



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



2022

Annual Comprehensive Financial Report

For the Year Ended June 30, 2022

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 RSM US LLP, for the audit period July 1, 2021 through June 30, 2022. 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 cursive script that reads "Keith Faber".

Keith Faber
Auditor of State
Columbus, Ohio

December 22, 2022

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

For the year ended June 30, 2022

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*

WHERE WE STAND



155,063
Members



81,151
Retirees & Beneficiaries



1,057
Contracted Employers



40,131
Total Covered Lives (Health)

For every dollar in employer contributions invested in SERS’ retirement benefits last year,





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



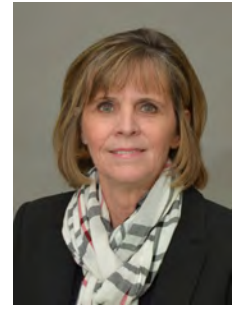
Jeff Davis
Chief Audit Officer



Farouki Majeed
Chief Investment Officer



Joseph Marotta
General Counsel



Tracy Valentino
Chief Financial Officer *



John Grumney
Director - Member
Services



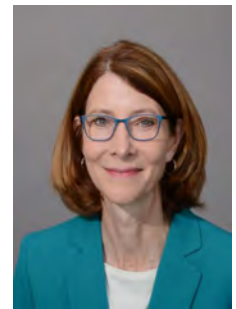
Mike McManaway
Assistant Director -
Building Services



Michelle Miller
Director - Administrative
Services



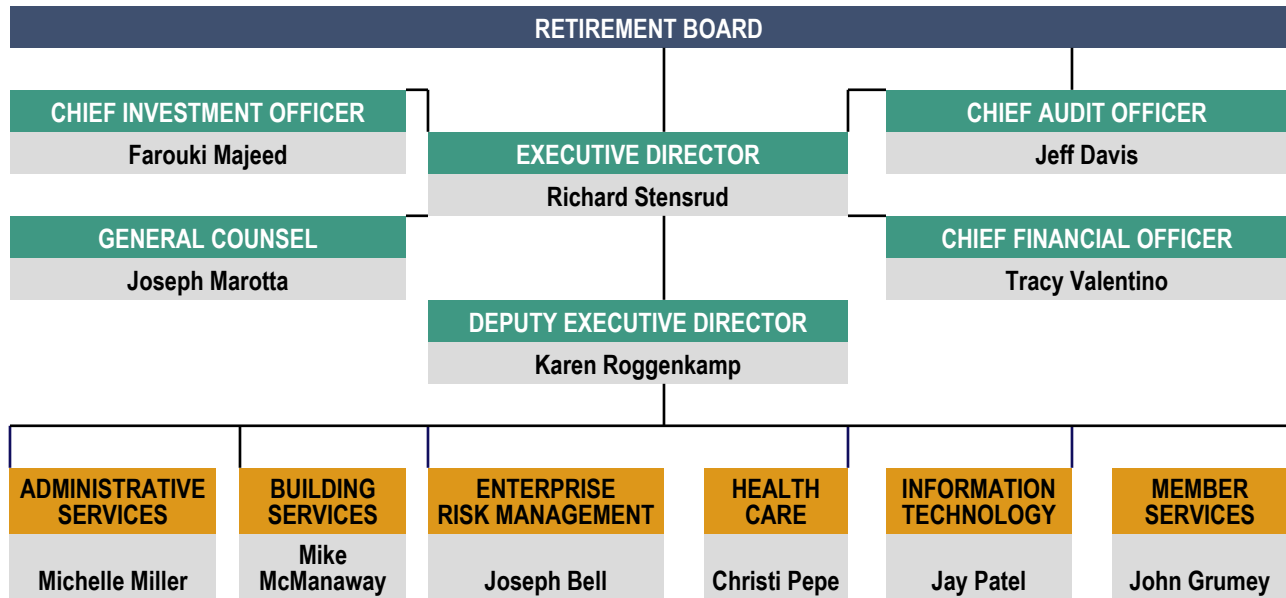
Jay Patel
Chief Technology
Officer



Christi Pepe
Director - Health Care
Services

* Tracy Valentino retired as Chief Financial Officer in July 2022. Marni Hall became Chief Financial Officer in July 2022.

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)	RSM US LLP Cleveland, Ohio
Investment Consultants and Investment Managers and Brokers' Fees - see pages 69 - 70	



Government Finance Officers Association

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For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2021

Christopher P. Morill

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2022***

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 12, 2022

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, 2022. 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

Focus on Improving Operations and Customer Service Throughout the year, SERS' Member Services and Employer Services teams implemented several new staff initiatives aimed at improving workflow, teamwork, and customer service.

The Member Services Department established an Innovation Team, which is comprised of staff from all six sections of the 52-member department. Team goals included identifying ways to improve current processes and procedures, strengthening communication between sections, and promoting healthy collaboration with all other departments at SERS. They also began a shadowing program where members of different sections could observe the daily work of their peers to gain greater understanding of their roles and responsibilities and find ways in which they can work together more effectively.

The Employer Services team implemented Sound Bite Wednesdays as a way to discuss one employer operations topic for 20 minutes during lunch. Attendees can join the meeting remotely via Zoom and choose which topic(s) appeal most to them.

Finally, to reinforce the importance of good customer service, the Member Services Department held a contest to create a motto for the team. Out of 36 suggestions, the team chose "Exceptional Service for Exceptional People."

Invasion of Ukraine Triggers Investment Changes Following Russia's unprovoked incursion into sovereign Ukraine on February 24, 2022, state and federal lawmakers enacted economic sanctions on Russia that included divestment from Russian investments.

To comply with the sanctions, SERS immediately began documenting the extent of its Russian holdings and ordered its managers not to purchase any new Russian and Belarusian investments. As of March 1, 2022, SERS held \$42.1 million in Russian assets, which

was 0.24% of the Total Fund. These assets were held in the Emerging Markets Equity, Global Fixed Income, and Private Equity asset classes of SERS' investment portfolio, with 85% in Emerging Markets. SERS has an Emerging Markets Equity allocation because of the diversification benefits it provides relative to US Equity and Non-US Developed Markets Equity. Emerging Markets Equity historically provides a higher 10-year investment return assumption than US Equity and Non-US Developed Markets Equity.

SERS, along with the other Ohio pension systems, reported its holdings and divestment efforts at the March 10, 2022, Ohio Retirement Study Council meeting.

After Russia closed its stock market on February 25, 2022, there was virtually no opportunity to sell Russian assets and draw the proceeds of such sales out of Russia. Because there was no market for Russian assets, per generally accepted accounting principles (GAAP) and SERS' investment valuation policy, the value of SERS' Russian holdings was marked down to zero. However, while the assets were marked down, they were not written off and remain on the books with the expectation that at some point they will become tradeable, and a fair value can be established.

Ultimately, responsibly investing SERS' assets to provide secure retirements for our members is our utmost priority. As always, our fiduciary duties guide our decisions in buying and selling assets.

Board/Staff Collaboration Produces 5-Year Technology Roadmap SERS maintains a substantial enterprise-wide technology platform, and expenditures on information technology and information security represent a meaningful and growing component of SERS' administrative budget.

To determine what can and should be accomplished with technology enhancements while staying within budget constraints, the SERS Board and staff began working in close collaboration in FY2022. At the recommendation of SERS' executive director, the Board approved the formation of a new Board Technology Committee in March 2021 and by the start of FY2022, the committee charter, chair, and members were in place.

During the year, staff educated committee members on the current structure of SERS' technology and information security systems and drafted a 5-Year Technology Roadmap (FY2023-FY2027) that detailed the technology and security resources needed and the costs of those resources. The Board approved the roadmap at the March 2022 meeting.

The foundation of the roadmap affirms SERS' commitment to reimagining and re-engineering the member, employer, and staff experience by deploying digital technologies that preserve and enrich high-touch engagement and outcomes these audiences want and need. This includes updating SERS technology to make it easier for members and employers to interact with SERS using mobile devices expanding the use of e-delivery of documents and messaging based on user preferences; and improving virtual chat capabilities. Additionally, the Roadmap includes replacing our telecommunications platform and our approach to Disaster Recovery and Business Continuity.

SERS Teams Prioritize Management and Protection of Data In FY2022, SERS' Enterprise Risk Management (ERM), Information Governance, and Digital Workplace teams made significant progress on several projects designed to improve the management and security of SERS' data.

The Digital Workplace and Information Governance teams managed a system-wide project to clean up electronic data stored on a shared network drive. This drive was created to house temporary files shared between departments. Over 200,000 documents were removed. Each department was tasked with reviewing and deleting outdated and duplicate data.

In addition to the file share project, the Digital Workplace and Information Governance teams have migrated multiple work groups to Microsoft Teams and SharePoint Online (SPO). Once data is moved to a Teams or SPO platform, files are placed on a retention schedule based on content and automatically deleted at the end of the retention period. This will free up digital storage space and ensure outdated records are properly deleted. This project will continue into FY2023.

The ERM team made significant strides in improving SERS' resiliency in the event of a disaster situation. With assistance from the Information Technology team, a cloud-based data backup solution was successfully tested. Although user testing will continue into FY2023, the team expects that the current offsite backup site will be decommissioned by the end of 2022. Transitioning all retirees to electronic benefits payments also was critical in eliminating the risk that SERS might not be able to mail out checks in the event of a disaster situation.

Finally, the ERM Team completely updated SERS' Emergency Response Plan which details the responsibilities of each department in the event of a cyber incursion or other situation that causes a business disruption. Staff will test the plan annually using different disaster scenarios and incorporate changes as necessary.

Health Care Developments In preparation for the 2023 medical year, SERS' Health Care staff completed the search for a new pharmacy benefit manager (PBM), enacted a rule change regarding Medicare Part B enrollment, and negotiated a new contract with Aetna that improved SERS' financial position and stabilized administrative fees.

SERS issued a Request for Proposal (RFP) for the PBM contract in late 2021. The system received five responses before the January 6, 2022, deadline. In May, the SERS Board approved the selection of Express Scripts as the winning bidder.

SERS' Health Care Fund and retirees enrolled in SERS-sponsored health care plans benefit from drug manufacturer rebates negotiated by PBMs. SERS passes all of the rebates it receives onto retirees in the form of reduced premiums.

In late 2020, the Trump administration introduced a rule to prohibit PBMs from retaining rebates paid by drug manufacturers. Because this rule negatively impacted SERS' Health Care Fund and retiree premiums, our government relations team joined with other health care providers to get legislation passed that delayed the rule from taking effect until 2026. In another effort to protect enrollees, SERS also influenced federal decision making regarding how employer group enrollee drug costs are applied to the out-of-pocket maximum established by the Build Back Better and Inflation Reduction Acts.

During FY2022, the Board approved the filing of an amended administrative rule that prohibits SERS retirees from enrolling in SERS-sponsored health care coverage if they fail to enroll in Medicare Part B during their Medicare initial or special enrollment period. In addition, those who fail to maintain the coverage must reenroll during Medicare's first available general period or they too will be prohibited from enrolling in SERS-sponsored health care.

When members lose their SERS-sponsored coverage, staff assists them in contacting the Ohio Senior Health Insurance Program, which provides Medicare beneficiaries with free, objective health insurance information, one-on-one counseling, and assistance in finding health care coverage.

Keeping SERS' Pension and Health Care Funds Sustainable In FY2022, SERS' Board identified two priorities in its efforts to keep SERS' pension and health care funds sustainable: address late career pension spiking and continue to provide a health care benefit program.

While pension spiking, the intentional inflation of the highest three years of an active member's salary history, has always been monitored, the Board wanted to make sure it does not become a problem that affects the System's funding. Therefore, the Board authorized staff to seek legislative approval for an enhancement to SERS' pension calculations called the Contribution-Based Benefit Cap. This calculation will ensure that every retiree's pension benefits are reflective of their lifetime contributions. A similar calculation is already being used by the Ohio Public Employees Retirement System.

On the health care side, the Board continues to support policies that direct enrollees to the most affordable coverage with the SERS Medicare Advantage plan and the SERS Marketplace Wraparound HRA for those under age 65. Medicare Part B enrollment is required for those 65 and older to be eligible for SERS' health care coverage. SERS' more expensive pre-Medicare group plan enrollment continues to decline, as enrollees elect the Wraparound coverage or retire later with Medicare eligibility. These continued efforts help support a sustainable health care benefit into the future.

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 \$17.3 billion. The investment return was negative 0.5% (net), for the fiscal year exceeding the policy benchmark by 3.1%. The actuarial rate of return was 7.00%. Net investment loss was \$0.3 billion compared to net investment income of \$4.1 billion in FY2021. 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.

Upon becoming SERS' investment consultant in 2016, Wilshire Associates (Wilshire), in partnership with SERS' investment staff, completed an asset liability review. SERS' staff and Wilshire explored numerous change options, most involving the reduction of the multi-asset strategies portfolio and increases in dedicated mandates such as high-yield bonds, emerging market debt, and master limited partnerships. Ultimately, staff recommended and Wilshire supported a proposal to change the existing asset allocation. The FY2022 allocation is 22.5% for US equity, 22.5% for non-US equity, 12% for private equity, 21% for fixed income and cash, 17% for real assets, and 5% for private credit.

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 FY2022, the funded ratios for the three benefits mandated by statutes (basic benefits) increased, which was due to impact of changes to COLA eligibility made in previous years, slower growth in the number of new retirees, and the performance of SERS' investments. The funding level for basic benefits increased from 74.5% over a 23-year period to 75.5% over a 22-year period. The funding level for discretionary health care benefits decreased from 46.6% to 45.4% over a 30-year period. 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, 2021. This was the 37th 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, 2021. SERS first issued the SAFR for fiscal year ended June 30, 2013 and has received this award for nine 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 2022. 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 133rd General Assembly:

HB 499 Allow Elected OPERS/SERS Recipients to Receive Benefits (6/1/2022 House Insurance Committee, Third Hearing, All Testimony, Substitute Bill) To allow a Public Employees Retirement System or School Employees Retirement System disability benefit recipient elected to certain offices to continue receiving a disability benefit during the term of office. SERS testified in opposition to the bill.

HB 539 State Retirement Systems - Public Broadcast (02/15/2022 Referred to House Insurance Committee) To require the state retirement systems to publicly broadcast board meetings.

HB 540 State Retirement Systems - Financial Information (5/25/2022 House Insurance Committee, First Hearing) To require the state retirement system boards to disclose certain financial information regarding alternative investments.

HB 541 State Retirement Systems - Former Employees (5/25/2022 House Insurance Committee, First Hearing) Regarding the prohibition against the state retirement systems doing business with a former state retirement system employee, officer, or board member.

HB 601 STRS Cost-of-Living Adjustments (04/06/2022 House Insurance Committee, First Hearing) Regarding increasing contributions for employers to the State Teachers Retirement System and School Employees Retirement System, establishing minimum amounts for certain STRS cost-of-living adjustments, and eliminating an age-related eligibility criterion for retirement in STRS.

SB 233 School Nurse Licensure, Retirement (02/15/2022 Senate Primary and Secondary Education Committee, Second Hearing) Regarding licensure and state retirement system membership for school nurses.

SB 308 Divestment, Restrictions-Russia (03/16/2022 Referred to Senate General Government Budget Committee) To prohibit state and local governments from investing in, granting incentives to, or contracting with Russia or companies based in Russia, to require Ohio's pension and other investment funds to divest from any such holdings, and to declare an emergency.

SB 347 SERS Contribution Benefit Cap (05/31/2022 Referred to Senate Insurance Committee) To establish a contribution-based benefit cap (CBBC) in calculating a School Employees Retirement System member's retirement benefit. SERS is advocating in support of the CBBC proposal.

SB 348 SERS Membership Determination Procedure (06/01/2022 Referred to Senate Insurance Committee) To establish a School Employees Retirement System membership determination procedure and to limit the amount that the retirement system can charge for late contributions.

Federal Legislation

From the 117th Congress:

HR 82 Social Security Fairness Act of 2021 (01/04/2021 Referred to the House Committee on Ways and Means) This bill would repeal the Government Pension Offset and Windfall Elimination Provision. Companion bill to S 1302.

HR 2337 Public Servants Protection and Fairness Act (04/01/2021 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 Windfall Elimination Provision.

HR 5834 Equal Treatment of Public Servants Act of 2021 (11/03/2021 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 Windfall Elimination Provision.

HR 5723 Social Security 2100: A Sacred Trust (10/26/2021 Referred to the House Committee on Ways and Means, and in addition to the Committees on Education and Labor, and Energy and Commerce) This bill would increase Social Security benefits and improves the COLA, minimum benefits, and benefits for widows and widowers. This bill would repeal the WEP and GPO. This legislation would apply the payroll tax to wages above \$400,000.

HR 2954 Securing a Strong Retirement Act of 2021 (03/29/2022 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.)

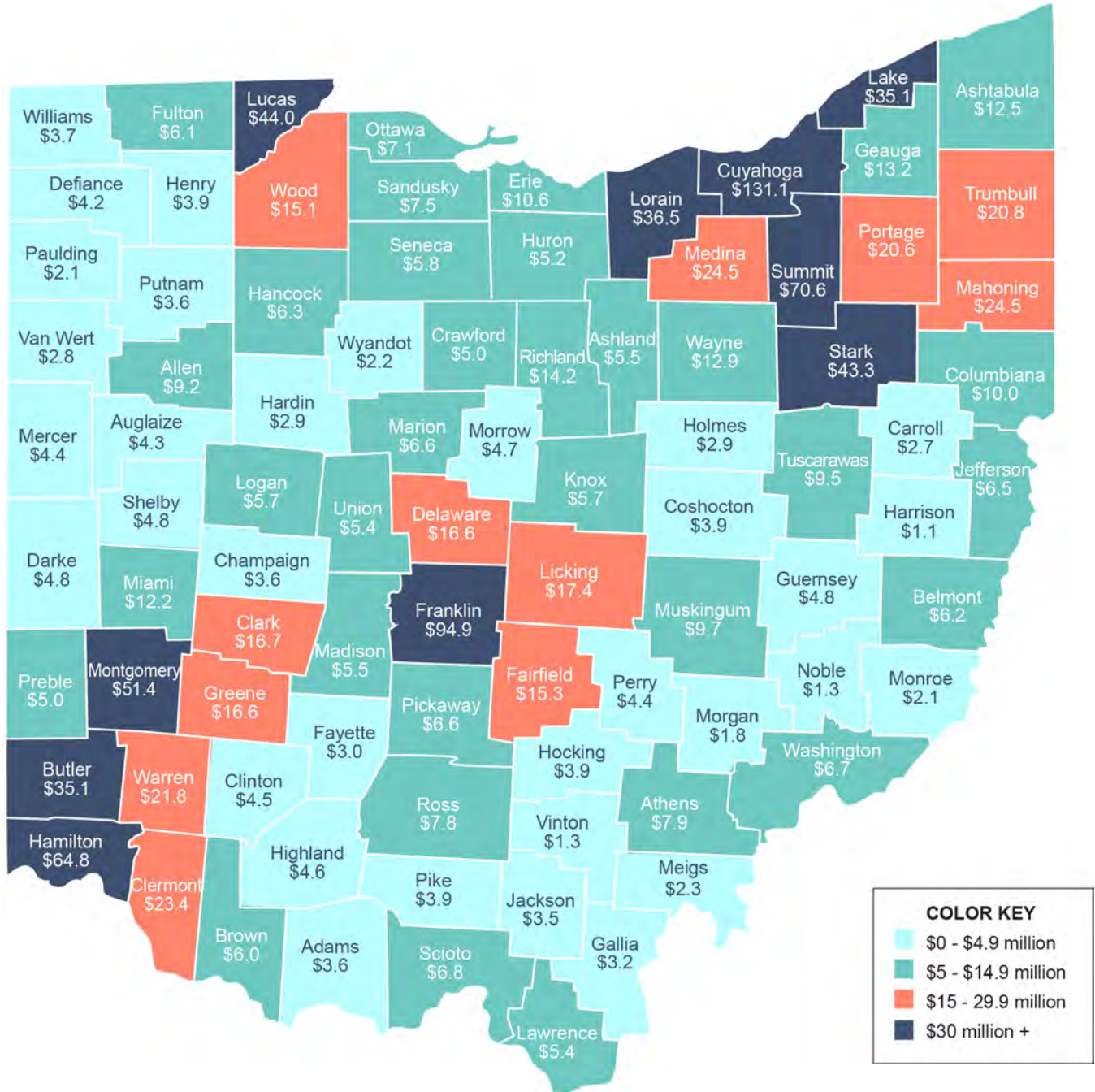
Regulatory Activity

On May 23, SERS submitted comments in response to the Federal Trade Commission's request for information on the business practices of Pharmacy Benefit Managers (PBMs) and their impact on the independent pharmacies and consumers. In the comment letter it was indicated that PBMs provide public sector retirees with necessary services to lower costs and navigate the complex world of prescription drug pricing. SERS remains concerned about high drug costs and urged the FTC to examine anti-competitive practices of large drug manufacturers to ensure we can continue to provide drug coverage that keeps retirees' out-of-pocket costs low.

Pension Benefits by County FY2022 *(\$ in millions)*

Public pensions positively impact Ohio's economy. Of the 81,151 individuals receiving pension benefits from SERS, nearly 91% live in Ohio.

In FY2022 alone, benefit payments of approximately \$1.4 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, \$2.61 was returned to local economies.



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\$17.6 BILLION

Net Position

↓ (0.5%)

Net Rate of Return

\$1.3 BILLION

Annual Basic Pension
Benefit Payments



75.48%

Funded as of June 30, 2022
(Basic Pension)

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinions. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS 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.

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

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise SERS's basic financial statements. The other supplementary information, including the schedules of administrative expenses, investment expenses, and payments to consultants, are presented for purposes of additional analysis and are 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, including the schedules of administrative expenses, investment expenses, and payments to consultants, 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 report. The other information comprises the introductory, investment, actuarial, and statistical 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.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated December 9, 2022, on our consideration of the SERS' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and 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 the 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.

RSM US LLP

Cleveland, Ohio
December 9, 2022

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, 2022. 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 is found 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, 2022 were \$17.9 billion, a decrease of \$0.9 billion, or 4.6%, compared to FY2021 assets. Cash and Short Term Investments are 18.3% lower than FY2021. Investments decreased by \$0.7 billion, or a 4.0% decrease. There was a slight increase of \$0.3 million in pension assets and a slight increase of \$1.5 million in OPEB assets recognized as part of recording the activity from the Ohio Public Employees Retirement System (OPERS) that flowed through to SERS in compliance with Governmental Accounting Standards Board (GASB) pronouncements.
- Deferred outflows from SERS' participation in OPERS increased from FY2021 to FY2022. Deferred outflows from pensions increased \$1.4 million and deferred outflows from Other Post Employment Benefits (OPEB) decreased \$0.9 million.
- SERS' total liabilities at June 30, 2022 were \$300.3 million, an increase of \$1.8 million, or 0.6%, compared to FY2021 liabilities.
- Deferred inflows decreased from FY2021 to FY2022 from SERS' participation in OPERS and GASB Statement No. 87, Leases. Deferred inflows from pensions increased by \$3.6 million and deferred inflows from OPEB decreased by \$2.3 million. Deferred inflows from tenant leases decreased by \$1.6 million.
- Total additions to plan net position were \$705.1 million, comprised of contributions of \$954.1 million, \$97.4 million of other income and net investment loss of \$346.4 million. This was a decrease of \$4.4 billion in net investment income from FY2021 to FY2022.
- Total deductions from plan net position for FY2022 totaled \$1.6 billion, including benefits payments of \$1.5 billion and administrative expenses of \$24.6 million, an increase of 3.4% from FY2021 deductions. Included in administrative expenses are personnel, professional, communication, computer support, facility expenses, and depreciation.
- The net decrease in plan net position was \$866.3 million compared to a net increase of \$3.5 billion in FY2021. The majority of the variance is due to strong investment earnings in FY2021 and a volatile market in FY2022.

CONDENSED SUMMARY OF TOTAL FIDUCIARY NET POSITION				
ASSETS	(\$ in millions)		Change	
	2022	2021	Amount	Percent
Cash	\$959.4	\$1,174.2	(\$214.8)	(18.3%)
Receivables	217.8	163.4	54.4	33.3
Investments	16,650.0	17,352.6	(702.6)	(4.0)
Capital Assets, Net	55.2	59.0	(3.8)	(6.4)
Other Assets	4.8	3.3	1.5	45.5
Total Assets	17,887.2	18,752.5	(865.3)	(4.6)
DEFERRED OUTFLOWS OF RESOURCES				
Deferred Outflows	2.5	2.0	0.5	25.0
LIABILITIES				
Benefits & Accounts Payable	25.6	41.4	(15.8)	(38.2)
Other Liabilities	274.7	257.1	17.6	6.8
Total Liabilities	300.3	298.5	1.8	0.6
DEFERRED INFLOWS OF RESOURCES				
Deferred Inflows	15.1	15.4	(0.3)	(1.9)
Fiduciary Net Position	\$17,574.3	\$18,440.6	(\$866.3)	(4.7%)

CONDENSED SUMMARY OF CHANGES IN TOTAL FIDUCIARY NET POSITION				
ADDITIONS	(\$ in millions)		Change	
	2022	2021	Amount	Percent
Contributions	\$954.1	\$884.5	\$69.6	7.9%
Other Income	97.4	84.1	13.3	15.8
Net Investment Income (Loss)	(346.4)	4,088.6	(4,435.0)	(108.5)
Total Additions	705.1	5,057.2	(4,352.1)	(86.1)
DEDUCTIONS				
Benefits	1,456.6	1,425.1	31.5	2.2
Refunds & Transfers	90.2	77.8	12.4	15.9
Admin. Expenses	24.6	16.1	8.5	52.8
Total Deductions	1,571.4	1,519.0	52.4	3.4
Net Increase (Decrease)	(866.3)	3,538.2	(4,404.5)	(124.5)
Balance, Beginning of Year	18,440.6	14,902.4	3,538.2	23.7
Balance, End of Year	\$17,574.3	\$18,440.6	(\$866.3)	(4.7%)

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 supplemental information that presents SERS' proportionate share of the Ohio Public Employees Retirement System (OPERS) net pension liability;
- Required supplemental information that presents SERS' contribution to pension based on statutory requirements;
- Required supplemental information that presents SERS' proportionate share of the OPERS net other post-employment benefits (OPEB) liability (asset);
- Required supplemental information that presents SERS' contribution to OPEB based on statutory requirements; and
- Optional supplemental schedules that present information related to funding progress, employer contributions, administrative expenses, and investment-related expenses.

The financial statements, notes, and Required Supplementary Information (RSI) are presented in compliance with GASB Statement No. 84, *Fiduciary Activities*.

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 and Combined Plan employer contributions was 0% for calendar year 2021. Contributions are expected to continue at that rate for the next several years. 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.

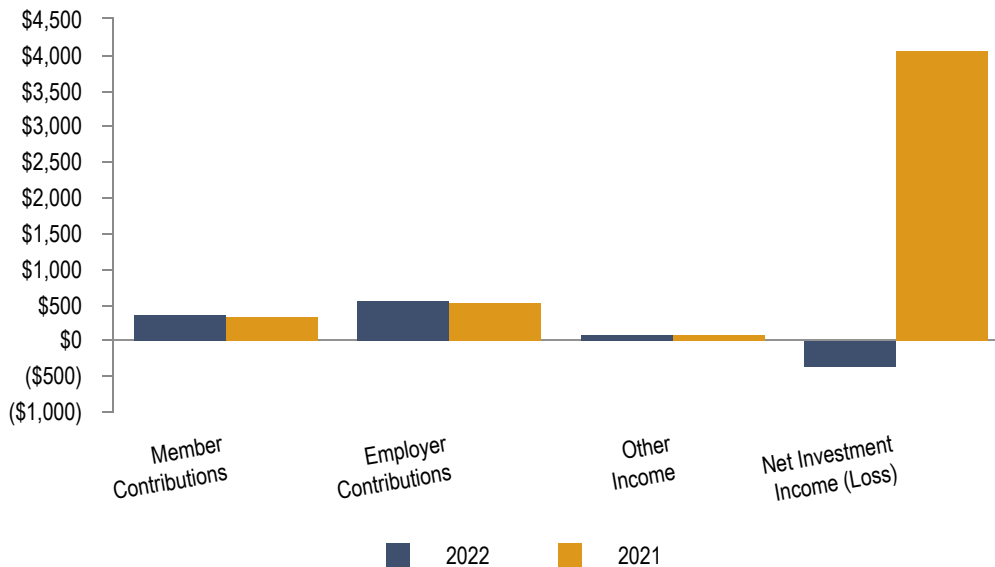
FINANCIAL ANALYSIS

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, 2022 and 2021, are shown on page 17.

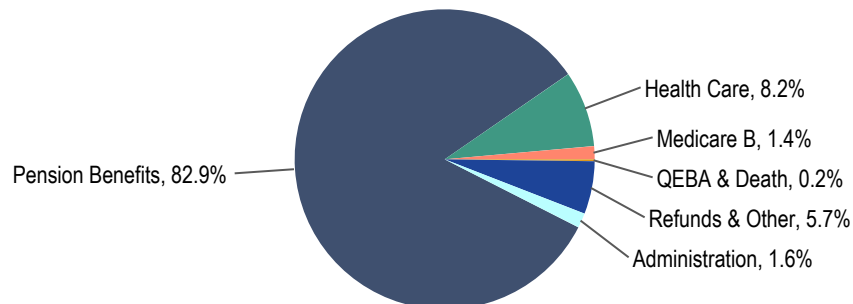
SERS is comprised of five separate funds – the Pension Trust Fund, the Medicare B Fund, the Death Benefit Fund, the Qualified Excess Benefit Arrangement (QEBA) Fund, and the Health Care Fund. Pension benefits are funded through a combination of member and employer contributions and investment income. 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, the federal government, and investment income. The graph below, "Comparative Additions by Source FY2022 and FY2021", depicts the proportion that each source added to the fund's assets.

Comparative Additions by Source FY2022 and FY2021
(\$ 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 FY2022



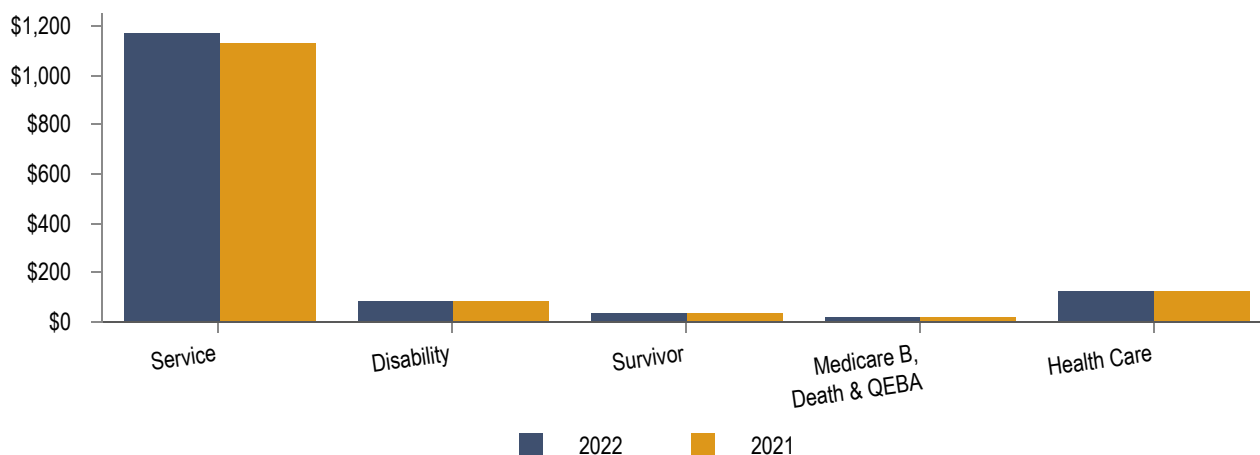
Management's Discussion and Analysis (unaudited)

SERS' fiduciary net position decreased by \$866.3 million during FY2022, compared to a net increase of \$3.5 billion in FY2021.

- 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 8.3% in FY2022 from FY2021. 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 FY2022. The Board allocated the remaining portion available to the basic benefits to increase the pension funding level. 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 \$53.5 million in FY2021 to \$53.8 million in FY2022.
- 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 approximately 1.8% from FY2021 to FY2022.
- Another source of additions to the Health Care Fund is a net reimbursement from the federal program for Medicare Part D qualified prescription drug plans (PDP) and from our primary Medicare Advantage provider. Premiums for this program are estimated at the beginning of the contract and then adjusted based on actual claims experience and Medicare reimbursements. If experience is favorable, SERS receives a payment for the adjusted premium; however, if experience is not favorable, SERS pays an additional premium to the provider. Total additions from these programs in FY2022 was \$34.5 million versus additions of \$20.1 million in FY2021.
- 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, 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. Due to economic uncertainties amid 40-year high inflation, SERS had a net investment loss of \$0.3 billion in FY2022 compared to a gain of \$4.1 billion in FY2021. Income from interest and dividends increased by \$185.2 million to \$510.6 million and investment expenses, including investment administrative expenses, decreased \$11.0 million, or 11.0%, in FY2022.
- Total payments to service, disability, and survivor benefit recipients increased \$31.2 million, or 2.4% during FY2022. Service retirement payments increased 2.9%, disability payments decreased 2.4%, and survivor benefits payments increased 0.2%. A 2.5% simple COLA was adopted for CY2022, which applied to half of FY2022.

Comparative Benefit Payments FY2022 and FY2021

(\$ in millions)



- Total refunds paid increased 13.6% from FY2021 to 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 FY2022 when compared to FY2021.
- 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 FY2022. 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 decreased 12.2% in FY2022.
- 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 slightly by \$0.7 million, or 0.5%, to \$128.8 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 2060, or a 38-year solvency period, as of June 30, 2022.

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:

Fund	AAL FY2022	AAL FY2021	Increase/ (Decrease)	% Change
Pension	\$21,941	\$21,097	\$844	4.0%
Medicare B	389	391	(2)	(0.5)
Death	41	41	—	—
Health Care	1348	1289	59	4.6

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:

Fund	UAL FY2022	UAL FY2021	Increase/ (Decrease)	% Change	Funded Ratio FY2022	Funded Ratio FY2021
Pension	\$5,330	\$5,316	\$14	0.3%	75.7%	74.8%
Medicare B	143	169	(26)	(15.1)	63.2	56.9
Death	11	13	(2)	(17.3)	71.7	67.7
Health Care	736	689	47	6.8	45.4	46.6

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

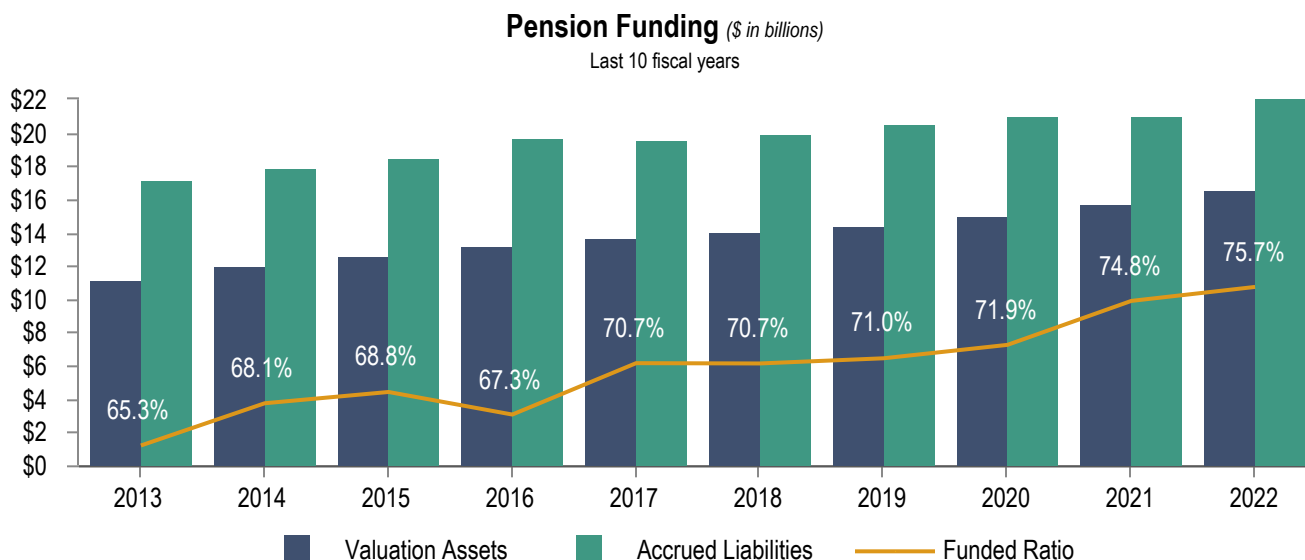
Management's Discussion and Analysis (unaudited)

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 FY2021, the fair value of assets was higher than the funding value by \$1.8 billion. At the end of FY2022, the fair value of assets was higher than the funding value by \$0.1 billion.

As of June 30, 2022, the date of the latest actuarial valuation, the funded ratio for basic pension was 75.48%. In general, this means that for every dollar of future pension liability, SERS had accumulated approximately \$0.75 to meet that obligation. The funded ratio for basic pension increased from June 30, 2021 by 1.02%. The June 30, 2022 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 22 years compared to 23 years at June 30, 2021.



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.

A pension sustainability committee has been formed and is evaluating 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. The committee continues to meet on a regular basis to determine what adjustments may need to be made to ensure the continued sustainability of the system.

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, and may be beneficial to them during the pension sustainability discussions. 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.

Markets are expected to remain volatile over the next several years. The Strategic Investment Plan has been designed to improve the portfolio structures to optimize returns while minimizing risks. Global Fixed Income investments are underweight and Cash Equivalent investments are overweight to try to mitigate risk.

COVID-19 continues to impact financial markets, schools, and the overall economy. It is unknown how long this pandemic will continue.

In May 2020, GASB issued Statement No. 96, *Subscription-Based Information Technology Arrangements (SBITA)*. Under this Statement, a government generally should recognize a right-to-use subscription asset, an intangible asset, and a corresponding subscription liability. A government should recognize the subscription liability at the commencement of the subscription term, which is when the subscription asset is placed into service. The subscription liability should be initially measured at the present value of subscription payments expected to be made during the subscription term. Future subscription payments should be discounted using the interest rate the SBITA vendor charges the government, which may be implicit, or the government's incremental borrowing rate if the interest rate is not readily determinable. A government should recognize amortization of the discount on the subscription liability as an outflow of resources (for example, interest expense) in subsequent financial reporting periods. The effective date of this standard is reporting periods beginning after June 15, 2022.

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

STATEMENT OF FIDUCIARY NET POSITION AS OF JUNE 30, 2022

	Pension Trust Fund	Medicare B Fund	Death Benefit Fund	QEBA Fund	Health Care Fund	TOTAL
ASSETS						
Cash & Operating Short Term Investments	\$808,343,388	\$16,572,171	\$598,494	\$55,918	\$133,802,138	\$959,372,109
Receivables						
Contributions						
Employer	3,779,074	3,129,959	392,192	—	52,202,983	59,504,208
Member	4,067,049	—	—	—	—	4,067,049
Investments Receivable	132,473,208	1,901,151	241,499	—	3,574,408	138,190,266
Other Receivables	3,557,728	15,578	—	—	12,459,390	16,032,696
Total Receivables	143,877,059	5,046,688	633,691	—	68,236,781	217,794,219
Investments at Fair Value						
US Equity	4,919,026,395	70,593,975	8,967,409	—	132,725,776	5,131,313,555
Non-US Equity	2,045,656,890	29,357,649	3,729,243	—	55,196,166	2,133,939,948
Private Equity	2,061,025,511	29,578,207	3,757,260	—	55,610,844	2,149,971,822
Fixed Income	3,345,678,893	48,014,536	6,099,189	—	90,273,520	3,490,066,138
Real Estate	3,557,577,614	51,055,538	6,485,482	—	95,990,997	3,711,109,631
Total Investments at Fair Value	15,928,965,303	228,599,905	29,038,583	—	429,797,303	16,616,401,094
Securities Lending Collateral at Fair Value	32,195,395	462,043	58,692	—	868,700	33,584,830
Capital Assets						
Land	3,315,670	—	—	—	—	3,315,670
Property & Equipment, at Cost	97,634,257	—	—	—	—	97,634,257
Accumulated Depreciation and Amortization	(45,766,673)	—	—	—	—	(45,766,673)
Property & Equipment, Book Value	55,183,254	—	—	—	—	55,183,254
Prepays and Other Assets	4,821,243	—	—	—	—	4,821,243
TOTAL ASSETS	16,973,385,642	250,680,807	30,329,460	55,918	632,704,922	17,887,156,749
DEFERRED OUTFLOWS OF RESOURCES						
Deferred Outflows - Pension	2,481,073	—	—	—	—	2,481,073
Deferred Outflows - OPEB	33,631	—	—	—	—	33,631
LIABILITIES						
Accounts Payable & Accrued Expenses	10,497,143	—	2,019	1,883	14,025,229	24,526,274
Benefits Payable	1,012,425	—	—	—	—	1,012,425
Investments Payable	232,911,099	3,342,556	424,598	—	6,284,436	242,962,689
Obligations under Securities Lending	30,421,927	436,591	55,459	—	820,848	31,734,825
TOTAL LIABILITIES	274,842,594	3,779,147	482,076	1,883	21,130,513	300,236,213
DEFERRED INFLOWS OF RESOURCES						
Deferred Inflows - Pension	9,978,657	—	—	—	—	9,978,657
Deferred Inflows - OPEB	3,366,299	—	—	—	—	3,366,299
Deferred Inflows - Leases	1,770,835	—	—	—	—	1,770,835
FIDUCIARY NET POSITION RESTRICTED FOR PENSION	\$16,685,941,961	\$246,901,660	\$29,847,384	\$54,035	\$—	\$16,962,745,040
FIDUCIARY NET POSITION RESTRICTED FOR OTHER POSTEMPLOYMENT BENEFITS	\$—	\$—	\$—	\$—	\$611,574,409	\$611,574,409
FIDUCIARY NET POSITION RESTRICTED FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS	\$16,685,941,961	\$246,901,660	\$29,847,384	\$54,035	\$611,574,409	\$17,574,319,449

See accompanying notes to the basic financial statements.

STATEMENT OF CHANGES IN FIDUCIARY NET POSITION FOR THE YEAR ENDED JUNE 30, 2022

	Pension Trust Fund	Medicare B Fund	Death Benefit Fund	QEBA Fund	Health Care Fund	TOTAL
ADDITIONS						
Contributions						
Employer	\$495,884,566	\$26,224,585	\$2,247,134	\$178,919	\$53,766,548	\$578,301,752
Member	375,838,354	—	—	—	—	375,838,354
Other Income						
Health Care Premiums	—	—	—	—	62,866,460	62,866,460
Federal Subsidies & Other Receipts	—	—	—	—	34,516,422	34,516,422
	871,722,920	26,224,585	2,247,134	178,919	151,149,430	1,051,522,988
Income (Loss) from Investment Activity						
Net Depreciation in Fair Value	(718,635,506)	(10,456,682)	(1,316,700)	—	(17,530,621)	(747,939,509)
Interest and Dividends	490,520,440	7,153,942	899,664	176	12,017,961	510,592,183
	(228,115,066)	(3,302,740)	(417,036)	176	(5,512,660)	(237,347,326)
Investment Expenses	(99,089,794)	(1,441,830)	(181,555)	—	(2,417,228)	(103,130,407)
Investment Administrative Expenses	(7,562,191)	(106,587)	(13,742)	—	(211,724)	(7,894,244)
Net Income (Loss) from Investment Activity	(334,767,051)	(4,851,157)	(612,333)	176	(8,141,612)	(348,371,977)
Income from Securities Lending Activity						
Gross Income	1,613,719	23,481	2,956	—	39,366	1,679,522
Rebate Income	293,542	4,271	538	—	7,161	305,512
Management Fees	(58,113)	(846)	(106)	—	(1,418)	(60,483)
Net Income from Securities Lending Activity	1,849,148	26,906	3,388	—	45,109	1,924,551
Total Investment Income (Loss), Net	(332,917,903)	(4,824,251)	(608,945)	176	(8,096,503)	(346,447,426)
TOTAL ADDITIONS	538,805,017	21,400,334	1,638,189	179,095	143,052,927	705,075,562
DEDUCTIONS						
Benefits						
Retirement	1,173,041,717	20,556,582	—	356,729	—	1,193,955,028
Disability	88,531,533	1,153,448	—	—	—	89,684,981
Survivor	40,784,352	736,600	—	—	—	41,520,952
Death	—	—	2,601,941	—	—	2,601,941
Health Care Expenses	—	—	—	—	128,796,889	128,796,889
	1,302,357,602	22,446,630	2,601,941	356,729	128,796,889	1,456,559,791
Refunds and Lump Sum Payments	82,209,215	—	—	—	—	82,209,215
Net Transfers to Other Ohio Systems	7,998,389	—	—	—	—	7,998,389
Administrative Expenses	21,533,026	6,774	45,945	2,512	3,011,817	24,600,074
	111,740,630	6,774	45,945	2,512	3,011,817	114,807,678
TOTAL DEDUCTIONS	1,414,098,232	22,453,404	2,647,886	359,241	131,808,706	1,571,367,469
Net Increase (Decrease)	(875,293,215)	(1,053,070)	(1,009,697)	(180,146)	11,244,221	(866,291,907)
FIDUCIARY NET POSITION RESTRICTED FOR PENSION AND OTHER POSTEMPLOYMENT BENEFITS						
Fiduciary Net Position, Beginning of Year	17,561,235,176	247,954,730	30,857,081	234,181	600,330,188	18,440,611,356
Fiduciary Net Position Restricted For Pension	\$16,685,941,961	\$246,901,660	\$29,847,384	\$54,035	\$—	\$16,962,745,040
Fiduciary Net Position Restricted For Other Postemployment Benefits	\$—	\$—	\$—	\$—	\$611,574,409	\$611,574,409
Fiduciary Net Position, End of Year	\$16,685,941,961	\$246,901,660	\$29,847,384	\$54,035	\$611,574,409	\$17,574,319,449

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 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.

Health Care Expenses Incurred and Unpaid Amounts accrued for health care expenses payable for recipients under age 65 in the Health Care Fund are based upon estimates that have been developed from prior claims experience.

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.

Benefit Payments Benefit payments (including refunds of member contributions) are recognized when due and payable in accordance with the benefit terms.

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.

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, 2022, was \$3,277.07. 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, 2022		
	Units	Value
Pension Trust Fund	5,040,112	\$16,516,792,940
Medicare B Fund	72,332	237,035,943
Death Benefits Fund	9,188	30,110,195
Health Care Fund	135,993	445,658,140
Total	5,257,625	\$17,229,597,218

Office Building, Equipment, and Fixtures (Non-Investment Assets) The cost of equipment and fixtures in excess of \$5,000 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 administrative expenses with the necessary money allocated to it from the Guarantee Fund.

RESERVE BALANCES AS OF JUNE 30, 2022	
	Reserve Amount Totals
Employees' Savings Fund	\$3,661,833,624
Employers' Trust Fund	(1,339,452)
Annuity and Pension Reserve Fund	13,536,400,615
Survivors' Benefit Fund	377,424,662
Guarantee Fund	—
Expense Fund	—
Total	\$17,574,319,449

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 the 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 a grandfather 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 grandfather 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, 2022)

Employer Members

Local	371
City	191
Educational Service Center	52
Village	49
Higher Education	15
Vocational/Technical	49
Community Schools	309
Other	21
Total	1,057

Employee Members and Retirees

Retirees and Beneficiaries Currently Receiving Benefits	81,151
Inactive Employee Members Entitled to But Not Yet Receiving Benefits	6,118
Total	87,269

Active Employee Members

Vested Active Employee Members	43,724
Non-vested Active Employee Members	111,339
Total	155,063

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 FY2022, 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 \$524.5 million and \$375.8 million, respectively, in FY2022. 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 FY2022, 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	13.24%
Medicare B Fund	0.70%
Death Benefit Fund	0.06%
Health Care Fund	—%

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 benefits in FY2022 was 75.48%, 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 FY2022 was zero. 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 FY2022, the minimum compensation level was established at \$25,000. The surcharge accrued for FY2022 and included in employer contributions in the Statement of Changes in Fiduciary Net Position is \$53.8 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, 2022.

Bond Mutual Funds generally 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.

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

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 equity, fixed income, and marketable alternative 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				
(\$ in thousands)		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)
Investments by Fair Value Level	6/30/2022			
Debt Securities				
Bond Mutual Funds	\$670,431	\$670,431	\$—	\$—
Certificates of Deposit	2,364	—	2,364	—
Foreign Obligations	289,051	31,596	255,402	2,053
Mortgage and Asset Backed	176,964	—	176,912	52
Municipal Obligations	22,332	—	22,332	—
US Corporate Obligations	489,138	—	488,120	1,018
US Government	978,454	452,322	526,132	—
Total Debt Securities	2,628,734	1,154,349	1,471,262	3,123
Equity Securities				
Foreign Common & Preferred Stock	2,134,182	1,618,715	—	515,467
US Common & Preferred Stock	4,785,691	3,906,198	20,338	859,155
Total Equity Securities	6,919,873	5,524,913	20,338	1,374,622
Total Investments by Fair Value Level	\$9,548,607	\$6,679,262	\$1,491,600	\$1,377,745
Investments Measured at the net asset value (NAV)				
Commingled Bond Funds	\$54,747			
Commingled Equity Funds	348,086			
Hedge Funds	502,690			
Private Credit Funds	1,004,625			
Private Equity Funds	2,144,043			
Private Real Estate Funds	3,711,110			
Total Investments Measured at the NAV	7,765,301			
Total Investments Measured at Fair Value	\$17,313,908			
Investment Derivative Instruments				
Foreign Equity Derivatives	(\$1,749)	(\$1,749)	\$—	
Foreign Fixed Derivatives	3,860	(70)	3,930	
US Commodity Derivatives	9	9	—	
US Equity Derivatives	(33)	(33)	—	
US Fixed Derivatives	(936)	(867)	(69)	
Total Investment Derivative Instruments	\$1,151	(\$2,710)	\$3,861	

INVESTMENTS MEASURED AT THE NET ASSET VALUE

(\$ in thousands)

Investments by Fair Value Level	6/30/2022	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
Commingled Bond Funds ¹	\$54,747	\$—	Monthly	1-10 Days
Commingled International Equity Funds ¹	348,086	—	Daily, Semi-Monthly, Monthly	1-120 Days
Hedge Funds				
Event Driven ²	14,520	—	Monthly, Quarterly	45-90 Days
Multi-Strategy / Risk Focus ³	101,783	—	Daily, Monthly	1-45 Days
Relative Value ⁴	241,138	—	Quarterly	60-90 Days
Tactical Trading ⁵	145,249	—	Quarterly	30 Days
Private Credit Funds ⁶	1,004,625	1,733,005	Not Eligible	Not Eligible
Private Equity Funds ⁶	2,144,043	1,503,563	Not Eligible	Not Eligible
Private Real Estate Funds ⁶	3,711,110	446,259	Not Eligible	Not Eligible
Total Investments Measured at the NAV	\$7,765,301			

¹ *Commingled Bond Funds and Equity Funds* Three bond funds and 21 equity funds are considered to be commingled in nature. Each is valued at the net asset value of units held at the end of the period based upon the fair value of the underlying investments.

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 14% of the value of these investments are eligible for redemption in the next six months. The remaining 86% 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* The two funds included in this group aim to pursue varying strategies in order to diversify risks and reduce volatility. These 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 6 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 76 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 28 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 5 to 10 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, 2022, the carrying amounts of SERS' operating and investment cash deposits totaled \$288,940,811, and the corresponding bank balances totaled \$257,454,473. Of the bank balances, the Federal Deposit Insurance Corporation insured \$1,443,219. In accordance with state law, bank balances of \$138,675,957 were collateralized at 56% with securities held in the name of SERS' pledging financial institutions. The remaining bank deposits of \$117,335,297 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, but not in the SERS name. As of June 30, 2022, approximately \$7.8 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 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, 2022, SERS held interest-only strips that had a total fair value of \$30,293,094. 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 \$839,799. 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		
	S&P Credit Quality Rating	Fair Value (\$ in thousands)
Foreign Fixed Derivatives	A	\$105
	A-	(79)
	AA-	3,831
	BBB+	74
Total		3,931
US Fixed Derivatives	A	(8)
	BBB	(60)
Total		(68)
Total		\$3,863

* 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	\$670,431	0.08
Certificates of Deposit	2,364	2.77
Foreign Obligations ¹	260,824	0.00
Mortgage and Asset Backed	176,964	2.20
Municipal Obligations	22,332	6.86
US Corporate Obligations	489,138	6.34
US Government & Agency Obligations	978,454	6.39
Total	\$2,600,507	3.83

¹ Excludes Pending FX

FAIR VALUE SUBJECT TO ISSUER CREDIT RISK

	Fair Value Based Upon S&P Credit Quality Rating (\$ in thousands)										Total	
	AAA	AA	A	BBB	BB	B	CCC	CC	D	Not Rated		
Bond Mutual Funds	\$—	\$119,574	\$550,857	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$—	\$670,431
Certificates of Deposit	—	—	486	1,878	—	—	—	—	—	—	—	2,364
Foreign Obligations	7,780	8,225	27,778	113,513	44,888	12,993	5,758	199	120	39,570	260,824	
Mortgage and Asset Backed	50,348	35,078	10,749	10,501	1,281	2,275	947	639	214	64,932	176,964	
Municipal Obligations	—	7,199	9,662	4,140	—	—	—	—	—	1,331	22,332	
US Corporate Obligations	1,412	14,350	103,321	306,835	44,603	8,832	508	—	—	9,277	489,138	
US Government & Agency Obligations	889	977,565	—	—	—	—	—	—	—	—	978,454	
Total	\$60,429	\$1,161,991	\$702,853	\$436,867	\$90,772	\$24,100	\$7,213	\$838	\$334	\$115,110	\$2,600,507	

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	\$110	\$—	\$—	\$128	\$—	\$—	\$—	\$—	\$—
Australian Dollar	72	29,937	—	—	(15)	—	—	—	—
Brazilian Real	75	20,472	—	2,772	35	—	—	—	—
British Pound	938	161,418	(6)	323	—	—	48,845	161	—
Canadian Dollar	1,130	46,221	—	—	—	—	—	—	—
Chilean Peso	—	917	—	524	—	—	—	—	—
Chinese Yuan	322	54,089	—	152	6	—	—	—	—
Colombian Peso	—	—	—	1,556	—	—	—	—	—
Czech Koruna	—	—	—	2,292	5	—	—	—	—
Danish Krone	31	54,063	—	—	—	—	—	—	—
Egyptian Pound	(2)	—	—	786	—	—	—	—	—
Euro	465	276,066	(57)	2,755	(49)	—	201,358	32,773	11,603
Hong Kong Dollar	580	120,294	—	—	2	—	—	—	—
Hungarian Forint	1	173	—	599	—	—	—	—	—
Indian Rupee	316	35,943	—	—	34	—	—	—	—
Indonesian Rupiah	217	8,877	—	3,897	—	—	—	—	—
Israeli Shekel	135	5,713	—	—	—	—	—	—	—
Japanese Yen	4,003	236,755	(17)	—	—	—	—	—	—
Kuwaiti Dinar	—	2,356	—	—	—	—	—	—	—
Malaysian Ringgit	—	1,415	—	2,253	—	748	—	—	—
Mexican Peso	488	7,643	—	9,450	(447)	—	—	—	—
Norwegian Krone	26	7,695	—	—	—	—	—	—	—
Peruvian New Sol	—	—	—	1,501	—	—	—	—	—
Polish Zloty	(2)	1,200	—	—	(2)	—	—	—	—
Russian Ruble	—	3,205	—	—	—	—	—	—	—
Saudi Arabia	—	6,079	—	—	—	—	—	—	—
Singapore Dollar	256	9,019	—	—	—	—	—	—	—
South African Rand	3	9,681	—	2,583	10	—	—	—	—
South Korean Won	49	95,603	—	—	—	—	—	—	—
Swedish Krona	423	16,344	—	—	—	—	—	—	—
Swiss Franc	38	100,099	—	—	—	—	—	—	—
Taiwan Dollar	31	45,376	—	—	—	—	—	—	—
Thailand Baht	—	11,922	—	1,095	—	—	—	—	—
Turkish Lira	8	3,123	—	—	—	—	—	—	—
United Arab Emirates	—	3,459	—	—	—	—	—	—	—
Total	\$9,713	\$1,375,157	(\$80)	\$32,666	(\$421)	\$748	\$250,203	\$32,934	\$11,603

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		
As of June 30, 2022 and 2021 (\$ in thousands)		
	FY2022	FY2021
Forward Currency Purchases	\$4,414,339	\$1,899,224
Forward Currency Sales	4,442,566	1,898,383
Unrealized gain (loss)	28,227	(841)

SWAP CONTRACTS				
As of June 30, 2022 and 2021 (\$ in thousands)				
Type	FY2022		FY2021	
	Notional Value	Fair Value	Notional Value	Fair Value
Credit Default	\$24,857	(\$114)	\$23,508	\$61
Interest Rate	80,530	(643)	143,912	928
Zero Coupon	63,971	4,619	20,940	1,351

FUTURES CONTRACTS						
As of June 30, 2022 and 2021 (\$ in thousands)						
Type	FY2022			FY2021		
	Number of Contracts	Notional Value	Contract Value	Number of Contracts	Notional Value	Contract Value
Equity Features						
International Equity Index Futures - Long	(64)	(\$3,501)	(\$36)	750	\$77,388	(\$834)
International Commodity Futures - Long	21	3,041	(78)	—	—	—
US Commodity Futures - Long	—	—	—	19	2,858	(56)
US Commodity Futures - Short	(8)	(846)	9	(8)	(588)	1
US Stock Index Futures - Long	50	9,548	43	817	91,778	197
US Stock Index Futures - Short	(71)	(7,015)	(75)	—	—	—
Fixed Income / Cash Equivalent Futures						
Cash Equivalent (3 Month) Futures - Long	81	20,260	(17)	—	—	—
Cash Equivalent (3 Month) Futures - Short	(40)	(9,705)	(10)	—	—	—
Cash Equivalent (Eurodollar) Futures - Long	366	88,264	(1,077)	238	58,831	(28)
Cash Equivalent (Eurodollar) Futures - Short	(66)	(16,035)	115	(682)	(170,208)	3
International Fixed Income Index Futures - Long	38	3,539	(25)	59	7,989	8
International Fixed Income Index Futures - Short	(4)	(669)	33	(83)	(22,909)	(125)
US Treasury Futures - Long	2,198	264,371	(1,664)	1,893	272,061	2,156
US Treasury Futures - Short	(1,441)	(201,134)	868	(1,081)	(154,863)	(1,232)
Total Futures (Net)	1,060	\$150,118	(\$1,914)	1,922	\$162,337	\$90

OPTIONS CONTRACTS						
As of June 30, 2022 and 2021 (\$ in thousands)						
Type	FY2022			FY2021		
	Number of Contracts	Notional Value	Fair Value	Number of Contracts	Notional Value	Fair Value
Fixed Income Options						
Fixed Income Call Options on Foreign Currency - Purchased	—	\$—	\$—	3,224,981	\$3,225	\$7
Fixed Income Call Options on Futures (non-dollar) - Purchased	314	—	35	578	—	147
Fixed Income Call Options on Futures (non-dollar) - Written	(690)	—	(204)	(358)	—	(200)
Fixed Income Put Options on Futures (non-dollar) - Purchased	—	—	—	904	—	77
Fixed Income Put Options on Futures (non-dollar) - Written	(137)	—	(568)	(681)	—	(112)
Fixed Income Call Options on US Interest Rate Swap - Purchased	29,000,000	29,000	9	17,050,000	17,050	85
Fixed Income Call Options on US Interest Rate Swap - Written	(50,950,000)	(50,950)	(10)	(29,890,000)	(29,890)	(114)
Fixed Income Call Options on US Futures - Purchased	23	—	44	—	—	—
Fixed Income Call Options on US Futures - Written	(91)	—	(93)	—	—	—
Fixed Income Put Options on US Futures - Written	(77)	—	(14)	—	—	—
Fixed Income Put Options on US Interest Rate Swap - Purchased	—	—	—	5,970,000	5,970	71
Fixed Income Put Options on US Interest Rate Swap - Written	—	—	—	(11,940,000)	(11,940)	(63)

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 gain on the securities lending program was \$1,924,551 during FY2022.

At June 30, 2022, SERS had no credit risk exposure on the securities lending collateral because the collateral exceeded the value of the securities loaned.

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, 2022, the GSAL collateral portfolio had an average weighted maturity of one day. 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 FY2022 were \$110,849.

SECURITIES LENDING		
As of June 30, 2022 <i>(\$ in thousands)</i>	Fair Value of Securities on Loan	Collateral Value (Cash)
Foreign Stocks	\$8,381	\$8,863
US Common & Preferred Stock	20,495	20,998
US Corporate Obligations	1,835	1,874
Total	\$30,711	\$31,735

Commitments As of June 30, 2022, unfunded commitments related to the opportunistic, private equity, and real estate investments totaled \$3.3 billion.

7. Capital Assets (Non-Investment Assets)

CAPITAL ASSETS ACTIVITY for the year ended June 30, 2022					
Cost:	Land	Office Building & Improvements	Furniture & Equipment	Internally-Developed Software	Total Capital Assets
Balances, June 30, 2021	\$3,315,670	\$54,307,687	\$8,306,656	\$34,979,428	\$100,909,441
Additions	—	—	132,502	—	132,502
Disposals	—	(26,684)	(65,332)	—	(92,016)
Balances, June 30, 2022	3,315,670	54,281,003	8,373,826	34,979,428	100,949,927
Accumulated Depreciation:					
Balances, June 30, 2021	—	26,048,320	7,468,064	8,414,606	41,930,990
Additions	—	1,410,051	433,350	2,057,614	3,901,015
Disposals	—	—	(65,332)	—	(65,332)
Balances, June 30, 2022	—	27,458,371	7,836,082	10,472,220	45,766,673
Net Capital Assets, June 30, 2022	\$3,315,670	\$26,822,632	\$537,744	\$24,507,208	\$55,183,254

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

The components of the net pension liability as of June 30, 2022:

PLAN FUNDS	
Total Pension Liability (a)	\$22,371,468,812
Fiduciary Net Position (b)	16,962,691,005
Net Pension Liability (Surplus) (a) - (b)	<u>\$5,408,777,807</u>
Fiduciary Net Position as a Percent of Total Pension Liability (b) / (a)	75.82%

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, 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. 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 are summarized in the following table:

ASSET CLASS	TARGET ALLOCATION	LONG-TERM EXPECTED REAL RATE OF RETURN
Cash	2.00%	(0.33%)
US Equity	24.75	5.72
Non-US Equity Developed	13.50	6.55
Non-US Equity Emerging	6.75	8.54
Fixed Income / Global Bonds	19.00	1.14
Private Equity	11.00	10.03
Real Estate / Real Assets	16.00	5.41
Multi-Asset Strategies	4.00	3.47
Private Debt / Private Credit	3.00	5.28

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 22-year amortization period of the unfunded actuarial accrued liability. The actuarially determined contribution rate of FY2022 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 FY2022 was (1.93%).

KEY METHODS AND ASSUMPTIONS USED IN VALUATION OF TOTAL PENSION LIABILITY

Valuation Date	June 30, 2022
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 System 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	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.

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%)	\$7,961,462,759
Current Discount Rate (7.00%)	\$5,408,777,807
1% Increase (8.00%)	\$3,258,175,451

9. Pension Plans 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 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.

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 table below.

SERS REQUIRED EMPLOYER CONTRIBUTIONS TO OPERS		
Year Ended June 30	Annual Required Contribution	Percent Contributed
2020	\$2,139,891	100%
2021	\$2,137,785	100%
2022	\$2,243,214	100%

GASB Statement No. 68 requires SERS to record a net pension liability based on its proportionate share of OPERS' total net pension liability. 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, 2022.

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 post-employment health care coverage which is considered an OPEB as described in GASB Statement No. 75. 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 employer rate allocated to post-employment health care in the defined benefit plan and combined plan was zero in calendar 2021. The portion of the employer rate allocated to post-employment health care in the defined contribution plan was 4% in calendar 2021.

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, 2022, and 2021, \$3,035,395 and \$2,919,154, 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 FY2021 was \$365,000, and the amount accrued in FY2022 was \$320,000.

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 FY2022, SERS was the lessor of six third-party lease contracts noted in the table below. The lease contract for Law Offices of Craig Scott & Company renewed for seven years effective February 1, 2022. Effective March 1, 2022, the lease contract for Ribway Engineering Group, Inc became a twelve month annual lease, categorizing it as short-term under GASB Statement No. 87, *Leases*. The Poling & Associates Co., L.P.A. lease contract was amended to reduce square footage effective April 1, 2022 resulting in remeasurement of the lease receivable and deferred inflow - leases. The lease contract for Zambito Executive Search, LLC (ZSG) was amended to increase square footage effective April 1, 2022 resulting in remeasurement of the lease receivable and deferred inflow - leases. SERS recognized \$582,408 in lease revenue and \$72,481 in interest revenue during the fiscal year related to lease payments. As of June 30, 2022, SERS' lease receivable (included in other receivables) for lease payments was \$2,110,104. 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, 2022, the balance of the deferred inflow - leases was \$1,770,835.

LEASES AS OF JUNE 30, 2022						
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	\$38,290	\$3,146	\$337,305	\$331,295
Plunkett & Cooney, PC	05/01/2013	112	69,335	1,531	14,882	14,555
Poling & Associates Co., L.P.A.	04/01/2022	119	260,442	58,860	1,321,880	1,037,263
Ribway Engineering Group, Inc	12/01/2016	63	58,497	537	—	—
Stratos Wealth Partners, Ltd	02/01/2018	60	71,794	2,153	46,214	44,650
Zambito Executive Search, LLC (ZSG)	04/01/2022	36	84,050	6,254	389,823	343,072
Totals			\$582,408	\$72,481	\$2,110,104	\$1,770,835

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, 10 community colleges, and 4 technical colleges. The Board administers the program in accordance with Chapter 3309 of the Ohio Revised Code.

Plan Membership At June 30, 2022, SERS' Health Care Plan's membership consisted of the following:

PLAN MEMBERSHIP

Currently Receiving Benefits:

Retirees, or Their Beneficiaries	34,972
Inactive Members Entitled to But Not Yet Receiving Benefits	6,118
Active Members	155,063
Total	196,153

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.

Discount Rate (SEIR) The discount rate used to measure the total OPEB liability at June 30, 2022, was 4.08%. The discount rate used to measure total OPEB liability prior to June 30, 2022, was 2.27%. 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 was projected to become insufficient to make all projected future benefit payments of current System members by SERS actuaries. The Municipal Bond Index Rate was used in the determination of the SEIR for both the June 30, 2021 and the June 30, 2022 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 3.69% at June 30, 2022 and 1.92% at June 30, 2021.

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 capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer time frame. 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 The projection of future benefit payments for all current plan members was until benefit payments ran out.

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

ASSET CLASS	TARGET ALLOCATION	LONG-TERM EXPECTED REAL RATE OF RETURN
Cash	2.00%	(0.33%)
US Equity	24.75	5.72
Non-US Equity Developed	13.50	6.55
Non-US Equity Emerging	6.75	8.54
Fixed Income / Global Bonds	19.00	1.14
Private Equity	11.00	10.03
Real Estate / Real Assets	16.00	5.41
Multi-Asset Strategies	4.00	3.47
Private Debt / Private Credit	3.00	5.28

Net OPEB Liability of SERS The components of the net OPEB liability of SERS at June 30, 2022, were as follows:

PLAN FUNDS	
Total OPEB Liability (a)	\$2,015,584,851
Plan Fiduciary Net Position (b)	611,574,409
SERS' Net OPEB Liability (a) - (b)	<u>\$1,404,010,442</u>
Plan Fiduciary Net Position as a Percent of Total OPEB Liability (b) / (a)	30.34%

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, what SERS' net OPEB liability would be if it were calculated using a discount rate that is 1% lower (3.08%) and higher (5.08%) than the current discount rate of 4.08%.

NET OPEB LIABILITY	
1% Decrease (3.08%)	\$1,743,802,127
Current Discount Rate (4.08%)	\$1,404,010,442
1% Increase (5.08%)	\$1,129,706,211

The following table presents the OPEB liability of SERS, what SERS' net OPEB liability would be based on health care cost trend rates that are 1% lower (6.00% decreasing to 3.40%) and 1% higher (8.00% decreasing to 5.40%) than the current rate.

NET OPEB LIABILITY		
1% Decrease (6.00% decreasing to 3.40%)	Health Care Cost Trend Rates (7.00% decreasing to 4.40%)	1% Increase (8.00% decreasing to 5.40%)
\$1,082,734,987	\$1,404,010,442	\$1,823,636,404

Actuarial Assumptions The total OPEB liability was determined by an actuarial valuation as of June 30, 2022. 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.

The total OPEB liability used the following assumptions and other inputs:

KEY METHODS AND ASSUMPTIONS USED IN VALUATION OF TOTAL OPEB LIABILITY

Long-term Rate of Return, Net of System 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	1.92%
Measurement Date	3.69%
Year FNP is Projected to be Depleted	2044
Single Equivalent Interest Rate, Net of Plan Investment Expense, Including Price Inflation	
Prior Measurement Date	2.27%
Measurement Date	4.08%
Medical Trend Assumption	7.00% - 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.

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. The impact of the requirements of this Statement to SERS is still being determined by management.

In April 2022, GASB issued Statement No. 99, *Omnibus 2022*. The requirements of this Statement will enhance comparability in the application of accounting and financial reporting requirements, while improving consistent authoritative literature enabling governments and other stakeholders to more easily locate and apply the correct accounting and financial reporting provisions, which improves the consistency with which such provisions are applied. The comparability of financial statements also will improve as a result of this Statement. Better consistency and comparability improve the usefulness of information for users of financial statements. The effective date of this standard related to extension of the use of London Interbank Offered Rate, accounting for Supplemental Nutrition Assistance Program distributions, disclosures of nonmonetary transactions, pledges of future revenues by pledging governments, clarification of certain provisions in Statement 34, as amended, and terminology updates related to Statement 53 and Statement 63 are effective upon issuance. The requirements related to leases, Public-to-Private and Public-to-Public Partnerships, and SBITAs are effective for fiscal years beginning after June 15, 2022, and all reporting periods thereafter. The requirements related to financial guarantees and the classification and reporting of derivative instruments within the scope of Statement 53 are effective for fiscal years beginning after June 15, 2023, and all

reporting periods thereafter. SERS management is currently determining the impact of the SBITA requirements of this statement. Management has reviewed all other requirements of this statement and determined SERS is not impacted.

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

SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY¹

	2022	2021	2020	2019
Total pension liability				
Service Cost	\$434,605,440	\$373,675,302	\$369,976,273	\$355,452,912
Interest	1,457,466,508	1,525,995,298	1,488,777,887	1,449,726,066
Benefit changes	—	—	—	—
Difference between expected and actual experience	330,257,785	(155,871,041)	1,562,953	60,411,674
Changes of assumptions	36,995,852	126,558,803	—	—
Benefit payments	(1,335,404,562)	(1,302,035,913)	(1,280,910,125)	(1,260,400,360)
Refunds of contributions	(82,209,215)	(72,374,764)	(72,849,117)	(75,639,810)
Net change in total pension liability	841,711,808	495,947,685	506,557,871	529,550,482
Total pension liability – beginning	21,529,757,004	21,033,809,319	20,527,251,448	19,997,700,966
Total pension liability – ending (a)	\$22,371,468,812	\$21,529,757,004	\$21,033,809,319	\$20,527,251,448
Plan fiduciary net position				
Contributions – employer	\$524,356,285	\$483,851,685	\$491,557,790	\$464,683,489
Contributions – member	375,838,354	346,781,820	352,343,063	345,212,684
Net investment income	(338,351,099)	3,976,995,866	413,108,397	831,584,377
Benefit payments	(1,335,404,562)	(1,302,035,913)	(1,280,910,125)	(1,260,400,360)
Administrative expense	(21,585,745)	(12,770,334)	(28,002,623)	(31,880,024)
Refunds of contributions	(82,209,215)	(72,374,764)	(72,849,117)	(75,639,810)
Other	—	—	—	—
Net change in plan fiduciary net position	(877,355,982)	3,420,448,360	(124,752,615)	273,560,356
Plan fiduciary net position – beginning	17,840,046,987	14,419,598,627	14,544,351,242 *	14,270,515,748
Plan fiduciary net position – ending (b)	16,962,691,005	17,840,046,987	14,419,598,627	14,544,076,104 *
Net pension liability – ending (a) – (b)	\$5,408,777,807	\$3,689,710,017	\$6,614,210,692	\$5,983,175,344

¹ The effort and cost to re-create financial statement information for FY2013 was not practical. Information was prepared prospectively from June 30, 2014 for GASB 67 purposes. Additional years will be added to the schedule as they become available.

* 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

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

Required Supplementary Pension Information

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

	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability	\$22,372	\$21,530	\$21,034	\$20,527	\$19,998	\$19,588	\$19,771	\$18,503	\$17,882
Plan fiduciary net position	16,963	17,840	14,420	14,544	14,271	13,614	12,452	12,797	12,821
Net pension liability	\$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	75.82%	82.86%	68.55%	70.85%	71.36%	69.50%	62.98%	69.16%	71.70%
Covered payroll	\$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	144.84%	106.97%	190.20%	172.80%	171.86%	180.90%	249.61%	200.53%	173.18%

¹ The effort and cost to re-create financial statement information for FY2013 was not practical. Information was prepared prospectively from June 30, 2014 for GASB 67 purposes. Additional years will be added to the schedule as they become available.

See accompanying notes to the required supplementary information.

SCHEDULE OF EMPLOYER CONTRIBUTIONS (\$ in millions)

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined employer contribution	\$524.4	\$483.9	\$491.6	\$464.7	\$435.1	\$467.8	\$436.4	\$395.8	\$405.0	\$402.2
Actual employer contributions	524.4	483.9	491.6	464.7	435.1	467.8	436.4	395.8	405.0	402.2
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	\$3,734.3	\$3,449.3	\$3,477.6	\$3,462.5	\$3,332.4	\$3,302.8	\$2,932.2	\$2,845.4	\$2,922.3	\$2,905.7
Actual contributions as a percentage of covered payroll	14.04%	14.03%	14.14%	13.42%	13.06%	14.16%	14.88%	13.91%	13.86%	13.84%

See accompanying notes to the required supplementary information.

SCHEDULE OF INVESTMENT RETURNS¹

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

¹ The effort and cost to re-create financial statement information for FY2013 was not practical. Information was prepared prospectively from June 30, 2014 for GASB 67 purposes. Additional years will be added to the schedule as they become available.

See accompanying notes to the required supplementary information.

Notes to Required Supplementary Pension Information June 30, 2022

Changes of Benefit Terms

- No changes of benefit terms were implemented in FY2022.
- With the authority granted to the Board under SB 8, the Board enacted a three-year COLA delay for future benefit recipients commencing on or after April 1, 2018.
- 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 HB 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

2022

- Cost-of-Living-Adjustments was increased from 2.00% to 2.50%.

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-Adjustments was reduced from 2.50% to 2.00%.
- 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.

Additional Actuarial Information

The following actuarial methods and assumptions (from the June 30, 2021 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for FY2022 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 one year and adjusted 94.20% for males and set forward two 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 five years and adjusted 103.3% for males and set forward three 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 one 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.

Required Supplementary Health Care Information

SCHEDULE OF CHANGES IN THE NET OPEB LIABILITY¹

	2022	2021	2020	2019	2018	2017
Total OPEB liability						
Service Cost	\$170,026,723	\$159,635,250	\$164,641,764	\$160,601,083	\$155,385,800	\$178,649,865
Interest	55,840,796	69,007,716	94,783,974	117,411,967	109,982,145	101,409,264
Benefit changes	—	—	—	—	—	—
Difference between expected and actual experience	(211,615,083)	(67,242,883)	(772,465,329)	(653,300,118)	53,656,583	—
Changes of assumptions	(425,649,309)	(260,284,207)	260,375,382	217,194,383	(102,900,217)	(295,667,088)
Benefit payments ²	(65,930,429)	(64,142,473)	(69,997,414)	(73,206,711)	(72,071,363)	(86,257,389)
Net change in total OPEB liability	(477,327,302)	(163,026,597)	(322,661,623)	(231,299,396)	144,052,948	(101,865,348)
Total OPEB liability - beginning	2,492,912,153	2,655,938,750	2,978,600,373	3,209,899,769	3,065,846,821	3,167,712,169
Total OPEB liability - ending (a)	\$2,015,584,851	\$2,492,912,153	\$2,655,938,750	\$2,978,600,373	\$3,209,899,769	\$3,065,846,821
Plan fiduciary net position						
Contributions - employer	\$88,282,970	\$73,592,929	\$80,536,164	\$81,944,848	\$100,056,736	\$65,013,891
Net investment income	(8,096,503)	111,580,200	11,139,059	22,009,627	28,167,652	35,730,747
Benefit payments ²	(65,930,429)	(64,142,473)	(69,997,414)	(73,206,711)	(72,071,363)	(86,257,389)
Administrative expense	(3,011,817)	(3,311,946)	(2,877,010)	(2,566,722)	(2,632,948)	(2,582,204)
Other	—	—	—	—	—	—
Net change in plan fiduciary net position	11,244,221	117,718,710	18,800,799	28,181,042	53,520,077	11,905,045
Plan fiduciary net position - beginning	600,330,188	482,611,478	463,810,679	435,629,637	382,109,560	370,204,515
Plan fiduciary net position - ending (b)	611,574,409	600,330,188	482,611,478	463,810,679	435,629,637	382,109,560
Net OPEB liability - ending (a) - (b)	\$1,404,010,442	\$1,892,581,965	\$2,173,327,272	\$2,514,789,694	\$2,774,270,132	\$2,683,737,261

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

² Benefit payments are net of retiree contributions.

See accompanying notes to the required supplementary information.

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

	2022	2021	2020	2019	2018	2017
Total OPEB liability	\$2,015.6	\$2,492.9	\$2,655.9	\$2,978.6	\$3,209.9	\$3,065.8
Plan fiduciary net position	611.6	600.3	482.6	463.8	435.6	382.1
Net OPEB liability	\$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	30.34%	24.08%	18.17%	15.57%	13.57%	12.46%
Covered payroll	\$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	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.

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

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Actuarially determined employer contribution	\$91.9	\$126.6	\$161.0	\$190.1	\$189.4	\$178.0	\$161.6	\$164.2	\$190.4	\$171.4
Actual employer contributions	88.3	73.6	80.5	81.9	100.1	65.0	77.3	89.0	75.3	45.5
Annual contribution deficiency (excess)	\$3.6	\$53.0	\$80.5	\$108.2	\$89.3	\$113.0	\$84.3	\$75.2	\$115.1	\$125.9
Covered payroll	\$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	\$2,746.8
Actual contributions as a percentage of covered payroll	2.36%	2.13%	2.32%	2.37%	3.00%	1.97%	2.64%	3.13%	2.73%	1.66%

See accompanying notes to the required supplementary information.

SCHEDULE OF INVESTMENT RETURNS – OPEB¹

<i>Year ended June 30</i>	2022	2021	2020	2019	2018	2017
Annual money weighted rate of return, net of investment expense	(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.

Notes to Required Supplementary Health Care Information June 30, 2022

Changes of Benefit and Funding Terms

No changes of benefit or funding terms were implemented in FY2022.

Changes of Assumptions in the following June 30th actuarial valuations

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%.
- Rates of withdrawal, retirement, and disability were updated to reflect recent experience.
- Rates of health care participation for future retirees and spouses was 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.

Additional Actuarial Information

The following actuarial methods and assumptions (from the June 30, 2021 actuarial valuation) were used to determine the Actuarially Determined Contribution reported for FY2022 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:	Pre-Medicare - 6.750% initially, decreasing to 4.400% Medicare - 5.125% initially, decreasing to 4.400%

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 one year and adjusted 94.20% for males and set forward two 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 five years and adjusted 103.3% for males and set forward three 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 one 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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OPERS Related Required Supplementary Pension Information

SCHEDULES OF SERS' PROPORTIONATE SHARE OF THE NET PENSION LIABILITY

Ohio Public Employees Retirement Plan - Traditional Pension Plan					
Last 10 Fiscal Years*	2022	2021	2020	2019	2018
SERS' proportion of the net pension liability (asset)	0.0921448%	0.0909161%	0.0923731%	0.0958985%	0.0973540%
SERS' proportionate share of the net pension liability (asset)	\$8,016,966	\$13,462,691	\$18,258,172	\$26,288,404	\$15,272,959
SERS' covered payroll	13,372,990	12,805,035	12,996,795	12,963,846	11,946,483
SERS' proportionate share of the net pension liability (asset) as a % of its covered payroll	60%	105%	140%	203%	128%
Plan fiduciary net position as a % of the total pension liability	92.62%	86.88%	82.17%	74.70%	84.66%

* 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 available.

Ohio Public Employees Retirement Plan - Combined Pension Plan					
Last 10 Fiscal Years*	2022	2021	2020	2019	2018
SERS' proportion of the net pension liability (asset)	0.2096088%	0.1994927%	0.1942455%	0.0217249%	0.2256010%
SERS' proportionate share of the net pension liability (asset)	(\$825,869)	(\$575,863)	(\$405,048)	(\$242,933)	(\$307,116)
SERS' covered payroll	955,597	879,164	864,692	929,157	857,951
SERS' proportionate share of the net pension liability (asset) as a % of its covered payroll	(86%)	(66%)	(47%)	(26%)	(36%)
Plan fiduciary net position as a % of the total pension liability	169.88%	157.67%	145.28%	126.64%	137.28%

* 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 available.

SCHEDULES OF CONTRIBUTIONS

Ohio Public Employees Retirement Plan - Traditional Pension Plan					
Last 10 Fiscal Years*	2022	2021	2020	2019	2018
Contractually required contribution	\$1,872,219	\$1,792,704	\$1,819,551	\$1,781,661	\$1,616,321
Contributions in relation to the contractually required contribution	1,872,219	1,792,704	1,819,551	1,781,661	1,616,321
Contribution deficiency (excess)	—	—	—	—	—
SERS' covered payroll	\$13,347,012	\$12,898,191	\$13,037,464	\$12,726,150	\$11,545,152
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 available.

Ohio Public Employees Retirement Plan - Combined Pension Plan					
Last 10 Fiscal Years*	2022	2021	2020	2019	2018
Contractually required contribution	\$133,784	\$123,083	\$121,057	\$127,825	\$116,006
Contributions in relation to the contractually required contribution	133,784	123,083	121,057	127,825	116,006
Contribution deficiency (excess)	—	—	—	—	—
SERS' covered payroll	\$932,981	\$871,375	\$902,194	\$913,034	\$828,612
Contributions as a % of covered payroll	14%	14%	13%	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 available.

OPERS Related Required Supplementary Pension Information

2017	2016	2015
0.0956142%	0.0937745%	0.0925739%
\$21,712,365	\$16,242,931	\$11,165,446
10,594,473	10,003,875	9,728,270
205%	162%	115%
77.25%	81.08%	86.45%

2017	2016	2015
0.2277590%	0.2364605%	0.2391363%
(\$126,764)	(\$115,067)	(\$92,073)
759,911	737,594	749,257
(17%)	(16%)	(12%)
116.55%	116.90%	114.83%

2017	2016	2015
\$1,517,599	\$1,457,881	\$1,361,957
1,517,599	1,457,881	1,361,957
—	—	—
\$10,839,992	\$10,413,435	\$9,877,201
14%	14%	14%

2017	2016	2015
\$110,430	\$109,964	\$104,896
110,430	109,964	104,896
—	—	—
\$788,786	\$785,457	\$760,728
14%	14%	14%

OPERS Related Required Supplementary OPEB Information

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

Ohio Public Employees Retirement Plan						
Last 10 Fiscal Years*	2022	2021	2020	2019	2018	2017
SERS' proportion of the net OPEB liability (asset)	0.1040415%	0.1007839%	0.1014843%	0.0104825%	0.1060842%	0.1047274%
SERS' proportionate share of the net OPEB liability (asset)	(\$3,258,739)	(\$1,795,546)	\$14,017,613	\$13,666,743	\$11,519,966	\$10,577,819
SERS' covered payroll	541,604	445,100	420,175	375,863	1,338,357	2,243,369
SERS' proportionate share of the net OPEB liability (asset) as a % of its covered payroll	(602%)	(403%)	3,336%	3,636%	861%	472%
Plan fiduciary net position as a % of the total OPEB liability	128.23%	115.57%	47.80%	46.33%	54.14%	54.05%

* 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*	2022	2021	2020	2019	2018	2017
Contractually required contribution	\$75,825	\$62,314	\$58,824	\$125,775	\$262,029	\$295,539
Contributions in relation to the contractually required contribution	75,825	62,314	58,824	125,775	262,029	295,539
Contribution deficiency (excess)	—	—	—	—	—	—
SERS' covered payroll	\$540,160	\$446,267	\$417,722	\$898,395	\$1,871,633	\$2,110,993
Contributions as a % of covered payroll	14%	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.

SCHEDULE OF ADMINISTRATIVE EXPENSES for the year ended June 30, 2022

	General Expenses	Investment Related Expenses	Total
Personnel Services			
Salaries	\$13,747,265	\$3,067,748 *	\$16,815,013
Retirement Contributions	(4,594,745)	366,798	(4,227,947)
Insurance	4,206,074	429,558	4,635,632
Total Personnel Services	13,358,594	3,864,104	17,222,698
Professional Services			
Actuarial Advisors	278,054		278,054
Audit Services	205,718		205,718
Custodial Banking	190,606	1,094,586	1,285,192
Master Recordkeeper		1,016,714	1,016,714
Investment Related Consulting	57,266	1,467,245	1,524,511
Medical	45,000		45,000
Technical	1,774,450	205,056	1,979,506
Total Professional Services	2,551,094	3,783,601	6,334,695
Communications			
Postage	545,502		545,502
Telecommunications Services	227,425		227,425
Member / Employer Education	2,202		2,202
Printing and Publication	112,962		112,962
Total Communications	888,091		888,091
Other Services			
Computer Support Services	2,051,191	145,500	2,196,691
Office Equipment and Supplies	143,727	284	144,011
Training	69,939	10,974	80,913
Transportation and Travel	62,916	31,067	93,983
Memberships and Subscriptions	104,376	58,714	163,090
Property and Fiduciary Insurance	443,027		443,027
Facilities Expense	816,594		816,594
Maintenance	66,998		66,998
Staff Support	106,445		106,445
Ohio Retirement Study Council	38,403		38,403
Miscellaneous	13,481		13,481
Total Other Services	3,917,097	246,539	4,163,636
Total Administrative Expenses before Depreciation	20,714,876	7,894,244	28,609,120
Depreciation			
Furniture and Equipment	2,475,147		2,475,147
Building	1,410,051		1,410,051
Total Depreciation	3,885,198		3,885,198
Total Administrative Expenses	\$24,600,074	\$7,894,244	\$32,494,318

* Includes salary and incentive payments for investment staff.

See accompanying independent auditor's report.

SCHEDULE OF INVESTMENT EXPENSES for the year ended June 30, 2022

Description of Expenses	Net Assets Under Management	Direct Fees
Global Equities	\$7,011,063,631	\$24,905,885
Global Private Equity	2,192,037,620	21,164,034
Global Fixed Income	185,824,822	7,006,228
Global Real Assets	3,715,184,460	23,702,434
Global Private Credit	799,438,528	7,682,017
Opportunistic Investments	826,134,277	9,888,845
Cash Equivalents	521,669,099	8,780,964
Total Investment Management Fees		\$103,130,407
Custody Service Fees		1,094,586
Master Recordkeeper Fees		1,016,714
Investment Consulting and Performance/Analytics Fees		1,467,245
Other Investment Administrative Expenses		4,275,189
Total Other Investment Expenses		7,853,734
Total Investment Expenses		\$110,984,141

SCHEDULE OF PAYMENTS TO CONSULTANTS

SERS paid the following non-investment related consulting fees in FY2022:

Actuarial Advisors	\$278,054
Audit Services	205,718
Legal Counsel	181,512
Medical Consultant	45,000
Information Technology Consultants	1,012,375
Health Care Consultants	275,500
Other Consultants	552,935
Total	\$2,551,094

See accompanying independent auditor's report.

Investment Section

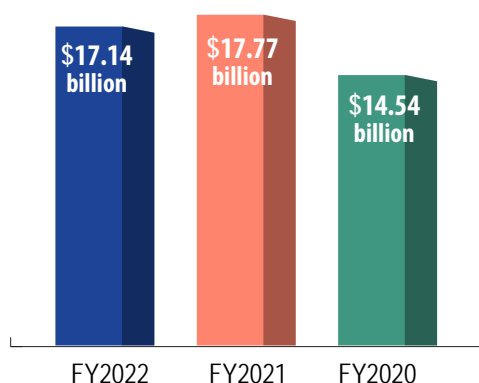
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Investment Highlights

For fiscal year end June 30, 2022, SERS' gross investment rate of return was 0.2% with \$17.14 billion in assets. The Fund's net return was negative 0.5% and outperformed the policy benchmark by 3.1%. 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.

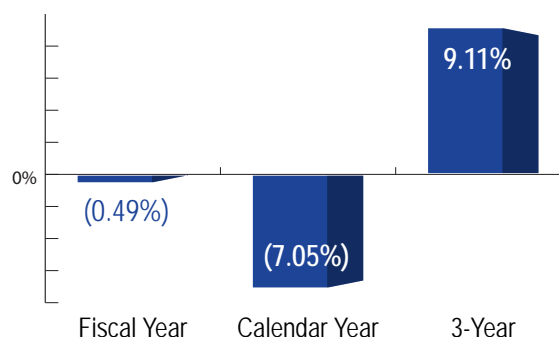


TOTAL INVESTMENT FUND BALANCE

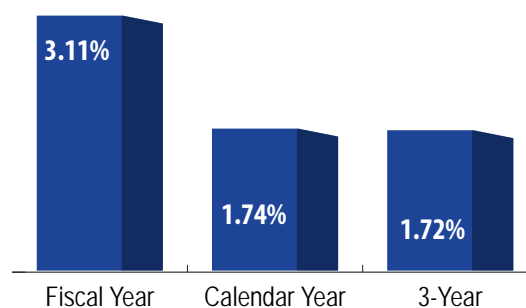


Difference
\$2.60 BILLION
FY2020 - FY2022

TOTAL FUND RETURN (net of fees)



TOTAL FUND EXCESS RETURN VS. BENCHMARK





SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

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RICHARD STENSRUD
Executive Director

KAREN ROGGENKAMP
Deputy Executive Director

December 1, 2022

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, 2022. 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.

U.S. economic growth, which was positive in the second half of CY2021, turned negative in the first half of CY2022 due to historically high inflation and continued supply chain disruptions from lockdowns in China. As a result, FY2022 GDP growth rate was down to 2.1% from 12.2% in FY2021, which was abnormally high coming off the Covid-induced contraction in CY2020. The labor market continued to be robust with 6.3 million jobs added in FY2022, and the unemployment rate remained historically low at 3.6% as of June 2022. To curb inflation, the U.S. Federal Reserve conducted three interest rate hikes in the first half of CY2022 pushing up the Fed Fund rate by 150 bps. Consequently, the Bloomberg US Aggregate Bond index was down 10.4% for the first 6 months of CY2022, and down 10.3% for FY2022. Long dated US Treasuries were down an unprecedented 20% for this fiscal year. The rise in interest rates and concern about high inflation and slowing growth also negatively impacted equity returns. The US Equity market was down 13.9% and non-US equity markets returned negative 19.4% for FY2022. The last time both equity and bonds simultaneously suffered negative returns was CY2000.

SERS' Total Fund generated a net of fees (NOF) return of negative 0.5% in FY2022, exceeding the policy benchmark by 3.1%, helped by strong returns in Private Equity at 34.4%, followed by Real Assets at 24.5%, and Private Credit at 9.3%. Though the return for FY2022 was marginally negative, SERS performed much better than the median return for pension funds which was negative 9%. The Total Fund net five-year return of 8.6% exceeded the policy benchmark by 1.2%, while the ten-year net return of 9.1% exceeded the benchmark by 1.0%. Implementation of the investment program added value to the fund over five- and ten-year periods relative to the Total Fund benchmark. Longer term returns exceeded the actuarial interest rate of 7.00%, thus improving the funded ratio to 75.5%. SERS returns ranked in the top decile (10%) in the public fund peer universe on a gross of fee basis for the 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 inflation 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 FY2022 SERS' strategic asset allocation targets and its corresponding benchmarks were as follows:

Asset Class	FY2022 Policy	Benchmark
Global Equities	45%	<i>US Equity</i> : 55% Russell 3000; <i>NUSE Developed Market</i> : 30% MSCI World ex-USA Net Total Return Index (USD); <i>NUSE Emerging Market</i> : 15% MSCI Emerging Markets Net Total Return Index (USD)
Global Private Equity	12%	Burgiss All Private Equity Benchmark (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%	Citigroup 30-day Treasury Bill Index
Strategy		Benchmark
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 declined sharply for FY2022 due to recession fears from interest rate hikes to combat inflation along with declining GDP and continued supply chain impacts from both China's zero Covid policies and the Russia-Ukraine war. The Russell 3000 Index returned (13.9%) for US markets, while the non-US developed market return of (16.8%) was even lower than the US market. The MSCI Emerging Index declined the most with a (25.3%) return for FY2022. The FY2022 global market favored large cap value for most of the fiscal year.

During the fiscal year, the US Equity portfolio returned (13.3%) net of fees, which outperformed the Russell 3000 index benchmark by 0.6%. Both the large cap and small cap managers outperformed their respective Russell 1000 and Russell 2000 benchmarks. This out performance was driven by SERS' active managers' low portfolio beta of approximately 0.80, which helped the portfolio protect capital during the market drawdown.

The Non-US Developed Equity portfolio returned (16.5%) net of fees, outperforming the MSCI World ex-US benchmark by 0.3% in FY2022. Returns were helped by SERS' core ACWI ex-US mandate, which posted a (15.4%) net return. The large cap active and passive composites posted an excess net return of 0.3% for FY2022. Small cap detracted from performance with this portfolio returning (24.0%) net of fees.

The Non-US Emerging Equity portfolio returned (25.6%) net of fees, underperforming the MSCI Emerging Market benchmark by 0.3%. This portfolio is 100% actively managed. The portfolio outperformed by 1.5% during the first half of FY2022 and then underperformed by (1.7%) during the second half of FY2022 due to the rising US dollar, China Covid lockdowns, and Russia-Ukraine war impacts.

Global Private Equity

Despite continued economic uncertainty surrounding the COVID-19 pandemic, CY2021 was a banner year for private equity. Deal values and exits roared to new heights, general partners had the second-best year for fundraising, and private equity funds accelerated their distributions to limited partners while continuing to deliver solid returns. All this was accomplished while navigating the challenges of a high valuation environment that has raised the bar for investors looking to create value. CY2021 set a record as the level of transactions rose to \$1.1 trillion, well above the previous record of \$804 billion set in CY2006 and twice as much as the \$570 billion completed in CY2020. The volume of deals completed in CY2021 rose by 16% to 4,300. The \$1.1 trillion record was driven primarily by the average deal size climbing by 57% in CY2021 to \$1 billion. The increase in deal flow is a direct result of the abundance of low-cost debt financing and the estimated \$3.3 trillion of dry powder available across all fund types and all geographies at the end of CY2021. The intense competition for assets has led to increase in purchase price multiples. Purchase price multiples have risen from approximately 9.0 times earnings in CY2011 to an average of 12.3 times earnings in CY2021 paving the way for an excellent exit market for private equity funds in CY2021. Over 1,500 exits were completed in CY2021, for a total value of \$957 billion. This set a record and more than doubled the \$427 billion reported in CY2020. Private equity funds raised more than \$1.2 trillion, up 16% from CY2020. The level of investment activity at increased purchase valuations and steady uplift in 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 34.4% for FY2022, beating the benchmark return of 22.3% by 12.1%.

Global Fixed Income

The global fixed income portfolio faced significant macro headwinds in FY2022 realizing a net return of (10.7%) relative to the Bloomberg US Aggregate Bond Index return of (10.3%). All the major sectors of the index had negative returns for the fiscal year due to high inflation, multiple interest rate hikes, slowing growth, and the rising risk of recession. The worst performing sector in FY2022 was investment grade debt at (14.1%). The higher duration of investment grade bonds relative to the benchmark in a rising rate environment along with spread widening drove the underperformance. High yield corporate debt also underperformed with (12.9%) due to spread widening, but the shorter duration and higher coupon payments helped the sector outperform investment grade debt. Agency mortgages outperformed the index returning (9.0%), but higher mortgage rates and quantitative tightening still resulted in a negative return. Emerging market debt struggled during the fiscal year with the blended local and hard currency debt index returning (20.3%), mainly due to high inflation and the conflict in Ukraine causing a surge in commodity prices.

Global Private Credit

The Global Private Credit portfolio generated a net return of 9.3% during FY2022 versus the benchmark return of 4.7%. The portfolio benefited from tailwinds of the pandemic, which created a strong pipeline of opportunities within private credit. The private credit market continued to grow in CY2021 and reached an estimated \$1.2 trillion in assets under management at the end of the calendar year. During CY2021, nearly \$200 billion was raised within private credit funds, which was approximately a 14% increase from CY2020. However, the market environment is shifting given the potential for slowed economic growth and as the U.S. Federal Reserve increases interest rates in

the U.S. to combat rising inflation. Nonetheless, the market outlook for private credit is positive given the expectation that the amount of capital raised, and deal flow activity will continue to grow. During FY2022, a total of \$225 million was deployed and SERS' Global Private Credit portfolio ended the fiscal year close to the 5% target allocation.

Global Real Assets

During FY2022, market conditions for commercial real estate and infrastructure assets continued their recovery from pandemic lows. Real Assets reached its 17% target allocation during the fiscal year and stayed within its policy range of 14-20%. Within real estate, industrial and multifamily property types continued to perform well. Retail and office saw improvements but are still contending with high vacancy due to structural changes related to e-commerce, consumer preferences, and work from home, respectively. Core real estate return for FY2022 was 33.5%, well above the long-term average of 8.5% to 9.5% as many assets recovered from extreme stress experienced in CY2020-CY2021 during the pandemic. The economic recovery is expected to support multifamily, 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 are still coping with lower traffic due to some countries' strict travel restrictions. Going forward, infrastructure and real estate total returns are expected to normalize to long-term averages, and income returns are expected to play a more important role. SERS' Global Real Assets portfolio generated a net return of 24.5% for FY2022, beating the benchmark return of 21.9%, and its one-year income return as of June 30, 2022 was approximately 4.75% 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 FY2022 the short-term cash returned 0.2%, matching the FTSE 30-day T-Bill Index.

As of June 30, 2022, the weight of cash equivalents was 3.0% of the Total Fund.

Opportunistic and Tactical Investments

The Opportunistic and Tactical portfolio returned 6.7% 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 four opportunistic investments in FY2022, committing a total of \$250 million to funds that will invest in strategies including commodities, risk parity, and structured credit.

Overlay Program

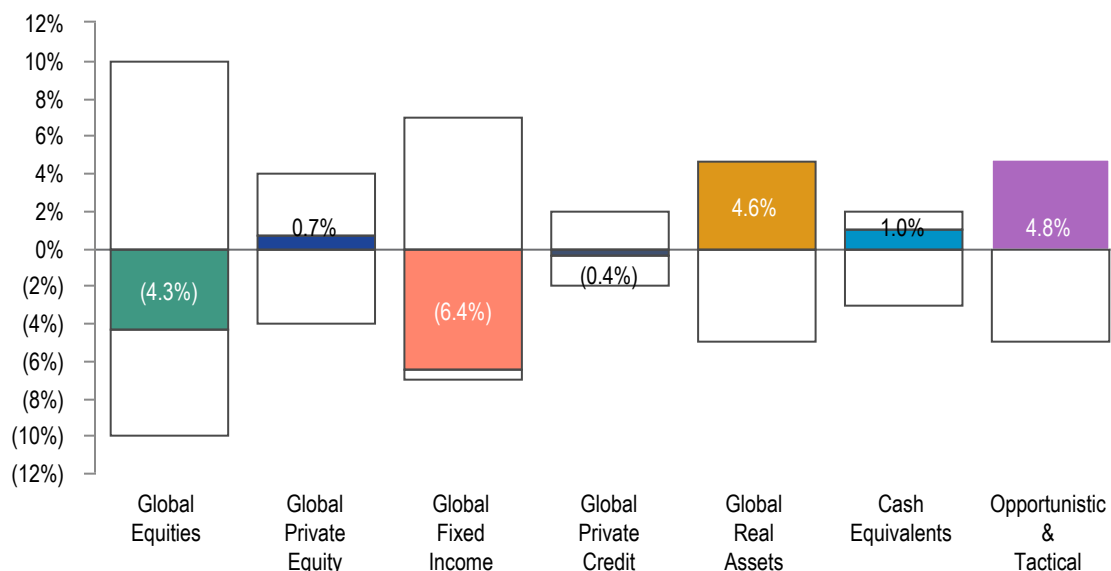
The overlay program, comprised of the enhanced asset allocation and active currency programs, aims at adding value by taking active long/short positions in the broad asset classes and foreign exchange markets, with a tight risk budget. For FY2022, the overlay program produced gains and added 51 basis points to the Total Fund return. These programs do not require full cash funding except for the margin requirements since they are implemented through futures and forward contracts.

Investments

Investment Summary as of June 30, 2022

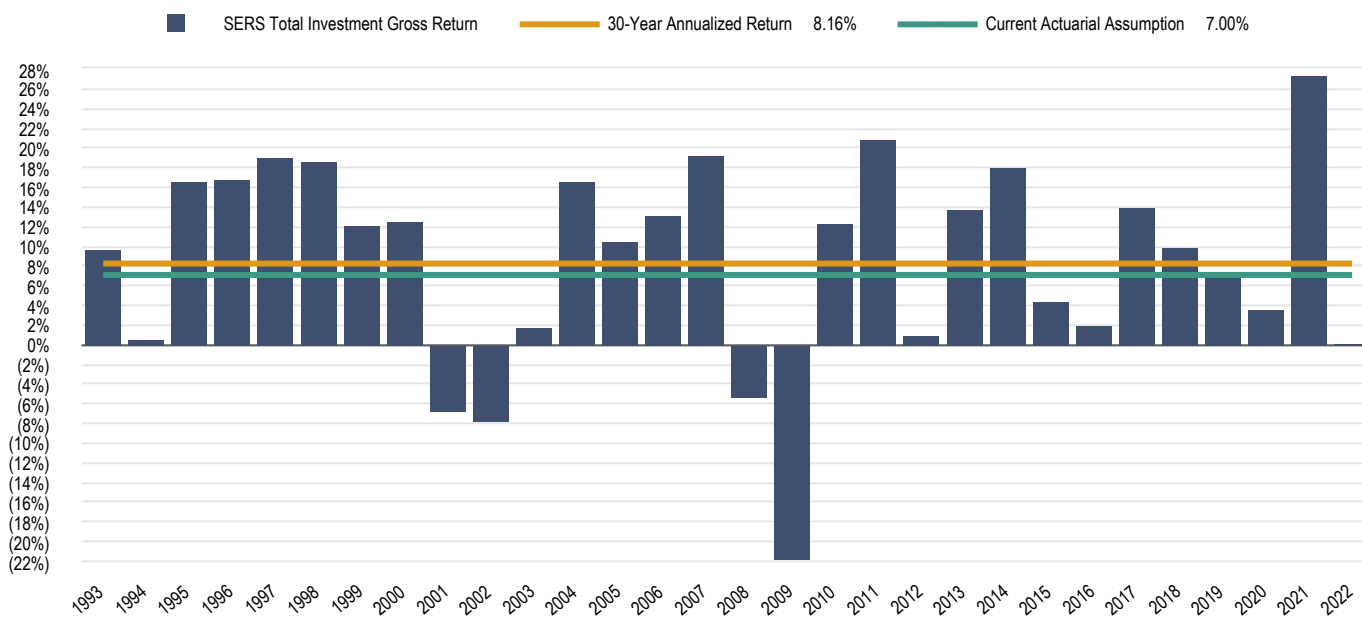
	Fair Value	% of Fair Value	Policy	Range
Global Equities	\$7,011,063,631	40.7%	45.0%	35% - 55%
Global Private Equity	2,192,037,620	12.7	12.0	8 - 16
Global Fixed Income	2,162,433,665	12.6	19.0	12 - 26
Global Private Credit	799,438,528	4.6	5.0	3 - 7
Global Real Assets	3,715,169,652	21.6	17.0	14 - 20
Cash Equivalents	521,669,099	3.0	2.0	0 - 5
Opportunistic & Tactical	825,935,018	4.8	0.0	0 - 5
Total Portfolio	\$17,227,747,213	100.0%	100.0%	

Asset Allocation vs. Policy

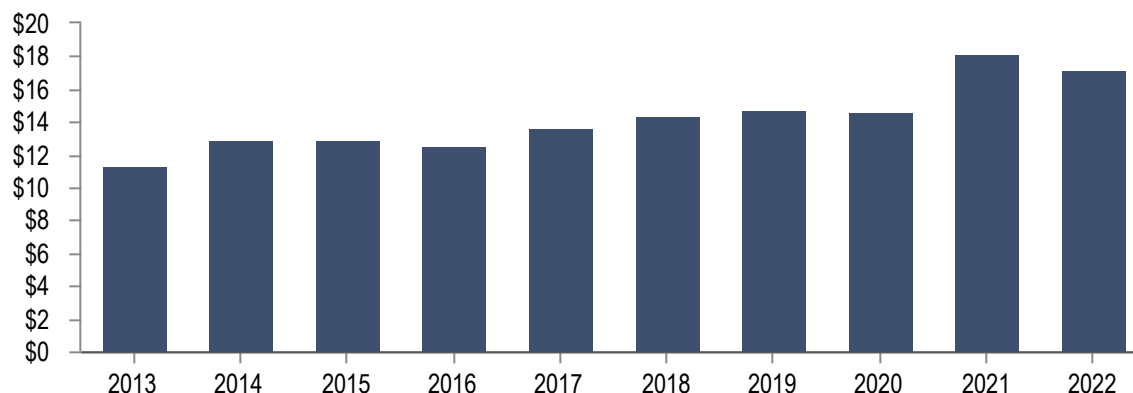


Note: Boxes represent permissible ranges around target weights.

SERS Total Investment Return (Gross of Fees)



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



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

	2022	2021	2020	Annualized Rates of Return		
				3 Years	5 Years	10 Years
Global Equities						
SERS	(15.6%)	41.9%	3.0%	7.2%	7.6%	9.7%
Custom Global Equities Benchmark ⁽¹⁾	(16.4)	40.3	0.8	5.7	6.7	8.8
Global Private Equity						
SERS ⁽²⁾	36.3	48.1	4.0	28.1	24.4	21.2
Custom Global Private Equity Benchmark ⁽³⁾	22.3	47.3	1.9	22.9	19.4	16.4
Global Fixed Income						
SERS	(10.4)	3.9	8.8	0.4	1.9	2.7
Bloomberg US Aggregate Bond Index	(10.3)	(0.3)	8.7	(0.9)	0.9	1.5
Global Real Assets						
SERS ⁽⁴⁾	25.7	8.7	5.0	12.8	12.0	12.2
Custom Global Real Assets Benchmark ⁽⁵⁾	21.9	2.6	5.3	9.6	8.5	9.6
Opportunistic and Tactical Investments						
SERS ⁽⁶⁾	7.9	27.3	(6.1)	8.9	9.3	N/A
Policy Benchmark ⁽⁷⁾	(8.3)	1.7	3.7	(1.2)	2.2	N/A
Global Private Credit						
SERS ⁽⁸⁾	10.6	19.5	N/A	N/A	N/A	N/A
3-month Treasury Bill Rate + 4.50% ⁽⁹⁾	4.7	4.8	N/A	N/A	N/A	N/A
Cash Equivalents						
SERS	16.5	2.6	0.8	6.4	5.3	3.1
Citigroup 30-day Treasury Bill Index	0.2	0.1	1.4	0.5	1.0	0.6
Total Fund (Gross of Fees)						
SERS	0.2	27.5	3.6	9.8	9.3	9.8
Policy Benchmark ⁽¹⁰⁾	(3.6)	23.6	3.7	7.4	7.4	8.1
Total Fund (Net of Fees)						
SERS	(0.5)	26.8	3.0	9.1	8.6	9.1
Policy Benchmark ⁽¹⁰⁾	(3.6)	23.6	3.7	7.4	7.4	8.1

Source: BNY Mellon Global Risk Solutions

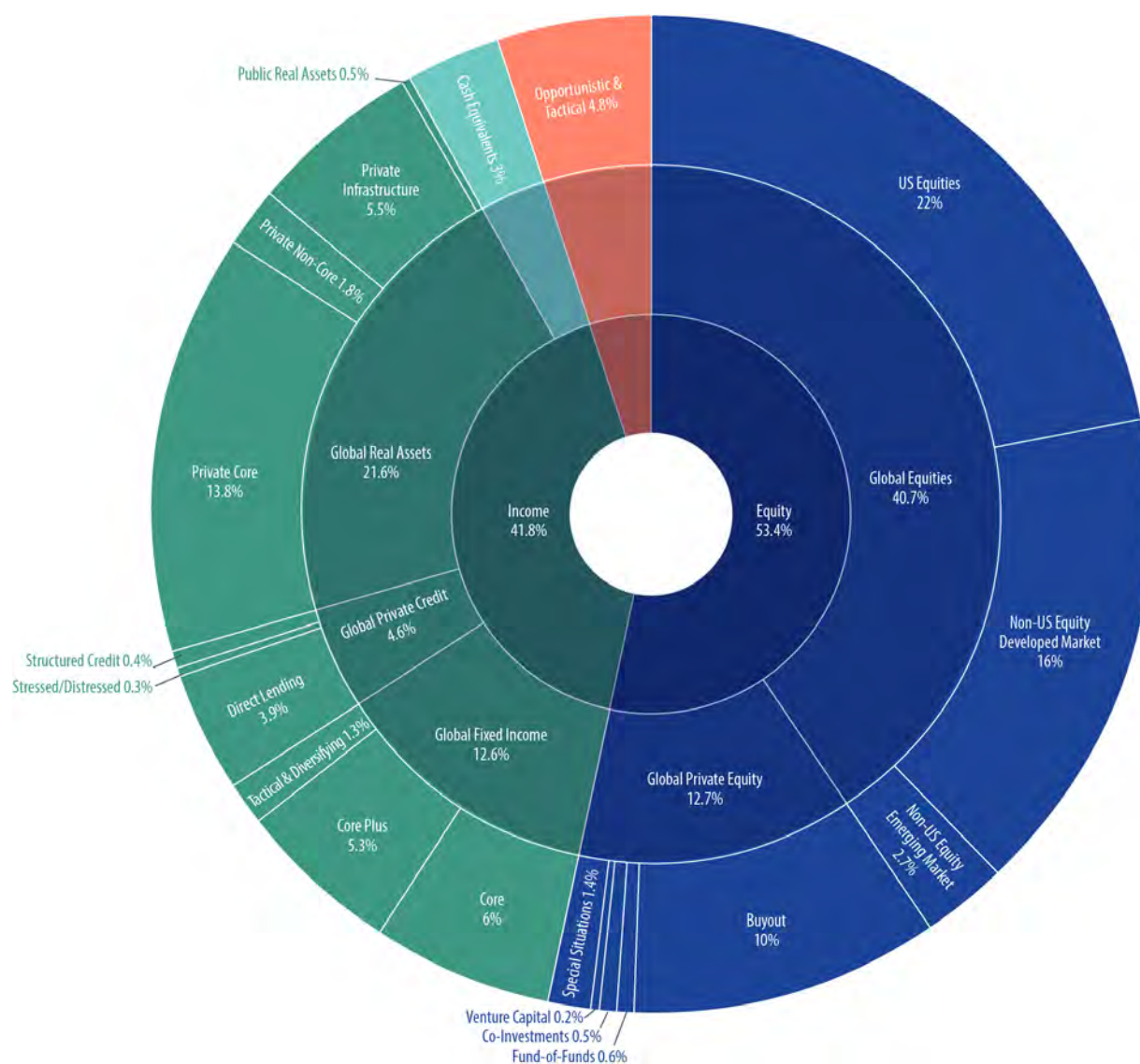
Investment results provided by BNY Mellon Global Risk Solutions are based upon a time-weighted rate of return methodology. Fair value adjustments made to global private equity, global real assets, opportunistic and tactical, and global private credit as of June 30 will be reflected in the investment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

Notes to Investment Results

- (1) Custom Global Equities Benchmark:
 - (a) Effective January 1, 2021
 - 55.0% Russell 3000 Index
 - 30.0% MSCI ACWI ex-US (net dividends) Index
 - 15.0% MSCI Emerging Markets Net Total Return Index
 - (b) Effective January 1, 2014
 - 50.00% Russell 3000 Index
 - 50.00% MSCI ACWI ex-US (net dividends) Index
 - (c) Effective July 1, 2013
 - 50.0% Russell 3000 Index
 - 50.0% MSCI ACWI ex-US (net dividends) Index (developed markets 50% hedged)
 - (d) Prior to July 1, 2013
 - 50.0% Russell 3000 Index
 - 50.0% MSCI ACWI ex-US (gross 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 300 basis points
- (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 & Tactical inception date occurred in June 2013
- (7) Opportunistic and Tactical Benchmark:
 - (a) Effective July 1, 2020 Bloomberg US Aggregate Bond Index +2.00%
 - (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 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
 - (b) 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
 - (c) 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
 - (d) 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
 - (e) 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
 - (f) 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
 - (g) 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
 - (h) 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
 - (i) 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
 - (j) Effective July 1, 2010
 - 22.50% Russell 3000 Index
 - 22.50% MSCI ACWI ex-US Index (developed markets 50% hedged)
 - 19.00% Barclays Aggregate Index
 - 10.00% NCREIF
 - 10.00% SERS Custom Private Equity Benchmark
 - 15.00% HFRI Fund of Fund Index
 - 1.00% Citigroup 30-Day T-Bill Index

SERS Detailed Asset Allocation

EQUITY		53.4%	INCOME		41.8%
Global Equities		40.7%	Global Fixed Income		12.6%
US Equities		22.0%	Core		6.0%
Non-US Equity Developed Market		16.0%	Core Plus		5.3%
Non-US Equity Emerging Market		2.7%	Tactical & Diversifying		1.3%
Global Private Equity		12.7%	Global Private Credit		4.6%
Buyout		10.0%	Direct Lending		3.9%
Fund-of Funds		0.6%	Stressed/Distressed		0.3%
Co-Investments		0.5%	Structured Credit		0.4%
Venture Capital		0.2%	Global Real Assets		21.6%
Special Situations		1.4%	Private Core		13.8%
OPPORTUNISTIC & TACTICAL		4.8%	Private Non-Core		1.8%
Opportunistic & Tactical		4.8%	Private Infrastructure		5.5%
Opportunistic & Tactical		4.8%	Public Real Assets		0.5%
			Cash Equivalents		3.0%
			Cash Equivalents		3.0%



Investments

Largest Public Equity Holdings as of June 30, 2022

Description	Country	Shares	Fair Value
1 Microsoft Corp.	United States	822,893	\$211,343,651
2 Apple, Inc.	United States	1,378,291	188,439,931
3 Amazon.com, Inc.	United States	907,251	96,359,099
4 Alphabet, Inc. Class A	United States	35,910	78,257,520
5 Alphabet, Inc. Class C	United States	32,031	70,066,491
6 Berkshire Hathaway, Inc.	United States	199,397	54,439,238
7 Johnson & Johnson	United States	295,100	52,383,269
8 UnitedHealth Group, Inc.	United States	99,370	51,039,223
9 Roche Holding AG	Switzerland	142,889	47,785,199
10 Amgen, Inc.	United States	192,765	46,899,709

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, 2022

Description	Rating	Par Value	Fair Value
1 FNMA TBA 3.500% 09/01/2052	AA+	\$26,906,000	\$25,799,810
2 US Treasury Bond 2.250% 02/15/2052	AA+	16,310,000	13,422,620
3 US Treasury Bond 2.375% 02/15/2042	AA+	15,467,000	13,115,533
4 US Treasury Note 2.250% 02/15/2027	AA+	13,466,000	12,983,644
5 US Treasury Bond 2.000% 02/15/2050	AA+	15,950,000	12,360,004
6 US Treasury Note 0.750% 03/31/2026	AA+	11,849,000	10,883,029
7 US Treasury Note 2.500% 04/30/2024	AA+	10,805,000	10,710,878
8 SLM Student Loan Trust Variable Rate 01/25/2041	AA+	11,287,580	10,561,167
9 US Treasury Note 0.875% 06/30/2026	AA+	10,726,000	9,846,552
10 FNMA TBA 3.500% 07/01/2052	AA+	9,785,000	9,409,654

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, 2022

Investment Consultants

Aksia LLC
Wilshire Associates, Inc.

Investment Managers - US Equity

AllianceBernstein, LP
BNY Mellon Asset Management North America
Brown Capital Management, Inc.
Coho Partners Ltd.
Martingale Asset Management, LP
Neumeier Poma Investment Counsel, LLC
State Street Global Advisors
WCM Investment Management, LLC

Investment Managers - Non-US Equity

Arrowstreet Capital, LP
Axiom International Investors, LLC
BlackRock Institutional Trust Co., N.A.
City of London Investment Management Co. Ltd.
Genesis Asset Managers
GlobeFlex Capital, LP
Highclere International Investors
J.P. Morgan Investment Management, Inc.
LSV Asset Management
MFS Institutional Advisors, Inc.
State Street Global Advisors
Walter Scott & Partners Ltd.
WCM Investment Management, LLC

Investment Manager - Futures

Russell Implementation Services, Inc.

Investment Managers - Global Private Equity

Altas Partners GP, LP
Bridgepoint Advisers Limited
Charterhouse Capital Partners
Cinven Capital Management Ltd.
Coller Investment Management Ltd.
Evergreen Pacific Partners
FdG Associates, LLC
Francisco Partners Management, LP
Freeman Spogli Management Co., L. P.
Leonard Green & Partners
Graham Partners
Goldman Sachs Asset Management, LP
Invesco Credit Partners
J.P. Morgan Investment Management, Inc.
KKR Credit Advisors (US) LLC
Kohlberg & Co.
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
Greenspring Associates
Swander Pace Capital Partners
Thomas H. Lee Partners
Transportation Resource Partners
Warburg Pincus LLC
West Street Strategic Solutions Fund I, LP

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
PGIM, Inc.
Pharo Global Advisors Ltd.
Stone Harbor Investment Partners, LP
Western Asset Management Co.

Investment Managers - Global Real Assets

Almanac Realty Investors, LLC
AMP Capital Investors Ltd.
Beacon Capital Partners, LLC
BlackRock Institutional Trust Co., N.A.
Brookfield Asset Management
CBRE Global Investors, LLC
Clarion Partners, LLC
Colony Capital, LLC
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.
LA Financial Management, LLC
Mesa West Capital, LLC
Patrizia, AG
Pretium Partners
Prudential Real Estate
The Carlyle Group
UBS Realty Investors, LLC

Investment Managers - Multi-Asset Strategies

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

Investment Managers - Opportunistic & Tactical Investments

Barings Global Advisers, Ltd.
BlackRock Institutional Trust Co., N.A.
D.E Shaw & Co., LLC
GoldenTree Asset Management, LP
Intermediate Capital Group PLC
Marathon Asset Management, LP
Oceanwood Capital Management, LLP
PanAgora
Schroder Investment Management North America Ltd.
Strategic Value Partners
Viking Global Investors, LP

Investment Managers - Global Private Credit

Apollo Global Management
Arcmont Asset Management
Ares Management Corporation
Barings Global Advisers, Ltd.
BlackRock Institutional Trust Co., N.A.
Francisco Partners Management, LP
GoldenTree 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

Currency Overlay

AlphaEngine Global Investment Solutions LLC
P/E Global, LLC

Securities Lending Agent

Goldman Sachs Agency Lending

Custodians

The Bank of New York Mellon
Fifth Third Bank

Master Recordkeeper

BNY Mellon Asset Servicing

Investment Analytics

BNY Mellon Global Risk Solutions

Investments

Summary Schedule of Broker Commissions for US and Non-US Equity Transactions for the Year Ended June 30, 2022

Broker Name	Fees Paid	# of Shares Traded	Avg. Commission per Share
Instinet, LLC	\$149,525	122,291,738	\$0.001
J.P. Morgan Securities, LLC	104,912	120,498,067	0.001
HSBC Securities, Inc.	99,619	470,905,920	0.000
Goldman Sachs & Co.	76,068	21,813,577	0.003
Citigroup Global Markets, Inc.	67,277	81,746,466	0.001
Stifel, Nicolaus & Co., Inc.	66,723	2,441,966	0.027
UBS Securities, LLC	66,651	68,155,640	0.001
Jefferies, LLC	63,861	799,787,432	0.000
ITG, Inc.	57,496	10,835,002	0.005
Merrill Lynch Professional Clearing Corp.	53,461	36,394,844	0.001
All other brokers	831,286	952,063,146	0.001
Total	\$1,636,879	2,686,933,798	

Reconciliation to Statement of Fiduciary Net Position

Asset Class/Strategy	Fair Value	% of Total Fair Value
Global Equities	\$7,011,063,631	40.7%
Global Private Equity	2,192,037,620	12.7
Global Fixed Income	2,162,433,665	12.6
Global Real Assets	3,715,169,652	21.6
Opportunistic & Tactical Investments	825,935,018	4.8
Global Private Credit	799,438,528	4.6
Cash Equivalents	521,669,099	3.0
Net Portfolio Value	\$17,227,747,213	100.0%
Investments receivable, securities sold	(138,190,266)	
Investments payable, securities purchased	242,962,689	
Cash and cash equivalents	(716,118,542)	
Investments per Statement of Fiduciary Net Position	\$16,616,401,094	

Statement of Investment Policy (effective February 17, 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 "Investment Beliefs" below. 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.

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- 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 and Governance Officer, 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;

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;

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- 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:

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

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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.

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:

<u>ASSET CLASS</u>	<u>TARGET</u>	<u>RANGE</u>
Equity	57%	47% - 67%
Global Equities	45%	35% - 55%
Global Private Equity	12%	8% - 16%
Income	43%	38% – 48%
Global Bonds	19%	12% - 26%
Global Private Credit	5%	3% - 7%
Global Real Assets	17%	14% - 20%
Cash Equivalents	2%	0% - 5%
<u>STRATEGY</u>		
Opportunistic and Tactical Investments	0%	0% – 5%
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

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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.

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	US Equity: 55% Russell 3000; NUSE Developed Market: 30% MSCI World ex-USA Net Total Return Index (USD); NUSE Emerging Market: 15% MSCI Emerging Markets Net Total Return Index (USD)
Global Private Equity	Burgiss All Private Equity Benchmark (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	Citigroup 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.

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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



155,063
Active Members



\$3,995 million
Annual Payroll



\$25,762
Annual Average Salary



Percent Increase
in Average Pay



47.2
Average Age:
Members



7.6
Active Average
Years of Service

RETIREES



81,151
Retirees*



\$1,295 million
Annual Benefits



\$15,963
Group Average
Annual Benefit



75.2
Average Age:
Retirees and
Beneficiaries



67.0
Average Age:
Disabilities



72.5
Average Age:
Survivors



Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

October 26, 2022

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, 2022 indicates that a contribution rate of 11.22% of payroll for 155,063 school employees meets the basic financial objective over a 22-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 75.48%. 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 15, 2022, 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
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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 financial reporting purposes meet the parameters set by the Actuarial Standards of Practice (ASOPs).

In order to prepare the results in this report we have utilized appropriate actuarial models that were developed for this purpose. These models use 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 2060, 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.



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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, 2022 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, 2022.

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

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 FY2022, 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, 2022, 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 22-year period.

Pension Trust Fund	13.24%
Medicare B Fund	0.70%
Death Benefit Fund	0.06%
Health Care Fund	—%
	<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 FY2022, 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, 2022:

- **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 for 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 table below.

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	—	3.25	3.25

Non-Economic Assumptions

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

Annual Rates of Retirement								
Age	Reduced	Eligible prior to 8/1/17			Eligible on or after 8/1/17			
		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 three 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, 2022				
Present value of:	Pension Benefits	Medicare Part B	Post-Retirement Death Benefit	Total Basic Benefits
Future benefits to present retirees and survivors	\$13,025,447,789	\$209,633,866	\$31,703,852	\$13,266,785,507
Benefits and refunds to present inactive members	747,231,253	21,444,734	1,143,693	769,819,680
Allowances to present active members				
Service	7,572,081,193	141,850,108	7,846,080	7,721,777,381
Disability	277,718,558	3,970,254	351,184	282,039,996
Survivor benefits	175,915,692	3,039,315	—	178,955,007
Withdrawal	142,659,299	9,012,218	419,724	152,091,241
Total Active AAL	8,168,374,742	157,871,895	8,616,988	8,334,863,625
Total AAL	\$21,941,053,784	\$388,950,495	\$41,464,533	\$22,371,468,812

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
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	0.0
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
2013	121,642	2,747	22,581	(1.3)

* 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		
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
2013	4,197	62,841,820	2,464	2,650,786	70,771	898,267,601	7.2	12,693

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		
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
2013	2,569	1,402,674	2,824	1,541,904	47,376	25,867,296	(0.5)	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							
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
2013	10,988	16,826	5,838	65.3	2,747	212.5	29
MEDICARE B							
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
2013	119	387	268	30.6	2,747	9.8	29
DEATH BENEFIT							
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
2013	19	34	15	55.9	2,747	0.5	29

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							
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
2013	2,860	9,796	4,196	10,988	100.0	83.0	0.0
MEDICARE B							
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
2013	0	255	132	119	100.0	47.0	0.0
DEATH BENEFIT							
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
2013	0	27	7	19	100.0	73.0	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 94)

Type of Risk Area	2022				2021				2020			
	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.	(\$69.6)	\$2.7	\$1.1	(\$65.8)	(\$99.9)	\$2.9	\$0.8	(\$96.2)	(\$98.0)	\$3.0	\$1.0	(\$94.0)
Disability Retirements If disability claims are less than assumed, there is a gain. If more claims, there is a loss.	(6.3)	(0.1)	0.0	(6.4)	(5.0)	0.0	0.0	(5.0)	(3.0)	(0.1)	0.0	(3.1)
Pre-Retirement Death Benefits If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(6.6)	(0.4)	0.0	(7.0)	(4.5)	(0.2)	0.0	(4.7)	(5.2)	(0.2)	0.0	(5.4)
Pay Increases If there are smaller pay increases than assumed, there is a gain. If greater increases, there is a loss.	(212.3)	0.0	0.0	(212.3)	136.7	0.0	0.0	136.7	136.2	0.0	0.0	136.2
Investment Income (Loss) If there is greater investment income than assumed, there is a gain. If less income, there is a loss.	264.7	3.5	0.4	268.6	425.4	5.2	0.7	431.3	6.4	0.7	0.0	7.1
Withdrawal From Employment If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, there is a loss.	(46.9)	3.2	0.2	(43.5)	(108.7)	1.1	0.1	(107.5)	(104.1)	(0.1)	0.0	(104.2)
New Members Additional accrued liability attributable to members who entered the plan since the last valuation.	(50.7)	(1.8)	(0.1)	(52.6)	(16.0)	(0.6)	0.0	(16.6)	(21.5)	(0.7)	0.0	(22.2)
Death After Retirement If retired members live longer than assumed, there is a loss. If not as long, there is a gain.	67.3	16.1	(0.7)	82.7	45.3	15.0	(0.5)	59.8	15.6	13.6	(0.3)	28.9
Other Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(23.3)	(1.9)	0.0	(25.2)	186.4	2.7	0.1	189.2	59.3	2.9	0.1	62.3
Non-Recurring Items Adjustments for plan amendments, assumption changes, or method changes.	(37.0)	0.0	0.0	(37.0)	(120.9)	(4.5)	(1.1)	(126.5)	0.0	0.0	0.0	0.0
Total Gain (Loss) During Year	(\$120.7)	\$21.3	\$0.9	(\$98.5)	\$438.8	\$21.6	\$0.1	\$460.5	(\$14.3)	\$19.1	\$0.8	\$5.6

2019				2018				2017				2016			
Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total	Pension	Med B	Death Benefit	Total
\$3.4	\$3.8	\$0.6	\$7.8	(\$211.1)	\$1.2	\$0.3	(\$209.6)	(\$211.0)	(\$0.5)	(\$0.3)	(\$211.8)	(\$141.6)	\$0.7	(\$0.1)	(\$141.0)
(9.5)	0.0	0.0	(9.5)	(14.6)	(0.1)	0.0	(14.7)	(37.0)	(0.7)	(0.1)	(37.8)	(49.9)	(0.6)	(0.1)	(50.6)
(3.8)	(0.2)	0.0	(4.0)	(6.4)	(0.2)	0.0	(6.6)	(0.1)	0.0	0.0	(0.1)	(27.9)	(0.6)	0.0	(28.5)
20.3	0.0	0.0	20.3	85.2	0.0	0.0	85.2	(69.2)	0.0	0.0	(69.2)	70.0	0.0	0.0	70.0
(44.1)	0.1	(0.1)	(44.1)	(159.0)	(1.9)	(0.2)	(161.1)	(12.1)	0.1	0.0	(12.0)	49.6	0.9	0.1	50.6
(105.9)	(0.4)	0.0	(106.3)	(124.0)	(0.5)	0.0	(124.5)	21.7	0.2	0.0	21.9	29.2	1.1	0.1	30.4
(21.6)	(0.8)	0.0	(22.4)	(34.6)	(1.0)	(0.1)	(35.7)	(45.0)	(2.9)	(0.2)	(48.1)	(42.3)	(1.6)	(0.1)	(44.0)
(35.6)	10.7	0.0	(24.9)	4.6	10.5	(0.1)	15.0	85.3	14.0	(2.1)	97.2	104.4	10.6	(1.2)	113.8
75.7	2.7	0.0	78.4	(0.7)	5.5	(0.2)	4.6	(32.1)	1.8	3.6	(26.7)	(3.3)	1.0	1.6	(0.7)
0.0	0.0	0.0	0.0	357.6	0.0	0.0	357.6	998.5	0.0	0.0	998.5	(643.5)	(22.4)	(2.3)	(668.2)
(\$121.1)	\$15.9	\$0.5	(\$104.7)	(\$103.0)	\$13.5	(\$0.3)	(\$89.8)	\$699.0	\$12.0	\$0.9	\$711.9	(\$655.3)	(\$10.9)	(\$2.0)	(\$668.2)

(continued on next page)

Actuarial

(continued from prior page)

Type of Risk Area	2015				2014				2013*
	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.	(\$124.4)	\$1.5	(\$0.1)	(\$123.0)	(\$122.0)	(\$0.5)	(\$0.1)	(\$122.6)	(\$121.9)
Disability Retirements If disability claims are less than assumed, there is a gain. If more claims, there is a loss.	(52.4)	(0.6)	(0.1)	(53.1)	(55.3)	(0.6)	(0.1)	(56.0)	(53.6)
Pre-Retirement Death Benefits If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0
Pay Increases If there are smaller pay increases than assumed, there is a gain. If greater increases, there is a loss.	53.3	0.0	0.0	53.3	103.4	0.0	0.0	103.4	219.2
Investment Income (Loss) If there is greater investment income than assumed, there is a gain. If less income, there is a loss.	60.6	1.3	0.2	62.1	398.0	4.5	0.8	403.3	241.0
Withdrawal From Employment If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, there is a loss.	63.2	1.7	0.2	65.1	43.0	5.1	0.2	48.3	61.1
New Members Additional accrued liability attributable to members who entered the plan since the last valuation.	(46.0)	(1.5)	(0.1)	(47.6)	(26.7)	(1.4)	(0.1)	(28.2)	(35.1)
Death After Retirement If retired members live longer than assumed, there is a loss. If not as long, there is a gain.	39.0	16.9	(0.1)	55.8	2.5	0.5	0.1	3.1	2.9
Other Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	(0.8)	0.4	0.3	(0.1)	(4.6)	2.3	0.2	(2.1)	1.9
Non-Recurring Items Adjustments for plan amendments, assumption changes, or method changes.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8
Total Gain (Loss) During Year	(\$7.5)	\$19.7	\$0.3	\$12.5	\$338.4	\$9.9	\$1.0	\$349.3	\$343.3

* Breakdowns by fund for FY2013 are not available.

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 post-employment 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.

Year Ended June 30	Annual Required Contribution (ARC)	Employer Contribution	Retiree Drug Subsidy (RDS) & Other Contribution	Total Contribution	Percentage of ARC Contributed
	(a)	(b)	(c)	(d) = (b) + (c)	(d) / (a)
2022	\$98,268,579	\$53,766,548	\$34,516,422	\$88,282,970	89.8%
2021	132,930,967	53,533,333	20,059,596	73,592,929	55.4
2020	161,011,895	48,187,050	32,349,114	80,536,164	50.0
2019	190,092,589	65,877,673	16,067,175	81,944,848	43.1
2018	176,950,184	63,539,354	36,517,382	100,056,736	56.5
2017	178,034,717	47,672,886	17,341,005	65,013,891	36.5
2016	161,566,234	44,855,441	32,493,250	77,348,691	47.9
2015	164,182,107	68,904,867	20,084,826	88,989,693	54.2
2014	190,390,431	46,097,206	29,200,200	75,297,406	39.5
2013	171,402,038	45,489,443	—	45,489,443	26.5

Asset Valuation Method Fair Value

Economic Assumptions The following economic assumptions were used in the actuarial valuation as of June 30, 2022:

- **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** Below is a chart detailing trend assumptions:

Calendar Year	Trend Rate
2022	7.00%
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

Actuarial

Non-Economic Assumptions

- **Age-related morbidity** Per capita costs are adjusted to reflect expected cost changes related to age. The increase to the net incurred claims is assumed to be:

Participant Age	Annual Increase	
	Medical	Prescription
Under 41	0.00%	0.00%
41 - 45	2.50	1.25
46 - 50	2.60	1.30
51 - 55	3.20	1.60
56 - 60	3.40	1.70
61 - 65	3.70	1.85
66 - 70	3.20	1.60
71 - 75	2.40	1.20
76 - 80	1.80	0.90
81 - 85	1.30	0.65
86 and over	0.00	0.00

- **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, 2022

Present value of:

Benefits payable on account of present retiree members and beneficiaries	\$519,877,530
Benefits payable on account of present active members	816,090,867
Benefits payable on account of deferred vested members	12,285,673
Total AAL	\$1,348,254,070

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	2022	2021	2020	2019	2018	2017	2016	2015	2014*
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.	(\$1.0)	(\$3.9)	(\$6.6)	(\$3.9)	\$30.8	(\$4.8)	(\$10.6)	\$2.8	\$2.7
Disability Retirements If disability claims are less than assumed, there is a gain. If more claims, there is a loss.	(0.3)	1.2	1.2	(1.6)	(0.4)	(5.1)	2.8	2.6	3.8
Post-Retirement Death Benefits If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1.5)	(1.5)	(1.7)	(2.0)	(1.9)	(2.4)	(1.0)	(0.7)	(1.5)
Claims Increases (Including Wrap Plan) If there are smaller claims increases than assumed, there is a gain. If greater increases, there is a loss.	69.4	(7.9)	491.4	415.3	(71.4)	124.0	170.7	112.7	561.2
Investment Income (Loss) If there is greater investment income than assumed, there is a gain. If less income, there is a loss.	(53.9)	82.7	(16.4)	(3.7)	4.7	14.3	(21.0)	(12.5)	29.2
Withdrawal From Employment If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, there is a loss.	21.5	19.7	17.5	17.9	39.2	3.4	29.4	30.1	51.0
Contribution Shortfall If there are more contributions than the ACR, there is a gain. If less contributions, there is a loss.	(10.3)	(60.9)	(82.6)	(111.0)	(78.9)	(116.0)	(86.4)	(77.2)	(118.1)
New Members Additional accrued liability attributable to members who entered the plan since the last valuation.	(10.3)	(12.8)	(18.1)	(20.5)	(21.2)	(39.0)	(24.7)	(18.2)	(31.4)
Death after Retirement If retired members live longer than assumed, there is a loss. If not as long, there is a gain.	15.9	14.4	16.0	16.3	35.4	18.4	12.2	14.3	24.3
Other Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	22.8	42.3	55.1	63.4	9.2	31.1	(2.9)	9.0	19.3
Non-Recurring Items Adjustments for plan amendments, assumption changes, or method changes.	(106.2)	560.9	(16.4)	0.0	0.0	0.0	(72.1)	0.0	(36.1)
Total Gain (Loss) During Year	(\$53.9)	\$634.2	\$439.4	\$370.2	(\$54.5)	\$23.9	(\$3.6)	\$62.9	\$504.4

* Breakdowns by fund for FY2013 are not available.

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)
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
2013	379	2,918	2,539	13.0	2,747	92.4	8

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)
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
2013	0	1,157	1,761	379	100.0	32.8	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		% Increase in Projected Benefits	Average Projected Benefits
	No.	Projected Benefits	No.	Projected Benefits	No.	Projected Benefits		
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
2013	2,110	8,977,566	3,217	4,370,993	45,332	100,514,730	10.8	2,217

* 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	102
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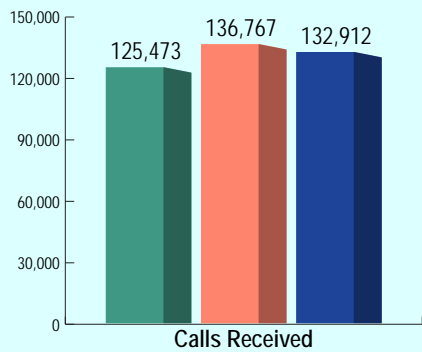
Member and Employer Interaction

MEMBER INTERACTION

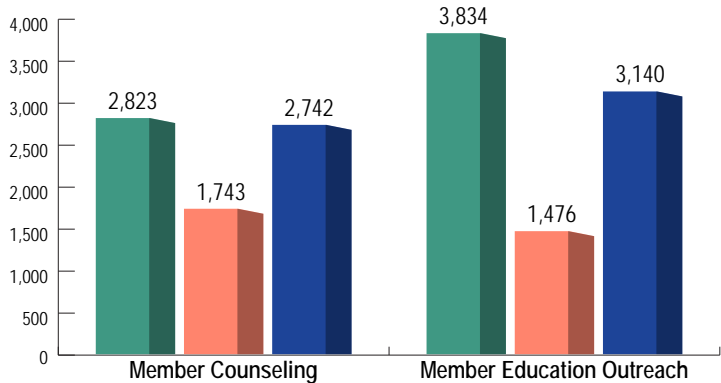
FY2020 FY2021 FY2022

During fiscal year 2022, Member Services reached 5,882 of our members through webinars, remote counseling, and on-site counseling sessions.

Incoming Calls

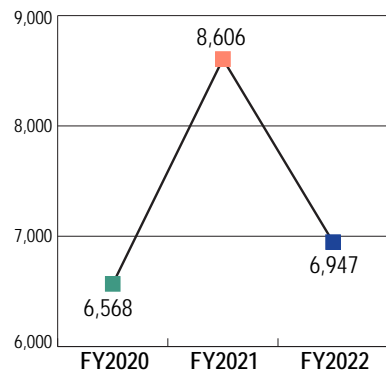


Counseling and Outreach

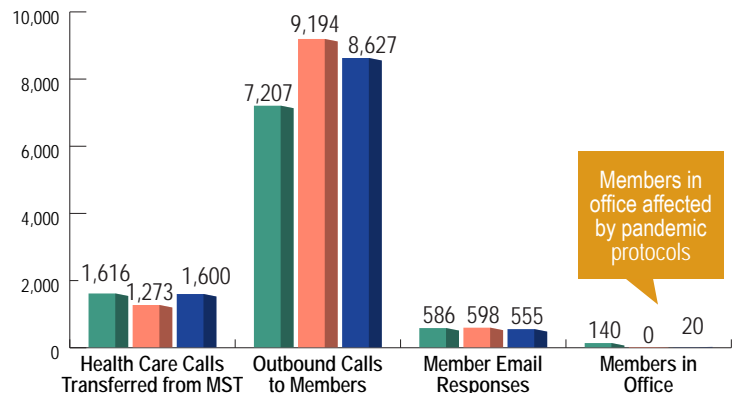


EMPLOYER INTERACTION

Incoming Calls



HEALTH CARE INTERACTION



Data from FY2022 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 103 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 110 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:

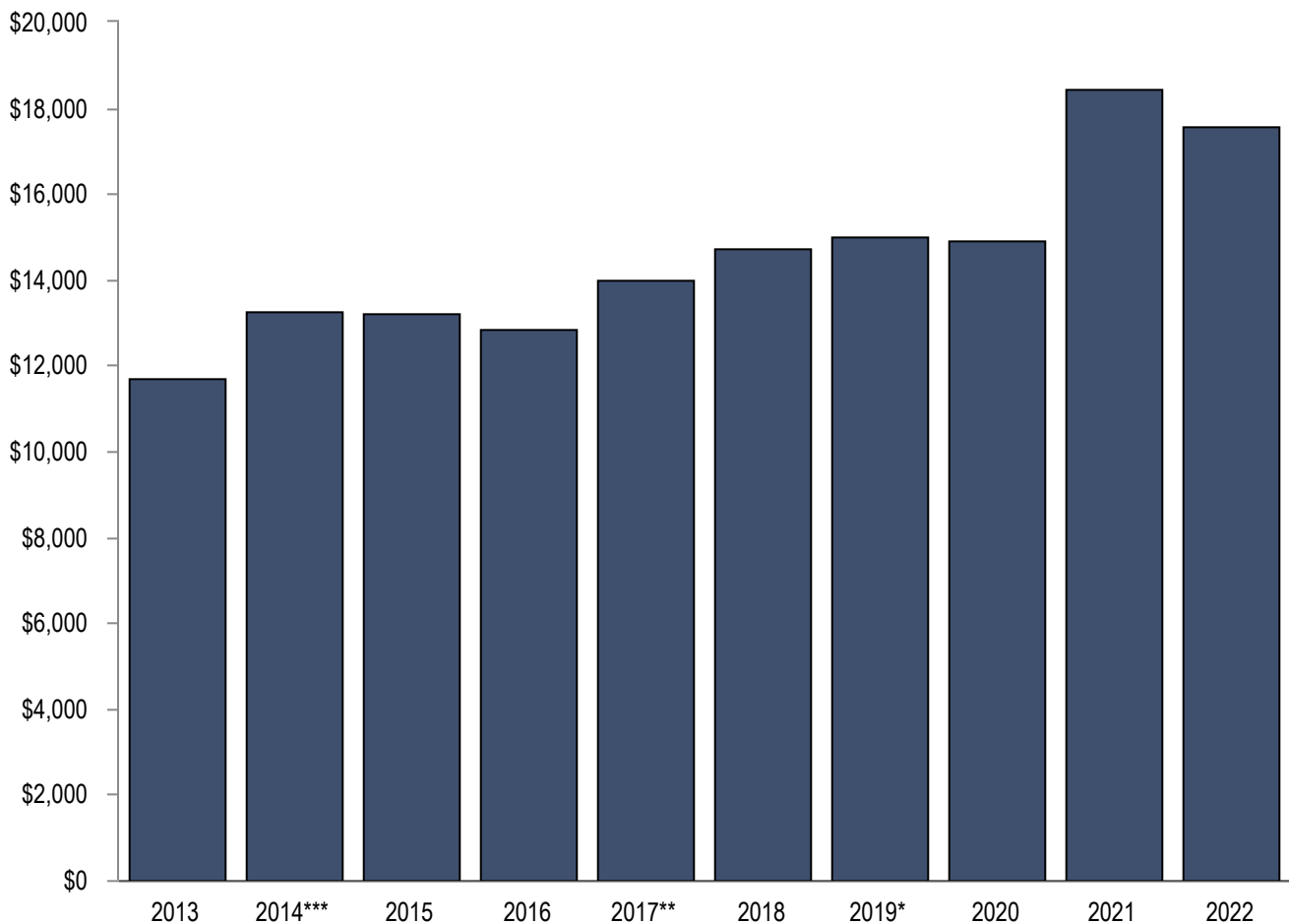
- Employee and Employer Contribution Rates
- Demographics of New Pension Benefit Recipients
- Demographics of Active and Retired Members Used for Valuation Purposes
- Retired Members by Type of Benefit
- Retirees, Spouses, and Dependents Receiving Health Care Coverage
- Principal Participating Employers
- 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
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
2013	11,160,574,582	120,363,782	19,543,665	144,750	379,181,026	11,679,807,805

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 107)

ALL FUNDS COMBINED	2022	2021	2020	2019*
ADDITIONS				
Employer Contributions	\$578,301,752	\$537,740,460	\$540,093,944	\$530,912,162
Member Contributions	375,838,354	346,781,820	352,343,063	345,212,684
Other Income	97,382,882	84,050,104	97,386,324	87,988,134
Total Investment Income (Loss), Net	(346,447,426)	4,088,576,284	424,249,537	853,597,055
TOTAL ADDITIONS	705,075,562	5,057,148,668	1,414,072,868	1,817,710,035
DEDUCTIONS				
Benefits	1,456,559,791	1,425,088,081	1,412,869,771	1,404,572,346
Refunds and Lump Sum Payments	82,209,215	72,374,764	72,849,117	75,639,810
Net Transfers to Other Ohio Systems	7,998,389	5,424,513	3,411,620	1,311,797
Administrative Expenses	24,600,074	16,084,857	30,882,135	34,449,268
TOTAL DEDUCTIONS	1,571,367,469	1,518,972,215	1,520,012,643	1,515,973,221
Net Increase (Decrease)	(866,291,907)	3,538,176,453	(105,939,775)	301,736,814
Fiduciary Net Position Held in Trust:				
Beginning of Year	18,440,611,356	14,902,434,903	15,008,374,678	14,706,362,726
End of Year	\$17,574,319,449	\$18,440,611,356	\$14,902,434,903	\$15,008,099,540

PENSION TRUST FUND	2022	2021	2020	2019*
ADDITIONS				
Employer Contributions	\$495,884,566	\$456,195,419	\$461,695,266	\$435,388,804
Member Contributions	375,838,354	346,781,820	352,343,063	345,212,684
Total Investment Income (Loss), Net	(332,917,903)	3,916,448,920	407,045,705	819,731,217
TOTAL ADDITIONS	538,805,017	4,719,426,159	1,221,084,034	1,600,332,705
DEDUCTIONS				
Pension Benefits	1,302,357,602	1,270,735,447	1,251,597,154	1,232,808,916
Refunds and Lump Sum Payments	82,209,215	72,374,764	72,849,117	75,639,810
Net Transfers to Other Ohio Systems	7,998,389	5,424,513	3,411,620	1,311,797
Administrative Expenses	21,533,026	12,704,584	27,934,647	31,814,787
TOTAL DEDUCTIONS	1,414,098,232	1,361,239,308	1,355,792,538	1,341,575,310
Net Increase (Decrease)	(875,293,215)	3,358,186,851	(134,708,504)	258,757,395
Fiduciary Net Position Held in Trust:				
Beginning of Year	17,561,235,176	14,203,048,325	14,337,756,829	14,078,724,296
End of Year	\$16,685,941,961	\$17,561,235,176	\$14,203,048,325	\$14,337,481,691

HEALTH CARE FUND	2022	2021	2020	2019
ADDITIONS				
Employer Contributions	\$53,766,548	\$53,533,333	\$48,187,050	\$65,877,673
Other Income	97,382,882	84,050,104	97,386,324	87,988,134
Total Investment Income (Loss), Net	(8,096,503)	111,580,200	11,139,059	22,009,627
TOTAL ADDITIONS	143,052,927	249,163,637	156,712,433	175,875,434
DEDUCTIONS				
Health Care Expenses	128,796,889	128,132,981	135,034,624	145,127,670
Administrative Expenses	3,011,817	3,311,946	2,877,010	2,566,722
TOTAL DEDUCTIONS	131,808,706	131,444,927	137,911,634	147,694,392
Net Increase (Decrease)	11,244,221	117,718,710	18,800,799	28,181,042
Fiduciary Net Position Held in Trust:				
Beginning of Year	600,330,188	482,611,478	463,810,679	435,629,637
End of Year	\$611,574,409	\$600,330,188	\$482,611,478	\$463,810,679

* 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

2018	2017**	2016	2015	2014***	2013
\$499,018,574	\$515,834,904	\$481,635,982	\$466,904,369	\$451,402,553	\$447,901,887
324,842,074	336,627,658	314,325,716	303,866,076	295,690,550	292,958,056
116,893,434	98,190,524	113,932,903	116,501,166	127,867,227	135,705,046
1,270,190,442	1,649,100,073	108,787,810	452,598,520	1,939,269,151	1,329,495,903
2,210,944,524	2,599,753,159	1,018,682,411	1,339,870,131	2,814,229,481	2,206,060,892
1,407,652,952	1,341,304,984	1,309,740,098	1,248,400,086	1,174,068,175	1,120,377,591
59,575,036	60,692,833	70,340,495	60,635,651	55,668,466	48,979,203
(6,734,065)	(3,139,875)	(2,272,514)	28,139,159	7,535,690	22,301,557
29,630,291	26,988,572	24,556,744	21,600,412	21,857,167	21,471,412
1,490,124,214	1,425,846,514	1,402,364,823	1,358,775,308	1,259,129,498	1,213,129,763
720,820,310	1,173,906,645	(383,682,412)	(18,905,177)	1,555,099,983	992,931,129
13,985,542,416	12,822,058,903	13,205,741,315	13,224,646,492	11,679,807,805	10,686,876,676
\$14,706,362,726	\$13,995,965,548	\$12,822,058,903	\$13,205,741,315	\$13,234,907,788	\$11,679,807,805

2018	2017**	2016	2015	2014***	2013
\$406,953,261	\$442,032,882	\$412,712,475	\$374,724,343	\$382,098,970	\$380,083,642
324,842,074	336,627,658	314,325,716	303,866,076	295,690,550	292,958,056
1,226,089,090	1,593,050,588	105,116,336	435,966,343	1,864,902,017	1,277,940,348
1,957,884,425	2,371,711,128	832,154,527	1,114,556,762	2,542,691,537	1,950,982,046
1,227,807,547	1,146,987,656	1,085,216,541	1,020,154,456	957,757,668	901,072,882
59,575,036	60,692,833	70,340,495	60,635,651	55,668,466	48,979,203
(6,734,065)	(3,139,875)	(2,272,514)	28,139,159	7,535,690	22,301,557
26,931,754	24,343,472	21,746,197	19,249,913	19,528,157	19,239,612
1,307,580,272	1,228,884,086	1,175,030,719	1,128,179,179	1,040,489,981	991,593,254
650,304,153	1,142,827,042	(342,876,192)	(13,622,417)	1,502,201,556	959,388,792
13,428,420,143	12,296,016,233	12,638,892,425	12,652,514,842	11,160,574,582	10,201,185,790
\$14,078,724,296	\$13,438,843,275	\$12,296,016,233	\$12,638,892,425	\$12,662,776,138	\$11,160,574,582

2018	2017	2016	2015	2014	2013
\$63,539,354	\$47,672,886	\$44,855,441	\$68,904,867	\$46,097,206	\$45,489,443
116,893,434	98,190,524	113,932,903	116,501,166	127,867,227	135,705,046
28,167,652	35,730,747	2,244,300	11,142,837	50,980,652	35,523,491
208,600,440	181,594,157	161,032,644	196,548,870	224,945,085	216,717,980
152,447,415	167,106,908	196,445,600	199,750,908	187,994,468	190,468,991
2,632,948	2,582,204	2,746,127	2,292,565	2,273,442	2,178,370
155,080,363	169,689,112	199,191,727	202,043,473	190,267,910	192,647,361
53,520,077	11,905,045	(38,159,083)	(5,494,603)	34,677,175	24,070,619
382,109,560	370,204,515	408,363,598	413,858,201	379,181,026	355,110,407
\$435,629,637	\$382,109,560	\$370,204,515	\$408,363,598	\$413,858,201	\$379,181,026

(continued on next page)

SERS Retirement Plan Schedules

Changes in Fiduciary Net Position (continued from prior page)

Last 10 fiscal years

MEDICARE B FUND	2022	2021	2020	2019
ADDITIONS				
Employer Contributions	\$26,224,585	\$26,273,453	\$28,332,747	\$27,319,485
Total Investment Income (Loss), Net	(4,824,251)	53,543,370	5,305,350	10,373,511
TOTAL ADDITIONS	21,400,334	79,816,823	33,638,097	37,692,996
DEDUCTIONS				
Pension Benefits	22,446,630	22,913,755	23,536,709	23,990,512
Administrative Expenses	6,774	6,453	6,655	5,487
TOTAL DEDUCTIONS	22,453,404	22,920,208	23,543,364	23,995,999
Net Increase (Decrease)	(1,053,070)	56,896,615	10,094,733	13,696,997
Fiduciary Net Position Held in Trust:				
Beginning of Year	247,954,730	191,058,115	180,963,382	167,266,385
End of Year	\$246,901,660	\$247,954,730	\$191,058,115	\$180,963,382

DEATH BENEFIT FUND	2022	2021	2020	2019
ADDITIONS				
Employer Contributions	\$2,247,134	\$1,382,813	\$1,529,777	\$1,975,200
Total Investment Income (Loss), Net	(608,945)	7,003,576	757,342	1,479,649
TOTAL ADDITIONS	1,638,189	8,386,389	2,287,119	3,454,849
DEDUCTIONS				
Death Benefits	2,601,941	2,962,198	2,364,642	2,289,135
Administrative Expenses	45,945	59,297	61,321	59,750
TOTAL DEDUCTIONS	2,647,886	3,021,495	2,425,963	2,348,885
Net Increase (Decrease)	(1,009,697)	5,364,894	(138,844)	1,105,964
Fiduciary Net Position Held in Trust:				
Beginning of Year	30,857,081	25,492,187	25,631,031	24,525,067
End of Year	\$29,847,384	\$30,857,081	\$25,492,187	\$25,631,031

QEBA FUND	2022	2021	2020	2019
ADDITIONS				
Employer Contributions	\$178,919	\$355,442	\$349,104	\$351,000
Total Investment Income (Loss), Net	176	218	2,081	3,051
TOTAL ADDITIONS	179,095	355,660	351,185	354,051
DEDUCTIONS				
Pension Benefits	356,729	343,700	336,642	356,113
Administrative Expenses	2,512	2,577	2,502	2,522
TOTAL DEDUCTIONS	359,241	346,277	339,144	358,635
Net Increase (Decrease)	(180,146)	9,383	12,041	(4,584)
Fiduciary Net Position Held in Trust:				
Beginning of Year	234,181	224,798	212,757	217,341
End of Year	\$54,035	\$234,181	\$224,798	\$212,757

SERS Retirement Plan Schedules

2018	2017	2016	2015	2014	2013
\$26,291,404	\$24,155,026	\$22,208,623	\$21,499,206	\$21,517,805	\$20,672,040
13,784,587	17,527,764	1,233,948	4,716,932	20,040,557	13,702,584
40,075,991	41,682,790	23,442,571	26,216,138	41,558,362	34,374,624
24,384,610	24,718,613	25,391,810	25,743,861	25,800,345	26,204,777
6,143	6,277	7,544	7,407	6,639	6,317
24,390,753	24,724,890	25,399,354	25,751,268	25,806,984	26,211,094
15,685,238	16,957,900	(1,956,783)	464,870	15,751,378	8,163,530
151,581,147	134,623,247	136,580,030	136,115,160	120,363,782	112,200,252
\$167,266,385	\$151,581,147	\$134,623,247	\$136,580,030	\$136,115,160	\$120,363,782

2018	2017	2016	2015	2014	2013
\$1,858,955	\$1,608,830	\$1,500,583	\$1,455,553	\$1,412,852	\$1,398,442
2,147,404	2,790,208	192,842	772,277	3,345,822	2,329,326
4,006,359	4,399,038	1,693,425	2,227,830	4,758,674	3,727,768
2,639,464	2,122,612	2,358,518	2,460,907	2,262,136	2,410,943
55,996	53,601	55,139	48,157	47,394	45,510
2,695,460	2,176,213	2,413,657	2,509,064	2,309,530	2,456,453
1,310,899	2,222,825	(720,232)	(281,234)	2,449,144	1,271,315
23,214,168	20,991,343	21,711,575	21,992,809	19,543,665	18,272,350
\$24,525,067	\$23,214,168	\$20,991,343	\$21,711,575	\$21,992,809	\$19,543,665

2018	2017	2016	2015	2014	2013
\$375,600	\$365,280	\$358,860	\$320,400	\$275,720	\$258,320
1,709	766	384	131	103	154
377,309	366,046	359,244	320,531	275,823	258,474
373,916	369,195	327,629	289,954	253,558	219,998
3,450	3,018	1,737	2,370	1,535	1,603
377,366	372,213	329,366	292,324	255,093	221,601
(57)	(6,167)	29,878	28,207	20,730	36,873
217,398	223,565	193,687	165,480	144,750	107,877
\$217,341	\$217,398	\$223,565	\$193,687	\$165,480	\$144,750

SERS Retirement Plan Schedules

Benefit and Refund Deductions from Fiduciary Net Position by Type

Last 10 fiscal years

PENSION BENEFITS	2022	2021	2020	2019
Service Retirement	\$1,173,041,717	\$1,139,424,266	\$1,117,724,808	\$1,096,960,216
Disability Retirement	88,531,533	90,688,344	93,391,297	95,725,624
Survivor Benefits	40,784,352	40,622,837	40,481,049	40,123,076
Total Pension Benefits	\$1,302,357,602	\$1,270,735,447	\$1,251,597,154	\$1,232,808,916
Refunds				
Separation	\$82,147,880	\$72,308,775	\$72,834,422	\$75,630,053
Beneficiaries	61,335	65,989	14,695	9,757
Total Refunds	\$82,209,215	\$72,374,764	\$72,849,117	\$75,639,810

MEDICARE B REIMBURSEMENT	2022	2021	2020	2019
Service Retirement	\$20,556,582	\$20,885,774	\$21,365,130	\$21,734,690
Disability Retirement	1,153,448	1,229,228	1,296,750	1,327,303
Survivor Benefits	736,600	798,753	874,829	928,519
Total Medicare B Reimbursement	\$22,446,630	\$22,913,755	\$23,536,709	\$23,990,512

DEATH BENEFITS	2022	2021	2020	2019
Service	\$2,391,622	\$2,710,522	\$2,169,207.57	\$2,083,499
Disability	210,319	251,676	195,434.14	205,636
Total Death Benefits	\$2,601,941	\$2,962,198	\$2,364,641.71	\$2,289,135

HEALTH CARE EXPENSES	2022	2021	2020	2019
Medical	\$51,225,584	\$64,912,611	\$56,771,016	\$72,447,500
Prescription	77,571,305	63,220,370	78,263,608	72,680,170
Other	—	—	—	—
Total Health Care Expenses	\$128,796,889	\$128,132,981	\$135,034,624	\$145,127,670

SERS Retirement Plan Schedules

2018	2017	2016	2015	2014	2013
\$1,091,624,986	\$1,012,404,884	\$952,950,117	\$891,831,626	\$834,865,512	\$781,736,903
97,027,548	96,312,675	94,595,437	91,265,121	87,804,462	85,514,086
39,155,013	38,270,097	37,670,987	37,057,709	35,087,694	33,821,893
\$1,227,807,547	\$1,146,987,656	\$1,085,216,541	\$1,020,154,456	\$957,757,668	\$901,072,882
\$59,496,216	\$59,541,576	\$68,857,916	\$59,875,564	\$55,018,577	\$48,392,410
78,820	1,151,257	1,482,579	760,087	649,889	586,793
\$59,575,036	\$60,692,833	\$70,340,495	\$60,635,651	\$55,668,466	\$48,979,203

2018	2017	2016	2015	2014	2013
\$22,072,596	\$22,336,187	\$22,855,321	\$23,105,680	\$23,099,058	\$23,460,682
1,330,670	1,336,790	1,413,048	1,428,700	1,436,026	1,425,456
981,344	1,045,636	1,123,441	1,209,481	1,265,261	1,318,639
\$24,384,610	\$24,718,613	\$25,391,810	\$25,743,861	\$25,800,345	\$26,204,777

2018	2017	2016	2015	2014	2013
\$2,377,087	\$1,939,771	\$2,133,523	\$2,256,060	\$2,052,993	\$2,197,804
262,377	182,841	224,995	204,847	209,143	213,139
\$2,639,464	\$2,122,612	\$2,358,518	\$2,460,907	\$2,262,136	\$2,410,943

2018	2017	2016	2015	2014	2013
\$81,873,185	\$87,845,475	\$108,821,435	\$117,389,938	\$109,622,130	\$110,990,977
70,574,230	79,261,433	86,997,168	80,843,448	76,945,975	78,135,361
—	—	626,997	1,517,522	1,426,363	1,342,653
\$152,447,415	\$167,106,908	\$196,445,600	\$199,750,908	\$187,994,468	\$190,468,991

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	
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
2013	10.00	13.05	0.74	0.05	0.16	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
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
2013	21.7	1,236	63.2	31,558

Average Disability Benefit

Year Ended June 30	Service Credit	Monthly Amount	Age	Final Average Salary
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
2013	16.1	1,254	54.0	29,484

Defined Benefit Program Schedules

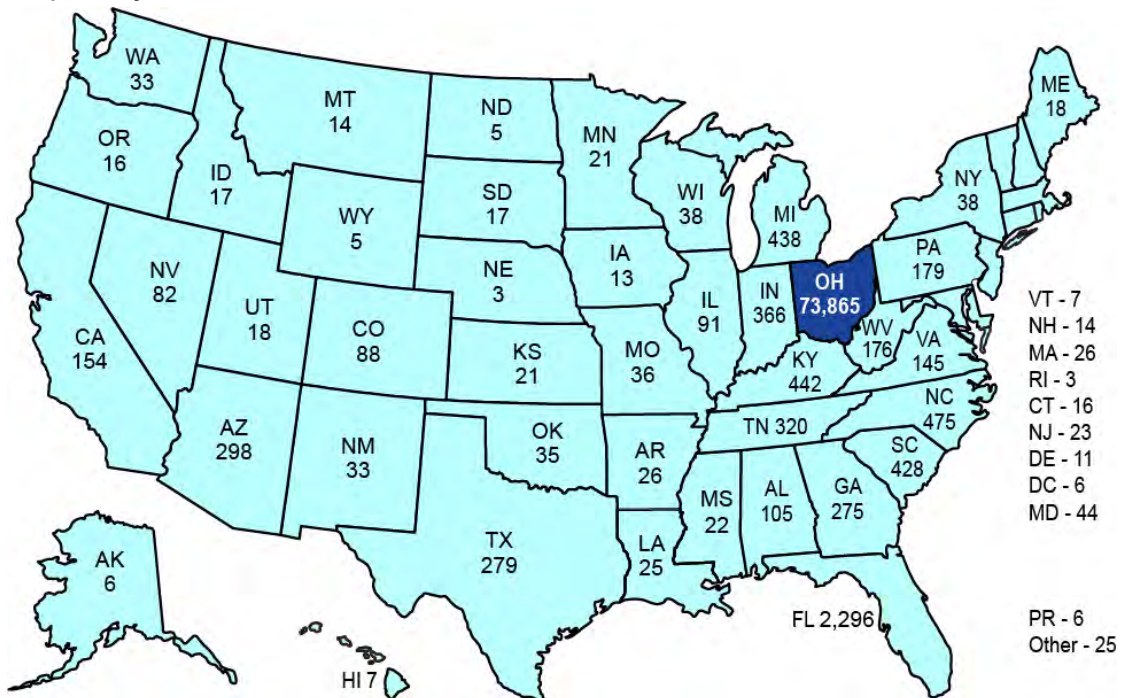
Demographics of Active and Retired Members Used for Valuation Purposes

Fiscal Year 2022

	Active Members			Percentage of Distribution		
	Male	Female	Total	Male	Female	Total
Under 20	1,462	1,342	2,804	1%	1%	2%
20 to 29	8,479	12,029	20,508	5	8	13
30 to 39	8,419	16,805	25,224	5	11	16
40 to 49	10,251	23,864	34,115	7	15	22
50 to 54	5,663	14,210	19,873	4	9	13
55 to 59	5,392	15,092	20,484	3	10	13
60 to 64	5,086	13,834	18,920	3	9	12
65 to 69	2,865	5,660	8,525	2	4	6
70 and over	1,907	2,703	4,610	1	2	3
	49,524	105,539	155,063	31%	69%	100%

	All Benefit Recipients			Percentage of Distribution		
	Male	Female	Total	Male	Female	Total
Under 55	351	616	967	0%	1%	1%
55 to 59	766	1,192	1,958	1	1	2
60 to 64	2,103	4,739	6,842	3	6	9
65 to 69	4,391	12,896	17,287	5	16	21
70 to 74	4,774	12,927	17,701	6	16	22
75 to 79	3,696	10,410	14,106	5	13	18
80 to 84	2,651	7,990	10,641	3	10	13
85 to 89	1,601	5,414	7,015	2	7	9
90 to 94	726	2,785	3,511	1	3	4
95 to 99	160	825	985	0	1	1
100 and over	12	126	138	0	0	0
	21,231	59,920	81,151	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	9,304	8,623	23	658
251 - 500	10,852	9,580	245	1,027
501 - 750	10,698	9,374	521	803
751 - 1,000	9,629	8,252	770	607
1,001 - 1,500	14,435	12,667	1,204	564
1,501 - 2,000	9,125	8,105	789	231
over 2,000	17,108	15,729	1,104	275
	81,151	72,330	4,656	4,165
Average Monthly Benefit		\$1,347	\$1,530	\$811
Average Age		75.2	67.0	72.5

Retirees, Spouses, and Dependents Receiving Health Care Coverage

Attained Age	Number of		Total Number
	Males	Females	
Under 30	86	90	176
30 - 39	3	5	8
40 - 49	22	21	43
50 - 59	376	558	934
60 - 64	1,083	2,009	3,092
65 - 69	2,374	5,107	7,481
70 - 74	2,493	5,761	8,254
75 - 79	1,895	5,081	6,976
80 - 84	1,637	4,514	6,151
85 - 89	1,077	3,057	4,134
90 - 94	455	1,688	2,143
95 - 99	82	559	641
100 and over	8	90	98
	11,591	28,540	40,131

Defined Benefit Program Schedules

Principal Participating Employers

Current fiscal year and nine years ago

	Fiscal Year 2022			Fiscal Year 2013		
	Covered Employee Members	Rank	Percentage of Total System	Covered Employee Members	Rank	Percentage of Total System
Columbus City Schools	3,871	1	2.50%	3,556	1	2.92%
Cincinnati Public Schools	3,404	2	2.20	2,531	3	2.08
Cleveland Metropolitan School District	2,595	3	1.67	2,633	2	2.16
Educational Service Center Council of Governments	1,890	4	1.22	1,114	9	0.92
Toledo City Schools	1,776	5	1.15	1,397	6	1.15
Akron Public Schools	1,707	6	1.10	1,496	5	1.23
Olentangy Local Schools	1,391	7	0.90	—	—	—
South-Western City Schools	1,296	8	0.84	1,142	8	0.94
Dayton City Schools	1,292	9	0.83	1,156	7	0.95
Dublin City Schools	1,236	10	0.80	—	—	—
University of Akron	—	—	—	2,393	4	1.97
Columbus State Community College	—	—	—	974	10	0.80
All Other	134,605		86.79	103,250		84.88
Total	155,063		100.00%	121,642		100.00%

In FY2022 "All Other" consisted of:

	Covered Employee Members	Number of School Districts
City School Districts	53,712	183
Local School Districts	50,274	369
Educational Service Centers	9,090	51
Exempted Village Districts	7,183	49
Community Schools	5,521	311
Higher Education	4,102	15
Vocational Schools	3,169	48
Other	1,554	21

Defined Benefit Program Schedules

Average Benefit Payments - New Retirees (Service Only)

Last 10 fiscal years

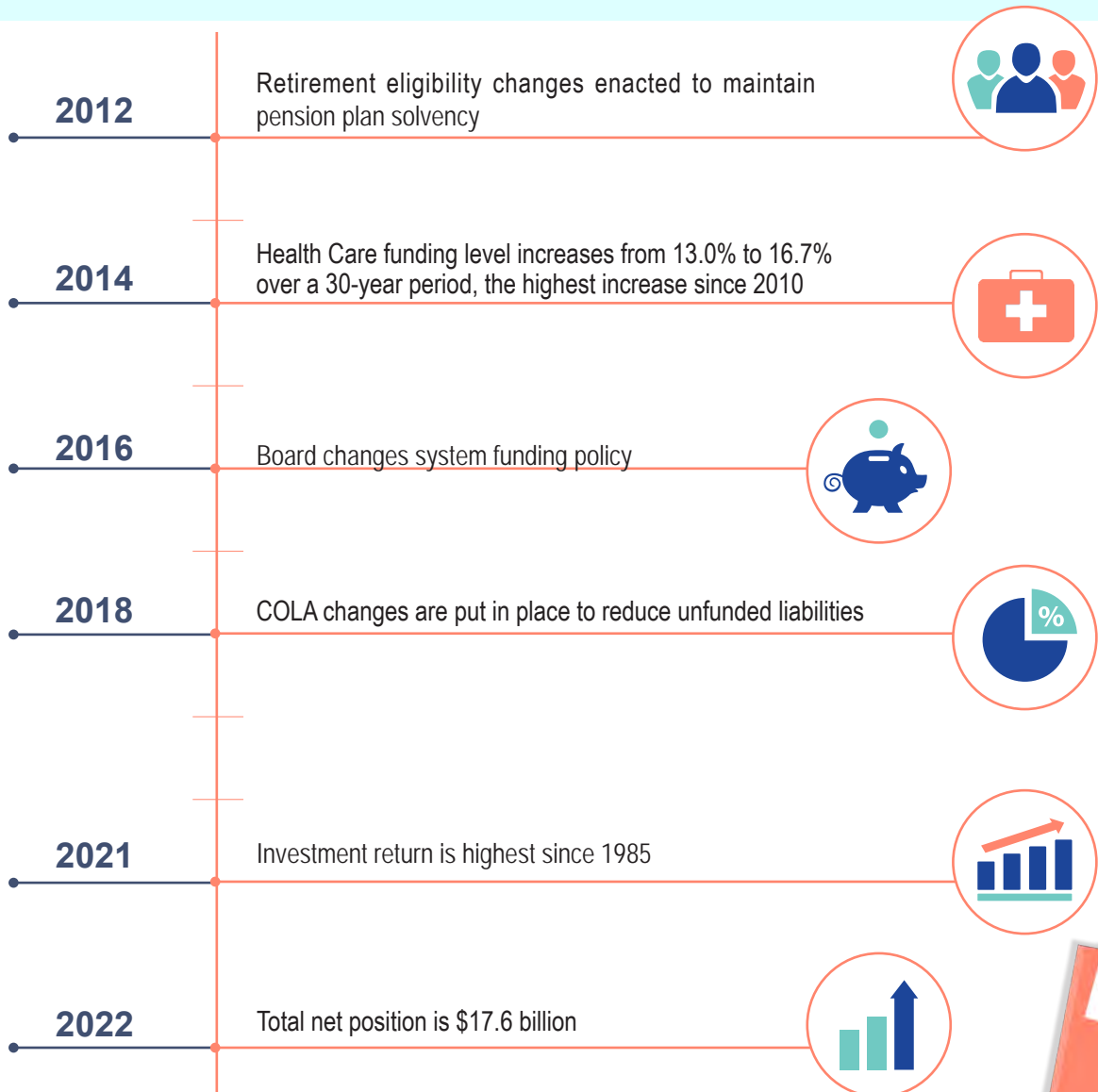
Retirement Effective Dates	Years of Credited Service					
	5-9	10-14	15-19	20-24	25-29	30+
Period 7/1/21 to 6/30/22						
Average Monthly Benefit	\$306	\$486	\$783	\$1,075	\$1,493	\$2,665
Monthly Final Average Salary	1,906	2,371	2,678	2,860	3,061	3,922
Number of Retirees	4	488	491	712	660	985
Period 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
Period 7/1/12 to 6/30/13						
Average Monthly Benefit	\$227	\$483	\$732	\$1,086	\$1,403	\$2,815
Monthly Final Average Salary	1,540	2,069	2,270	2,585	2,830	3,224
Number of Retirees	483	639	437	538	744	965

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, 2022, 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

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:

- Five (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 grandfathered members. To be grandfathered, as of August 1, 2017, the member must have had at least 25 years of service credit or purchased the right to be grandfathered.

A member who is not grandfathered 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
Number of Qualified Beneficiaries	Monthly Benefit Shall Not be Less than	As a Percentage of the Member's Final Average Salary
1	\$96*	25%
2	186	40
3	236	50
4	236	55
5 or more	236	60

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

SCHEDULE III	
Years of Service	As a Percent of the Member's Final Average Salary
20	29%
21	33
22	37
23	41
24	45
25	48
26	51
27	54
28	57
29 or more	60

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 (ERI).

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.



RSM US LLP

**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

The Retirement Board
School Employees Retirement System of Ohio
and The Honorable Keith Faber

We have audited, in accordance with the 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, which comprise the statement of fiduciary net position as of June 30, 2022, and the related statement of changes in fiduciary net position for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise School Employees Retirement System of Ohio's basic financial statements, and have issued our report thereon dated December 9, 2022.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered School Employees Retirement System of Ohio's 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 School Employees Retirement System of Ohio's internal control. Accordingly, we do not express an opinion on the effectiveness of School Employees Retirement System of Ohio's 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 the entity's 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. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether School Employees Retirement System of Ohio's 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*.

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 the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

RSM US LLP

Cleveland, Ohio
December 9, 2022

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 1/3/2023

88 East Broad Street, Columbus, Ohio 43215
Phone: 614-466-4514 or 800-282-0370

This report is a matter of public record and is available online at
www.ohioauditor.gov