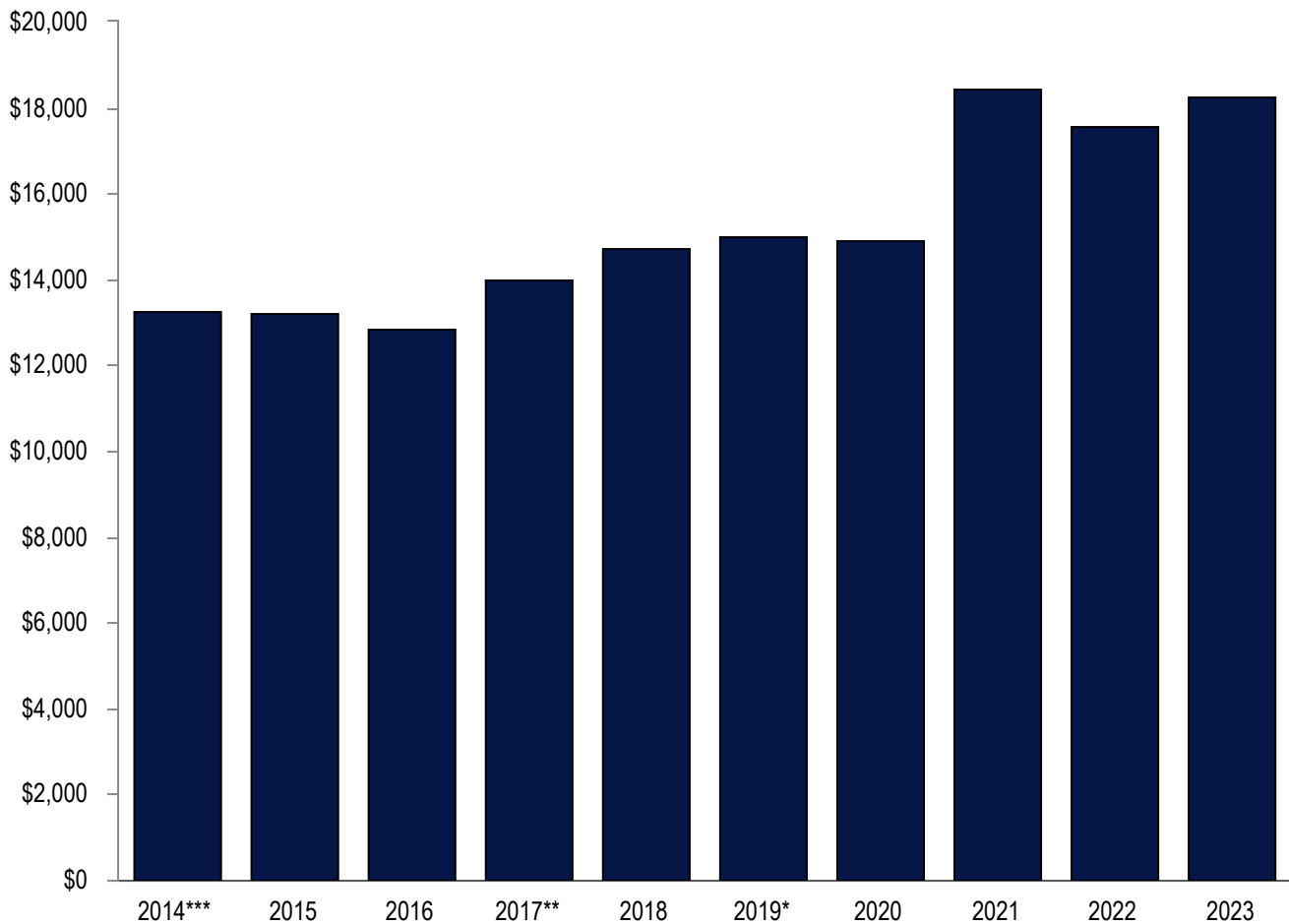
- Employee and Employer Contribution Rates
- Demographics of New Pension Benefit Recipients
- Demographics of Active and Retired Members Used for Valuation Purposes
- Retired Members by Type of Benefit
- Retirees, Spouses, and Dependents Receiving Health Care Coverage
- Principal Participating Employers
- Average Benefit Payments - New Retirees (Service Only)

Fiduciary Net Position by Fund

Last 10 years

June 30	Pension Trust Fund	Medicare B Fund	Death Benefit Fund	QEBA Fund	Health Care Fund	Total Fund
2023	\$17,259,676,387	\$268,029,775	\$31,095,304	\$135,195	\$706,785,561	\$18,265,722,222
2022	16,685,941,961	246,901,660	29,847,384	54,035	611,574,409	17,574,319,449
2021	17,561,235,177	247,954,730	30,857,081	234,180	600,330,188	18,440,611,356
2020	14,203,048,325	191,058,115	25,492,187	224,798	482,611,478	14,902,434,903
2019*	14,337,481,691	180,963,382	25,631,031	212,757	463,810,679	15,008,099,540
2018	14,078,724,296	167,266,385	24,525,067	217,341	435,629,637	14,706,362,726
2017**	13,438,843,275	151,581,147	23,214,168	217,398	382,109,560	13,995,965,548
2016	12,296,016,233	134,623,247	20,991,343	223,565	370,204,515	12,822,058,903
2015	12,638,892,425	136,580,030	21,711,575	193,687	408,363,598	13,205,741,315
2014***	12,662,776,138	136,115,160	21,992,809	165,480	413,858,201	13,234,907,788

Total Fiduciary Net Position (\$ in millions)



* Fiduciary Net Position was restated due to the implementation of GASB 87 during FY2020.

** Fiduciary Net Position was restated due to the implementation of GASB 75 during FY2018.

*** Fiduciary Net Position was restated due to the implementation of GASB 68 during FY2015.

SERS Retirement Plan Schedules

Changes in Fiduciary Net Position

Last 10 fiscal years

(continued through page 115)

ALL FUNDS COMBINED	2023	2022	2021	2020
ADDITIONS				
Employer Contributions	\$614,499,611	\$578,301,752	\$537,740,460	\$540,093,944
Member Contributions	398,907,335	375,838,354	346,781,820	352,343,063
Other Income	134,359,629	97,382,882	84,050,104	97,386,324
Total Investment Income (Loss), Net	1,182,955,780	(346,447,426)	4,088,576,284	424,249,537
TOTAL ADDITIONS	2,330,722,355	705,075,562	5,057,148,668	1,414,072,868
DEDUCTIONS				
Benefits	1,498,588,257	1,456,559,791	1,425,088,081	1,412,869,771
Refunds and Lump Sum Payments	97,668,607	82,209,215	72,374,764	72,849,117
Net Transfers to Other Ohio Systems	9,866,201	7,998,389	5,424,513	3,411,620
Administrative Expenses	33,196,517	24,600,074	16,084,857	30,882,135
TOTAL DEDUCTIONS	1,639,319,582	1,571,367,469	1,518,972,215	1,520,012,643
Net Increase (Decrease)	691,402,773	(866,291,907)	3,538,176,453	(105,939,775)
Fiduciary Net Position Held in Trust:				
Beginning of Year	17,574,319,449	18,440,611,356	14,902,434,903	15,008,374,678
End of Year	\$18,265,722,222	\$17,574,319,449	\$18,440,611,356	\$14,902,434,903

PENSION TRUST FUND	2023	2022	2021	2020
ADDITIONS				
Employer Contributions	\$528,038,431	\$495,884,566	\$456,195,419	\$461,695,266
Member Contributions	398,907,335	375,838,354	346,781,820	352,343,063
Total Investment Income (Loss), Net	1,128,873,919	(332,917,903)	3,916,448,920	407,045,705
TOTAL ADDITIONS	2,055,819,685	538,805,017	4,719,426,159	1,221,084,034
DEDUCTIONS				
Pension Benefits	1,344,067,864	1,302,357,602	1,270,735,447	1,251,597,154
Refunds and Lump Sum Payments	97,668,607	82,209,215	72,374,764	72,849,117
Net Transfers to Other Ohio Systems	9,866,201	7,998,389	5,424,513	3,411,620
Administrative Expenses	30,482,587	21,533,026	12,704,584	27,934,647
TOTAL DEDUCTIONS	1,482,085,259	1,414,098,232	1,361,239,308	1,355,792,538
Net Increase (Decrease)	573,734,426	(875,293,215)	3,358,186,851	(134,708,504)
Fiduciary Net Position Held in Trust:				
Beginning of Year	16,685,941,961	17,561,235,176	14,203,048,325	14,337,756,829
End of Year	\$17,259,676,387	\$16,685,941,961	\$17,561,235,176	\$14,203,048,325

HEALTH CARE FUND	2023	2022	2021	2020
ADDITIONS				
Employer Contributions	\$57,483,842	\$53,766,548	\$53,533,333	\$48,187,050
Other Income	134,359,629	97,382,882	84,050,104	97,386,324
Total Investment Income (Loss), Net	35,445,488	(8,096,503)	111,580,200	11,139,059
TOTAL ADDITIONS	227,288,959	143,052,927	249,163,637	156,712,433
DEDUCTIONS				
Health Care Expenses	129,424,430	128,796,889	128,132,981	135,034,624
Administrative Expenses	2,653,377	3,011,817	3,311,946	2,877,010
TOTAL DEDUCTIONS	132,077,807	131,808,706	131,444,927	137,911,634
Net Increase (Decrease)	95,211,152	11,244,221	117,718,710	18,800,799
Fiduciary Net Position Held in Trust:				
Beginning of Year	611,574,409	600,330,188	482,611,478	463,810,679
End of Year	\$706,785,561	\$611,574,409	\$600,330,188	\$482,611,478

* Fiduciary Net Position was restated due to the implementation of GASB 87 during FY2020.

** Fiduciary Net Position was restated due to the implementation of GASB 75 during FY2018.

*** Fiduciary Net Position was restated due to the implementation of GASB 68 during FY2015.

SERS Retirement Plan Schedules

2019*	2018	2017**	2016	2015	2014***
\$530,912,162	\$499,018,574	\$515,834,904	\$481,635,982	\$466,904,369	\$451,402,553
345,212,684	324,842,074	336,627,658	314,325,716	303,866,076	295,690,550
87,988,134	116,893,434	98,190,524	113,932,903	116,501,166	127,867,227
853,597,055	1,270,190,442	1,649,100,073	108,787,810	452,598,520	1,939,269,151
1,817,710,035	2,210,944,524	2,599,753,159	1,018,682,411	1,339,870,131	2,814,229,481
1,404,572,346	1,407,652,952	1,341,304,984	1,309,740,098	1,248,400,086	1,174,068,175
75,639,810	59,575,036	60,692,833	70,340,495	60,635,651	55,668,466
1,311,797	(6,734,065)	(3,139,875)	(2,272,514)	28,139,159	7,535,690
34,449,268	29,630,291	26,988,572	24,556,744	21,600,412	21,857,167
1,515,973,221	1,490,124,214	1,425,846,514	1,402,364,823	1,358,775,308	1,259,129,498
301,736,814	720,820,310	1,173,906,645	(383,682,412)	(18,905,177)	1,555,099,983
14,706,362,726	13,985,542,416	12,822,058,903	13,205,741,315	13,224,646,492	11,679,807,805
\$15,008,099,540	\$14,706,362,726	\$13,995,965,548	\$12,822,058,903	\$13,205,741,315	\$13,234,907,788

2019*	2018	2017**	2016	2015	2014***
\$435,388,804	\$406,953,261	\$442,032,882	\$412,712,475	\$374,724,343	\$382,098,970
345,212,684	324,842,074	336,627,658	314,325,716	303,866,076	295,690,550
819,731,217	1,226,089,090	1,593,050,588	105,116,336	435,966,343	1,864,902,017
1,600,332,705	1,957,884,425	2,371,711,128	832,154,527	1,114,556,762	2,542,691,537
1,232,808,916	1,227,807,547	1,146,987,656	1,085,216,541	1,020,154,456	957,757,668
75,639,810	59,575,036	60,692,833	70,340,495	60,635,651	55,668,466
1,311,797	(6,734,065)	(3,139,875)	(2,272,514)	28,139,159	7,535,690
31,814,787	26,931,754	24,343,472	21,746,197	19,249,913	19,528,157
1,341,575,310	1,307,580,272	1,228,884,086	1,175,030,719	1,128,179,179	1,040,489,981
258,757,395	650,304,153	1,142,827,042	(342,876,192)	(13,622,417)	1,502,201,556
14,078,724,296	13,428,420,143	12,296,016,233	12,638,892,425	12,652,514,842	11,160,574,582
\$14,337,481,691	\$14,078,724,296	\$13,438,843,275	\$12,296,016,233	\$12,638,892,425	\$12,662,776,138

2019	2018	2017	2016	2015	2014
\$65,877,673	\$63,539,354	\$47,672,886	\$44,855,441	\$68,904,867	\$46,097,206
87,988,134	116,893,434	98,190,524	113,932,903	116,501,166	127,867,227
22,009,627	28,167,652	35,730,747	2,244,300	11,142,837	50,980,652
175,875,434	208,600,440	181,594,157	161,032,644	196,548,870	224,945,085
145,127,670	152,447,415	167,106,908	196,445,600	199,750,908	187,994,468
2,566,722	2,632,948	2,582,204	2,746,127	2,292,565	2,273,442
147,694,392	155,080,363	169,689,112	199,191,727	202,043,473	190,267,910
28,181,042	53,520,077	11,905,045	(38,159,083)	(5,494,603)	34,677,175
435,629,637	382,109,560	370,204,515	408,363,598	413,858,201	379,181,026
\$463,810,679	\$435,629,637	\$382,109,560	\$370,204,515	\$408,363,598	\$413,858,201

(continued on next page)

SERS Retirement Plan Schedules

Changes in Fiduciary Net Position (continued from prior page)

Last 10 fiscal years

MEDICARE B FUND	2023	2022	2021	2020
ADDITIONS				
Employer Contributions	\$26,635,054	\$26,224,585	\$26,273,453	\$28,332,747
Total Investment Income (Loss), Net	16,604,465	(4,824,251)	53,543,370	5,305,350
TOTAL ADDITIONS	43,239,519	21,400,334	79,816,823	33,638,097
DEDUCTIONS				
Pension Benefits	22,104,393	22,446,630	22,913,755	23,536,709
Administrative Expenses	7,011	6,774	6,453	6,655
TOTAL DEDUCTIONS	22,111,404	22,453,404	22,920,208	23,543,364
Net Increase (Decrease)	21,128,115	(1,053,070)	56,896,615	10,094,733
Fiduciary Net Position Held in Trust:				
Beginning of Year	246,901,660	247,954,730	191,058,115	180,963,382
End of Year	\$268,029,775	\$246,901,660	\$247,954,730	\$191,058,115

DEATH BENEFIT FUND	2023	2022	2021	2020
ADDITIONS				
Employer Contributions	\$1,987,715	\$2,247,134	\$1,382,813	\$1,529,777
Total Investment Income (Loss), Net	2,030,083	(608,945)	7,003,576	757,342
TOTAL ADDITIONS	4,017,798	1,638,189	8,386,389	2,287,119
DEDUCTIONS				
Death Benefits	2,718,918	2,601,941	2,962,198	2,364,642
Administrative Expenses	50,960	45,945	59,297	61,321
TOTAL DEDUCTIONS	2,769,878	2,647,886	3,021,495	2,425,963
Net Increase (Decrease)	1,247,920	(1,009,697)	5,364,894	(138,844)
Fiduciary Net Position Held in Trust:				
Beginning of Year	29,847,384	30,857,081	25,492,187	25,631,031
End of Year	\$31,095,304	\$29,847,384	\$30,857,081	\$25,492,187

QEBA FUND	2023	2022	2021	2020
ADDITIONS				
Employer Contributions	\$354,569	\$178,919	\$355,442	\$349,104
Total Investment Income (Loss), Net	1,825	176	218	2,081
TOTAL ADDITIONS	356,394	179,095	355,660	351,185
DEDUCTIONS				
Pension Benefits	272,652	356,729	343,700	336,642
Administrative Expenses	2,582	2,512	2,577	2,502
TOTAL DEDUCTIONS	275,234	359,241	346,277	339,144
Net Increase (Decrease)	81,160	(180,146)	9,383	12,041
Fiduciary Net Position Held in Trust:				
Beginning of Year	54,035	234,181	224,798	212,757
End of Year	\$135,195	\$54,035	\$234,181	\$224,798

SERS Retirement Plan Schedules

2019	2018	2017	2016	2015	2014
\$27,319,485	\$26,291,404	\$24,155,026	\$22,208,623	\$21,499,206	\$21,517,805
10,373,511	13,784,587	17,527,764	1,233,948	4,716,932	20,040,557
37,692,996	40,075,991	41,682,790	23,442,571	26,216,138	41,558,362
23,990,512	24,384,610	24,718,613	25,391,810	25,743,861	25,800,345
5,487	6,143	6,277	7,544	7,407	6,639
23,995,999	24,390,753	24,724,890	25,399,354	25,751,268	25,806,984
13,696,997	15,685,238	16,957,900	(1,956,783)	464,870	15,751,378
167,266,385	151,581,147	134,623,247	136,580,030	136,115,160	120,363,782
\$180,963,382	\$167,266,385	\$151,581,147	\$134,623,247	\$136,580,030	\$136,115,160

2019	2018	2017	2016	2015	2014
\$1,975,200	\$1,858,955	\$1,608,830	\$1,500,583	\$1,455,553	\$1,412,852
1,479,649	2,147,404	2,790,208	192,842	772,277	3,345,822
3,454,849	4,006,359	4,399,038	1,693,425	2,227,830	4,758,674
2,289,135	2,639,464	2,122,612	2,358,518	2,460,907	2,262,136
59,750	55,996	53,601	55,139	48,157	47,394
2,348,885	2,695,460	2,176,213	2,413,657	2,509,064	2,309,530
1,105,964	1,310,899	2,222,825	(720,232)	(281,234)	2,449,144
24,525,067	23,214,168	20,991,343	21,711,575	21,992,809	19,543,665
\$25,631,031	\$24,525,067	\$23,214,168	\$20,991,343	\$21,711,575	\$21,992,809

2019	2018	2017	2016	2015	2014
\$351,000	\$375,600	\$365,280	\$358,860	\$320,400	\$275,720
3,051	1,709	766	384	131	103
354,051	377,309	366,046	359,244	320,531	275,823
356,113	373,916	369,195	327,629	289,954	253,558
2,522	3,450	3,018	1,737	2,370	1,535
358,635	377,366	372,213	329,366	292,324	255,093
(4,584)	(57)	(6,167)	29,878	28,207	20,730
217,341	217,398	223,565	193,687	165,480	144,750
\$212,757	\$217,341	\$217,398	\$223,565	\$193,687	\$165,480

SERS Retirement Plan Schedules

Benefit and Refund Deductions from Fiduciary Net Position by Type

Last 10 fiscal years

PENSION BENEFITS	2023	2022	2021	2020
Service Retirement	\$1,215,742,249	\$1,173,041,717	\$1,139,424,266	\$1,117,724,808
Disability Retirement	86,650,975	88,531,533	90,688,344	93,391,297
Survivor Benefits	41,674,640	40,784,352	40,622,837	40,481,049
Total Pension Benefits	\$1,344,067,864	\$1,302,357,602	\$1,270,735,447	\$1,251,597,154
Refunds				
Separation	\$97,571,386	\$82,147,880	\$72,308,775	\$72,834,422
Beneficiaries	97,221	61,335	65,989	14,695
Total Refunds	\$97,668,607	\$82,209,215	\$72,374,764	\$72,849,117

MEDICARE B REIMBURSEMENT	2023	2022	2021	2020
Service Retirement	\$20,329,498	\$20,556,582	\$20,885,774	\$21,365,130
Disability Retirement	1,101,768	1,153,448	1,229,228	1,296,750
Survivor Benefits	673,127	736,600	798,753	874,829
Total Medicare B Reimbursement	\$22,104,393	\$22,446,630	\$22,913,755	\$23,536,709

DEATH BENEFITS	2023	2022	2021	2020
Service	\$2,495,769	\$2,391,622	\$2,710,522	\$2,169,208
Disability	223,149	210,319	251,676	195,434
Total Death Benefits	\$2,718,918	\$2,601,941	\$2,962,198	\$2,364,642

HEALTH CARE EXPENSES	2023	2022	2021	2020
Medical	\$45,251,021	\$51,225,584	\$64,912,611	\$56,771,016
Prescription*	162,221,095	77,571,305	63,220,370	78,263,608
Other	—	—	—	—
Total Health Care Expenses	\$207,472,116	\$128,796,889	\$128,132,981	\$135,034,624

* Prescription expenses prior to FY2023 are net of prescription rebates.

SERS Retirement Plan Schedules

2019	2018	2017	2016	2015	2014
\$1,096,960,216	\$1,091,624,986	\$1,012,404,884	\$952,950,117	\$891,831,626	\$834,865,512
95,725,624	97,027,548	96,312,675	94,595,437	91,265,121	87,804,462
40,123,076	39,155,013	38,270,097	37,670,987	37,057,709	35,087,694
\$1,232,808,916	\$1,227,807,547	\$1,146,987,656	\$1,085,216,541	\$1,020,154,456	\$957,757,668
\$75,630,053	\$59,496,216	\$59,541,576	\$68,857,916	\$59,875,564	\$55,018,577
9,757	78,820	1,151,257	1,482,579	760,087	649,889
\$75,639,810	\$59,575,036	\$60,692,833	\$70,340,495	\$60,635,651	\$55,668,466

2019	2018	2017	2016	2015	2014
\$21,734,690	\$22,072,596	\$22,336,187	\$22,855,321	\$23,105,680	\$23,099,058
1,327,303	1,330,670	1,336,790	1,413,048	1,428,700	1,436,026
928,519	981,344	1,045,636	1,123,441	1,209,481	1,265,261
\$23,990,512	\$24,384,610	\$24,718,613	\$25,391,810	\$25,743,861	\$25,800,345

2019	2018	2017	2016	2015	2014
\$2,083,499	\$2,377,087	\$1,939,771	\$2,133,523	\$2,256,060	\$2,052,993
205,636	262,377	182,841	224,995	204,847	209,143
\$2,289,135	\$2,639,464	\$2,122,612	\$2,358,518	\$2,460,907	\$2,262,136

2019	2018	2017	2016	2015	2014
\$72,447,500	\$81,873,185	\$87,845,475	\$108,821,435	\$117,389,938	\$109,622,130
72,680,170	70,574,230	79,261,433	86,997,168	80,843,448	76,945,975
—	—	—	626,997	1,517,522	1,426,363
\$145,127,670	\$152,447,415	\$167,106,908	\$196,445,600	\$199,750,908	\$187,994,468

Defined Benefit Program Schedules

Employee and Employer Contribution Rates

Last 10 fiscal years

Fiscal Year	Employee Rate	Employer Rate				Total
		Pension	Medicare B	Death Benefit	Health Care	
2023	10.00%	13.28%	0.67%	0.05%	0.00%	14.00%
2022	10.00	13.24	0.70	0.06	0.00	14.00
2021	10.00	13.20	0.76	0.04	0.00	14.00
2020	10.00	13.15	0.81	0.04	0.00	14.00
2019	10.00	12.61	0.83	0.06	0.50	14.00
2018	10.00	12.59	0.85	0.06	0.50	14.00
2017	10.00	13.20	0.75	0.05	0.00	14.00
2016	10.00	13.21	0.74	0.05	0.00	14.00
2015	10.00	12.39	0.74	0.05	0.82	14.00
2014	10.00	13.05	0.76	0.05	0.14	14.00

Demographics of New Pension Benefit Recipients

Last 10 fiscal years

Average Service Benefit

Year Ended June 30	Service Credit	Monthly Amount	Age	Final Average Salary
2023	23.8	\$1,459	65.4	\$37,430
2022	24.2	1,496	65.5	37,361
2021	24.5	1,536	65.5	36,972
2020	24.8	1,573	65.0	37,169
2019	25.8	1,659	65.1	37,047
2018	21.2	1,281	63.9	34,090
2017	19.8	1,078	63.4	30,256
2016	21.4	1,224	63.4	31,785
2015	21.6	1,254	63.2	32,263
2014	21.7	1,228	63.4	31,617

Average Disability Benefit

Year Ended June 30	Service Credit	Monthly Amount	Age	Final Average Salary
2023	17.8	\$1,402	57.7	\$34,507
2022	17.2	1,380	56.6	34,162
2021	18.2	1,398	58.1	34,290
2020	17.1	1,294	57.2	32,094
2019	17.2	1,348	55.4	33,255
2018	17.4	1,315	55.5	31,736
2017	17.0	1,245	56.6	30,570
2016	16.5	1,296	55.9	31,118
2015	15.9	1,291	54.1	31,091
2014	15.8	1,250	54.5	29,965

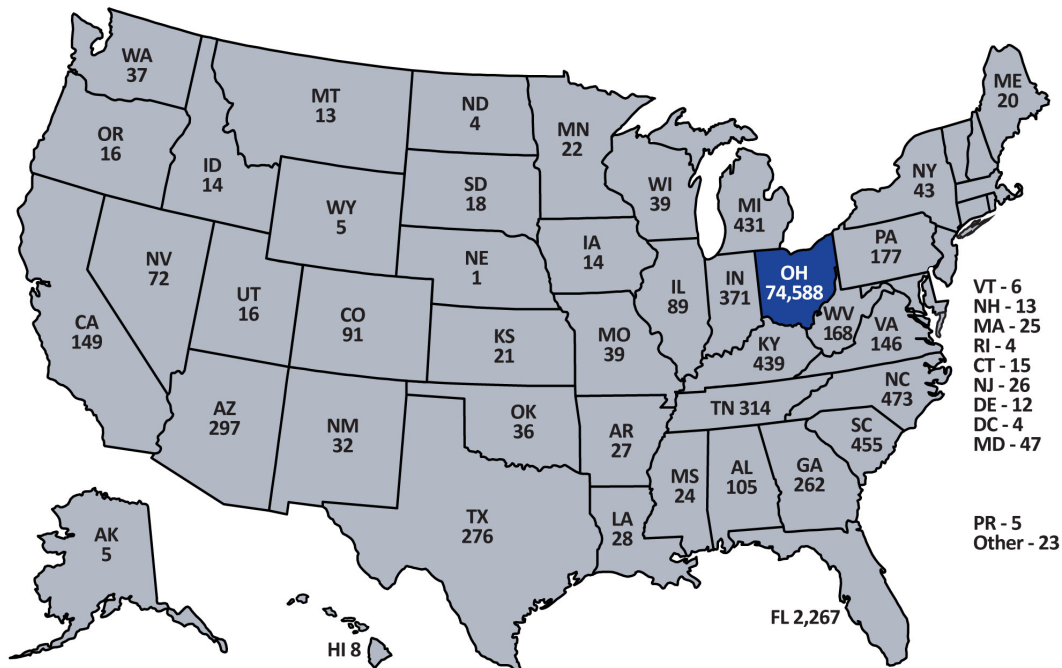
Demographics of Active and Retired Members Used for Valuation Purposes

Fiscal Year 2023

	Active Members			Percentage of Distribution		
	Male	Female	Total	Male	Female	Total
Under 20	1,631	1,697	3,328	1%	1%	2%
20 to 29	8,932	12,758	21,690	6	8	14
30 to 39	8,714	18,039	26,753	5	11	16
40 to 49	10,743	24,646	35,389	7	15	22
50 to 54	5,649	13,896	19,545	4	9	13
55 to 59	5,424	14,620	20,044	3	9	12
60 to 64	4,961	13,682	18,643	3	9	12
65 to 69	3,118	6,274	9,392	2	4	6
70 and over	2,036	3,053	5,089	1	2	3
Total	51,208	108,665	159,873	32%	68%	100%

	All Benefit Recipients			Percentage of Distribution		
	Male	Female	Total	Male	Female	Total
Under 55	336	555	891	0%	1%	1%
55 to 59	629	1,078	1,707	1	1	2
60 to 64	1,945	4,583	6,528	2	6	8
65 to 69	4,357	12,821	17,178	5	16	21
70 to 74	4,869	13,289	18,158	6	16	22
75 to 79	3,815	10,624	14,439	5	13	18
80 to 84	2,778	8,271	11,049	4	10	14
85 to 89	1,699	5,617	7,316	2	7	9
90 to 94	665	2,727	3,392	1	3	4
95 to 99	166	865	1,031	0	1	1
100 and over	16	128	144	0	0	0
Total	21,275	60,558	81,833	26%	74%	100%

All Benefit Recipients by State



Defined Benefit Program Schedules

Retired Members by Type of Benefit

Amount of Monthly Benefit (\$)	Total	Service	Disability*	Survivor
1 - 250	8,855	8,190	41	624
251 - 500	10,759	9,405	368	986
501 - 750	10,628	9,098	736	794
751 - 1,000	9,572	7,951	1,012	609
1,001 - 1,500	14,645	12,518	1,530	597
1,501 - 2,000	9,406	8,262	919	225
over 2,000	17,968	16,508	1,168	292
Total Number	81,833	71,932	5,774	4,127
Average Monthly Benefit		\$1,390	\$1,442	\$831
Average Age		75.4	68.4	72.7

* Disability counts include 1,303 retirees that have converted to a service retirement.

Retirees, Spouses, and Dependents Receiving Health Care Coverage

Attained Age	Number of		Total Number
	Males	Females	
Under 30	75	84	159
30 - 39	2	7	9
40 - 49	21	17	38
50 - 59	307	483	790
60 - 64	952	1,919	2,871
65 - 69	2,415	5,192	7,607
70 - 74	2,577	5,748	8,325
75 - 79	1,824	4,896	6,720
80 - 84	1,612	4,497	6,109
85 - 89	1,105	3,175	4,280
90 - 94	424	1,564	1,988
95 - 99	79	578	657
100 and over	12	91	103
Total	11,405	28,251	39,656

Principal Participating Employers

Current fiscal year and nine years ago

	Fiscal Year 2023			Fiscal Year 2014		
	Covered Employee Members	Rank	Percentage of Total System	Covered Employee Members	Rank	Percentage of Total System
Columbus City Schools	4,028	1	2.52%	3,470	1	2.86%
Cincinnati Public Schools	3,441	2	2.15	2,607	2	2.15
Cleveland Metropolitan School District	2,713	3	1.70	2,572	3	2.12
Educational Service Center Council of Governments	2,088	4	1.31	1,258	7	1.04
Toledo City Schools	1,891	5	1.18	1,465	6	1.21
Akron Public Schools	1,697	6	1.06	1,487	5	1.23
Olentangy Local Schools	1,560	7	0.98	—	—	—
South-Western City Schools	1,316	8	0.82	1,149	8	0.95
Dublin City Schools	1,259	9	0.79	—	—	—
Lakota Local Schools	1,240	10	0.78	—	—	—
University of Akron	—	—	—	2,253	4	1.86
Dayton City Schools	—	—	—	1,136	9	0.94
Parma City Schools	—	—	—	968	10	0.80
All Other	138,640		86.71	102,886		84.84
Total	159,873		100.00%	121,251		100.00%

In FY2023 "All Other" consisted of:

	Covered Employee Members	Number of School Districts
City School Districts	56,218	184
Local School Districts	50,505	369
Educational Service Centers	9,657	51
Exempted Village Districts	7,329	49
Community Schools	5,878	319
Higher Education	4,130	15
Vocational Schools	3,238	49
Other	1,685	23

Defined Benefit Program Schedules

Average Benefit Payments - New Retirees (Service Only)

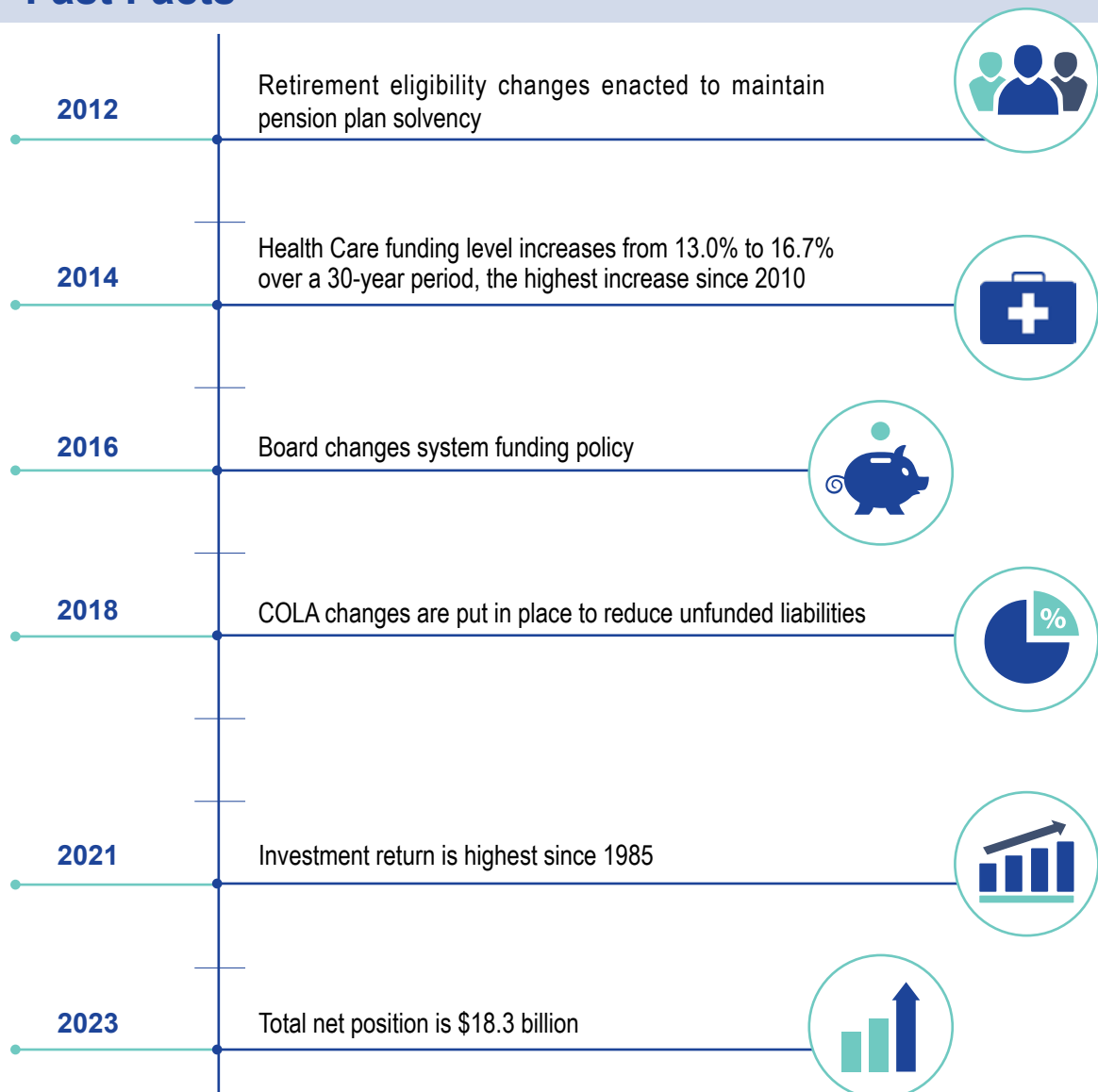
Last 10 fiscal years

Retirement Effective Dates	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-29	30+
Period 7/1/22 to 6/30/23						
Average Monthly Benefit	\$461	\$496	\$735	\$1,090	\$1,499	\$2,769
Monthly Final Average Salary	3,623	2,499	2,547	2,896	3,122	4,028
Number of Retirees	3	538	493	740	759	855
Period 7/1/21 to 6/30/22						
Average Monthly Benefit	\$306	\$486	\$783	\$1,075	\$1,493	\$2,665
Monthly Final Average Salary	1,906	2,371	2,678	2,860	3,061	3,922
Number of Retirees	4	488	491	712	660	985
Period 7/1/20 to 6/30/21						
Average Monthly Benefit	\$497	\$460	\$744	\$1,014	\$1,521	\$2,723
Monthly Final Average Salary	4,425	2,311	2,518	2,650	3,050	3,967
Number of Retirees	4	456	433	542	634	952
Period 7/1/19 to 6/30/20						
Average Monthly Benefit	\$339	\$485	\$712	\$997	\$1,532	\$2,627
Monthly Final Average Salary	2,241	2,354	2,484	2,643	3,034	3,869
Number of Retirees	3	386	345	388	442	914
Period 7/1/18 to 6/30/19						
Average Monthly Benefit	\$414	\$478	\$747	\$1,040	\$1,519	\$2,551
Monthly Final Average Salary	3,351	2,240	2,402	2,544	2,965	3,770
Number of Retirees	2	279	265	216	444	863
Period 7/1/17 to 6/30/18						
Average Monthly Benefit	\$243	\$497	\$880	\$1,241	\$1,555	\$2,537
Monthly Final Average Salary	1,734	2,151	2,700	2,950	3,027	3,741
Number of Retirees	500	668	949	977	656	1,021
Period 7/1/16 to 6/30/17						
Average Monthly Benefit	\$212	\$488	\$767	\$1,044	\$1,487	\$2,439
Monthly Final Average Salary	1,532	2,084	2,360	2,498	2,937	3,654
Number of Retirees	715	847	951	948	692	857
Period 7/1/15 to 6/30/16						
Average Monthly Benefit	\$241	\$510	\$762	\$1,110	\$1,456	\$2,392
Monthly Final Average Salary	1,608	2,104	2,341	2,644	2,869	3,582
Number of Retirees	535	671	615	630	769	1,013
Period 7/1/14 to 6/30/15						
Average Monthly Benefit	\$247	\$511	\$804	\$1,123	\$1,459	\$2,404
Monthly Final Average Salary	1,587	2,157	2,479	2,675	2,875	3,576
Number of Retirees	515	636	535	505	764	994
Period 7/1/13 to 6/30/14						
Average Monthly Benefit	\$239	\$506	\$756	\$1,053	\$1,390	\$2,391
Monthly Final Average Salary	1,554	2,130	2,357	2,511	2,785	3,586
Number of Retirees	468	622	489	527	736	957

Plan Summary

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Fast Facts



Introduction

Established by state law in 1937, SERS is a statewide defined benefit plan that provides retirement, disability, and survivor benefits to non-teaching employees of Ohio's public, vocational, technical, and community schools; community colleges; and the University of Akron.

The Retirement Board is responsible for the general administration and management of the Retirement System. The Board comprises nine members: four elected employee members; two elected retiree members; and three appointed investment expert members. One investment expert is appointed by the Governor, a second one by the State Treasurer, and the third one jointly by the Speaker of the House and President of the Senate of the General Assembly.

The day-to-day operations are administered by a professional staff led by the Executive Director.

The plan summary in effect at June 30, 2023, is described below.

COVERED EMPLOYEES

All non-teaching employees of Ohio's public, vocational, technical, and community schools; community colleges; and the University of Akron are required to be members unless their position permits exemption from membership, optional membership, or the position is excluded from membership.

Compulsory or Mandatory Coverage

Compulsory coverage is required for any employee who:

- Is employed in a position for which the person is not required to have a registration certificate or license issued pursuant to sections 3319.22 to 3319.31 of the Revised Code; or
- Performs a service common to the normal daily operation of an educational unit even though the person is employed and paid by one who has contracted with the school to perform the service.

Exemption from Coverage

The following individuals may choose exemption from coverage by filing a written application with the employer within the first month after being employed:

- A student who is not a member at the time of the student's employment and who is employed by the school, college, or university in which the student is enrolled and regularly attending classes;
- An emergency employee serving on a temporary basis in case of fire, snow, earthquake, flood, or other similar emergency; or
- An individual employed in a program established under the Workforce Innovation and Opportunity Act.

Optional Coverage

A school or governing board member may choose to become a member by making application within thirty (30) days of taking office. A school board member is a member of a city, local, exempted village, or joint vocational school district board of education, and a governing board member is a member of an educational service center governing board.

Exclusion from Coverage

The following employees are excluded from SERS coverage:

- Any person having a license issued by the Ohio Department of Education (ODE) and employed in a public school in this state in an educational position, as determined by the ODE, under programs under federal law and financed in whole or in part from federal funds, but for which no licensure requirements for the position can be made under the provisions of such federal law.
- Any person who participates in an alternative retirement plan (ARP) established by a college or university.
- University of Akron police officers who are covered by the Ohio Public Employees Retirement System (OPERS).
- Non-teaching University of Akron employees hired on or after September 28, 2016. These employees are covered by OPERS unless terminated and rehired within one (1) year of September 28, 2016.
- Employees of community school operators who withhold Social Security taxes beginning with their first paycheck: whose initial employment with the community school operator is on or after July 1, 2016, or; who previously worked for a community school operator and returned to work for that same operator on or after July 1, 2016, provided the employee was not previously employed by the same operator at any time between July 1, 2015 to June 30, 2016, and whose date of reemployment is before July 1, 2017. The

community school operator must have withheld Social Security taxes for employees on or before February 1, 2016, in order for employers to fall under this exemption.

CONTRIBUTIONS

The employee and employer are required to contribute a percentage of the employee's compensation to SERS to fund the benefits available. Employees contribute 10% of their gross compensation. Employers contribute 14% of the employee's compensation. Members are entitled to a return of their contributions, either in the form of monthly benefits, provided they meet eligibility requirements, or a single lump-sum payment after the termination of employment.

SERVICE CREDIT

The amount of a member's service credit is a factor in determining:

- Eligibility for retirement or disability benefits
- The amount of a benefit
- Eligibility for health care coverage and the amount of the health care premium

It also determines the eligibility of a member's dependents for survivor benefits, the amount of benefits, and availability of health care coverage.

Service credit is accrued through contributions during school employment, for other periods at no cost, and for other service that may be purchased.

Contributing Service Credit

One year of service credit is granted upon completion of 120 or more days of paid school employment within a fiscal year (July 1 through the following June 30). Any portion of a day constitutes one full day. If service is less than 120 days, a fractional amount of service credit is prorated on the basis of a 180-day school year.

Free Service Credit

Additional service credit up to three years is available at no cost for periods a member received Workers' Compensation for a school-related injury. In addition, certain periods of military service or disability credit may be available at no cost.

Purchased Service Credit

The following additional service credit may be available for purchase:

- Previously refunded SERS service credit
- Employer-authorized unpaid leaves of absence
- Any service after July 1, 1991, in a position for which SERS membership was compulsory, but for which a member was permitted to, and did, sign an exemption from membership form
- Any service before July 1, 1991, in a position for which SERS membership was optional, and a member did not choose to become a member
- Up to five years of service with a public or private school, college, or university in another state, or operated by the federal government, which has been chartered or accredited by the proper government agency if the service in a comparable position in Ohio would have been covered by an Ohio state retirement system, or an Ohio municipal retirement system except the Cincinnati Retirement System
- Periods of military service
- Up to two years for periods when the member resigned because of pregnancy or adoption of a child
- School board member service prior to July 1, 1991
- Cincinnati Retirement System covered service
- Service covered by the Ohio Police & Fire Pension Fund or Ohio Highway Patrol Retirement System if not being used in a benefit under those systems
- Disability credit, if member received SERS disability benefits for more than two years and returned to work for at least two years after the disability benefit terminated

Plan Summary

Other Ohio State Retirement System Service Credit

If a member has been employed in a job covered by the State Teachers Retirement System of Ohio (STRS) or the Ohio Public Employees Retirement System (OPERS) as well as in a job covered by SERS, at retirement the member may receive a retirement benefit independently from each of the systems if eligible, or may combine the service credit and accounts in all the systems to receive one benefit. The system with the greatest service credit will be the system that will calculate and pay the benefit. While the salaries in one year will be added together, if the member has service credit in each system for the same year, the member cannot be credited with more than one year of service credit for each 12 months in a year.

Early Retirement Incentive Program

An employer may establish an Early Retirement Incentive program (ERI), which allows employees who are at least 57 years old to retire early. Under an ERI, an employer may purchase up to five years of service credit for its eligible employees. If an employer has an ERI, it notifies all eligible employees of the plan and its requirements.

AGE AND SERVICE RETIREMENT

Eligibility

A member who retired on or before August 1, 2017, from SERS retired under the following age and service credit guidelines:

- 5 years of service credit and is at least 60 years old,
- 25 years of service credit and is at least 55 years old, or
- 30 years of service credit irrespective of age.

These guidelines also apply to exempt members. To be exempt, as of August 1, 2017, the member must have had at least 25 years of service credit or purchased the right to be exempt.

A member who is not exempt may retire under the following age and service credit guidelines:

- 10 years of service credit and is at least 62 years old,
- 25 years of service credit and is at least 60 years old, or
- 30 years of service credit and is at least 57 years old.

Calculating a Benefit

The calculation of a benefit is determined using the member's salary, service credit, and age.

The **salary** used is the Final Average Salary (FAS) which is the average of the three (3) highest years of salary. If a member has more than one covered job, the salaries will be combined.

The **service credit** used is the total service credit at the time of retirement.

The **age** used to calculate a benefit is the member's actual age at the time of retirement.

The formula used in calculating a benefit is as follows:

1. The value of a year of service credit is determined by multiplying the member's FAS by 2.2%, and by 2.5% for each year above 30 years of service credit. If the result is less than \$86.00, then \$86.00 is the value of each year.
2. The number of years of service credit is then multiplied by this value of each year to determine the annual retirement benefit.
3. Depending on the member's service credit and age at retirement, the annual benefit may be reduced to cover a longer period of retirement.

Payment Plans

At retirement, a member must choose a payment plan. There are three categories of plans. All plans pay a monthly benefit for the retiree's life. Under the first category, payments cease with the retiree's death; this is Plan B (Single Life Allowance). Another category provides a continuing benefit to a designated beneficiary after the retiree's death. The plans in this category are Plan A, C, D (Joint Life plans), and F (Multiple Beneficiaries plan). The third category provides payment to a designated beneficiary for a specified period of time if the retiree dies during the specified period; this is Plan E (Time Limited). Choosing a plan other than the Single Life Allowance will result in a reduced monthly benefit to the retiree depending on the retiree's age, the beneficiary's age, and the plan chosen.

Partial Lump Sum Option Payment

In addition to selecting a payment plan, a member may elect to receive part of their benefit in a one-time partial lump sum option payment (PLOP), which will permanently reduce the lifetime monthly benefit. A PLOP payment may be from 6 to 36 months of the unreduced retirement allowance, and cannot reduce the original allowance more than 50%.

Reemployment

A retiree may be reemployed after retirement. A job in the private sector does not affect the retiree's benefit.

However, if the job is in a position covered by SERS, the State Teachers Retirement System of Ohio, the Ohio Public Employees Retirement System, the Ohio Police & Fire Pension Fund, or the Ohio Highway Patrol Retirement System, SERS must be notified. If the retiree returns to work in a job covered by any of these systems before the retiree has received a SERS benefit for two months, the retiree forfeits the benefit payment for each of the two months in which the retiree worked.

If the retiree returns to a SERS-covered position, then member and employer contributions are required for the new position. The retiree accrues a new benefit in the form of an annuity based on the contributions paid by the retiree and the employer. This is separate from the original SERS benefit. There are no other benefits available, and the retiree does not accrue any additional service credit for the period of reemployment.

DISABILITY BENEFITS

A member is entitled to a benefit under one of two disability plans. A member who became a member on or after July 29, 1992, is covered under the **new disability plan**. A member who became a member before July 29, 1992, is covered by the **old disability plan** unless they exercised a one-time election to switch to the new plan.

The following describes the common and different features of both plans.

Eligibility

Under both plans, a member is eligible for disability benefits if the member:

- Has at least 5 years of total service credit;
- Files an application no later than 2 years from the date that the contributing service stopped;
- Is permanently disabled, either physically or mentally, for work in a SERS-covered position as determined by a physician appointed by SERS;
- Became disabled after becoming a SERS member;
- Did not receive a refund of the member's contributions;
- Does not receive a service retirement benefit;
- Is not receiving a disability benefit from State Teachers Retirement System of Ohio, the Ohio Public Employees Retirement System, the Ohio Police & Fire Pension Fund, the Ohio Highway Patrol Retirement System, or the Cincinnati Retirement System; and
- Is not applying for a disability benefit based on a disabling condition that resulted from a felony the member was convicted of, pled guilty to, or was found not guilty of by reason of insanity.

Under the old disability plan, a member also must apply before turning 60 years old. Under the new disability plan a member may apply at any age.

All disability recipients enrolled in a SERS health care plan are required to apply for Social Security disability benefits, if eligible.

Benefit Payment

Old Disability Plan

Under the old disability plan, an annual benefit is calculated by the following formula using total service credit and Final Average Salary (FAS):

1. The value of a year of service credit is determined by multiplying the member's FAS by 2.2%. If the result is less than \$86.00, then \$86.00 is the value of each year.
2. The number of years of service credit is then multiplied by this value of each year.

Service credit includes all service credit the member has at the time of the benefit effective date plus the number of years between the member's current age and age 60. The benefit cannot be less than 30% of FAS or more than 75%.

Plan Summary

New Disability Plan

Under the new disability plan, the amount of an annual benefit is the greater of 45% of FAS, or total service credit at the time of the application multiplied by 2.2% of FAS, not to exceed 60% of FAS. The following chart shows the approximate applicable percentage amounts under this plan:

Years of Service Credit	Percentage of the Member's FAS
5-21	45.0%
22	48.4
23	50.6
24	52.8
25	55.0
26	57.2
27	59.4
28 or more	60.0

Termination of Benefits

Under the **new disability plan**, benefits also will end after a specified number of months as shown:

Age at Effective Date	Period Benefits Payable
Younger than 60	Until age 65
60 or 61	60 months
62 or 63	48 months
64 or 65	36 months
66, 67, or 68	24 months
69 or older	12 months

At the end of the period, the member can apply for a conversion retirement benefit.

A disability benefit under either plan stops if any one of the following events occur:

- A subsequent SERS medical re-examination finds that the member meets the applicable standard for termination, which changes 3 or 5 years after the disability benefits began (depending on whether the member is receiving rehabilitation or treatment).
- The member is no longer disabled from their SERS-covered position, or
- The member is capable of performing other job duties with pay at or above 75% of his or her annual compensation and can reasonably find such a position with his or her qualifications.
- The member returns to a SERS-covered job.
- The member dies.
- The member requests that benefits end.

DEATH BENEFIT

At death after retirement or receipt of a disability benefit, the retiree's beneficiary or disability benefit recipient's beneficiary is entitled to a one-time lump sum payment of \$1,000.

SURVIVOR BENEFITS

Eligibility

If a member dies while working, before the member begins receiving a monthly service retirement benefit, or while receiving a disability benefit, the member's qualified survivors are entitled to certain benefits.

A beneficiary qualifies for benefits in the following order:

1. Person designated in writing by the member on a form provided by SERS

2. If there is no designated beneficiary or the beneficiary died before the member, the statutory order of beneficiaries applies

The statutory order of succession is as follows, the member's:

1. Surviving spouse
2. Surviving children
3. Dependent parent who is age 65 or older
4. Surviving parents
5. Estate

The first qualifying beneficiary is entitled to a one-time, lump-sum payment of only the member's remaining contributions to SERS, or monthly benefits if otherwise eligible. However, if the member is survived by children under age 19, or by children who are mentally or physically incompetent, only a monthly benefit is available to the qualifying survivors.

Monthly benefit payments are available if the member:

1. Had at least one and one-half (1½) years of contributing service credit
2. Had at least one-quarter (¼) year of Ohio service credit earned within two and one-half (2½) years prior to death
3. Was not receiving a service retirement benefit

The following survivors are eligible for monthly benefits:

1. Surviving spouse at age 62
2. Surviving spouse at any age if the member had 10 or more years of service credit; or if there are qualified children; or has been declared mentally or physically incompetent by a court
3. Children who have never married and are under 19, or have been declared mentally or physically incompetent by a court
4. Dependent parent age 65 or older

Benefit Payments

The amount of the monthly benefit is determined under one of the following schedules, whichever pays the greater benefit:

SCHEDULE I		SCHEDULE II	SCHEDULE III	
Number of Qualified Beneficiaries	Monthly Benefit Shall Not be Less than	As a Percentage of the Member's Final Average Salary	Years of Service	As a Percentage of the Member's Final Average Salary
1	\$96*	25%	20	29%
2	186	40	21	33
3	236	50	22	37
4	236	55	23	41
5 or more	236	60	24	45
			25	48
			26	51
			27	54
			28	57
			29 or more	60

*Not less than \$106 to spouse if the member had 10 or more years of service credit.

COST-OF-LIVING ADJUSTMENT

An individual whose benefit effective date is before April 1, 2018, is eligible for a cost of living adjustment (COLA) on the first anniversary date of the benefit. New benefit recipients must wait until the fourth anniversary of their benefit for COLA eligibility. The COLA is added each year to the base benefit amount on the anniversary date of the benefit. The COLA is indexed to the percentage increase in the CPI-W, not to exceed 2.5% and with a floor of 0%.

A three-year COLA suspension was in effect for all benefit recipients for calendar years 2018, 2019, and 2020. The Retirement Board approved a 2.5% COLA for calendar year 2023.

Plan Summary

HEALTH CARE

Currently, SERS offers medical and prescription drug coverage to qualifying benefit recipients. To the extent that resources permit, SERS intends to continue offering access to health care coverage. However, the Retirement System reserves the right to change or discontinue any plan or program at any time.

Currently a **service retiree** qualifies for health care coverage if the retiree has 10 qualified years of service credit at retirement. Qualifying service credit does not include:

- Military, other than free or interrupted military service credit;
- Other government and school service credit;
- Exempted service credit; or
- Service credit purchased by an employer under an Early Retirement Incentive plan.

A beneficiary of a deceased service retiree who receives a monthly benefit qualifies for health care coverage if the retiree had qualified for such coverage.

Disability benefit recipients qualify for the SERS health care coverage upon receipt of a disability benefit.

Survivor benefit recipients qualify for health care coverage upon receipt of a survivor benefit.

Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of
Financial Statements Performed in Accordance with *Government Auditing Standards*

Independent Auditor's Report

To Management and the Retirement Board
School Employees Retirement System of Ohio

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of School Employees Retirement System of Ohio (SERS) as of and for the year ended June 30, 2023 and the related notes to the financial statements, which collectively comprise SERS' financial statements, and have issued our report thereon dated December 5, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered SERS' internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of SERS' internal control. Accordingly, we do not express an opinion on the effectiveness of SERS' internal control.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of SERS' financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies, and, therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify a certain deficiency in internal control, described in the accompanying schedule of findings as Finding 2023-001, that we consider to be a significant deficiency.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether SERS' financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

SERS' Response to the Finding

Government Auditing Standards require the auditor to perform limited procedures on SERS' response to the finding identified in our audit and described in the accompanying schedule of findings. SERS' response was not subjected to the other auditing procedures applied in the audit of the financial statements, and, accordingly, we express no opinion on it.

To Management and the Retirement Board
School Employees Retirement System of Ohio

Purpose of This Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of SERS' internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering SERS' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Alente & Morse, PLLC

December 5, 2023

Schedule of Findings

Year Ended June 30, 2023

Reference Number	Finding
2023-001	<p>Finding Type - Significant deficiency</p> <p>Criteria - Cash reported in the general ledger should be reconciled to the bank balance on a monthly basis to ensure cash is stated in accordance with generally accepted accounting principles.</p> <p>Condition - Monthly bank reconciliations were not performed throughout the year; however, bank activity is reconciled daily.</p> <p>Context - During our audit, we noted that month-end cash account reconciliations were not completed for any month. While other internal controls over cash exist, a comprehensive reconciliation is not performed over all cash activity.</p> <p>Cause - SERS' controls over reconciling cash accounts were incomplete.</p> <p>Effect - The lack of timely reconciliations increases the risk that errors can occur without being identified or resolved.</p> <p>Recommendation - We recommend that SERS ensure month-end cash reconciliations are prepared and reviewed timely each month to ensure there is no misappropriation of assets.</p> <p>Views of Responsible Officials and Corrective Action Plan - SERS agrees with this recommendation. Currently, the subsidiary system is creating cash transactions for the general ledger import on a lag in such a way that a standard bank reconciliation has been challenging to complete timely. SERS has been relying on compensating controls to prevent fraud. A project has been approved to change when the subsidiary system creates cash transactions for importing into the general ledger. This will help SERS complete the bank reconciliations timely.</p>

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OHIO AUDITOR OF STATE KEITH FABER



SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

FRANKLIN COUNTY

AUDITOR OF STATE OF OHIO CERTIFICATION

This is a true and correct copy of the report, which is required to be filed pursuant to Section 117.26, Revised Code, and which is filed in the Office of the Ohio Auditor of State in Columbus, Ohio.



Certified for Release 12/26/2023

88 East Broad Street, Columbus, Ohio 43215
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This report is a matter of public record and is available online at
www.ohioauditor.gov