



**Retirement Board Agenda
May 18, 2023**

Click Link to Join Zoom Meeting:

<https://ohsers.zoom.us/j/95212904232?pwd=dWp4UVR0U0xKb1NKdkJvcGNyRUN5Zz09>

Meeting ID: 952 1290 4232

Password: 12345

To join by phone, dial: (301) 715-8592 and enter the meeting ID: **952 1290 4232** and password: **12345**

PLEDGE OF ALLEGIANCE

1. Roll Call

CONSENT AGENDA (R)

2. Minutes of the **April 20, 2023**, Retirement Board meeting
3. Summary of Investment Transactions – **March 1, 2023 through March 31, 2022**
4. Retirement Report
 - Superannuations, Survivor Benefits & Transfers
 - Special Cases
5. Disability Report
 - Approval of Disability Benefits
 - Termination of Disability Benefits – Any Occupation
 - Disapproval of Disability Benefits

INVESTMENT REPORT

6. Quarterly Performance Report - Wilshire Associates
7. Annual Overlay Program Review
8. Quarterly Investment Report
9. Statement of Investment Policy (R)
10. Annual Investment Plan – FY24 Draft - Discussion
11. Investment Department Incentive Program (R)

HEALTH CARE REPORT

12. Presentation of 2024 Self-Insured Rates – Cavanaugh Macdonald
13. 2024 Health Care Review and Benefit Considerations

EXECUTIVE DIRECTOR'S REPORT

14. Executive Director's Update
15. Review of Administrative Expenses
16. SERS FY2024 Draft Administrative Budget Review
17. Final Filing of Proposed Amended Administrative Rules (R)

RETIREMENT REPORT

18. Executive Session pursuant to R.C. 121.22 (G)(5) to review applications for Disability Retirement Benefits *(if needed)* (R)

BOARD COMMUNICATION AND POLICY ISSUES

19. Calendar Dates for Future Board Meetings
20. Continued or New Business
 - Board Information Requests and Follow-up Items

ADJOURNMENT (R)

FY2023 SERS Board Roll Call

Jeffrey DeLeone	_____
Frank Weglarz	_____
Hugh Garside	_____
James Haller	_____
Matthew King	_____
Catherine Moss	_____
Barbra Phillips	_____
James Rossler	_____
Daniel Wilson	_____

CONSENT AGENDA

1. Minutes of the
 - a. **April 20, 2023**, Retirement Board meeting
2. Summary of Investment Transactions – **March 1, 2023 to March 31, 2023**
3. Retirement Report
 - a. Superannuations and Survivor Benefits and Transfers
 - b. Special Cases
4. Disability Report
 - a. Approval of Disability Benefits
 - b. Disapproval of Disability Benefits
 - c. Termination of Disability Benefits – Any Occupation

APPROVAL OF CONSENT AGENDA

_____ moved and _____ seconded the motion to approve the Consent Agenda, which includes the following items:

1. Minutes of the
 - a. **April 20, 2023**, Retirement Board meeting
2. Summary of Investment Transactions – **March 1, 2023 to March 31, 2023**
3. Retirement Report
 - a. Superannuations and Survivor Benefits and Transfers
 - b. Special Cases
4. Disability Report
 - a. Approval of Disability Benefits
 - b. Disapproval of Disability Benefits
 - c. Termination of Disability Benefits – Any Occupation

Upon roll call, the vote was as follows:

<u>ROLL CALL:</u>	<u>YEA</u>	<u>NAY</u>	<u>ABSTAIN</u>
Frank Weglarz	_____	_____	_____
Hugh Garside	_____	_____	_____
James Haller	_____	_____	_____
Matthew King	_____	_____	_____
Catherine Moss	_____	_____	_____
Barbra Phillips	_____	_____	_____
James Rossler	_____	_____	_____
Daniel Wilson	_____	_____	_____
Jeffrey DeLeone	_____	_____	_____

SERS Retirement Board Meeting Minutes

April 20, 2023

The nine hundredth and fifty-eighth meeting of the Retirement Board of the School Employees Retirement System was held in the boardroom at 300 E. Broad Street, Columbus, Ohio, and streamed via Zoom videoconferencing on Thursday, April 20, 2023.

Pledge of Allegiance

The SERS Retirement Board meeting convened at 8:34 a.m. with the Pledge of Allegiance.

Roll Call

Following the Pledge of Allegiance, the roll call was as follows: Jeffrey DeLeone, Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, and Daniel Wilson. Also attending in person was Lisa Reid, representative of the Ohio Attorney General's Office and various members of the SERS staff. Several SERS staff members and members of the public attended virtually.

Consent Agenda

The consent agenda for **April 20, 2023**, included:

- Minutes of the March 16, 2023, Retirement Board meeting
- Summary of Investment Transactions for the period of February 1, 2023, to February 28, 2023
- Retirement Report – Superannuations, Survivor Benefits, and Transfers
- Disability Report – Approval of Disability Benefits, Disapproval of Disability Benefits, Termination of Disability Benefits – Any Occupation, Disapproval of Appeal for Disability Benefits, Disapproval of Appeal of Termination on Personal Appearance – Any Occupation, Approval of Appeal of Termination – Any Occupation

Barbra Phillips moved and Catherine Moss seconded the motion to approve the Consent Agenda of the Retirement Board meeting held on Thursday, April 20, 2023. Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

Investment Report

Annual Portfolio Review – Private Credit

SERS Chief Investment Officer, Farouki Majeed, introduced Investment staff member Adam Messerschmidt, who provided a Private Credit Portfolio review. Mr. Messerschmidt opened by reporting the Private Credit portfolio has a market value of \$1B and the global private credit allocation is 5.8% of the total fund. The private credit portfolio had a 5.9% net return for the one-year period ending February 28, 2023, which trailed the policy benchmark by 0.8%. Mr. Messerschmidt continued his report, stating that the portfolio goals for 2023 are to monitor the pace of capital deployment to maintain the allocation within the target range, continue to make new investments with a focus on income generating strategies, and to research new opportunities that can provide a stable allocation and/or additional diversification benefits.

Mr. Messerschmidt continued, stating that SERS invests in private credit to provide risk adjusted returns in excess of those provided by publicly traded fixed income securities and to generate a consistent cash yield. The performance objective is to provide returns in excess of the 90-day Treasury bill rate + 4.5%, net of fees. The Global Private Credit allocation is set at 5% with a permissible range of 3% to 7%.

Mr. Messerschmidt stated new portfolio activity in the last 12 months include new capital commitments of \$305 million with three new funds and one separately managed account and the portfolio market value increased from \$690.6 million to \$1.0 billion.

SERS Retirement Board Meeting Minutes

April 20, 2023

Mr. Messerschmidt closed by reporting the objectives for the remainder of FY2023 are to maintain the allocation within the target range (5% to 7%) by making new investments that fit the SERS' investment policy, while managing the portfolio in conjunction with the pace of capital drawdowns for existing commitments. Other objectives are to build the allocation in line with the implementation guidelines and ensure appropriate risk and return characteristics are present within the new target allocation, evaluate new investments with a cautious approach given the economic outlook and the rising interest rate environment, while focusing on increasing the cash yield of the portfolio and income distribution to the Total Fund and to consider differentiated strategies that can add further diversification to the portfolio while also contributing to the portfolio's return and cash yield. SERS will continue to look for co-investment opportunities with existing managers that could be a fit for the portfolio and that increase the portfolio's cash yield.

Following a brief discussion, the board thanked Mr. Messerschmidt for his report.

SERS Monthly Investment Report

SERS Chief Investment Officer, Farouki Majeed, continued the investments presentation with a monthly investment report. Mr. Majeed reported US growth slowed but remained resilient. The growth rate was 2.6% for Q4 and 2.1% for 2022. The main drivers of Q4 GDP were increases in private inventory investments, consumer and government spendings.

Mr. Majeed continued, stating the US labor market was strong in February with 311,000 jobs added and unemployment rate slightly higher than last month at 3.6%. The labor force participation rate was 62.5%, remaining below the pre pandemic level of 63.3%, indicating a continued tight labor market. US inflation trended down from its peak but remains high.

Mr. Majeed continued his presentation reporting that the SERS pension fund is at \$17.3B and is hopeful the total fund performance for the current fiscal year will be marginally positive. Long-term returns still look fine as the rolling ten-year returns show SERS is above the benchmark and will continue.

Mr. Majeed reported there is still a great likelihood that a recession will happen towards the end of the calendar year as inflation remains high and is expected to remain flat.

After a robust discussion and several questions, the board thanked Mr. Majeed and the investment team for their presentations and continued hard work.

Asset Allocation Presentation and Recommendation

Wilshire Associates staff members Joanna Bewick, David Lindberg, and Ned McGuire provided a presentation on the SERS Asset Liability Study results. Mr. Lindberg introduced Mr. McGuire who opened the presentation with some background and an overview. Mr. McGuire reported the asset allocation decision is the most important decision an investor can make and the asset allocation decision drives 90% of return variability among portfolios. Wilshire recommends revisiting the asset allocation decision every three to five years, or sooner, as market conditions warrant. SERS last reviewed its asset allocation in February 2020.

Mr. McGuire continued, stating the 2022/2023 review of asset allocation occurred over several phases. In December 2022 and January 2023, SERS investment staff and Wilshire mapped the project and completed foundational work. In February 2023, Wilshire and SERS investment staff reviewed asset class expected returns and risk assumptions with the Board. In March 2023, Wilshire and SERS investment staff reviewed asset-only optimization, which serves as a useful tool in comparing risk/return trade-off among various alternative policy portfolios. In April 2023, Wilshire introduced SERS' liability information to the modeling process and finalized a recommendation to the Board.

Ms. Bewick and Mr. Lindberg continued by discussing several things that the SERS board has taken into account. The board has allowed the asset allocation decision to be very long-term focused. Diversification and illiquidity premium are expected to benefit the portfolio over the long-term and changes to asset allocation

SERS Retirement Board Meeting Minutes

April 20, 2023

have been incremental but impactful over the long-term. SERS investment staff also phased out the multi asset strategies allocation, increased the real asset allocation, and added to the private credit portfolio. The focus of the 2023 asset allocation review is to continue to remain long-term focused, preserve liquidity and maintain an income focus, create a new interest rate regime that will improve the risk/reward profile of fixed income. Another goal in the Real Asset category is to identify real estate as a specific line item and maintain liquidity and income orientation.

As discussed during the April 20, 2023, Board meeting, Barbra Phillips moved and James Rossler seconded the motion to approve the revised Asset Allocation targets and ranges as indicated below, effective July 1, 2023.

Significant changes from the current policy are:

- 1) Decrease in Global Equity from 45% to 40%
- 2) Increase in Private Equity from 12% to 14%
- 3) Increase in Real Assets from 17% to 20%
- 4) Decrease in Global Fixed Income from 19% to 18%; and
- 5) Increase in Cash from 2% to 3%

ASSET CLASS	Current Policy	Recommended Policy	Recommended Range
Equity			
Global Equities	45.0%	40.0%	35-45%
Global Private Equities	12.0%	14.0%	11-17%
Income			
Global Fixed Income	19.0%	18.0%	13-23%
Global Private Credit	5.0%	5.0%	3-7%
Global Real Assets	17.0%	20.0%	17-22%
Cash	2.0%	3.0%	1-5%
Strategy			
Opportunistic & Tactical	n/a	n/a	0-5%
Total Assets	100%	100%	
Leverage	N/A	N/A	0-10%
Total Notional Exposure (Including Leverage)	100.0%	100.0%	100-110%

Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

The board took a brief recess at 10:05 a.m.

The board reconvened at 10:19 a.m.

SERS Retirement Board Meeting Minutes

April 20, 2023

Executive Director's Report

Ohio Retirement Study Council (ORSC)

SERS Executive Director Richard Stensrud reported that the ORSC did not meet in April and their next scheduled meeting is for May 11, 2023.

Advocacy Groups

Mr. Stensrud continued his report stating SERS is preparing for upcoming stakeholder events. There will be a joint meeting with OASBO on May 5, 2023. At OASBO's request, it will be a virtual format to expand turnout. SERS will present on "The State of SERS" and outline upcoming issues.

SERO will have its annual meeting on May 9, 2023 at Villa Milano in Columbus, Ohio. This meeting will provide an opportunity for SERS to discuss how we're doing and to express appreciation for their support.

State Legislation

Mr. Stensrud reported that SERS CBBC legislation has been introduced under HB 146. The bill is being sponsored by Adam Bird (R-New Richmond), who is a member of the ORSC and the House Pensions Committee. The bill has been referred to the Pensions Committee and hearings could commence as early as next week. The first hearing will be for sponsor testimony. In addition to pursuing the standalone bill, SERS continues to speak with legislators and caucus staff about opportunities to add the proposal to other legislation, such as the state operating budget, HB33.

ESG Legislation

Mr. Stensrud reported that SERS continues to monitor the ongoing debate around ESG legislation. SB 6, introduced by Senator Schuring, is still pending in the Senate Finance Committee. There has been no vote yet but it is likely to go to the Senate floor next week.

Member Services Statistics

Employer training and retirement planning programs continue to be held, including a retirement planning webinar scheduled for April 29, with over 300 members registered to attend. Outreach to our members and employers continues to be a key focus for SERS staff.

Myths and Misconceptions

Mr. Stensrud reported that SERS Board Chair Jeffrey DeLeone recently met with the Ohio Treasurer of State and was invited to share with the Treasurer's appointees to the other retirement systems the approach SERS has taken with respect to transparency and engagement. Mr. DeLeone noted that the group was very interested in the *Myths and Misconceptions* segments created by SERS and wanted to learn more about SERS' approach to investment transparency. Mr. DeLeone told the group that SERS strives to be proactive in addressing issues or misconceptions. Mr. DeLeone complimented his fellow Board Members for their commitment to good governance.

Board Photo Day

Mr. Stensrud proposed and the Board concurred that going forward the September Board Meeting would include taking a new Board picture.

SERS Retirement Board Meeting Minutes

April 20, 2023

25 Years of Service at SERS

Mr. Stensrud continued his report by thanking 3 SERS staff members who recently celebrated 25 years of service at the organization. Sherry Powell, Bill Scurlock, and Jennifer Sedor were all congratulated and thanked by the Board for their many years of service and dedication.

Executive Session

Barbra Phillips moved and James Rossler seconded the motion that the Board convene in Executive Session pursuant to R.C. 121.22 (G)(5) to discuss a matter required to be kept confidential by law. Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

The board went into executive session at 10:28 a.m.

The board reconvened in open session at 10:58 a.m.

Administrative Expenses Report and ORSC Budget Submission

SERS Chief Financial Officer, Marni Hall, provided an update on the current administrative expenditures as of March 2023.

Ms. Hall also provided the board with a copy of the cover letter and draft FY2024 budget that will be submitted to the ORSC. The ORSC provides the format used for the budget submission and the submission is only a draft that can be modified by SERS before the final version is approved by the board. Ms. Hall stated that the ORSC budget submission is an early preview of the proposed budget and more finalized information will be provided at the May board meeting.

After several questions, the Board thanked Ms. Hall for her presentation.

Strategic Plan Update

Mr. Stensrud and SERS Deputy Executive Director Karen Roggenkamp provided the Board with an update on SERS' Strategic Plan.

Mr. Stensrud reported that in 2018, SERS initiated the development of a five-year strategic plan to guide the organization's work. Mr. Stensrud noted that development of the Strategic Plan featured a highly participative process that included engagement with the Board and stakeholder groups, collecting and analyzing survey data, facilitating key informational focus groups, leading to preparation of a preliminary report and final Strategic Plan.

Mr. Stensrud noted that six goals were created as part of the SERS Strategic Plan:

1. Pension Fund Sustainability
2. Healthcare Sustainability
3. Service Delivery
4. Operations
5. Culture
6. Communications and Stakeholder Engagement

Mr. Stensrud stated that the Strategic Plan is a living rather than a static document that continues to evolve and adjust according to the business needs of SERS. Mr. Stensrud noted that this was exemplified by the experience of the pandemic, whereby a number of initiatives in the Strategic Plan had been accelerated.

SERS Retirement Board Meeting Minutes

April 20, 2023

Mr. Stensrud and Ms. Roggenkamp then noted highlights of the substantial progress that had been made in each goal area in the Strategic Plan.

After a robust discussion, it was confirmed that this presentation will occur annually each April. The Board thanked Mr. Stensrud and Ms. Roggenkamp for their presentation.

Enterprise Risk Management Review

SERS' Chief Risk Officer, Joe Bell, provided an update on the Enterprise Risk Management (ERM) efforts at SERS. Mr. Bell reported that the ERM Program ensures risks are included in decision-making, aligns risk exposure with risk management, conducts rigorous risk measurement, and aligns with strategic planning. ERM has an important role to assess and report the status of key risks to process owners, Executive Leadership, and the Board. Mr. Bell also stated that the Board should ensure:

1. ERM has an effective program and governance structure in place.
2. Management's risk tolerance and mitigating controls align with Board expectations.
3. Oversight of ERM's exception-based reports and management's mitigating strategies.

Mr. Bell continued his presentation by introducing staff member Susan Bradley, SERS Enterprise Risk Management Officer, who has been handling most of the ERM project. Ms. Bradley stated that ERM has shown steady progress in reducing and managing key risks while creating a firm foundation for risk management monitoring and reporting. They are monitoring such things as third-party vendors to ensure they are a good fit for SERS and there are future initiatives to look at risk registers to manage higher risks and keep them at an acceptable level for SERS. There is always a desire and an effort to do better, and this work is ongoing.

After several questions and a robust discussion, the Board offered their continued support and thanked the ERM staff for their presentation.

Final Filing of Proposed Amended Administrative Rules

SERS legal counsel, Dawn Viggiano, introduced a motion to the board regarding administrative rule 3309-1-04, 3309-1-13, and 3309-1-64. Legal Counsel discussed with the Retirement Board the following proposed new and amended administrative rules: 3309-1-04 Election of retirement board members, 3309-1-13 Obtaining optional or compulsory service credit, and 3309-1-64 Dental and vision coverage that have been reviewed by JCARR and are ready for final adoption by the Board.

Frank Weglarz moved and Barbra Phillips seconded that amended rules 3309-1-04, 3309-1-13 and 3309-1-64 be adopted. Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

Filing of Proposed Revised Amended Administrative Rule

Ms. Viggiano continued by discussing with the Retirement Board filing with JCARR the following proposed revised amended rule: 3309-1-35 Health care. Barbra Philips moved and Hugh Garside seconded that proposed revised amended rule 3309-1-35 be filed with JCARR as discussed. Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

SERS Retirement Board Meeting Minutes

April 20, 2023

Ballot Certification – Employee Member

Mr. Stensrud submitted certification of the judges on the canvass of the vote for the election of one employee member to the Retirement Board for the term beginning July 1, 2023. Catherine Moss moved and Barbra Phillips seconded that the certification be accepted and made a matter of record and that Aimee Russell be declared an elected employee member of the Retirement Board for a term of four years beginning July 1, 2023. Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

Technology Committee Update

SERS Technology Committee Chair Matthew King provided an update on the work being done in the Technology Committee. Mr. King stated that work continues on the Technology Roadmap and projects are progressing on schedule. The SMART projects include reimagining the member services portal and an MVVM upgrade and both projects are in motion, on track, and on budget. Mr. King also noted that several infrastructure projects are also on track but supply chain issues are presenting challenges. Nevertheless, all projects are expected to be completed on time and on budget. The board thanked Mr. King for his update.

Compensation Committee Update

Compensation Committee Report

Compensation Committee Chair Daniel Wilson reported that the Compensation Committee had reviewed market compensation information for the Executive Director position and was recommending non-salary compensation changes for the Executive Director designed to maintain stable leadership.

Executive Session

Barbra Phillips moved and James Haller seconded the motion that the Board convene in Executive Session pursuant to R.C 121.22 (G)(1) to discuss the employment and compensation of a public employee. Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

The board convened in executive session at 12:22 p.m.

The board reconvened in open session at 12:27 a.m.

On behalf of the Board, Compensation Committee Chair Dan Wilson reported that it is SERS' compensation policy that to fulfill the system's mission and provide the best service to its members, retirees, and employers, SERS must attract, retain, and motivate employees. It is SERS' objective to have a compensation program that supports a high-performance culture, the organization's values and strategic goals, and pays competitively and equitably. To support these objectives, SERS regularly reviews compensation information from other comparable organizations for all positions at SERS. To that end, the SERS Board has received and reviewed information regarding the compensation paid by comparable organizations for the Executive Director position and has determined that certain non-salary compensation elements be approved for SERS' Executive Director.

Accordingly, recognizing Executive Director Richard Stensrud's years of excellent service to SERS, his importance to the organization, and the Board's desire to retain Mr. Stensrud in his position so that he will continue to serve SERS and its stakeholders, Barbra Phillips moved and Hugh Garside seconded that Mr. Stensrud's employment letter and addendum be amended as follows:

SERS Retirement Board Meeting Minutes

April 20, 2023

- Effective with the pay period starting April 22, 2023, vacation leave accrual rate increases from 8 hours per pay period to 10 hours per pay period.
- Effective with the pay period starting April 22, 2023, vacation leave accrual cap increases from 416 hours to 520 hours.
- Beginning with calendar year 2023, provided Mr. Stensrud is still employed in good standing at SERS on the last pay date of the calendar year, an additional 40 hours of vacation leave will be granted to Mr. Stensrud.
- Beginning with calendar year 2023, provided Mr. Stensrud is still employed in good standing at SERS on the last pay date of the calendar year, SERS will contribute for each such calendar year \$20,000.00 to Mr. Stensrud's Ohio Public Employees Deferred Compensation Program ("OPEDCP") account.
- Mr. Stensrud shall provide the Chair of the SERS Board of Trustees, with a copy to HR, 120 calendar days' notice of voluntary termination of employment at SERS. If Mr. Stensrud fails to provide such notice, Mr. Stensrud shall not receive his accrued vacation or sick leave, the additional 40 hours of vacation leave, nor the \$20,000.00 contribution to OPEDCP.
- Should Mr. Stensrud choose to voluntarily separate employment with SERS during a calendar year, before the last pay date of the calendar year, he shall nonetheless be entitled to the \$20,000.00 OPEDCP payment and the additional 40 hours of vacation leave for the calendar year in which he departs if he (a) provides written notice of his departure to the Chair of the SERS Board of Trustees with a copy to HR, at least 120 calendar days in advance of his departure date; (b) remains employed by SERS for the notice period and continue to perform satisfactorily during such period; and (c) cooperates in good faith in connection with the transition of his duties. Notice in one calendar year of a departure in the next calendar year qualifies for such a payment, provided all other conditions are met.
- Effective May 2023, Mr. Stensrud will be reimbursed each month for his voluntary life insurance premiums.

Upon roll call, the vote was as follows: Yea: Frank Weglarz, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. The motion carried.

Board Communication and Policy Issues

Board Information Request & Follow Up Items

The board expressed interest in voting electronically for future board members, similar to what was done during the pandemic. SERS Counsel advised that an exception was made, and it would be unlikely that electronic voting would be allowed for future board elections. However, SERS legal staff will inquire about the process and provide an answer to the board at a later date.

SERS Retirement Board Meeting Minutes

April 20, 2023

Calendar Dates for Future Board Meetings

The board reviewed the meeting dates for 2023 and 2024.

CALENDAR DATES FOR SERS BOARD AND COMMITTEE MEETINGS FOR 2023

AUDIT COMMITTEE MEETINGS

June 14, 2023 – 2:30 p.m. (Weds.)
September 20, 2023 - 2:30 p.m. (Weds.)
December 20, 2023 – 2:30 p.m. (Weds.)

COMPENSATION COMMITTEE MEETINGS

June 15, 2023 – 7:30 a.m. (Thurs.)
July 20, 2023 – 7:30 a.m. (Thurs.) * **Special Meeting** *
September 21, 2023 – 7:30 a.m. (Thurs.)
December 21, 2023 – 7:30 a.m. (Thurs.)

TECHNOLOGY COMMITTEE MEETINGS

June 15, 2023 – 12:30 p.m. (Thurs.)
September 21, 2023 – 12:30 p.m. (Thurs.)
December 21, 2023 – 12:30 p.m. (Thurs.)

BOARD MEETINGS

May 18 – 19, 2023 - 8:30 a.m. (Thurs. and Fri.)
June 15 – 16, 2023 - 8:30 a.m. (Thurs. and Fri.)
July 20 – 21, 2023 - 8:30 a.m. (Thurs. and Fri.)
September 21 – 22, 2023 - 8:30 a.m. (Thurs. and Fri.)
October 19 – 20, 2023 - 8:30 a.m. (Thurs. and Fri.)
November 16 – 17, 2023 - 8:30 a.m. (Thurs. and Fri.)
December 21 – 22, 2023 - 8:30 a.m. (Thurs. and Fri.)

CALENDAR DATES FOR SERS BOARD AND COMMITTEE MEETINGS FOR 2024 **

AUDIT COMMITTEE MEETINGS

March 20, 2024 – 2:30 p.m. (Weds.)
June 19, 2024 – 2:30 p.m. (Weds.)
September 18, 2024 - 2:30 p.m. (Weds.)
December 18, 2024 – 2:30 p.m. (Weds.)

COMPENSATION COMMITTEE MEETINGS

March 21, 2024 – 7:30 a.m. (Thurs.)
June 20, 2024 – 7:30 a.m. (Thurs.)
July 18, 2024 – 7:30 a.m. (Thurs.) * **Special Meeting** *
September 19, 2024 – 7:30 a.m. (Thurs.)
December 19, 2024 – 7:30 a.m. (Thurs.)

SERS Retirement Board Meeting Minutes

April 20, 2023

TECHNOLOGY COMMITTEE MEETINGS

March 21, 2024 – 12:30 p.m. (Thurs.)
June 20, 2024 – 12:30 p.m. (Thurs.)
September 19, 2024 – 12:30 p.m. (Thurs.)
December 19, 2024 – 12:30 p.m. (Thurs.)

BOARD MEETINGS

February 15 - 16, 2024 - 8:30 a.m. (Thurs. and Fri.)
March 21 - 22, 2024 – 8:30 a.m. (Thurs. and Fri.)
April 18 – 19, 2024 - 8:30 a.m. (Thurs. and Fri.)
May 16 – 17, 2024 – 8:30 a.m. (Thurs. and Fri.)
June 20 - 21, 2024 - 8:30 a.m. (Thurs. and Fri.)
July 18 – 19, 2024 – 8:30 a.m. (Thurs. and Fri.)
September 19 – 20, 2024 – 8:30 a.m. (Thurs. and Fri.)
October 17 – 18, 2024 – 8:30 a.m. (Thurs. and Fri.)
November 21 – 22, 2024 – 8:30 a.m. (Thurs. and Fri.)
December 19 – 20, 2024 – 8:30 a.m. (Thurs. and Fri.)

**** Please note that these dates and times are tentative.**

Adjournment

Board Chair, Jeffrey DeLeone, moved to adjourn to meet on Thursday, May 18, 2023, at 8:30 a.m. for the next SERS regularly scheduled Retirement Board meeting.

The SERS board meeting adjourned at 12:40 p.m.

Jeffrey DeLeone, Board Chair

Richard Stensrud, Secretary

SCHOOL EMPLOYEES RETIREMENT BOARD OF OHIO

Summary of Investment Transactions to be
Reported to the Retirement Board for
Ratification in May

The following is a summary of the investment transactions made during the period of March 1, 2023 through March 31, 2023. A detailed list of these transactions can be found in the Board Agenda mailed prior to the Retirement Board Meeting.

A. PURCHASES

Asset Class	Approximate Cost (in millions)
Global Equities	\$ 186.2
Fixed Income	329.6
Private Equity Capital Calls	54.6
Real Asset Capital Calls	36.6
Opportunistic & Tactical	28.9
Global Private Credit	10.1
Cash Equivalents	277.9

B. SALES

Asset Class	Approximate Net Proceeds (in millions)	Approximate Gain/(Loss) (in millions)
Global Equities	\$ 140.7	\$ (5.7)
Fixed Income	299.6	(6.3)
Private Equity distributions	34.1	n/a
Real Asset distributions	16.5	n/a
Opportunistic & Tactical	47.7	(0.8)
Global Private Credit	n/a	n/a
Cash Equivalents	331.4	n/a

Memo

To: Retirement Board
From: Farouki Majeed
cc: Richard Stensrud, Karen Roggenkamp
Date: May 5, 2023
Re: **Investment Report for the May Board Meeting**

The Investment Report for the Board includes the following agenda items:

- Quarterly performance report for the period ended March 31, 2023, presented by Wilshire Associates.
- Annual Portfolio Review – Overlay Program.
- Investment report and economic update for the period ended March 31, 2023.
- Statement of Investment Policy – Asset Allocation changes approved during the April Board meeting. A motion has been prepared for a vote to approve during the May Board meeting.
- Draft Annual Investment Plan for fiscal year 2024 will be discussed at the May Board meeting. If acceptable to the Board, a motion will be prepared for a vote to approve the Plan during the June Board meeting.
- The Investment Department Incentive Plan for fiscal year 2024 will be presented by Joe Bell for the Board's review. If acceptable to the Board, a motion has been prepared for a vote to approve during the May Board meeting.

Included with the Board materials are the following reports prepared by Staff:

- Manager Reviews – Overlay Program
- Monthly Top 20 Equity and Fixed Income Holdings Reports – March 31, 2023
- Monthly Compliance Update memo – March 31, 2023
- Quarterly Iran/Sudan Investment Activity Report – March 31, 2023
- Quarterly Securities Lending Review Report – March 31, 2023

If anyone has any questions prior to the Board meeting, please email me at fmajeed@ohsers.org.

Wilshire



Executive Summary of Investment Performance

As of March 31, 2023

Market Commentary

U.S. Equity

The U.S. stock market was up 7.3% for the first quarter but is down -8.6% for the past 12 months. The best performing sectors were IT (+21.2%) and Communication Services (+19.8%). The worst performing were Financials (-5.2%) and Energy (-4.6%). From a size perspective, large-cap outperformed small-cap by 400 basis points. Growth stocks vastly outperformed value for the quarter but still trail meaningfully for the one-year return.

The yield curve inversion that began during the third quarter of last year worsened during the first quarter of 2023. The spread between the 10-year Treasury and 3-month T-Bill, arguably the strongest predictor of a pending recession, is at a level not seen since the early 1980's. The Federal Reserve's aggressive action has pushed the short-term rate to a spread of 1.37% above the benchmark ten-year. The probability of a recession in the next 12 months, according to the Federal Reserve Bank of New York, currently stands at 62%. The short end of the curve had been rising this quarter until early March when the FDIC announced that they had closed the failing Silicon Valley Bank. Market action quickly pushed the curve mostly below year-end 2022 levels.

Non-U.S. Equity

Banking weakness appeared in Europe as the Swiss bank, Credit Suisse, saw billions in depositor outflows in one day due to concerns of instability within the organization. Swiss authorities quickly pressed a plan for rival UBS to acquire the smaller bank at a reduced price, with Credit Suisse investors and creditors losing nearly everything. China is quickly seeing benefits from its relaxed COVID-related restrictions as a key index measuring their services sector jumped in March to its highest level in more than a decade.

Fixed Income

The U.S. Treasury yield curve was up in the short-end (below 1-year) but fell across the remainder of the curve. The 10-year Treasury yield ended the quarter at 3.47%, down 41 basis points from December. The FOMC increased the overnight rate by 0.25% in both January and March, targeting a range of 4.75% to 5.00%. The Fed's "dot plot" is messaging that the current expectation is for another 25 basis point increase before the end of 2023 while markets are pricing a year-end rate that would be approximately 50 basis points lower than the current rate.

March 2023 Asset Class Assumptions

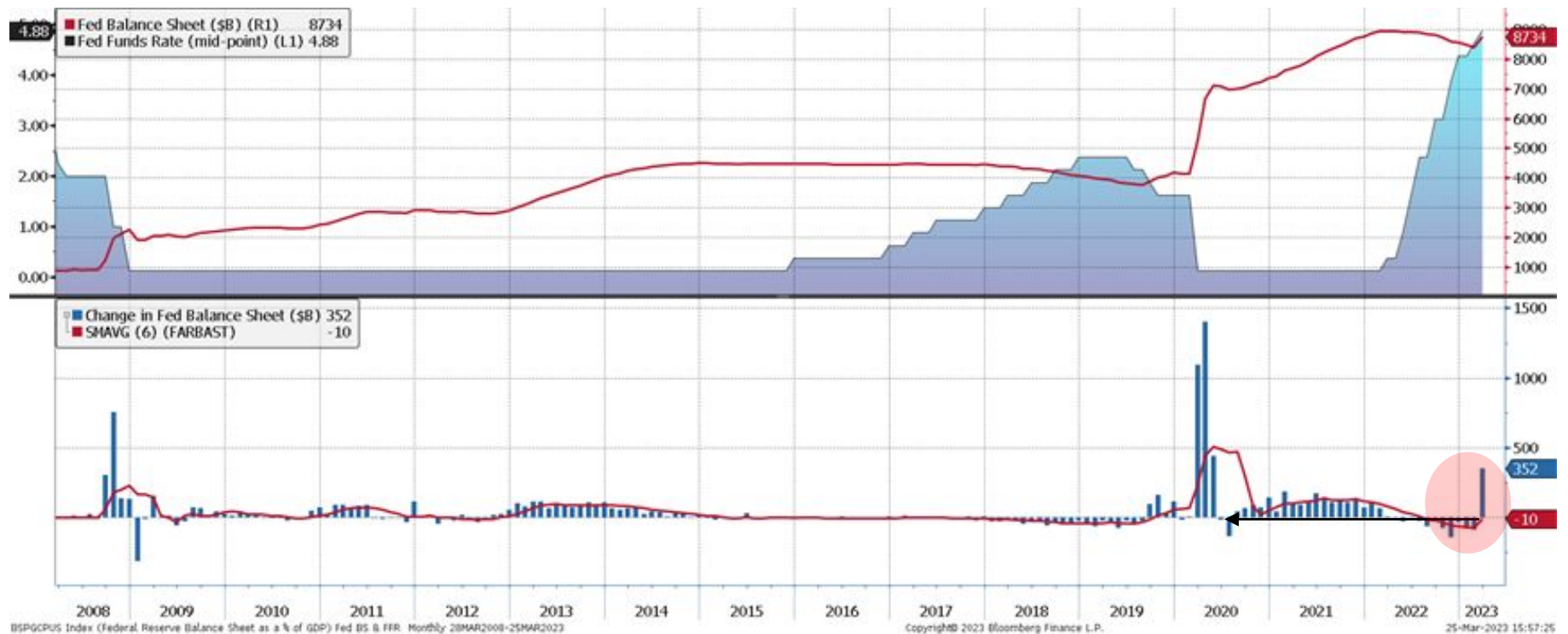
	Equity						Fixed Income						Real Assets						
	US Stock	Dev ex-US Stock	Emg Stock	Global ex-US Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Private Credit	Dev ex-US Bond (Hdg)	US RES	Global RES	Private RE	Cmdty	Real Assets	US CPI
Compound Return (%)	6.15	6.90	7.15	7.25	6.70	9.60	3.65	4.60	4.60	3.65	6.25	8.55	2.85	5.75	5.90	6.25	5.90	6.65	2.25
Expected Risk (%)	17.00	18.00	26.00	19.10	17.10	29.65	0.75	4.70	9.85	6.00	10.00	12.75	4.00	17.50	16.45	13.90	16.00	12.35	1.75
Cash Yield (%)	1.65	3.15	2.75	3.05	2.20	0.00	3.65	4.90	4.95	4.25	9.35	4.90	3.45	4.05	4.05	2.25	3.65	3.15	0.00
Growth Exposure	8.00	8.00	8.00	8.00	8.00	14.00	0.00	-0.95	-2.40	-3.00	4.00	5.10	-1.00	6.00	6.00	3.50	0.00	2.70	0.00
Inflation Exposure	-3.00	0.00	5.00	1.45	-1.30	-3.75	0.00	-2.50	-6.80	2.50	-1.00	-1.50	-3.00	1.00	1.80	1.00	12.00	5.25	1.00
Correlations																			
US Stock	1.00																		
Dev ex-US Stock (USD)	0.81	1.00																	
Emerging Mkt Stock	0.74	0.74	1.00																
Global ex-US Stock	0.84	0.95	0.89	1.00															
Global Stock	0.95	0.91	0.84	0.94	1.00														
Private Equity	0.72	0.63	0.61	0.67	0.73	1.00													
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.06	0.00	1.00												
Core Bond	0.28	0.13	0.00	0.08	0.20	0.30	0.18	1.00											
LT Core Bond	0.31	0.15	0.01	0.11	0.24	0.31	0.11	0.94	1.00										
TIPS	-0.05	0.00	0.15	0.06	-0.01	-0.03	0.20	0.60	0.48	1.00									
High Yield Bond	0.54	0.39	0.49	0.46	0.53	0.31	-0.10	0.24	0.32	0.05	1.00								
Private Credit	0.68	0.55	0.58	0.60	0.68	0.44	0.00	0.24	0.30	0.00	0.76	1.00							
Dev ex-US Bond (Hdg)	0.16	0.25	-0.01	0.16	0.17	0.26	0.10	0.68	0.66	0.39	0.26	0.22	1.00						
US RE Securities	0.58	0.47	0.44	0.49	0.57	0.49	-0.05	0.17	0.22	0.10	0.56	0.62	0.05	1.00					
Global RE Securities	0.64	0.57	0.54	0.60	0.65	0.55	-0.05	0.17	0.21	0.11	0.61	0.68	0.04	0.96	1.00				
Private Real Estate	0.55	0.45	0.45	0.49	0.54	0.50	-0.05	0.19	0.25	0.09	0.58	0.63	0.05	0.79	0.78	1.00			
Commodities	0.25	0.34	0.39	0.38	0.32	0.28	0.00	-0.03	-0.03	0.25	0.29	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.62	0.63	0.65	0.69	0.67	0.57	-0.03	0.22	0.24	0.30	0.64	0.69	0.04	0.78	0.84	0.76	0.64	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	0.00	-0.08	0.05	0.04	0.05	0.44	0.22	1.00

Regional Banks Under Stress



Data Source: Bloomberg

Fed Response: “Dovish Hike” - End of QT?



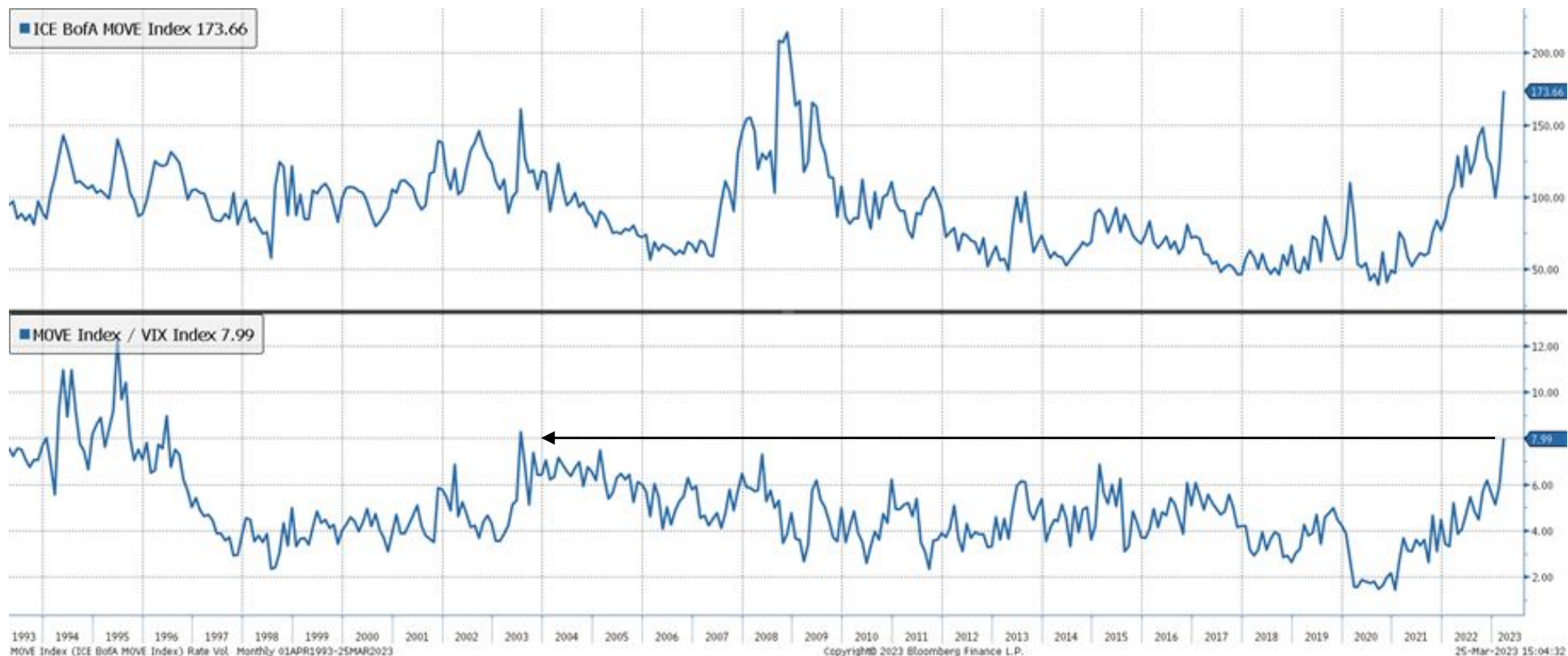
Data Source: Bloomberg

Fed Funds Discounting Goes into “Charlie Brown” Mode



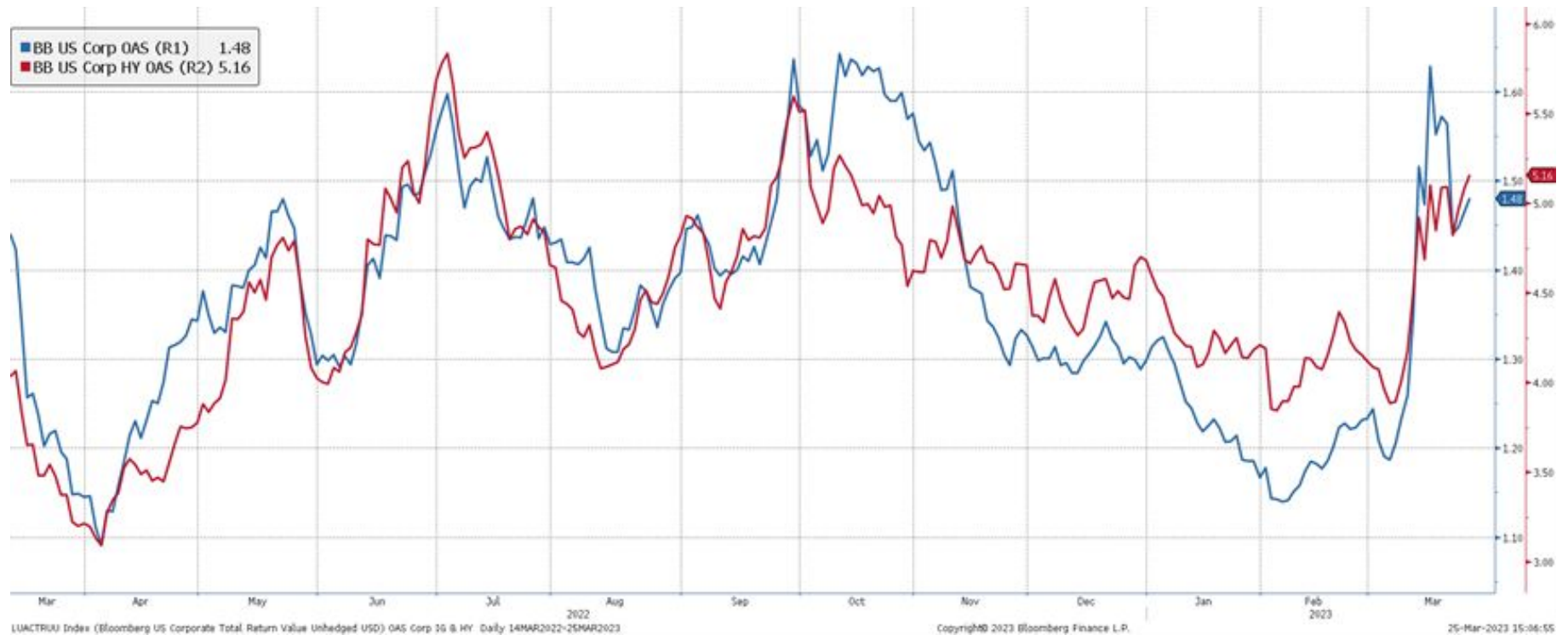
Data Source: Bloomberg

Extreme Interest Rate Volatility



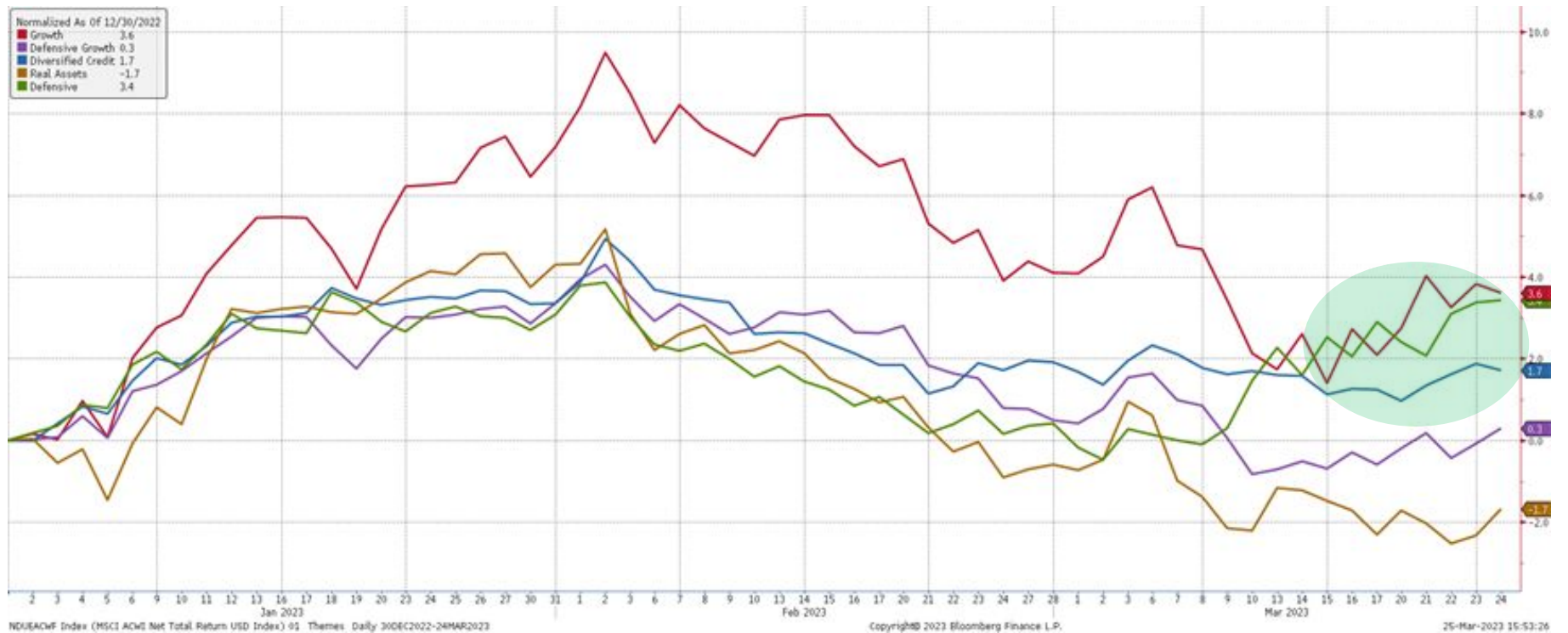
Data Source: Bloomberg

Credit Spreads Widen (but remain below Sept '22 levels)



Data Source: Bloomberg

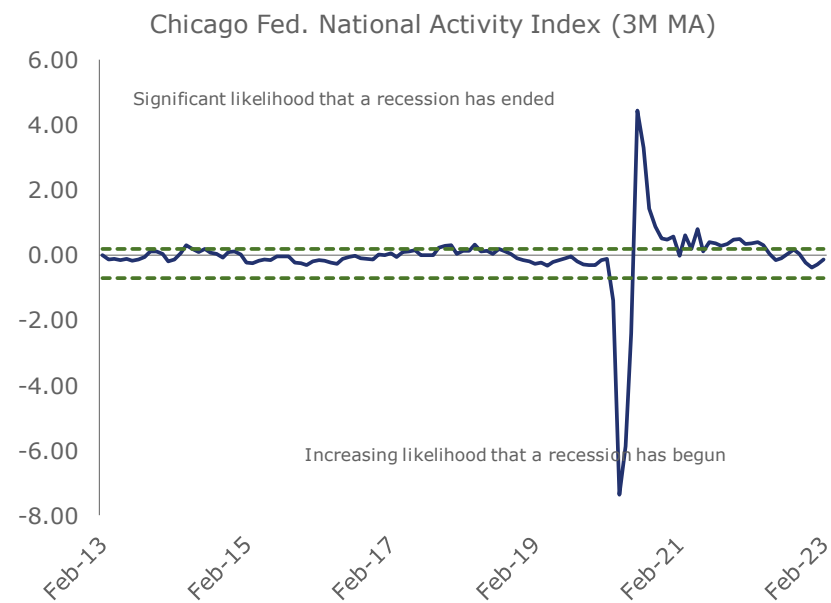
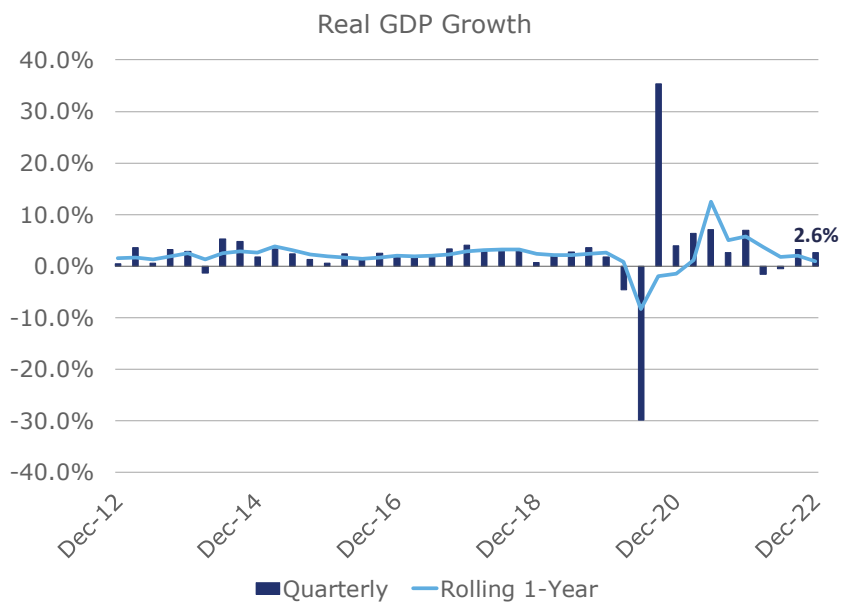
Many Risk-Assets Showing Resilience



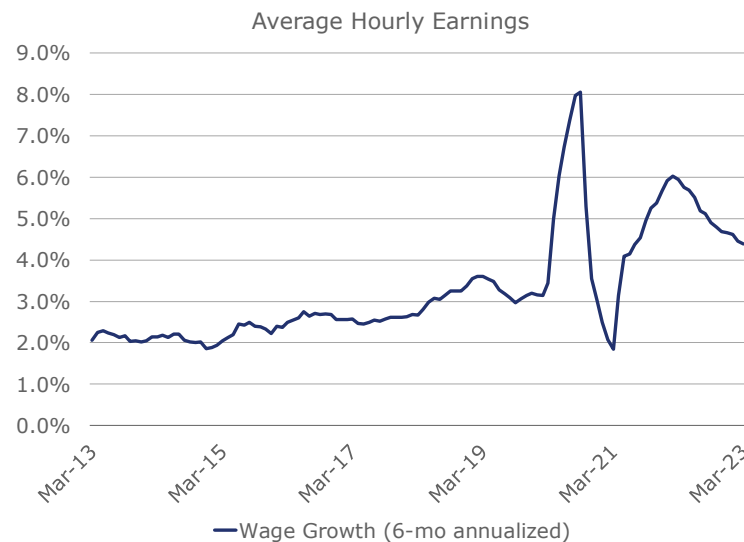
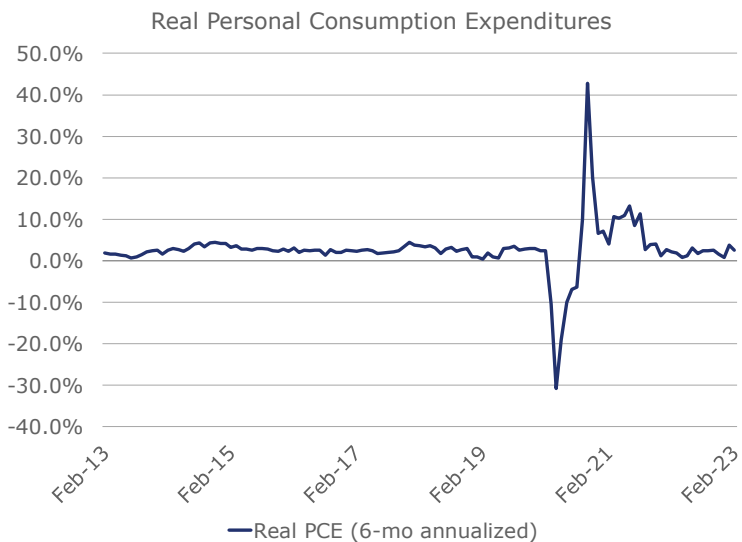
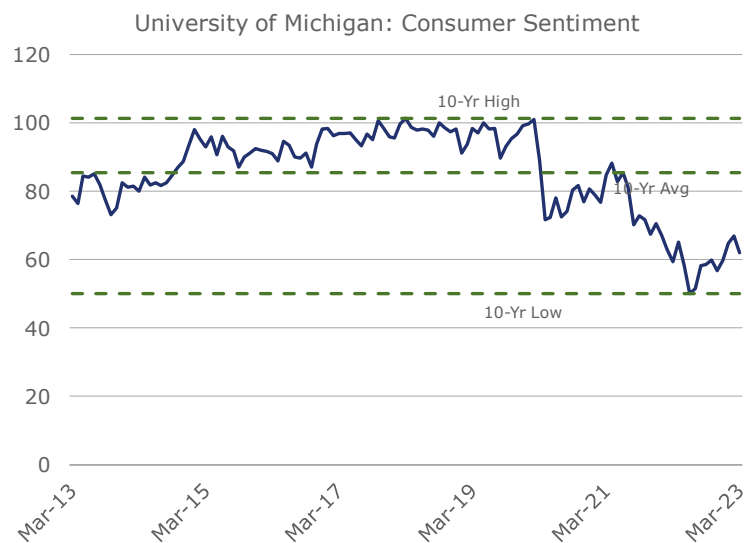
Data Source: Bloomberg

Economic/Market Activity

Economic Growth

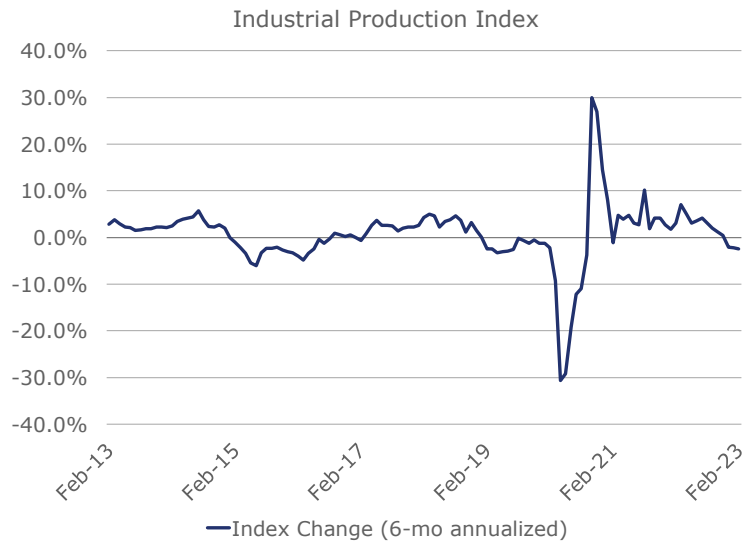
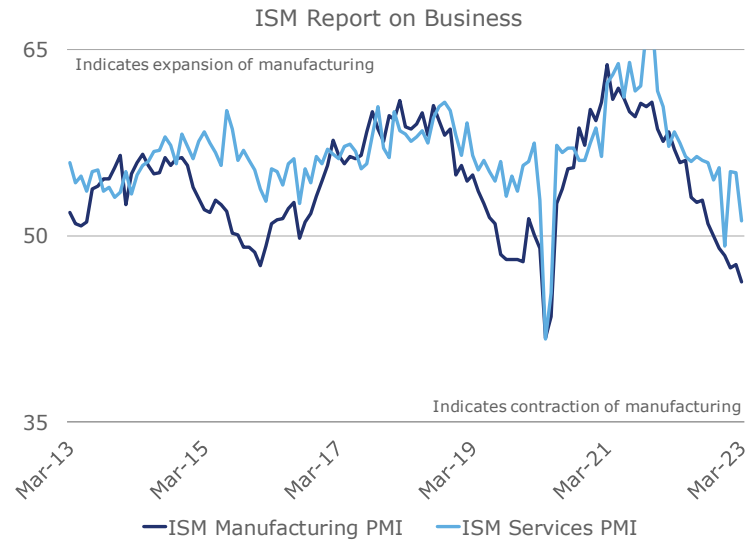


Consumer Activity



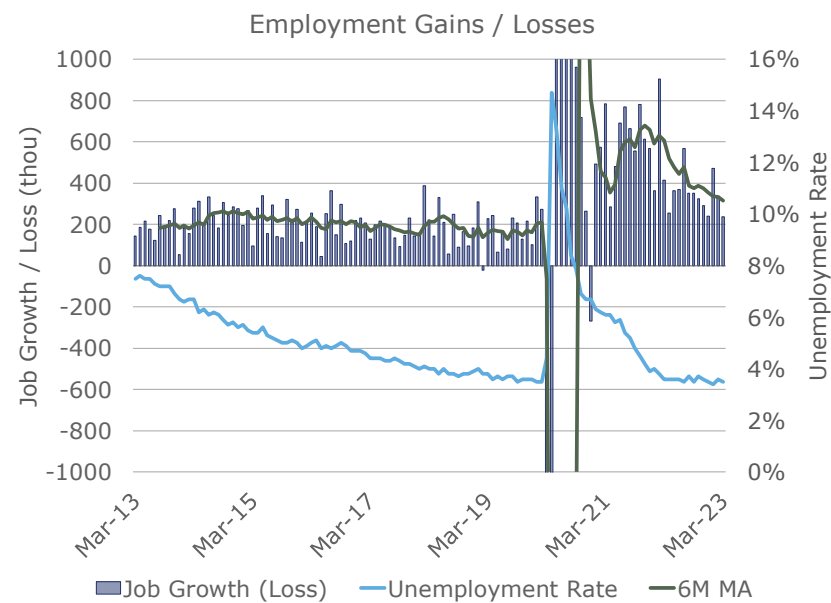
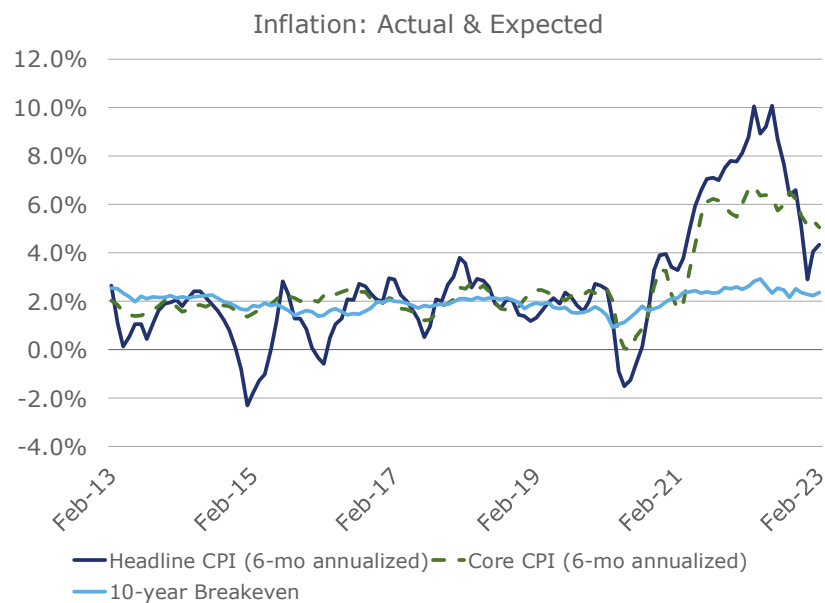
Data Sources: Bloomberg

Business Activity



Data Sources: Bloomberg

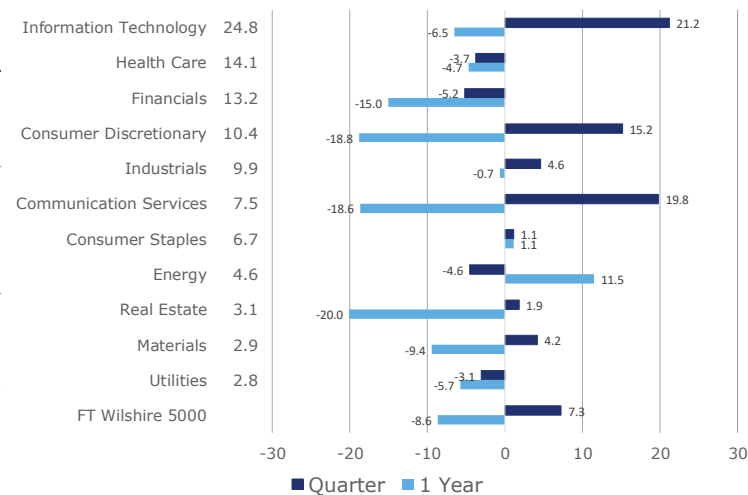
Inflation and Employment



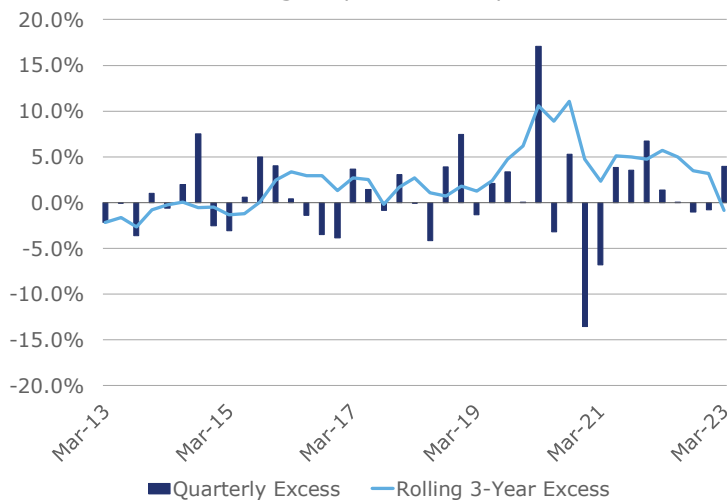
U.S. Equity Market

As of 3/31/2023	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
FT Wilshire 5000	7.3	7.3	-8.6	18.8	10.7	11.9
Wilshire U.S. Large Cap	7.6	7.6	-8.4	18.8	11.2	12.3
Wilshire U.S. Small Cap	3.6	3.6	-10.3	19.8	6.0	8.7
Wilshire U.S. Large Growth	15.7	15.7	-11.4	19.7	12.9	14.2
Wilshire U.S. Large Value	0.1	0.1	-4.8	17.5	9.4	10.3
Wilshire U.S. Small Growth	6.3	6.3	-8.7	17.6	6.1	9.2
Wilshire U.S. Small Value	1.0	1.0	-11.7	22.0	5.8	8.1
Wilshire REIT Index	3.2	3.2	-21.3	11.0	5.7	5.9
MSCI USA Min. Vol. Index	1.3	1.3	-4.4	12.4	9.1	10.6
FTSE RAFI U.S. 1000 Index	1.7	1.7	-5.9	22.1	10.0	11.0

U.S. Sector Weight and Return (%)



Large Cap vs Small Cap



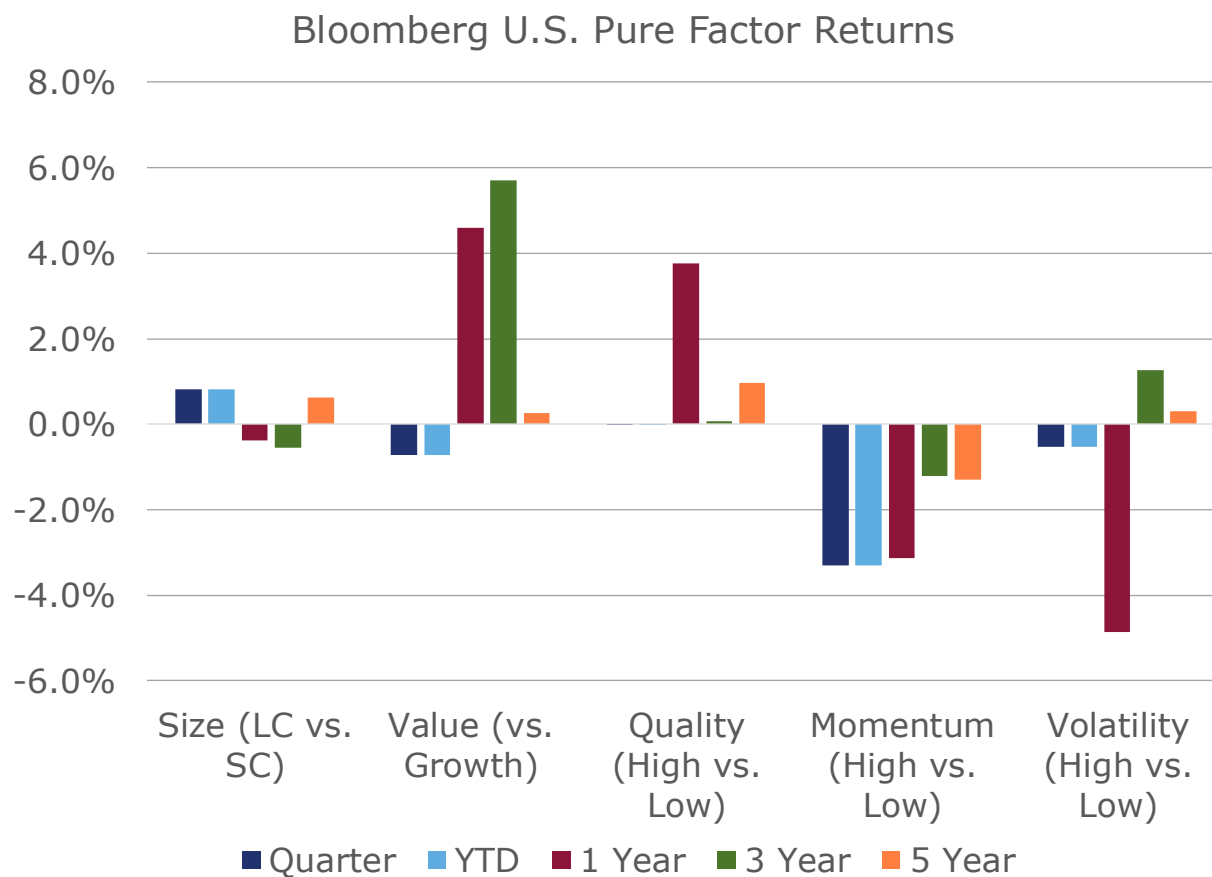
Large Growth vs Large Value



Data Sources: Bloomberg, Wilshire Atlas

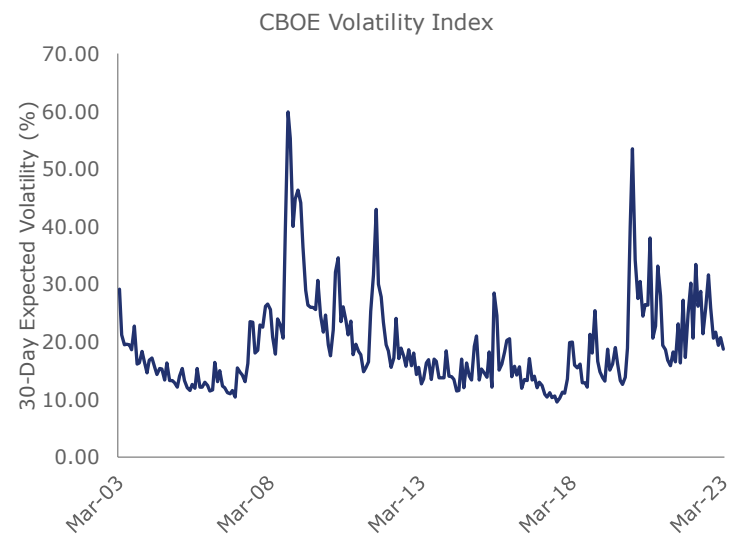
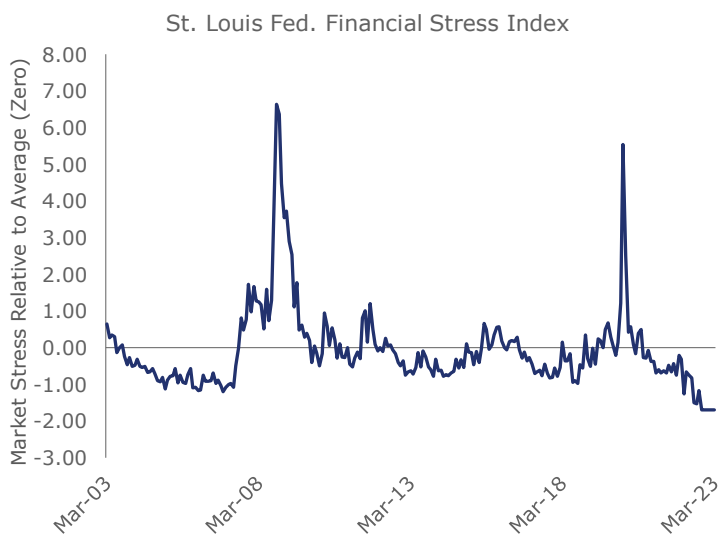
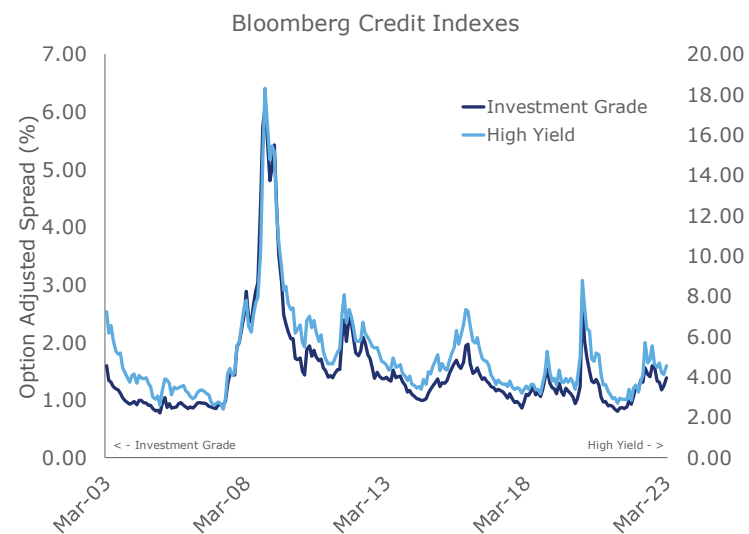
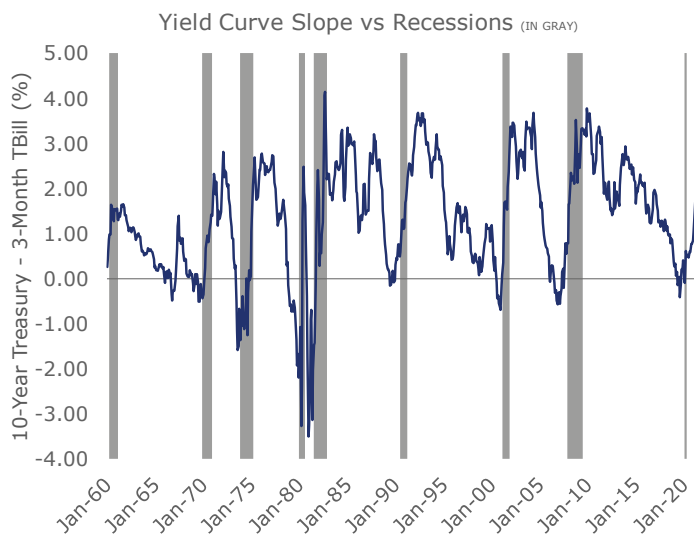
U.S. Factor Returns

- Factor returns represent the contribution from large cap, value, etc. stocks within Bloomberg’s Portfolio & Risk Analytics module
- Value and low volatility have mostly outperformed this year



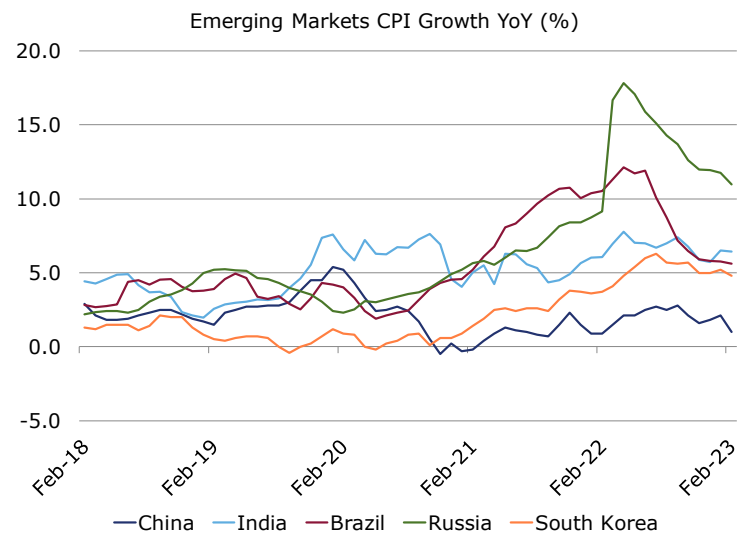
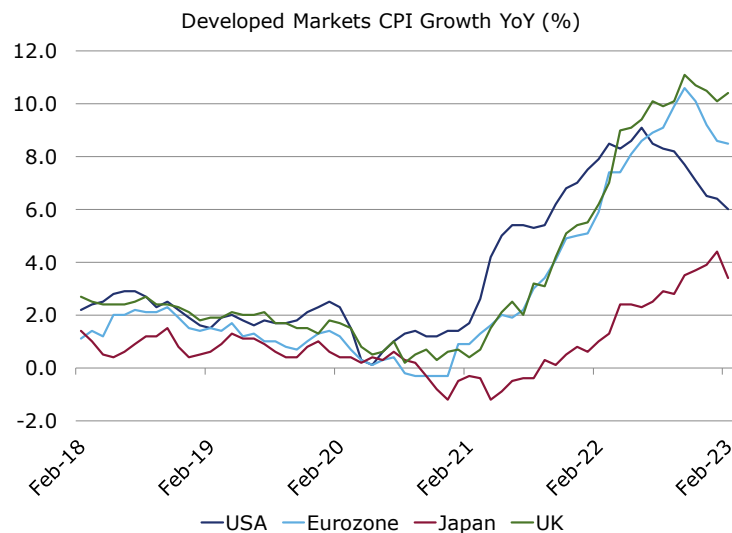
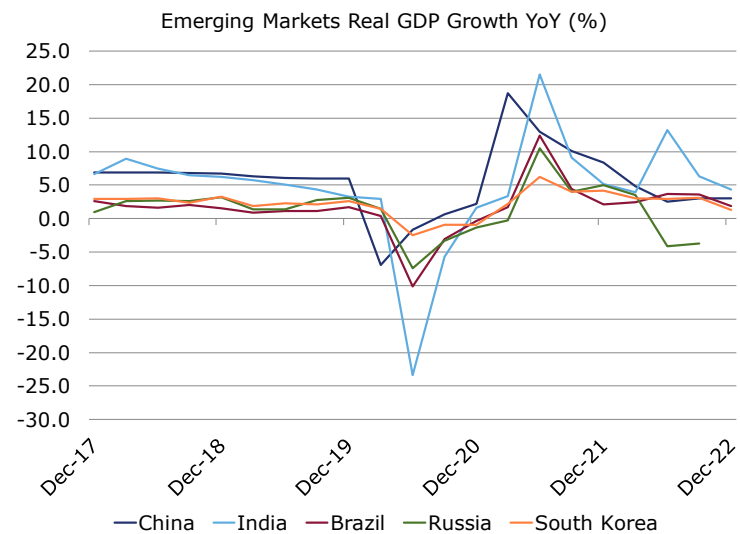
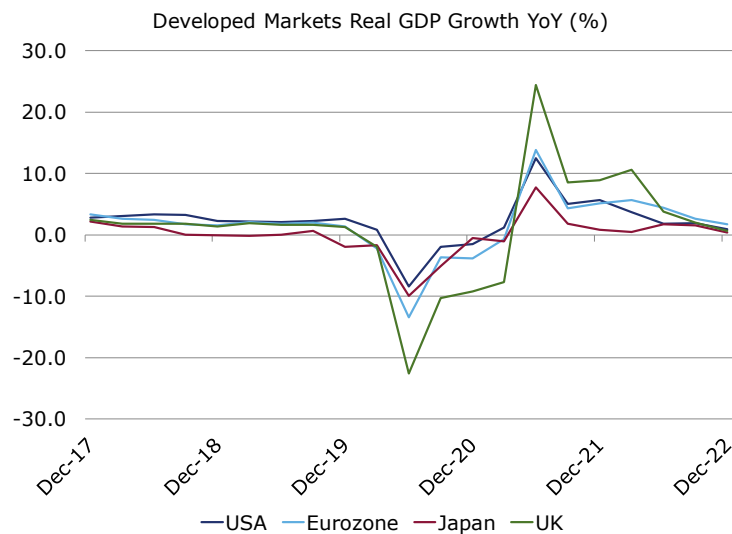
Data Sources: Bloomberg

Risk Monitor



Data Sources: Bloomberg

Non-U.S. Growth and Inflation

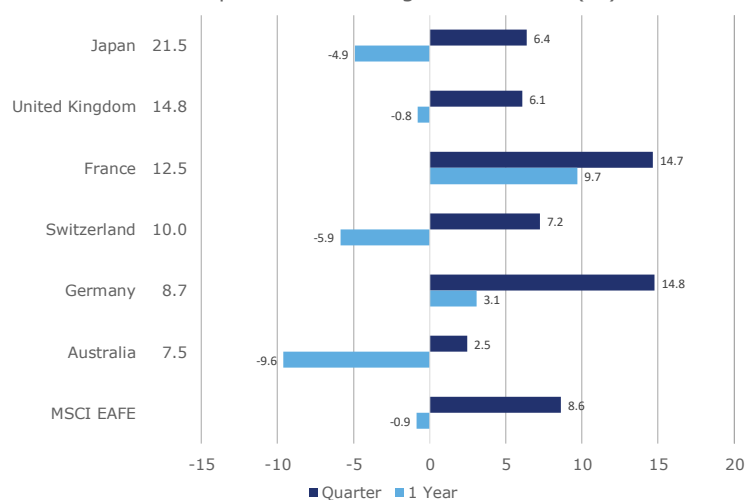


Data Sources: Bloomberg

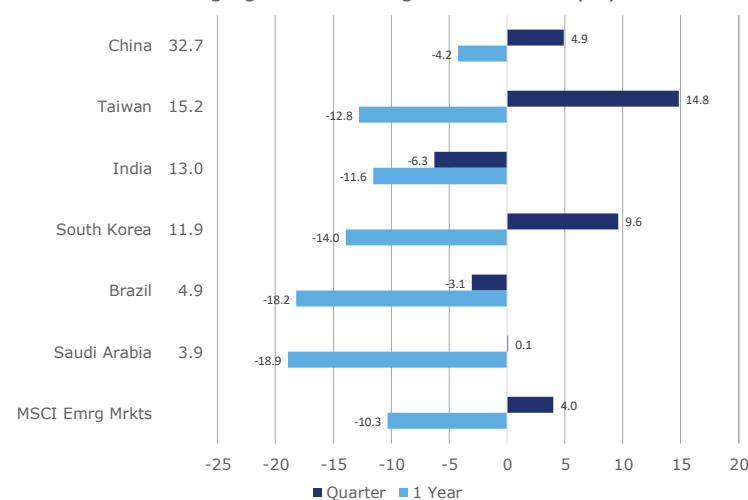
Non-U.S. Equity Market

As of 3/31/2023	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex-US (\$G)	7.0	7.0	-4.6	12.3	3.0	4.7
MSCI EAFE (\$G)	8.6	8.6	-0.9	13.5	4.0	5.5
MSCI Emerging Markets (\$G)	4.0	4.0	-10.3	8.2	-0.5	2.4
MSCI Frontier Markets (\$G)	2.5	2.5	-16.3	7.9	-3.7	0.0
MSCI ACWI ex-US Growth (\$G)	8.7	8.7	-6.0	9.8	3.7	5.4
MSCI ACWI ex-US Value (\$G)	5.1	5.1	-3.9	14.9	1.9	3.9
MSCI ACWI ex-US Small (\$G)	4.8	4.8	-9.9	15.5	2.1	5.5
MSCI ACWI Minimum Volatility	1.7	1.7	-5.5	8.9	5.7	7.4
MSCI EAFE Minimum Volatility	5.8	5.8	-4.6	5.3	1.6	4.7
FTSE RAFI Developed ex-US	6.7	6.7	-1.6	16.8	3.4	5.3
MSCI EAFE LC (G)	7.7	7.7	4.4	15.2	6.8	7.9
MSCI Emerging Markets LC (G)	3.8	3.8	-6.2	9.2	2.3	5.4

Developed Markets Weight and Return (%)



Emerging Markets Weight and Return (%)

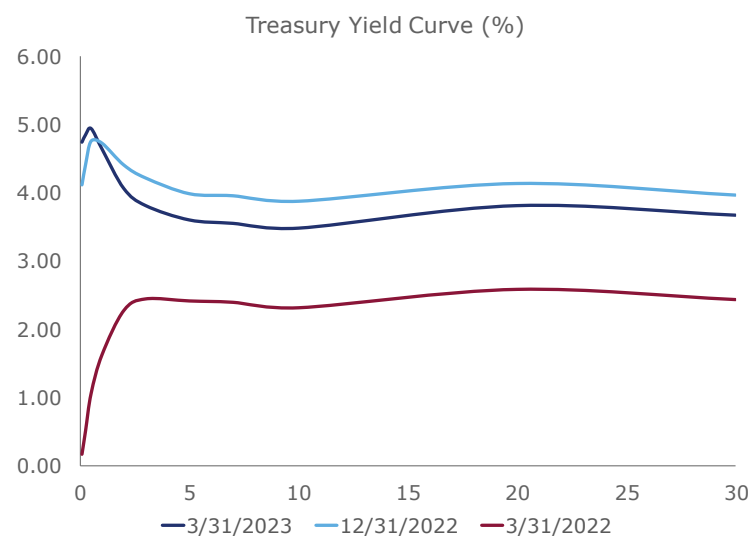
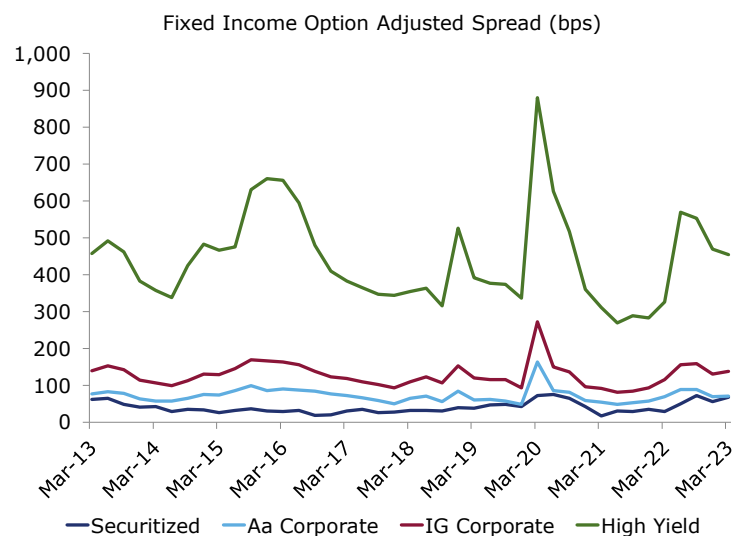


Data Sources: Bloomberg

U.S. Fixed Income

As of 3/31/2023	YTW	DUR.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg Aggregate	4.4	6.3	3.0	3.0	-4.8	-2.8	0.9	1.4
Bloomberg Treasury	3.8	6.3	3.0	3.0	-4.5	-4.2	0.7	0.9
Bloomberg Gov't-Rel.	4.4	5.4	2.9	2.9	-3.3	-1.6	1.1	1.4
Bloomberg Securitized	4.6	5.8	2.5	2.5	-4.7	-3.1	0.3	1.0
Bloomberg Corporate	5.2	7.2	3.5	3.5	-5.6	-0.5	1.6	2.3
Bloomberg LT Gov't/Credit	4.6	14.6	5.8	5.8	-13.4	-6.3	0.6	2.3
Bloomberg LT Treasury	3.8	16.4	6.2	6.2	-16.0	-11.3	-0.4	1.5
Bloomberg LT Gov't-Rel.	5.1	11.7	5.2	5.2	-9.9	-3.1	0.6	2.3
Bloomberg LT Corporate	5.3	13.2	5.4	5.4	-11.5	-2.6	1.1	3.0
Bloomberg U.S. TIPS *	3.5	7.6	3.3	3.3	-6.1	1.8	2.9	1.5
Bloomberg High Yield	8.5	3.7	3.6	3.6	-3.3	5.9	3.2	4.1
S&P/LSTA Leveraged Loan	9.4	0.3	3.2	3.2	2.5	8.5	3.6	3.8
Treasury Bills	4.7	0.3	1.1	1.1	2.5	0.8	1.4	0.9

* Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 7-10 Year Index

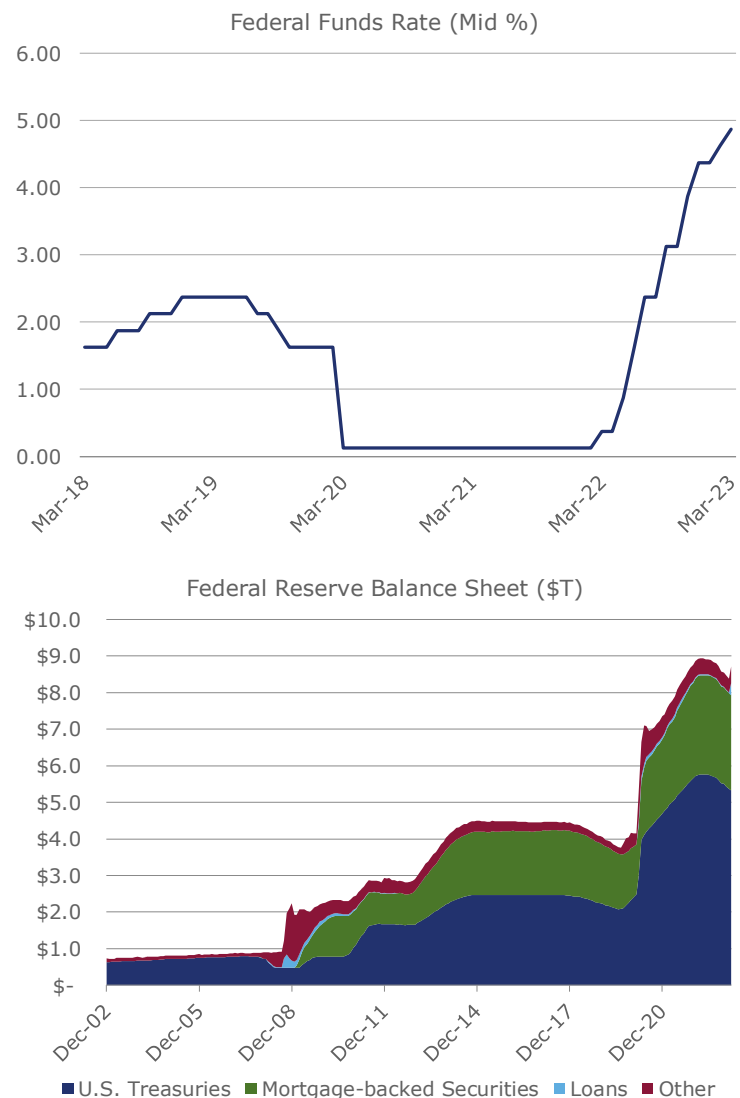


Data Sources: Bloomberg

Federal Reserve

- After total increases of 425 basis points in the Fed-funds rate last year, the FOMC increased the rate an additional 50 basis points during Q1
- QE4 was larger than the 3 phases of quantitative easing – combined – following the global financial crisis
- After a steady decline in the Fed’s balance sheet during 2022, total assets moved higher in March

	Announced	Closed	Amount (bil)
QE1	11/25/2008	3/31/2010	\$1,403
QE2	11/3/2010	6/29/2012	\$568
QE3	9/13/2012	10/29/2014	\$1,674
QE4	3/23/2020	3/15/2022	\$4,779

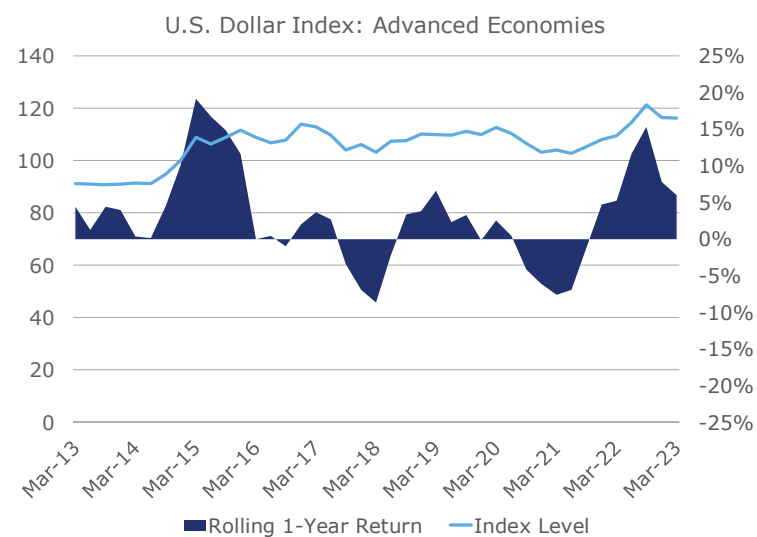
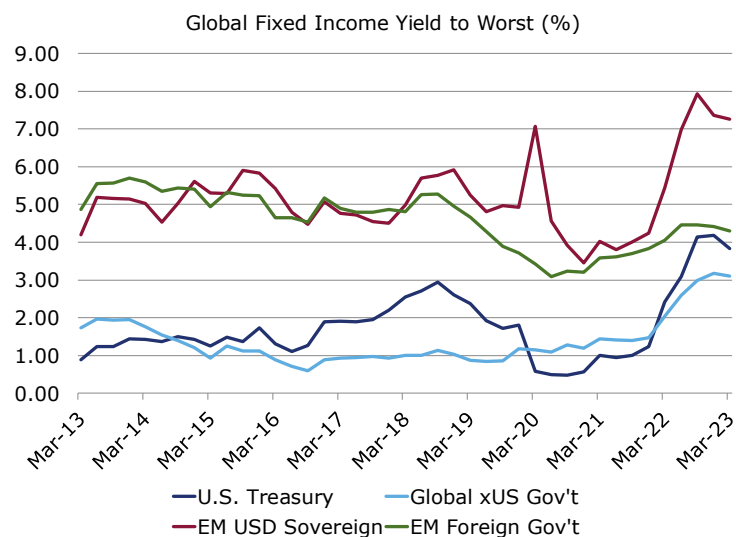


Data Sources: Bloomberg

Non-U.S. Fixed Income

As of 3/31/2023	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Developed Markets						
Bloomberg Global Aggregate xUS	3.1	3.1	-10.7	-4.1	-3.2	-1.0
Bloomberg Global Aggregate xUS *	2.9	2.9	-3.3	-1.8	0.9	2.3
Bloomberg Global Inflation Linked xUS	5.4	5.4	-21.7	-3.4	-3.6	-0.2
Bloomberg Global Inflation Linked xUS *	4.0	4.0	-15.6	-2.0	0.3	2.7
Emerging Markets (Hard Currency)						
Bloomberg EM USD Aggregate	2.1	2.1	-4.6	0.1	0.3	2.1
Emerging Markets (Foreign Currency)						
Bloomberg EM Local Currency Gov't	3.1	3.1	-3.5	1.9	0.1	0.5
Bloomberg EM Local Currency Gov't *	2.2	2.2	3.1	0.2	2.2	2.0
Euro vs. Dollar	1.3	1.3	-2.1	-0.6	-2.5	-1.7
Yen vs. Dollar	-1.3	-1.3	-8.4	-6.8	-4.4	-3.4
Pound vs. Dollar	2.1	2.1	-6.1	-0.2	-2.5	-2.1

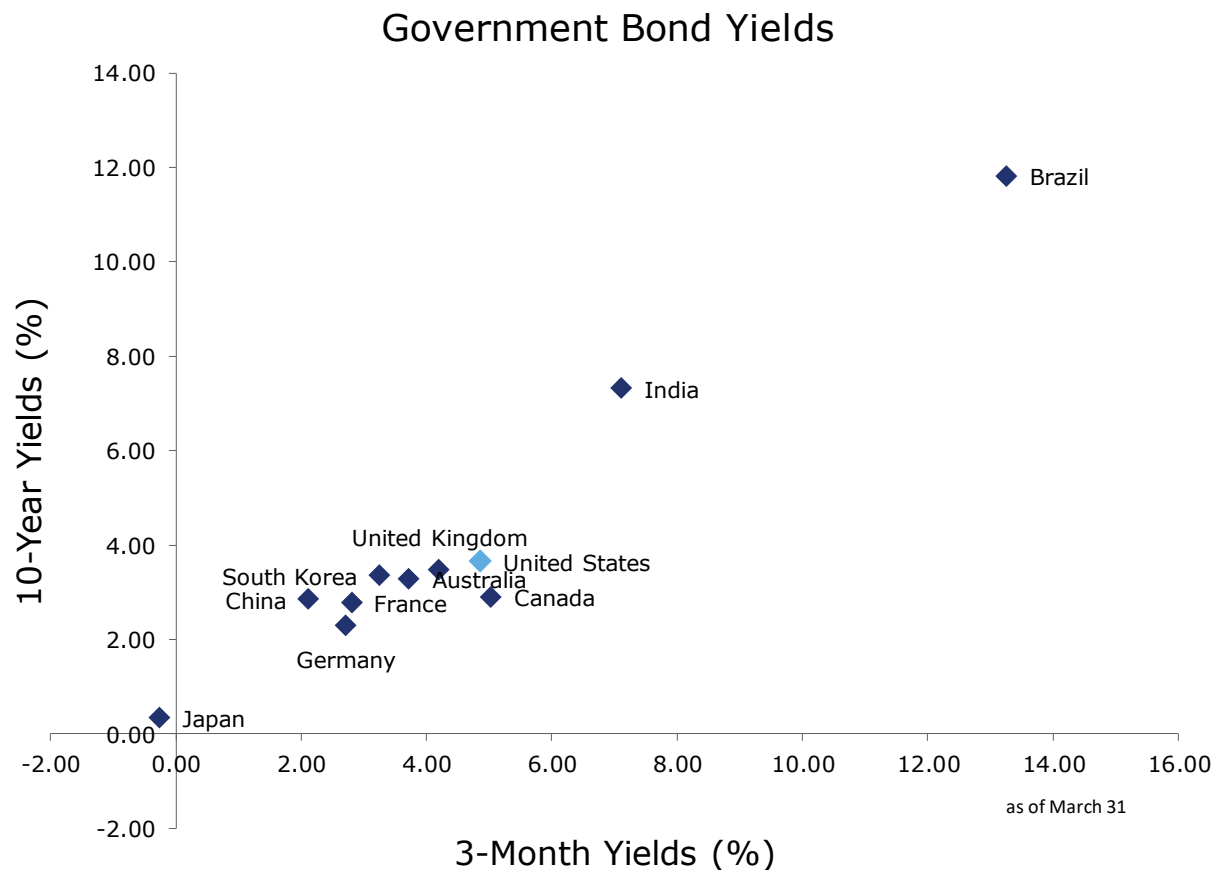
* Returns are reported in terms of local market investors, which removes currency effects.



Data Sources: Bloomberg

Global Interest Rates

Short-term rates have turned positive in most larger countries; longer-term rates around 3.5% in the U.K. and the U.S.

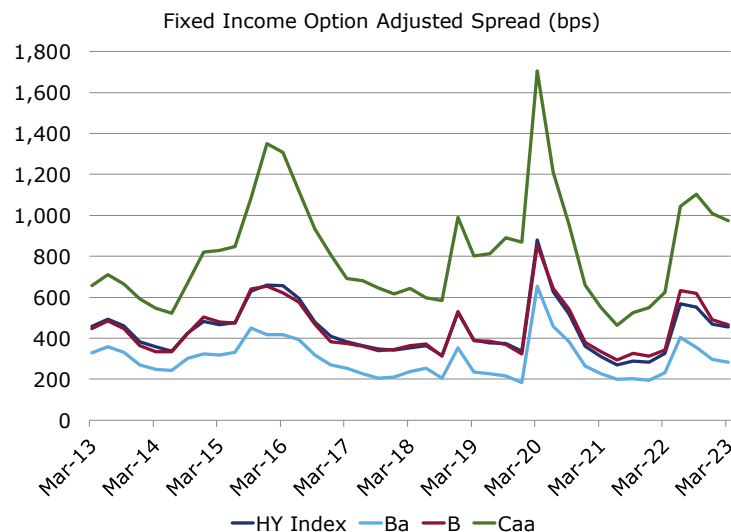


Data Sources: Bloomberg

High Yield Bond Market

As of 3/31/2023

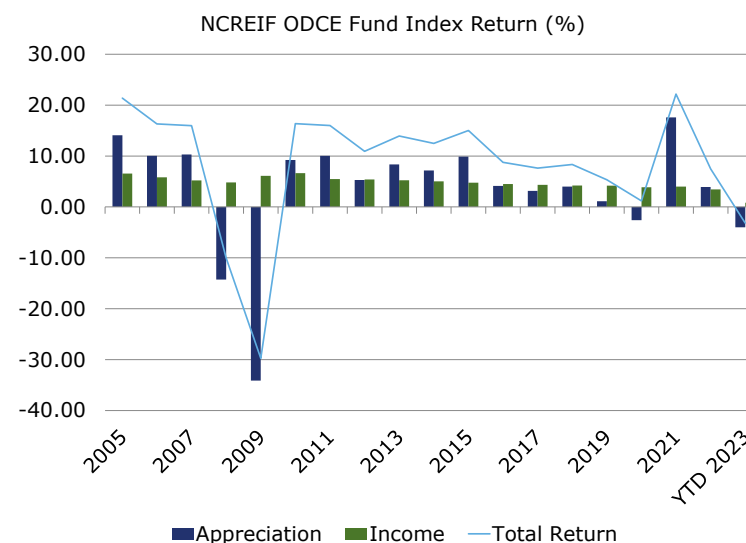
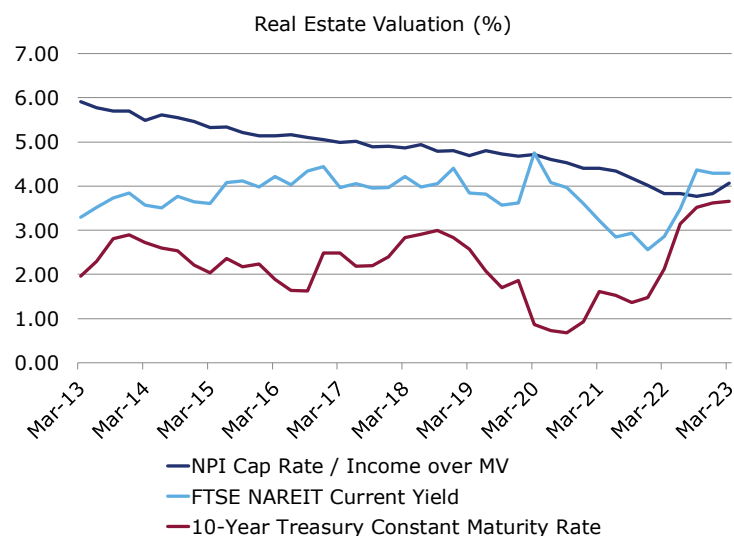
		YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg High Yield		8.5	3.6	3.6	-3.3	5.9	3.2	4.1
S&P LSTA Leveraged Loan		9.1	2.9	2.9	2.4	6.5	3.4	3.3
High Yield Quality Distribution	Weight							
Ba U.S. High Yield	48.8%	6.8	3.4	3.4	-1.9	5.8	4.0	4.5
B U.S. High Yield	39.6%	8.7	3.5	3.5	-3.7	5.4	3.0	3.7
Caa U.S. High Yield	10.7%	13.4	5.0	5.0	-8.6	7.1	0.5	3.4
Ca to D U.S. High Yield	0.9%	35.1	-3.6	-3.6	-10.3	12.4	-0.8	-5.3



Data Sources: Bloomberg

Real Assets

As of 3/31/2023	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg U.S. TIPS	3.3	3.3	-6.1	1.8	2.9	1.5
Bloomberg Commodity Index	-5.4	-5.4	-12.5	20.8	5.4	-1.7
Bloomberg Gold Index	8.1	8.1	0.7	5.9	7.1	1.3
Wilshire Global RESI Index	2.3	2.3	-20.8	9.0	3.2	4.3
NCREIF ODCE Fund Index	-3.2	-3.2	-3.1	8.4	7.5	9.5
NCREIF Timberland Index	1.8	1.8	11.3	8.1	5.5	5.8
FTSE Global Core Infrastructure 50/50	0.7	0.7	-7.1	11.1	6.6	7.1
Alerian Midstream Energy	0.8	0.8	-1.2	34.8	9.7	n.a.
Bitcoin	71.7	71.7	-38.0	63.6	32.9	77.7



Data Sources: Bloomberg, National Council of Real Estate Investment Fiduciaries

Asset Class Performance

Asset Class Returns - Best to Worst

2018	2019	2020	2021	2022	2023 YTD	Annualized 5-Year as of 3/23
T-Bills 1.9%	U.S. Equity 31.0%	U.S. Equity 20.8%	REITs 46.2%	Commodities 16.1%	Developed 8.6%	U.S. Equity 10.7%
Core Bond 0.0%	REITs 25.8%	Emrg Mrkts 18.7%	Commodities 27.1%	T-Bills 1.3%	U.S. Equity 7.3%	REITs 5.7%
U.S. TIPS -1.3%	Developed 22.7%	U.S. TIPS 11.0%	U.S. Equity 26.7%	High Yield -11.2%	Emrg Mrkts 4.0%	Commodities 5.4%
High Yield -2.1%	Emrg Mrkts 18.9%	Developed 8.3%	Developed 11.8%	U.S. TIPS -11.8%	High Yield 3.6%	Developed 4.0%
REITs -4.8%	High Yield 14.3%	Core Bond 7.5%	U.S. TIPS 6.0%	Core Bond -13.0%	U.S. TIPS 3.3%	High Yield 3.2%
U.S. Equity -5.3%	Core Bond 8.7%	High Yield 7.1%	High Yield 5.3%	Developed -14.0%	REITs 3.2%	U.S. TIPS 2.9%
Commodities -11.2%	U.S. TIPS 8.4%	T-Bills 0.7%	T-Bills 0.0%	U.S. Equity -19.0%	Core Bond 3.0%	T-Bills 1.4%
Developed -13.4%	Commodities 7.7%	Commodities -3.1%	Core Bond -1.5%	Emrg Mrkts -19.7%	T-Bills 1.1%	Core Bond 0.9%
Emrg Mrkts -14.2%	T-Bills 2.3%	REITs -7.9%	Emrg Mrkts -2.2%	REITs -26.8%	Commodities -5.4%	Emrg Mrkts -0.5%

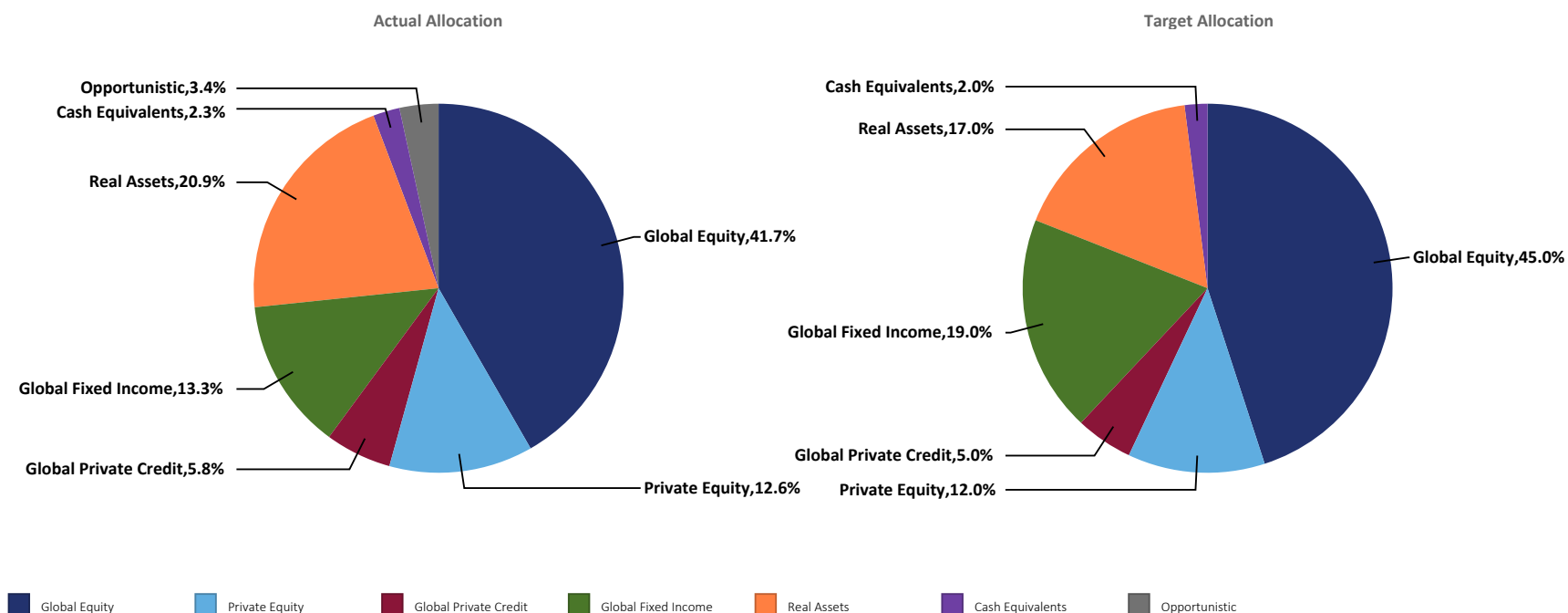
Data Sources: Bloomberg Note: Developed asset class is developed equity markets ex-U.S., ex-Canada

Total Fund

Asset Allocation Compliance

Total Fund

Periods Ended As of March 31, 2023



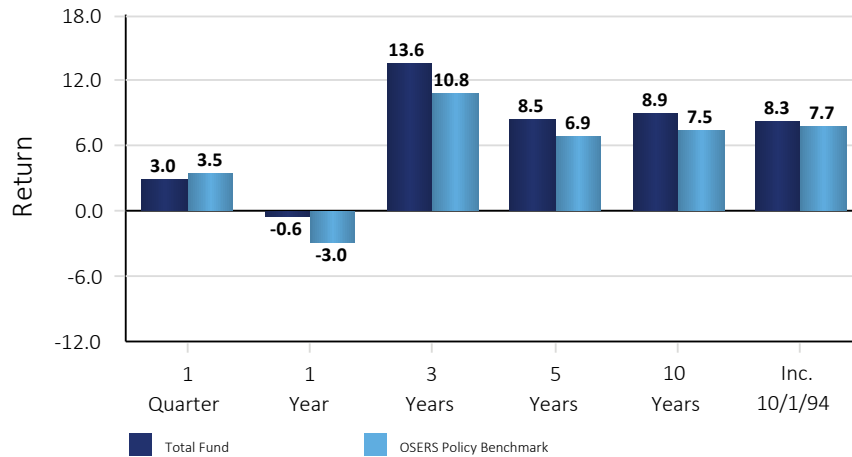
	Asset Allocation \$	Asset Allocation (%)	Target Allocation (%)	Differences (%)
Total Fund	17,490,120,924	100.0	100.0	0.0
Global Equity	7,296,094,859	41.7	45.0	-3.3
Private Equity	2,199,429,184	12.6	12.0	0.6
Global Private Credit	1,013,958,087	5.8	5.0	0.8
Global Fixed Income	2,319,737,920	13.3	19.0	-5.7
Real Assets	3,657,313,136	20.9	17.0	3.9
Cash Equivalents	406,906,918	2.3	2.0	0.3
Opportunistic	596,680,820	3.4	0.0	3.4

Composite Performance Summary

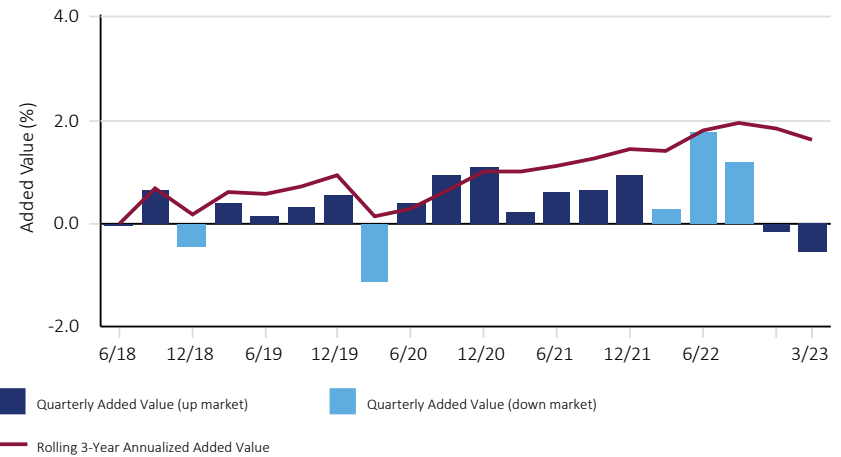
Total Fund

Periods Ended March 31, 2023

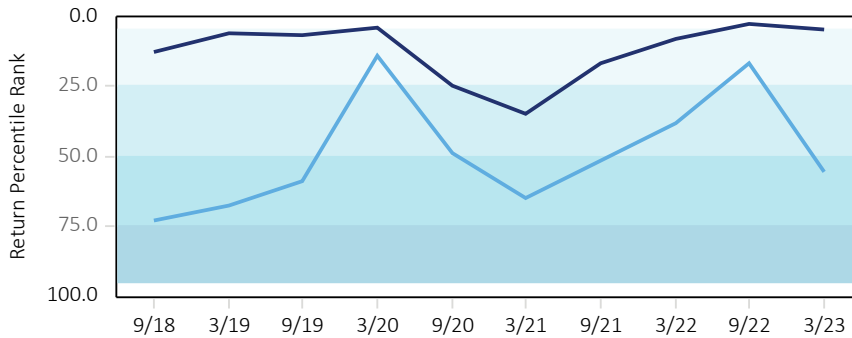
Comparative Performance



Added Value History

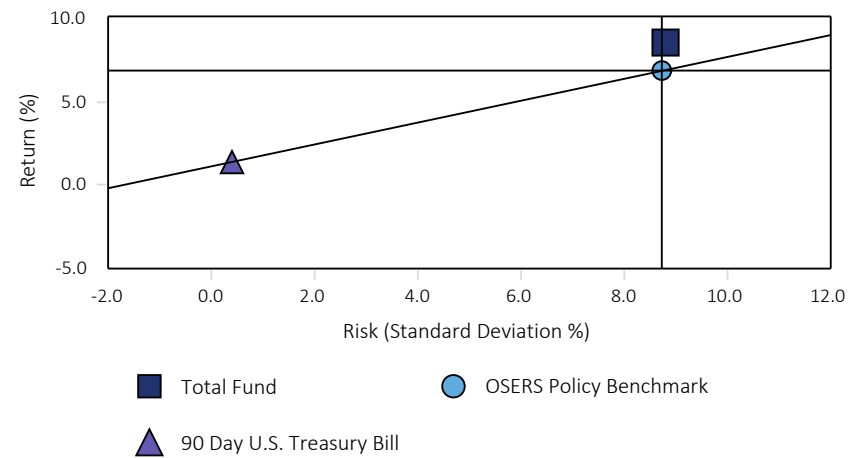


Rolling 3-Year Percentile Rank: All Public Plans-Total Fund



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
— Total Fund	10	9 (90%)	1 (10%)	0 (0%)	0 (0%)
— Benchmark	10	2 (20%)	2 (20%)	6 (60%)	0 (0%)

Risk and Return 04/1/18 - 03/31/23

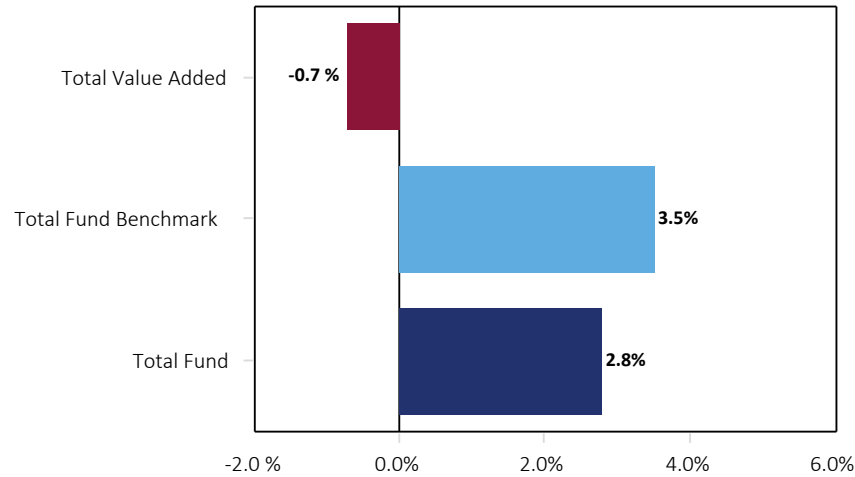


Total Fund Attribution

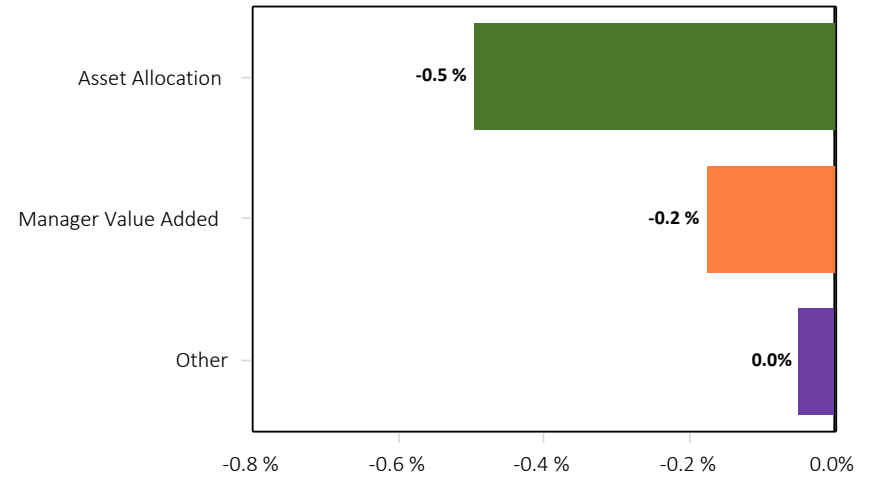
Total Fund

Periods Ended 1 Quarter Ending March 31, 2023

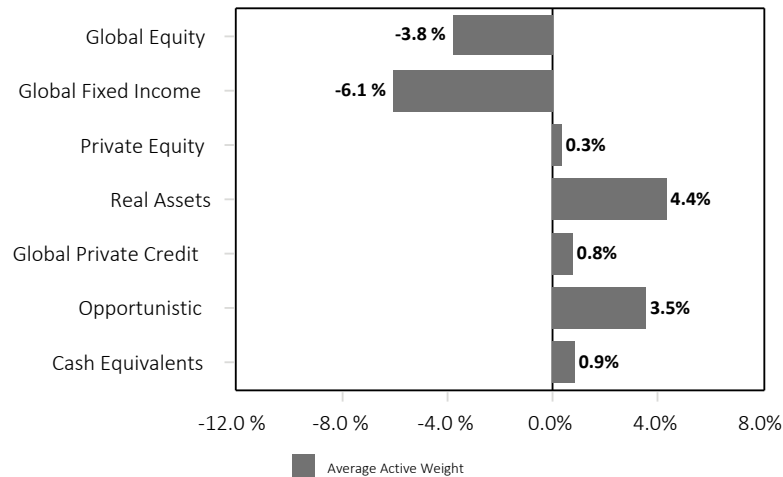
Total Fund Performance



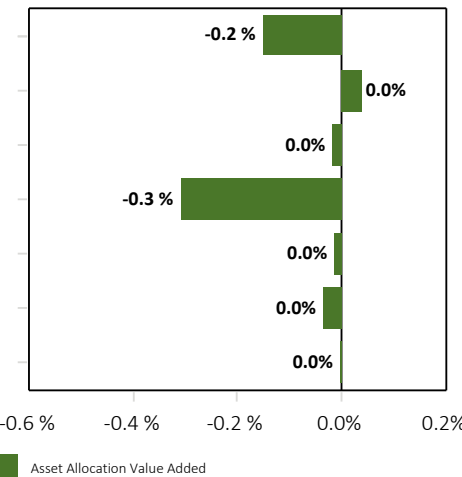
Total Value Added:-0.7 %



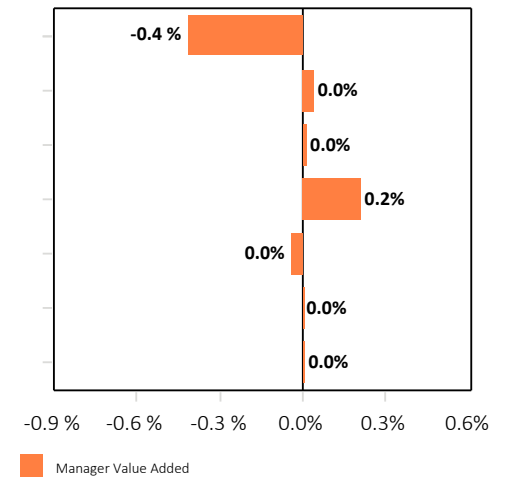
Total Asset Allocation:-0.5 %



Asset Allocation Value Added:-0.5 %



Total Manager Value Added:-0.2 %

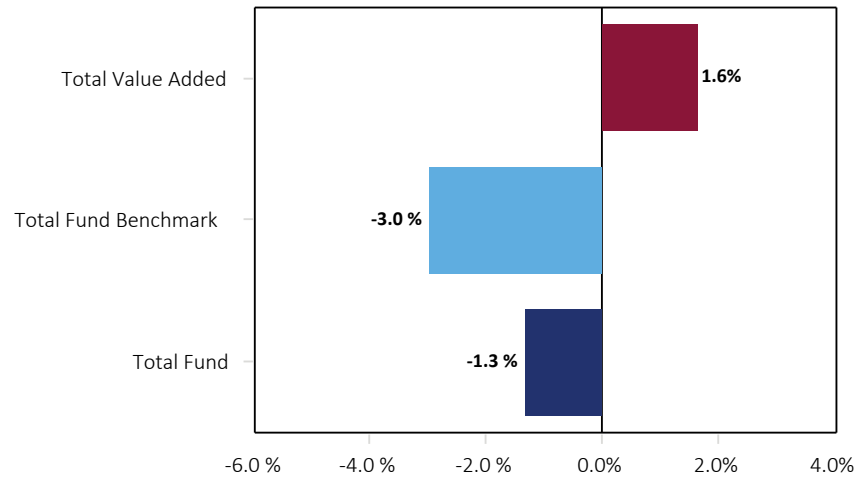


Total Fund Attribution

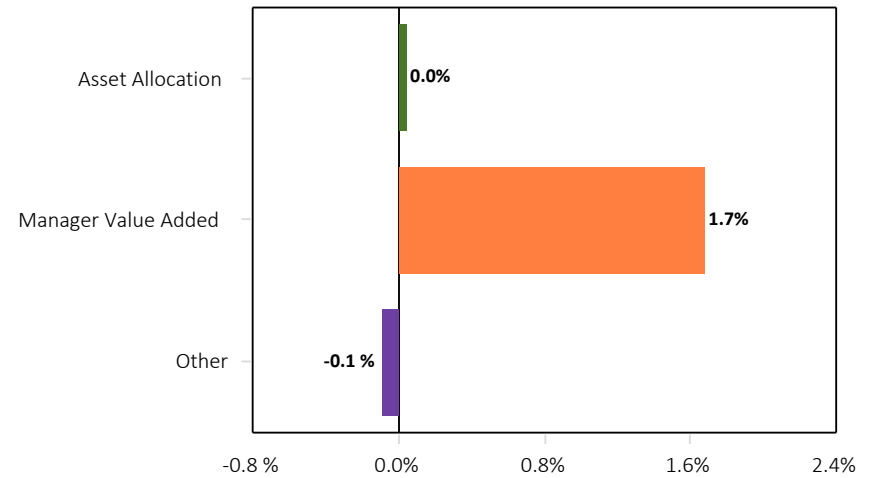
Total Fund

Periods Ended 1 Year Ending March 31, 2023

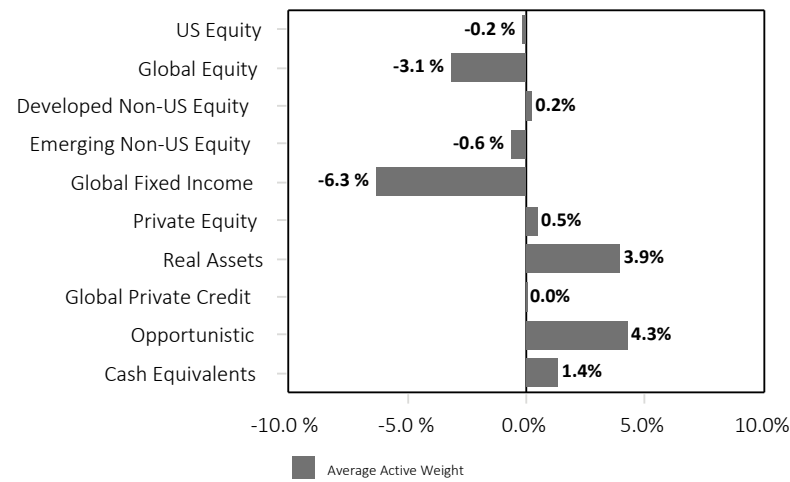
Total Fund Performance



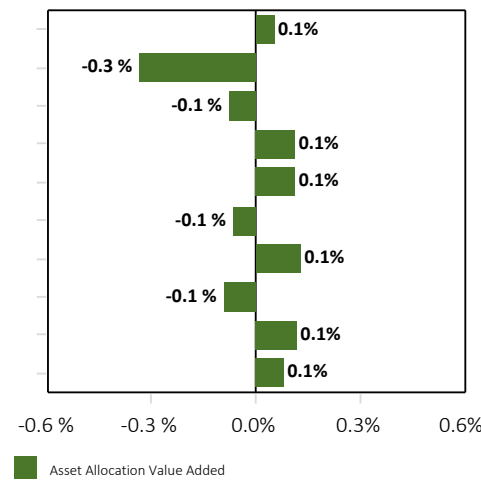
Total Value Added:1.6%



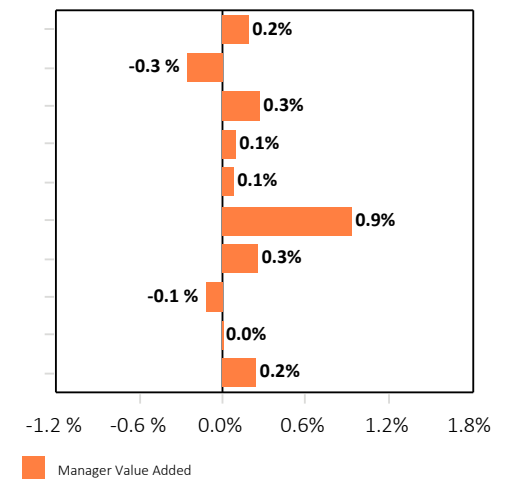
Total Asset Allocation:0.0%



Asset Allocation Value Added:0.0%



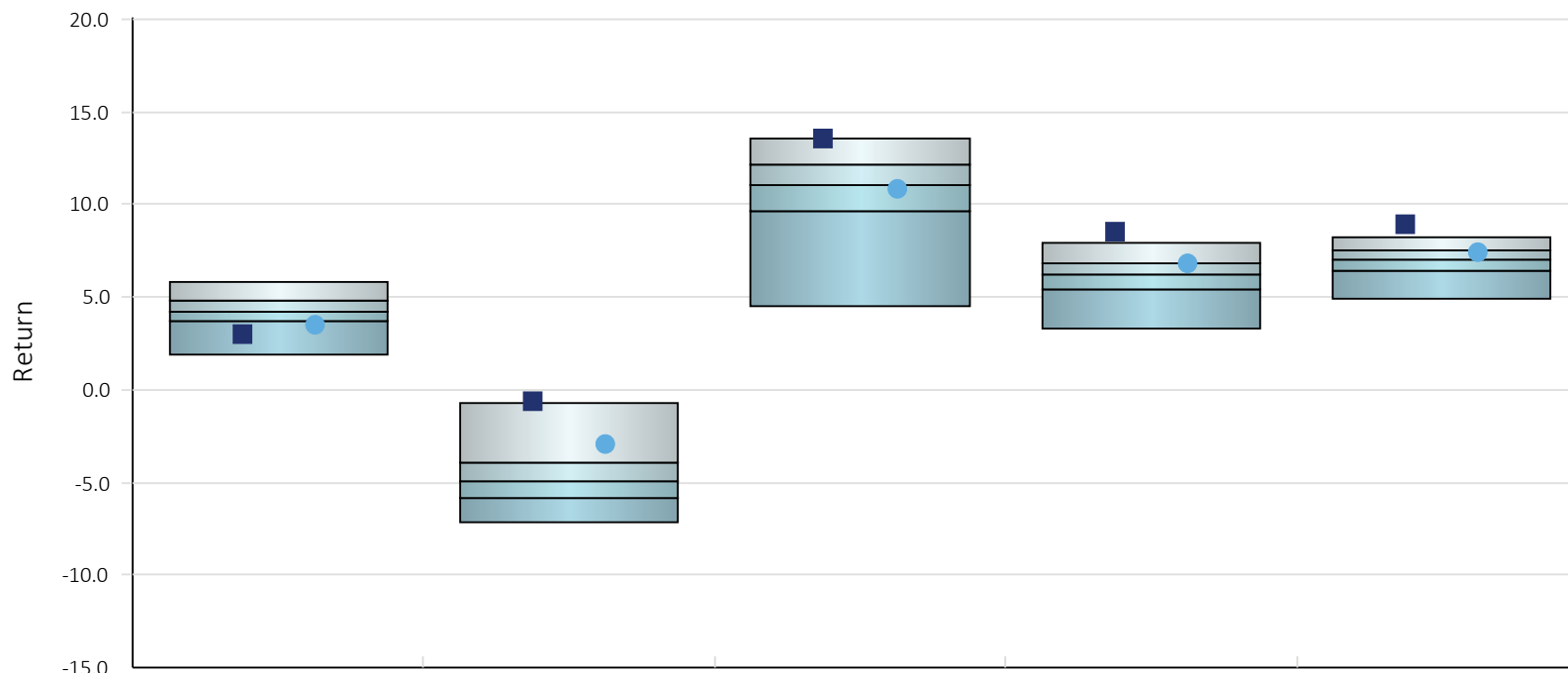
Total Manager Value Added:1.7%



Plan Sponsor Peer Group Analysis

Total Fund vs All Public Plans-Total Fund (GOF)

Periods Ended March 31, 2023



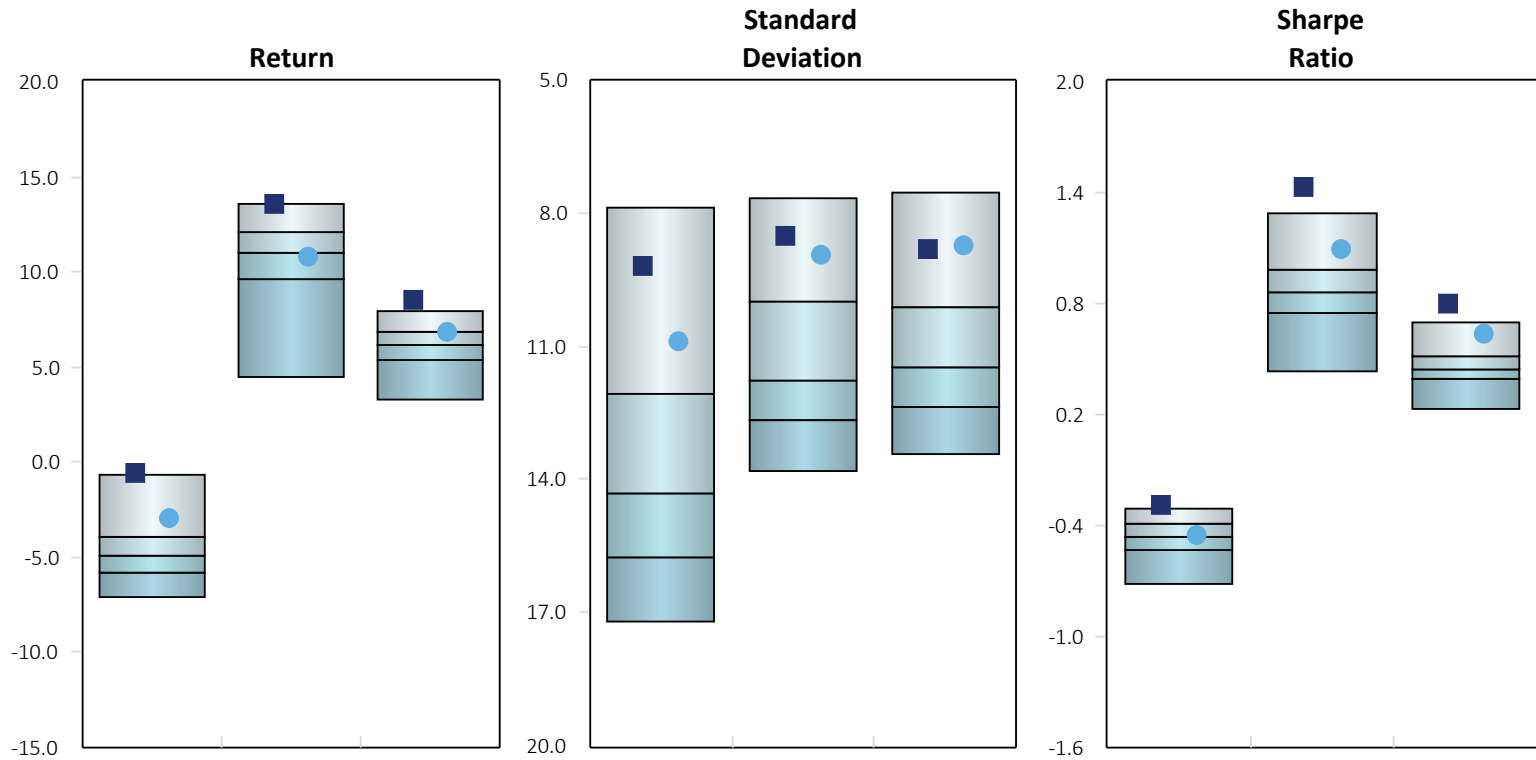
	QTD	1 Year	3 Years	5 Years	10 Years
■ Total Fund	2.97 (90)	-0.58 (5)	13.58 (5)	8.49 (3)	8.90 (2)
● OSERS Policy Benchmark	3.52 (79)	-2.97 (15)	10.84 (56)	6.85 (25)	7.45 (31)
5th Percentile	5.84	-0.70	13.53	7.92	8.27
1st Quartile	4.80	-3.95	12.11	6.84	7.56
Median	4.21	-4.96	11.03	6.18	7.05
3rd Quartile	3.70	-5.82	9.66	5.38	6.37
95th Percentile	1.86	-7.11	4.48	3.31	4.89
Population	322	310	303	293	254

Parentheses contain percentile rankings.
 Calculation based on monthly periodicity.
 Ohio SERS performance is Gross of Fees

Plan Sponsor Peer Group Analysis - Multi Statistics

Total Fund vs All Public Plans-Total Fund (GOF)

Periods Ended March 31, 2023



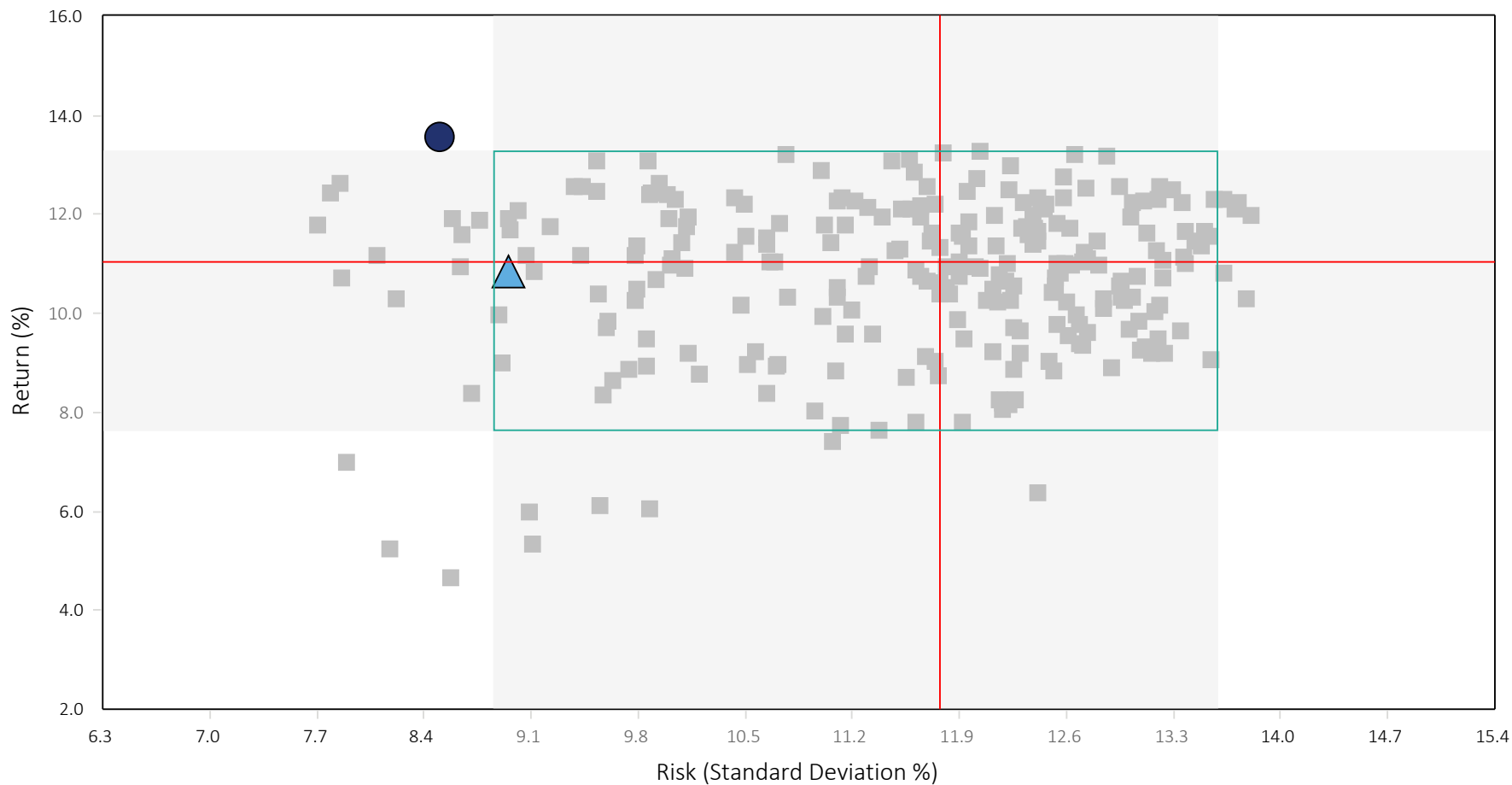
	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ Total Fund	-0.58 (5)	13.58 (5)	8.49 (3)	9.18 (7)	8.50 (9)	8.82 (10)	-0.29 (5)	1.43 (4)	0.80 (4)
● OSERS Policy Benchmark	-2.97 (15)	10.84 (56)	6.85 (25)	10.91 (15)	8.95 (12)	8.73 (9)	-0.45 (49)	1.09 (15)	0.64 (8)
5th Percentile	-0.70	13.53	7.92	7.90	7.65	7.53	-0.31	1.29	0.70
1st Quartile	-3.95	12.11	6.84	12.07	10.01	10.11	-0.39	0.99	0.51
Median	-4.96	11.03	6.18	14.33	11.77	11.47	-0.46	0.86	0.45
3rd Quartile	-5.82	9.66	5.38	15.77	12.65	12.38	-0.54	0.75	0.39
95th Percentile	-7.11	4.48	3.31	17.21	13.81	13.43	-0.71	0.43	0.23

Parentheses contain percentile rankings.
 Calculation based on monthly periodicity.
 Ohio SERS performance is Gross of Fees

Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund

Periods Ended April 1, 2020 To March 31, 2023



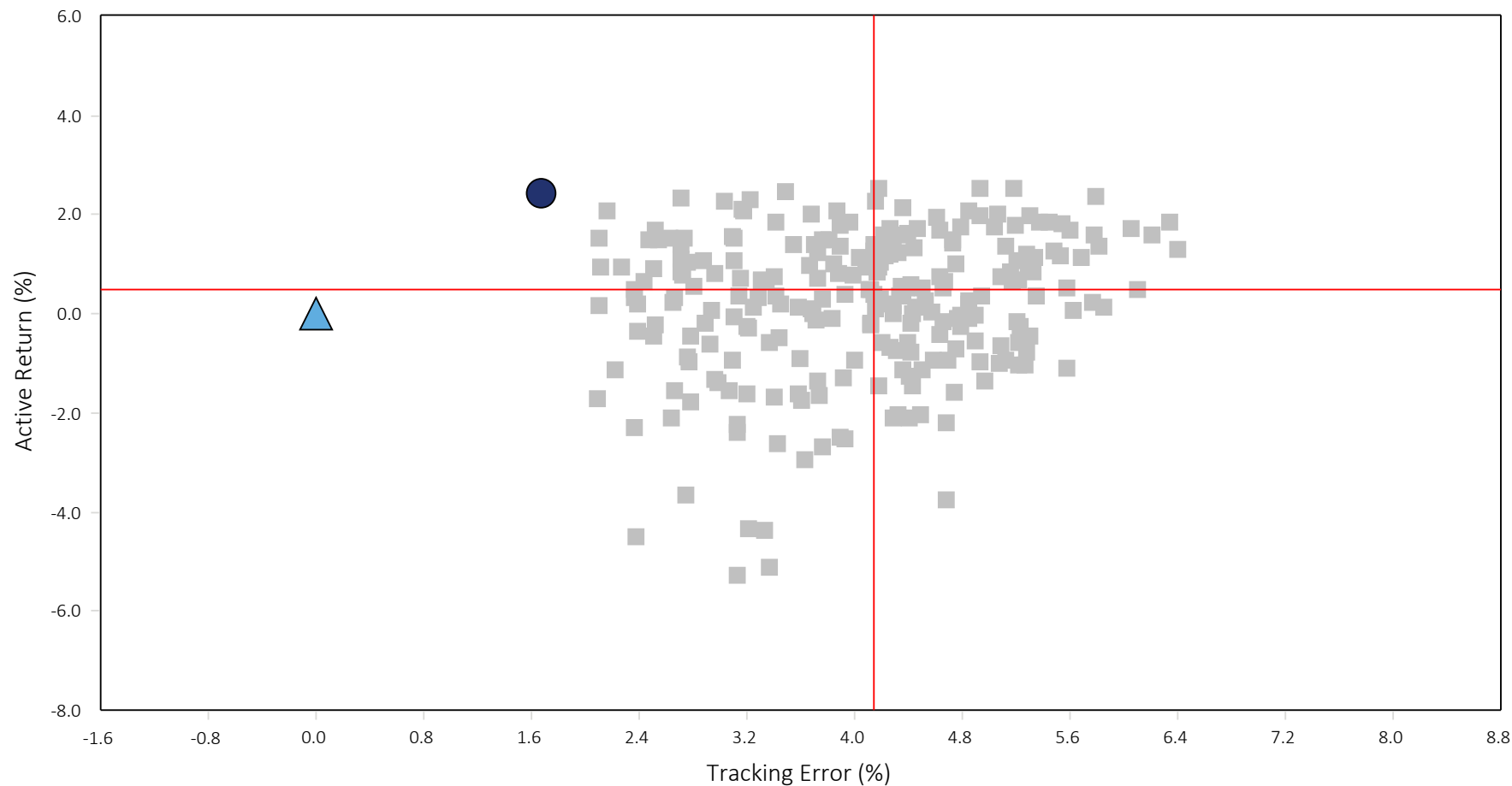
	Return	Standard Deviation
● Total Fund	13.58	8.50
▲ OSERS Policy Benchmark	10.84	8.95
— Median	11.03	11.77

Calculation based on monthly periodicity.
Ohio SERS performance is Gross of Fees

Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund

Periods Ended April 1, 2020 To March 31, 2023



	Active Return	Tracking Error
● Total Fund	2.42	1.67
▲ OSERS Policy Benchmark	0.00	0.00
— Median	0.50	4.15

Calculation based on monthly periodicity.
Ohio SERS performance is Gross of Fees

Asset Allocation & Performance

Total Fund

Periods Ended March 31, 2023

	Allocation		Performance (%) net of fees								
	Market Value \$000	%	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date
Total Fund	17,490,121	100.00	2.80	4.41	-1.34	12.88	7.82	8.22	8.01	7.78	10/1/1994
OSERS Policy Benchmark			3.52	4.40	-2.97	10.84	6.85	7.45	7.81	7.75	
Value Added			-0.72	0.01	1.63	2.04	0.97	0.77	0.20	0.03	
Global Equity	7,296,095	41.72	6.29	9.17	-6.63	15.72	6.88	8.35	8.76	7.48	7/1/2002
Global Equity Benchmark			7.31	9.75	-7.05	15.29	6.54	7.99	8.37	7.17	
Value Added			-1.02	-0.58	0.42	0.43	0.34	0.36	0.39	0.31	
Global Private Equity	2,199,429	12.58	1.16	-0.61	1.70	21.64	18.66	18.28	12.85	13.37	10/1/1994
Global PE Benchmark			1.04	-5.02	-5.76	17.69	15.52	15.30	12.70	13.00	
Value Added			0.12	4.41	7.46	3.95	3.14	2.98	0.15	0.37	
Global Private Credit	1,013,958	5.80	1.54	2.69	4.76					10.62	7/1/2020
Global Private Credit Benchmark			2.19	5.83	7.12					5.58	
Value Added			-0.65	-3.14	-2.36					5.04	
Global Fixed Income	2,319,738	13.26	3.31	1.13	-4.10	-0.40	1.75	2.08	4.08	5.31	10/1/1994
Blmbg. U.S. Aggregate Index			2.96	-0.09	-4.78	-2.77	0.90	1.36	3.18	4.68	
Value Added			0.35	1.22	0.68	2.37	0.85	0.72	0.90	0.63	
Cash Equivalents	406,907	2.33	0.73	1.20	9.92	17.67	4.60	2.51	2.33	2.29	7/1/2002
FTSE 1 Month T-Bill			1.09	2.47	2.57	0.89	1.35	0.81	1.19	1.20	
Value Added			-0.36	-1.27	7.35	16.78	3.25	1.70	1.14	1.09	

Asset Allocation & Performance

Total Fund

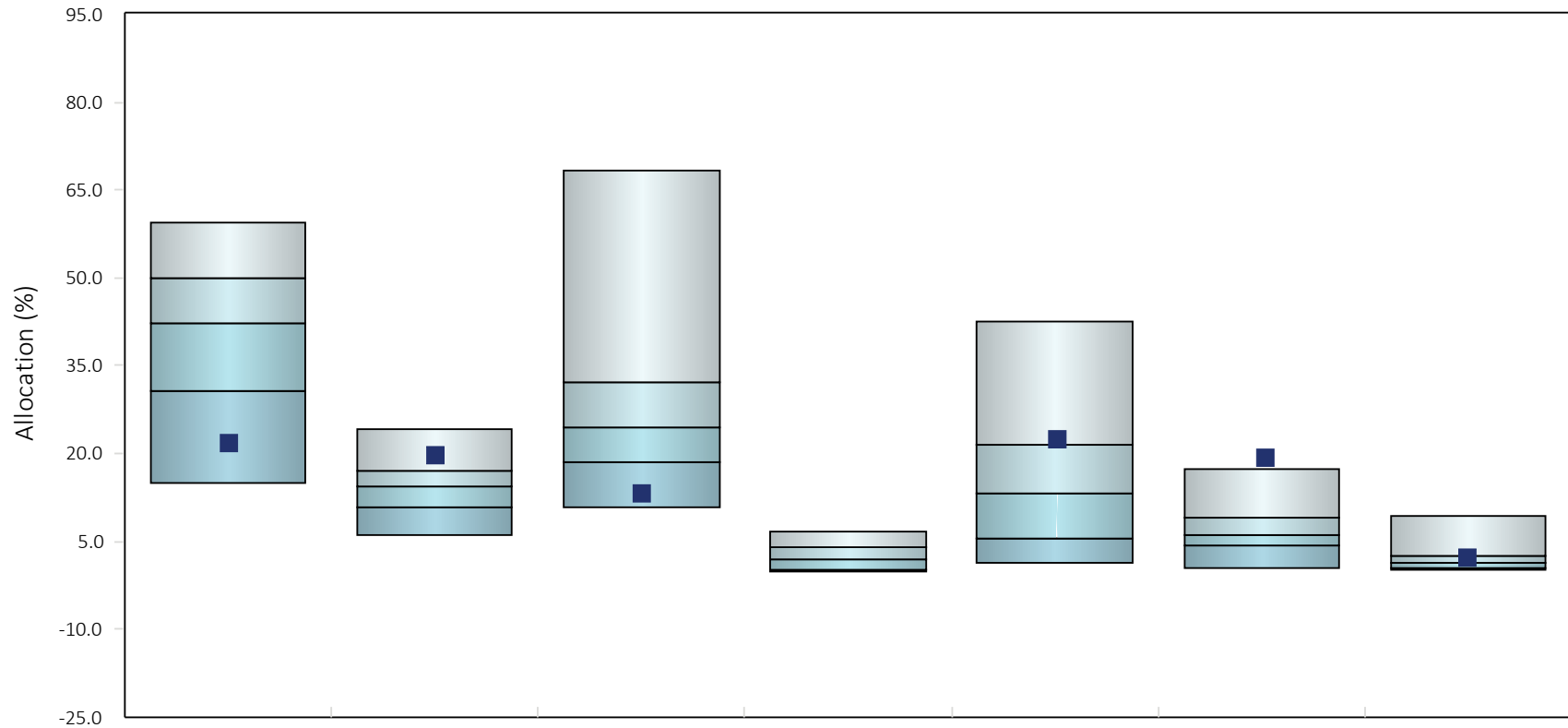
Periods Ended March 31, 2023

	Allocation		Performance (%) net of fees								
	Market Value \$000	%	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date
Global Real Assets	3,657,313	20.91	-2.42	2.21	7.69	10.80	10.03	10.51	7.67	7.85	10/1/1994
Real Assets Benchmark			-3.50	0.19	5.52	8.06	7.46	8.82	9.03	9.35	
Value Added			1.08	2.02	2.17	2.74	2.57	1.69	-1.36	-1.50	
Opportunistic & Tactical	596,681	3.41	2.55	1.45	-0.99	8.37	6.67			6.98	6/1/2013
Opportunistic Benchmark			3.47	1.40	-2.88	0.91	1.00			4.31	
Value Added			-0.92	0.05	1.89	7.46	5.67			2.67	

Plan Sponsor TF Asset Allocation

Total Fund vs All Public Plans-Total Fund

Periods Ended March 31, 2023



	US Equity	Global ex-US Equity	US Fixed	Global ex-US Fixed	Alternatives	Total Real Estate	Cash & Equivalents
■ Total Fund	21.90	19.81	13.26		21.80	20.90	2.33
5th Percentile	59.54	24.10	68.19	6.81	42.58	17.49	9.30
1st Quartile	49.93	16.94	32.32	4.11	21.66	9.17	2.47
Median	42.39	14.49	24.40	1.85	13.18	6.12	1.29
3rd Quartile	30.68	10.86	18.56	0.30	5.47	4.26	0.53
95th Percentile	14.99	6.14	10.92	0.01	1.32	0.41	0.06

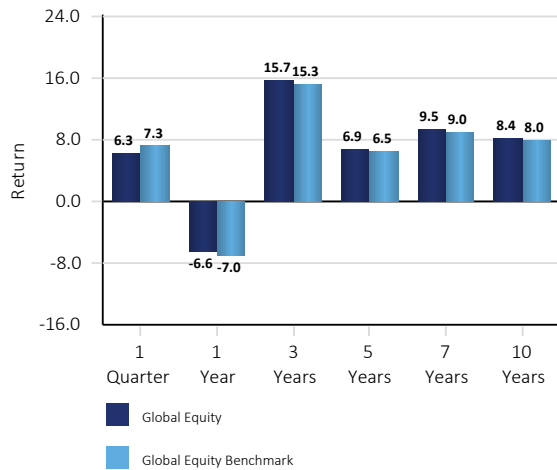
Global Equity

Performance Summary

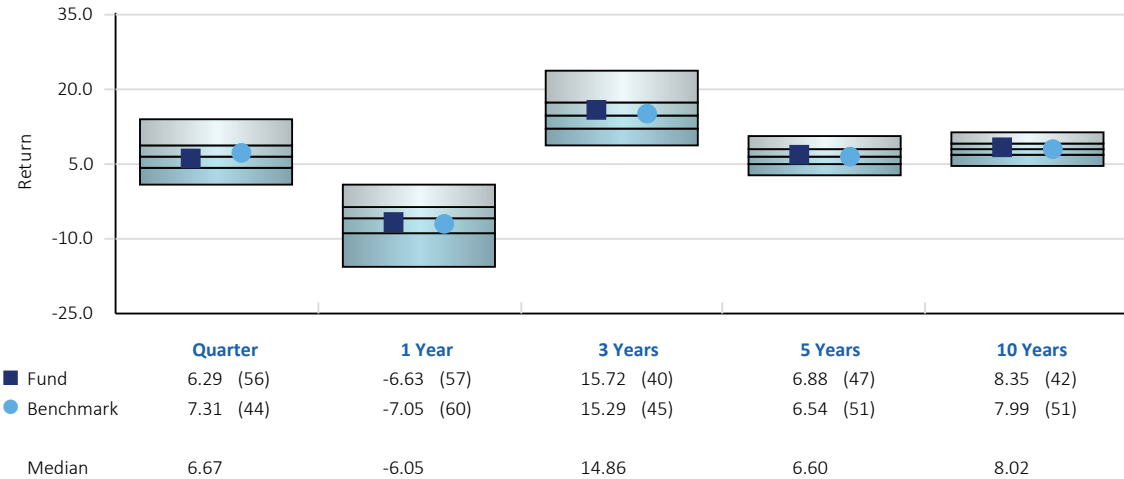
Global Equity

Periods Ended March 31, 2023

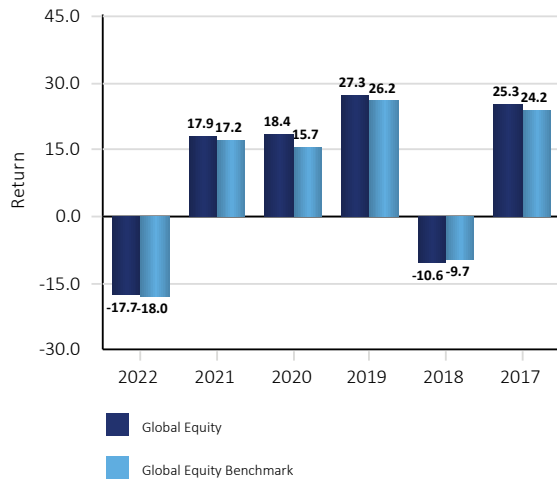
Comparative Performance



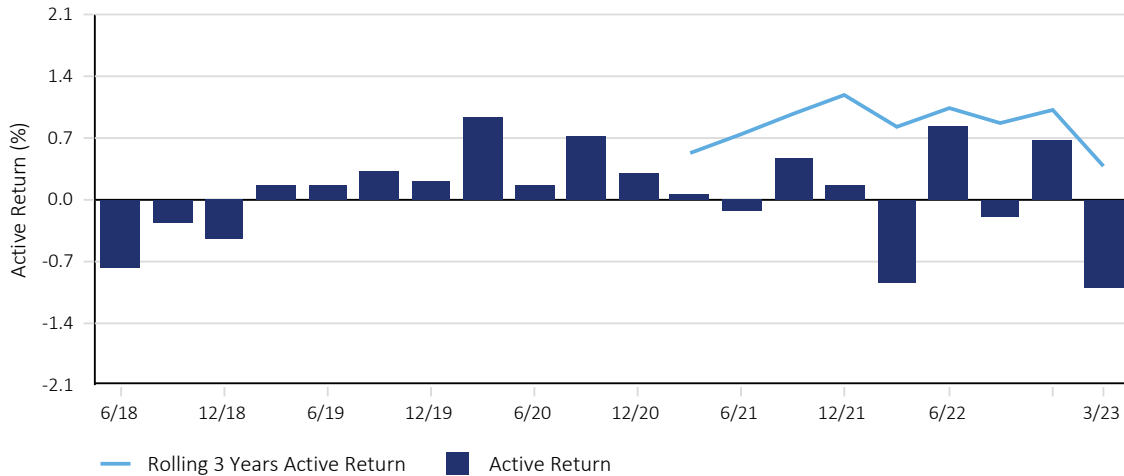
Peer Group Analysis: IM Global Equity (SA+CF)(NOF)



Comparative Performance



Quarterly Active Return

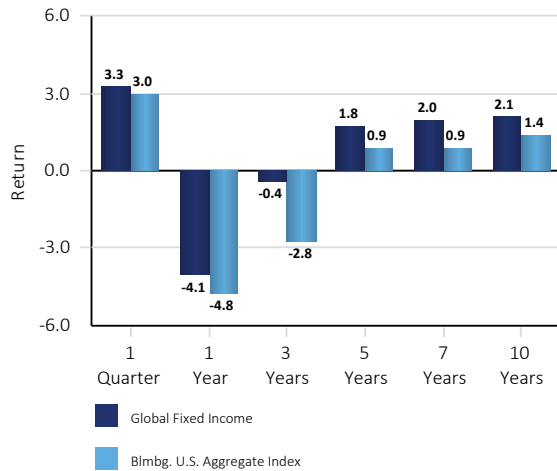


Global Fixed Income

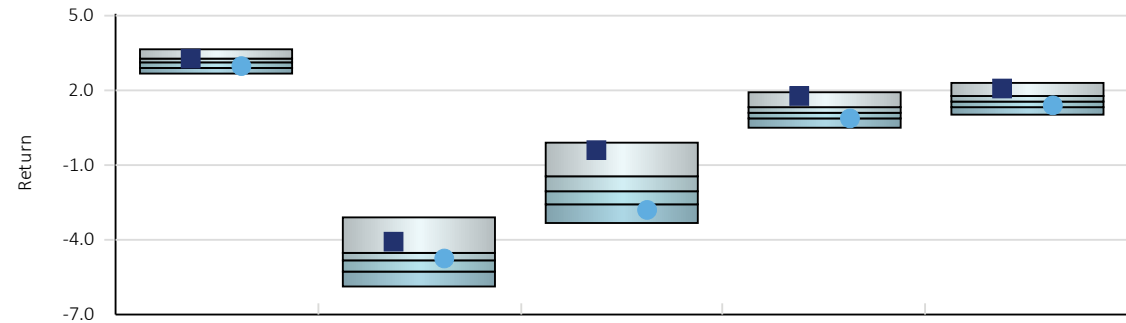
Performance Summary

Global Fixed Income
Periods Ended March 31, 2023

Comparative Performance

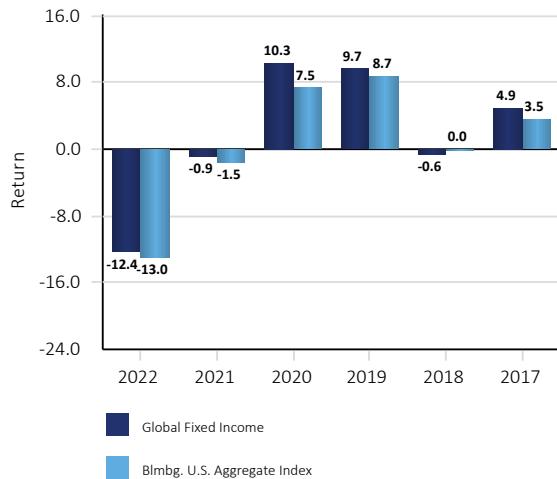


Peer Group Analysis: IM U.S. Broad Market Core Fixed Income (SA+CF) (NOF)

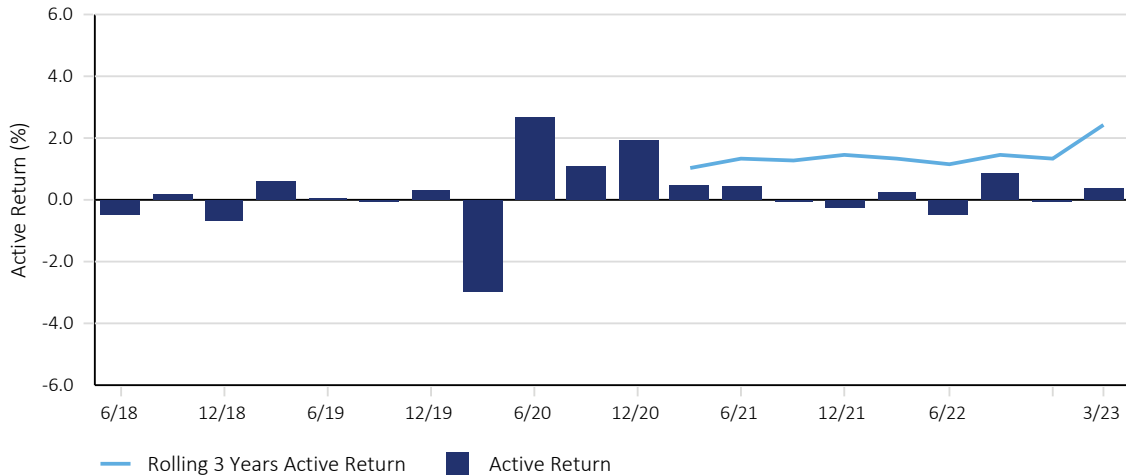


	Quarter	1 Year	3 Years	5 Years	10 Years
Fund	3.31 (19)	-4.10 (13)	-0.40 (6)	1.75 (9)	2.08 (9)
Benchmark	2.96 (73)	-4.78 (42)	-2.77 (84)	0.90 (69)	1.36 (71)
Median	3.12	-4.85	-2.06	1.07	1.53

Comparative Performance



Quarterly Active Return



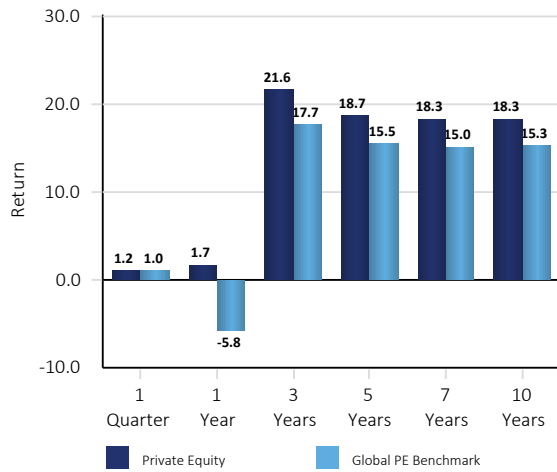
Global Private Equity

Performance Summary

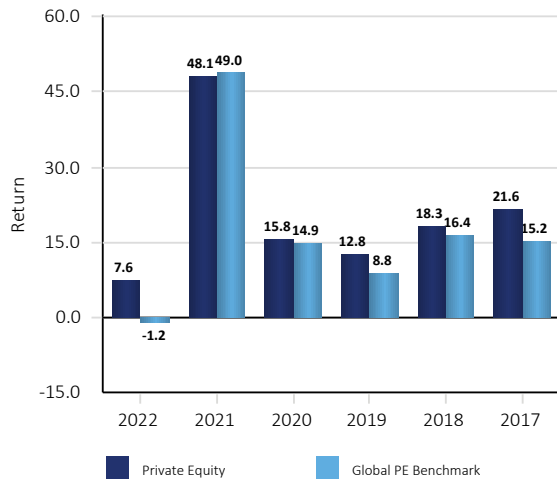
Global Private Equity

Periods Ended March 31, 2023

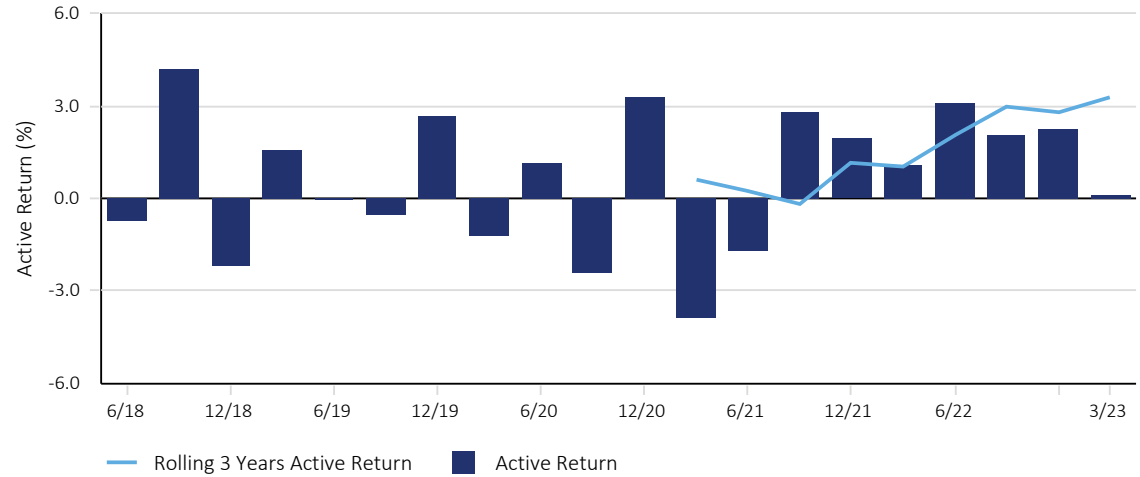
Comparative Performance



Comparative Performance



Quarterly Active Return



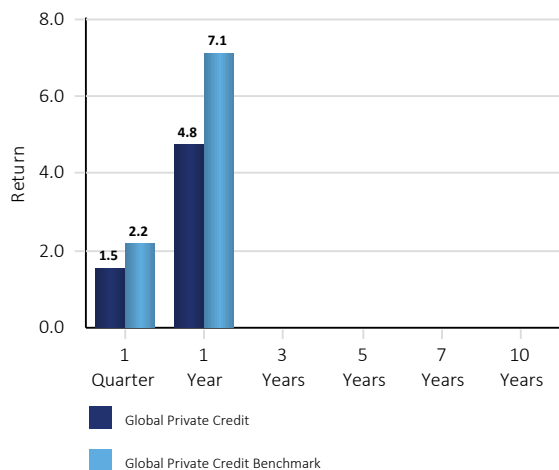
Global Private Credit

Performance Summary

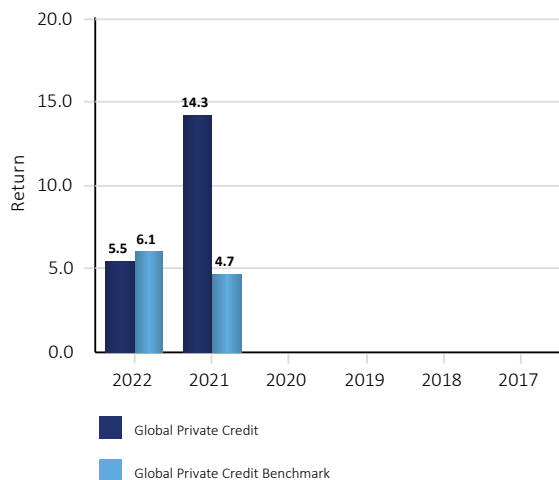
Global Private Credit

Periods Ended March 31, 2023

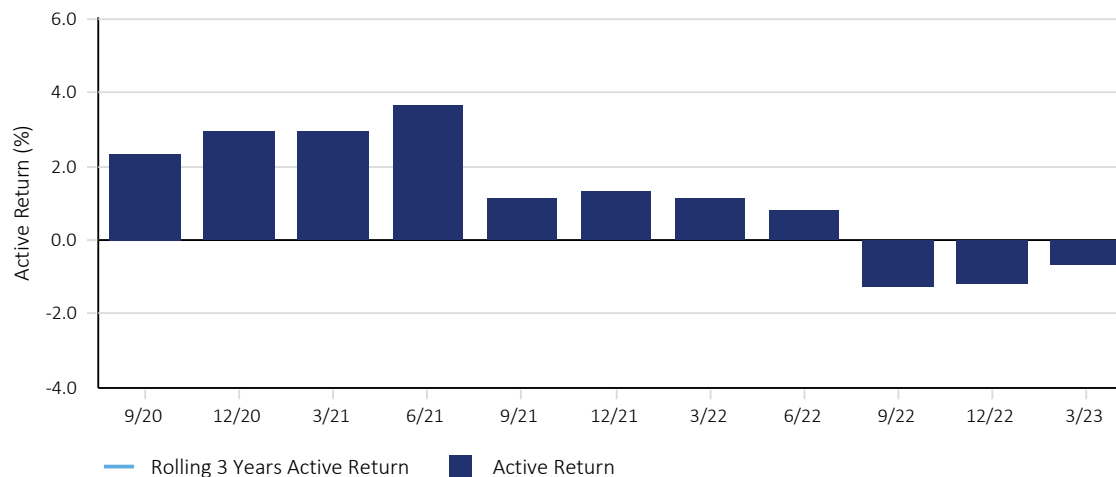
Comparative Performance



Comparative Performance



Quarterly Active Return



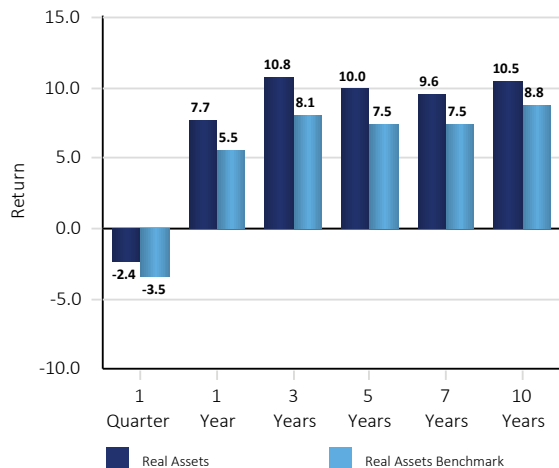
Global Real Assets

Performance Summary

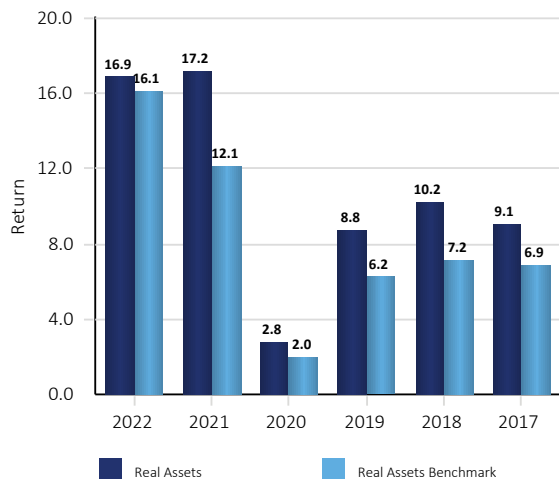
Global Real Assets

Periods Ended March 31, 2023

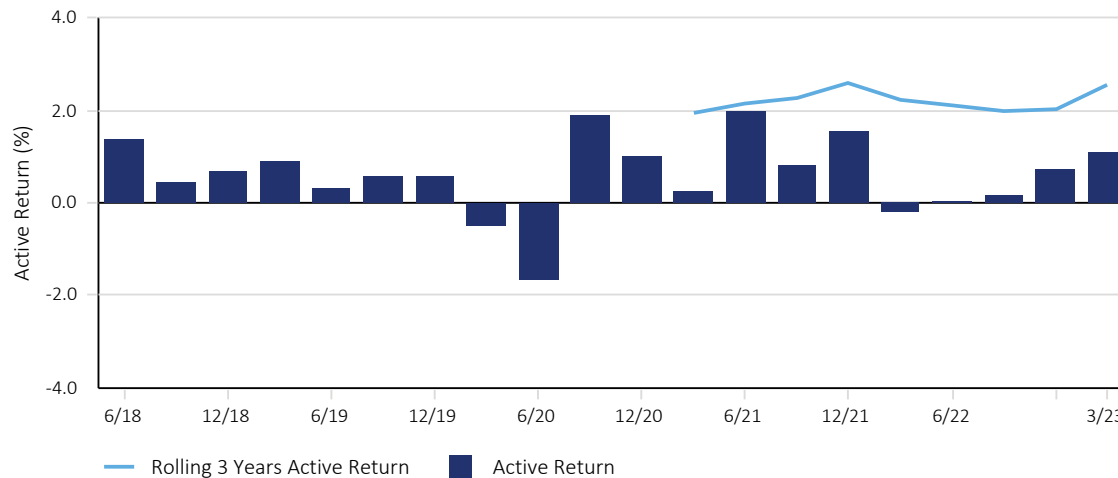
Comparative Performance



Comparative Performance



Quarterly Active Return

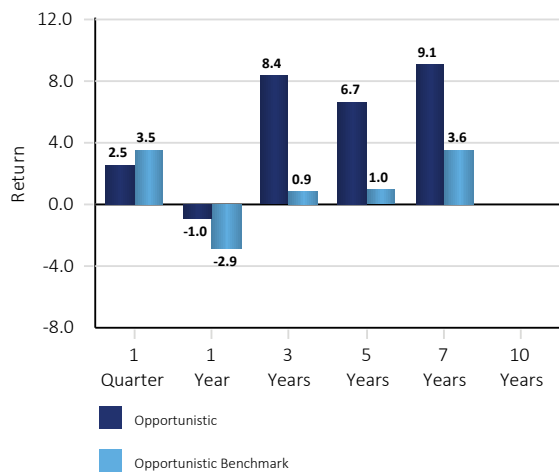


Opportunistic & Tactical

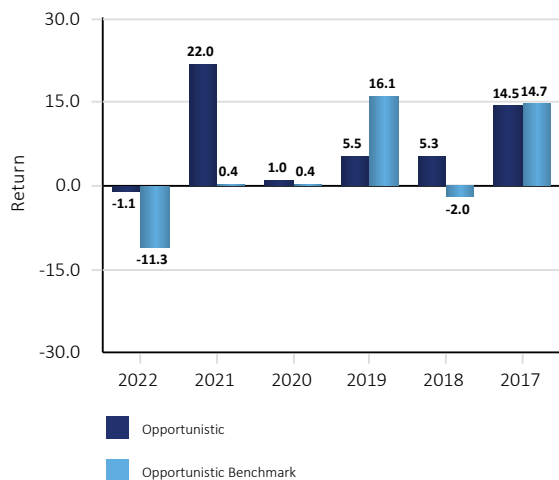
Performance Summary

Opportunistic & Tactical
 Periods Ended March 31, 2023

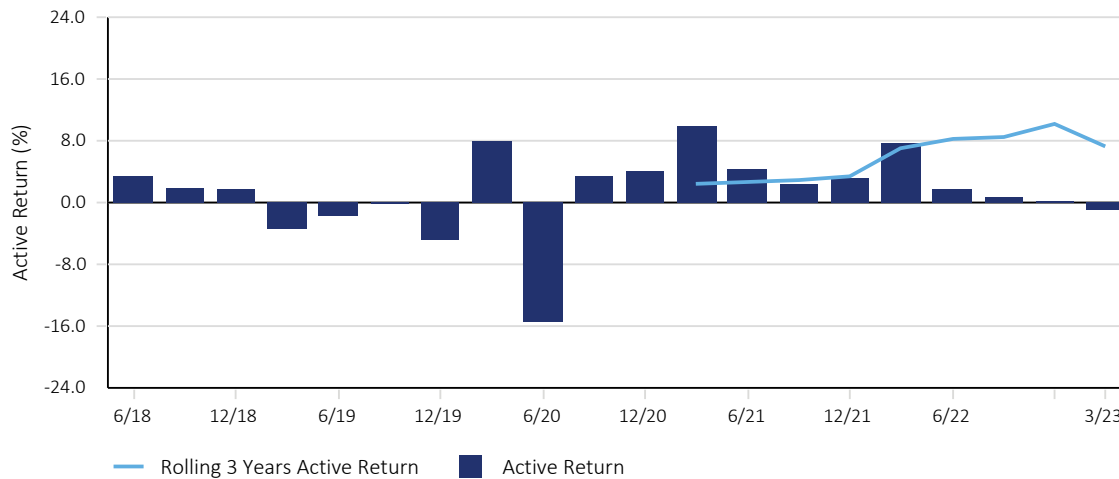
Comparative Performance



Comparative Performance



Quarterly Active Return



Memo

To:	Retirement Board
From:	Farouki Majeed
cc:	Richard Stensrud, Karen Roggenkamp
Date:	May 5, 2023
Re:	SERS Overlay Program - Annual Update

This memo provides an overview of the SERS Overlay Program. The program is designed to enhance Total Fund performance and is not funded through asset class policy allocations. It is a low net exposure, long/short program requiring only a minimal cash funding for futures/forwards collateral and margin requirements. Exposures are managed within a notional dollar limit and active risk targets. The program's performance objective is to add 10 to 20 basis points annually to Total Fund performance on a three-to-five-year time horizon within a 1% tracking error limit. The Overlay Program consists of two sub-programs, Tactical Asset Allocation (TAA) and Active Currency.

Tactical Asset Allocation Program

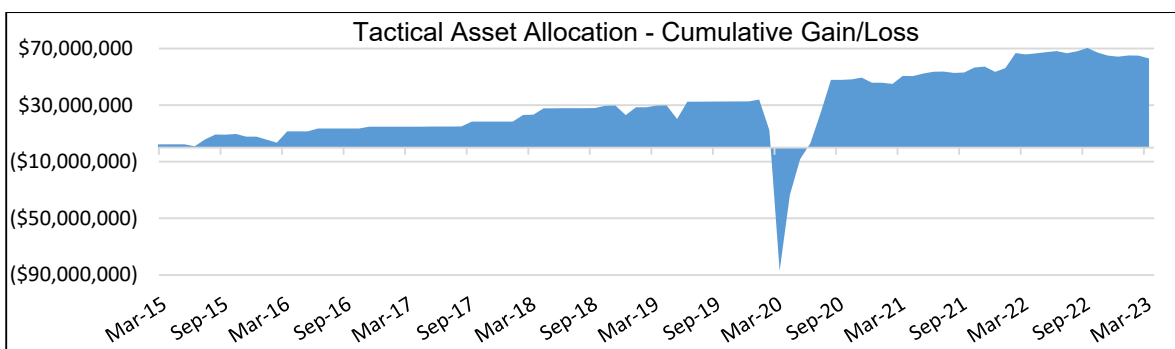
The Tactical Asset Allocation (TAA) Program has been implemented using two managers, Russell Implementation Services and AlphaEngine Global Investment Solutions (AE). The two strategies are complementary with Russell investing opportunistically when market misvaluations occur, and AE consistently has long and short positioning based on the relative attractiveness of assets.

The Russell account which began in 2014 takes long/short positions in equity and bond index futures with net zero exposure and no net leverage. Long and short decisions are based on Russell's proprietary model. Trades are only implemented when the manager has high conviction in the signals, so the account may only have active long and short positions infrequently throughout the year for a short time lasting from several days to several months. Over the last year, there were no active trades in the account. The program has net gains of \$68.0 million since inception.

Alpha Engine invests long and short in US and non-US equity, fixed income, oil, and precious metals with a low net notional exposure. The AE strategy invests with a \$700 million notional exposure limit that was increased from \$500 million in December 2022, and a 1% risk target. The strategy historically performed well when growth assets like equities are underperforming, so the strategy is intended to act as a risk reducer and be negatively correlated with equities and bonds. The strategy was funded in Q2 2021 and is underperforming for the fiscal year with a \$5.2 million loss. The losses have been broad-based with fixed income generating the majority, followed by US and developed market equities and precious metals while emerging markets and energy exposures have generated small gains. The strategy reached a two-year performance track record in April and was terminated due to poor performance.

Below is a summary of the gains and losses by fiscal year and a graph of the cumulative gains of the TAA managers:

G/L Summary	FYTD 2023 (thru 3/23)	FY 2022	FY 2021	FY 2015 – 2020	Since Inception
Russell EAA	-	\$14,520,800	\$50,482,050	\$3,028,776	\$68,031,626
AlphaEngine	(\$5,159,567)	(\$43,718)	\$126,717	-	(\$5,076,568)
Total TAA G/L	(\$5,159,567)	\$14,477,082	\$50,608,767	\$3,028,776	\$62,955,057



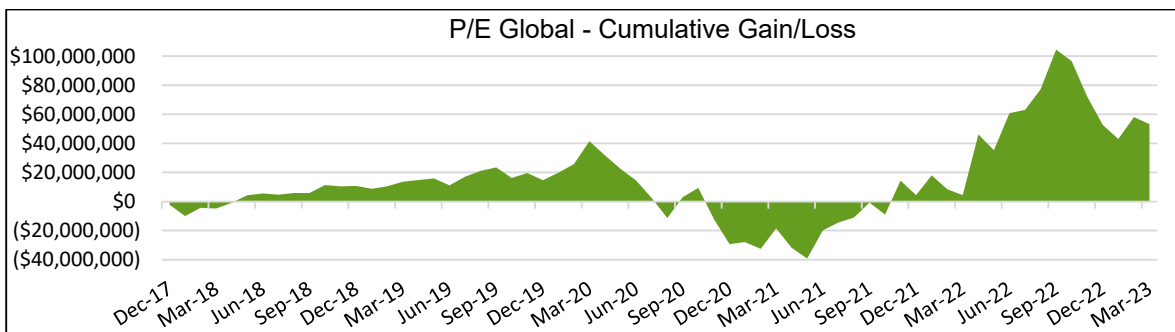
Active Currency Program

The Active Currency Program (ACP) is implemented using long and short forward currency contracts in designated currencies based on expected returns for various currencies generated by the manager’s multifactor quantitative model. The program launched in August 2016 and has utilized three managers. Two managers were terminated in 2020. P/E Global was hired in December 2017 and is currently the only manager in the ACP, managing \$250 million in notional exposure with an 8% target volatility.

Over the last 12 months, P/E had gains of \$51.3 million. The gains were broad-based with the US dollar strongly appreciating against most major currencies in Q2 2022. Since the beginning of the fiscal year 2023, the strategy has given back some of the Q2 gains with \$7.5 million in losses fiscal year to date. The short Japanese yen and British pound positions generated most of the losses during this period, but were offset by gains in the euro, Australian and Canadian dollar, Mexican peso, precious metals and several other small positions. Staff reduced the notional value of the program from \$450 million to \$250 million in December based on the outlook for a weaker US dollar going forward.

The following table summarizes the Active Currency Program performance to date and the graph shows P/E Global’s cumulative program gains. The two legacy managers had cumulative losses of \$21.0 million.

G/L Summary	FYTD 2023 (thru 3/23)	FY 2022	FY 2021	FY 2017 – 2020	Since Inception
P/E Global	(\$7,473,465)	\$80,494,721	(\$34,195,461)	\$14,365,360	\$53,191,155
Total ACP G/L	(\$7,473,465)	\$80,494,721	(\$34,195,461)	(\$6,684,009)	\$32,141,787



Overlay Summary

The cumulative gains of the Overlay Program are \$95.1 million as of March 2023. Below is a summary of the Overlay Program’s performance impact on Total Fund performance.

Overlay Program Impact (Net-of-Fees)	FYTD Return	1 Yr Return	3 Yr Return	5 Yr Return
Tactical Allocation - Impact to Total Fund	(0.03%)	(0.02%)	0.37%	0.05%
Currency Overlay - Impact to Total Fund	(0.02%)	0.28%	(0.01%)	0.05%
Total Overlay Impact to Total Fund	(0.05%)	0.26%	0.35%	0.10%



Ohio SERS Investment Report

Quarterly Report to the Board

For the period ending: March 31, 2023

Prepared by Investment and IAD Staff

Farouki Majeed, Chief Investment Officer

Meeting Date: May 2023



Investment Agenda

- Quarterly Performance Report - Wilshire Associates (March 31, 2023)
- Annual Overlay Program Review
- Quarterly Investment Report (March 31, 2023)
- Statement of Investment Policy (possible vote)
- FY24 Annual Investment Plan Discussion
- FY24 Investment Department Incentive Plan (possible vote)



Economic and Financial Market Outlook

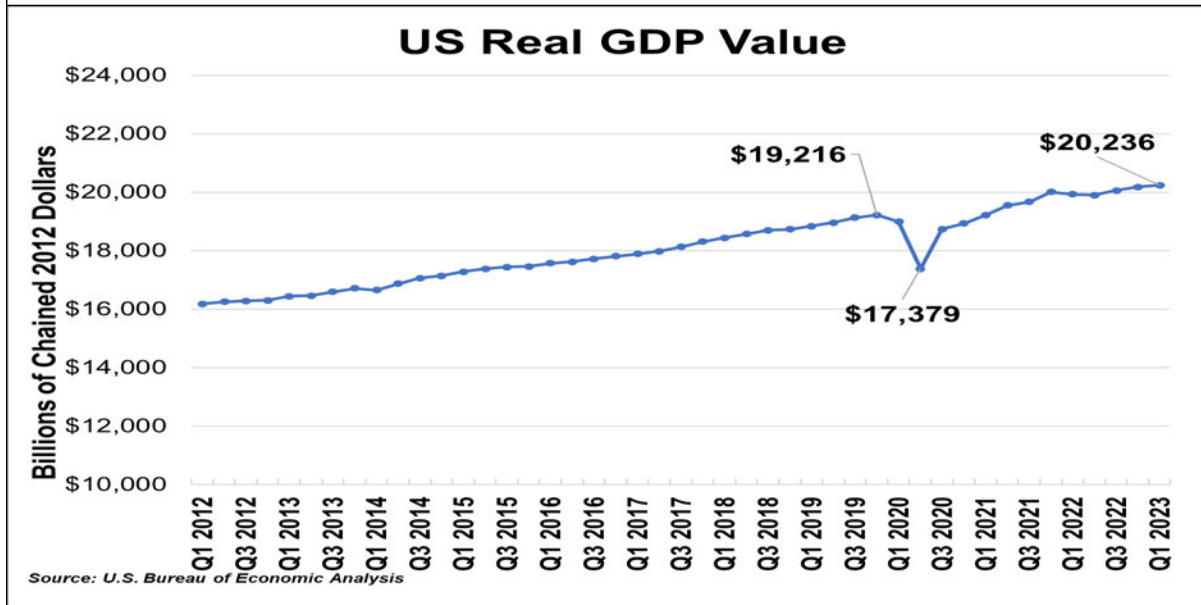
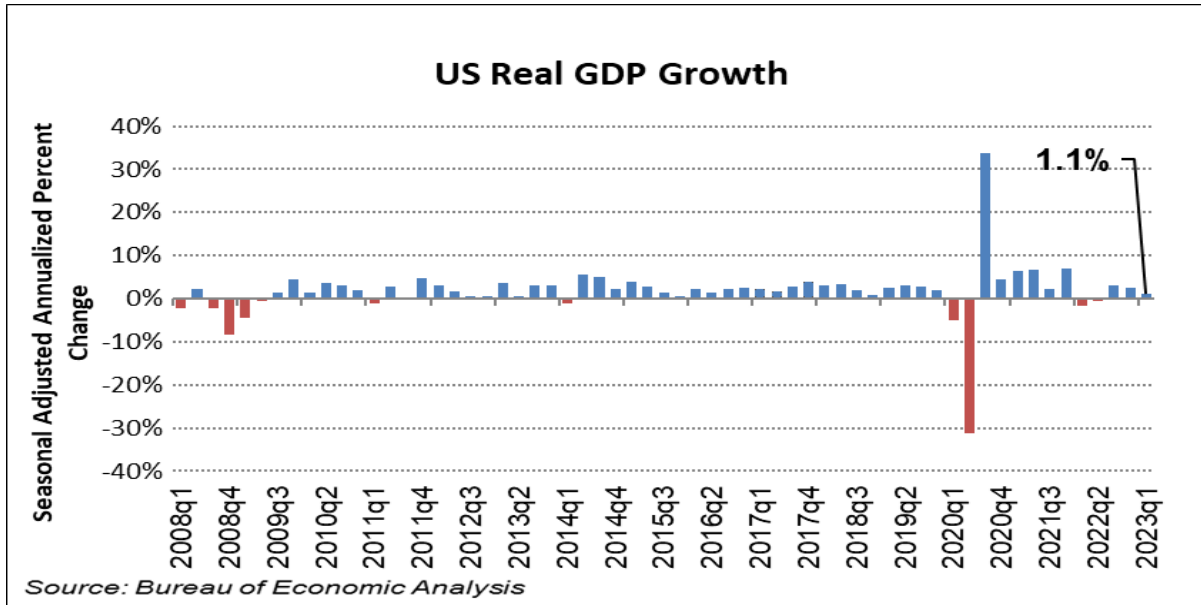
- US growth slowed but remained resilient. The growth rate was 1.1% for Q1, 2023. The main drivers of Q1 GDP were increases in personal consumption expenditures (+3.7%), exports (+4.8%), and government spendings (+4.7%); the largest detractor was private domestic investment (-12.5%). (Source: *Bureau of Economic Analysis*)
- US labor market slowed down in March, adding 236,000 jobs vs. 326,000 in February and 472,000 in January. Labor demand remained strong but weakened as job openings tumbled by 630,000 to 9.9 million in February. The unemployment rate inched down to 3.5%. The labor force participation rate trended up to 62.6%, below the pre-pandemic level of 63.3%, indicating a tight labor market. (Sources: *Bureau of Labor Statistics and Department of Labor*)
- US headline inflation was down to 5.0% and the core inflation was slightly up to 5.6% in March. The energy index was down 6.4% while the food index was up 8.5% for the last 12 months. (Source: *Bureau of Labor Statistics*).
- The 10-year Treasury nominal yield was 3.44% as of April end, decreasing 4 bps from March. The current 10-year real yield, estimated by the gap between the 10-year Treasury nominal yield and the current headline inflation, continued to improve but remained negative 1.56% in March. The Fed conducted the third interest rate hike of 0.25% in 2023, after seven hikes in 2022, to curb inflation. The Fed Funds rate currently is in the range of 5.00-5.25%, the highest level over the last 15 years.
- The S&P Case-Shiller 20-City home price index gained 0.2% for the month of February, but the annual gain was down to 0.4% from 2.6% in the previous month.
- Consumer Sentiment Index released by Thomson Reuters and University of Michigan continued improving from June 2022 to 63.5 in April, remaining below the historical average. March US Economic Surprise index stayed positive, down to 22.0. The March Leading Economic Index (LEI) issued by the Conference Board was 108.4, down 4.5% from 6 months ago.
- Both US and Global Manufacturing PMI readings improved but stayed below 50, indicating contraction. High interest rates and high inflation continue to be the largest challenges to the US and global economy. (Source: *Institute for Supply Management*).
- Equity markets were mixed in April. US market (Russell 3000) and Non-US Developed markets (MSCI World ex-USA) were up 1.07% and 2.84%, respectively while the Emerging markets were down 1.13%.
- The US fixed income market, Bloomberg Barclay's US Aggregate Bond Index, was up 0.61% in April.

Notes: Acronym – PMI – Purchasing-Managers' Index



ECONOMY

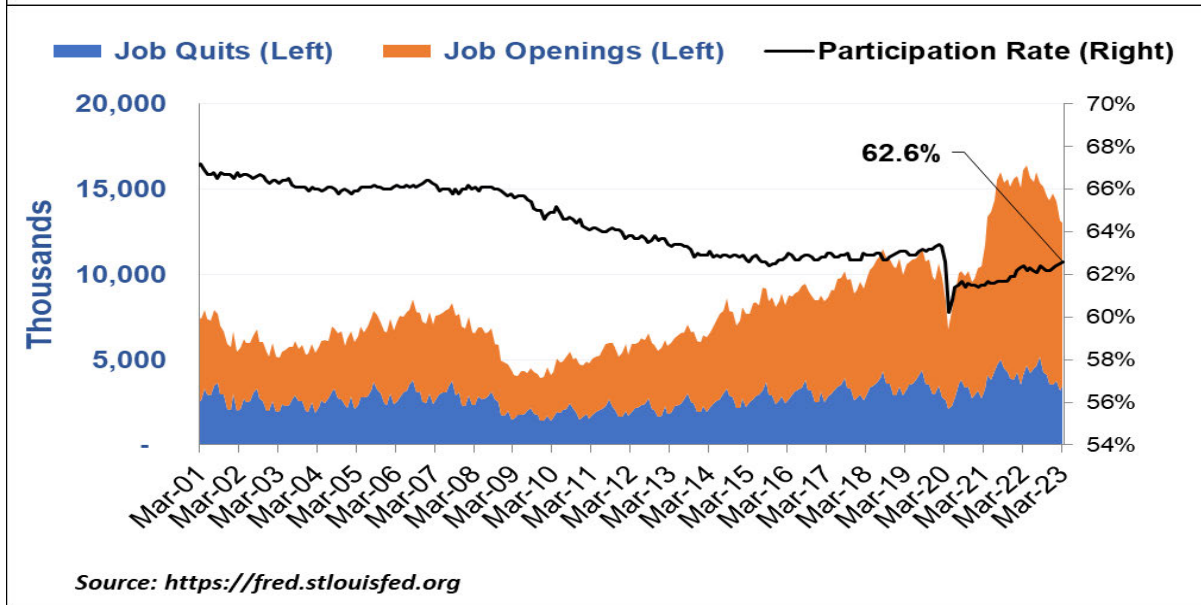
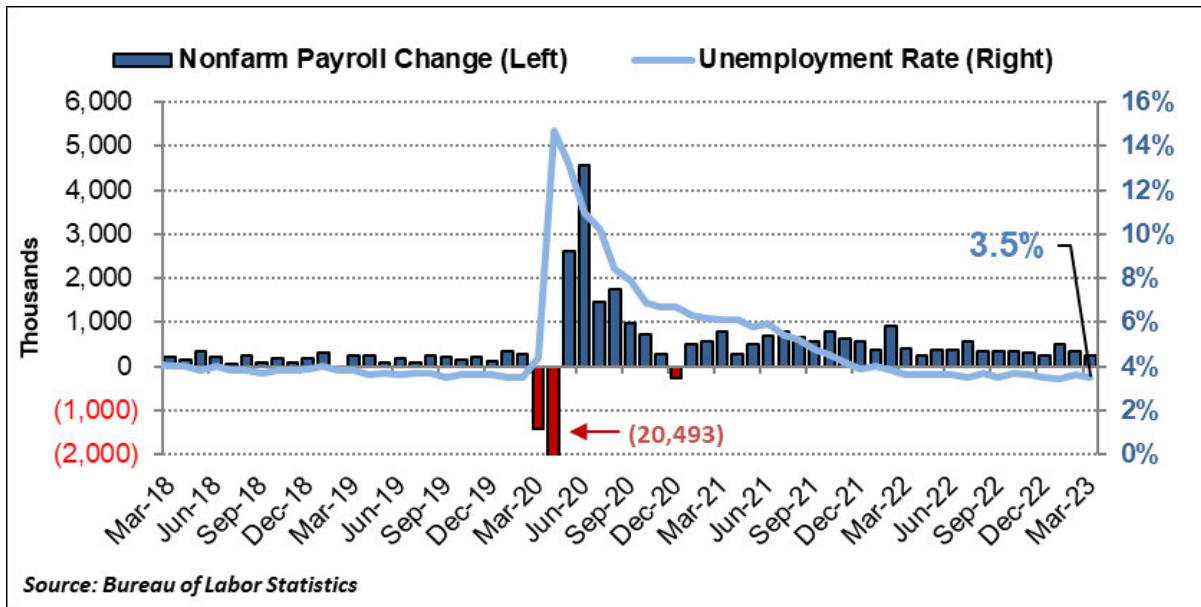
US Real Gross Domestic Product





ECONOMY

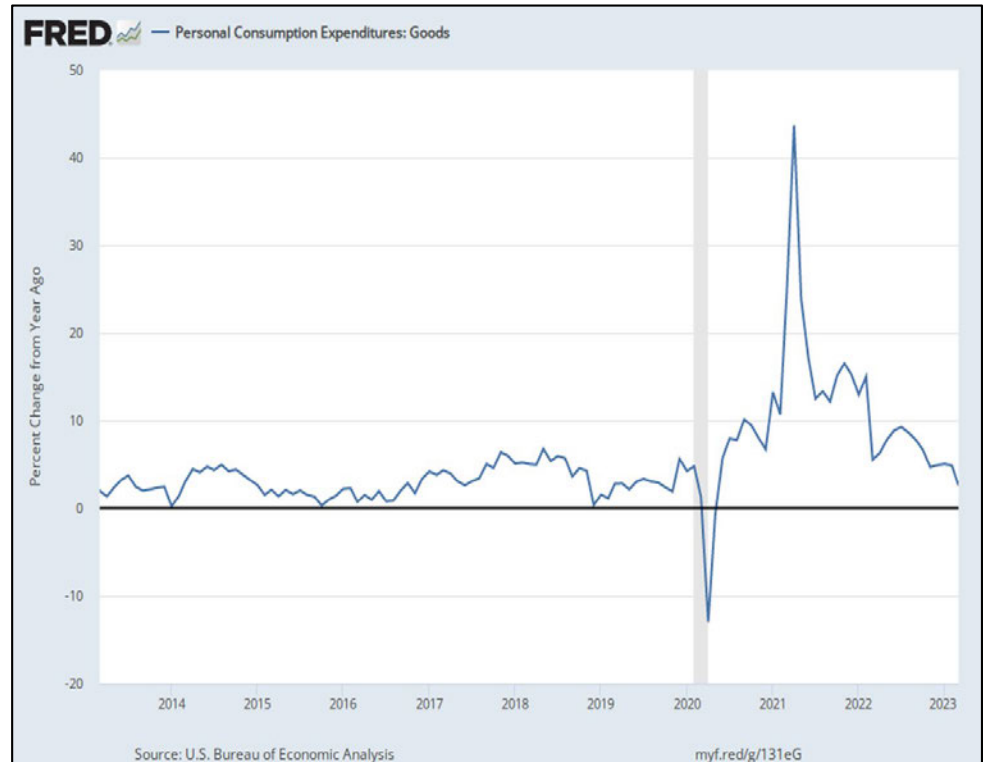
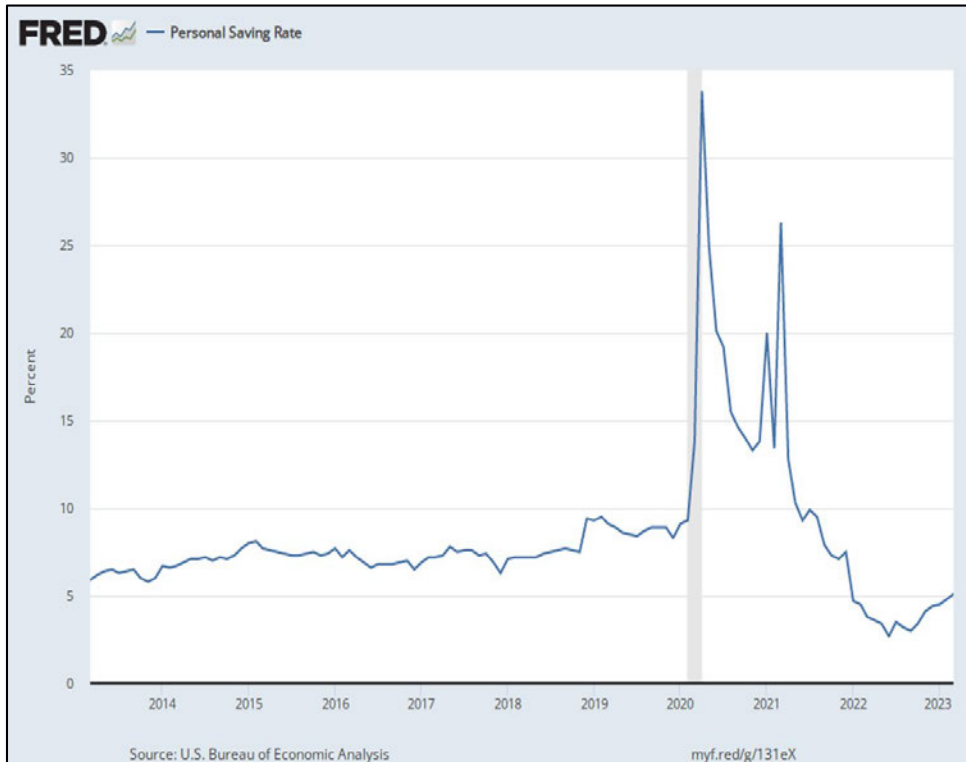
US Labor Market





ECONOMY

Personal Savings Rate & Personal Expenditures: Goods



Date	Annual Personal Savings Rate
Jun-19	8.5%
Jun-20	20.1%
Jun-21	9.3%
Jun-22	2.7%
Mar-23	5.1%

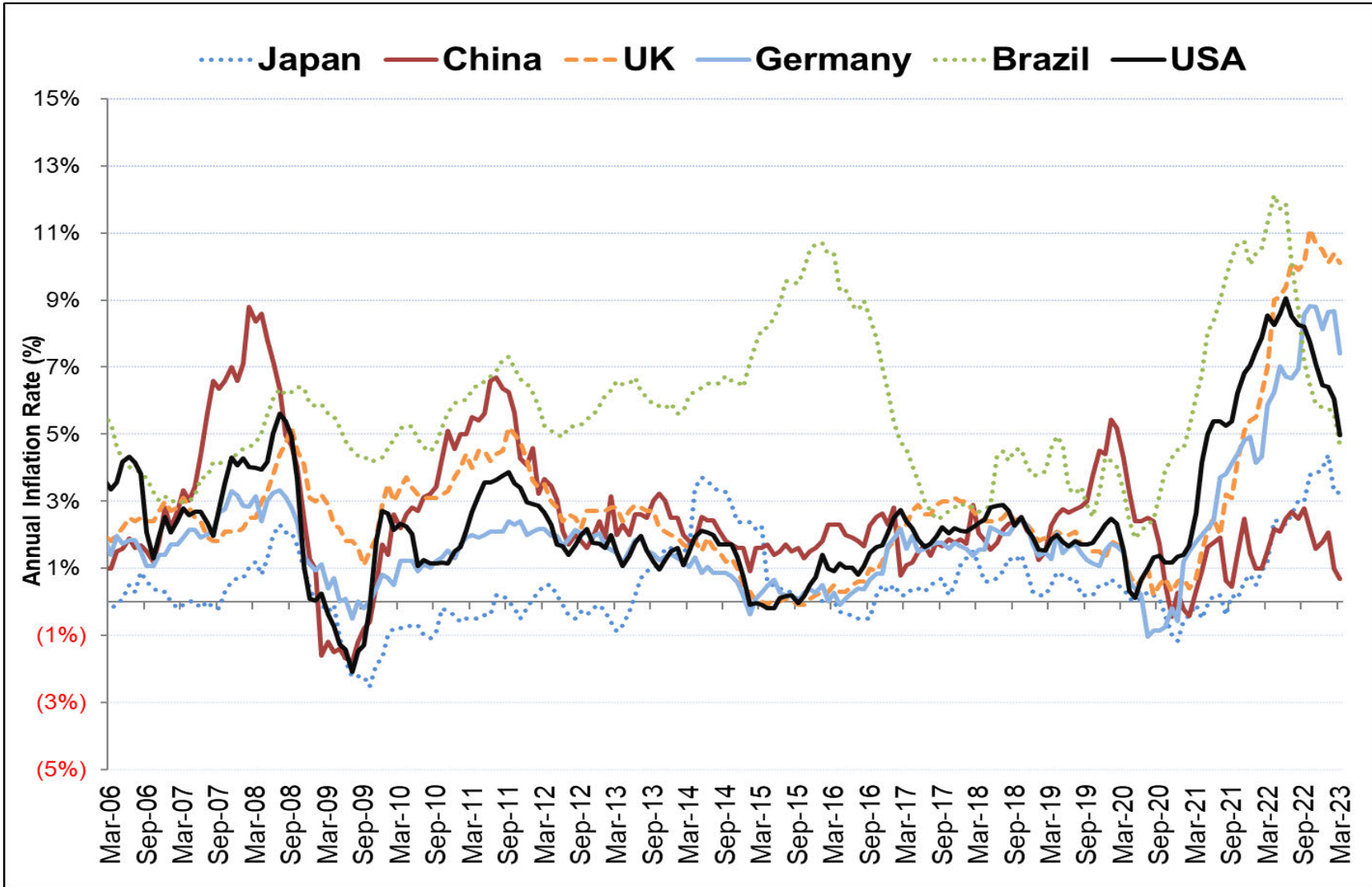
Date	Personal Consumption Expenditures: Goods Change from Prior Year
Jun-19	3.0%
Jun-20	5.7%
Jun-21	17.1%
Jun-22	8.9%
Mar-23	2.6%

Source: FRED, U.S. Bureau of Economic Analysis



ECONOMY

Headline Inflation



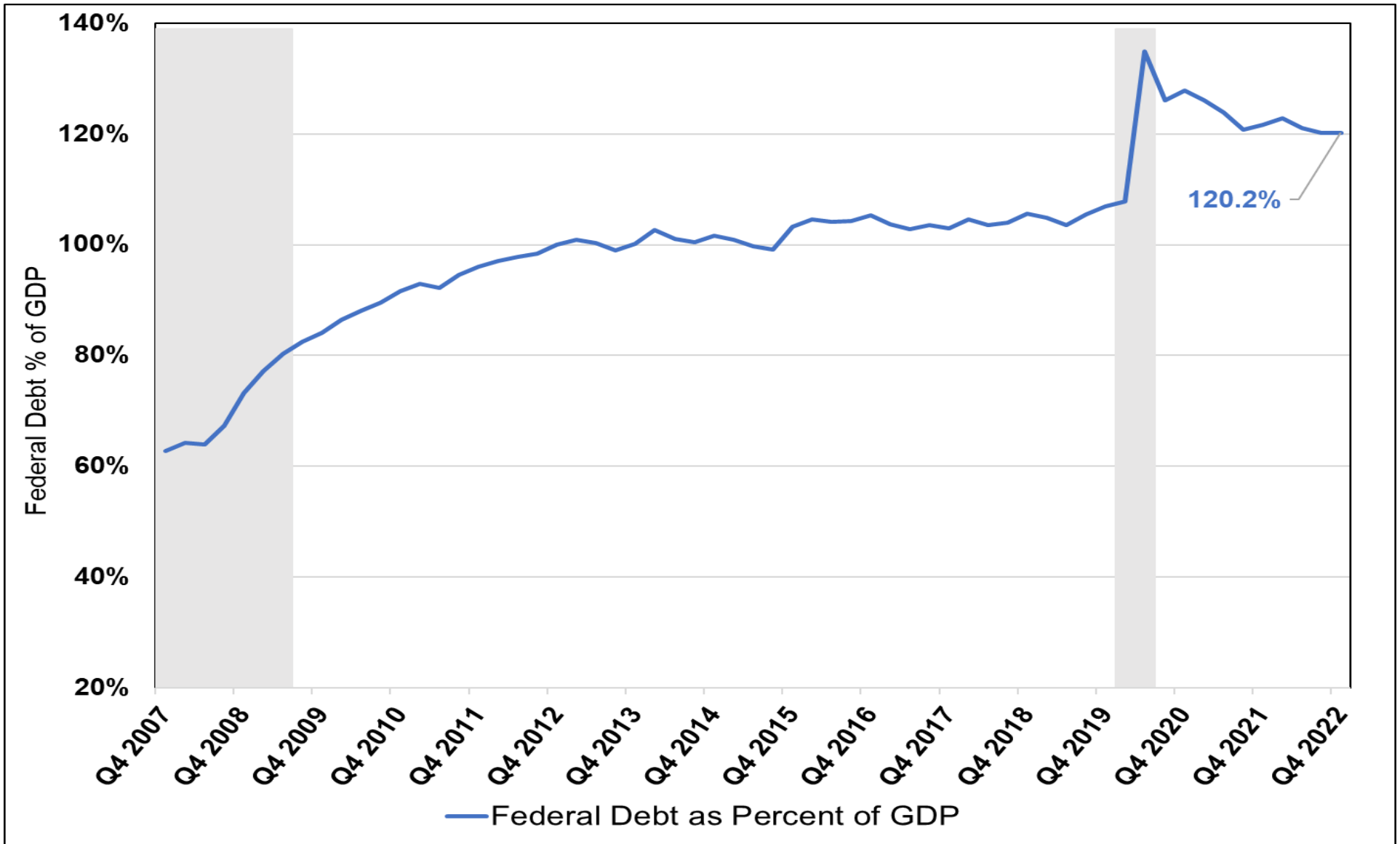
	Japan	China	UK	Germany	Brazil	USA
Mar-23	3.3	0.7	10.1	7.4	4.7	5.0

Sources: www.ons.gov.uk, www.oecd.org, www.inflation.eu, and www.tradingeconomics.com



ECONOMY

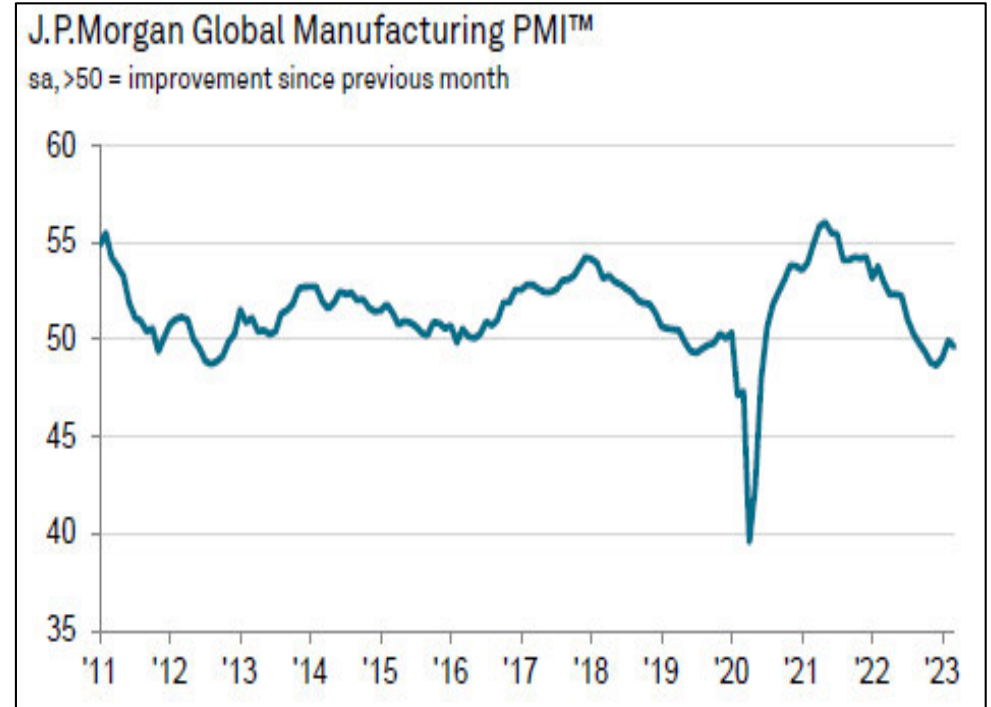
Federal Debt as Percent of GDP





ECONOMY

US & Global Manufacturing Activities

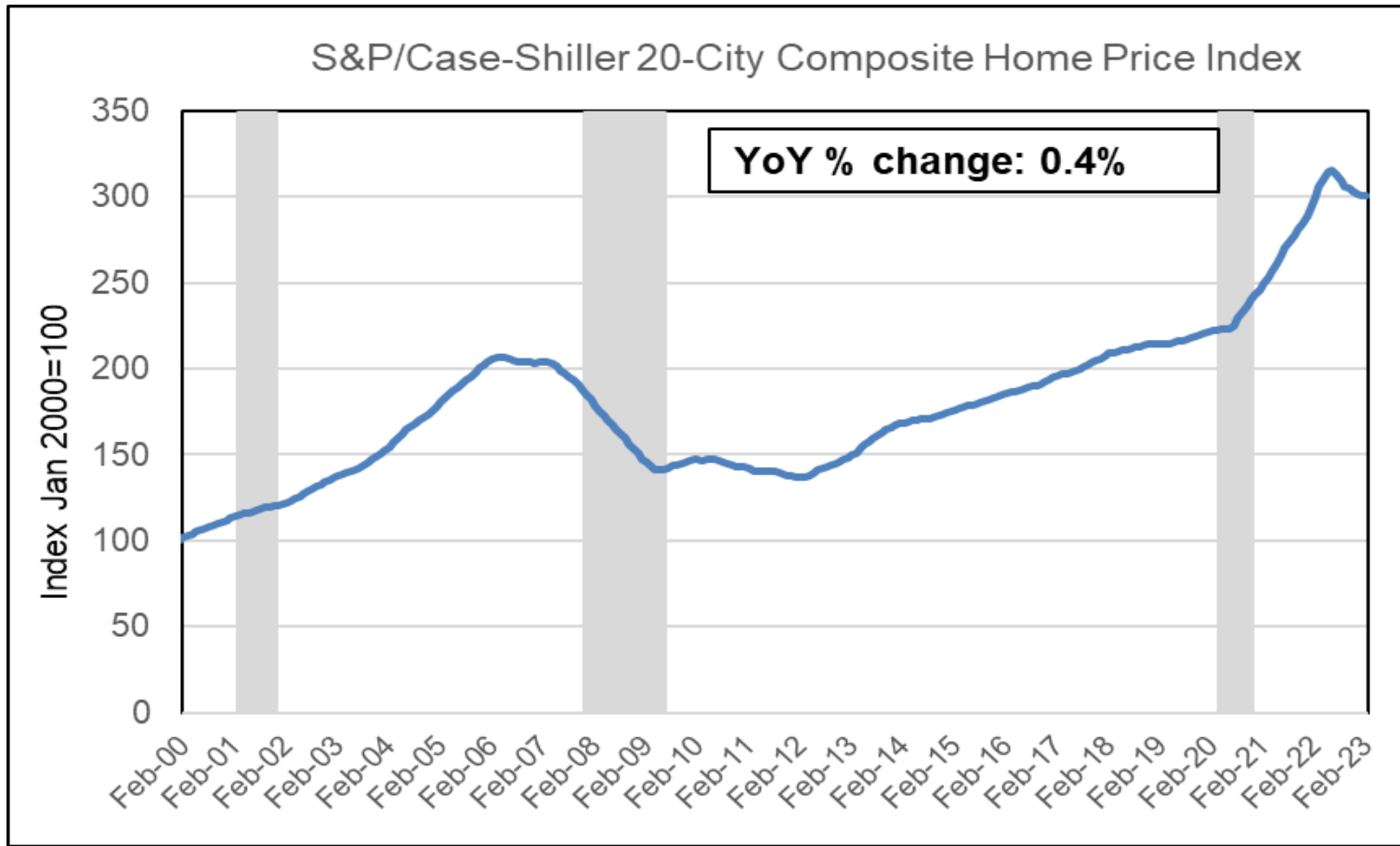


Source: Manufacturing ISM Report On Business & JPMorgan Global Manufacturing PMI™
Notes: Acronym – ISM – Institute of Supply Management; PMI – Purchasing Managers Index



ECONOMY

US Housing Market

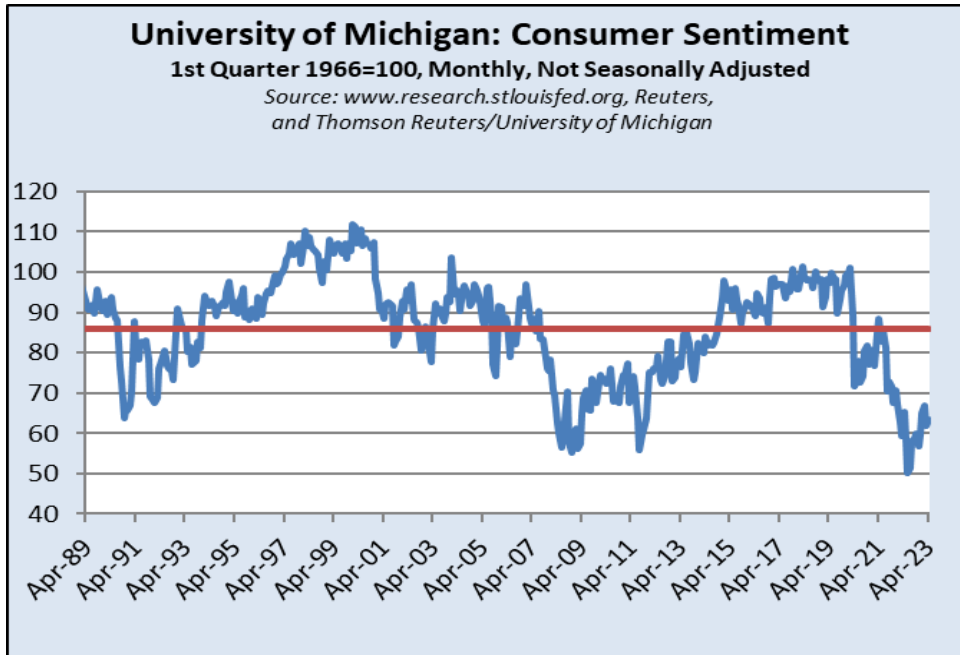


Date	S&P Case-Shiller 20-City Home Price Index January 2000 = 100, Seasonally Adjusted
Jul-19	216.09
Jul-20	225.13
Jul-21	270.10
Jul-22	313.19
Feb-23	300.71

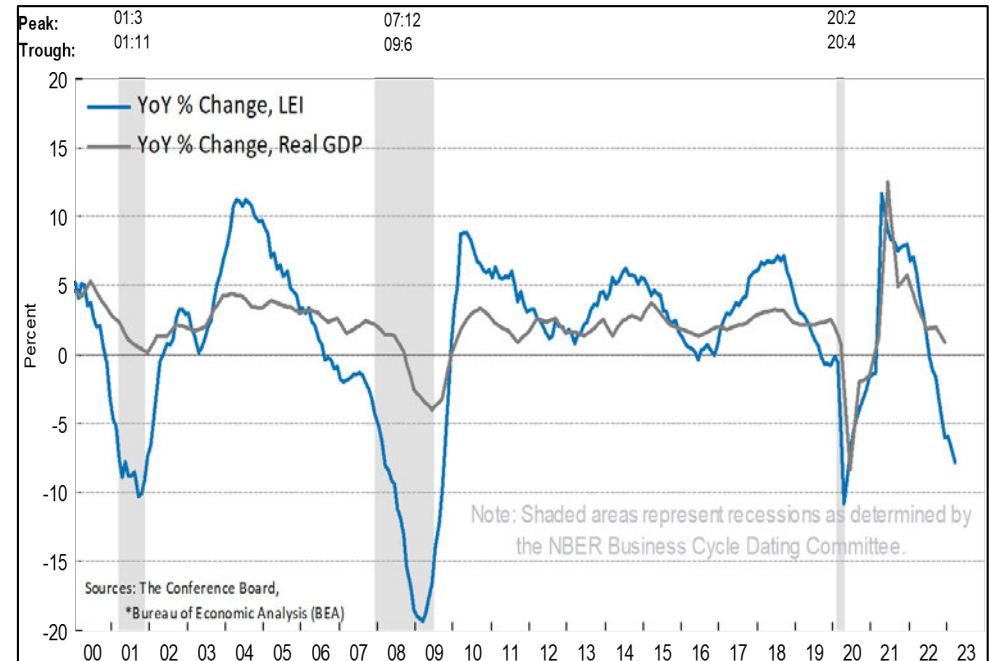


ECONOMY

Consumer Sentiment



The Leading Economic Index (LEI) and Coincident Economic Index (CEI) for the United States



Shaded areas represent US recessions

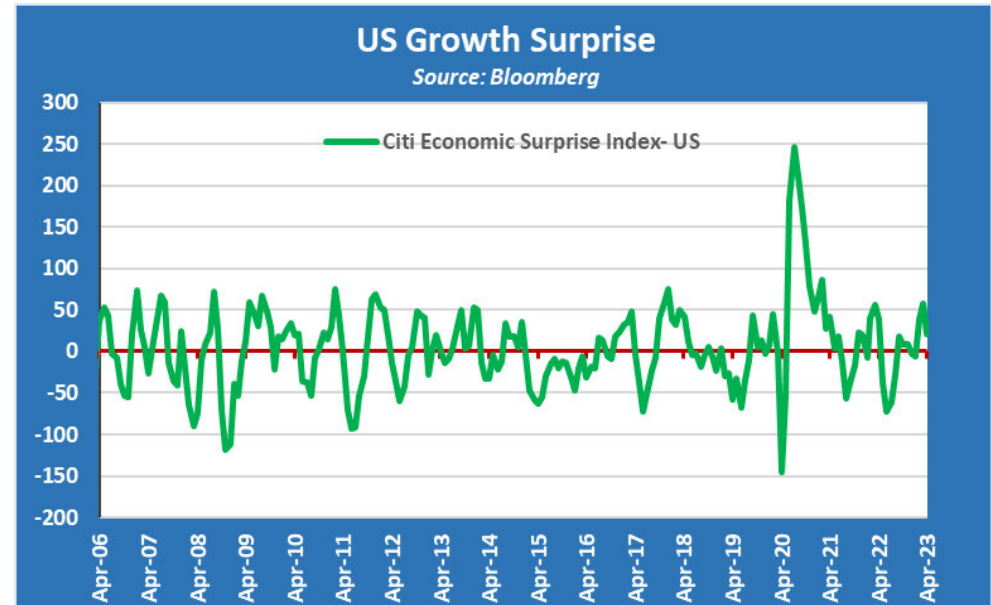
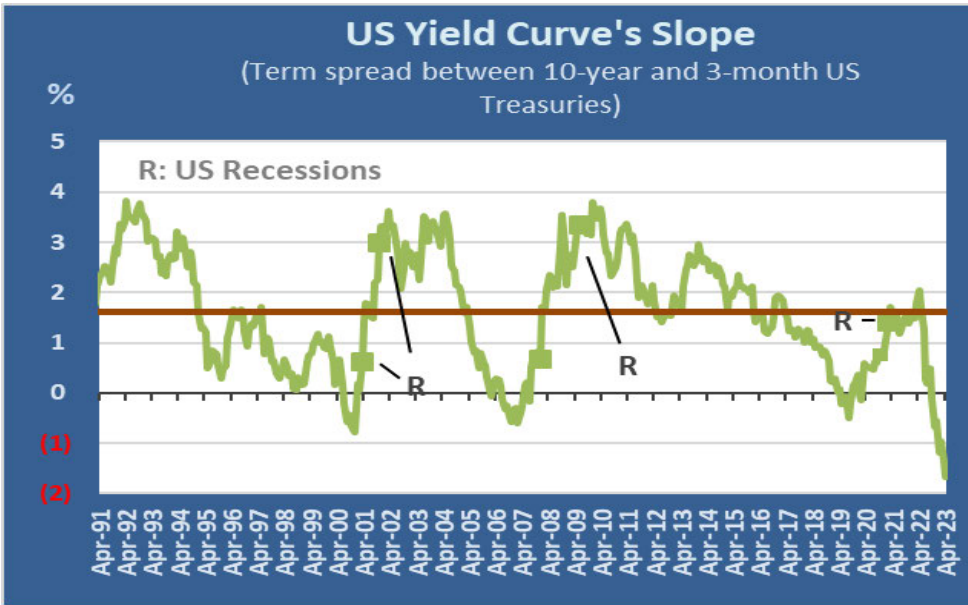
Index of Consumer Sentiment				
Mar-23	Apr-23	Apr-22	M-M Change	Y-Y Change
62.0	63.5	65.2	2.4%	-2.6%

Index	Feb-23	Mar-23	Month -Month Percent Change	6-Month Percent Change (Sep-Mar)
LEI	109.7 r	108.4 p	-1.2	-4.5

p Preliminary; r Revised; Indexes equal 100 in 2016



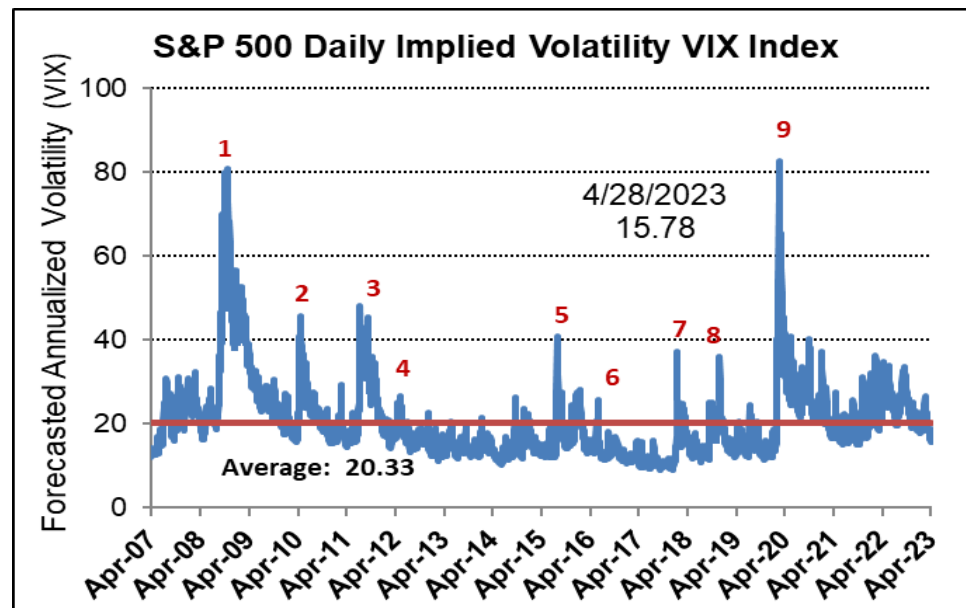
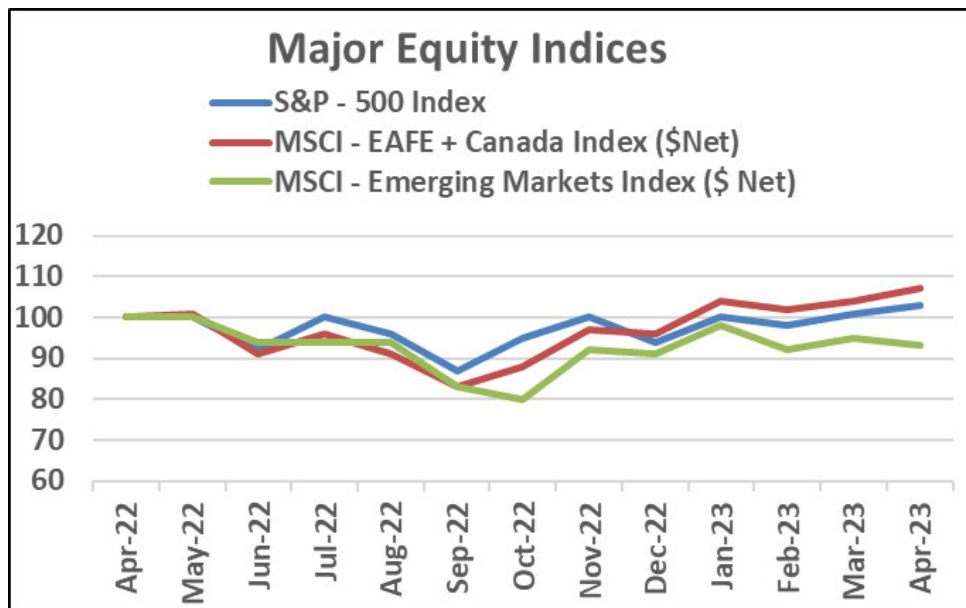
ECONOMY





MARKETS

Equity



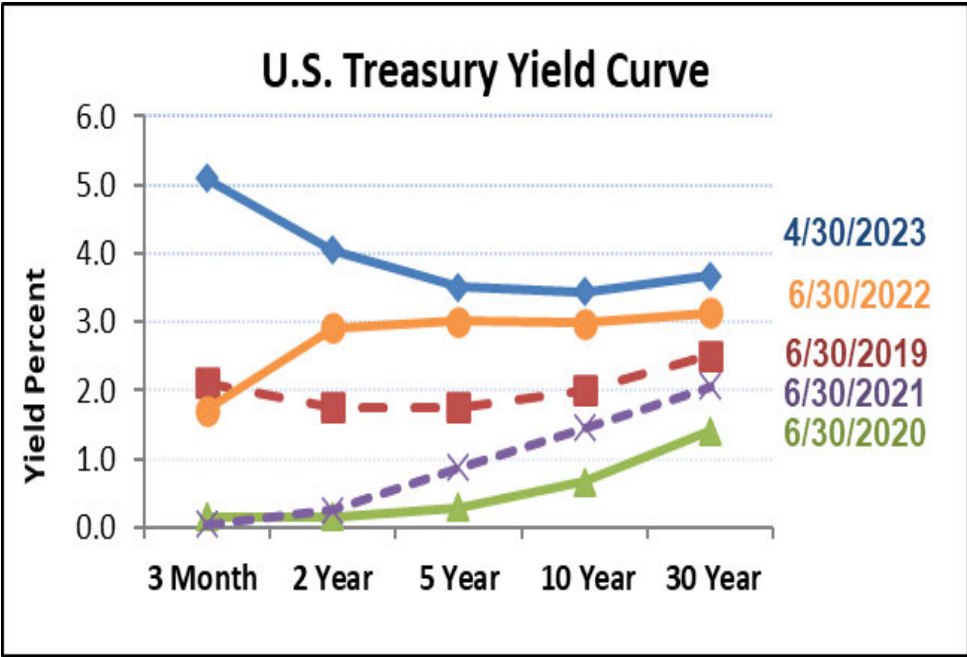
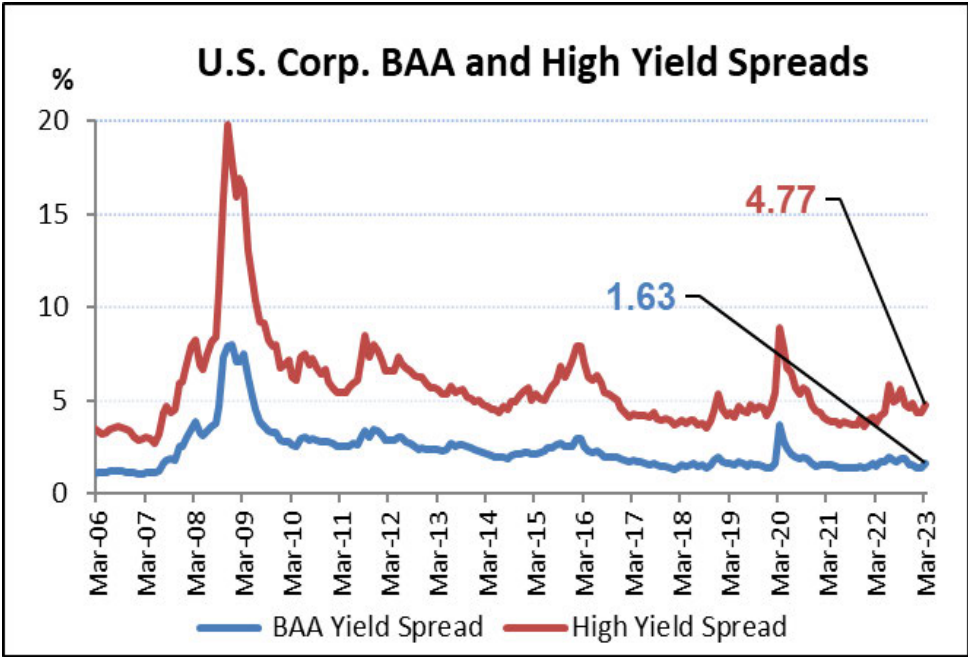
	Return as of 4/30/2023	
	1 Year	FYTD
S&P 500	2.66	11.69
MSCI - EAFE + Canada Index (\$Net)	7.05	17.20
MSCI - Emerging Markets Index (\$Net)	(6.51)	(0.30)

- 1 2008 (Nov.) Financial Crisis S&P 500: -48.8%
- 2 2010 (May) Flash crash; Europe/ Greece debt S&P 500: -16%
- 3 2011 (Aug.) US downgrade, Europe periphery S&P 500: -19.4%
- 4 2012 (June) Eurozone double dip S&P 500: -9.9%
- 5 2015 (Aug.) Global slowdown, China, Fed S&P 500: -12.4%
- 6 2016 (Feb.) Oil crash, US recession fear, China S&P 500: -10.5%
- 7 2018 (Feb.) Inflation, trade, tech S&P 500 : -10.2%
- 8 2018 (Dec.) Interest rate hike, trade tension, global slowdown S&P 500: -10.5%
- 9 2020 (Mar.) Coronavirus, S&P 500 : -23.7%



MARKETS

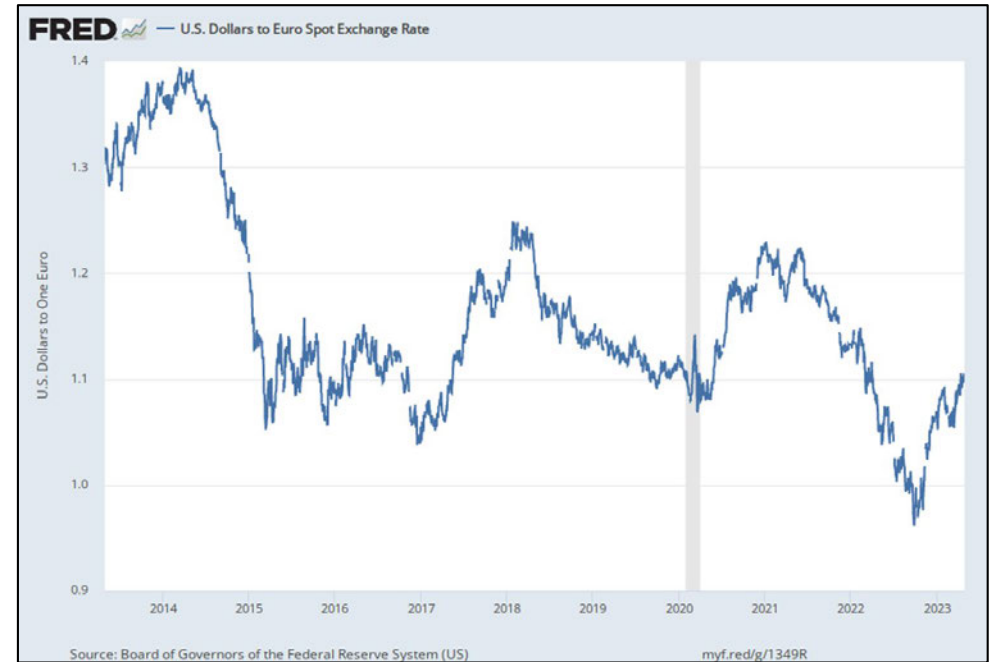
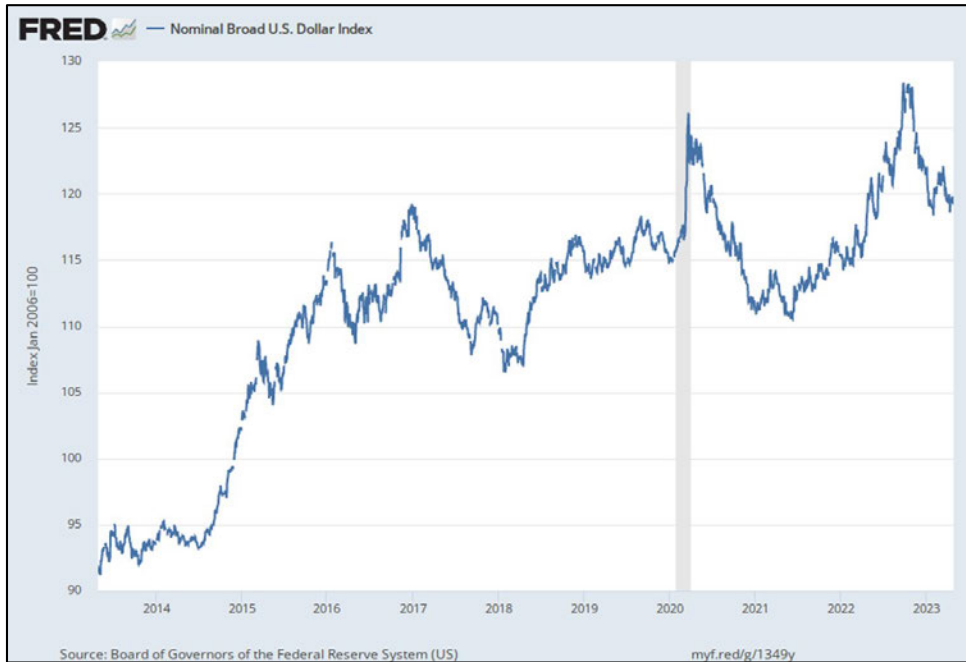
Fixed Income



Sources: Wilshire Compass, ThomsonReuters, and Bloomberg



MARKETS Foreign Exchange



Date	Nominal Broad U.S. Dollar Index January 2006=100
June-19	114.56
June-20	120.86
June-21	112.85
June-22	121.05
April-23	119.43

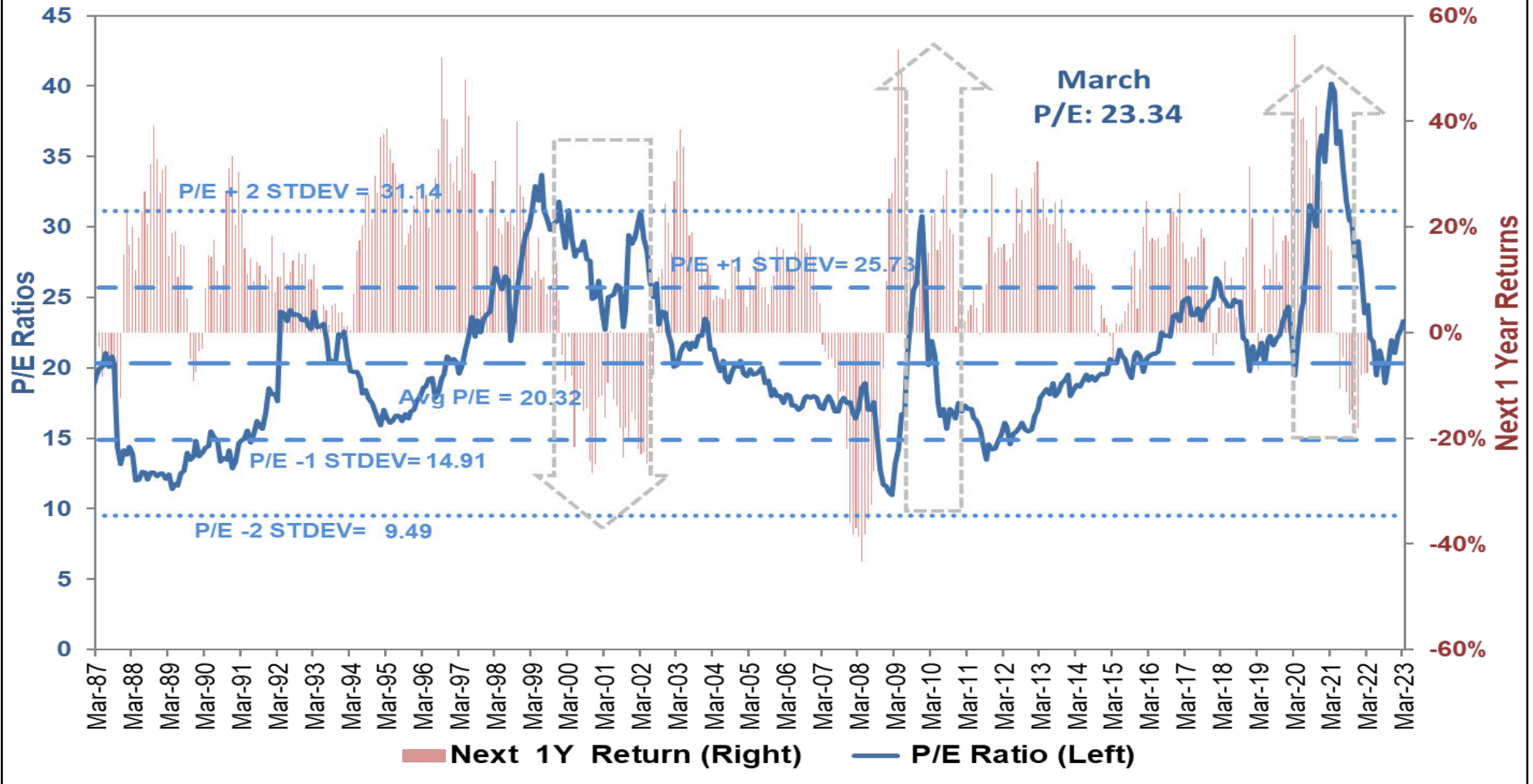
Date	U.S. / Euro Foreign Exchange Rate U.S. Dollars to One Euro
June-19	1.14
June-20	1.12
June-21	1.18
June-22	1.05
April-23	1.10



VALUATION

US Equity

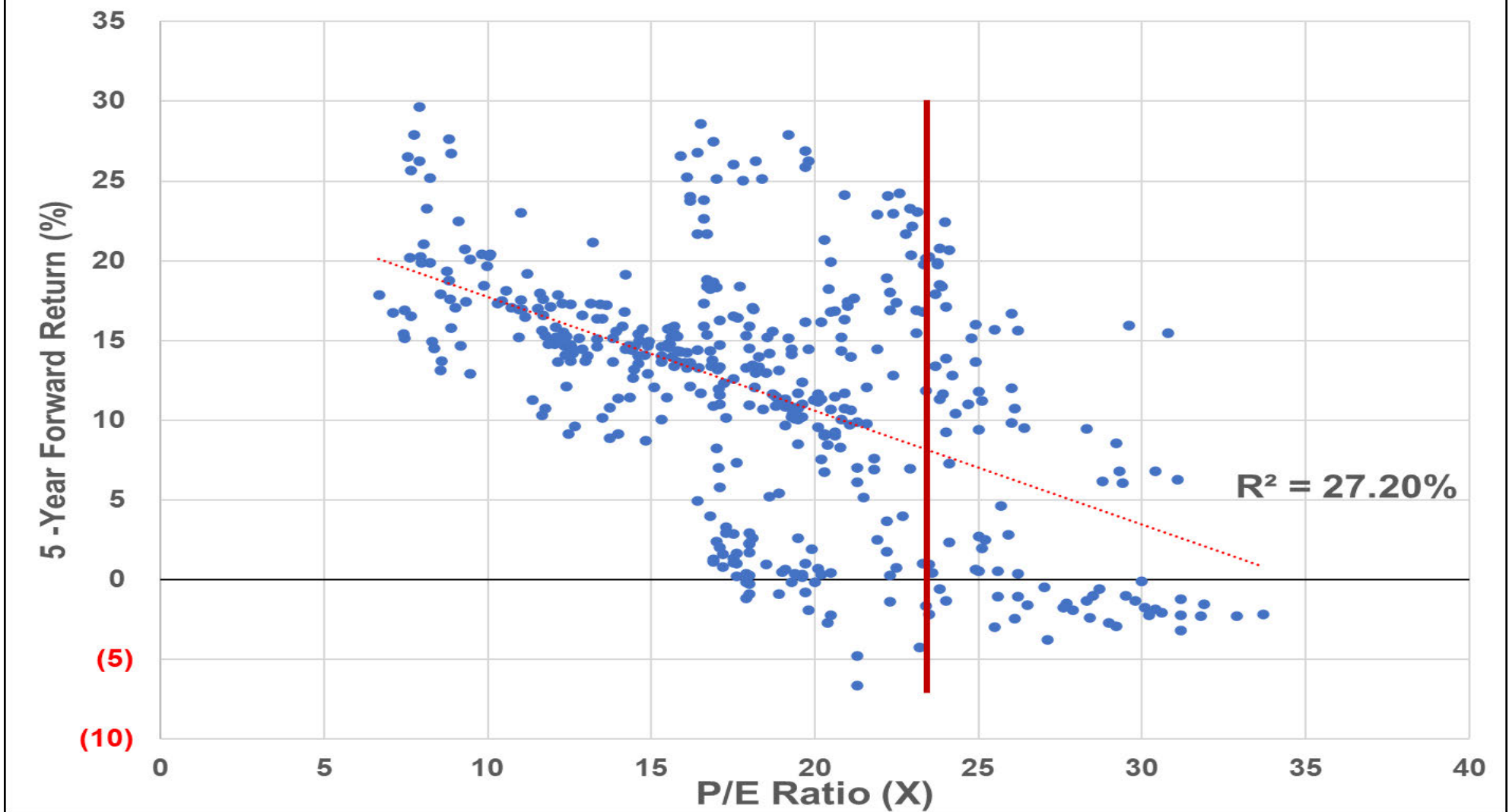
S&P 500 P/E Ratios and Next 1 Year Returns





VALUATION **US Equity**

S&P 500 P/E Ratio and Subsequent 5-Year Return

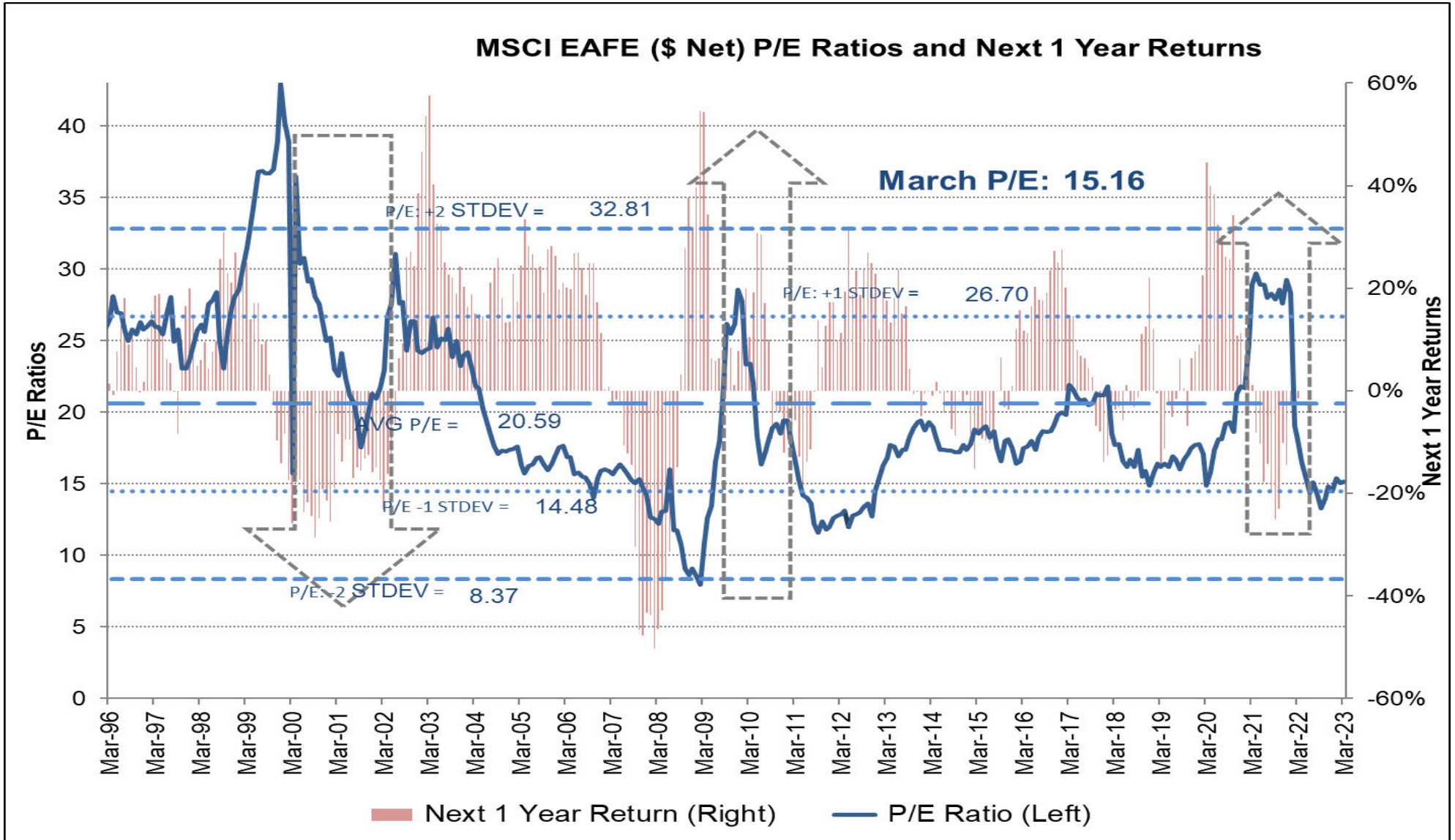




VALUATION

Non US Developed Market Equity

MSCI EAFE (\$ Net) P/E Ratios and Next 1 Year Returns

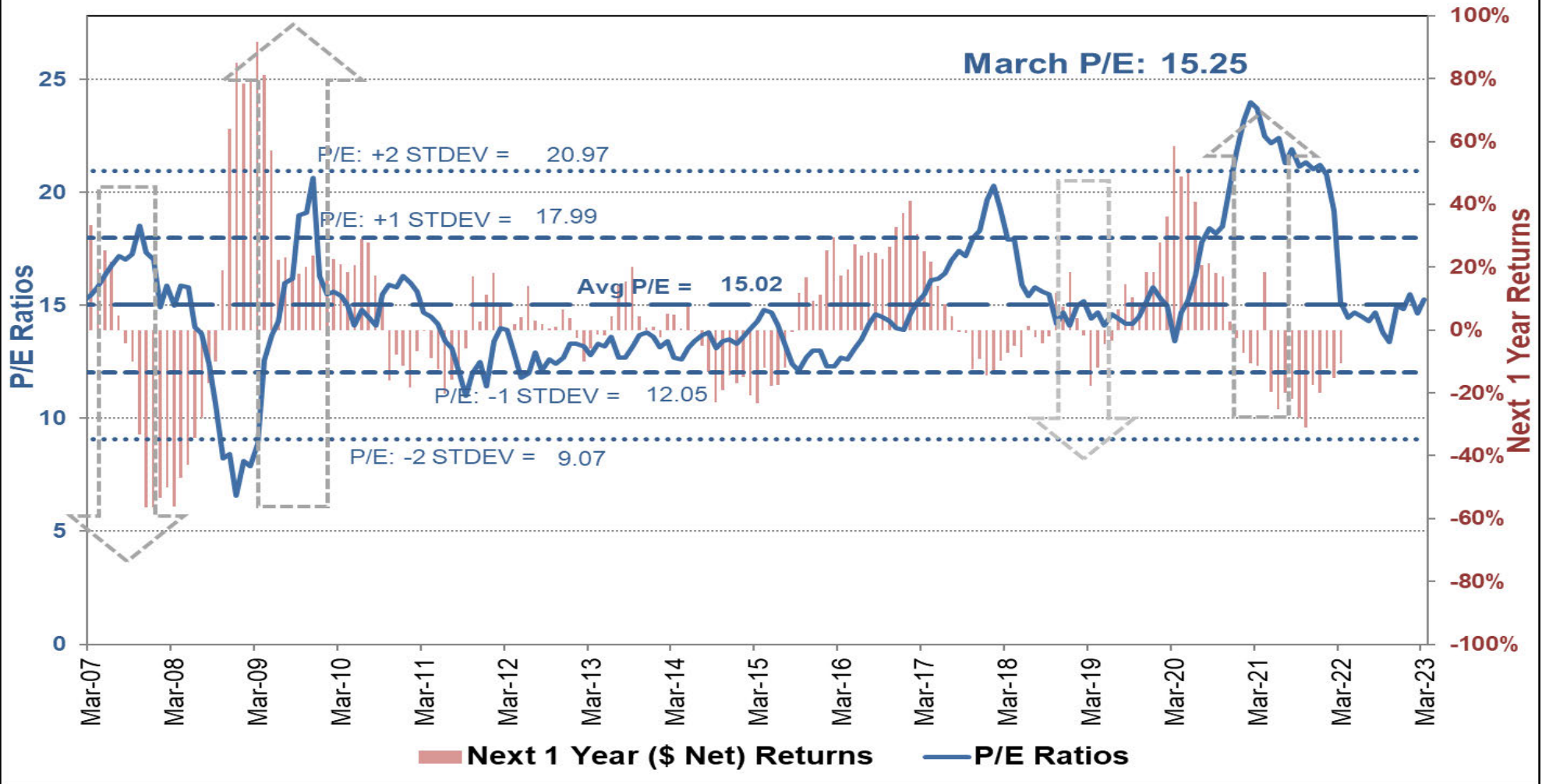




VALUATION

Emerging Market Equity

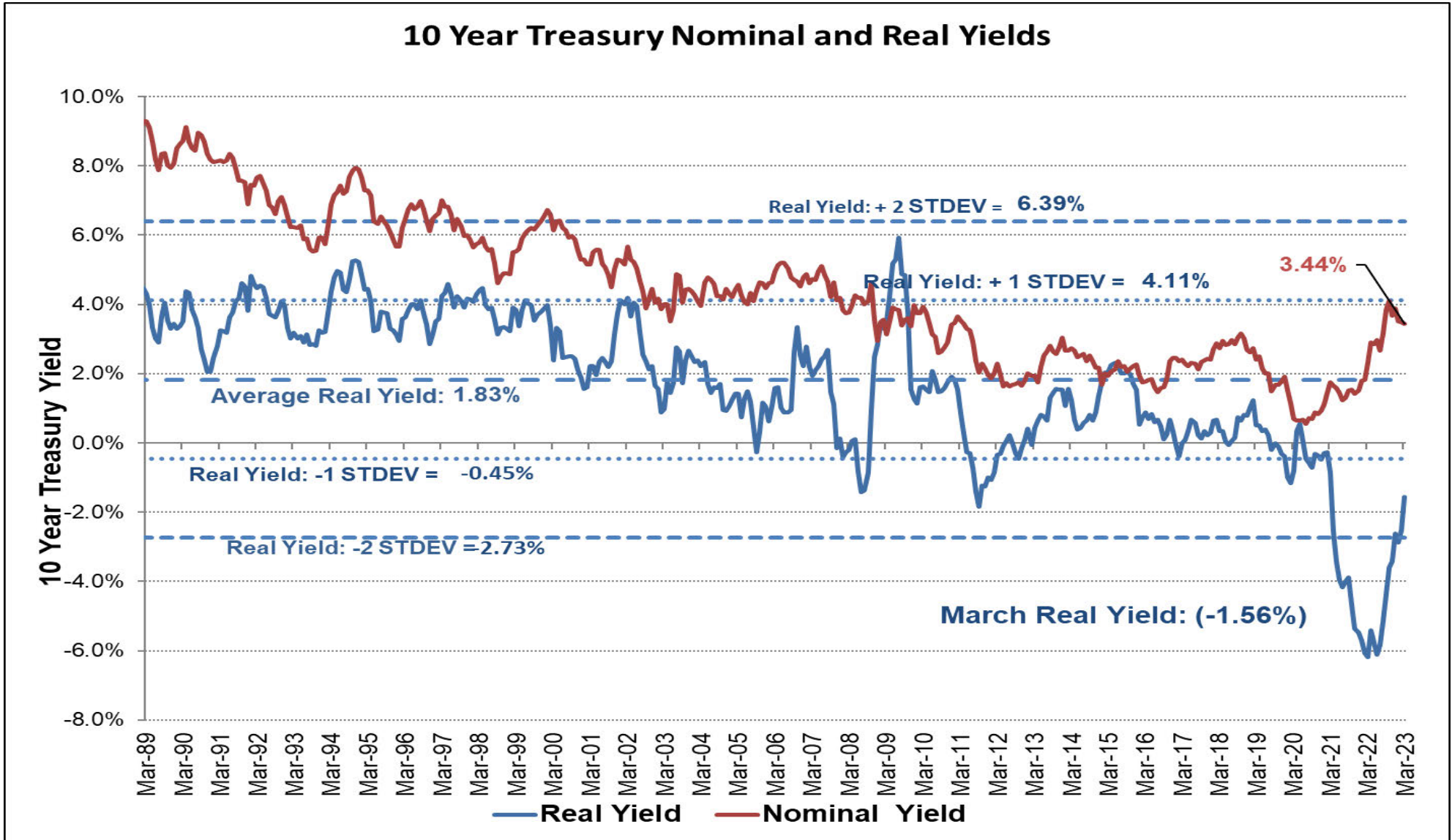
MSCI EM P/E Ratios and Next 1 Year (\$ Net) Returns





VALUATION

US Treasury Bonds





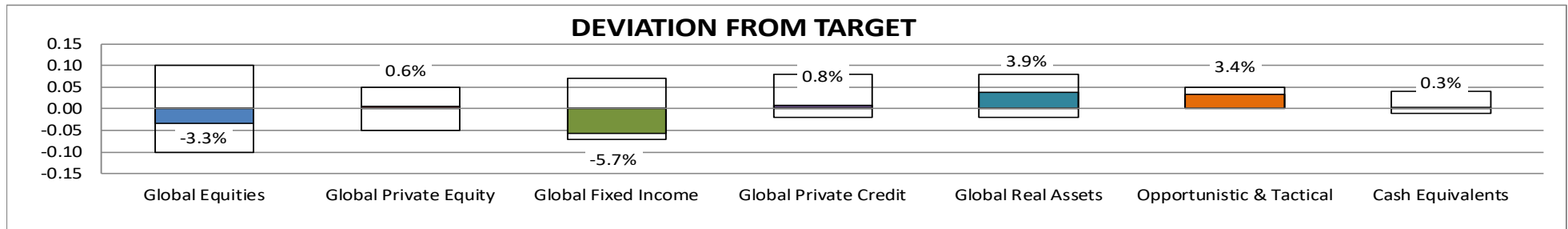
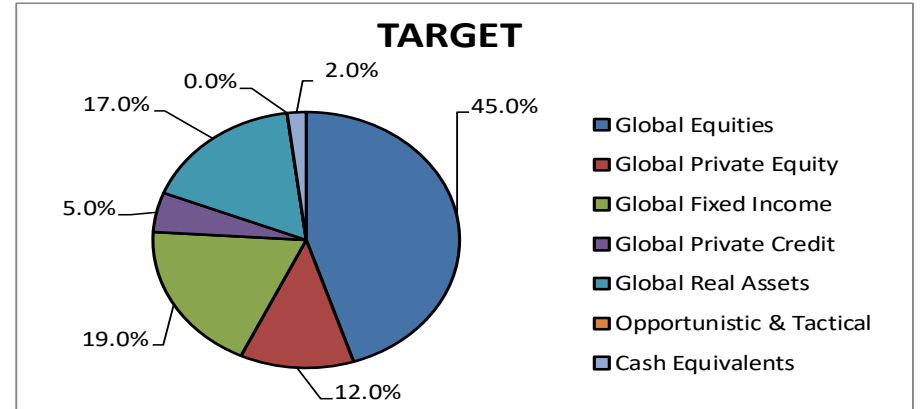
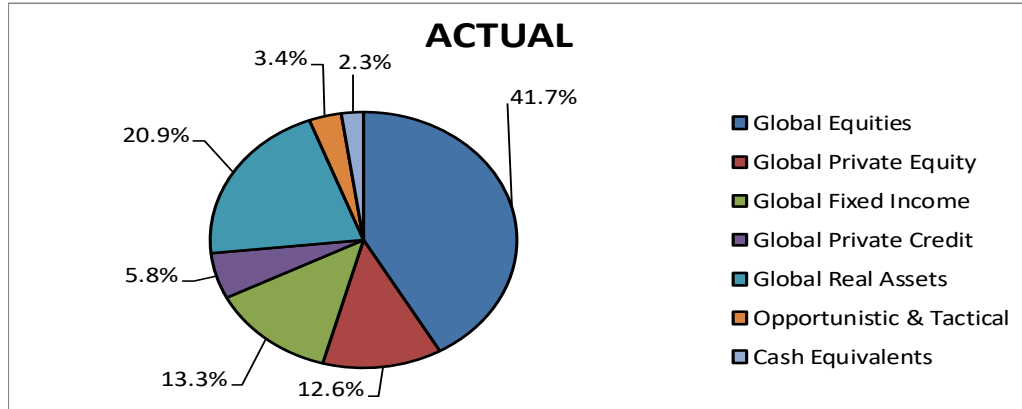
SERS' Investment Portfolios Review



Total Fund Asset Allocation

Asset Class	Market Value \$	Actual	Target	Range
Global Equities	7,296,094,859	41.7%	45.0%	35% - 55%
Global Private Equity	2,199,429,184	12.6%	12.0%	8% - 16%
Global Fixed Income	2,319,737,920	13.3%	19.0%	12% - 26%
Global Private Credit	1,013,958,087	5.8%	5.0%	3% - 7%
Global Real Assets	3,657,313,136	20.9%	17.0%	14% - 22%
Opportunistic & Tactical	596,680,820	3.4%	0.0%	0% - 7%
Cash Equivalents	406,906,918	2.3%	2.0%	0% - 5%
Short-Term	378,635,054	2.2%	2.0%	
Russell EA Overlay	0	0.0%	0.0%	
Aegis - Alpha Overlay	4,695,115	0.0%	0.0%	
Direct Rebalance Overlay	0	0.0%	0.0%	
Transition / Operational Account	1,488,680	0.0%	0.0%	
Currency Overlay	22,088,069	0.1%	0.0%	
Total Fund	17,490,120,924	100.0%	100.0%	

Source: BNY Mellon GRS





Total Fund Change in Net Assets

CHANGE IN NET ASSETS

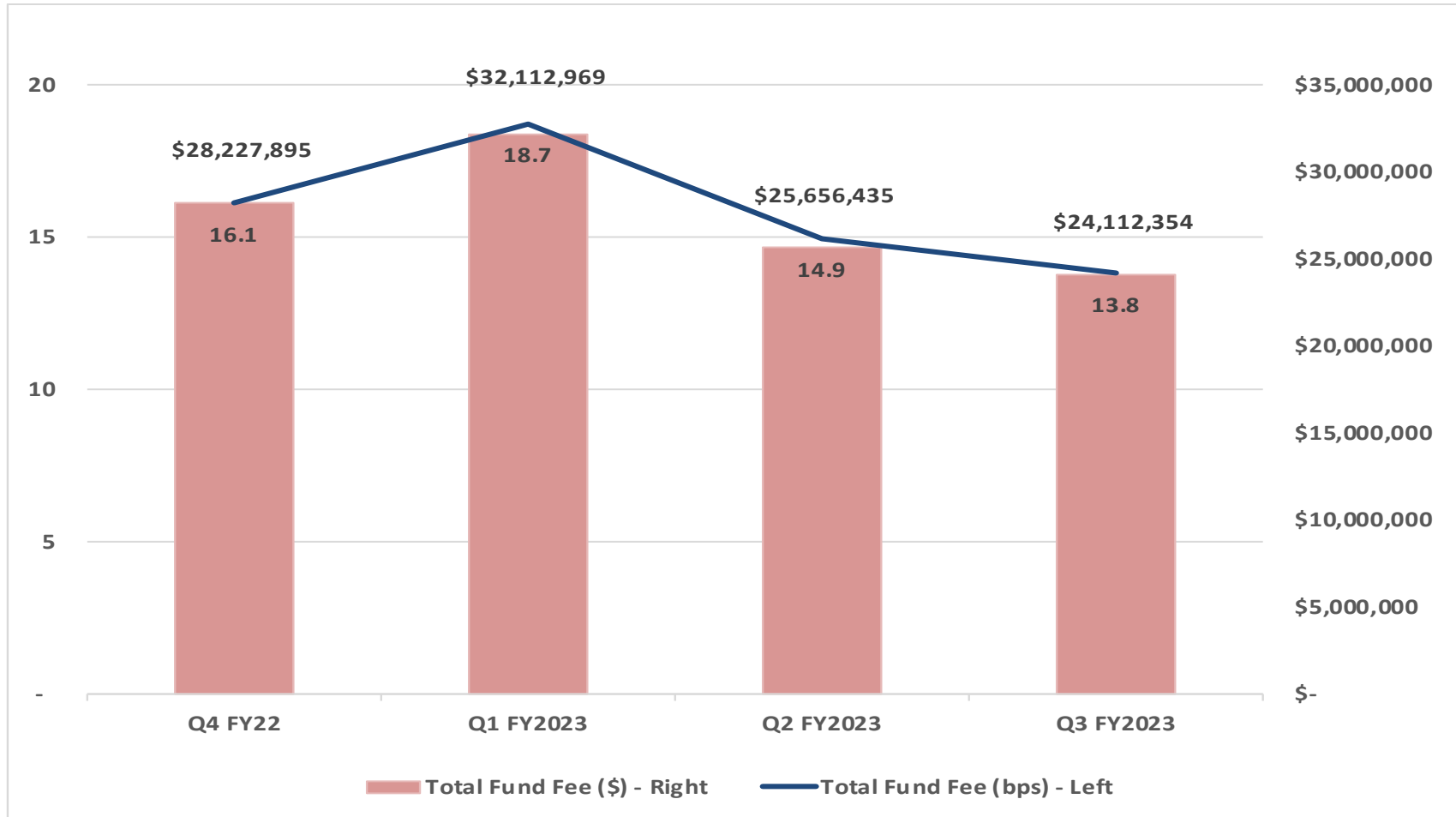
	<i>vs. One Year Ago, since 04/01/2022</i>	<i>vs. Three Years Ago, since 04/01/2020</i>
Beginning Market Value	18,253,344,170	13,452,605,596
Gain/Loss	(157,595,691)	5,996,605,541
Expenses	(100,627,554)	(260,090,213)
Net Transfer	(505,000,000)	(1,699,000,000)
End of Period Market Value	17,490,120,924	17,490,120,924

**Sources of Net Transfer*

<i>Dividends/Interest</i>	<i>212,417,075</i>
<i>Net Distributions</i>	<i>292,582,925</i>
<i>Cash on Hand</i>	<i>Not Required</i>



Total Fund Fees by Quarter

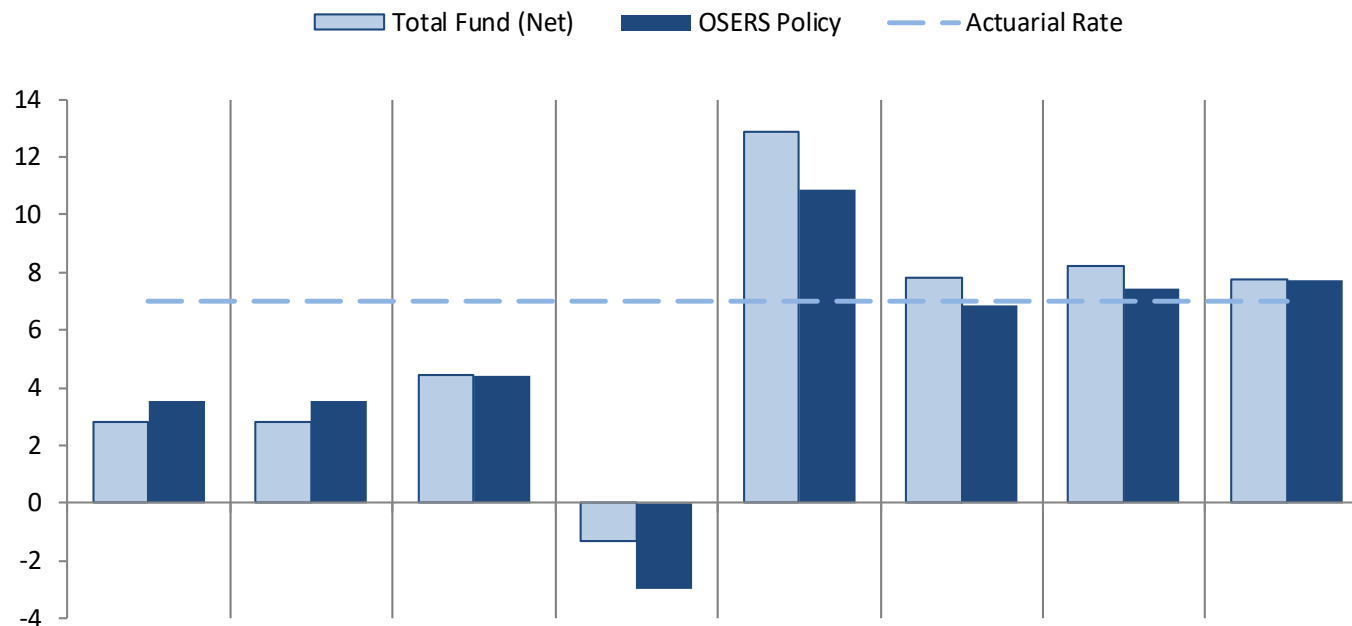




Total Fund Performance

Current Benchmark:

45% MSCI ACWI (Net Dividends)
 12.00% Burgiss All Private Equity
 benchmark (1q lag) (BAPE)
 19.00% Bloomberg Aggregate Bond
 17.00% NCREIF Property (1q lag)
 5.00% 90 Day T-Bill + 4.5%
 2.00% Citigroup 30 Day US T-Bill



Actuarial Rate

(7.0% effective 7/1/21, adopted 4/15/21)

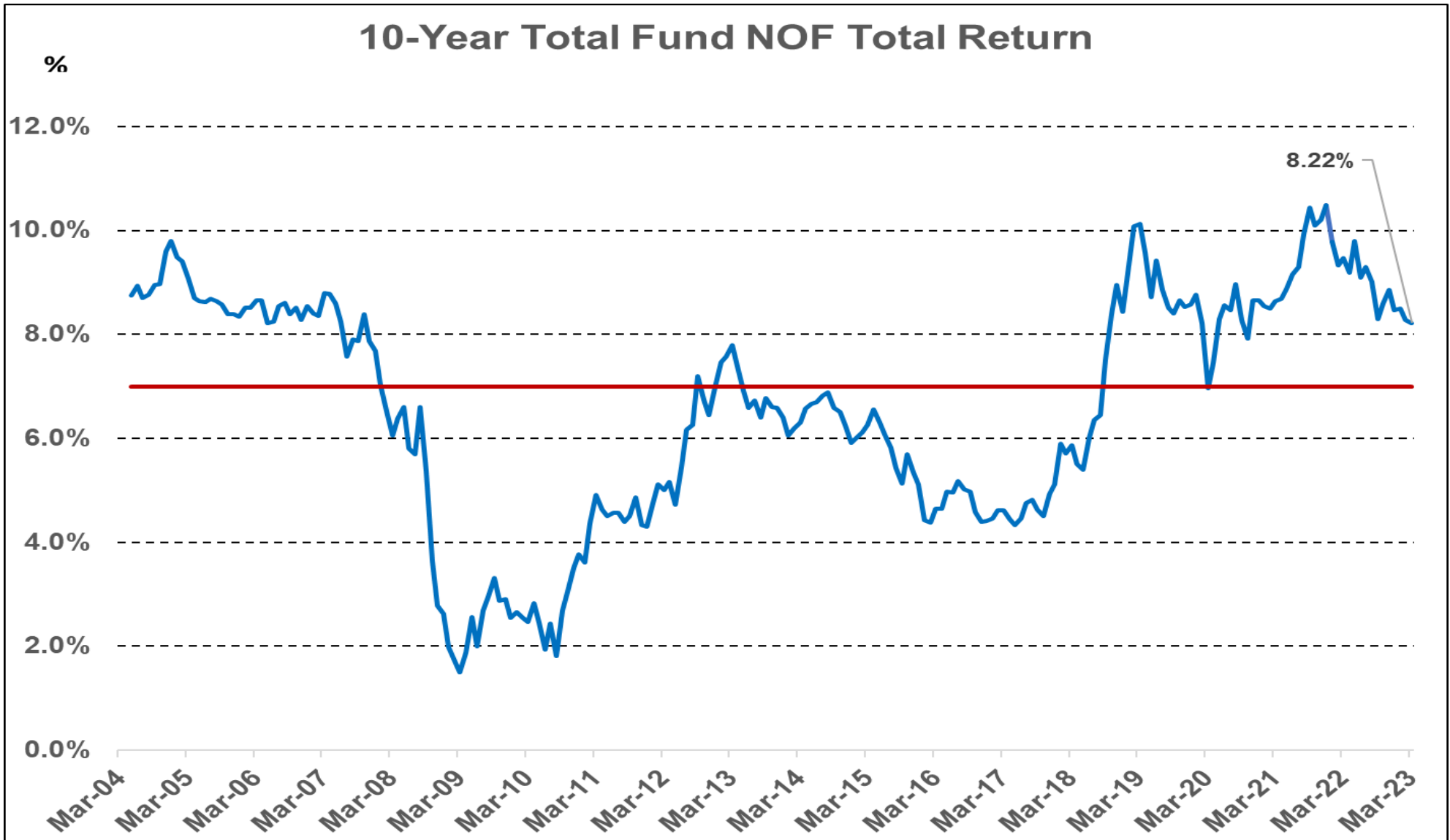
	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD*
Total Fund (Gross)	2.97	2.97	4.99	(0.58)	13.59	8.50	8.91	8.31
Total Fund (Net)	2.80	2.80	4.41	(1.34)	12.88	7.81	8.22	7.78
OSERS Policy	3.52	3.52	4.40	(2.97)	10.84	6.85	7.45	7.75
Value Added (Net of Fee)	(0.72)	(0.72)	0.01	1.63	2.03	0.96	0.76	0.03

Source: BNY Mellon GRS

*ITD is Inception date 10/1/1994 (28 years and 6 months)



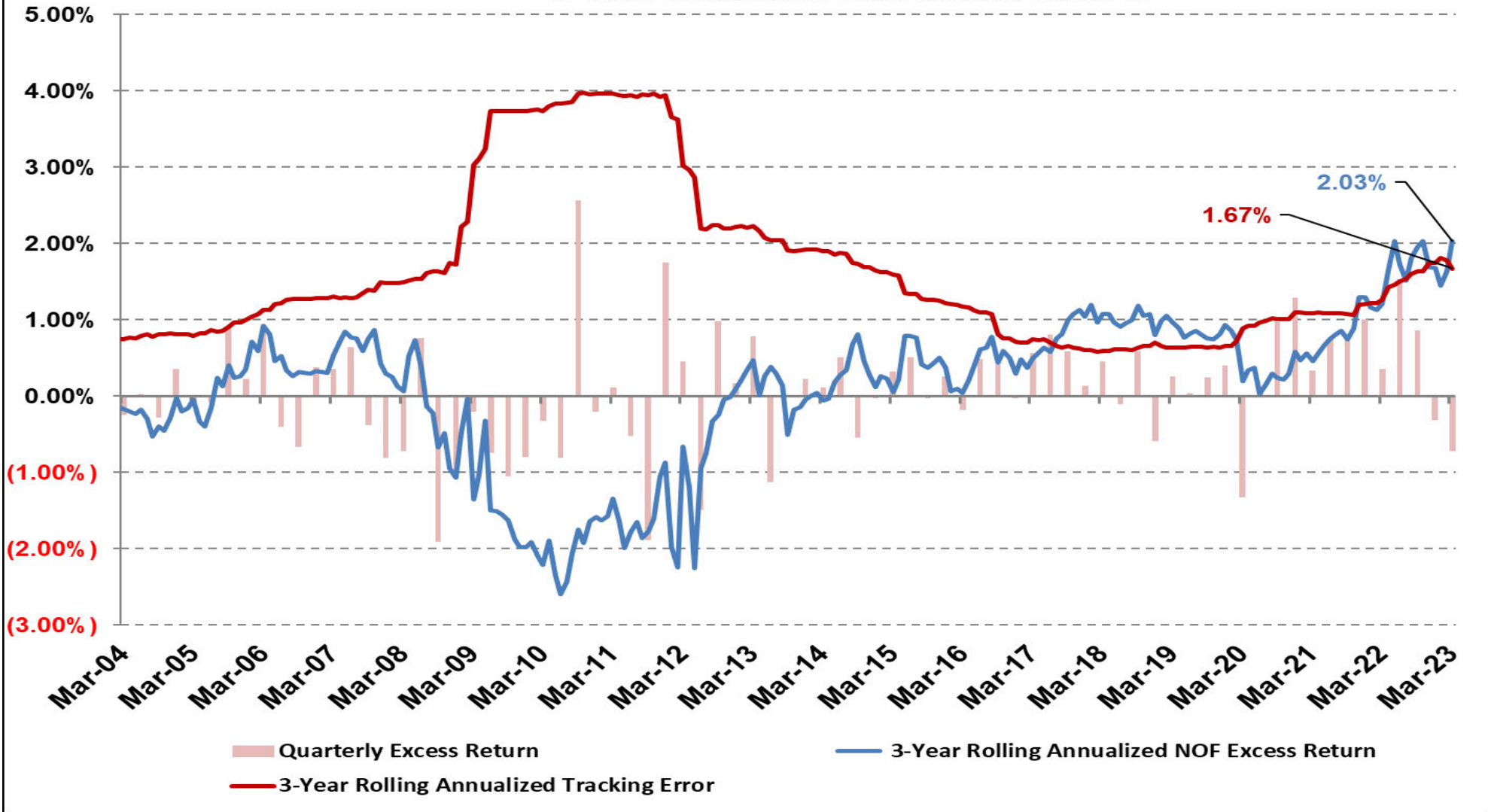
Total Fund Performance





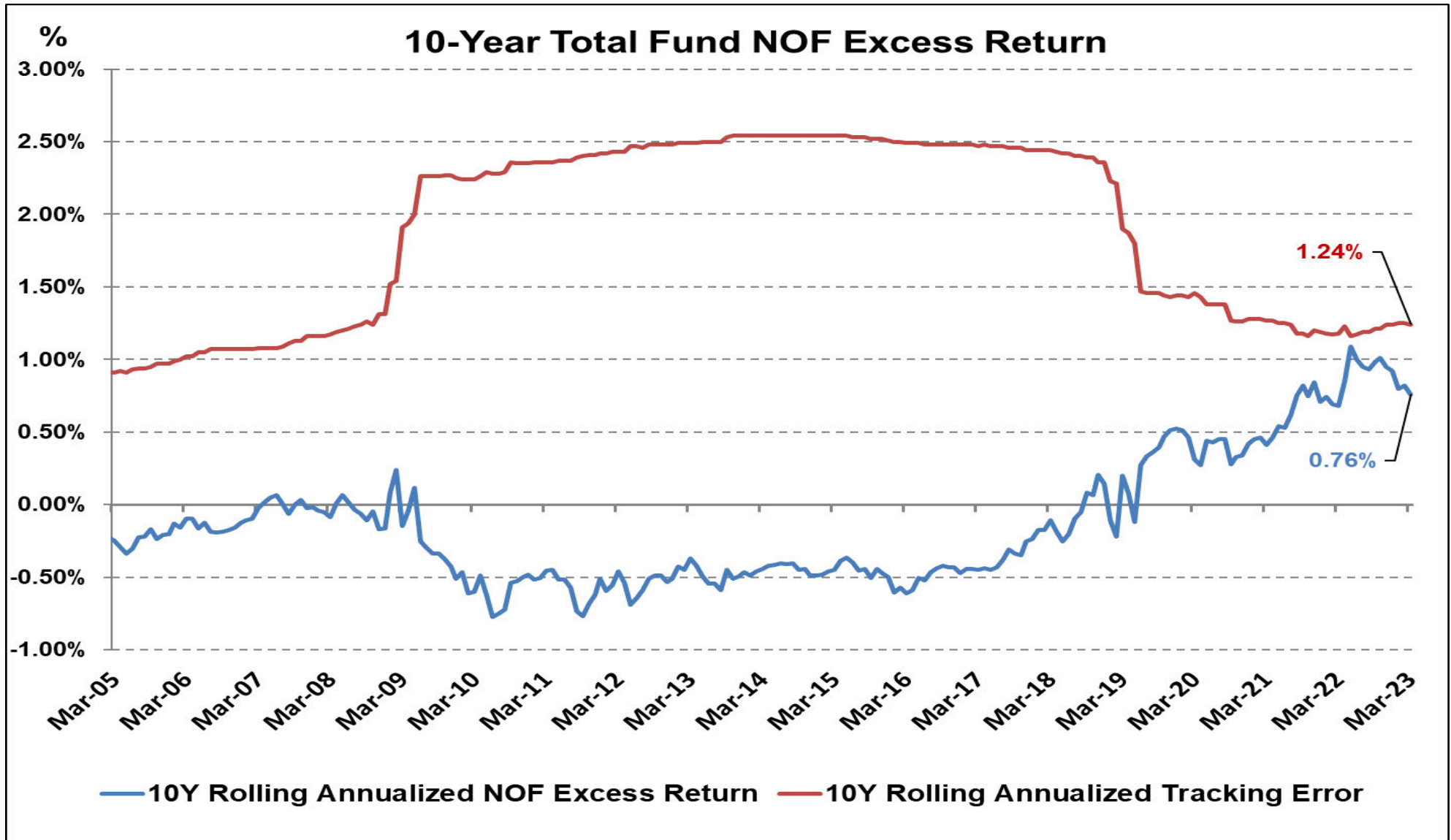
Total Fund Performance

3-Year Total Fund NOF Excess Return



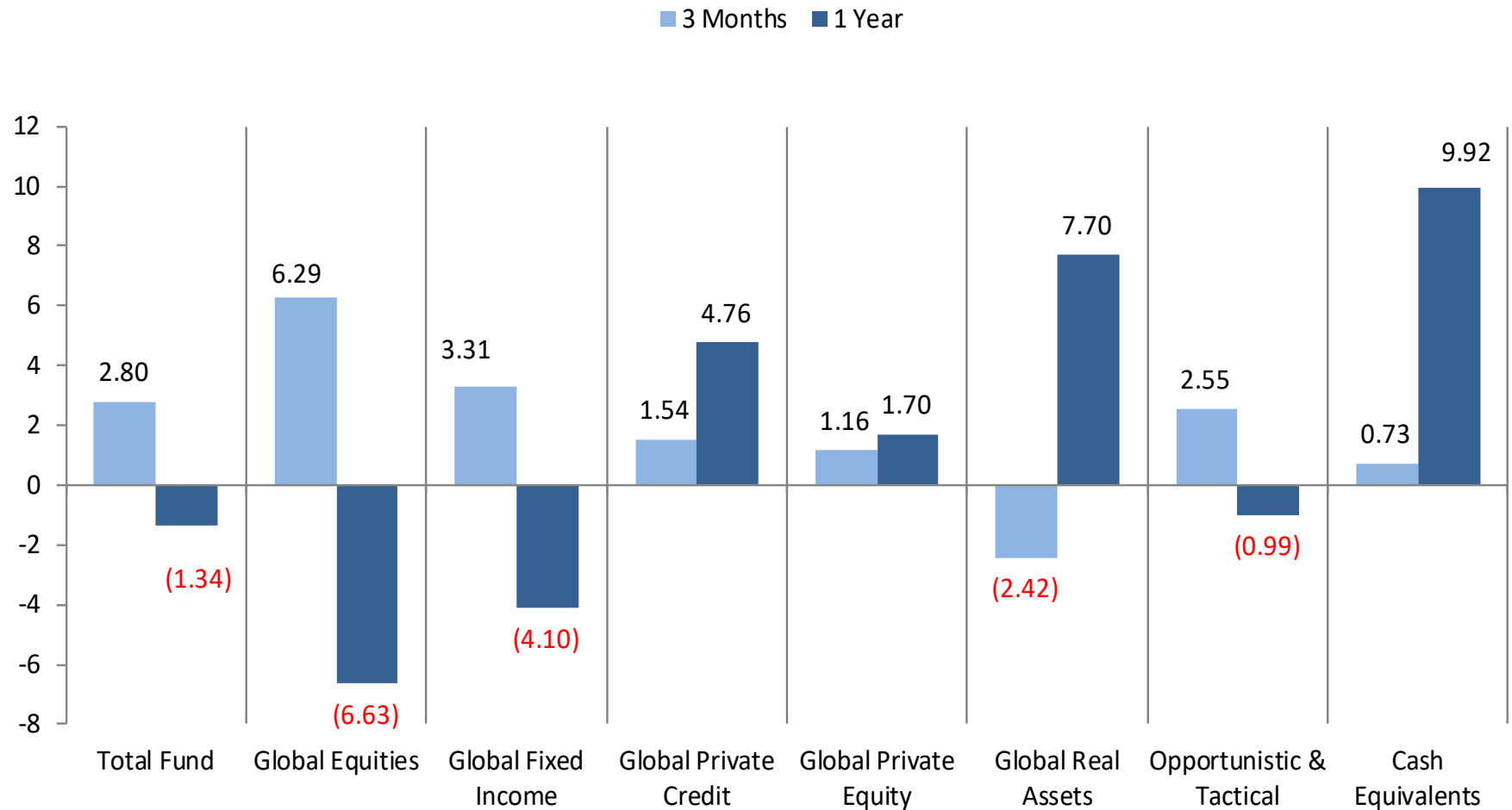


Total Fund Performance





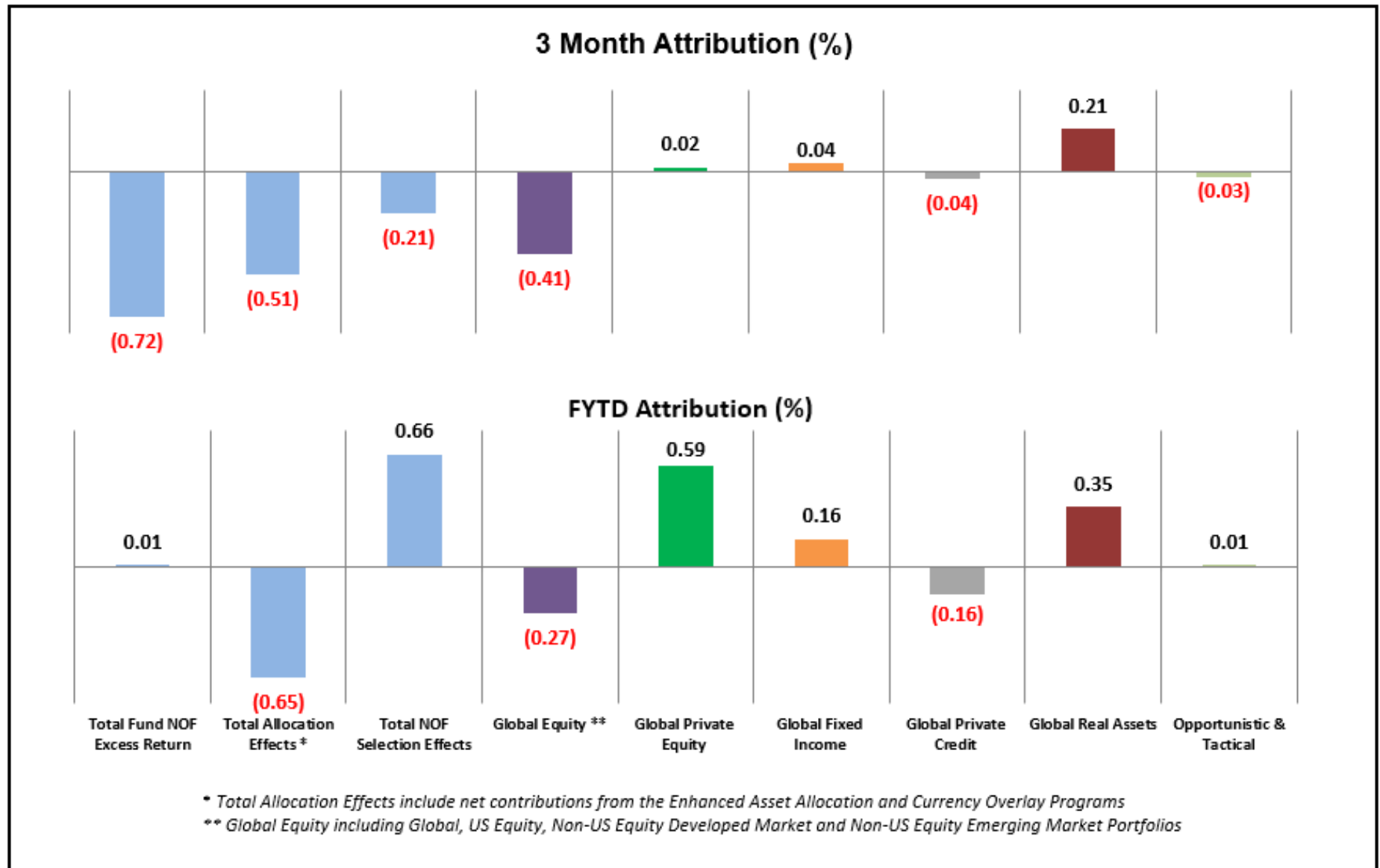
Total Fund and Asset Class Performance (Net)



Source: BNY Mellon GRS

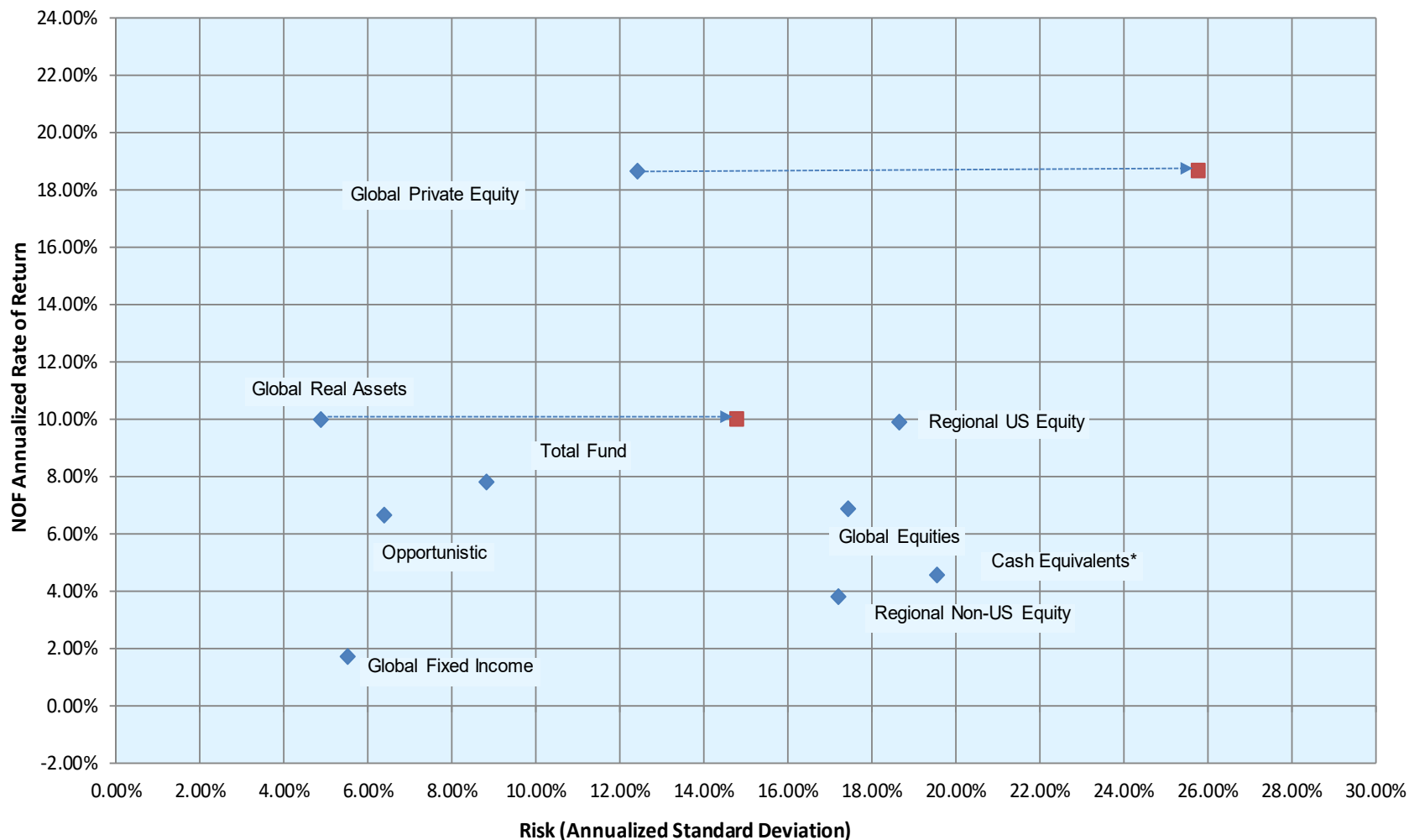


Total Fund Attribution





5 Year Risk and Return

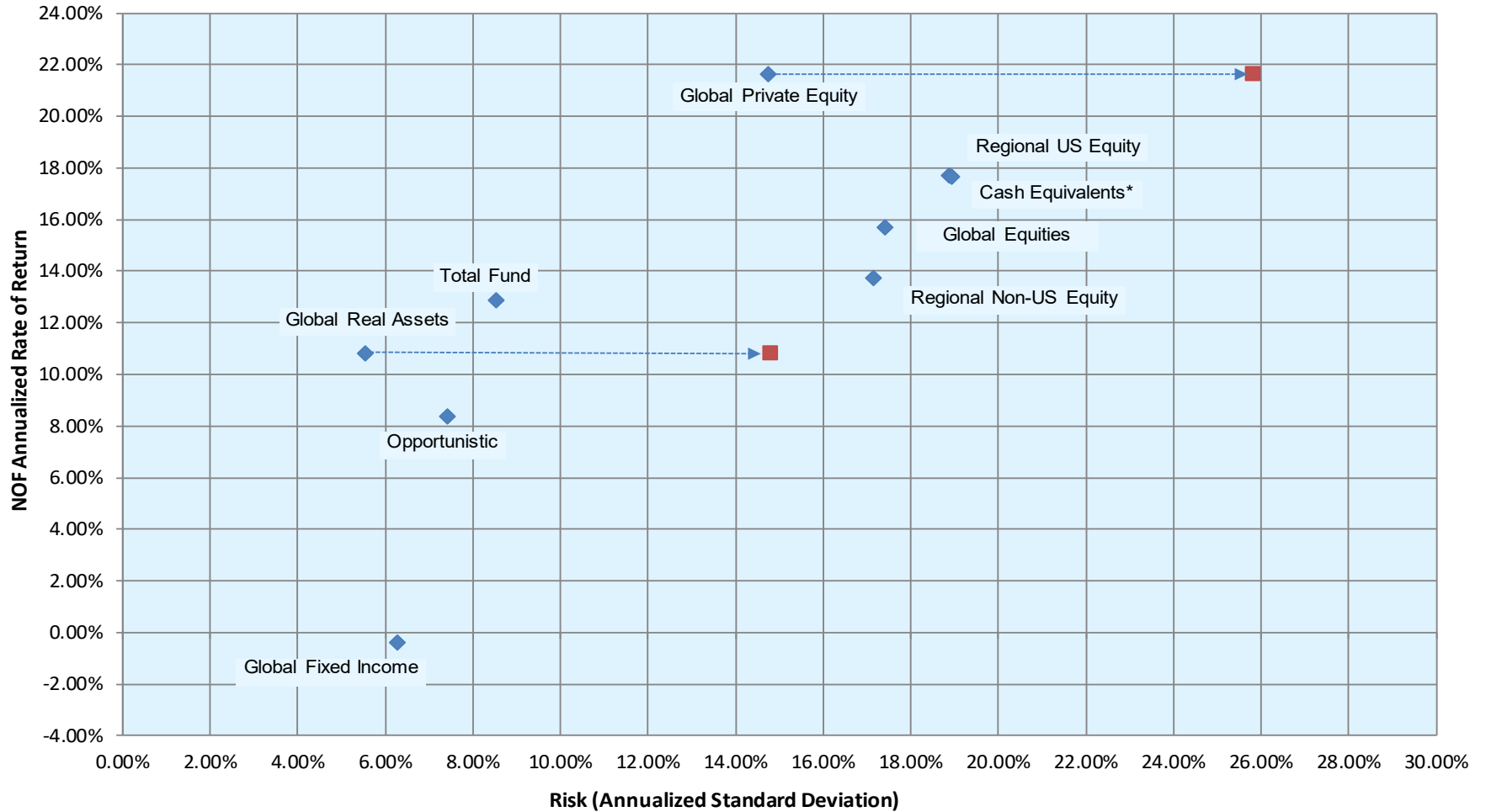


*Cash Equivalents include Short-Term, Enhanced Allocation Overlay and Currency Overlay

◆ Realized Risk ■ Forecast Risk



3 Year Risk and Return



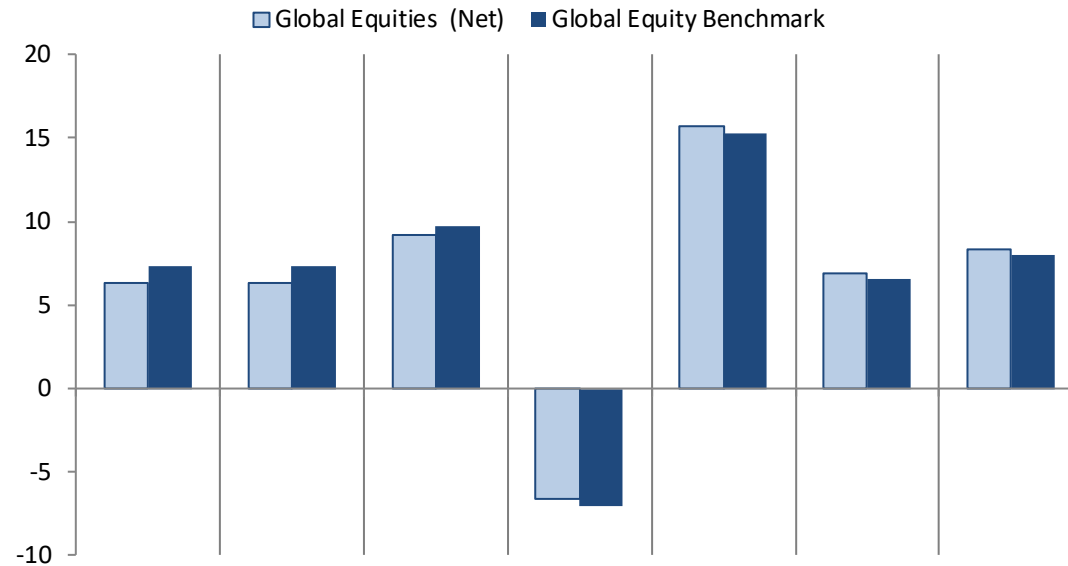
*Cash Equivalents include Short-Term, Enhanced Allocation Overlay and Currency Overlay



Global Equities Performance

Current Benchmark:

MSCI ACWI (Net Dividends)



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Global Equities (Gross)	6.36	6.36	9.36	(6.35)	16.06	7.20	8.70
Global Equities (Net)	6.29	6.29	9.17	(6.63)	15.72	6.88	8.36
Global Equity Benchmark	7.31	7.31	9.75	(7.05)	15.29	6.54	7.99
Value Added (Net of Fee)	(1.01)	(1.01)	(0.58)	0.42	0.43	0.35	0.36
Regional US Equity	6.17	6.17	9.08	(8.37)	17.73	9.93	11.34
Russell 3000 Index	7.18	7.18	9.75	(8.58)	18.48	10.45	11.73
Value Added (Net of Fee)	(1.01)	(1.01)	(0.67)	0.21	(0.75)	(0.52)	(0.39)
Regional Non-US Equity	7.59	7.59	10.18	(3.54)	13.72	3.84	5.38
Custom Non-US Equity BM	6.87	6.87	10.03	(4.92)	11.70	2.42	4.14
Value Added (Net of Fee)	0.72	0.72	0.15	1.38	2.02	1.42	1.24

Source: BNY Mellon GRS

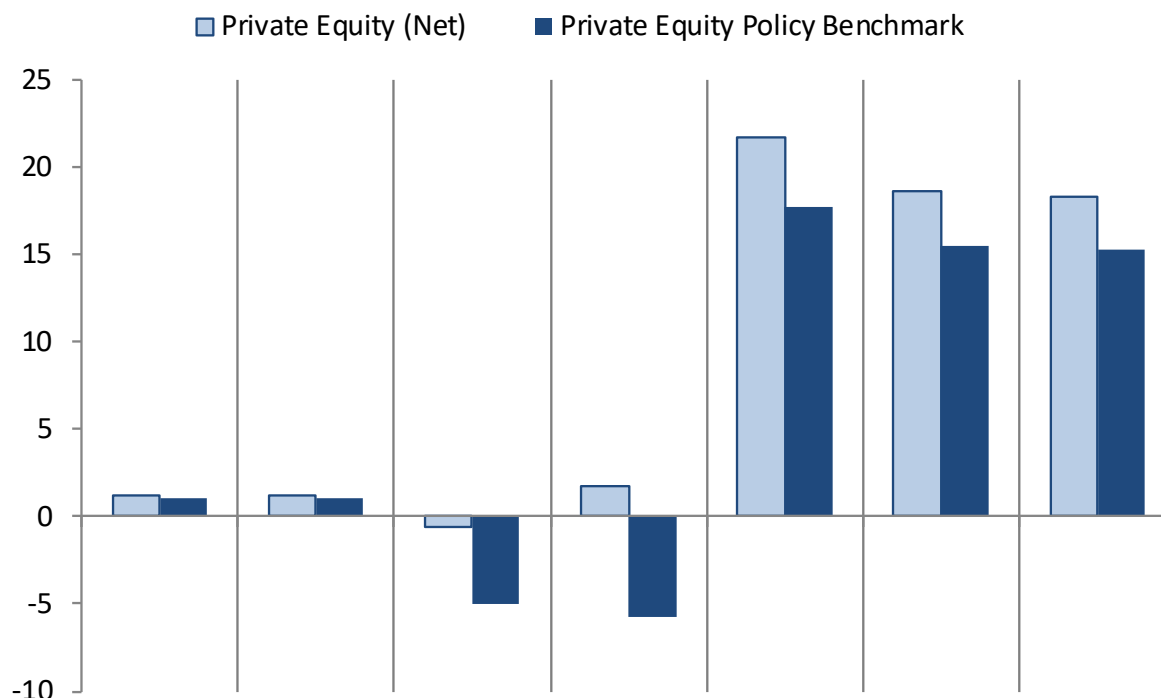


Global Private Equity Performance

Results as of: 03/31/2023

Current Benchmark:

Burgiss All Private Equity Index



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Private Equity (Gross)	1.56	1.56	0.70	3.43	23.52	20.43	19.99
Private Equity (Net)	1.16	1.16	(0.61)	1.70	21.64	18.66	18.28
Private Equity Policy Benchmark	1.04	1.04	(5.02)	(5.76)	17.69	15.52	15.30
Value Added (Net of Fee)	0.12	0.12	4.41	7.46	3.96	3.14	2.99

Source: BNY Mellon GRS

The difference between Gross and Net is management fee only. Performance based fees are captured in the Gross return.

Global Private Equity performance is reported one quarter in arrears.



Public vs Private Equity Performance (Net)

Public vs Private Equity - Performance (Net)

	3 Year	5 Year	10 Year
Regional US Equity	17.73	9.93	11.34
Global Equity	15.72	6.88	8.36
Private Equity	21.64	18.66	18.28

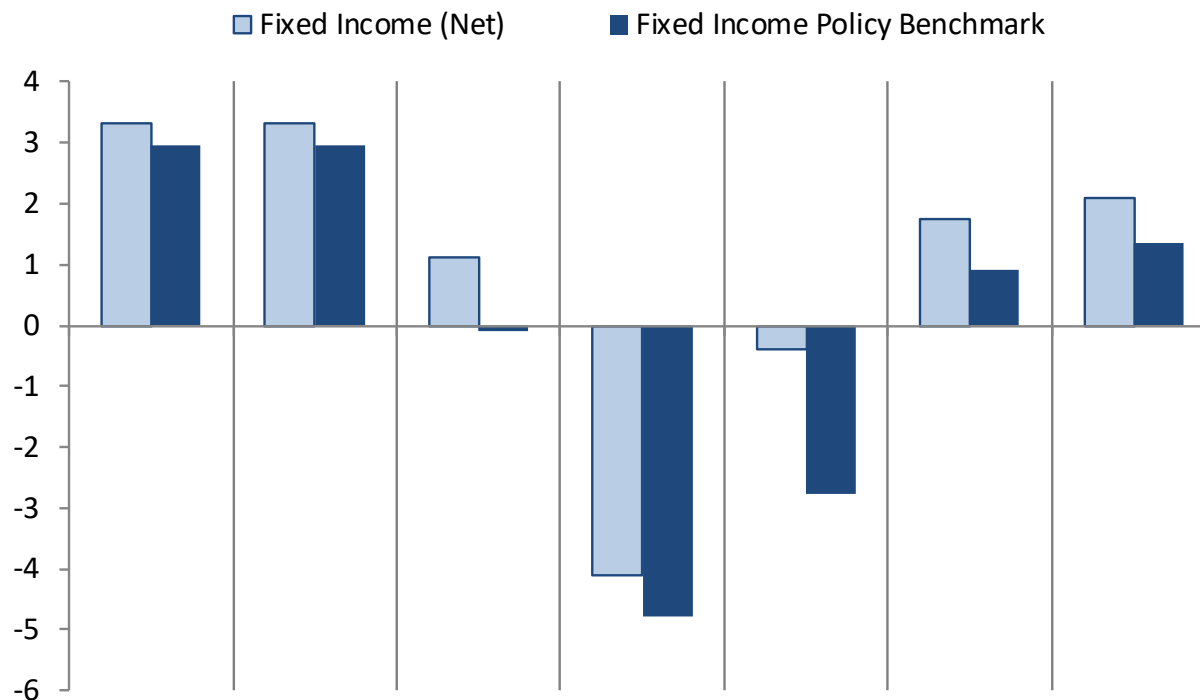
* Private Equity returns are lagged one quarter



Global Fixed Income Performance

Current Benchmark:

Bloomberg Aggregate Bond Index



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Fixed Income (Gross)	3.38	3.38	1.33	(3.84)	(0.13)	2.01	2.32
Fixed Income (Net)	3.31	3.31	1.13	(4.10)	(0.40)	1.76	2.08
Fixed Income Policy Benchmark	2.96	2.96	(0.09)	(4.78)	(2.77)	0.91	1.36
Value Added (Net of Fee)	0.34	0.34	1.23	0.68	2.37	0.85	0.72

Source: BNY Mellon GRS

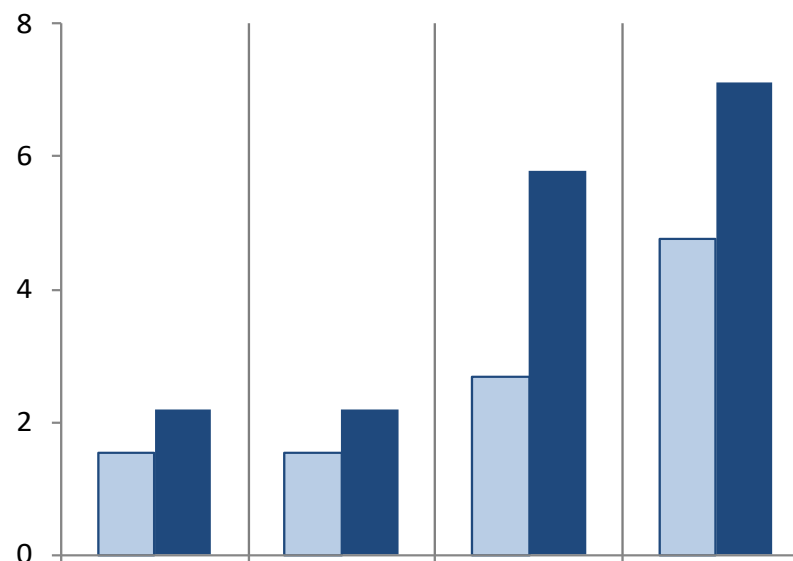


Global Private Credit Performance

Current Benchmark:

90 Day T-Bill + 4.5%

■ Global Private Credit (Net)
■ Global Private Credit Policy Benchmark



	Qtr	CYTD	FYTD	1 Year
Global Private Credit (Gross)	1.99	1.99	3.88	6.26
Global Private Credit (Net)	1.54	1.54	2.69	4.76
Global Private Credit Policy Benchmark	2.19	2.19	5.79	7.11
Value Added (Net of Fee)	(0.65)	(0.65)	(3.10)	(2.35)

Source: BNY Mellon GRS

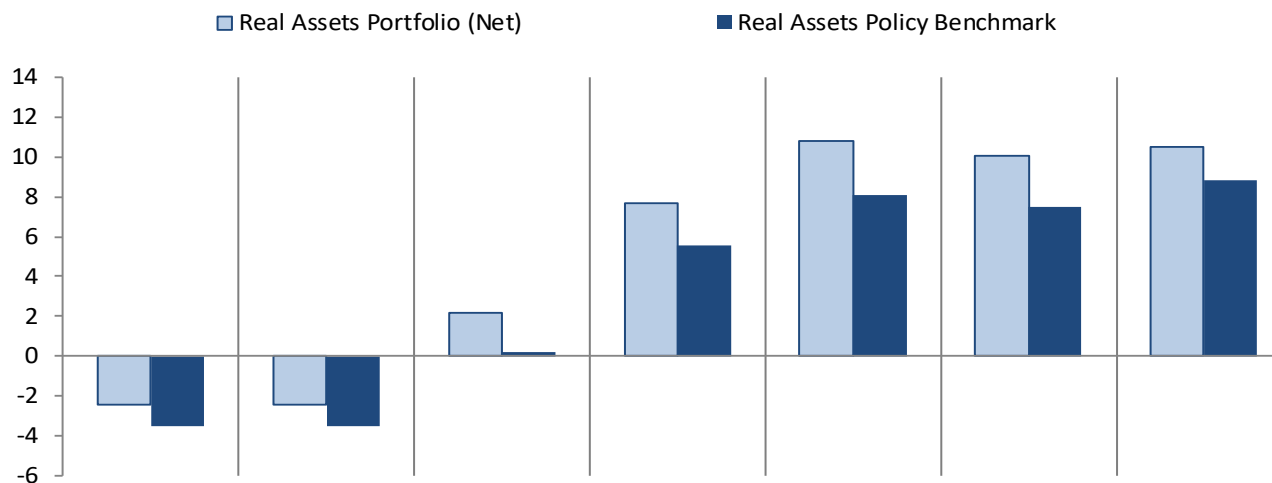
The difference between Gross and Net is management fee only. Performance based fees are captured in the Gross return.



Global Real Assets Performance

Results as of: 03/31/2023

Current Benchmark:
NCREIF Property Index (1q lag)



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Real Assets Portfolio (Gross)	(2.23)	(2.23)	2.85	8.60	11.68	10.97	11.57
Real Assets Portfolio (Net)	(2.42)	(2.42)	2.21	7.70	10.79	10.02	10.52
Real Assets Policy Benchmark	(3.50)	(3.50)	0.19	5.53	8.06	7.46	8.82
Real Assets Value Added (NOF)	1.08	1.08	2.02	2.17	2.73	2.56	1.70
Real Assets Core (Net)	(4.84)	(4.84)	1.65	9.84	12.61	10.81	10.74
Real Assets Policy Benchmark	(3.50)	(3.50)	0.19	5.53	8.06	7.46	8.82
Real Assets Core Value Added (NOF)	(1.34)	(1.34)	1.46	4.31	4.55	3.35	1.92
Real Assets Non-Core (Net)	(1.42)	(1.42)	(4.00)	0.47	6.31	6.96	9.76
Real Assets Policy Benchmark	(3.50)	(3.50)	0.19	5.53	8.06	7.46	8.82
Real Assets Non-Core Value Added (NOF)	2.08	2.08	(4.19)	(5.06)	(1.75)	(0.50)	0.94
Real Assets Infrastructure (Net)	2.55	2.55	5.47	7.84	8.17	10.69	n/a
Real Assets Policy Benchmark	(3.50)	(3.50)	0.19	5.53	8.06	7.46	n/a
Real Assets Infrastructure Value Added (NOF)	6.05	6.05	5.28	2.31	0.11	3.23	n/a

Source: BNY Mellon GRS

The difference between Gross and Net is management fee only. Performance based fees are captured in the Gross return.

Global Real Assets performance is reported one quarter in arrears.

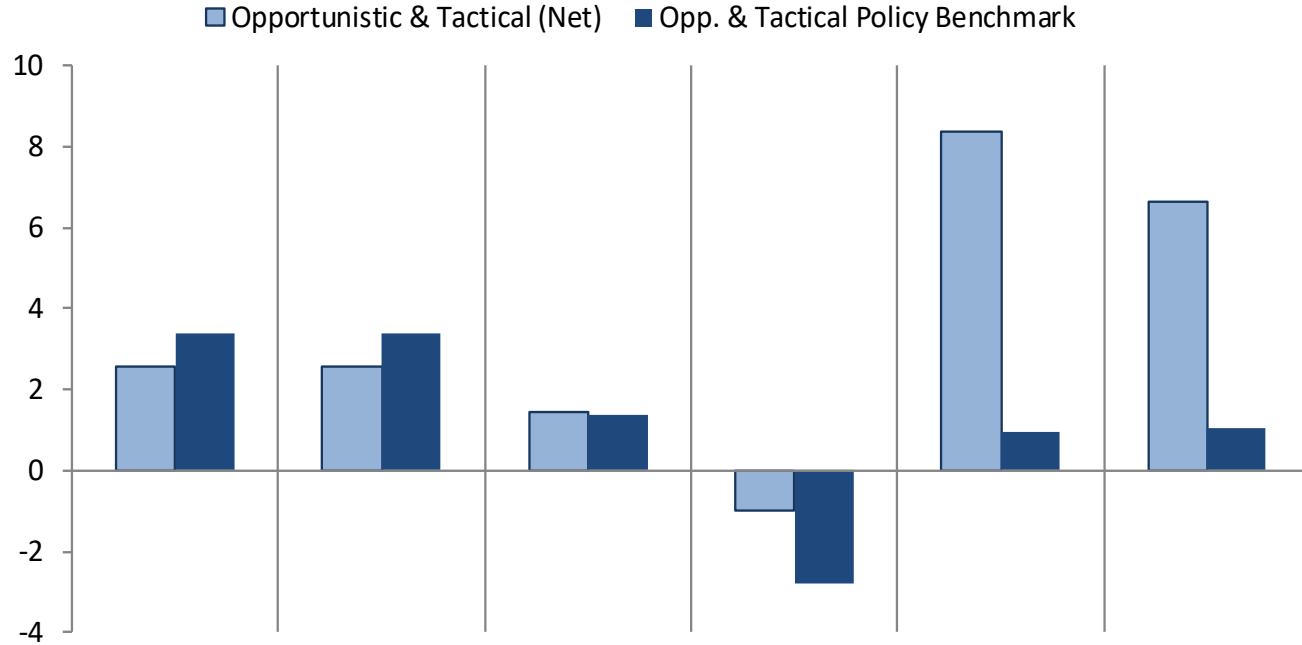


Opportunistic & Tactical Performance

Current Benchmark:

Bloomberg Aggregate

Bond Index + 2%



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year
Opportunistic & Tactical (Gross)	2.81	2.81	2.25	0.03	9.66	8.12
Opportunistic & Tactical (Net)	2.55	2.55	1.45	(0.99)	8.37	6.66
Opp. & Tactical Policy Benchmark	3.37	3.37	1.38	(2.78)	0.98	1.04
	(0.82)	(0.82)	0.07	1.80	7.39	5.62

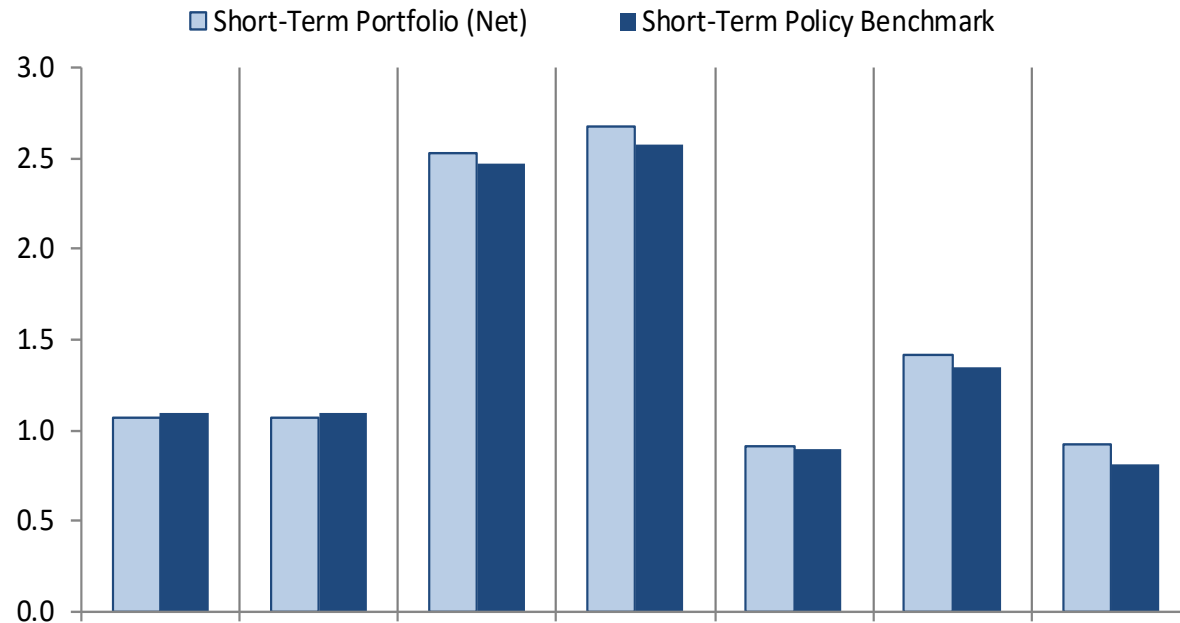
Source: BNY Mellon GRS



Short-Term Performance

Current Benchmark:

Citigroup 30 Day Treasury Bill Index

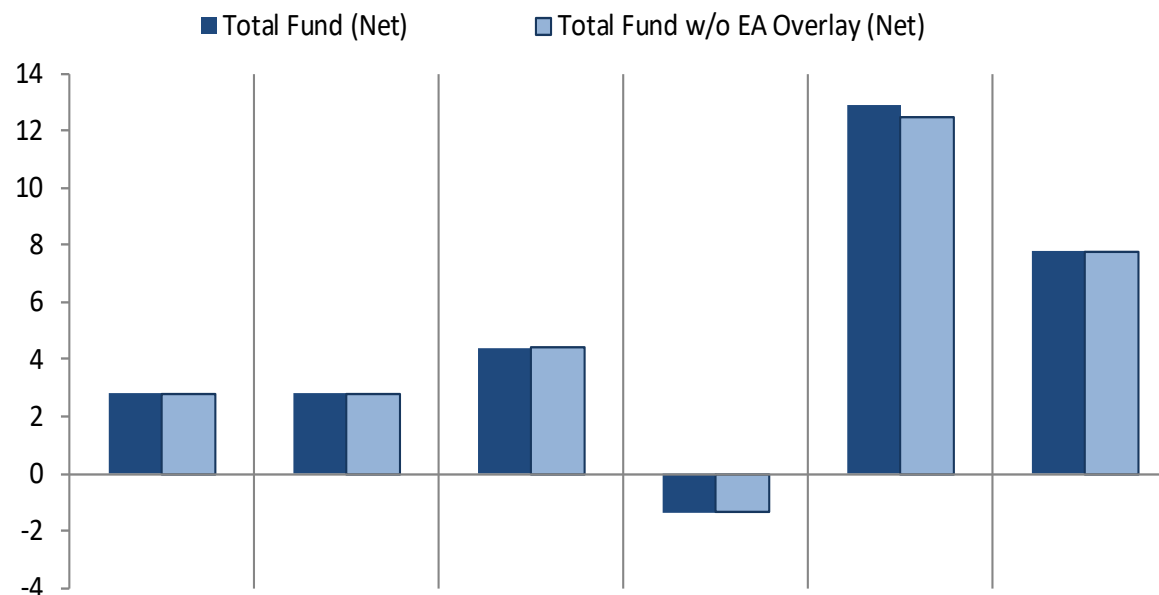


	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Short-Term Portfolio (Gross)	1.07	1.07	2.53	2.67	0.91	1.42	0.92
Short-Term Portfolio (Net)	1.07	1.07	2.53	2.67	0.91	1.42	0.92
Short-Term Policy Benchmark	1.09	1.09	2.47	2.57	0.89	1.35	0.81
Value Added (Net of Fee)	(0.02)	(0.02)	0.06	0.09	0.02	0.07	0.11

Source: BNY Mellon GRS



Enhanced Asset Overlay Performance

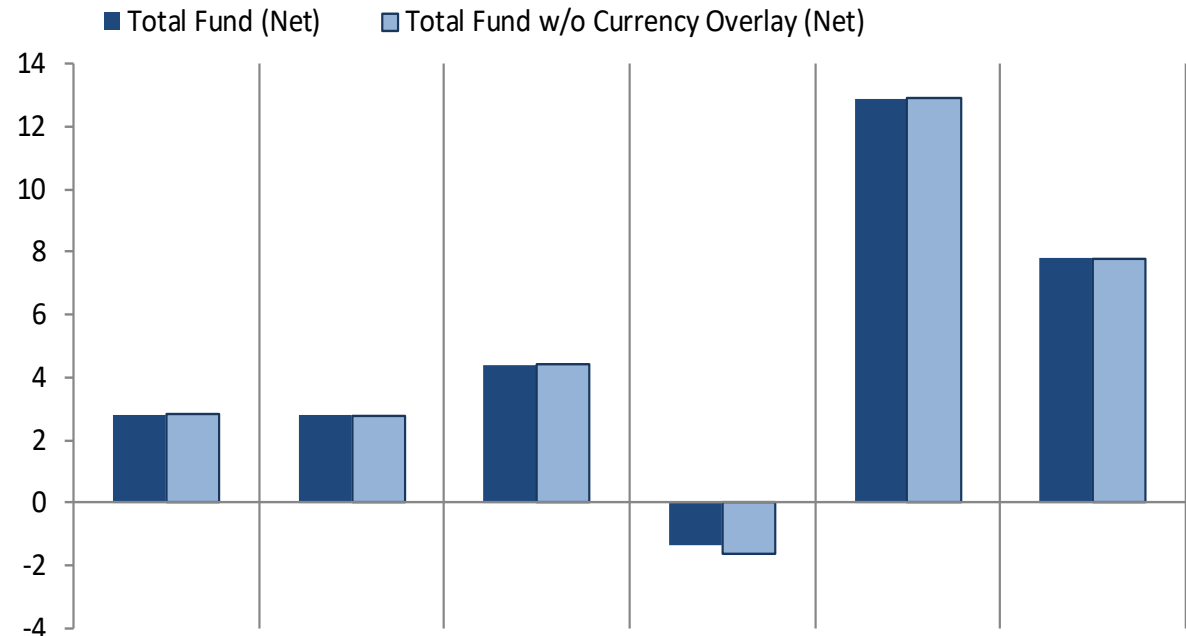


	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year
Total Fund (Gross)	2.97	2.97	4.99	(0.58)	13.59	8.50
Total Fund w/o EA Overlay (Gross)	2.98	2.98	5.02	(0.58)	13.20	8.44
Total Fund (Net)	2.80	2.80	4.41	(1.34)	12.88	7.81
Total Fund w/o EA Overlay (Net)	2.81	2.81	4.45	(1.32)	12.51	7.76
EA Overlay Impact (Net of Fee)	(0.01)	(0.01)	(0.03)	(0.02)	0.37	0.05

Source: BNY Mellon GRS



Currency Overlay Performance



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year
Total Fund (Gross)	2.97	2.97	4.99	(0.58)	13.59	8.50
Total Fund w/o Currency Overlay (Gross)	2.98	2.97	4.95	(0.95)	13.57	8.42
Total Fund (Net)	2.80	2.80	4.41	(1.34)	12.88	7.81
Total Fund w/o Currency Overlay (Net)	2.81	2.80	4.43	(1.62)	12.89	7.76
Currency Overlay Impact (Net of Fee)	(0.01)	(0.00)	(0.02)	0.28	(0.01)	0.05

Source: BNY Mellon GRS



Proposed Investment Agenda – Next Meeting

- FY24 Annual Investment Plan – possible vote
- Monthly Investment Report (April 30, 2023)



Statement of Investment Policy

INV1-001

Effective Date:	08/02/1985	Revision Date:	07/01/ 2022 2023	Audience:	Investments
Owner:	Investments	Certifier:	Richard Stensrud	Co-Owner (s):	Board
Document Links:	Purpose, Policy, Procedure, Definitions, Related Documents, Policy History				

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

III. Investment Objectives

The Investment Objectives of SERS are:

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

IV. Risk Management

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

V. Implementation Approach

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

VI. Investment Organization and Responsibilities

A. Responsibilities of the **Board**

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

Responsibilities of the Board include:

- 1. establishing controls and systems to ensure that Total Fund fiduciaries comply with applicable laws;
- 2. establishing asset allocation and investment policies for SERS assets;
- 3. appointing and discharging the Executive Director and Board Investment Consultants;
- 4. confirming or rejecting the Executive Director's proposed appointment of a Chief Investment Officer for SERS;
- 5. designating the individual as Chief Investment Officer of SERS for purposes of R.C. 3309.043, and then notifying the Ohio Department of Commerce, Division of Securities in writing of the designation as required by the Ohio Revised Code;
- 6. monitoring and reviewing investment performance and policy compliance;
- 7. requesting, receiving and reviewing reports from Investment Staff, Board Consultants and other entities, if applicable;
- 8. approving an Annual Investment Plan;
- 9. approving Statement of Investment Policy and changes thereto; and
- 10. conducting an annual evaluation of the performance of the Board's Investment Consultant.

B. Responsibilities of **Staff**

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

- 1. The **Executive Director** is responsible for:
 - a. ensuring that reports of the Total Fund's investment performance are presented on a timely basis;

- b. retaining vendors, consultants and advisors as necessary to assist Staff, and assist the Board in the retention of Investment Consultants;
 - c. appointing, discharging and retaining the Chief Investment Officer and Investment Staff;
 - d. overseeing the investment function,
 - e. executing investment documents when necessary,
 - f. conducting a fiduciary audit of investment operations at least on a seven- to ten-year cycle unless circumstances require an audit to be conducted sooner.
2. The **Chief Investment Officer** is responsible for:
- a. overseeing the investment program and keeping the Executive Director advised;
 - b. conducting periodic asset liability studies with the assistance of Investment Consultants and recommending asset allocation targets and ranges;
 - c. reviewing the SIP on an annual basis and recommending changes as needed for approval by the Board;
 - d. preparing and presenting the Annual Investment Plan to the Board for approval;
 - e. implementing the Annual Investment Plan;
 - f. investigating, researching and recommending new and emerging investment concepts and strategies, and implementing appropriate strategies in accordance with approved policies and procedures;
 - g. informing Investment Managers, Investment Consultants, and others providing investment services to SERS about the requirements of applicable laws and Board policies, and monitoring their compliance with said laws and policies;
 - h. adjusting allocations to Asset Classes, Investment Managers and Funds as needed, subject to any approved allocation ranges;
 - i. approving implementation guidelines for each asset class to establish allocation ranges for sub-strategies, risk parameters and risk limits, and providing such guidelines to the Board;
 - j. appointing and discharging Investment Managers and approving investments in or redemptions from Funds subject to conditions and guidelines in Section VII.;
 - k. executing investment documents;
 - l. approving Investment Manager guidelines, changes and additions;
 - m. hiring and supervising Investment Staff;
 - n. monitoring and evaluating the effectiveness of executed securities transactions and reporting annually to the Board regarding the performance of agents who execute securities transactions on behalf of SERS; ~~and~~
 - o. regularly reporting to the Board on market conditions, the status of the Total Fund, and its multi-period performance relative to benchmarks. Performance will be calculated on a gross-of-fees and net-of-fees basis; ~~and-~~
 - ~~e-p. Conducting Investment Committee meetings as the Chair and ensuring appropriate due diligence prior to investment decisions.~~
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
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	54% 57%	44% - 64% 47% - 67%
Global Equities	40% 45%	35% - 45% 35% - 55%
Global Private Equity	14% 12%	11% - 17% 8% - 16%
Income	46% 43%	41% - 51% 38% - 48%
Global Fixed Income	18% 19%	13% - 23% 12% - 26%
Global Private Credit	5%	3% - 7%
Global Real Assets	20% 17%	17% - 22% 14% - 22%
Cash Equivalents	3% 2%	1% - 5% 0% - 5%
<u>STRATEGY</u>		
Opportunistic and Tactical Investments	0%	0% - 5% 0 - 7%
Total	100%	
Leverage	0%	0% - 10%
Total Notional Exposure (Including Leverage)	100%	100% - 110%

B. Derivatives

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

C. Leverage

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

D. Rebalancing

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

E. Currency Hedging

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

F. Transition Management

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

G. Proxy Voting

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

H. Securities Lending

The Board authorizes Investment Staff to develop and implement a securities lending program which may involve the appointment or discharge of third party securities lending agents by the Executive Director or the Chief Investment Officer. The Board recognizes that while the practice of securities lending can generate meaningful income for the Total Fund, it is not without investment risk. To mitigate investment risk the securities lending program will focus on intrinsic value lending and use conservative collateral reinvestment guidelines as outlined in the securities lending policy. If Staff determines the risk/reward relationship of the program is no longer advantageous for the Total Fund, the program will be discontinued.

I. Opportunistic and Tactical Investments

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

J. Overlay Program

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

K. Investment Managers and Funds

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

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

It is a goal of the Board to increase the utilization of Ohio-qualified Investment Managers when an Ohio-qualified Investment Manager offers quality, services and safety comparable to other Investment

Managers available to the Board, and the use of such Investment Manager is consistent with the Board's fiduciary duties.

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

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

L. Co-investments

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

M. Collective Investment Funds

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

N. Approved Brokers

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

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

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

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	<u>US Equity</u> : 55% Russell 3000; <u>NUSE Developed Market</u> : 30% MSCI World ex-USA Net Total Return Index (USD); <u>NUSE Emerging Market</u> : 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% <u>(one quarter in arrears)</u>
Global Real Assets	NCREIF Property Index (one quarter in arrears)
Cash Equivalents	<u>FTSE 30 Day Treasury Bill</u> Citigroup 30-day T-Bill Index
STRATEGY	BENCHMARK MEASURE
Opportunistic and Tactical Investments	Bloomberg US Aggregate Bond Index + 2%

D. Performance Benchmarks – Individual Investment Managers

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

X. Review and Evaluation

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

- A. Monthly – Investment Report including Total Fund market value, asset allocation, performance of the Total Fund and each asset class, and the Total Fund's compliance with this SIP.

- B. Quarterly – Summary Investment Report presented by the Investment Consultant, including highlights and commentary about market conditions, investment performance, asset composition and characteristics for each asset class, and relevant manager level information.

XI. Related Policies and Procedures

A list of related policies and procedures that govern the investment program is attached as Appendix I.

Appendix I - Related Policies

SIP	Number	Document
	INV1-001	Statement of Investment Policy
VIII	INV1-002	Derivatives Policy
VIII	INV1-003	Leverage Policy
VIII	INV1-004	Opportunistic and Tactical Investment Policy
IV	INV1-006	Investment Risk Management Policy
VIII	INV1-007	Securities Lending Policy
VI	INV1-012	Cash Equivalents Portfolio Investment Guidelines Policy
VIII	INV1-014	Cash Equitization Policy
VI	INV1-024	Investment Committee and Investment Approval Policy
VIII	INV1-025	Private Market Co-Investment Policy
VI	INV3-001	Investment Oversight Policy
VIII	BD3-008	Securities Litigation Policy
VIII	EXE6-002	Proxy Voting Policy

Appendix II – Glossary of Terms

Active Risk – also known as Tracking Error, describes how a portfolio’s performance is different from its benchmark and is measured by the standard deviation of the differences in returns of the actual portfolio and the benchmark portfolio.

Active Share – the Active Share of a fund represents the percent of portfolio holdings that differ from the (declared) benchmark index holdings.

Actuarial Assumed Rate – also referred to as the actuarial discount rate. This rate is used to value a pension fund’s liabilities and is also used as a long-term investment return objective.

Asset and Liability Study – a study to determine the appropriate level of overall investment risk for a pension plan, based on future liabilities and funding resources. The study helps maximize the probability that the return on plan assets exceeds the growth of plan liabilities.

Benchmark – a gauge in the securities market by which investment performance can be measured, such as the Standard & Poor’s 500 Index.

Bloomberg US Aggregate Bond Index – a market capitalization weighted US bond index published by Bloomberg. Most US traded investment grade bonds are represented in the index. SERS’ global fixed income policy benchmark.

Broker – an individual or firm authorized to act on behalf of another, such as executing a transaction. The broker does not assume any financial risk in the transaction, as a dealer would.

Brokerage Commission – fee paid to a broker for the purchase and sale of securities.

Broker/dealer – any individual or firm in the business of buying and selling securities for itself and others. Broker/dealers must register with the SEC. When acting as a broker, a broker/dealer executes orders on behalf of a client. When acting as a dealer, a broker/dealer executes trades for the firm's own account. Securities bought for the firm's own account may be sold to clients or other firms or become a part of the firm's holdings.

Burgiss All Private Equity (BAPE) – The BAPE is comprised of data from more than 5,000 private equity funds contributed by limited partners that are Burgiss clients and use Burgiss' web-based institutional portfolio management platform Private i. The benchmark data is sourced from Burgiss' limited partner clients and includes complete transactional and valuation history between the limited partner and their fund investments. Burgiss publishes a detailed breakdown of the dataset every quarter allowing for increased transparency.

Cash Securitization – Cash securitization is a method used to obtain asset-like returns on short-term cash investments in equity, fixed income or other accounts by overlaying the short-term cash investments with relevant futures. Securitization of equity cash is referred to as cash equitization.

Cash Equivalents – highly liquid, safe investments with maturities of 397 days or less, which can be easily converted into cash. Examples include Treasury Bills, money market funds, and quality commercial paper. The cash equivalents asset class serves as a liquidity pool for SERS.

Chapter 3309, Ohio Revised Code – the Ohio statute governing the School Employees Retirement Board and School Employees Retirement System of Ohio.

~~**Citigroup 30-day T-Bill Index** – an index that measures the rate of return for 30-day US Treasury Bills, which are considered representative of the performance of short-term money market instruments. The Citigroup 30-day T-Bill index is the policy benchmark for Cash Equivalents.~~

Co-investment – a direct investment in a single asset of a private market Fund, made alongside the Fund's investment in the asset; typically involves more attractive terms and shorter time frames than those of the Fund.

Collective Investment Fund – A fund that is operated by a trust or bank and holds commingled (pooled) assets.

Conflict of Interest – a direct or indirect pecuniary interest or a relationship (without regard to whether the relationship is personal, private, commercial, or business) and the interest or relationship could diminish the Investment Service Provider's independence of judgment in the performance of its responsibilities to SERS; or bias the Investment Service Provider's evaluation of, or advice with respect to, a transaction or assignment on behalf of SERS.

Credit Risk – the possibility that a bond issuer will default by failing to repay principal and interest in a timely manner.

Currency Hedging – also known as Currency Management. A technique or strategy used to address foreign exchange fluctuations which affect investment returns on international investments. Currency hedging can be active, passive, or a combination of active and passive. Passive hedging is a strategy to neutralize fluctuations between US and Non-US currencies to a predetermined level. Active hedging is a strategy to manage currency fluctuations in an effort to generate returns.

Default Risk – see Credit Risk.

Derivatives (Derivative Instruments) – financial instruments (securities or contracts) whose values are derived from underlying financial assets, indices or other instruments. Derivative performance is based on the performance of assets, interest rates, currency exchange rates, and various domestic and foreign indices underlying the instruments. The common forms of derivatives are forward, futures, swap and options contracts.

Diversification – spreading a portfolio over many investments to avoid excessive exposure to any one source of risk.

Due Diligence – an investigation or audit of a potential or existing investment.

Equity Investment – claims held by the residual owners of a firm. May also be referred to as common stock. Investments in real estate and certain private markets classifications may also be considered equity.

External Management – the management or investment of fund assets by Investment Managers.

Fiduciary – a person, company or association holding assets in trust for a beneficiary. One who can exercise discretionary authority or can control important aspects of a pension plan's management.

Firm Level – as used in this SIP, Firm Level refers to an Investment Management Firm and includes all investment products, strategies or styles offered by the firm.

Fixed Income Investment – a security issued by a borrower that obligates the issuer to make specified payments to the holder over a specific period. May also be referred to as "debt" or "bonds."

Foreign Currency Risk – incurred by investing in foreign countries. Fluctuations in exchange rates between domestic and foreign currencies impact total returns. Impacts may be positive or negative.

FTSE 30 Day Treasury Bill – an index that measures the rate of return for 30-day US Treasury Bills, which are considered representative of the performance of Short-Term money market instruments. The FTSE 30 Day Treasury Bill is SERS' policy benchmark for Cash Equivalents.

Fund – Fund means a limited partnership, trust or commingled investment vehicle in which SERS invests or may invest (e.g., hedge fund, private equity fund, or real estate fund).

Global Equities – reflects the consolidation of what had been treated by SERS as US equity and Non-US equity asset classes; includes equities of US and non-US origin, equities of various capitalizations (e.g., large cap, small cap, mid cap, etc.), equities from developed, emerging and frontier markets, growth and value equities, and passive and active strategies. Investments in global equities strategies are made in accordance with investment allocation guidelines established and amended as necessary, by mutual agreement between the Chief Investment Officer and the Investment Consultant.

Global Private Credit - broadly defined as strategies that provide loans and financing to middle market companies in lieu of bank financing. Strategies can have objectives of either preserving capital, with return coming primarily from current pay coupon and fees or maximizing appreciation of more subordinated loans.

Guidelines – refers to an Investment Manager's "Investment Guidelines," established between the Investment Manager and Staff as part of an investment management agreement. Guidelines may be general or specific.

Hedge Fund – a private investment partnership or an offshore investment corporation in which the general partner has made a substantial personal investment, and whose offering memorandum allows for the Fund to take both long and short positions, using leverage and derivatives, and invest in many markets. Hedge funds often use strategies involving program trading, selling short, swaps and arbitrage.

Indexing – the weighting of investments that are in line with one of the major market indices, such as the Standard & Poor's 500 Index. Also referred to as passive investing.

Interest Rate Risk – the risk that an investment's value will change due to a change in the absolute level of interest rates.

Internal Management – the management or investment of fund assets by Investment Staff.

Intrinsic Value Lending – lending that produces returns based upon the securities loan itself, with little incremental benefit from collateral reinvestments.

Investment Committee – a committee comprised of the Chief Investment Officer and Investment Officers from SERS' Investment Department who possess the State Retirement System Investment Officer (SRSIO) license, with clearly defined structure, rules and procedures for reviewing and approving investments in a timely and prudent fashion.

Investment Consultant – any consultant hired by the Board or by Staff to advise or assist with the investment program in accordance with this SIP. Board Investment Consultants must be approved by the Board. Staff Investment Consultants shall be approved by the Executive Director.

Investment Manager – a manager or potential manager of SERS assets, both public market and private market. Includes, but is not limited to managers of equity, fixed income, private equity, real estate, hedge funds, commodities and cash.

Investment Program – the implementation of SERS' investment responsibilities and the Board's SIP by fund fiduciaries.

Investment Service Provider – an entity or person, other than a Retirement Board member or SERS employee, who provides investment advice to SERS intended to affect or form a basis for investment or fund management decisions by SERS, including but not limited to (a) Investment Consultants, (b) Investment Managers, (c) agents, (d) broker/dealers, (e) master record keepers, and (f) custodian.

Investment Staff – members of the Investment Department of SERS, including the Chief Investment Officer, State Retirement System Investment Officers, and other department personnel.

Leverage – in investments, this is the control of a large amount of money by a smaller amount of money, such as buying on margin. In finance, this is the relationship of debt to equity on a company's balance sheet in the form of the debt/equity ratio.

Liquidity Risk – the risk that a given security or asset cannot be traded quickly enough in the market to prevent a loss or to make the required profit.

Long-term – in the context of SERS' liability and investment horizons, long-term is assumed to be at least 10 years.

Mandate – mandate is the macro or high-level strategy employed by a manager. Examples of macro strategies include US versus Non-US; large cap versus small cap; real estate versus private equity; etc.

Master Record Keeper – the master accountant used by SERS.

Modern Portfolio Theory – a theory about how rational investors can construct portfolios in order to optimize market risk for expected returns, emphasizing that risk is an inherent part of higher reward. According to the theory, it is possible to construct an "efficient frontier" of optimal portfolios offering the maximum possible expected return for a given level of risk. This theory was pioneered by Harry Markowitz in his paper "Portfolio Selection," published in 1952 by the *Journal of Finance*.

Morgan Stanley Capital International – All Country World Free ex-USA Index (\$Net) – an equity index representing 44 developed and emerging countries. "Free" indicates the index reflects actual investable opportunities for global investors by taking into account local market restrictions on share ownership by foreigners. "Net" indicates that dividends are reinvested after the deduction of withholding taxes applicable to non-resident institutional investors. The MSCI-ACWI ex-USA Index, net of dividends reinvested is SERS' policy benchmark for Non-US Equities.

NCREIF Property Index (NPI) – a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. The NCREIF Property Index is a component of SERS' global real estate policy benchmark.

Opportunistic and Tactical Investments – Global opportunistic investments are tactical or non-traditional investment opportunities that may be short-term or may not fit within the generally accepted risk/return parameters of specific asset classes or strategy groupings. Such opportunities may involve capitalizing on short-term market dislocations or other such unique situations. Tactical investments may include strategies with dynamic allocations to single assets or across multiple asset types or other innovative approaches.

Portfolio – a collection of investments owned, managed, or overseen by an individual or Investment Manager, a board or an organization. Portfolio can mean a manager account or subset thereof (e.g.,

Goldman Sachs Core Plus account), an asset class (e.g., US equity), or the entire fund (e.g., SERS' Total Fund).

Private Market Assets – broadly defined as those assets of alternative mandates utilizing either publicly- or privately-traded securities or other investment instruments. These include, but are not limited to, real assets, private equity, private credit and hedge funds.

Proxy – an agent legally authorized to act on behalf of another party. Shareholders not attending a company's annual meeting may choose to vote their shares by proxy by allowing someone else to cast votes on their behalf. Management often encourages shareholders to vote by proxy so that ownership interests are fully represented even if shareholders are unable to attend the company's annual meetings in person.

Prudent (Prudent Person) – this phrase generally refers to the prudent person rule which is a legal maxim restricting the discretion in a client's account to investments only in those securities that a prudent person seeking reasonable income and preservation of capital might buy for his or her own investment.

Rebalancing – the action of adjusting allocations relative to their targets or ranges to adjust for actual or anticipated market movements.

Risk – the chance that an investment's actual return will be different than expected. This includes the possibility of losing some or all of the original investment. It is usually measured by calculating the standard deviation of the historical returns or average returns of a specific investment.

Risk-Adjusted Return – a measure of how much risk a Fund or portfolio takes on to earn its returns, usually expressed as a ratio. Usually expressed by a Sharpe Ratio or Information Ratio calculation.

Russell 3000 Index – a market-value weighted equity index published by the Frank Russell Company. The index measures the performance of the 3,000 largest US companies in terms of market capitalization. The Russell 3000 Index is SERS' Domestic Equity Policy Benchmark.

Securities Lending – the temporary loan of a security from an institutional investor's portfolio to a broker/dealer or dealer bank to support that firm's trading activities. These trading activities include short selling, selling on margin or the satisfaction of some other type of transaction. Loaned securities are generally collateralized, reducing the lender's credit exposure to the borrower. Except for the right to vote proxies, the lender retains entitlement to all the benefits of owning the original securities, including the receipt of dividends and interest.

Securities Litigation – refer to SERS' Securities Litigation Policy.

Soft Dollars – Soft dollar trading arrangements refer to agreements whereby an investment manager directs transactions to a broker in exchange for brokerage and research services. The research services provided to the investment manager may be either proprietary or originate with a third-party.

Style – Style refers to an investment product, strategy or style offered by an Investment Management Firm and reflects how the assets are invested. For example, value versus growth; core versus value added; quantitative versus fundamental; etc.

Total Fund – Total Fund refers to SERS' total investment assets.

Total Return – the return on an investment, including income from dividends and interest, as well as appreciation or depreciation in the price of the security, over a given time period.

Tracking Error – a divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark. Calculated as the standard deviation of the difference in returns between a portfolio and its benchmark.

Transition Management – management of the transition of assets from one portfolio to another by a transition manager.

Related Documents and Information

Statutes: R.C. 3309, Ohio Revised Code

Rules: N/A

Document Links: Purpose, Policy, Procedure, Definitions, Related Documents, Policy History

Forms: ---

Policy History

This policy supersedes the policy adopted August 2, 1985 and all revised policies dated [7/1/22](#); [2/17/22](#); [2/18/21](#); [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](#).

STATEMENT OF INVESTMENT POLICY AMENDMENTS

As discussed during the May 18, 2023, Board meeting, _____ moved and _____ seconded the motion to approve amendments to the Statement of Investment Policy. The amended Statement of Investment Policy will become effective July 1, 2023, and replaces the Statement of Investment Policy dated July 1, 2022.

Significant changes from the current policy are:

- 1) Decrease in Global Equity from 45% to 40%
- 2) Increase in Private Equity from 12% to 14%
- 3) Increase in Real Assets from 17% to 20%
- 4) Decrease in Global Fixed Income from 19% to 18%; and
- 5) Increase in Cash from 2% to 3%

ASSET CLASS	Current Policy	Recommended Policy	Recommended Range
Equity			
Global Equities	45.0%	40.0%	35-45%
Global Private Equities	12.0%	14.0%	11-17%
Income			
Global Fixed Income	19.0%	18.0%	13-23%
Global Private Credit	5.0%	5.0%	3-7%
Global Real Assets	17.0%	20.0%	17-22%
Cash	2.0%	3.0%	1-5%
Strategy			
Opportunistic & Tactical	n/a	n/a	0-5%
Total Assets	100%	100%	
Leverage	N/A	N/A	0-10%
Total Notional Exposure (Including Leverage)	100.0%	100.0%	100-110%

Upon roll call, the vote was as follows:

<u>ROLL CALL:</u>	<u>YEA</u>	<u>NAY</u>	<u>ABSTAIN</u>
Frank Weglarz	_____	_____	_____
Hugh Garside	_____	_____	_____
James Haller	_____	_____	_____
Matthew King	_____	_____	_____
Catherine Moss	_____	_____	_____
Barbra Phillips	_____	_____	_____
James Rossler	_____	_____	_____
Daniel Wilson	_____	_____	_____
Jeffrey DeLeone	_____	_____	_____



DRAFT
05/18/2023

2024

ANNUAL INVESTMENT PLAN



**FOR THE
YEAR ENDED
JUNE 30, 2024**



**SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO
ANNUAL INVESTMENT PLAN**

For the year ended June 30, 2024

Prepared by SERS Investment Staff
Farouki Majeed, Chief Investment Officer
300 East Broad Street, Suite 100
Columbus, Ohio 43215-3746
www.ohsers.org
Serving the People Who Serve Our Schools®

TABLE OF CONTENTS

Executive Summary	3
Global Economic Outlook	6
Portfolio Strategies	
Total Fund Asset Allocation.....	9
Global Equities	10
Global Private Equity.....	13
Global Fixed Income	16
Global Private Credit	18
Global Real Assets.....	20
Cash Equivalents & Securities Lending	22
Opportunistic & Tactical	23
Overlay Program	24
Investment Risk Management & Analytics	25
Investment Operations	27
Investment Implementation Guidelines	
Global Equities	29
Global Private Equity.....	32
Global Fixed Income	35
Global Private Credit	38
Global Real Assets.....	41
Cash Equivalents & Securities Lending	45
Opportunistic & Tactical	47
Overlay Program	48
References	
Sources	51
Glossary	53

Executive Summary

EXECUTIVE SUMMARY

The Board's Statement of Investment Policy (SIP) requires the Chief Investment Officer prepare and present to the Board for its approval an Annual Investment Plan (Plan). The following document outlines the recommended Plan for Fiscal Year (FY) 2024.

As in prior years, the Plan reviews the economic environment based upon consensus reports from leading sources, SERS' asset allocation target and long-term performance objective for each portfolio, last year's objectives and accomplishments, a review of the market conditions over the last year and objectives for FY2024. Implementation Guidelines for each asset class portfolio are included to provide further details on how each portfolio will be managed in the coming year relative to portfolio construction parameters and risk limits. **This Plan is meant to be a living document subject to adjustment during the year.** If circumstances change or opportunities arise during the year, items will be discussed with the Board which may lead to intra-year changes to the Plan or Strategy Statements.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The general objectives of the Investment Department for FY2023 were as follows:

- *Our major strategic goals remain unchanged. The focus will continue to be value added performance, risk management, cost effectiveness and maintenance of an investment program that meets or exceeds investment objectives over the long-term.*

Total Fund returns exceeded the policy benchmark for all periods over ten years. For FYTD, Total Fund return of 4.41% as of March 2023 exceeded the benchmark by 0.01% which is below expectation but longer term excess returns have added significant value to the Total Fund. For three years the annualized return of 12.88% exceeded the benchmark by 2.03%, and for five years the annualized return was 7.81% with 0.96% excess return. Over ten years the Total Fund generated a return of 8.22% exceeding the benchmark by 0.76% on an annualized basis. The excess returns have been generated with modest active risk well within the limits approved by the Board.

- *Continue to implement the asset allocation framework and targets approved by the Board and implement the leverage program as conditions and return expectations improve.*

Staff has been focused on filling the 5% allocation to Private Credit which has been reached and the increase in Private Equity from 10% to 12% has also been achieved. Staff took the opportunity to implement tactical allocation decisions in 2022 by underweighting equities and fixed income throughout this period following peak valuations at the end of 2021. These decisions helped the Fund to outperform the benchmark significantly and minimize the drawdown that occurred in 2022 due to both equities and fixed income having negative double digit returns.

- *Research new strategies in renewable energy, infrastructure, and commodities and implement on a selective basis.*

New investments in infrastructure and Global macro strategy were approved in FY2023.

FY2024 OBJECTIVES

- Our major strategic goals remain unchanged. The focus will continue to be value added performance, risk management, cost effectiveness and maintenance of an investment program that meets or exceeds investment objectives over the long-term.
- Implement the asset allocation framework and targets approved by the Board in April 2023.
- Continue to develop and engage the Investment team, including adding a new Associate Risk Officer due to a promotion and adding a new Investment Analyst to the team if approved by the Board in the FY24 budget.

CONCLUSION

As of March 31, 2023, SERS' Total Fund had net returns of 7.81% over five years and 8.22% over ten years exceeding the actuarial rate of 7.00% by a good margin thus improving the funded ratio of the plan. Staff will remain focused on adding value relative to policy benchmarks and managing risks and costs.

Staff appreciates the support and guidance received from the Board in FY2023 and looks forward to working with the Board in FY2024 for another successful year.

EXECUTIVE SUMMARY

ACKNOWLEDGEMENTS

SERS is very fortunate to have an experienced and deep Investment Staff. The following individuals contributed to this report.

- Economic Outlook – Farouki Majeed and Hai Yen Le
- Total Fund Asset Allocation – Farouki Majeed
- Global Equities – Judi Masri and Hai Yen Le
- Global Private Equity – Steve Price and Phil Sisson
- Global Fixed Income – Jason Naber
- Global Private Credit – Adam Messerschmitt, Phil Sisson, and Michael Browning
- Global Real Assets – Paul Cheng and Michael Browning
- Cash Equivalents & Securities Lending – Jason Naber
- Opportunistic and Tactical – Farouki Majeed, Phil Sisson, Michael Browning, and Adam Messerschmitt
- Overlay Program – Farouki Majeed, Jason Naber, and Judi Masri
- Investment Risk Management and Analytics – Hai Yen Le and Michael Browning
- Investment Operations – Terri Martin and Katie Swank

We would appreciate the opportunity to review the Annual Investment Plan with you at the June 2023 Board meeting. If you have any questions or comments before then, please let me know.

Respectfully submitted,



Farouki A. Majeed
Chief Investment Officer



Global Economic Outlook

GLOBAL ECONOMIC OUTLOOK

After a strong recovery in 2021, both the US and global economy growth slowed in 2022 and further decline in growth is expected for 2023 as shown in tables below. High inflation and aggressive tightening of monetary policy by the Fed to counter high inflation and labor shortages were major challenges to the US economy in 2022. Geopolitical risk intensified with the Russian-Ukraine war causing inflationary pressures in food and energy prices.

Global inflation increased significantly from 4.7% in 2021 to 8.8% in 2022 and is expected to fall to 6.5% in 2023 according to the International Monetary Fund (IMF). US headline inflation reached its peak of 9.1% in June 2022, then declined to 5.0% in March 2023. Global supply chain improvement and tighter monetary policy as well as slowing economic growth are the main factors helping ease inflation.

The US labor market remained strong although tight, adding 4.8 million jobs in 2022 and 1.1 million jobs in Q1 2023. The unemployment rate remained low at 3.5% in March 2023. To curb inflation, the Fed conducted seven interest rate hikes in 2022, and three hikes in the first five months of 2023 raising the federal funds rate from 0-0.25% in January 2022 to 5.00-5.25% in May. Further action by the Fed will depend on inflation, labor market, and banking system's health. The 10-year rate increased from 1.63% in December 2021 to 3.88% in December 2022 and declined to 3.44% by April 30, 2023. The yield curve has been inverted with 3-month rate being higher than the 10-year rate since October 2022, indicating the economy entered a highly uncertain phase.

In 2022, US equity markets were down 19.2%. Non-US developed markets were also down 14.3% while emerging markets lost 20.1%. US consumer sentiment stayed below the historical average throughout 2022 and Q1 2023, due to persistently high inflation and slower economic growth concerns.

Economic forecasts from the Blue Chip Consensus (US) and the IMF are presented below:

US ECONOMY

The Blue Chip consensus expects the US economy growth rate to slow down to 1.0% in 2023 and 1.1% in 2024 amid concerns of negative impacts of tightening financial conditions to the overall economy (Table 1).

According to the Blue Chip Economic forecasts, the unemployment rate is expected to increase from a historically low level of 3.6% in 2022 to 3.9% in 2023 and 4.5% in 2024. Inflation is expected to trend down further from the 2022 peak to 3.9% in 2023, then 2.5% in 2024. The yield on 10-year US Treasuries is expected to be 3.7% in 2023 and 3.4% in 2024, being lower than 3-Month T-Bill yield as the yield curve is expected to stay inverted through 2023 and 2024. US corporate profits are expected to weaken to negative \$0.7 trillion in 2023 and improve to positive \$2.3 trillion in 2024. Estimated S&P500 earnings growth is negative 6.8% for Q1 2023. The Analysts' Consensus expected the earnings growth to be negative 6.6% in Q2, then positive 1.4% in Q3, 9.7% in Q4 2023, and 12% for 2024.

Table 1

Period	Real GDP Growth Rate (%)	Unemployment Rate (%)	Inflation Rate CPI (%)	T-Bill 3-Mo. (%)	T-Note 10-Yr. (%)	Corporate Profits (Cur. \$)
2019	2.3	3.7	1.8	2.1	2.1	3.9
2020	(2.8)	8.1	1.2	0.4	0.9	(5.9)
2021	5.9	5.4	4.7	0.0	1.4	22.6
2022	2.1	3.6	8.0	2.1	3.0	N/A
2023 Consensus	1.0	3.9	3.9	4.9	3.7	(0.7)
2024 Consensus	1.1	4.5	2.5	3.9	3.4	2.3

Source: Blue Chip Economic Indicators, April 2023

GLOBAL ECONOMY

The IMF forecasted global GDP growth to slow to 2.8% in 2023 and then improve to 3.0% in 2024 (Table 2). For 2023, emerging and developing economies are expected to grow faster than advanced economies as the former's expected growth rate is 3.9% while the latter's is 1.3%. For 2024, emerging and developing economies are projected to marginally increase to 4.2%, maintaining their growth advantage versus the advanced economies which are expected to grow 1.4%.

GLOBAL ECONOMIC OUTLOOK

Table 2

Annual GDP Growth (in percent)	2022	2023 (projected)	2024 (projected)
World	3.4	2.8	3.0
US	2.1	1.6	1.1
Advanced Economies (including US)	2.7	1.3	1.4
Emerging and Developing Economies	4.0	3.9	4.2

Source: International Monetary Fund World Economic Outlook, April 2023

Portfolio Strategy

PORTFOLIO STRATEGY – Total Fund Asset Allocation

Actual asset allocation relative to policy target is shown in the table below:

	FY23 Target	Range	Actual			FY24 Target
			3/31/2023	7/1/2022	7/1/2021	
Global Equities	45%	35 – 45%	41.7%	41.0%	48.6%	40%
Global Private Equity	12%	11 – 17%	12.6%	12.9%	10.4%	14%
Global Fixed Income	19%	13 – 23%	13.3%	12.6%	15.1%	18%
Global Real Assets	17%	17 – 22%	20.9%	20.9%	14.8%	20%
Global Private Credit	5%	3 – 7%	5.8%	4.6%	2.4%	5%
Opportunistic	0%	0 – 5%	3.4%	4.8%	4.3%	0%
Cash	2%	1 – 5%	2.0%	3.0%	4.4%	3%
Total Fund	100%		100%	100%	100%	100%
Leverage	N/A	0% - 10%	0%	N/A	N/A	N/A
Total Notional Exposure (Including Leverage)	100%	100% - 110%	100%	100%	100%	100%

Staff has maintained an underweight in Global Equities and Global Fixed Income, relative to the FY23 policy targets and overweight in Global Real Assets, overweight in Opportunistic investments and overweight in Cash during FY2023. Total Fund FYTD returned 4.41%, matching the benchmark with a 1bps excess return mostly due to the positive selection effects in Private Equity, Real Assets and Fixed Income as these asset classes exceeded their respective benchmarks.

Both Global Equity and Global Fixed Income, which together account for nearly 60% of the Total Fund, had negative returns in CY2022 as inflation spiked and interest rates tightened causing valuations to compress. Interest rates are likely nearing a peak in the U.S and the Fed fund rate may stay for longer before heading down. The slowing economy is impacting corporate profits negatively. In addition, the liquidity crisis in the banking industry, which started in March 2023 will lead to tighter credit conditions for companies and consumers, could increase the probability of a recession. The current environment is characterized by high volatility in the equity and fixed income markets. Staff believes it would be appropriate to maintain underweight positions in both equity and fixed income relative to targets in this environment, but be prepared to increase the allocation to fixed income when the interest rates have peaked and the yield curve ceases being inverted.

The Board approved a new Asset Allocation Policy effective July 1, 2023. Global Equity was reduced by 5% while Private Equity and Real Assets increased by 2% and 3%, respectively. Fixed Income was reduced by 1% and Cash increased by 1%. The changes increased the Total Fund expected return by 2 basis points and reduced expected risk by 7 basis points while maintaining the cash yield advantage to fund the deficit between pension benefit payments and employee/employer contributions.

PORTFOLIO STRATEGY - Global Equities

INVESTMENT STRATEGY

SERS invests in equity securities to earn a premium over government treasury bonds, which is compensation for assuming the higher risk inherent in public equity securities. A sizeable allocation to Global Equities is necessary to meet the long-term return goal.

SERS' Statement of Investment Policy sets the Global Equities target allocation as follows:

	FY23 Total Fund Target	FY24 Total Fund Target	Permissible Range
Global Equities	45%	40%	35% - 45%

The performance objective of the Global Equity portfolio is to exceed the return of the MSCI All Country World Net Total Return Index (USD) by 30 basis points net of management fees.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Monitor the portfolio for possible performance enhancement.*

After outperforming FYTD through February 2023 by 53bps net of fees, Global Equities (GE) underperformed 103bps in the month of March due to the portfolio's marginal value tilt negatively impacting the portfolio after Silicon Valley Bank's bankruptcy and UBS assuming control of Credit Suisse. Overweighting US small cap added value, but overweighting Non-US small cap detracted from the FYTD return. The GE portfolio underperformed the benchmark by 56 bps for FYTD through March 2023 but outperformed for longer periods by 0.44% for 1-Year, 0.43% for 3-Years and 0.35% for 5-Years.

- *Complete the US Equity Small Cap Growth and Core manager searches.*

A Small Cap Growth mandate was hired and funded \$50 million on June 1, 2022, and has a since inception excess return of 5.50% through March 2023. A Small Cap Core mandate was hired and funded \$50 million in two tranches during October 2022 and February 2023 with a since inception excess return of 1.87% through March 2023.

- *Transition the Global Equity portfolio's structure from regionally specific mandates and benchmarks to global mandates and a global benchmark, the MSCI ACWI. The transition includes allocating to global mandates and converting the regional market allocations to MSCI ACWI geographic allocation ranges.*

The new global equity portfolio with two composites (Global and Regional) was effectively and fully transitioned as of July 1, 2022. As of March 2023, the allocation was 16.4% in the Global Composite and 83.6% in the Regional Composite. Staff has continued to monitor regional weightings in the Regional Composite versus the MSCI ACWI benchmark with an overweight to US and underweights to developed markets (DM) and emerging markets (EM), which has been performance additive.

- *Manage the Global Equity portfolio structure relative to benchmark exposures to achieve appropriate risk and return characteristics.*

Both the US and DM portfolios have slight value tilts and are overweight small cap FYTD. The value tilt was additive FYTD through February 2023, but value was a headwind in March with Silicon Valley Bank's default and UBS saving Credit Suisse. The US small cap overweight was helpful to performance through February, but detracted FYTD in DM.

- *Engage with Wilshire on a portfolio structure review. Global Equity will be reviewed for appropriate US and Non-US allocations, correct benchmarks, active-passive allocation, and detailed manager alignment. Make portfolio adjustments, as necessary.*

Staff engaged with Wilshire on a portfolio review during the first quarter of the FY. Two primary outcomes came from this review:

1. Moving DE Shaw to a portable alpha program in US equities effective October 1, 2022. The mandate has a 1.36% excess return through March 2023.

PORTFOLIO STRATEGY - Global Equities

2. Conducting an EM search with Connor, Clark & Lunn (CC&L) funded \$50 million on March 1, 2023.
- Review IMAs and Investment Guidelines on the review schedule and make necessary adjustments as needed.

The Arrowstreet Capital IMA was renegotiated in June 2022 for the new global mandate effective July 1, 2022.

CURRENT MARKET CONDITIONS AND OUTLOOK

Cumulative Periods through March 31, 2023	Annualized Returns (in percent)				
	FYTD	1 Year	3 Year	5 Year	10 Year
Russell – 3000 Index	9.75	(8.58)	18.48	10.45	11.73
Russell – 3000 Growth Index	12.56	(10.88)	18.23	13.02	14.16
Russell – 3000 Value Index	6.92	(6.35)	18.12	7.30	8.99
Russell – 1000 Index	9.93	(8.39)	18.55	10.87	12.02
Russell – 2000 Index	6.75	(11.60)	17.51	4.71	8.04
MSCI – AC World Index (\$Net)	9.75	(7.44)	15.36	6.93	8.06
MSCI – AC World Ex-USA Index (\$Net)	10.03	(5.07)	11.80	2.47	4.17
MSCI – World Ex USA Index (\$Net)	13.96	(2.74)	13.49	3.80	4.91
MSCI – Emerging Markets Index (\$Net)	0.84	(10.70)	7.82	(0.91)	2.00

Source: Wilshire Compass

Fiscal years begin July 1 and end on June 30

After a strong year in 2021, global equity markets (MSCI ACWI) experienced a large draw down of 25.6% for the first three quarters of 2022 due to persistently high inflation, rising interest rates, and the break-out of the Russia-Ukraine war. The markets bounced back with a 9.8% return in Q4 as Europe avoided an expected recession; China started relaxing its zero COVID tolerance policy; and US growth rebounded. Overall, CY 2022 was a down year for equities as MSCI ACWI was down 18.4%; US equity (Russell 3000) was down 19.2%; Non-US developed markets (MSCI World ex USA) were down 14.3% and Emerging markets (MSCI EM) were down 20.1%. Q1, 2023 was volatile with US regional bank troubles, but all major indices finished positive. With two positive quarters, global equity markets had a gain of 9.8% for FYTD through March 2023.

The US equity market was broadly down in 2022 without exceptions by style or capitalization size. Nevertheless, value stocks (Russell 3000 Value) performed better than growth stocks (Russell 3000 Growth) as rising interest rates were particularly challenging for growth stocks in 2022. Russell 3000 Value was down 8% while Russell 3000 Growth was down 29% in CY2022. The size did not have a great performance impact as large cap stocks (Russell 1000) were down 19.1% and small cap stocks (Russell 2000) were down 20.4% in 2022. However, due to market expectations for an end to the rate hiking cycle and the US regional bank turmoil in March, Value underperformed Growth and Small underperformed Large in Q1 2023. For FYTD as of March 31, the US equity market gained 9.8%.

Non-US Equity Developed Markets (MSCI World ex US Index) posted a (2.7%) return for 2022, outperforming US markets as Europe withstood the energy crisis caused by Russian supply disruption better than expected, and the US dollar depreciated. MSCI World ex US also outperformed the US market for FYTD through March with a 14.0% return; however, the index lagged the US market for the longer periods.

Non-US Equity Emerging Markets (MSCI EM) declined 10.7%, performing worse than developed markets in 2022. China's delayed business reopening from COVID-restrictions and the Russia-Ukraine war had negative impacts on emerging markets' performance in 2022. Emerging Markets rebounded at the end of 2022 and early in 2023, but only delivered 0.8% for FYTD as of March 2023.

Equity market volatility is expected to be elevated due to high interest rates, high inflation, and slower growth or even recession concerns. Thus, global equity returns are expected to be lower near-term. Market valuations are close to the historical average. Emerging and developed ex-US companies are trading at about 15 times earnings while the US equity market is more expensive, trading at 23 times earnings.

PORTFOLIO STRUCTURE

At the end of March, Global Equity was underweight the 45% target allocation by 3.2%. The Staff controlled regional composite has the following exposures:

PORTFOLIO STRATEGY - Global Equities

- The US portfolio was 2.25% overweight relative to its 60.56% MSCI ACWI target allocation,
- The Non-US Developed Market portfolio was underweight by 0.45% relative to its 28.50% MSCI ACWI benchmark target allocation, and
- The Non-US Emerging portfolio was underweight by 1.80% relative to its 10.94% MSCI ACWI benchmark target allocation.

The Global Equities allocation will be reduced to the FY 2024 policy target of 40% and may remain underweight in the near-term, depending on the equity risk adjusted return attractiveness relative to other asset classes in the Total Fund.

Both the US and Non-US portfolios maintain a small capitalization bias and a marginal value style tilt. The value tilt will gradually be reduced as interest rates are nearing their peak. The portfolio will remain overweight to small capitalization stocks, as small caps are undervalued relative to large cap. The US portfolio is currently 71.1% passively managed, which may slightly decline as active low beta managers are expected to outperform passive during a declining market. The Non-US portfolio is 71.6% active in Developed markets and 100% active in Emerging markets as active management is expected to be more successful in more inefficient Non-US Equity markets.

FY2024 OBJECTIVES

Staff will focus on the following objectives during FY2024:

- Monitor the portfolio for possible performance enhancement, completing searches, as necessary.
- Manage the Global Equity portfolio structure relative to benchmark exposures to achieve appropriate risk and return characteristics.
- Review IMAs and Investment Guidelines to make any necessary adjustments.

PORTFOLIO STRATEGY – Global Private Equity

INVESTMENT STRATEGY

SERS invests in private equity to provide risk adjusted returns in excess of those provided by publicly traded equities.

SERS' Statement of Investment Policy sets the Private Equity target allocation as follows:

	FY23 Target	FY24 Target	Permissible Range
Global Private Equity	12%	14%	11% - 17%

The performance objective for Private Equity is to provide returns in excess of the Burgiss All Private Equity Benchmark, one quarter in arrears.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Manage the Private Equity portfolio and fiscal year commitments to reflect the increased investment allocation of 12%, subject to identifying opportunities that meet SERS' investment criteria.*

The Private Equity allocation is 12.6% as of March 31, 2023. This is slightly above the allocation target of 12% but well within the upper range of 16%. To date, \$216 million has been committed to three funds, and three co-investments.

- *Review the Private Equity portfolio strategy and structure and develop a plan to improve risk and return characteristics of the portfolio, achieve fee reductions and optimize manager counts as appropriate.*

To date, three commitments have been made to private equity funds with an average management fee of 1.7%. Additionally, three commitments were made to co-investments that have no management fees or carried interest. Together the average management fee on all approved commitments is 1.1%. These private equity commitments are diversified by investment strategy, sector focus and geography.

- *Actively seek co-investment opportunities where appropriate with current SERS' private equity general partners who meet co-investment criteria, as outlined in the Private Equity co-investment guidelines.*

Staff reviewed several co-investment opportunities throughout the fiscal year. Three opportunities met SERS criteria and were approved in fiscal year 2023. The Private Equity portfolio has a total of 13 approved co-investments totaling \$139.8 million. The co-investments are in various stages of their life cycle and are generating an IRR of 21% and a 1.8x multiple of invested capital as of December 31, 2022.

- *Research and identify new and innovative investment opportunities with managers who offer compelling return expectations. These new opportunities may be used for a combination of purposes to replace current managers who no longer meet SERS' investment criteria or to target strategies that are not currently a directly invested component of the Private Equity portfolio.*

Staff reviewed over 100 investment offerings during the fiscal year 2023. One opportunity with a new manager met the investment criteria and SERS committed a total of \$50 million to this fund in fiscal year 2023.

PORTFOLIO COMPOSITION

	Allocations as of March 31, 2023	Target Ranges
Buyout	80%	55% - 95%
Venture Capital	5%	0% - 10%
Special Situations	10%	5% - 25%
Co-Investments	5%	0% - 25%
Domestic	80%	55% - 95%
International	20%	5% - 45%

PORTFOLIO STRATEGY – Global Private Equity

CURRENT MARKET CONDITIONS AND OUTLOOK

Despite a number of headwinds that included the war in Ukraine, inflation, and growing tension between the US and China, private equity continued to expand its record-breaking run of deal activity during the first six months of the year. However, the Federal Reserve's decision to raise interest rates by 75 basis points and then to continue raising them signaled the end of cheap debt in the buyout markets. The combination of concerns about inflation and rate increases drove speculation about a recession which in turn caused banks to be more cautious about providing debt to private equity backed companies. As a result, year-end totals for private equity deals, exits and fund raising were all down considerably. In taking a closer look at the data, transactions fell to \$657 billion in 2022. Although still a large number this was well below the record of \$1.1 trillion set in 2021. The volume of deals completed in 2022 fell to 2,318. Fund-raising also declined last year by approximately 16% with a total of \$347 billion in capital raised resulting in a total of approximately \$3.7 trillion of dry powder available across all fund types and all geographies at the end of 2021. The intense competition for assets that has led to growth in purchase price multiples and made it very difficult for private equity firms to find and purchase companies continued in 2022. Purchase price multiples have risen from approximately 9.0 times earnings in 2011 to an average of 11.9 times earnings in 2022, slightly down from 12.3 in 2021 but still ahead of prior periods. The change in conditions also impacted exits in 2022. Exits declined from over 1,500 exits in 2021 to approximately 600 exits totaling \$565 billion in 2022. Economic uncertainty combined with elevated purchase valuations and a steady flow of dry powder once again underscores the importance of identifying and backing high quality private equity managers that remain disciplined in their process, due diligence and selection criteria throughout investment cycles.

Nonetheless, as illustrated in the below table, Private Equity continues to generate solid performance over all periods.

Annualized Returns (in percent) for Periods Ended March 31, 2023				
Fund Type	1-Year	3-Years	5-Years	10-Years
SERS Private Equity	1.70	21.64	18.66	18.28
Burgiss Benchmark	(5.76)	17.69	15.52	15.30

Source: Burgiss All Private Equity Index

The long-term outlook for private equity remains positive. In the near term, the industry could be influenced by a wide range of factors that may include the economic effects of higher interest rates, inflation, slower economic growth and global trade implications. It is too early to tell what impact these issues may have on the private equity market, however, in the near-term it is expected that fundraising and exit activity will continue at or near the year end 2022 levels. Valuations remain elevated and investor appetite for private equity is expected to continue to rise. As mentioned earlier, the increased price expectations for sellers has resulted in the average private equity firm paying a higher price to acquire new portfolio companies. However, private equity firms with finely tuned strategies and repeatable value-creation models will prosper. Top quartile private equity managers find ways to overcome problems, generate returns for their limited partners and earn the capability to raise additional funds.

With this in mind, the outlook for the SERS Private Equity portfolio is favorable. Current market conditions reflect positively on the style of investing employed by the general partners that make up the core of the SERS Private Equity portfolio. Quality investments can be identified in the current market; however, finding these companies requires patience, discipline and the ability to fully understand the operations of the target company. The full impact of the pandemic, global trade implications, rising inflation and lower economic growth on private equity remains to be seen. Navigating through these issues to date has required firms to pay close attention to portfolio operations and in some cases reassess their approach to value creation. Top private equity firms understand and displayed their ability to create and maintain value in portfolio companies under difficult conditions in 2020, 2021 and again in 2022, generating an opportunity for investors to separate the top private equity firms more easily from the rest of the pack. SERS' Private Equity portfolio is comprised primarily of general partners who have demonstrated their ability to identify, create value and exit companies in all market environments. In an effort to ensure the portfolio is properly positioned for future uncertainty, our goals for the fiscal year include: continuing to identify and invest with operationally focused managers who primarily target the middle market and avoid the competition in the large and mega space; increasing exposure to attractive investments that meet our criteria and offer lower costs through co-investments; and ensuring that we stay on top of market trends and opportunities by continuing to research and seek out managers offering investment strategies that deliver private equity like returns with differentiated and unique strategies. Additionally, as the Total Fund moves into what many believe will be a low return environment,

PORTFOLIO STRATEGY – Global Private Equity

we will seek to maintain the allocation level of Private Equity to slightly above its target of 14% to obtain the benefit of this higher returning asset class to the Total Fund level. This will take time as Private Equity is a long-term asset class where manager selection is critical and additional capital takes more time to deploy.

FY2024 OBJECTIVES

Staff will focus on the following objectives during FY2024:

- Manage the Private Equity portfolio and fiscal year commitments to reflect the investment allocation of 14%, subject to identifying opportunities that meet SERS' investment criteria.
- Review the Private Equity portfolio strategy and structure and develop a plan to improve risk and return characteristics of the portfolio, achieve fee reductions and optimize manager counts as appropriate.
- Actively seek co-investment opportunities where appropriate with current SERS' private equity general partners who meet co-investment criteria, as outlined in the Private Equity co-investment guidelines.
- Research and identify new and innovative investment opportunities with managers who offer compelling return expectations. These new opportunities may be used for a combination of purposes to replace current managers who no longer meet SERS' investment criteria or to target strategies that are not currently a directly invested component of the Private Equity portfolio.

PORTFOLIO STRATEGY - Global Fixed Income

INVESTMENT STRATEGY

SERS invests in fixed income assets for the primary purpose of risk diversification and decreasing the overall risk of the investment plan. Fixed income assets may include sovereign debt securities, global corporates, securitized securities, private placements, convertibles, derivatives, and currency.

SERS' Statement of Investment Policy sets the Fixed Income target allocation as follows:

	FY23 Target	FY24 Target	Permissible Range
Global Fixed Income	19%	18%	13% - 23%

The performance objective for the Fixed Income portfolio is to exceed the Bloomberg US Aggregate Bond Index, net of manager fees, by 60 basis points over rolling three-year periods.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Manage the portfolio structure and risk relative to the benchmark as the central banks around the globe embark on a rate hiking cycle and quantitative tightening over the next several years.*

The portfolio returned 1.13% through March 2023, outperforming the benchmark by 123 basis points. Rising interest rates have been a headwind to fixed income performance over the last 12 months. The portfolio continued to be underweight interest rate duration during the last year, and this has been the leading contributor to the outperformance. The portfolio has gradually reduced the duration underweight as the Federal Reserve gets closer to the end of its interest rate hiking cycle.

- *Tactically manage the allocations to core, core plus and tactical and diversifying sectors to enhance the risk and return tradeoff. Continue to research other potential new and innovative investment opportunities to mitigate the impact of rising interest rates and diversify sources of return.*

During the fiscal year, \$70 million was contributed to core strategies, \$50 million to core plus strategies and \$60 million to tactical and diversifying strategies. The contributions moved the portfolio to a more defensive position by lowering portfolio duration, allocating to outperforming strategies and reducing the active risk of the portfolio during a period of rising interest rates and higher market uncertainty.

- *Review IMAs and Investment Guidelines to make any necessary adjustments.*

One core manager's contract is currently being fully renegotiated and is expected to be finalized before the end of the fiscal year. A second core manager's investment guidelines were modified in Q2 2023 to position the portfolio more defensively going forward.

CURRENT MARKET CONDITIONS AND OUTLOOK

The Bloomberg US Aggregate Bond Index returned (0.09%) for FY2023 through March 2023. The major sectors of the index had mixed performance during this period. US Treasuries were down 0.76% and mortgages down by 0.88% as rising interest rates and the Fed's ongoing balance sheet reduction program negatively impacted the sectors. Investment grade corporates returned 1.84% with the positive impact of an average yield of 5.24% and credit spread compression offset by a negative impact from higher interest rate exposure in a rising rate environment. The asset-backed sector returned 1.30% with consumer balance sheets remaining healthy, but higher interest rates are starting to have an impact on spending. The best performing core plus sector was high yield debt at 7.19%, which has benefited from an average yield of 8.6%, a below average default rate and credit spread compression during the fiscal year. A 50/50 blend of local currency and US dollar-denominated emerging market debt returned 6.90% fiscal year to date with an attractive 8% average yield. Local currency bonds outperformed US dollar bonds by 3.58% due to the weaker US dollar in FY2023 and ongoing high volatility in emerging markets.

The Federal Reserve conducted the third interest rate hike of 0.25% in 2023, after seven hikes in 2022, in an attempt to curb inflation. Labor markets have been resilient and slowing wage gains may be difficult, so the central bank will remain focused on economic data releases. Markets are anticipating the US to enter a recession at some point in the next 12 months. A neutral to long duration stance will have a positive performance impact if the central bank

PORTFOLIO STRATEGY - Global Fixed Income

cuts interest rates to address slowing growth. A cautious stance and a focus on high quality fixed income sectors like US government, agency mortgage back securities and investment grade corporates are warranted given the uncertain outlook.

PORTFOLIO STRUCTURE

The Fixed Income portfolio is currently weighted 47% core, 41% core plus and 12% to tactical and diversifying strategies. The portfolio currently has a yield of 5.39% relative to the benchmark yield of 4.39% with an average investment grade credit rating of A+, which is two grades lower than the benchmark rating of AA. The Federal Reserve may have reached the end of its rate hiking cycle and expects to keep rates at this level until the end of 2023. During the fiscal year, the portfolio duration moved closer to the benchmark duration by 0.4 years and stood at 0.3 years shorter than the benchmark duration at the end of March 2023. Going forward, we expect to continue to increase portfolio duration in FY2024 in anticipation of future interest rate cuts.

The portfolio is underweight US government assets and overweight credit sectors to earn additional yield and price appreciation over the benchmark. The allocation to US Treasury and Agency securities increased by 3% over the year as the portfolio reduced risk. Allocations to emerging market debt and high yield debt were reduced by 3% during the year as the portfolio's core plus exposure was reduced. The portfolio allocation to mortgages increased by 4% during the year but continued to be underweight as the Federal Reserve continues to reduce the mortgage allocation on its balance sheet. The asset-backed exposure was stable during the year while the commercial mortgage-backed exposure remains underweight due to the unfavorable outlook for the sector.

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- Manage the portfolio structure and risk relative to the benchmark as central banks globally reach peak interest rates and the potential for a US recession grows.
- Explore ways to increase the fixed income allocation to reduce the current underweight using cash securities or derivatives as the outlook for fixed income assets is attractive going forward.
- Tactically manage the allocations to core, core plus and tactical and diversifying strategies to enhance the risk and return tradeoff. Continue to research new and innovative investment opportunities to position the portfolio for a potential recession, falling interest rates and to diversify sources of return.
- Engage with Wilshire on a Fixed Income portfolio structure review focusing on strategy allocations, manager and sector weights and consider new strategies. Make portfolio changes as appropriate.
- Review IMAs and Investment Guidelines to make any necessary adjustments.

PORTFOLIO STRATEGY – Global Private Credit

INVESTMENT STRATEGY

SERS invests in private credit to provide risk adjusted returns in excess of those offered by publicly traded fixed income securities and to generate a consistent cash yield.

SERS' Statement of Investment Policy sets the Global Private Credit target allocation as follows:

	FY23 Target	FY24 Target	Permissible Range
Global Private Credit	5%	5%	3% - 7%

The performance objective for Global Private Credit is to produce net of fee returns in excess of the 90-day Treasury bill rate + 4.5%, one quarter in arrears.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Increase the Private Credit allocation to 5% of the Total Fund by making new investments that fit the SERS' investment policy, while managing the portfolio in conjunction with the pace of capital drawdowns for existing commitments.*

At the end of 2022, the Global Private Credit allocation increased to 5.8% of Total Fund and exceeded the policy target of 5%. To date, Staff executed nearly \$1.5 billion in new capital commitments and total unfunded capital commitments decreased to \$800 million from the prior year as new fund investments progress through the investment period. Of the new capital commitments executed, \$230 million was completed during fiscal year 2023. Deployment has slowed since the portfolio is over target, which has been amplified by the volatility in the public markets.

- *Build the Private Credit allocation in line with the implementation guidelines and ensure appropriate risk and return characteristics are present within the new target allocation.*

Staff executed \$1.3 billion in capital commitments to investments that fall within the direct lending sub-asset class and \$175 million within the stressed/distressed sub-asset class. The portfolio weight exceeded the target allocation of 5% by 80 basis points at the end of 2022, but all sub-asset classes fell within the ranges stated in the implementation guidelines. In addition, Staff executed investments that are diversified across industries, geographies, and types of private credit instruments. Most of the new investments have been made within the direct lending sub-asset class, which is primarily comprised of investments that are senior in the capital structure of a company, contain a contractual income component, are structured with robust covenants to protect investors, and have priority over a company's cash flows or other assets in the event of a default.

- *Evaluate new investments with a cautious approach given the economic outlook and the rising interest rate environment, while focusing on increasing the cash yield of the portfolio and income distribution to the Total Fund.*

All the investments that have been executed or considered for the Private Credit portfolio include an income component, which is expected to comprise the largest part of the investment return. Most of the underlying investments within private credit funds include a contractual cash payment that is distributed to investors in the form of income on a quarterly basis. As base rates increase, the income generated from the underlying loans also increases. During the fiscal year, Staff remained focused on investing with managers with robust due diligence processes and closely monitored the ability of portfolio companies to withstand a rising interest rate environment and the potential for a slowing economy.

- *Consider differentiated strategies that can add further diversification to the portfolio while also contributing to the portfolio's return and cash yield.*

During the fiscal year, Staff reviewed numerous differentiated strategies that could provide additional diversification benefits to the portfolio and will continue to consider new strategies that could be a fit for the portfolio. Overall capital deployment has slowed given the target allocation for Private Credit has been exceeded, but as capital becomes available, Staff will continue to consider adding differentiated strategies to the portfolio.

- *Continue to look for co-investment opportunities with existing managers that could be a fit for the portfolio and that increase the portfolio's cash yield.*

There were no co-investments made during the fiscal year. Staff reviews co-investment opportunities if they arise, but the volume tends to be less than other private asset classes and the speed of execution tends to be much quicker.

PORTFOLIO STRATEGY – Global Private Credit

CURRENT MARKET CONDITIONS AND OUTLOOK

The private credit market continued to grow in 2022 and reached an estimated \$1.4 trillion in assets under management at the end of the year, which was higher than earlier forecasts. The private credit market is forecast to reach over \$2 trillion in the next several years. During 2022, fundraising activity slowed given the economic uncertainty and rapidly increasing interest rates as the Federal Reserve shifted its monetary policy. Many investors paused on new investments within the private credit space given the uncertainty of corporate earnings growth, rising inflation, and the ability of companies to service debt obligations. Nonetheless, over \$200 billion was raised within private credit funds during 2022. The direct lending strategy raised approximately \$90 billion during the year, which was a decrease from 2021. The leveraged loan market faced a sharp decline in new issuances throughout most of the year as traditional banks pulled back from lending to the middle-market, but activity began to pick up towards the end of 2022. As seen in prior years, larger companies turned to the private credit market for financing needs given the lack of readily available capital. Loan defaults also began to increase across the credit markets and the level of U.S. distressed loan increased drastically to an estimated \$100 billion towards the end of 2022. It is estimated that loan default rates will continue to trend upwards in the coming years as companies need to recapitalize balance sheets to deal with rising costs and interest rates. However, deal activity continued to remain strong within the private credit market since many companies had no alternative source of financing, which led to a lender-friendly market with tighter covenants and better pricing terms for investors.

The private credit market began to experience valuation markdowns during 2022, primarily due to mark-to-market movements impacting broader public markets. However, cash yields continued to increase with rising interest rates, providing an attractive return for investors. In particular, the income focused direct lending strategy delivered an estimated 9.5% yield to investors, which was an attractive premium over the U.S. non-investment grade, U.S. investment grade, and 10-year U.S. Treasury yields of 8.6%, 5.3%, and 3.7%, respectively.

The outlook for the private credit market is positive with considerable growth still expected even with the uncertain economic stability in coming years. The regional banking crisis in the first quarter of 2023 gives rise to the possibility for increased regulatory scrutiny, declining net interest rate margins, and a reassessment of their lending business model. As regional banks reassess and regroup, they may restrain their lending, which could result in additional deal flow for private lenders.

The general expectation is that the Federal Reserve will slow its interest rate increases, but that interest rates will remain elevated for longer than originally expected. While rising rates may negatively impact other assets classes, it can add to returns within the private credit asset class since many loans are structured with a floating interest rate. But the likelihood of higher default rates also increases given the uncertainty around whether the borrowers will be able to withstand interest rates at these higher levels for an extended period. Therefore, it is important for private lenders to conduct a rigorous underwriting process on portfolio companies to ensure borrowers can withstand the impacts of further interest rate increases. Since the pipeline of opportunities is expected to be robust, private lenders can be even more disciplined when selecting borrowers. Thus, resulting in the ability to originate loans with better protections in place for the lender, while providing downside protection and an attractive cash yield for investors.

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- Manage the Private Credit allocation within the target allocation range while considering the pace of drawdowns for new investments and re-evaluate existing manager performance as new capital is raised.
- Build the Private Credit allocation in line with the implementation guidelines and ensure appropriate risk and return characteristics are present within the target allocation.
- Evaluate new investments with a cautious approach given the economic outlook and the rising interest rate environment, while focusing on increasing the cash yield of the portfolio and income distribution to the Total Fund.
- Consider adding differentiated strategies to the portfolio if capacity permits that could add further diversification to the portfolio, while also contributing to the portfolio's return and cash yield.
- Review the appropriateness of the benchmark and recommend changes if necessary.

PORTFOLIO STRATEGY - Global Real Assets

INVESTMENT STRATEGY

The role of SERS' Global Real Assets portfolio is to provide a stable income return from tangible assets, to be a partial inflation hedge over the long term and to provide low correlation to equities.

SERS' Statement of Investment Policy sets the Global Real Assets target allocation as follows:

	FY23 Target	FY24 Target	Permissible Range
Global Real Assets	17%	20%	17% - 22%

The performance objective for Global Real Assets is to produce net of fee returns in excess of the NCREIF Property Index ("NPI"), one quarter in arrears, over a market cycle, with the income component of the return comprising a significant portion of the total return.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Formulate and implement a portfolio allocation strategy that factors in macroeconomic risks.*

FY2023 was impacted by inflation and economic uncertainty. Staff submitted redemptions from private and public real estate managers that are more correlated to economic growth. Staff also made a new commitment to a core infrastructure fund that has inflation-linked contracted revenues and higher cash yield.

- *Formulate and implement a one-year plan to achieve and maintain a 17% allocation to Real Assets.*

As of March 2023 the Real Assets portfolio allocation is 20.9% of the Total Fund. The Real Assets team was highly selective in deploying new capital to manage its allocation. During 2022, approximately \$337 million of capital was called, and Staff made new commitments totaling \$100 million. Staff submitted \$200 million of redemptions from private real estate funds and \$65 million from the public REITs fund. As of May 2023, SERS has received \$23 million of the \$200 million in private real estate redemptions submitted during FY23. SERS has received all the redemptions from public REITs.

- *Tactically manage the existing real estate and infrastructure allocations to improve portfolio structure and achieve favorable risk-adjusted returns.*

The Real Asset portfolio had about \$337 million of capital called during 2022. Most of the capital called (\$195 million) during 2022 was invested in core real estate and infrastructure fund strategies. Of the \$100 million in new commitments during 2022, the majority (\$90 million) was to core strategies. Redemptions were made during the year from REITs to reduce the volatility within the portfolio. The emphasis remains on operating assets, with the current exposure at 93%, vs non-operating assets at 7%.

- *Evaluate new investment strategies for the Real Assets portfolio such as niche real estate property types, non-US real estate, energy transition, listed infrastructure funds, and secondaries.*

Staff evaluated many new mandates for the portfolio and made commitments to three new investments during the year. Among the investments Staff committed to was a US core farmland fund, the first real estate co-investment during 2022. The new commitments will add exposure to new asset types in the Real Asset Portfolio.

- *Actively pursue co-investment opportunities with existing Real Assets managers.*

Staff reviewed several co-investment opportunities with existing general partners during 2022. Staff successfully executed two co-investments, one in a European mobile cell towers platform and the other in a self-storage portfolio.

CURRENT MARKET CONDITIONS AND OUTLOOK

Across most property types, real estate returns were strong in 2022, rebounding from their pandemic lows. SERS' Real Assets portfolio returned 16.91% net of fees in 2022 versus a benchmark NPI return of 16.08% gross of fees, producing an excess return of 0.83%. The income return gross of fees during 2022 was 5.40%.

The real estate portfolio performance in 2022 can be viewed as a tale of two halves. Between January and June, real estate values continued to see strength, led by strong rent growth and low vacancies in both the Industrial and Multifamily sectors. However, between July and December, real estate values were broadly flat in Q3, and then saw across the board declines of 4-9% in our portfolio funds. The Q4 write-downs were largely attributed to two factors – capital market volatility reflected in higher discount and cap rates and ongoing weakness in the Office sector.

PORTFOLIO STRATEGY - Global Real Assets

Office as a property type is facing multiple challenges like lower workspace needs as tenants shrink their footprint in a hybrid / work-from-home world, glut in outdated class B and C buildings that are either functionally obsolete or have weak demand, and high capital expenditures needs due to tenants' preferences for newer "ESG" friendly buildings.

Retail performed well during 2022 as foot traffic increased and consumers returned to shopping in physical locations. Neighborhood and community shopping centers with a grocery anchor have performed better than malls. Retail vacancy rates declined to 6.9% (vs 8.0% in 2021).

Industrial properties had the best performance in 2022, driven by strong fundamentals. Industrial had a vacancy rate of 3.0% (vs 3.2% in 2021) and strong rent growth of 13.8% (YoY) in 2022. The pandemic has forced companies to create more resilient supply chains and hold excess inventory which requires more warehouse space.

Multifamily can provide inflation protection because rental rates can be reset each year. Higher interest rates and a lack of supply of single-family homes created greater demand for multifamily rentals. Vacancy rates for multifamily increased to 4.6% (vs 2.9% in 2021) as supply increased.

Real estate return forecasts from multiple industry groups and managers indicate that 2023 could see negative returns. While some managers have been more proactive in writing down asset values in Q4 2022, many appear to be taking a more gradual approach, suggesting that 3-5% write-downs per quarter could persist through Q3 and even Q4 of 2023.

While capital markets uncertainty will likely continue to impact real estate valuations, fundamentals in most sectors – with the exception of office – remain healthy. Higher quality Industrial assets in top-20 regions are still seeing strong occupancy and mid to high single digit rent growth or higher. Likewise, the residential sector – apartments, single family rentals, manufactured housing – still benefit from strong fundamentals as the U.S. housing industry has not sufficiently met demand created by population growth and the need to replace obsolete stock. Even Retail, whose weaknesses were exacerbated during the pandemic, have bottomed. As well, numerous managers have indicated that new investments in 2023-24 could be particularly good "vintages" as there could be many attractively priced opportunities created by the current marketplace dislocation.

The infrastructure portfolio proved to be a safe harbor in a volatile year. The core, essential, and monopolistic characteristics of many infrastructure assets demonstrated their resilience. With a few exceptions, our infrastructure funds performed very well in 2022, providing downside protection and cash yield. Most of the funds that had been impacted by the COVID pandemic have recovered from the pandemic lows and funds with more recent vintages are maturing, with their assets becoming operational and generating their target returns after overcoming the J-curve impact. The more recent digital infrastructure fund and U.S. mobile cell tower co-investment have performed well since our commitment, reflecting strong industry fundamentals and manager skill. A new commitment to a "super-core" infrastructure fund is anticipated to provide stabilized returns while offering co-investments that would reduce the fee load.

Going forward, the infrastructure program will continue to focus on attractive assets that provide inflation protection, diversification, and cash yield. Two sectors that will remain priorities are energy transition / renewables because of strong global policy support and investment demand, and digital infrastructure, which continues to benefit from the global mega-trend of digitalization.

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- Formulate and implement a one-year plan to remain within the 17-22% allocation range to Real Assets.
- Reallocate capital to lower the allocation to the target 20%.
- Tactically manage the existing real estate and infrastructure allocations to improve portfolio structure and achieve favorable risk-adjusted returns by incrementally reallocating capital from real estate to infrastructure until the latter reaches the target of 7%.
- Evaluate new investment strategies for the Real Assets portfolio such as real estate secondaries, real estate debt, sector specific real estate, niche real estate property types, ex-US real estate, energy transition, digital infrastructure, and listed infrastructure funds.
- Actively pursue co-investment opportunities with existing Real Assets managers.

PORTFOLIO STRATEGY - Cash Equivalents & Securities Lending

INVESTMENT STRATEGY

SERS invests in cash equivalents for the purpose of earning market returns on cash held for benefits and expenses and to provide short-term cash needed to fund other asset classes. Cash Equivalents are fixed income assets with maturities of less than 270 days and may include US government, asset-backed, corporate and high-quality money market-type securities.

SERS' Statement of Investment Policy sets the Cash Equivalent target allocation as follows:

	FY23 Target	FY24 Target	Permissible Range
Cash Equivalents	2%	3%	1% – 5%

The performance objective for Cash Equivalents is to exceed the return on 30-day US Treasury Bills.

The Securities Lending program is designed to be a low risk, intrinsic value focused strategy that generates additional income for the plan by temporarily lending equity and fixed income securities. All loans are collateralized with cash at 102-105% of security market value and reinvested in government money markets and repurchase agreements. Loans to approved borrowers are limited to 25% of the average monthly market value of the loan from the prior year. Fixed income security loans require a ten basis point minimum spread at loan initiation. The program is implemented through a third-party lending agent and collateral reinvestment manager.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Research and monitor money market funds for opportunities to earn additional yield over the portfolio benchmark.*

The daily short-term cash continued to be invested in the Federated Hermes Prime Obligation (FHPO) and Fidelity Government Portfolio money market funds. The proportion of cash invested in the prime money market fund significantly increased during the year to earn a higher yield than offered by the government money market fund.

- *Evaluate opportunities to improve the Cash Management process and maintain liquidity needs for the portfolio.*

A quarterly cash forecast model was created to monitor the ending cash balance at each of the next four quarter-ends based on expected activity in the public and private asset classes, and transfers for the pension benefit payments.

- *Monitor the Securities Lending program for opportunities to generate incremental income and ensure it is operating within the program implementation guidelines.*

Securities lending income increased over the last year through a combination of higher reinvestment rates and more attractive on-loan rates. Much of the additional income was earned by lending US equity and fixed income securities.

CURRENT MARKET CONDITIONS AND OUTLOOK

As interest rates have risen quickly over the last 12 months, so have money market yields. The prime money market fund daily yield has risen from 0.35% to 4.84% during this period. With rising interest rates, money market funds have kept low average weighted maturities to reduce price risk in portfolio securities. The Federal Reserve hiked interest rates by 0.25% in May and expects to keep interest rates at the current level until the end of 2023. Uncertainty around the direction of inflation, recessionary pressures and market volatility could lead to heightened volatility around money market cash flows. The target allocation to the portfolio was increased from 2% to 3% for FY24 to take advantage of attractive current income yields and to increase the liquidity of the Total Fund.

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- Research and monitor money market funds for opportunities to earn additional yield over the portfolio benchmark.
- Evaluate opportunities to improve the Cash Management process to include a forecast of expected private market income payments and maintain liquidity needs for the portfolio.
- Forecast and analyze expected asset class cash flows and pension payments quarterly to ensure cash flow needs can be anticipated and planned for in advance.
- Monitor the Securities Lending program for opportunities to generate incremental income and ensure it is operating within the program implementation guidelines.

PORTFOLIO STRATEGY – Opportunistic & Tactical

INVESTMENT STRATEGY

SERS invests in opportunistic investments for the purpose of earning returns greater than the Bloomberg US Aggregate Bond Index + 2% for investments that do not fit within the existing asset classes. The 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 including tactical allocation.

SERS' Statement of Investment Policy sets the Opportunistic investments target allocation as follows:

	FY23 Target	FY24 Target	Permissible Range
Opportunistic Investments	0%	0%	0% – 5%

The performance objective for Opportunistic investments is to exceed the return of the Bloomberg US Aggregate Bond Index + 2%.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Search for possible Opportunistic investments for the Fund that are expected to exceed the portfolio benchmark. This will be accomplished through the evaluation of markets, strategies and specific funds that offer compelling risk adjusted returns. Specific investments under consideration include strategies that provide diversification, downside protection, and inflation protection. Investments that pass initial screening will undergo detailed due diligence prior to staff recommendation.*

Two new investments totaling \$100 million have been added to the portfolio this fiscal year. The first investment is to a private debt fund that will invest in dislocated credit opportunities, primarily in the United States and Europe. The second investment is in a systematic trend following strategy that provides a low correlation to public equities and bonds.

- *Actively manage the Opportunistic allocation to improve portfolio structure and returns without increasing risk.*

Staff continues to closely monitor and manage the liquid portion of the portfolio, which has grown in recent years. The portfolio is comprised of seven funds that offer liquidity on a regular basis. These funds represent approximately 45% of the Opportunistic allocation.

CURRENT MARKET CONDITIONS AND OUTLOOK

The Opportunistic portfolio consists of funds that seek to take advantage of market dislocations, or which do not fit within the risk and return objectives of other asset classes. The return objective of the portfolio is to outperform the Bloomberg US Aggregate Bond Index + 2%. The portfolio is positioned to take advantage of ongoing Fed tightening, high inflation, and a slowing economy. Current strategies include investments that provide inflation protection as well as investments that are uncorrelated to public equities and fixed income, such as distressed assets, structured credit, long/short multi strategy funds, commodities and risk parity strategies. The maximum allocation has decreased from 7% to 5% to fund inflows to the fixed income portfolio.

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- *Search for possible Opportunistic investments for the Fund that are expected to exceed the portfolio benchmark. This will be accomplished through the evaluation of markets, strategies and specific funds that offer compelling risk adjusted returns. Specific investments under consideration include strategies that provide diversification, downside protection, and inflation protection. Investments that pass initial screening will undergo detailed due diligence prior to Staff recommendation.*
- *Actively manage the Opportunistic allocation to improve portfolio structure and returns without increasing risk.*

PORTFOLIO STRATEGY – Overlay Program

INVESTMENT STRATEGY

SERS invests in overlay strategies that trade derivatives of the Total Fund's underlying assets and currency exchange rates to enhance the Total Fund portfolio efficiency. The overlay program includes tactical asset allocation and active currency strategies.

The tactical asset allocation strategy aims to add value to the Total Fund performance through active allocations (long/short) across stocks and bonds thereby exploiting short-term macro market dislocations. The active currency strategies aim to add value and risk diversification to the Total Fund, as well as help manage currency risk by utilizing short-term inefficiency in the foreign exchange markets and low correlation of the strategies to the major asset classes such as US equity and fixed income.

The program is fully tactical; exposures to any overlay strategies in this program are not required by the Statement of Investment Policy.

The overlay program is targeted to add 10 to 20 bps excess return to the Total Fund's performance on a three-to five-year horizon. Tracking errors of the tactical rebalancing strategy and the currency program are expected in the ranges of 5 to 15 basis points and 5 to 8%, respectively.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Actively monitor the Tactical Asset Allocation Strategy to enhance the impacts of the strategy to the Total Fund performance.*

One of the two tactical asset allocation strategies was actively managed throughout the year, being both long and short equities, fixed income, and commodities. The notional exposure of the program was increased in July 2022 and the net zero leverage constraint was relaxed in October 2022 to reduce strategy performance volatility. The strategy has realized fiscal year to date losses totaling \$5.2 million through March 2023 and the account was closed in April 2023. No trades have been initiated in the second tactical asset allocation strategy fiscal year to date.

- *Actively monitor the Active Currency Strategies to improve the program's risk and return characteristics.*

The strategy has been active in managing the size of the US dollar exposure relative to other major developed market currencies throughout the fiscal year. The notional exposure of the account was reduced in Q4 based on the view that the value of the US dollar may have peaked. The strategy has realized a fiscal year to date net loss of \$7.5 million with losses in currencies offset by gains in precious metals.

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- *Actively monitor the Tactical Asset Allocation Strategy to enhance the impacts of the strategy on the Total Fund performance.*
- *Actively monitor the Active Currency Strategy to improve the program's risk and return characteristics.*

PORTFOLIO STRATEGY - Investment Risk Management & Analytics

Investment Risk Management and Analytics is responsible for the provision and communication of diligent, thorough, timely and forward-looking investment risk analytics and other investment analytics to the Board and Investment Staff.

Total Fund forecast volatility increased from 12.2% in December 2021 to 14.0% in December 2022 and 13.44% in March 2023 due to high inflation and increased interest rates. The 3-years realized risk of the Total Fund was 8.7% in March 2023.

The forecast risk is a forward-looking risk estimate based on a fund's current holdings at a point of time while the realized risk measures volatility of the historical return of the fund over a period of time; the former counteracts the smoothing effect of infrequent valuation of private investments that is inherent in the later. Hence, the forecast risk tends to be higher than the realized risk for a fund that includes private investments. The forward-looking risk is preferable for assessing allocation among assets and risk-return reward of an asset.

The Total Fund risk structure changed slightly with a 7% reduction in equity risk and a 7% increase in the private asset risk due to asset allocation changes for the period from December 2021 to March 2023. As of March 2023, 75.6% of the Total Fund risk was equity risk and 24.4% was fixed income, private assets, and currency risk. The Total Fund's active risk stayed under the 3% limit stated in the Statement of Investment Policy as the 3-year realized active risk was 1.7% and forecast active risk was 1.6% in March 2023.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Provide risk forecasts and analyses of the Total Fund and asset class portfolios.*

Staff utilized the risk system to generate risk analyses of the Total Fund and asset classes. The risk analyses based on SERS' investment holdings provide forecasted volatility of returns of portfolios. The analyses also provide portfolio risk decomposition by strategies, as well as by factors.

- *Report risk of the Total Fund to the Board on a quarterly basis.*

The quarterly risk report on the Total Fund is provided to the Board showing risk contribution of asset class weights, and active risk of asset classes and factor risks across the portfolio. The total risk decomposition by asset classes focused on their role in the Total Fund. The total risk decomposition by factors focused on cross factor exposures, especially equity factors among the asset class portfolios as the equity factors are the largest risk driver of the Total Fund. The active risk decomposition showed risk contribution from the investment implementation, which is comprised of active allocation among the asset classes and active selection of strategies and securities.

- *Communicate asset class portfolios' risk with asset class investment officer(s) and discuss any potential changes of the portfolio structure on a quarterly basis.*

Staff discussed the risk profile of asset class portfolios with each asset class team. The discussion was focused on i) trend and level of forecast risks, ii) the portfolio's risk structure in terms of manager line-up and factor tilts, and iii) the portfolio's sensitivity to market movements. The discussions assisted each asset class team in balancing their portfolio risks and minimizing unintended risk tilts.

- *Provide return attribution analyses of the Total Fund and asset classes of the Fund to the Investment Strategy Team.*

Staff reported monthly return attribution analyses of the Total Fund, analyzing effects of active weights on alpha generation of each asset class. The analyses were presented to the Investment Strategy Team. Staff also delivered to the Investment Strategy Team attribution reports of each asset class portfolio analyzing the contribution of each account within an asset class.

- *Perform other portfolio and market analyses and research as needed.*

Staff conducted analyses of the Total Fund liquidity and leverage. Staff also conducted portfolio and market analyses as needed or upon request.

PORTFOLIO STRATEGY - Investment Risk Management & Analytics

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- Provide risk forecasts and analyses of the Total Fund and asset class portfolios.
- Report risk of the Total Fund to the Board on a quarterly basis.
- Communicate asset class portfolios' risk with asset class investment officer(s) and discuss any potential changes of the portfolio structure on a quarterly basis.
- Provide return attribution analyses of the Total Fund and asset classes of the Fund to the Investment Strategy Team.
- Perform other portfolio and market analyses and research as needed.

Investment Operations

The Investment Operations area is responsible for managing administrative activities for the Investment department, assisting the CIO and investment officers, and providing reports and information to Staff and the Board. The objectives for FY2024 remain consistent with those of FY2023 as these broad categories reflect the primary duties of Investment Operations.

REVIEW OF FY2023 OBJECTIVES AND IMPLEMENTATION

The FY2023 Annual Investment Plan objectives and related activities are as follows:

- *Coordinate, assist and participate in organizational initiatives including Policies, Procedures and Practices; Information Governance Projects, fiscal budget; Subject Matter Experts (SMEs); and Emergency Response Program (ERP).*

Investment Operations assisted with the annual review and revisions to the Investment Department Policies and participated in the system-wide Information Governance Project to create a new SharePoint 365 Investments library, migrate existing electronic files, assign retention schedules and reclassify electronic fund manager agreements to ensure they were properly stored per SERS' retention schedules. Staff prepared and analyzed the fiscal budget for executive approval as well as participated in and provided feedback in relation to SME Communications and ERP activities.

- *Perform administrative duties and attend meetings for the Investment Committee, Strategy Team and Board meetings including establishing meeting dates and agendas, organizing and distributing documents to team members, producing reports and taking minutes.*

Operations attended all Investment Committee, Strategy Team and Board meetings. Agendas and documents were prepared and distributed, minutes taken and distributed in a timely manner. Staff assisted with processing documents associated with hiring, termination and redemption of managers.

- *Assist with projects for the CIO and Investment officers including revising the Annual Investment Plan, updating the Statement of Investment Policy as needed, new investment managers searches, and aiding with special projects for Staff.*

Operations coordinated revisions and produced the FY2023 Annual Investment Plan, the amended Statement of Investment Policy, and assisted with manager searches throughout the fiscal year.

FY2024 OBJECTIVES

Staff will focus on the following objectives in FY2024:

- Coordinate, assist, and participate in organizational initiatives including annual Policy review; Information Governance project; fiscal budget; Subject Matter Experts (SMEs); and Emergency Response Program (ERP).
- Perform administrative duties and attend meetings for the Investment Committee, Strategy Team and Board meetings including establishing meeting dates and agendas, organizing and distributing documents to team members, producing reports, and taking minutes.
- Assist with projects for the CIO and Investment officers including revising the Annual Investment Plan, updating the Statement of Investment Policy as needed, searches for Investment managers, and aiding with special projects for Staff.



Implementation Guidelines

IMPLEMENTATION GUIDELINES - Global Equities

I. ROLE

The role of Global Equities is to earn the equity risk premium over US Treasury bonds by investing in common stock of publicly listed companies.

II. ASSET ALLOCATION

	Total Fund Target	Range	
		Minimum	Maximum
Global Equity	4540%	35%	5545%

Global Equity is divided into two portfolios as follows:

Global Equity – Global Composite: Managers invest in securities from across all regional markets of the world including US, Non-US Developed Markets and Emerging Markets. This composite is benchmarked to the MSCI All Country World Net Total Return Index (MSCI ACWI).

Global Equity – Regional Composite: Managers invest in securities of assigned regional markets only. Staff manages the regional market allocation versus the MSCI ACWI. This composite is benchmarked to the MSCI ACWI. Typical benchmarks utilized within the regional market mandates are:

- US Equity: Russell 3000 Index
- Non-US Equity Developed Market: MSCI World ex-USA Net Total Return Index (USD)
- Non-US Equity Emerging Market: MSCI Emerging Markets Net Total Return Index (USD)

III. BENCHMARK:

The Global Equity benchmark is the MSCI All Country World Net Total Return Index (USD).

IV. PERFORMANCE OBJECTIVE

The annualized return objective, net of management fees, for both Global Equity portfolios is 30 basis points over the MSCI ACWI.

V. PORTFOLIO DESIGN AND CONSTRUCTION:

The *Global Composite* portfolio is currently run by one manager who selects securities from across the world, making their own active decisions between US, Non-US Developed Markets and Emerging Markets. This is a 100% active portfolio with a +/- 10% country range limit versus the MSCI ACWI.

The *Regional Composite* portfolio is constructed using a multi-manager line-up of US, Non-US Developed and Emerging Market mandates and a combination of active and passive strategies to deliver risk-adjusted performance relative to respective benchmarks. Portfolio design will consider risk/return characteristics, manager count and investment management fees.

The Global Equities portfolio may employ economic leverage via portfolio alpha overlay strategies where the equity market beta is derived from invested derivatives and the alpha is derived from an active market neutral strategy or an uncorrelated active manager. The leverage employed will be within the allowed Total Fund leverage parameters and portfolio tracking error will be maintained within stated ranges in Section VII. Risk Management.

PERMISSIBLE INVESTMENTS

Security Type	US Equity Portfolio	Non-US Equity Portfolio
Common Stock	Y	Y
Stock Treated as Common Stock	Y	Y

IMPLEMENTATION GUIDELINES - Global Equities

Cash / Treasuries	Y	Y
Preferred Stock	Y	Y
Convertible Rights	Y	Y
Warrants	Y	Y
Depository Receipts	Y	Y
REITS	Y	Y
Rule 144a Issues	Y	Y
Private Placement	Y	Y
IPOs	Y	Y
Commingled Funds	Y	Y
Exchange Traded Funds	Y	Y
Futures_Derivatives	Y	Y
Options	Y	Y
Currency Forwards	N	Y
Currency Futures	N	Y
Currency Options	N	Y
Country Funds	N	Y

VI. RISK MANAGEMENT

Active Risk Target	
Global Equity – Global Composite	Tracking Error of 3.0% with a range of 3.0% to 7.0%
Global Equity – Regional Composite	Tracking Error of 1.5% within a range of 0.50% to 2.5%

Below are the guidelines for the *Global Equity – Regional Composite* Portfolio:

US Equity Implementation Guidelines			
	Investment Benchmark	Global Equity Target Allocation	Permissible Range
US Equity Allocation	Russell 3000 Index	MSCI ACWI US Allocation	+/- 10% 5%
Portfolio Structure			
Capitalization			
Large Cap Equity	Russell 1000 Index	Neutral to BM	+/- 5%
Large Cap Active	Manager Specific	-	0% - 30% 25%
Large Cap Passive	Russell 1000 Index	-	70% 75% - 100%
Small Cap Equity	Russell 2000 Index	Neutral to BM	+/- 10%
Small Cap Active	Manager Specific	100%	N/A
Style			
Growth	Manager Specific	Neutral to BM	+/- 5%
Value	Manager Specific	Neutral to BM	+/- 5%

Factors such as currency, sector and country limits are manager specific and outlined in each manager's Investment Guidelines. Aggregate portfolio characteristics such as P/E, B/P, yield, size, etc., shall be within a reasonable range of the US equity benchmark.

IMPLEMENTATION GUIDELINES - Global Equities

Non-US Equity Implementation Guidelines			
	Investment Benchmark	Global Equity Target Allocation	Permissible Range
Non-US Equity Developed Markets	MSCI World ex-USA Net Total Return Index (USD)	MSCI ACWI Non-US Developed Market Allocation	+/- 7% 5%
Non-US Equity Emerging Markets	MSCI Emerging Markets Net Total Return Index (USD)	MSCI ACWI Emerging Market Allocation	+/- 7% 5%
Broad Market Exposure			
Developed Markets Active	Manager Specific	--	75-100%
Developed Markets Passive	MSCI World ex US Index (\$net)	--	0-25%
Emerging Markets Active	Manager Specific	100%	+/- 5%
Portfolio Structure			
Capitalization			
Large Cap Equity	Manager Specific	BM Weight	+/- 10%
Small to Mid-Cap Equity	Manager Specific	BM Weight	+/- 10%
Small Cap Equity	Manager Specific	BM Weight	+/- 10%
Micro Cap Equity	Manager Specific	BM Weight	+/- 5%
Style			
Growth	Manager Specific	Neutral to BM	+/- 10%
Value	Manager Specific	Neutral to BM	+/- 10%

Factors such as currency, sector and country limits are manager specific and outlined in each manager's Investment Guidelines. Aggregate portfolio characteristics such as P/E, B/P, yield, size, etc., shall be within a reasonable range of the Non-US developed and emerging market equity benchmarks.

IMPLEMENTATION GUIDELINES – Global Private Equity

I. ROLE

SERS invests in Private Equity to provide returns in excess of those provided by publicly-traded equities to compensate for private equity's liquidity and concentration risk.

II. ASSET ALLOCATION

The Private Equity target asset allocation is established with periodic asset allocation studies. The most recent asset allocation study authorized a ~~12%~~14% allocation target to Private Equity with a range of ~~8%–16%~~11%–17%.

III. BENCHMARK

Private Equity performance is benchmarked to the Burgiss All Private Equity benchmark, ~~one quarter in arrears~~.

IV. PERFORMANCE OBJECTIVE

The performance objective for Private Equity is to provide net returns in excess of the Burgiss All Private Equity Benchmark. Over time periods of five years and longer Private Equity net returns are expected to exceed SERS Global Equity portfolio by 2%.

V. PORTFOLIO DESIGN AND CONSTRUCTION

Capital allocation among the various market segments is a critical driver for the long-term success of the Private Equity portfolio. Capital allocation risk is controlled in a portfolio structure incorporating long-term sub asset target allocations.

Long-term sub-asset target exposure is detailed below:

	Range	
	Minimum	Maximum
Buyout		
Small/Middle	50%	70%
Large/Mega	5%	25%
Total Buyout	55%	95%
Venture Capital	0%	10%
Special Situations	5%	25%
Total		
Domestic	55%	95%
International	5%	45%
Total		
Primary Commitments	75%	100%
Fund of Funds	0%	15%
Co-Investments	0%	25%
Total		

The portfolio is tilted toward buyout investments. There is no target allocation to venture capital due to higher risk and manager selection issues, however, there may be opportunistic allocations to venture capital up to 10% of the portfolio as shown in the accompanying table. Within buyouts, the preference is for small and middle market managers with a significant value creation approach and de-emphasizes larger firms with a financial engineering approach.

IMPLEMENTATION GUIDELINES – Global Private Equity

VI. PERMISSIBLE INVESTMENTS

Investment Structure	
Limited Partnership Interests	Y
Discretionary Managers investing in Private Equity Partnerships	Y
Co-Investments	Y
Separate Accounts	Y

Investment Type	
Buyouts	Y
Venture Capital	Y
Special Situations (secondary interests, distressed debt or equity, mezzanine, co-investments, energy, etc.)	Y

Buyout

Net Expected Return 10-15%, Moderate Risk

Capital is typically invested in more established companies, those further along the business life cycle having relatively predictable cash flows and the ability to raise capital along the entire capital structure, including secured and unsecured debt. Buyouts are targeted to represent 75% of the Private Equity portfolio.

Venture Capital

Net Expected Return: 15-25%, High Risk

Venture capital equity is targeted at companies in the earliest phases of a business life cycle. Companies may be classified as seed, early, middle and late stage and are characterized by their inability to access public equity and other forms of capital such as secured and unsecured debt. These companies have uncertain revenues and a need for cash to build their businesses and are subject to high failure rates. Venture capital is targeted to represent 0% of the portfolio.

Special Situations

Net Expected Return: 10-20%, Moderate Risk

Many private equity opportunities have characteristics of buyout or venture capital but have enough differences as to require separate classification. These investments include energy, distressed debt, mezzanine, opportunity and secondary funds. Special situations is targeted to represent 25% of the portfolio.

Co-Investments

Net Expected Return: 15-20%, Moderate Risk

Co-Investments are direct investments in a single asset of a multi-asset fund, made alongside the Fund's investment in the asset. Typically, co-investments are offered on more attractive economic terms and shorter time frames than those of the Fund. Co-Investments are targeted to represent up to 10% of the portfolio.

VII. RISK MANAGEMENT

The primary risk management tool in private equity is industry diversification as well as extensive due diligence of prospective investments. Monitoring is managed through a combination of quantitative and qualitative constraints. The following sections identify the most significant risks with private equity investments and the method of control.

Liquidity Risk

Private equity investments are illiquid and typically have expected holding periods of 10-12 years. Investments are typically held until maturity and selling prior to maturity typically results in a discount to fair market value. Liquidity risk is managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation exposure limits.

Geographic Risk

Geographic risk is controlled through a long-term international target exposure of 25% by market value.

IMPLEMENTATION GUIDELINES – Global Private Equity

Vintage Risk

Vintage reflects the year of first capital draw and vintage risk refers to the variability of private equity commitments over time. The investment-pacing model controls the short and long-term private equity commitment amounts and attempts to minimize vintage risk while achieving targeted exposure. Commitments will be dependent on the availability of investments that meet SERS' investment criteria and will not be driven by the target investment pace in any given year.

Manager Risk

Manager risk consists of two elements, managing the exposure within a partnership and controlling the number of general partners in our private equity portfolio. Partnership exposure is controlled by limiting the commitment size within a partnership and the maximum commitment to a partnership will be 25% of a fund's size. The 25% limit does not apply to funds committed to a discretionary manager or a separate account. The maximum market value exposure to a single manager is targeted to be less than 20% of the portfolio. The optimum number of general partners in the portfolio varies with time.

Firm Risk

Firm risk is the exposure to a private equity general partner and is controlled by limiting the maximum commitment to funds operated by a general partner and its affiliates.

Currency Risk

The Private Equity program accepts the currency risks consistent with the geographic constraints. Private equity partnerships generally do not hedge currency risk and the private equity program will not implement currency hedges.

Industry Risk

Typically, private equity partnerships are permitted to invest in a wide variety of industries. Industry risk is controlled primarily through appropriate diversification across classes and subclasses.

Leverage Risk

General partners invest capital from private equity partnerships throughout the capital structure of firms. The capital markets control the maximum leverage available to the general partners and limited partners control leverage exposure through partnership selection and portfolio construction.

IMPLEMENTATION GUIDELINES – Global Fixed Income

I. ROLE

The primary role of diversified fixed income is to reduce the overall risk of the investment plan. Fixed income securities should provide stable income returns through yield-oriented assets. Fixed income provides risk reduction through lower correlations to the investment program.

II. ASSET ALLOCATION

The Global Fixed Income allocation is established with periodic asset allocation studies. The most recent asset allocation study authorized ~~a 19%an 18%~~ market value exposure to Global Fixed Income with a range of ~~12% – 26%13% - 23%~~.

III. BENCHMARK

Global Fixed Income performance is benchmarked to the Bloomberg US Aggregate Bond Index.

IV. PERFORMANCE OBJECTIVE

The annualized return objective for the Global Fixed Income portfolio is 60 basis points net of fees above the benchmark over rolling three year periods and is comprised of the following strategies:

Strategy	Expected Excess Return	Tracking Error	Benchmark
Core	20 basis points	N/A	Bloomberg US Aggregate Bond Index
Core Plus	60 basis points	N/A	Bloomberg US Aggregate Bond Index
Tactical & Diversifying	200 basis points	N/A	Bloomberg US Aggregate Bond Index
Total Portfolio	60 basis points	0 – 5%	Bloomberg US Aggregate Bond Index

V. PORTFOLIO DESIGN AND CONSTRUCTION

SERS seeks to obtain broad fixed income market exposure to gain diversification while receiving income. The portfolio is 100% externally managed in active strategies, in broad mandates of core, core plus, and Tactical & Diversifying strategies. Core mandates invest primarily in benchmark type securities and exposures. Core sector weightings can deviate from the benchmark, depending on the external manager's market views and strategies. Core plus mandates allow investments in all sectors of the Bloomberg US Aggregate Bond Index with additional allocations to the extended sectors of high yield, Non-US debt and emerging market debt. The Tactical & Diversifying sector invests in return seeking or diversification enhancing strategies and can provide high excess returns. The ~~strategysector~~ invests in all sectors of the index in addition to emerging market debt, high yield, and long/short credit ~~and fixed income relative value arbitrage strategies~~.

The portfolio may employ economic leverage to obtain benchmark or sector exposure to enhance the excess return of the portfolio. The leverage employed will be within the parameters of the Total Fund leverage policy and portfolio tracking error will be maintained within the range stated in Section IV.

Below are the current sector exposure limits:

Strategy	Range	
	Minimum	Maximum
Core	30%	70%
Core Plus	25%	50%
Tactical & Diversifying	0%	20%

IMPLEMENTATION GUIDELINES – Global Fixed Income

VI. PERMISSIBLE INVESTMENTS

Security Type	Core	Core Plus	Tactical & Diversifying
Governments			
US Treasuries, TIPS and Agencies	Y	Y	Y
Sovereigns/Quasi-Sov. In US \$	Y	Y	Y
Sovereigns/Quasi-Sov. In local currency	N	Y	Y
Corporates			
US Corporates	Y	Y	Y
Non-US Corporates in US \$	Y	Y	Y
Non-US Corporates in local currency	N	Y	Y
High Yield	N	Y	Y
Bank Loans	N	Y	Y
Structured Credit			
Mortgages	Y	Y	Y
Asset Backed	Y	Y	Y
Collateralized Loan Obligations	N	Y	Y
Other			
144 (A)s	Y	Y	Y
Commingled Funds	Y	Y	Y
Convertibles	N	Y	Y
Currency	N	Y	Y
Derivatives	Y	Y	Y
Equity	N	Y	Y
Exchange Traded Funds	Y	Y	Y
Money Markets	Y	Y	Y
Municipals	Y	Y	Y
Repurchase Agreements	Y	Y	Y

VII. RISK MANAGEMENT

For strategies held in separate accounts, the following risk factors are controlled through limits specified in each manager's Investment Manager Agreement (IMA) and Investment Guidelines. Duration, sector and credit risk are reviewed on a total portfolio basis quarterly by SERS:

Interest Rate

Controlled by duration band limits around the benchmark duration.

Yield Curve Risk

Controlled by duration band limits around the benchmark duration.

Sector Risk

Riskier sectors like high yield, non-US, non-agency mortgages and CMBS are controlled around set limits with each individual manager. Portfolios are allowed 25% maximum exposure to any one industry.

Credit Risk

Portfolios must maintain a minimum exposure to investment grade securities. In addition, each manager of individual portfolios has an established average weighted credit quality that must be maintained at all times.

IMPLEMENTATION GUIDELINES – Global Fixed Income

Currency Risk

Currency is not hedged at the overall portfolio level. Managers who demonstrate skill are allowed to purchase non-US securities on a hedged or unhedged basis or take direct currency positions without owning securities.

Issuer Risk

Issuer limits are specified in each IMA investment guidelines.

Liquidity Risk

Accounts have a maximum 144(A) limit without registration rights.

Active Risk

Normal tracking error is expected to be 2-4% over any rolling three-year time horizon. During periods of increased volatility, tracking error should not exceed 5% over any rolling three-year time horizon.

IMPLEMENTATION GUIDELINES – Global Private Credit

I. ROLE

The role of SERS' Private Credit portfolio is to provide risk adjusted returns in excess of those provided by publicly traded fixed income securities and to generate a consistent stream of income cash yield.

II. ASSET ALLOCATION

SERS' Statement of Investment Policy sets the private credit target allocation at 5%, with a range of 3% to 7%.

III. BENCHMARK

The private credit benchmark is the 90-day Treasury bill rate + 4.5% one quarter in arrears.

IV. PERFORMANCE OBJECTIVE

The performance objective of the Private Credit portfolio is to provide net returns in excess of the SERS Global Fixed Income portfolio over time periods five years and longer, with the income component of the return comprising a significant portion of the total return.

V. PORTFOLIO DESIGN AND CONSTRUCTION

The Private Credit portfolio is designed to gain exposure to various aspects of the private credit market with a focus on consistent income generation. It is expected that a greater portion of the Private Credit portfolio will be allocated to direct lending investments with higher expected cash yields.

Long-term sub asset target exposure is detailed below:

	Target	Range	
		Minimum	Maximum
Direct Lending	80%	60%	100%
Mezzanine	0%	0%	10%
Stressed/Distressed	10%	0%	15%
Structured Credit/Other Asset Based Lending/Specialty Finance	10%	0%	15%
Total	100%		
Domestic	60%	40%	85%
International	40%	15%	60%
Total	100%		
Primary Commitments	100%	80%	100%
Secondaries	0%	0%	10%
Co-Investments	0%	0%	10%
Total	100%		

The portfolio is tilted toward direct lending investments and does not have a target allocation to mezzanine due to the structure of investments typically containing a less predictable cash income component than direct lending.

IMPLEMENTATION GUIDELINES – Global Private Credit

VI. PERMISSIBLE INVESTMENTS

Investment Structure	
Limited Partnership Interests	Y
Co-Investments	Y
Separate Accounts	Y

Investment Type	
Direct Lending	Y
Mezzanine	Y
Stressed/Distressed	Y
Structured Credit and Other Asset Based Lending and Specialty Finance	Y

Direct Lending

Net Expected Return: ~~6-8%~~ 8-12%, Moderate Risk

Direct Lending represents loans made directly to small to medium size companies; secured by assets/cash flows/contracts, etc. depending on the type of loan. Direct Lending is targeted to represent 80% of the Global Private Credit portfolio.

Mezzanine

Net Expected Return: ~~8-12%~~ 10-15%, High Risk

Mezzanine debt is subordinated to senior loans and typically is structured as an unsecured fixed or floating rate loan with an equity component. Mezzanine is targeted to represent 0% of the Global Private Credit portfolio.

Stressed/Distressed

Net Expected Return: 12-25%, High Risk

Stressed/Distressed debt represents loans made to companies that are financially stressed and/or are likely to go through restructuring/bankruptcy. These investments typically have longer holding periods where the lender sometimes is seeking to take control of the company. Stressed/Distressed is targeted to represent 10% of the Global Private Credit portfolio.

~~Structured Credit and Other~~ Asset Based Lending/Specialty Finance

Net Expected Return: ~~5-20%~~ 10-15%, Moderate to High Risk

~~Structured credit includes investments in collateralized loan obligation tranches and other asset backed securities. Other Private Credit investments include specialty financing, non-performing loans, and other investment types that do not fit within the other categories. Asset based lending and specialty finance includes investments backed by financial and hard assets, as well as cash flows generated from differentiated sources other than traditional corporate lending. The types of investments may include auto loans, real estate loans, consumer loans, litigation finance, leasing, royalties, portfolio finance, and various other types.~~ Asset based lending & other is targeted to represent 10% of the Global Private Credit portfolio.

VII. RISK MANAGEMENT

The primary risk management tool in private credit is extensive due diligence of prospective investments and diversification. The following sections identify the most significant risks of private credit investments and the method of control.

Credit Risk

Credit risk is the primary risk associated with the asset class. Thorough due diligence of investments will be completed to ensure the general partners have sufficient measures in place to monitor and assess the risks involved with underlying investments, as well as the capabilities to structure loans with adequate covenants to protect the lender.

IMPLEMENTATION GUIDELINES – Global Private Credit

Interest Rate Risk

Interest rate risk is inherent within the Private Credit portfolio since investments are typically structured as floating rate credit instruments and interest rates will fluctuate over time. The risk is managed by the general partners through the structuring process to ensure appropriate interest rate floors and other measures are in place to manage an acceptable level of interest income.

Liquidity Risk

Private credit investments are illiquid but have shorter holding periods than other private security types, with 3 – 5 years being a typical holding period. Investments are typically held until maturity and selling prior to maturity typically results in a discount to fair market value. Liquidity risk is managed through the portfolio construction process by limiting the amount of exposure to more illiquid areas of private credit, such as distressed debt.

Geographic Risk

International exposure refers to non-US investments and is limited to 60% of the portfolio.

Vintage Risk

Vintage reflects the year of first capital draw and vintage risk refers to the variability of private credit commitments over time. The investment-pacing model controls the short and long-term private credit commitment amounts and attempts to minimize vintage risk while achieving targeted exposure. Commitments will be dependent on the availability of investments that meet SERS' investment criteria and will not be driven by the target investment pace in any given year.

Manager Risk

Manager risk consists of two elements, managing the exposure within a partnership and controlling the number of general partners in the **Global Private Credit portfolio**. Partnership exposure is controlled by limiting the commitment size to 25% of the aggregate commitments to the partnership or master fund if more than one feeder vehicle exists, within a partnership and the maximum commitment to a partnership will be 25% of a fund's size. The 25% limit does not apply to funds committed to a discretionary manager or a separate account. The maximum market value exposure to a single manager is targeted to be less than 35% of the portfolio. The optimum number of general partners in the portfolio varies with time.

Firm Risk

Firm risk is the exposure to a private credit general partner and is controlled by limiting the maximum commitment to funds operated by a general partner and its affiliates.

Currency Risk

The Private Credit program does not hedge currency risk and relies upon its external managers to determine if such hedges are appropriate. Currency risk will be managed through geographic exposure limits, as shown above under geographic risks.

Industry/Sector Risk

Typically, private credit partnerships are permitted to invest in a wide variety of industries and sectors. Industry/Sector risk is controlled primarily through appropriate diversification across classes and subclasses.

Leverage Risk

The capital markets control the maximum leverage available to the general partners and limited partners control leverage exposure through partnership selection and portfolio construction. Leverage at an individual fund level is managed through the portfolio construction process.

Valuation Risk

The valuation frequency for private credit is dependent upon the external managers' internal and external valuation policies, which are reviewed during the operational due diligence process.

IMPLEMENTATION GUIDELINES – Global Real Assets

I. ROLE

The role of SERS' Global Real Assets portfolio is to provide a stable income return from tangible assets, to be a partial inflation hedge over the long term and to provide low correlation to equities.

II. ASSET ALLOCATION

SERS' Statement of Investment Policy sets the global real assets target allocation at **17-20%**, with a permissible range of **14% to 22%**.

III. BENCHMARK

The global real assets benchmark is the NCREIF Property Index (NPI), one quarter in arrears.

IV. PERFORMANCE OBJECTIVE

The performance objective for Global Real Assets is to produce net of fee returns in excess of the benchmark over a market cycle, with the income component of the return comprising a significant portion of the total return.

V. PORTFOLIO DESIGN AND CONSTRUCTION

The Global Real Assets portfolio is designed to achieve the performance objective, to manage risks and to focus on the overall role of global real assets within the Total Fund. SERS' Global Real Assets Implementation Guidelines set the private market, public market and asset type exposures for Global Real Assets, as shown in the table below.

Strategy	Target	Range	
		Minimum	Maximum
Private Core Real Estate	60%	40%	80%
Private Non-Core Real Estate	5%	0%	15%
Private Infrastructure	30%	15%	40%
Public Market Real Assets	4% 5%	0%	10%
Private Agriculture/Farmland	1%	0%	5%

Core real estate investments include substantially leased or fully operational institutional quality properties or projects located in developed markets. The revenue streams from core real estate are generally long duration and comprise a majority of the asset's total return. Core real estate strategies are typically implemented through open-end commingled funds.

Non-core real estate investments include value-added and opportunistic strategies in which properties or projects are re-leased, re-developed, or newly constructed, particularly in developing or transitional markets. This strategy has a higher return expectation but has higher reliance on capital appreciation (vs income return). Non-core real estate strategies are typically implemented through closed-end commingled funds.

Private infrastructure typically involves the movement of goods, people, water, and energy (definition provided by JP Morgan Asset Management). The sectors include, but are not limited to, power (including renewables), energy, utilities, transportation, communication, and social infrastructure sectors. Infrastructure revenue streams are typically long-dated, contractual and inflation linked. Private infrastructure is implemented through both open and closed end commingled funds, as well as co-investments.

Public market real assets are securities of companies whose primary source of revenue comes from the operation of tangible assets, including, but not limited to, real estate (REITs), listed infrastructure, natural resources, and master limited partnerships. While more liquid in nature, public market real assets exhibit greater volatility than privately held real assets. Master limited partnerships, or MLPs, are publicly traded limited partnerships that derive most of the partnership's cash flows from infrastructure and natural resource assets. The advantage of an MLP is that it combines the tax benefits of a limited partnership with the liquidity of a publicly traded company.

IMPLEMENTATION GUIDELINES – Global Real Assets

Private Farmland investments include annual row and permanent crops located throughout the United States. Core farmland will be substantially leased on long term contracts to top quality growers. Core farmland provides a strong income stream that will comprise the majority of the total return. Core farmland strategies are typically implemented through open-end funds.

Over time, Staff intends to judiciously increase exposure to co-investments in infrastructure and real estate through underwriting of individual assets as well via programmatic sidecar vehicles.

VI. PERMISSIBLE INVESTMENTS

The underlying investments included in the Global Real Assets portfolio generally are tangible assets, have long term investment horizons or holding periods, produce attractive income returns and cash yields and provide a partial inflation hedge over the long term. Permissible investment structures and types are as follows.

Investment Structure and Type	
Limited Partnership Interests	Y
Co-Investments	Y
Separate Accounts	Y
Commingled Funds	Y
Secondaries Vehicles	Y
Joint Ventures	Y
Real Estate Operating Companies (REOCs)	Y
Private Real Estate Equity and Debt	Y
Real Estate Investment Trusts (REITs)	Y
Exchange Traded Funds	Y
Private Infrastructure Equity and Debt	Y
Public Infrastructure Securities and MLPs	Y
Natural Resources and Commodities	Y

VII. RISK MANAGEMENT

Qualitative constraints and quantitative measures are used to manage risk in the Global Real Assets portfolio. The following sections identify the most significant risks with real asset investments and the method of control.

Real Estate Life Cycle Risk

Life cycle risk refers to the stage of an investment's life and generally falls into two categories, operating and non-operating investments. Operating investments are those that are leased or functioning at a level in which the contractual cash payments are supporting operations. Non-operating investments are those in pre-development, construction, conversion, or in a stage of major releasing. A significant portion of the private market real assets portfolio will be in operating investments in order to achieve Global Real Assets' role of providing income.

	Operating	Non-Operating
Target Exposure	≥85%	≤15%

Real Estate Property Type Risk

Property type risk refers to the level of exposure of the major property type categories in the private market real estate portfolio relative to the NCREIF Property Index. Property type risk will be managed through portfolio design and the use of diversified commingled funds. At least 80% of the private market real estate portfolio will be invested in the four primary property type categories including apartment, industrial, office and retail.

IMPLEMENTATION GUIDELINES – Global Real Assets

(as of December 31, 2022)	NCREIF Property Index	Range
Apartment	28% 26%	15% - 45%
Industrial	32% 28%	15% - 45%
Office	26% 30%	5% 15% - 40%
Retail	14% 15%	5% - 25%
Subtotal	99%	80% - 100%
Hotel/Other Niche/Other	<1%	5% - 20%
Total	100%	

Real Estate Geographic Risk

Geographic risk can be broken down into two segments: US regional exposure and non-US exposure. US regional exposure refers to the level of exposure in the four US regions in the private market real estate portfolio relative to the NCREIF Property Index.

(as of December 31, 2022)	NCREIF Property Index	Range
West	42% 41%	20% - 50%
East	29% 30%	20% - 45% 50%
Midwest	7% 8%	5% - 20%
South	22% 21%	10% - 35% 30%
Total	100%	

Infrastructure Sector Risk

Infrastructure sector risks refers to the level of exposure to the major infrastructure sectors in the private markets infrastructure portfolio. Sector risk will be managed through portfolio design and the use of commingled funds and co-investments.

Infrastructure Geographic Risk

Infrastructure geographic risks is broken into the regional exposure of the private markets infrastructure portfolio. Geographic risks will be managed through portfolio design and the use of commingled funds and co-investments.

Global Real Assets Geographic Risk

Non-US exposure refers to the level of exposure of non-US investments in the total Global Real Assets portfolio. Non-US exposure will be limited to 35% of the private market portfolio.

Liquidity Risk

Private market real asset investments are illiquid, with both holding periods and commingled fund terms ranging from 7-10 years or longer. Liquidity risk will be managed through target allocations to private and public market real assets as well as vintage year diversification.

Leverage Risk

Private market real asset investments typically are acquired with a combination of equity capital and mortgage financing. The amount of leverage per asset or pool of assets depends on debt availability, property type, tenant quality, and asset life cycle. The amount of leverage and financing terms ultimately are the responsibility of SERS' external real asset managers and are governed and constrained by partnership agreements. The leverage maximum for the total private market real assets portfolio is 50% of the gross asset value of the private market real assets portfolio. Leverage risk will be managed through target allocations and portfolio design.

Currency Risk

The Global Real Assets program does not hedge currency risk and relies upon its external managers to determine if such hedges are appropriate. Currency risk will be managed through geographic exposure limits, as shown above under geographic risks.

IMPLEMENTATION GUIDELINES – Global Real Assets

Valuation Risk

The valuation frequency for private market real assets is dependent upon the external managers' internal and external valuation policies, which are reviewed during the operational due diligence process.

Manager Concentration Risk

A single manager utilizing core strategies shall not constitute more than 25% of the net assets of the Global Real Assets program. For non-core strategies, a single fund commitment shall not constitute more than 10% of the net assets of the Global Real Assets program and a single manager with multiple fund commitments, including co-investments, shall not constitute more than 20% of the net assets of the Global Real Assets program.

IMPLEMENTATION GUIDELINES – Cash Equivalents & Securities Lending

I. ROLE

Short-Term Cash should provide liquidity for funding investment capital calls and operational expenses. Cash should be invested in conservative, low risk securities/funds to preserve capital for future expenditures and investments.

II. ASSET ALLOCATION

The Cash allocation is established with periodic asset allocation studies. The most recent asset allocation study authorized a ~~2%~~3% exposure to cash with a range of ~~0%–5%~~1% - 5%.

III. BENCHMARK

The Short-Term cash benchmark is the ~~FTSE 30 Day Treasury Bill~~Citigroup 30-day Treasury Bill Index.

IV. PERFORMANCE OBJECTIVE

The annualized return objective for the Short-Term portfolio is five basis points net of fees over the benchmark.

V. PORTFOLIO DESIGN AND CONSTRUCTION

The Cash portfolio is designed with preservation of capital in mind. A cash balance of one to three months of expenditures is usually maintained. A higher allocation to cash may also be used to preserve capital in volatile markets. The average weighted maturity of the portfolio will not exceed 20 days.

Risk is constantly assessed before investment purchases are made in the portfolio. Only top tier commercial paper is purchased. Money market holdings are also reviewed on a regular basis along with choosing a top tier money market provider with a deep credit analyst team and whose short-term investments are important to the organization.

The Securities Lending program is designed to be a low risk, intrinsic value focused strategy that can generate additional income for the system. The program is implemented through a third-party lending agent and collateral reinvestment manager. Separately, additional securities lending income is earned by the commingled passive global equity accounts.

VI. PERMISSIBLE INVESTMENTS

Security Type	
US Treasury Bills	Y
Commercial Paper rated A-1/P-1 or higher	Y
Money Market Funds rated at least A-1/P-1	Y
Unrated Market Funds comparable to an A-1/P-1 equivalent fund	Y

VII. RISK MANAGEMENT

Liquidity Risk

The weighted average maturity shall not exceed 20 days. All money market funds must provide daily liquidity.

Credit Risk

A commercial paper issuer must be on the approved credit list or approved by the Chief Investment Officer before purchasing. Market and issuer news are reviewed daily by the Senior Investment Officer – Global Fixed Income. Money market funds must regularly send a holdings report to SERS, where it is reviewed on a regular basis.

Issuer Risk

Single issuer commercial paper investments are limited to \$20 million. Related entity commercial paper investments are limited to the lower of 30% of the short-term account or \$40 million. Overnight commercial paper issuer maturities are limited to \$50 million.

IMPLEMENTATION GUIDELINES – Cash Equivalents & Securities Lending

Securities Lending Risk

All loans will be collateralized with cash at 102% for US securities and 105% for non-US securities and marked-to-market daily. Collateral will be reinvested in government money market funds and/or repurchase agreements. Loans on fixed income securities will be subject to a ten-basis point minimum spread requirement at loan initiation. Loans to approved borrowers will be limited to 25% of the average monthly market value on loan for the prior calendar year.

IMPLEMENTATION GUIDELINES – Opportunistic & Tactical

I. ROLE

The role of SERS' Opportunistic portfolio is to earn a return above the Bloomberg US Aggregate Bond Index + 2% by investing in assets and strategies that do not fit within the existing asset classes. The investments are defined as tactical or non-traditional investment opportunities.

II. ASSET ALLOCATION

SERS' Statement of Investment Policy sets the opportunistic target allocation at 0%, with a range of 0% to 7%.

III. BENCHMARK

The Opportunistic benchmark is the Bloomberg US Aggregate Bond Index + 2%.

IV. PERFORMANCE OBJECTIVE

The performance objective of the Opportunistic portfolio is to earn a net of fee return in excess of the Bloomberg US Aggregate Bond Index + 2%, with a meaningful component of the total return coming from current income.

V. PORTFOLIO DESIGN AND CONSTRUCTION

The Opportunistic portfolio may consist of a wide variety of investment types, structures and strategies targeting cash yield as well as price appreciation. Investment strategies include separate accounts, commingled funds, ETFs, co-investments and derivatives.

VI. PERMISSIBLE INVESTMENTS

Permissible investments include, but are not limited to, common stock, preferred stock, debt securities, currencies, commodities, etc.

VII. RISK MANAGEMENT

Leverage Risk

Leverage will be prudent for the given strategy and consistent with the fund's offering memorandum.

Liquidity Risk

Liquidity will be monitored regularly to ensure the portfolio can be traded or rebalanced within a reasonable timeframe. Liquidity risk will be managed through target allocations to private and public market assets as well as through portfolio design.

Currency Risk

The Opportunistic portfolio does not directly hedge foreign currency risk and relies upon its external managers to determine if such hedges are appropriate.

IMPLEMENTATION GUIDELINES – Overlay Program

I. ROLE

SERS invests in Overlay strategies that trade derivatives of the Total Fund's underlying asset exposures and currency exchange rates to enhance the Total Fund portfolio's efficiency. The Overlay program includes i) tactical asset allocation-rebalance; and ii) active currency strategies.

The tactical asset allocation strategy aims to add value to the Total Fund performance through long and short positions based on short-term relative attractiveness of assets.

The active currency strategies aim to add value to the Total Fund on a risk-adjusted basis by employing long and short positions in various currency pairs based on relative attractiveness of the currencies. The strategies are expected to have low correlation to the major asset classes such as US equity and fixed income.

II. ASSET ALLOCATION

The target allocation of the tactical asset allocation and Currency program is 0% since long and short positions net out.

The tactical asset allocation program's notional exposure limit is +/-7% of the Total Fund to each of the following assets: US fixed income, US equity and Non-US equity. Since the tactical asset allocation positions are employed for short periods, the notional exposures are not subject to the policy asset allocation ranges set forth in the Statement of Investment Policy; however, the active risk contribution by the overlay program as a whole is subjected to the overall guideline on active risk for the management of the Total Fund specified in the Risk Management Policy.

The notional value of the active currency program is capped at 50% of the Non-US Equity portfolio's value.

III. BENCHMARK

The benchmark for the tactical asset allocation and Currency Overlay program is 0% since net exposure is 0%.

IV. PERFORMANCE OBJECTIVE

The Overlay program is expected to add 5 to 10 bps of excess return to the Total Fund's performance on a three to five year horizon.

V. PORTFOLIO DESIGN AND CONSTRUCTION

The mandates are unfunded. The Overlay strategies buy (long) or sell (short) futures or forwards contracts to get exposures to desired markets in order to exploit shifts in relative valuation of assets and currencies.

The tactical rebalancing strategy's net exposures, sum of long and short positions, are valued at zero on the initiating position time. Active currency strategies can go either net long or net short US dollar. Both tactical rebalancing and active currency aggregate portfolios are constructed to have no dependency on any single risk factor.

VI. PERMISSIBLE INVESTMENTS

Tactical asset allocation: equity, fixed income, commodity and precious metals futures and options on futures.

Currency Overlay: currency forwards, currency futures, gold forwards, gold futures, and limited currency options.

IMPLEMENTATION GUIDELINES – Overlay Program

VII. RISK MANAGEMENT

Counter-party risk management

- Futures and exchange traded options are traded at exchanges thus having default risk only to the clearinghouse while having no credit risk to trade counterparties.
- Forward contracts and over-the-counter options entail default risk of the counterparties. Counterparty risk of these contracts is managed through ISDA (International Swaps and Derivatives Association) and EMIR (European Market Infrastructure Regulation) umbrella agreements with managers.

Volatility management

- The tactical asset allocation program's tracking error range is 5 to 15 bps.
- All active currency strategies have targeted tracking error equal to or less than 8%; the aggregate active currency program's tracking error is expected to be in the range of 5 to 8%.

Liquidity

- The use of derivatives requires initial margin as well as daily variation margin for futures. Liquidity risk will be managed by ensuring that an adequate reserve of cash is available to meet margin requirements at all times.



Sources

SOURCES

Economic Outlook:

Blue Chip Economic Indicators, March 2023.
International Monetary Fund World Economic Outlook, April 2023.
Yardeni Research, Inc. YRI S&P 500 Earnings Forecast. <<https://www.yardeni.com/pub/>>
FactSet. Earnings Insight. www.factset.com
University Of Michigan. Surveys of Consumers. <<http://www.sca.isr.umich.edu>>
US Bureau of Labor Statistics. <<https://www.bls.gov/news.release/empsit.toc.htm>>
US Department of the Treasury. <<https://home.treasury.gov/resource-center/data-chart-center/interest-rates>>

Global Equities:

Bloomberg. <<http://www.bloomberg.com>>
FTSE Russell US Indices. <<https://www.ftserussell.com/products/indices/russell-us>>
Goldman. "Goldman Market Monitor." April 1, 2023.

Global Fixed Income:

BCA. "The Bank Credit Analyst." April 2023
Goldman Sachs. "Global Fixed Income Monthly." April 2023.
Ninety One. "Getting the most out of emerging market debt." February 2023.
Western Asset Management Company. "US Core Plus Investment Highlights." April 2023.

Global Private Credit

Pitchbook. <<http://www.pitchbook.com>>
Preqin. <<http://www.preqin.com>>
S&P Dow Jones Indices. <<https://us.spindices.com>>
J.P. Morgan Asset Management. "Guide to Alternatives." November 2022.
New York Fed. <<http://www.newyorkfed.org>>
Federal Reserve. <<http://www.federalreserve.gov>>

Global Private Equity:

Bain and Company. "Global Private Equity Report 2023." March 2023.
National Venture Capital Association. <<http://www.nvca.org>>
Pitchbook. <<http://www.pitchbook.com>>
Preqin. "2023 Preqin Global Private Equity & Venture Capital Report."

Global Real Assets:

CBRE Research. <<https://www.cbre.us/research-and-reports>>
Clarion Research. <<https://www.clarionpartners.com/insights>>
NCREIF Benchmark. <<https://www.ncreif.org>>
PREA Consensus Survey March 31, 2023.

Opportunistic and Tactical:

Preqin. <<http://www.preqin.com>>
US Energy Information Administration. <<https://www.eia.gov>>
J.P. Morgan Asset Management; "Guide to Alternatives." December 2022.

Cash Equivalents:

FitchRatings. "Global Money Market Funds Outlook 2023." December 8, 2022.

Glossary

GLOSSARY

Active Risk – see Tracking Error.

Alpha – the premium an investment portfolio earns above a certain benchmark (such as the Standard & Poor's 500 Index). A positive alpha indicates the investor earned a return in excess of the index return.

Asset Allocation – the practice of allocating a certain percentage of a portfolio between different types of investment assets, such as stocks, bonds, real estate, cash, etc. By diversifying among asset classes, it is expected to create a favorable risk/reward ratio for the portfolio.

Basis Point – one hundredth of one percent. For example, an addition of 40 basis points to a yield of 7.50 percent would increase the yield to 7.90 percent. Basis points are normally used when quoting yields or returns, alpha, or fees paid to investment managers.

Benchmark – a measurement or standard that serves as a point of reference by which portfolio performance is measured. Benchmarks must meet standard criteria.

Bloomberg US Aggregate Bond Index – a market capitalization weighted US bond index published by Bloomberg LLC. Most US traded investment grade bonds are represented in the index. The Bloomberg US Aggregate Bond Index is SERS' global fixed income policy benchmark.

Burgiss All Private Equity (BAPE) – BAPE is comprised of data from more than 5,000 private equity funds contributed by limited partners that are Burgiss clients and use Burgiss' web-based institutional portfolio management platform Private i. The benchmark data is sourced from Burgiss' limited partner clients and includes complete transactional and valuation history between the limited partner and their fund investments. Burgiss publishes a detailed breakdown of the dataset every quarter allowing for increased transparency.

Co-investment – a direct investment in a single asset of a multi-asset Fund, made alongside the Fund's investment in the asset; typically involves terms that are more attractive and with shorter time frames than those of the Fund.

Derivatives (Derivative Instruments) – financial instruments (securities or contracts) whose values are derived from underlying financial assets, indices, or other instruments. Derivative performance is based on the performance of assets, interest rates, currency exchange rates and various domestic and foreign indices underlying the instruments. The common forms of derivatives are forward, futures, swap, and options contracts.

Diversification – the method of reducing risk by distributing investment assets among a variety of investment securities which have different risk/ reward ratios.

Due Diligence – an investigation or audit of a potential or existing investment.

Equity Investment – claims held by the residual owners of a firm. May also be referred to as common stock. Investments in Real Estate and certain Private Markets classifications may also be considered equity.

Fixed Income Investment – a security issued by a borrower that obligates the issuer to make specified payments to the holder over a specific period. May also be referred to as "debt" or "bonds."

FTSE 30 Day Treasury Bill – an index that measures the rate of return for 30-day US Treasury Bills, which are considered representative of the performance of Short-Term money market instruments. The FTSE 30 Day Treasury Bill is SERS' policy benchmark for Cash Equivalents.

Fund – fund means a limited partnership, trust or commingled investment vehicle in which SERS invests or may invest (e.g., private credit fund, private equity fund, or real estate fund).

Global Equities – reflects the consolidation of what had been treated by SERS as US Equity and Non-US Equity asset classes; includes equities of US and non-US origin, equities of various capitalizations (e.g., large cap, small cap, mid cap, etc.), equities from developed, emerging and frontier markets, growth and value equities and passive and active strategies. Investments in Global Equities strategies are made in accordance with established investment

GLOSSARY

guidelines, and amended as necessary, by mutual agreement between the Chief Investment Officer and the Investment Consultant.

Guidelines – refers to an Investment Manager’s “Investment Guidelines,” established between the Investment Manager and Staff as part in an investment management agreement. Guidelines may be general or specific.

Investment Committee – a committee comprised of the Chief investment Officer and Investment Officers from SERS’ Investment Department who possess the Ohio State Retirement System Investment Officer (SRSIO) license, with clearly defined structure, rules, and procedures for reviewing and approving investments in a timely and prudent fashion.

Investment Consultant – any consultant hired by the Board or by Staff to advise or assist with the Investment Program in accordance with the Statement of Investment Policy. Board investment consultants must be approved by the Board. Staff investment consultants shall be approved by the Executive Director.

Investment Manager – a manager or potential manager of SERS assets, both public market and private market. Includes, but is not limited to managers of equity, fixed income, private credit, private equity, real estate, commodities, and cash.

Investment Staff – members of the investment department of SERS, including the Chief Investment Officer, Investment Officers, and other department personnel.

Leverage – in investments, this is the control of a large amount of money by a smaller amount of money, such as buying on margin. In finance, this is the relationship of debt to equity on a company’s balance sheet in the form of the debt/equity ratio.

Long a futures contract or a forward contract – buying exposure to the underlying assets of the contract without actually owing those assets. When the underlying assets deliver a positive return, the long position gains; when the underlying assets deliver a negative return, the reverse is true.

Morgan Stanley Capital International – All Country World Free ex-USA Index (\$Net) – an equity index representing 44 developed and emerging countries. “Free” indicates the index reflects actual investable opportunities for global investors by taking into account local market restrictions on share ownership by foreigners. “Net” indicates that dividends are reinvested after the deduction of withholding taxes applicable to non-resident institutional investors. The MSCI-ACWI ex-USA Index, net of dividends reinvested is SERS’ policy benchmark for Non-US Equities.

NCREIF Property Index (NPI) – a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. The NCREIF Property Index is a component of SERS’ Global Real Estate Policy Benchmark.

Opportunistic and Tactical Investments – global opportunistic investments are tactical or non-traditional investment opportunities that may be short-term or may not fit within the generally accepted risk/return parameters of specific asset classes or strategy groupings. Such opportunities may involve capitalizing on short-term market dislocations or other such unique situations. Tactical investments may include strategies with dynamic allocations to single assets or across multiple asset types or other innovative approaches.

Options contract – a form of financial derivatives. In an options contract, two parties (buyer and seller) agree that the buyer, who pays an option premium to the seller, has the right to exercise an option whether to buy or sell a particular asset at a specified price at a specified future date.

Portfolio – a collection of investments owned, managed, or overseen by an individual or investment manager, a board, or an organization. Portfolio can mean a manager account or subset thereof (e.g., Goldman Sachs Core Plus account), an asset class (e.g., US Equity), or the entire fund (e.g., SERS’ Total Fund).

GLOSSARY

Rebalancing – adjusting asset class or portfolio allocations relative to their targets or ranges to adjust for actual or anticipated market movements.

Russell 3000 Index – a market-value weighted equity index published by the Frank Russell Company. The index measures the performance of the 3,000 largest US companies in terms of market capitalization. The Russell 3000 Index is SERS' Domestic Equity Policy Benchmark.

Secondaries – pre-existing investor capital commitments to private funds that are purchased in the secondary market.

Secured Overnight Financing Rate (SOFR) – SOFR is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities. There is a considerable volume of transactions executed that utilize SOFR and the rate is published on each business day.

Securities Lending – the temporary loan of a security from an institutional investor's portfolio to a broker/dealer to support the firm's trading activities. Loaned securities are collateralized with cash at 102-105% of the loan exposure. The lender retains the entitlement to all the benefits of the loaned security, including dividends and interest, except the right to vote proxies. The lender has a right to recall the loan at any time.

Short a futures contract or forward contract – selling exposure to the underlying assets of the contract without transferring the ownership of those assets to the buyers. When the underlying assets deliver a positive return, the short position experiences losses; when the underlying assets deliver a negative return, the reverse is true.

Style – style refers to an investment product, strategy or style offered by an Investment Management Firm and reflects how the assets are invested. For example, value versus growth; core versus value added; quantitative versus fundamental; etc.

T-bill – refers to Treasury Bill. Staff utilizes the 90-day T-bill rate as a reference benchmark.

Total Fund – refers to SERS' total investment assets.

Tracking Error – standard deviation of the excess return of the portfolio relative to the Benchmark, often measured over rolling three-year periods.

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

Serving the People Who Serve Our Schools®



**School Employees Retirement
System of Ohio**



**Investment Department Incentive Plan
for Fiscal Year 20243**

Amended May 189, 20232

TABLE OF CONTENTS

<u>Section</u>	<u>Topic</u>	<u>Page</u>
1	Purpose of Plan	1
2	Plan Objectives	1
3	Performance Period	1
4	Eligibility	1
5	Incentive Compensation Criteria	1
6	Incentive Compensation Opportunity	2
7	Performance Goals	3
8	Incentive Compensation Calculation	3
9	Incentive Compensation Adjustment	5
10	Plan Administration	5
Exhibit A	History	8

Section 1: Plan Purpose

The purpose of the Incentive Plan (“Plan”) is to provide a compensation package that allows SERS to recruit and retain talent in the Investment Department that is necessary to maximize investment returns.

Section 2: Plan Objectives

The objectives of the Plan are to:

- a. Reinforce a performance philosophy.
- b. Attract and retain high quality talent.

Section 3: Performance Period

The performance period for purposes of the Plan will coincide with SERS’ fiscal year, i.e. July 1 through June 30 of each year.

Section 4: Eligibility

There are five tiers of participation within the Plan and those tiers cover the following job classifications:

Table 1. Eligibility by Job Title

TIER	JOB TITLES
I	Chief Investment Officer
II	Assistant Director
III	Senior Investment Officer Investment Officer
IV	Associate Investment Officer Senior Investment Analyst
V	Investment Analyst

In order to be eligible to receive incentive compensation, a participant must meet performance expectations (including goals and competencies) on the most recent SERS annual performance evaluation, and the fund must meet certain performance standards. A participant who fails to achieve an overall rating of “Expected Performance” on the annual performance evaluation will be ineligible for incentive compensation for the corresponding year of the evaluation, as will a participant who is no longer in good standing at SERS at the time the incentive compensation is paid.

Section 5: Incentive Compensation Criteria

Incentive compensation will be earned if the Investment Department achieves positive net of fees investment returns in excess of the Board-approved benchmark on the overall fund or specific asset classes.

The incentive compensation amount will be calculated on the number, level, and salaries of eligible participants in the Plan as of July 1 of the fiscal year in which the incentive is earned. The Chief Risk Officer verifies the abovementioned information with Human Resources. The Chief Audit Officer reviews the calculations before incentive compensation earnings are approved by the Executive Director.

Fund Performance

Fund performance reflects the planned total fund or asset class goal. Individual incentive compensation may be earned upon achievement of positive excess returns.

For purposes of the Plan, the fund performance goal is positive excess returns relative to the Board-approved benchmark. If the total fund performance or specific asset class performance net of fees is above its respective benchmark that portion of incentive compensation will be earned and conversely, if the total fund performance or specific asset class performance is equal to or below its respective benchmark, that portion of incentive compensation will not be earned.

For purposes of this Plan, the maximum performance goal is 50 basis points over the Board-approved benchmark.

Section 6: Incentive Compensation Opportunity

Distribution under the Plan to eligible participants is determined by performance goals as outlined in Section 7. For purposes of this Plan, the maximum performance goal is 50 basis points over the Board-approved benchmark. Incentive compensation is managed within the range of opportunity noted below.

Based on level of performance, a participant has the opportunity to earn incentive compensation as follows:

Table 2: Opportunity by Level (% applied to Base Salary)

TIER	JOB TITLE	Maximum distribution (50 ps or greater)
I	Chief Investment Officer	90%
II	Assistant Director	60%
III	Senior Investment Officer Investment Officer	60%
IV	Associate Investment Officer Senior Investment Analyst	30%
V	Investment Analyst	10%

Except as provided in Section 10, incentive compensation is calculated based on the salary in effect on July 1 of the fiscal year in which the incentive is earned. Compensation for performance between 1 bps and 50 bps above the benchmark is based on defined performance goals and is prorated on a linear basis according to the schedule in Attachment 1.

Section 7: Performance Goals

The incentive compensation is based on a combination of individual and department performance goals in reference to the Board-approved benchmark. Portfolio performance is calculated by SERS’ third-party performance and analytics consultant based on SERS’ annual returns net of investment manager fees and certified by Investment Accounting Division within SERS’ Finance Department. Two primary performance measures noted below are defined as critical to the success of the Investment Department.

Individual Goals

Portfolio Performance

Portfolio performance is based on results relative to the Board-approved performance benchmark for each asset class. Performance goals for each asset class are calculated based on annual returns net of investment manager fees for that particular asset class as described in the previous paragraph. The Board-approved benchmarks are stated in the current Statement of Investment Policy (SIP).

Department Goals

Total Fund

The performance benchmark for the total fund is a weighted average of the performance benchmarks and the policy allocation of each asset class as stated in the SIP.

Section 8: Incentive Compensation Calculation

In determining the appropriate percent applied to an individual’s base salary, the calculation by the Chief Risk Officer includes the achievement of both individual and department goals as described in Section 7. The performance goals are weighted as follows:

Table 3. Performance Goal Weights

TIER	JOB TITLE	INDIVIDUAL GOALS	DEPARTMENT GOALS
		Portfolio Performance	Overall Fund
I	Chief Investment Officer	30%	70%
II	Assistant Director	60%	40%
III	Senior Investment Officer Investment Officer	70%	30%
IV	Associate Investment Officer Senior Investment Analyst	70%	30%
V	Investment Analyst	75%	25%

The portfolio performance portion of the incentive compensation for the Chief Investment Officer and the Investment Officer – Risk Management and Analytics is based on aggregate performance in each asset class and strategy on an equally weighted basis. If an incentive eligible employee covers two asset classes, his/her portfolio performance is weighted 50%/50% for both asset classes.

Multiple Year Results

Incentive compensation for portfolio performance and overall fund performance considers both current year results and results over multiple years. During year one of an individual’s participation in the Plan, incentive compensation is based solely on the performance for the first year. In year two of participation in the Plan, 50% of the incentive compensation is based on performance for the current year and 50% on the performance for the two-year period. In years three and beyond, 25% of the incentive compensation is based on performance for the current year and 75% on the performance for the three-year period or on a rolling three-year period. When employees become eligible for the Plan, their compensation will be calculated as described above, based on their years of participation in the Plan.

Table 4. Plan Year Weights

Plan Year Weighting	Employee’s Year of Participation		
	Year 1	Year 2	Year 3 /Subsequent Years
Current Year	100%	50%	25%
Second Year		50%	
Third Year/Subsequent Years			75%
Total Weighting	100%	100%	100%

Asset Class Assignments

If an incentive-eligible employee transfers to a different asset class at the beginning of the fiscal year, he/she is phased into the new asset class performance cycle over a 3-year period, based on the following table:

Table 5. Asset Class Weights by Plan Year

	Returns	Weights
Current Year	1-Year	100% current asset class
	3-Year	33% current asset class, 67% previous asset class
Second Year	1-Year	100% current asset class
	3-Year	67% current asset class, 33% previous asset class
Third Year/Subsequent Years	1-Year	100% current asset class
	3-Year	100% current asset class

If an incentive-eligible employee transfers from one asset class to another mid-year, performance is calculated on a pro-rata basis for the number of whole months worked in each asset class.

Section 9: Incentive Compensation Adjustment

If the total fund's total return (net of fees) in the current fiscal year is negative (less than 0%) then the total incentive compensation will be calculated according to the foregoing methodology and the total payout will be reduced as follows:

Table 6. Incentive Compensation Adjustments

Total Fund 1-Year Returns	Incentive Adjustment
0%	0%
-.01% to -2%	-10%
-2.01% to -4%	-15%
-4.01% to -6%	-20%
-6.01% to -8%	-25%
-8.01% to -10%	-35%
-10.01% or lower	-50%

Additionally, if the five-year annualized return of the total fund (net of fees) is less than the actuarial assumed rate of return (currently 7.0%), the total incentive compensation for each incentive-eligible employee will be reduced by 10%. For example, if the total fund one-year net return is negative 5%, and the five-year annualized return of the total fund is less than the actuarial assumed rate of return, then the incentive compensation for each incentive eligible employee will be reduced by a total of 30%.

Section 10: Plan Administration

The Board of Trustees of SERS adopts, modifies, and monitors the Plan, and delegates to the Executive Director the administration of the Plan. The Executive Director shall have the right to interpret the plan and may administer the plan through the Incentive Plan Committee, which is a staff committee comprised of the Executive Director, Deputy Executive Director, General Counsel, Chief Risk Officer, Director of Human Resources and the Chief Investment Officer.

Calculation of Performance

An independent third party calculates annual, two-, three- and five-year Portfolio Performance and Overall Fund results.

Termination of Employment

In order to be compensated under this Plan, a participant must be employed and considered an active employee on the date the incentive compensation is paid. If a participant terminates from SERS for any reason other than death, disability, or normal retirement prior to the date of the incentive payment, that employee is ineligible to receive compensation under the Plan. If a participant terminates from SERS for reasons of death, permanent or total disability, or normal retirement, then pro-rata compensation is payable for the period of time the participant was employed based on the number of whole months worked during the performance period divided by 12. The pro-rata compensation is paid at the same time all other payments are made under

the Plan. The target compensation payment date is September following the end of the performance period.

New Hires, Promotions and Salary Adjustments

If an employee is hired or promoted into an incentive-eligible job during the first nine months of the performance period, he or she is eligible for a pro-rata payment based on the number of whole months he or she worked during the performance period.

If, during the first nine months of the performance period, a current incentive-eligible employee's base salary is adjusted and/or incentive level changes, he or she is eligible for a pro-rata payment based on the number of whole months worked at each salary and/or incentive level during the performance period.

Other Adjustments

If an incentive-eligible employee is away from work for an extended period of time such that he or she is not able to contribute to the management of the fund during the performance period, adjustments to that employee's incentive compensation may be made to reflect the period of time away. These situations will be considered on a case-by-case basis and handled at the discretion of the Incentive Plan Committee.

Plan Amendment, Suspension, or Termination

The Board shall review the Plan annually. The Plan may be amended, suspended or terminated at any time by the Board without advance notice. Further, nothing in the Plan shall confer on the participant the right to continued employment or affect SERS' right to terminate a participant's employment at any time and for any reason.

Deferral of Compensation

The Board may from time to time adopt a resolution or take other action to amend or otherwise modify this Plan to approve and provide for a deferral of payment of all or any part of any compensation earned under the Plan (a "Deferral").

Regardless of whether expressly so stated in the resolution or other action of the Board approving the Deferral (the "Deferral Action"), unless a different form of deferred compensation agreement is adopted, every Deferral shall be structured, administered and paid in a manner consistent with the provisions of Treas. Reg. § 1.409A-1(b)(4) concerning short-term deferrals and Code section 457, including specifically,

- a. the action shall specify a date of payment of the Deferrals that satisfies the requirements of the applicable two and one-half (2 ½) month period specified in Treas. Reg. § 1.409A-1(b)(4) (the "Payment Date");
- b. the action shall state:
 - (i) the period of substantial services to be performed and/or the business condition(s) to be satisfied prior to any payment of a Deferral, however, if satisfaction of such a business condition is not required prior to deferral, the period of services required shall be at least

as long as reasonably required under then applicable statutory, regulatory or other requirements or guidance so as to constitute a substantial risk of forfeiture; and

- (ii) the requirement that the person eligible for payment of the Deferral must be in the employment of SERS as of the Payment Date in order to be eligible to receive the Deferral payment.

Dispute Resolution

The Executive Director, in consultation with the Board, resolves all disputes, and such resolution is final.

Exhibit A HISTORY

Action	Approval Period
Adopted by the Retirement Board on March 15, 2001	July 1, 2001 through June 30, 2002
Amended by the Retirement Board on June 25, 2004	July 1, 2004 through June 30, 2005
Amended by the Retirement Board on October 20, 2005	July 1, 2005 through June 30, 2006
Amended by the Retirement Board on May 19, 2006	July 1, 2006 through June 30, 2007
Unchanged by the Retirement Board on May 17, 2007	July 1, 2007 through June 30, 2008
Amended by the Retirement Board on May 22, 2008	July 1, 2008 through June 30, 2009
Amended by the Retirement Board on March 19, 2009	July 1, 2008 through June 30, 2009
Amended by the Retirement Board on July 23, 2009	July 1, 2009 through June 30, 2010
Amended by the Retirement Board on May 19, 2010	July 1, 2010 through June 30, 2011
Amended by the Retirement Board on June 16, 2011	July 1, 2011 through June 30, 2012
Amended by the Retirement Board on May 14, 2012	July 1, 2012 through June 30, 2013
Amended by the Retirement Board on May 16, 2013	July 1, 2013 through June 30, 2014
Amended by the Retirement Board on Nov. 21, 2013	July 1, 2013 through June 30, 2014
Amended by the Retirement Board on May 15, 2014	July 1, 2014 through June 30, 2015
Amended by the Retirement Board on September 18, 2014	July 1, 2014 through June 30, 2015
Amended by the Retirement Board on May 22, 2015	July 1, 2015 through June 30, 2016
Amended by the Retirement Board on June 16, 2016	July 1, 2016 through June 30, 2017
Amended by the Retirement Board on May 18, 2017	July 1, 2017 through June 30, 2018
Amended by the Retirement Board on May 24, 2018	July 1, 2018 through June 30, 2019
Amended by the Retirement Board on December 20, 2018	July 1, 2018 through June 30, 2019
Amended by the Retirement Board on May 16, 2019	July 1, 2019 through June 30, 2020
Amended by the Retirement Board on May 21, 2020	July 1, 2020 through June 30, 2021
Amended by the Retirement Board on May 20, 2021	July 1, 2021 through June 30, 2022
Amended by the Retirement Board on May 19, 2022	July 1, 2022 through June 30, 2023
Amended by the Retirement Board on May 18, 2023	July 1, 2023 through June 30, 2024

ATTACHMENT 1

0 to 50 Basis Points											
WE DO NOT PAY OUT ON NEGATIVE RETURNS TO THE BENCHMARK											
Chief Investment Officer			Assistant Director Sr. Investment Officer Investment Officer			Assoc. Investment Officer Sr. Investment Analyst			Investment Analyst		
Excess Return %	Incremental Increase	Payout Percent	Excess Return %	Incremental Increase	Payout Percent	Excess Return %	Incremental Increase	Payout Percent	Excess Return %	Incremental Increase	Payout Percent
0.00	0.018	0.0%	0.00	0.012	0.0%	0.00	0.006	0.0%	0.00	0.002	0.0%
0.01	0.018	1.8%	0.01	0.012	1.2%	0.01	0.006	0.6%	0.01	0.002	0.2%
0.02	0.018	3.6%	0.02	0.012	2.4%	0.02	0.006	1.2%	0.02	0.002	0.4%
0.03	0.018	5.4%	0.03	0.012	3.6%	0.03	0.006	1.8%	0.03	0.002	0.6%
0.04	0.018	7.2%	0.04	0.012	4.8%	0.04	0.006	2.4%	0.04	0.002	0.8%
0.05	0.018	9.0%	0.05	0.012	6.0%	0.05	0.006	3.0%	0.05	0.002	1.0%
0.06	0.018	10.8%	0.06	0.012	7.2%	0.06	0.006	3.6%	0.06	0.002	1.2%
0.07	0.018	12.6%	0.07	0.012	8.4%	0.07	0.006	4.2%	0.07	0.002	1.4%
0.08	0.018	14.4%	0.08	0.012	9.6%	0.08	0.006	4.8%	0.08	0.002	1.6%
0.09	0.018	16.2%	0.09	0.012	10.8%	0.09	0.006	5.4%	0.09	0.002	1.8%
0.10	0.018	18.0%	0.10	0.012	12.0%	0.10	0.006	6.0%	0.10	0.002	2.0%
0.11	0.018	19.8%	0.11	0.012	13.2%	0.11	0.006	6.6%	0.11	0.002	2.2%
0.12	0.018	21.6%	0.12	0.012	14.4%	0.12	0.006	7.2%	0.12	0.002	2.4%
0.13	0.018	23.4%	0.13	0.012	15.6%	0.13	0.006	7.8%	0.13	0.002	2.6%
0.14	0.018	25.2%	0.14	0.012	16.8%	0.14	0.006	8.4%	0.14	0.002	2.8%
0.15	0.018	27.0%	0.15	0.012	18.0%	0.15	0.006	9.0%	0.15	0.002	3.0%
0.16	0.018	28.8%	0.16	0.012	19.2%	0.16	0.006	9.6%	0.16	0.002	3.2%
0.17	0.018	30.6%	0.17	0.012	20.4%	0.17	0.006	10.2%	0.17	0.002	3.4%
0.18	0.018	32.4%	0.18	0.012	21.6%	0.18	0.006	10.8%	0.18	0.002	3.6%
0.19	0.018	34.2%	0.19	0.012	22.8%	0.19	0.006	11.4%	0.19	0.002	3.8%
0.20	0.018	36.0%	0.20	0.012	24.0%	0.20	0.006	12.0%	0.20	0.002	4.0%
0.21	0.018	37.8%	0.21	0.012	25.2%	0.21	0.006	12.6%	0.21	0.002	4.2%
0.22	0.018	39.6%	0.22	0.012	26.4%	0.22	0.006	13.2%	0.22	0.002	4.4%
0.23	0.018	41.4%	0.23	0.012	27.6%	0.23	0.006	13.8%	0.23	0.002	4.6%
0.24	0.018	43.2%	0.24	0.012	28.8%	0.24	0.006	14.4%	0.24	0.002	4.8%
0.25	0.018	45.0%	0.25	0.012	30.0%	0.25	0.006	15.0%	0.25	0.002	5.0%
0.26	0.018	46.8%	0.26	0.012	31.2%	0.26	0.006	15.6%	0.26	0.002	5.2%
0.27	0.018	48.6%	0.27	0.012	32.4%	0.27	0.006	16.2%	0.27	0.002	5.4%
0.28	0.018	50.4%	0.28	0.012	33.6%	0.28	0.006	16.8%	0.28	0.002	5.6%
0.29	0.018	52.2%	0.29	0.012	34.8%	0.29	0.006	17.4%	0.29	0.002	5.8%
0.30	0.018	54.0%	0.30	0.012	36.0%	0.30	0.006	18.0%	0.30	0.002	6.0%
0.31	0.018	55.8%	0.31	0.012	37.2%	0.31	0.006	18.6%	0.31	0.002	6.2%
0.32	0.018	57.6%	0.32	0.012	38.4%	0.32	0.006	19.2%	0.32	0.002	6.4%
0.33	0.018	59.4%	0.33	0.012	39.6%	0.33	0.006	19.8%	0.33	0.002	6.6%
0.34	0.018	61.2%	0.34	0.012	40.8%	0.34	0.006	20.4%	0.34	0.002	6.8%
0.35	0.018	63.0%	0.35	0.012	42.0%	0.35	0.006	21.0%	0.35	0.002	7.0%
0.36	0.018	64.8%	0.36	0.012	43.2%	0.36	0.006	21.6%	0.36	0.002	7.2%
0.37	0.018	66.6%	0.37	0.012	44.4%	0.37	0.006	22.2%	0.37	0.002	7.4%
0.38	0.018	68.4%	0.38	0.012	45.6%	0.38	0.006	22.8%	0.38	0.002	7.6%
0.39	0.018	70.2%	0.39	0.012	46.8%	0.39	0.006	23.4%	0.39	0.002	7.8%
0.40	0.018	72.0%	0.40	0.012	48.0%	0.40	0.006	24.0%	0.40	0.002	8.0%
0.41	0.018	73.8%	0.41	0.012	49.2%	0.41	0.006	24.6%	0.41	0.002	8.2%
0.42	0.018	75.6%	0.42	0.012	50.4%	0.42	0.006	25.2%	0.42	0.002	8.4%
0.43	0.018	77.4%	0.43	0.012	51.6%	0.43	0.006	25.8%	0.43	0.002	8.6%
0.44	0.018	79.2%	0.44	0.012	52.8%	0.44	0.006	26.4%	0.44	0.002	8.8%
0.45	0.018	81.0%	0.45	0.012	54.0%	0.45	0.006	27.0%	0.45	0.002	9.0%
0.46	0.018	82.8%	0.46	0.012	55.2%	0.46	0.006	27.6%	0.46	0.002	9.2%
0.47	0.018	84.6%	0.47	0.012	56.4%	0.47	0.006	28.2%	0.47	0.002	9.4%
0.48	0.018	86.4%	0.48	0.012	57.6%	0.48	0.006	28.8%	0.48	0.002	9.6%
0.49	0.018	88.2%	0.49	0.012	58.8%	0.49	0.006	29.4%	0.49	0.002	9.8%
0.50	0.018	90.0%	0.50	0.012	60.0%	0.50	0.006	30.0%	0.50	0.002	10.0%

INVESTMENT DEPARTMENT INCENTIVE PLAN FISCAL YEAR 2024

_____ moved and _____ seconded the motion to approve the Investment Department Incentive Plan for fiscal year ending June 30, 2024, which replaces the Fiscal Year 2023 Investment Department Incentive Plan approved May 19, 2022.

Upon roll call, the vote was as follows:

<u>ROLL CALL:</u>	<u>YEA</u>	<u>NAY</u>	<u>ABSTAIN</u>
Frank Weglarz	_____	_____	_____
Hugh Garside	_____	_____	_____
James Haller	_____	_____	_____
Matthew King	_____	_____	_____
Catherine Moss	_____	_____	_____
Barb Phillips	_____	_____	_____
James Rossler	_____	_____	_____
Daniel Wilson	_____	_____	_____
Jeffrey DeLeone	_____	_____	_____



Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

Health Insurance Cost Estimates for Self Funded Plans

Preliminary for Plan Year 2024



May 18, 2023

Alisa Bennett, FSA, EA, FCA, MAAA

www.CavMacConsulting.com



Rate Setting Data

Paid Claims and Enrollment Data Provided by SERS



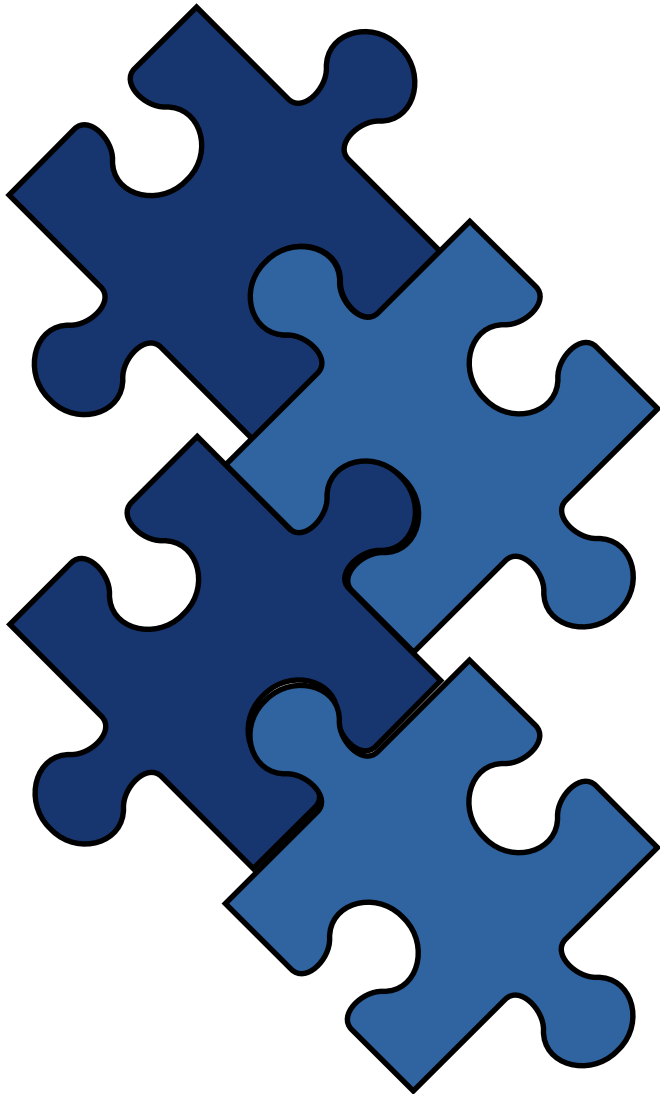
Summarized separately for:

- * Medical and prescription drug
- * Medicare and non-Medicare
- * Medical Plans and Medicare Part D reimbursements

Using 2021 and 2022 medical data. We are beyond the period of obvious impact of COVID – 19, but long-term impact still unknown.

Used calendar year 2021 and 2022 Express Scripts prescription drug data and Medicare Part D reimbursements for Medicare-eligible rates.

New agreements with ESI are projected to lead to prescription drug cost reductions starting in 2023, which are incorporated in the proposed rates.



Impact

- * COVID-19 is expected to have a minimal impact on 2023 and 2024 costs.
- * Impact, if any, of COVID-19 long haulers is unknown.

Potential Costs

- * Direct costs of COVID-19 in 2020 were offset by deferral of care and delaying non-emergency surgeries.
- * Routine and non-emergency care appears to have returned for 2021 and 2022, but impact of negative health impacts of skipped or delayed care is unknown.

Potential Savings

- * Increased use of telemedicine could create cost savings going forward. However, telemedicine could turn out to be in addition to office visits rather than replacing them. For SERS, use of telemedicine has declined for 2022.





The bill's health reforms primarily impact those with Medicare coverage.

Specifically, the bill implements the following measures:

- It allows the Secretary of Health and Human Services to negotiate the prices of certain Medicare drugs each year. The negotiations will take effect in 2026 for 10 drugs covered by Medicare, increasing to 20 drugs in 2029.
- Beginning in 2023, the cost of insulin will be capped at \$35 per month for people with diabetes enrolled in Medicare.
- Beginning in 2024, the 5% coinsurance for Medicare beneficiaries in catastrophic coverage phase will be eliminated. Beginning in 2025, out-of-pocket prescription drug costs will be capped at \$2,000 per year for Medicare beneficiaries.
- The bill also implements a three-year extension on increased health insurance subsidies for coverage purchased through an Exchange. These enhanced subsidies were originally provided as part of the American Rescue Plan Act, a COVID-19 relief bill, and were set to expire at the end of 2022.

Assumptions and Methods

Medical and Prescription Drug Trend Assumptions



Used Industry Projections for Future Trend



Industry projections suggest that projected medical plan cost increases for 2023 will be similar to pre-pandemic levels.



Double-digit specialty Rx cost trend, mostly driven by price increases and new specialty drugs and biologics.



Health plan cost increases continue to significantly outpace general inflation and average wage increases.

Assumptions and Methods

Medical and Prescription Drug Trend Assumptions



Trend From Mid-Point of Experience Period to Mid-Point of Rate Setting Period (6/30/2024)

Medical

Industry projections suggest approximately 7% for future medical trend for actives and pre-Medicare retirees. Used 7% in first year stepping down to 6.5%.

Prescription Drug

7% for Medicare and Non-Medicare.

No trend assumed on Medicare Part D direct reimbursements.

Assumptions and Methods

Spouses and Child(ren)



Current recommendation is ratio of:

- * 25% of retiree cost for child(ren)
- * 80% of retiree cost for spouse

Data fluctuates since the spouse and dependent coverage is a relatively small group. Overall data supports continued use of those ratios.



2024 Non-Medicare Medical Plan

Same from 2019 through 2023 (No plan changes)



	<u>2023</u>	<u>Proposed Medical 2024</u>
Deductible (Annual)	\$2,000/person \$4,000/family	\$2,000/person \$4,000/family
Co-insurance maximum	none	none
Out-of-Pocket Maximum	\$7,350/\$14,700	\$7,350/\$14,700
Office visit primary care	\$20 co-pay	\$20 co-pay
Specialist	\$40 co-pay	\$40 co-pay
Surgeon fee	20% coinsurance	20% coinsurance
Inpatient Hospital	20% coinsurance after \$250 co-pay	20% coinsurance after \$250 co-pay
Emergency Room	20% coinsurance	20% coinsurance
Ambulance	20% coinsurance	20% coinsurance
Urgent Care	\$40 co-pay	\$40 co-pay
Outpatient Diagnostic X-Ray	20% coinsurance	20% coinsurance
Outpatient Diagnostic Lab	20% coinsurance	20% coinsurance
Outpatient Surgery (Facility only)	20% coinsurance	20% coinsurance
Chiropractic	20% coinsurance	20% coinsurance
Durable Medical Equipment	20% coinsurance	20% coinsurance
Skilled Nursing Facility	20% coinsurance (100 day maximum)	20% coinsurance (100 day maximum)
Home Health Care	20% coinsurance	20% coinsurance
Hospice	Inpatient: 100% coverage after deductible, 30 day lifetime limit. Outpatient: 20% coinsurance after deductible	Inpatient: 100% coverage after deductible, 30 day lifetime limit. Outpatient: 20% coinsurance after deductible

2023 new ESI contract savings incorporated in Prescription Drug Rates.

2024 Non-Medicare Medical Plan Same As 2023



Self Funded Non-Medicare

	<u>Projected 2023</u>	<u>Projected 2024</u>
Medical		
Retiree	\$1,239.00	\$1,235.00
Spouse	\$991.00	\$988.00
Child	\$310.00	\$309.00
Prescription Drug		
Retiree	\$244.00	\$207.00
Spouse	\$195.00	\$166.00
Child	\$61.00	\$52.00
Total		
Retiree	\$1,483.00	\$1,442.00
Spouse	\$1,186.00	\$1,154.00
Child	\$371.00	\$361.00

0.0% decrease in retiree medical costs, 15.2% decrease in retiree prescription drug cost, 2.8% decrease in retiree total cost.

2024 Non-Medicare Medical Plan

Reduce Physician Copays from \$20 to \$10 & Specialist Copays from \$40 to \$30



Self Funded Non-Medicare

	<u>Projected 2023</u>	<u>Projected 2024</u>
Medical		
Retiree	\$1,239.00	\$1,252.00
Spouse	\$991.00	\$1,002.00
Child	\$310.00	\$313.00
Prescription Drug		
Retiree	\$244.00	\$207.00
Spouse	\$195.00	\$166.00
Child	\$61.00	\$52.00
Total		
Retiree	\$1,483.00	\$1,459.00
Spouse	\$1,186.00	\$1,168.00
Child	\$371.00	\$365.00

1.0% increase in retiree medical costs, 15.2% decrease in retiree prescription drug cost, 1.6% decrease in retiree total cost.

2024 Non-Medicare Medical Plan

Reduce Physician Copays from \$20 to \$10 & Specialist Copays from \$40 to \$25



Self Funded Non-Medicare

	<u>Projected 2023</u>	<u>Projected 2024</u>
Medical		
Retiree	\$1,239.00	\$1,258.00
Spouse	\$991.00	\$1,007.00
Child	\$310.00	\$315.00
Prescription Drug		
Retiree	\$244.00	\$207.00
Spouse	\$195.00	\$166.00
Child	\$61.00	\$52.00
Total		
Retiree	\$1,483.00	\$1,465.00
Spouse	\$1,186.00	\$1,173.00
Child	\$371.00	\$367.00

1.5% increase in retiree medical costs, 15.2% decrease in retiree prescription drug cost, 1.2% decrease in retiree total cost.

Non-Medicare Eligible SERS Wraparound HRA Plan



- * Marketplace Wraparound HRA Plan - Participants choose insurance from any insurer offering coverage in the federal Marketplace, and if eligible, receive a federal subsidy to lower the premium and cost-sharing amounts. The SERS Marketplace Wraparound HRA Plan offers additional benefits to help pay for deductibles, co-pays, and other costs. There is no additional premium for the SERS Wraparound Plan.
- * Reimbursement is capped at \$1,950 per participating family per calendar year, indexed for inflation for plan years beginning after December 31, 2022, in accordance with federal limits. This amount will index with inflation for future years.
- * 2019 through 2022 claims experience has been well below cost threshold.
- * The American Rescue Plan Act of 2021 (COVID-19 relief) law passed in March 2021 expands Marketplace subsidies. The expansion was extended by the Inflation Reduction Act. This could make the SERS Wraparound HRA plan more attractive to members, creating a cost savings for SERS.



Medicare Part D Prescription Drug Plan (PDP) And Express Scripts for Medicare Eligible



* Medicare Part D Prescription Drug Plan (PDP) savings passed on to Medicare-eligible retirees only.

* Based on 2023 Medicare Part D National Monthly Bid amount and Base Beneficiary Premium, Direct Subsidy is less than \$2 PMPM

* Due to Inflation Reduction Act, Direct Subsidy may increase to account for additional plan costs. Some projected additional plan costs are because of cap on insulin, which SERS already offers. We do not yet know the amount of the 2024 Direct Subsidy.

* Medicare Part D Prescription Drug Plan (PDP) receives other subsidies that are assumed to increase with same trend as claims:

CMS catastrophic reinsurance

Manufacturer coverage gap reimbursements



Results

Monthly Medicare Eligible Drug Costs



	Projected 2023 Rate After Contract Extension Savings	Projected 2024 Rate After New Contract Savings <i>Before</i> Increased Direct Subsidy
Retiree	\$159.00	\$154.00
Spouse	\$159.00	\$154.00
Child	\$159.00	\$154.00

Traditional Choice Costs for Medicare Eligible



Medicare Eligible in Medicare Advantage

Medicare eligible retirees (including those enrolled in Medicare Part B only) will continue to be enrolled in the fully insured Medicare Advantage Plan.



Medicare Eligible Not in Medicare Advantage

However, some retirees (less than 1% of total) are not enrolled in the Medicare Advantage plan for various reasons. Medicare Traditional Choice rates are available for Medicare eligible members not in the Medicare Advantage Plan.



Prescription Benefits for Traditional Choice

Prescription drug rates for this group are the same as for other Medicare eligible members.



Traditional Choice Costs for Medicare Eligible

Development of Rates



Historically
Volatile



Historical medical data for this group was very volatile and PMPM costs were high, so we had been holding the medical rates steady from year to year.

Trending
Lower



Data has stabilized over the past few years and are trending lower, but the group remains a mix between long time members and members who use the plan for a short time before moving to Medicare Advantage.

Decision to
Lower



Therefore, we have lowered the medical portion of the Medicare Traditional Choice rates somewhat and will continue to monitor the rates.

Results – Monthly Costs and Rates

Current Prescription Drug Plan



Self Funded Medicare Traditional Choice Rates

	<u>Projected 2023</u>	<u>Projected 2024</u>
Medical		
Retiree	\$400.00	\$350.00
Spouse	\$400.00	\$350.00
Child	\$400.00	\$350.00
Prescription Drug		
Retiree	\$159.00	\$154.00
Spouse	\$159.00	\$154.00
Child	\$159.00	\$154.00
Total		
Retiree	\$559.00	\$504.00
Spouse	\$559.00	\$504.00
Child	\$559.00	\$504.00



Health Care

May 18, 2023

Christi Pepe

Director Health Care Services



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

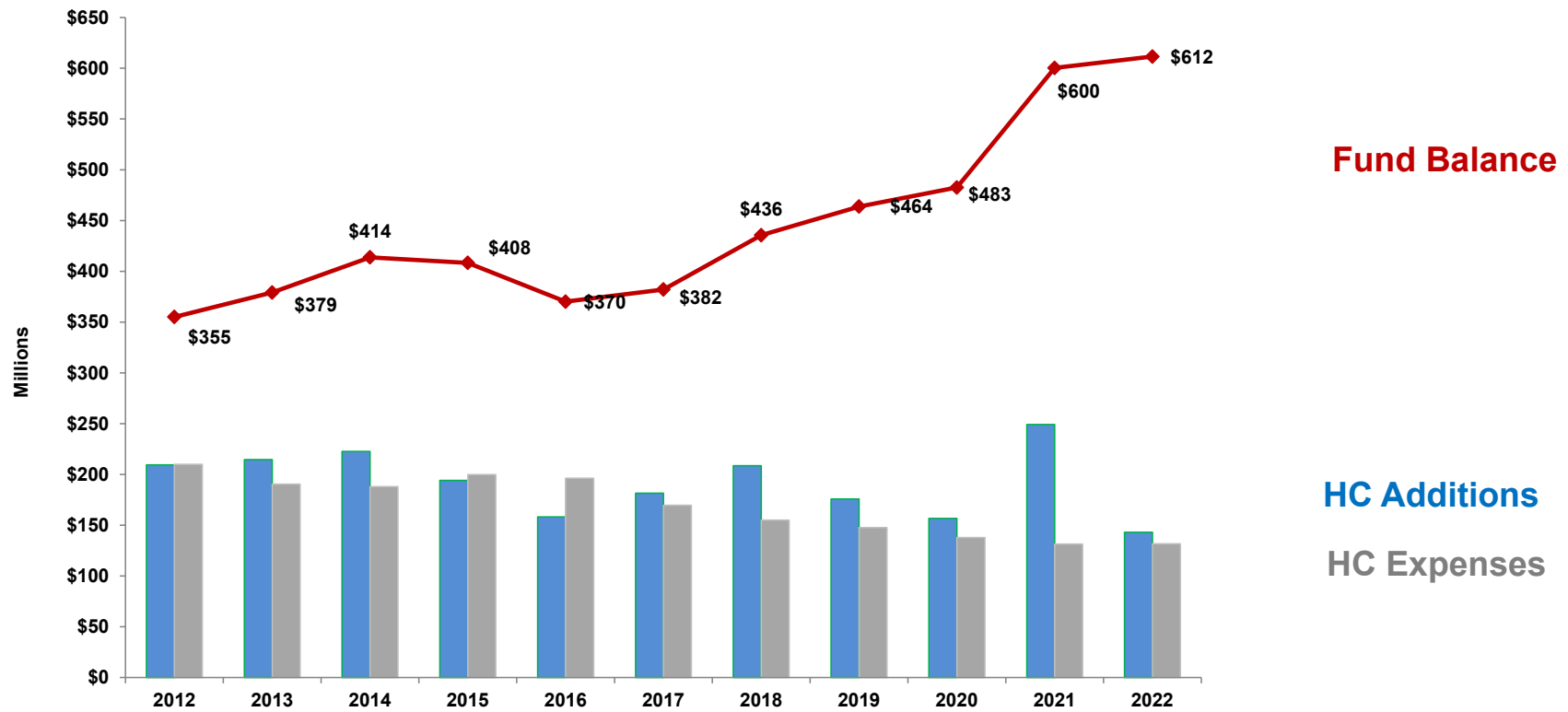
Agenda

- Health care program status
- 2024 rates - expectations for June
- Other program considerations



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

Health Care Fund Net Position



Enrollment / May 2023

Non-Medicare

Aetna Choice	3,035
AultCare	125
Wraparound HRA	339
TOTAL	3,499

Medicare

Aetna Medicare	36,297
Aetna Traditional Choice	83
TOTAL	36,380

Optional Coverage

Delta Dental	43,966
VSP Vision	34,966



Premium Expectations

Aetna Medicare Plan (PPO)

- No proposed premium change

Aetna Traditional Choice

- Follow actuary's recommendation
-

Aetna Choice POS II

- No proposed premium change

AultCare PPO

- Approximate 4% increase



Dental and Vision Premiums / 2024 - 2025

Delta Dental	2023 Premiums	Two-Year Premiums (2024-2025)
Benefit Recipient	\$28.25	\$30.37
Benefit Recipient and one dependent	\$56.50	\$60.74
Benefit Recipient and two or more dependents	\$84.98	\$91.35

VSP Vision	2023 Premiums	Two-Year Premiums (2024-2025)
Benefit Recipient	\$6.17	\$6.17
Benefit Recipient and one dependent	\$12.34	\$12.34
Benefit Recipient and two or more dependents	\$14.49	\$14.49



Proposed 2024 Benefit Changes

Aetna Choice POS II

- Reduce Primary Care Physician (PCP) co-pay from \$20 to \$10
- Reduce Specialist Office Visit co-pay from \$40 to \$25

Marketplace Wraparound HRA

- Increase to federally authorized reimbursement amount
- Expand reimbursement to any out-of-pocket expense for a covered service

Aetna Medicare Plan (PPO)

- Reduce Specialist office visit co-pay from \$30 to \$20
- Add \$60 per quarter Over The Counter (OTC) drug benefit to medical plan
- CMS-required Express Scripts pharmacy network change



Current Premium Discount

- Provides a 25% premium reduction
 - most frequent discount is \$16 monthly / \$192 yearly
- Qualifying income 175% Federal Poverty Level (FPL)
 - at or below \$25,515 annual single income
- Total enrollees: 1,490



Thank You



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

FEDERAL LEGISLATION BOARD REPORT
118th United States Congress
(Prepared by Chris Collins as of May 5, 2023)

H.R.82

SPONSOR: Rep. Graves, Garret (R-LA)

LAST ACTIONS: House - 01/09/2023 Referred to the House Committee on Ways and Means

CAPTION: Social Security Fairness Act of 2023

COMMENT: Repeals the GPO and WEP. 250 co-sponsors; nine Ohioans

S.597

SPONSOR: Sen. Brown, Sherrod [D-OH]

LAST ACTIONS: Senate - 03/01/2023 Read twice and referred to the Committee on Finance.

CAPTION: Social Security Fairness Act

COMMENT: Repeals the GPO and WEP. 39 co-sponsors

STATE LEGISLATION BOARD REPORT
(Prepared by Chris Collins as of May 5, 2023)

135th General Assembly

SB6 ESG POLICIES-STATE ENTITIES (Schuring, K) - Regarding environmental, social, and corporate governance policies with respect to the state retirement systems, Bureau of Workers' Compensation, and state institutions of higher education.

Current Status: 04/18/2023 Reported out as amended, Senate Finance, (Fifth Hearing)

HB4 LEGISLATIVE INTENT-ECONOMIC BOYCOTTS (Young, T., King, A.) To declare the General Assembly's intention to enact legislation regarding financial institutions and other businesses that conduct economic boycotts or discriminate against certain companies or customers based on certain factors.

Current Status: 02/16/2023 Referred to Financial Institutions Committee

HB33 FY24-25 OPERATING BUDGET (Edwards, J.) To make operating appropriations for the biennium beginning July 1, 2023, and ending June 30, 2025, to levy taxes, and to provide authorization and conditions for the operation of state programs.

Current Status: 04/26/2023 Passed by House; Vote 78-19

HB146 SERS BENEFIT CAP (Bird, A.) To establish a contribution based benefit cap in calculating a School Employees Retirement System member's retirement benefit.

Current Status: 04/25/2023 House Pensions, (First Hearing)

School Employees Retirement System of Ohio
REVIEW OF ADMINISTRATIVE EXPENSES
Apr-23

Expense Account	Vendor	Amount
53100 - Salaries & Wages	ADP, LLC	1,160,717.63
		Subtotal 1,160,717.63
53110 - Salaries & Wages - Overtime	ADP, LLC	1,398.67
		Subtotal 1,398.67
53111 - Vacation Leave Expense	ADP, LLC	109,468.22
		Subtotal 109,468.22
53112 - Sick Leave Expense	ADP, LLC	39,624.29
		Subtotal 39,624.29
53200 - Employer Contributions - PERS	ADP, LLC	173,601.30
		Subtotal 173,601.30
53300 - Group Life	American United Life Insurance Company	9,373.87
		Subtotal 9,373.87
53310 - Long Term Disability	American United Life Insurance Company	3,314.58
		Subtotal 3,314.58
53315 - Short Term Disability	American United Life Insurance Company	2,566.74
		Subtotal 2,566.74
53320 - Group Health Claims	Aetna Daily Wires - ESERS Aetna Daily Wires - ESERS	352.21 132,403.61
		Subtotal 132,755.82
53322 - Prescription Claims	Express Scripts - ESERS SaveonSP, LLC	88,594.72 3,052.95
		Subtotal 91,647.67
53323 - Prescription Admin fees	Beyond Blue Corporation	1,024.80
		Subtotal 1,024.80
53325 - Group Health - Stop Loss Claims	Stop Loss Reimbursement	(352.21)
		Subtotal (352.21)
53326 - Vision Claims	VSP - (OH)	3,862.75
		Subtotal 3,862.75
53327 - Vision Admin Fees	VSP - (OH)	121.68
		Subtotal 121.68
53330 - Group Health - Employee Cost	Employee Preimiums	(34,574.30)
		Subtotal (34,574.30)
53331 - Group Health - Wellness Incentive	ADP, LLC	3,775.00
		Subtotal 3,775.00
53332 - Group Health - Tobacco Premiums	ADP, LLC	(680.00)
		Subtotal (680.00)
53340 - Medicare Premium - Employer	ADP, LLC ADP, LLC	17,321.23 0.03
		Subtotal 17,321.26
53350 - Workers Compensation	Ohio Bureau Of Workers Compensation	3,452.75
		Subtotal 3,452.75
53380 - Deferred Compensation Match	ADP, LLC	4,830.00
		Subtotal 4,830.00
54100 - Actuarial Services	Cavanaugh MacDonald Consulting, LLC	12,350.00
		Subtotal 12,350.00
54310 - Custodial Fees	BNY Mellon Asset Servicing	83,300.26
		Subtotal 83,300.26
54320 - Custodial Banking	Treasurer of State - Warrants Huntington National Bank	84.14 31,212.16
		Subtotal 31,296.30
54410 - Master Recordkeeper Fees	BNY Mellon Asset Servicing	80,000.00
		Subtotal 80,000.00

54420 - Investment Advisory Fees	Wilshire/Aksia		43,921.23
		Subtotal	43,921.23
54430 - Performance/Analytics Fee	Bloomberg Finance LP		1,104.15
	BNY Mellon Asset Servicing		32,651.66
	Wilshire Advisors, LLC		3,000.00
		Subtotal	36,755.81
54520 - Medical Consultant	Borchers, M.D., Glen G.		3,750.00
		Subtotal	3,750.00
54610 - Special Counsel	Ice Miller LLP		2,272.50
	Seyfarth Shaw LLP		12,810.00
		Subtotal	15,082.50
54620 - Technical	Sagitec Solutions, LLC		31,416.00
	LexisNexis Risk Data Management, Inc		2,563.74
	Sigital, LLC		1,665.00
	Improving Ohio, Inc.		4,550.00
	Revelwood Incorporated		12,100.00
		Subtotal	52,294.74
54630 - Other Professional Services	Wickert, Kimberly		324.00
	Vorys Advisors LLC		3,333.33
	Attorney General		13,444.95
	Performance Leadership Group, LLC		5,625.00
		Subtotal	22,727.28
55100 - Postage	Employee Shipping Reimbursement		(55.96)
	Notifii LLC		237.00
	Pitney Bowes Inc.		1,024.11
	Unishippers Association		806.59
	Quadient		615.60
	FedEx		32.95
		Subtotal	2,660.29
55200 - Telecommunications Services	Verizon Wireless		393.75
	XO Communications		1,792.96
	Nextel Communications		55.49
	AT&T		40.10
	LUMEN		3,890.57
	Spectrum		2,021.46
	Spectrum AWS		2,208.01
	Everstream Solutions LLC		1,376.00
	XO Verizon		2,210.35
		Subtotal	13,988.69
55300 - Member/Employer Education	Employer Training Fees		(60.00)
	Vaughan, Cameron		53.61
	Talbert, Katie		101.76
	Richards, Michelle		125.72
		Subtotal	221.09
55400 - Printing Paper	Sterling Paper Company		8,471.10
		Subtotal	8,471.10
56020 - Hardware Maintenance	Park Place Technologies		8,053.89
		Subtotal	8,053.89
56030 - Software Maintenance	Sagitec Solutions, LLC		35,000.00
	Dell Marketing LP		72.95
	Open Text, Inc		4,465.08
	OARnet		47,729.28
		Subtotal	87,267.31
56035 - Software Subscriptions	Shi International Corp.		23,621.23
	CarahSoft Technology Corp		10,190.00
	ADP, LLC		3,632.38
	Liquid Web Inc		324.09
	Zoom		556.81
	Expedient		13,405.72
	Amazon Web Services		237.27
		Subtotal	51,967.50
56040 - Hardware < \$5,000	Dell Marketing LP		119.99
		Subtotal	119.99
56110 - Equipment Repairs & Maintenance	Ricoh USA, Inc		332.99
	Digital Print Solutions		1,213.22
	Canon Financial Services, Inc		2,191.27
	US Bank Equipment Finance		1,935.73
		Subtotal	5,673.21
56130 - Office Supplies & Expenses	Staples Business Advantage		243.06
	Amazon.com		53.98
	Metalcraft, Inc.		371.29
		Subtotal	668.33
56160 - Records Storage	Vital Records Holdings, LLC		1,717.04
		Subtotal	1,717.04

56210 - Seminars & Conferences	Ohio State University	675.00
	CFA Institute	475.00
	Heisel and Associates	103.42
	Central Ohio ISSA	1,375.00
	LogicManager, Inc.	799.00
	Subtotal	3,427.42
56220 - In House Training	Steven R. Edwards	1,750.00
	Subtotal	1,750.00
56310 - Travel & Transportation	Roggenkamp, Karen	618.44
	Stensrud, Richard	1,855.32
	Kroger	13.99
	Rossler, James	339.21
	Haller, James	688.02
	Phillips, Barbra	689.09
	Giant Eagle	25.60
	Sam's Club	46.68
	Bell, Joe	37.00
	Le, Hai Yen	1,624.07
	Majeed, Farouki	5,085.17
	Masri, Judi	917.80
	Moss, Catherine	776.67
	Wilson, Daniel L.	439.20
	King, Matt	321.75
	Weglarz, Frank	375.43
	Messerschmitt, Adam	926.23
	Collins, Chris	927.66
	Managed Fund Association	279.00
	Bradley, Susan	253.55
Meijer	31.11	
Olive Garden	356.18	
	Subtotal	16,627.17
56410 - Subscriptions	Wall Street Journal	116.97
	Constant Contact	195.00
	Shutterstock, Inc.	29.00
	Dow Jones & Company, Inc.	2,065.75
	Toledo Blade	12.99
	Currency Research Associates LLC	1,250.00
	Subtotal	3,669.71
56420 - Memberships	International Institute of Business Analysis	139.00
	Public Pension Financial Forum	200.00
	HRACO	125.00
	Association of Government Accountants	250.00
	Subtotal	714.00
56610 - Operations Maintenance	Amtrec, LLC	1,666.00
	South Central Power Company	90.00
	Northeast Ohio Natural Gas Corp.	171.42
	Subtotal	1,927.42
56630 - Interior Landscaping	Ambius Inc. (05)	1,366.37
	Subtotal	1,366.37
56640 - Vehicle Expense	Moo Moo Car Wash	21.00
	Subtotal	21.00
56620 - Staff Support	Cintas Corporation	588.39
	Franklin Services	1,075.70
	ADP, LLC	3,401.00
	Greer, David	304.02
	Premier ProduceOne	226.75
	SERS Employee Fund	55.99
	Amazon.com	350.00
	PayFlex Systems USA, Inc.	679.00
	Wellable LLC	470.60
	Dick's Sporting Goods	25.00
	Aetna Behavioral Health, LLC	282.60
	Buckeye Donuts	208.89
Acorn Distributors Inc.	619.81	
	Subtotal	8,287.75
56621 - Recruiting Expense	ADP Screening & Selection Services	292.96
	Indeed	1,299.46
	Wiley	600.00
	Subtotal	2,192.42
56710 - Board Member - School Board Reimb.	Ashland City School District	1,140.20
	Subtotal	1,140.20
56820 - Ohio Retirement Study Council	Ohio Retirement Study Council	12,096.53
	Subtotal	12,096.53
56900 - Reimbursement of Leased Svcs	Reimbursement of Leased Services	(25,416.67)
	Subtotal	(25,416.67)
	Total SERS Administrative Expense	2,313,340.40

School Employees Retirement System of Ohio

Summary of administrative operation expenses during the period **April 1, 2023-April 30, 2023.**

Actuals

Apr-2023

Account	Amount
Salaries & Wages	1,160,717.63
Salaries & Wages- Overtime	1,398.67
Vacation Leave Expense	109,468.22
Sick Leave Expense	39,624.29
Employer Contributions- PERS	173,601.30
Group Life	9,373.87
Long Term Disability	3,314.58
Short Term Disability	2,566.74
Group Health Claims	132,755.82
Prescription Claims	91,647.67
Prescription Admin Fees	1,024.80
Group Health- Stop Loss Claims	(352.21)
Vision Claims	3,862.75
Vision Admin Fees	121.68
Group Health- Employee Cost	(34,574.30)
Group Health- Wellness Incentive	3,775.00
Group Health- Tobacco Premiums	(680.00)
Medicare Premium- Employer	17,321.26
Workers Compensation	3,452.75
Deferred Compensation Match	4,830.00
Actuarial Services	12,350.00
Custodial Fees	83,300.26
Custodial Banking	31,296.30

Master Recordkeeper Fees	80,000.00
Investment Advisory Fees	43,921.23
Performance/ Analytics Fee	36,755.81
Medical Consultant	3,750.00
Special Counsel	15,082.50
Technical	52,294.74
Other Professional Services	22,727.28
Postage	2,660.29
Telecommunications Services	13,988.69
Member/Employer Education	221.09
Printing Paper	8,471.10
Hardware Maintenance	8,053.89
Software Maintenance	87,267.31
Software Subscriptions	51,967.50
Hardware < \$5,000	119.99
Equipment Repairs & Maintenance	5,673.21
Office Supplies & Expenses	668.33
Records Storage	1,717.04
Seminars & Conferences	3,427.42
In House Training	1,750.00
Travel & Transportation	16,627.17
Subscriptions	3,669.71
Memberships	714.00
Operations Maintenance	1,927.42
Interior Landscaping	1,366.37
Vehicle Expense	21.00
Staff Support	8,287.75
Recruiting Expense	2,192.42
Board Member- School Board Reimb.	1,140.20
Ohio Retirement Study Council	12,096.53
Reimbursement of Leased Svcs.	(25,416.67)
Total Administrative Expenses	2,313,340.40

**FY2023 Administrative Budget
Board Expense to Budget Reporting
Year-to-Date Through April 30, 2023**

Major Category/Sub-Major Category	Line Item	Vendor	FY2023 Budget	YTD Expense
PROFESSIONAL SERVICES			\$ 6,502,883	\$ 4,691,604
ACTUARIAL ADVISORS			\$ 421,008	\$ 317,912
	Actuarial	Cavanaugh Macdonald	\$ 272,508	\$ 234,662
AUDITING			\$ 244,000	\$ 181,031
	Auditing	RSM	\$ 184,000	\$ 152,444
BANKING FEES			\$ 1,268,466	\$ 959,302
	Custodial Banking		\$ 1,073,544	\$ 833,111
		Huntington	\$ 302,004	\$ 248,657
		BNYM	\$ 765,000	\$ 584,455
	Administrative Banking	Huntington National Bank/ TOS	\$ 194,922	\$ 126,190
INVESTMENT RELATED			\$ 2,664,622	\$ 2,042,184
	Master Recordkeeper		\$ 1,116,000	\$ 811,276
	Investment Consulting & Advisory Services		\$ 650,000	\$ 448,185
		Aksia	\$ 200,000	\$ 73,185
		Wilshire	\$ 450,000	\$ 375,000
	Performance Analytics Services		\$ 690,263	\$ 628,436
		Barra-One Risk Mgmt Sys	\$ 238,445	\$ 238,445
		BNY Mellon GRS	\$ 412,800	\$ 343,767
TECHNICAL			\$ 1,859,787	\$ 1,153,676
	Special Counsel		\$ 235,020	\$ 158,394
	Technical		\$ 1,202,316	\$ 698,317
		Merative US L.P.	\$ 118,000	\$ 88,500
		Sagitec	\$ 550,000	\$ 406,040
	Other Professional Services		\$ 422,451	\$ 296,965

Major Category/Sub-Major Category	Line Item	Vendor	FY2023 Budget	YTD Expense
OTHER OPERATING EXPENSE			\$ 3,607,379	\$ 2,737,712
COMPUTER SUPPORT SERVICES			\$ 2,343,770	\$ 1,766,809
	Software Maintenance		\$ 1,004,851	\$ 836,941
		Hyland	\$ 110,529	\$ 114,482
		Dell	\$ 240,000	\$ 236,640
		Sagitec	\$ 420,000	\$ 350,000
	Software Subscriptions		\$ 1,183,234	\$ 825,245
		DRaaS	\$ 158,000	\$ 92,476
		Dynamo	\$ 128,000	\$ 148,114
		Carahsoft	\$ 124,688	\$ 109,855
PROPERTY MANAGEMENT LIABILITY INSURANCE				
	Management Liability Insurance		\$ 518,000	\$ 519,591
		Cyber Liability Insurance	\$ 118,000	\$ 105,264
		Crime Fiduciary D&O Insurance	\$ 400,000	\$ 414,327

PROJECT ITEMS

Major Category/Sub-Major Category	Line Item	Project	FY2023 Budget	YTD Expense
PROFESSIONAL SERVICES				
TECHNICAL				
		CBBC Programming	\$ 150,000	\$ 39,382

SERS

UNBUDGETED PROJECT ITEMS

Major Category/Sub-Major Category	Line Item	Project	FY2023 Budget	YTD Expense
Technical	Technical	Agile Coaching- Project Mgmt	\$ -	\$ 10,500
	Seminars and Conferences	Agile Coaching- Project Mgmt	\$ -	\$ 18,900

OSERS BROAD STREET, LLC

UNBUDGETED PROJECT ITEMS

Major Category	Line Item	Project	FY2023 Budget	YTD Expense
----------------	-----------	---------	---------------	-------------

SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

FINANCIAL HIGHLIGHTS

As of March 31, 2023 and 2022

(unaudited)

SERS (All Funds)	3/31/23 YTD	3/31/22 YTD	Comparative Difference	% Difference
<u>ADDITIONS</u>				
Employer Contributions	\$453,194,290	\$425,134,143	\$28,060,147	7%
Member Contributions	295,970,141	278,174,850	17,795,291	6
Health Care Premiums, Subsidies & Other Income	128,003,159	80,727,151	47,276,008	59
Total Investment Income, Net	630,428,531	548,873,329	81,555,202	15
TOTAL ADDITIONS	1,507,596,121	1,332,909,473	174,686,648	13
<u>DEDUCTIONS</u>				
Retirement, Disability, Survivor & Death Benefits	1,025,669,774	995,491,814	30,177,960	3
Health Care Expenses	156,561,198	118,091,396	38,469,802	33
Refunds & Transfers	73,905,999	63,143,309	10,762,690	17
Administrative Expenses (excluding Investments)	22,497,737	21,805,455	692,282	3
TOTAL DEDUCTIONS	1,278,634,708	1,198,531,974	80,102,734	7
Changes in Net Position	228,961,413	134,377,499	94,583,914	(70)
Net Position - Beginning	17,574,319,449	18,440,611,356	(866,291,907)	(5)
SERS Net Position - Ending	\$17,803,280,862	\$18,574,988,855	(\$771,707,993)	(4%)

HEALTH CARE FUND

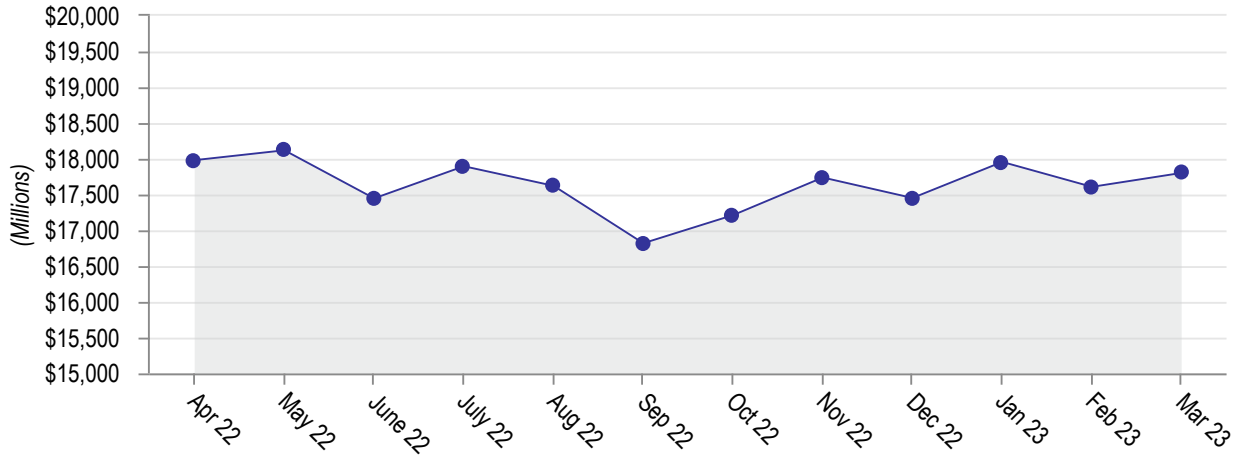
HEALTH CARE ADDITIONS

Employer Contributions	\$39,609,247	\$36,887,150	\$2,722,097	7%
Health Care Premiums	45,727,801	47,338,354	(1,610,553)	(3)
Medicare Subsidies & Other Income	82,275,358	33,388,797	48,886,561	146
Total Investment Income, Net	18,863,668	14,924,845	3,938,823	26
TOTAL HEALTH CARE ADDITIONS	186,476,074	132,539,146	53,936,928	41
TOTAL HEALTH CARE DEDUCTIONS	158,494,104	120,373,035	38,121,069	32
Changes in Net Position	27,981,970	12,166,111	15,815,859	130
Net Position - Beginning	611,574,409	600,330,188	11,244,221	2
SERS Health Care Fund Net Position - Ending	\$639,556,379	\$612,496,299	\$27,060,080	4%

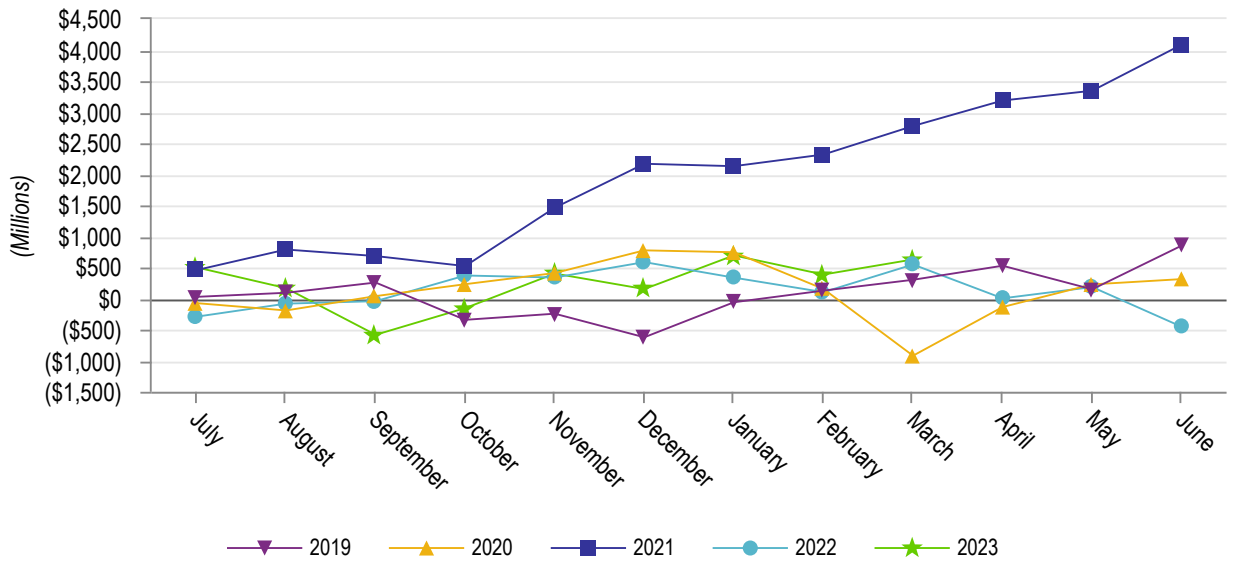
ADMINISTRATIVE EXPENSES

	3/31/23 YTD	Fiscal Year Annual Budget	% of Annual Budget
Personnel	\$18,122,373	\$24,392,195	74%
Professional Services	4,310,127	6,502,883	66
Communications	748,558	1,011,873	74
Other Operating Expenses	2,526,882	3,607,379	70
TOTAL ADMINISTRATIVE EXPENSES	\$25,707,940	\$35,514,330	72%

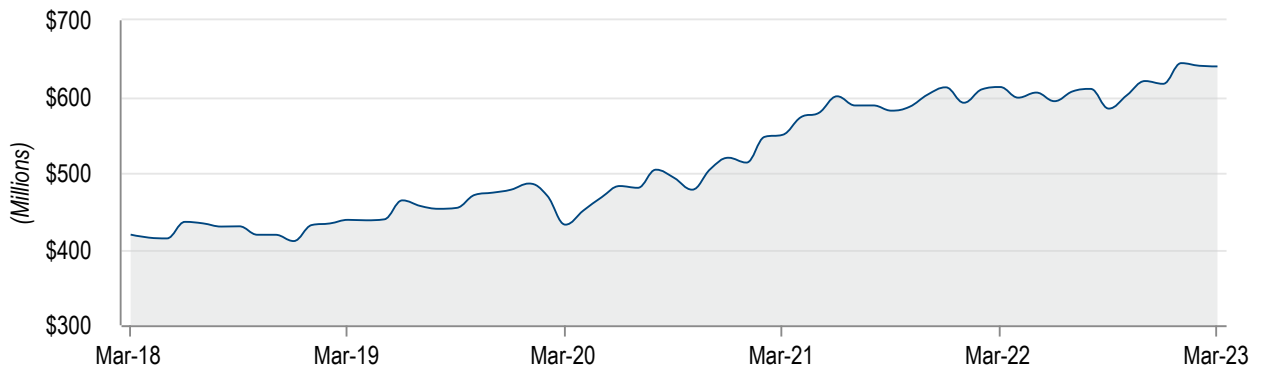
Total SERS Fund Balance for Previous 12 Months



Investment Income (includes realized and unrealized gains & losses)



Health Care Fund Balance Trend



School Employees Retirement System of Ohio
System Year-to-Date Budget Analysis
Year to Date Through March 31st

	FYTD22 Actual	FYTD23				Notes
		Actual	Budget	Actual to Budget %	Budget to Actual Under/(Over)	
PERSONNEL SERVICES	18,429,263	18,122,373	18,917,274	95.8%	794,901	
Salaries & Wages	13,157,468	14,048,426	13,891,618	101.1%	(156,808)	
PERS Retirement Contributions	1,750,714	1,846,440	1,853,066	99.6%	6,626	
Benefits	3,521,081	2,227,507	3,172,590	70.2%	945,083	Note 1
PROFESSIONAL SERVICES	4,695,510	4,310,126	5,054,105	85.3%	743,979	
Actuarial Advisors	205,521	305,562	371,131	82.3%	65,569	
Audit Services	171,038	181,031	244,000	74.2%	62,969	
Banking Fees	976,092	844,705	951,351	88.8%	106,646	
Investment Related	1,913,555	1,881,507	2,013,679	93.4%	132,172	Note 2
Medical	33,750	33,750	33,750	100.0%	-	
Technical	1,395,554	1,063,571	1,440,194	73.8%	376,623	Note 3
COMMUNICATIONS EXPENSE	655,136	748,558	841,539	89.0%	92,981	
Postage	387,888	459,418	527,288	87.1%	67,870	
Telecommunications Services	185,289	180,699	210,761	85.7%	30,062	
Member/Employer Education	174	6,876	11,940	57.6%	5,064	
Printing & Publication	81,785	101,565	91,550	110.9%	(10,015)	
OTHER OPERATING EXPENSE	2,673,321	2,755,632	2,970,677	92.8%	215,045	
Computer Support Services	1,710,453	1,594,151	1,642,020	97.1%	47,869	
Office Equipment & Supplies	119,658	131,228	125,777	104.3%	(5,451)	
Training	53,859	92,726	175,047	53.0%	82,321	
Transportation & Travel	46,036	100,804	158,103	63.8%	57,299	
Memberships Subscriptions	134,107	139,768	146,065	95.7%	6,297	
Property & Mgmt. Liability Insurance	443,027	519,591	518,000	100.3%	(1,591)	
Maintenance	55,127	45,292	58,405	77.5%	13,113	
Staff Support	78,587	90,688	100,866	89.9%	10,178	
School District Reimbursement	3,664	5,094	9,405	54.2%	4,311	
Mandatory Costs- ORSC	28,803	36,290	36,989	98.1%	699	
TOTAL DEPARTMENT EXPENSES	26,453,230	25,936,689	27,783,595	93.4%	1,846,906	
ADMINISTRATIVE CAPITAL	78,321	-	-	0.0%	-	
Computer Hardware > \$5,000	78,321	-	-	0.0%	-	
Computer Software > \$25,000	-	-	-	0.0%	-	
TOTAL SERS ADMINISTRATIVE EXPENSES	26,531,551	25,936,689	27,783,595	93.4%	1,846,906	
NET BUILDING OCCUPANCY EXPENSE	413,962	935,236	1,461,410	64.0%	526,174	Note 4
TOTAL ADMINISTRATIVE EXPENSES	26,945,513	26,871,925	29,245,005	91.9%	2,373,080	

Note 1: Benefits - FY 23 budget was developed using actuarial recommendations based on FY22 claims history. This resulted in a budget increase due to higher cost claimants along with rising inflation. During FY23, one high claimant no longer participates in our plan, resulting in lower claims/expense through 3/31/2023.

Note 2: Investment Related - Master Record Keeping fees are under budget due to lower than expected asset values.

Note 3: Technical - FY23 actuals are trending lower than budgeted due to contract modifications, availability of Sagitech resources, and timing of invoices for services rendered.

Note 4: Net Building Occupancy - FY23 budget includes tenant improvements and new tenant renovations, which have not occurred.

OSERS Broad Street Financials (For the nine months ending March 31, 2023)

	FY2022 Actuals	FY2023 FY Budget	FYTD2023 Budget	FYTD2023 Actuals*	Notes
OPERATING INCOME					
Suite & Related Income	824,869	498,527	400,118	379,024	1
Parking Income	181,276	161,515	124,060	163,070	
	1,006,145	660,042	524,178	542,094	
OPERATING EXPENSES					
Property Management & Labor	305,000	305,000	228,750	228,750	
Administrative Services	15,111	6,700	1,125	721	
Building Maintenance	999,440	1,065,599	828,928	738,446	2
Utilities	367,701	401,380	304,035	248,250	3
Building & Equipment Insurance	84,975	110,000	110,000	71,396	4
Real Estate Taxes	286,835	288,000	152,000	150,598	
	2,059,062	2,176,679	1,624,838	1,438,161	
NON-OPERATING EXPENSES					
Lease Commission Fees	-	54,500	42,500	-	
Special Counsel Fees	2,475	5,000	5,000	594	
Public Relations Fees	24,565	-	-	-	
Building Remodeling	25,110	267,000	267,000	2,950	5
	52,150	326,500	314,500	3,544	
CAPITAL					
Furniture & Equipment >\$5,000	-	-	-	-	
Leasehold Improvements	-	275,000	275,000	264,375	
TOTAL NET EXPENSE	\$1,105,067	\$2,118,137	\$1,690,160	\$1,163,986	

*69% of FYTD2023 Budget

Note 1 – Suite income decreased due to the unexpected lease termination by ERA.

Note 2 – Building maintenance variance is mainly due to the timing of invoicing as compared to when the services were budgeted.

Note 3 – Actual electricity expenses are trending lower than expected year to date.

Note 4 – A new vendor was selected for insurance who offered lower rates.

Note 5 – Building remodeling was budgeted at a reduced amount from prior years. The budget intent was to have dollars available to retain existing tenants or build out space if there was an interest for a smaller space. To date, these funds have not been required. Actual expenses include drawing plans for Genesis.

FY – Fiscal Year

FYTD – Fiscal Year to Date

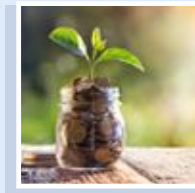
Memo

To: Retirement Board
From: Richard Stensrud, Executive Director
CC: Karen Roggenkamp, Deputy Executive Director
Date: May 5, 2023
Re: FY2024 Budget Review

At the meeting in May, you will receive the FY2024 Administrative Budgets for SERS and OSERS Holdings, LLC. At the June meeting, we will request approval of these budgets through separate resolutions: one for SERS' operating and one for the transfer of funds to OSERS Holdings, LLC to cover the net operating expenses of OSERS Broad Street, LLC.

As noted in the letter to the Board, found in the front of the budget book, the budget presented reflects an increase of 2.77% over the FY2023 budget and an 9.35% increase over the FY2023 projected expenses.

I look forward to reviewing this document with you and answering any questions that may arise.



FY2024

ADMINISTRATIVE BUDGET

School Employees Retirement System of Ohio

Serving the People Who Serve Our Schools®



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

SERS is a public defined benefit pension fund that provides pensions and access to health care coverage for the people who serve our schools.

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.



SERS AT A GLANCE



9

Members of the Retirement Board with fiduciary responsibility for the oversight of general administration and management of the Retirement System



1,057

Employers



155,063

Active Members



81,151

All Benefit Recipients



1,347

Average Monthly Benefit



183

SERS Employees



1937

The year School Employees Retirement System of Ohio was established.



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 D. ROGGENKAMP
Deputy Executive Director

May 18, 2023

Dear Chairperson DeLeone and SERS Retirement Board Members:

We are pleased to present the Retirement Board with the proposed FY2024 Administrative Budget which supports our approximately 236,000 active members, retirees, and beneficiaries with valuable pension benefit programs and health care services.

FY2023 Recap

In FY2023, we celebrated the system's 85th anniversary and continued to have many successes. This fiscal year focused on Pension and Health Care sustainability with continued focus on advancing the CBBC legislation and improving the Health Care Wraparound program. We made strides toward making a long-term investment in our technology infrastructure as we completed the first year of the Five-Year Technology Enhancement Project budget. We anticipate closing the year at \$35.4 million or 6.02% below budget.

Administration

- An actuarial audit of SERS' June 30, 2021, actuarial valuations resulted in confirmation of the actuarial methodology and results of Cavanaugh Macdonald's work and minor recommendations such as separately identifying converted disabilities and their conversion dates.
- Internal Audit completed a quality assessment of its office that concluded the office has demonstrated a commitment to quality, successful leadership practices and maintaining an internal auditor's mindset for professionalism.
- In-person Board meetings continue to be offered virtually, allowing more participation and viewer coverage.
- The SERS Health Care Fund increased solvency to 38 years beginning in FY2023.
- Health Care staff achieved net savings due to contract negotiations for Medicare and non-Medicare medical and pharmacy benefits beginning January 1, 2023. The net savings are \$4.3 million for Aetna annually and \$71 million over three years for Express Scripts.
- Health Care staff implemented a Board-approved rule change addressing non-Medicare benefits counseling, expected to reduce expenses by \$1 million per 10% reduction in SERS non-Medicare group plan selection, beginning in FY2024.
- Staff continued progress on the multi-year Information Governance project, which will improve record retention and increase digital storage/retrieval options. Included in the project is the removal of redundant and obsolete digital information and addition of a retention policy covering deleted emails.
- Building occupancy continued to be challenging in FY2023. However, parking revenue increased by over 30%.
- Building Services completed upgrades to the building security software and hardware. The lighting upgrades started in FY2023 will continue into FY2024.



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 D. ROGGENKAMP
Deputy Executive Director

Technology\Information Security

- The former backup site was successfully decommissioned after implementation of a cloud-based Disaster Recovery program. Servers were transferred to our headquarters, which saved on future hardware purchases.
- Information Security deployed tools to protect against malicious emails and developed procedures to consistently manage cloud services.
- Enterprise Risk Management (ERM) implemented a scored vendor risk register for vendor onboarding, monitoring, and off-boarding.
- ERM completed penetration security testing of our system and mitigated identified issues.

Employers and Membership

- Advancements in our digital technology has given Member Services the opportunity to expand educational outreach and reduce transportation costs.
- A new outreach program for active members was launched that gives them an opportunity to attend a retirement educational event without having to schedule time on the weekend or outside work hours.
- SERS worked diligently to move all members to direct deposit, including refunds. Originally, there were more than 3,000 members still receiving a paper check. The number of members receiving their monthly checks in the mail is down to 11.
- Employer Outreach returned to offering in-person Employer 101 Workshops. Expanded topics delivered through eSERS virtual training and live webinars produced greater participation levels.

Five-Year Technology Enhancement Project

- SMART MVVM upgrade activities began during the 3rd quarter of FY2023 and will continue into FY2024. This upgrade will enhance the user experience and interface for the internal and external users (Member and Employer Portals). It will also lay the foundation for members to access information through mobile devices and tablets.
- Completed the eDocuments project on the Member Self-Service Portal, which provides the capability to upload different types of documents and automatically initiate workflow.
- Completed the Health Care workflow queues project, which provides the capability to improve operational efficiency by grouping work items by category and automatically assigning tasks for processing.
- Completed the wireless refresh projects throughout the building and the majority of the network refresh.
- Upgraded the server hardware and backup storage capacity.
- Acquired a finance reconciliation tool to gain operational efficiencies.



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 D. ROGGENKAMP
Deputy Executive Director

FY2024 Budget Request

As detailed in the following pages, the proposed FY2024 budget of \$38.7 million reflects a 2.77% increase over the FY2023 budget and a 9.35% increase over the FY2023 projected expenses. The significant drivers of this change are a budgeted merit increase of 4.5%, salary adjustments based on CBIZ recommendations to align with current market conditions, and one additional Investment FTE. In addition, subscription-based services increased as the organization moves to a cloud-based environment. These were offset by decreases in professional services, telecommunication services, and net building occupancy. Additional budget adjustments are as follows:

- Microfilm digitization project outsources the conversion of our records currently stored on microfilm to a digital format.
- Two planned Board elections will increase postage and paper supplies costs.
- Procurement of cyber security tools to protect hardware, systems, and data on SERS network.
- Expansion of software tools for Investment operational due diligence automation and implementation of an account reconciliation solution.
- Cyclical equipment upgrades and support.
- Expected increases in cost associated with insurance coverage.
- Training and education expenses have increased returning to pre-pandemic levels.

The financials include the second year of the five-year Technology Project Enhancement Roadmap approved in FY2023. Forecasted FY2024 projects total \$2.99 million. Projects slated for FY2024 are as follows:

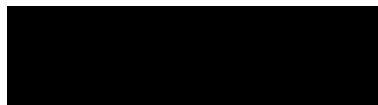
- Continued investment in the SMART system expanding the electronic payments capabilities.
- Registration Re-imagination project focusing on security enhancements to the Member and Employer Services portals.
- Continued work on the replacement of our end-of-life telecommunications system that will offer improved member call center features and tracking.
- Continued work on the network refresh.
- Portal Vision Re-imagination project that would improve the functionality and design as well as incorporate new features for the Member portal, including Health Care.
- Replacement of the general accounting system, which includes a cloud-based solution.

We appreciate your consideration of this budget and look forward to discussions regarding its contents.

Respectfully,



Richard Stensrud
Executive Director



Marni Hall, CPA
Chief Financial Officer

TABLE OF CONTENTS

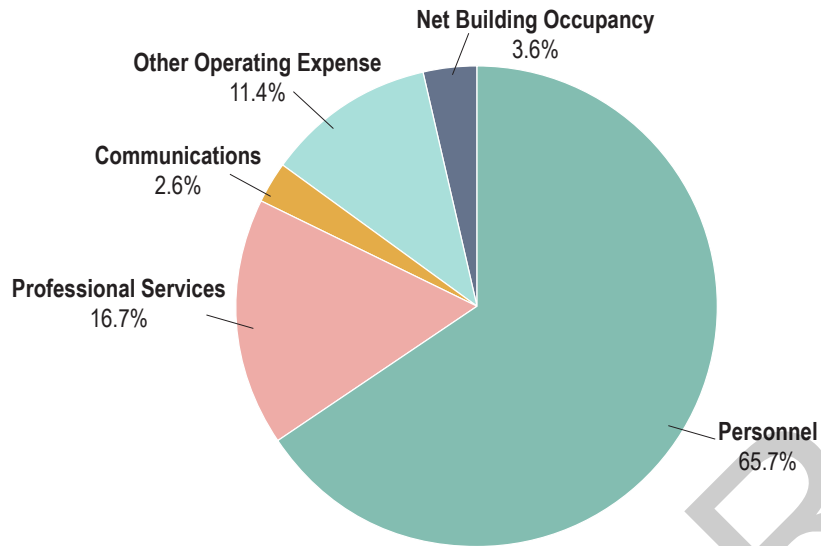
BUDGET OVERVIEW	2
FY2024 OPERATING BUDGET BY CATEGORY	3
FY2024 Budget Summary	4
Three-Year Review FY2022 – FY2024 Budget Presentation	5
Three-Year Review FY2022 – FY2024 SERS Budget Presentation excluding Investments	8
Three-Year Review FY2022 – FY2024 Investments Budget Presentation	10
DETAILS BY MAJOR ACCOUNT CATEGORY	11
Personnel	11
Professional Services	13
Communications	16
Other Operating Expense	17
ADMINISTRATIVE CAPITAL	20
OSERS BROAD STREET, LLC	21
FIVE YEAR TECHNOLOGY ROADMAP	25

BUDGET OVERVIEW

Category and Description	FY2024 Budget	\$	38,729,855
PERSONNEL		\$	25,450,941
A performance-based merit increase of 4.5%, salary adjustments based on recommendations from the compensation advisory consultants to align with current market conditions, one additional FTE, retirement contributions, Investment Staff professional incentive, and actuarial derived insurance-related staff benefits are included in this category.			
Operational Impact			65.7%
PROFESSIONAL SERVICES		\$	6,456,305
Investment-related fees are analogous to expected investment performance. Also in this category are infrastructure third-party services, health care medical and pharmacy claims data repository, medical/pharmacy pricing advisement, strategic retirement guidance related to pension and health care sustainability, external auditing services, and consulting services across the organization.			
Operational Impact			16.7%
COMMUNICATIONS		\$	1,015,710
Member Services, Health Care, and Employer Services will continue to provide the same standard of service to members and retirees. Retirement Board elections will be held for one retiree and one active member seats. Also included in this category are printing and postage costs as well as telecommunication services.			
Operational Impact			2.6%
OTHER OPERATING EXPENSE		\$	4,413,942
This includes annual requisite computer technology-related support for SERS' network, Board and staff training and education, insurance, and mandatory legislative oversight			
Operational Impact			11.4%
CAPITAL			-
There are no capital projects planned for FY2024.			
Operational Impact			0.0%
NET BUILDING OCCUPANCY-OSERS BROAD STREET, LLC		\$	1,392,957
OSERS Broad Street, LLC will notice a small increase in tenant income in a soft commercial real estate market. This budget includes routine maintenance, upkeep, and tenant alterations. Remodeling anticipated for tenant improvements.			
Operational Impact			3.6%

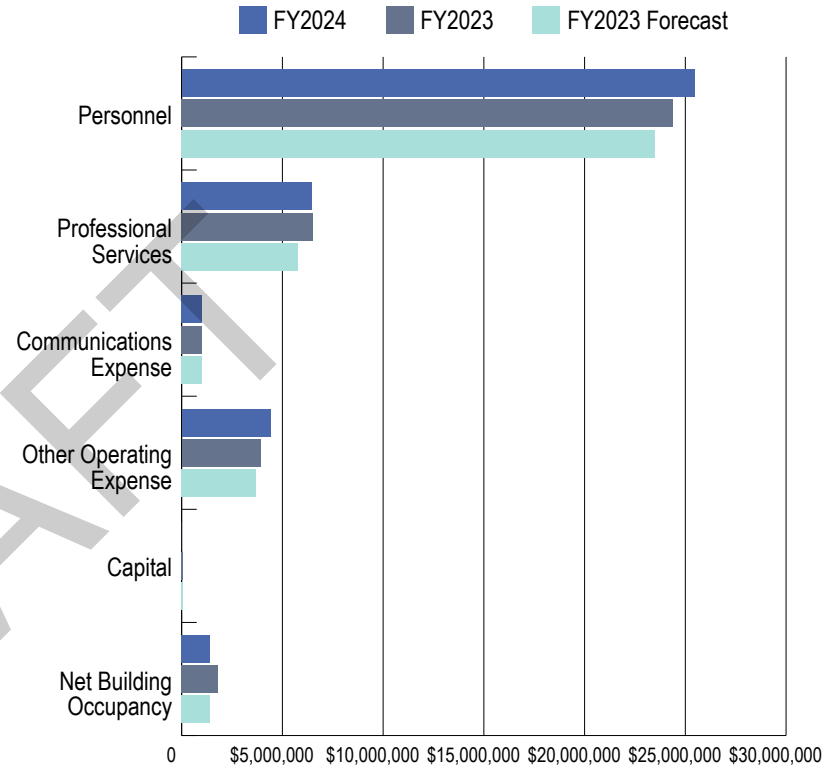
FY2024 OPERATING BUDGET BY CATEGORY

Total: \$38,729,855



Category	Amount
Personnel	\$ 25,450,941
Professional Services	\$ 6,456,305
Communications	\$ 1,015,710
Other Operating Expense	\$ 4,413,942
Capital	\$ -
Net Building Occupancy	\$ 1,392,957

BUDGET COMPARISON BY CATEGORY



BUDGET CATEGORY	BUDGET		FORECAST
	FY2024	FY2023	FY2023
Personnel	\$ 25,450,941	\$ 24,392,195	\$ 23,500,586
Professional Services	\$ 6,456,305	\$ 6,502,883	\$ 5,773,965
Communications Expense	\$ 1,015,710	\$ 1,011,873	\$ 1,018,294
Other Operating Expense	\$ 4,413,942	\$ 3,912,379	\$ 3,681,508
Capital	\$ -	\$ 54,109	\$ 54,109
Net Building Occupancy	\$ 1,392,957	\$ 1,813,137	\$ 1,390,873
TOTAL OPERATING	\$ 38,729,855	\$ 37,686,576	\$ 35,419,335

FY2024 BUDGET SUMMARY

Budget Category	FY2024 Budget	FY2023 Budget	FY2023 Forecast	Budget Change % (+/-)
Salaries & Wages	\$ 18,832,675	\$ 17,783,788	\$ 17,857,222	5.9%
OPERS Retirement Contributions	2,527,867	2,389,275	2,371,205	5.8%
Benefits	4,090,399	4,219,132	3,272,159	-3.1%
PERSONNEL	25,450,941	24,392,195	23,500,586	4.3%
Actuarial	292,500	421,008	382,439	-30.5%
Audit Services	234,000	244,000	190,971	-4.1%
Custodial Banking Fees	1,068,000	1,073,544	1,016,562	-0.5%
Master Recordkeeper	1,056,000	1,116,000	1,010,276	-5.4%
Investment Consulting	1,409,349	1,548,622	1,423,511	-9.0%
Other Consulting	2,201,516	1,904,787	1,574,097	15.6%
Banking Expense	194,940	194,922	176,109	0.0%
PROFESSIONAL SERVICES, INCLUDING INVESTMENT COSTS	6,456,305	6,502,883	5,773,965	-0.7%
Printing & Postage	807,752	729,669	754,064	10.7%
Telecommunications	196,208	264,184	253,774	-25.7%
Member/Employer Education	11,750	18,020	10,456	-34.8%
COMMUNICATIONS	1,015,710	1,011,873	1,018,294	0.4%
Conferences & Education	274,586	230,451	149,956	19.2%
Travel	228,602	209,234	163,321	9.3%
Computer Support Services	2,737,127	2,343,770	2,268,250	16.8%
Other Operating Expenses (Insurance, Maintenance, Memberships, Supplies)	1,125,227	1,076,924	1,051,594	4.5%
Ohio Retirement Study Council	48,400	52,000	48,387	-6.9%
OTHER OPERATING	4,413,942	3,912,379	3,681,508	12.8%
TOTAL OPERATING	\$ 37,336,898	\$ 35,819,330	\$ 33,974,353	4.2%
Furniture & Equipment > 5,000	-	-	-	0.0%
Computer Hardware > 5,000	-	54,109	54,109	-100.0%
Computer Software > 25,000	-	-	-	0.0%
Vehicles	-	-	-	0.0%
CAPITAL	-	54,109	54,109	-100.0%
NET BUILDING OCCUPANCY EXPENSE	1,392,957	1,813,137	1,390,873	-23.2%
TOTAL OPERATING AND CAPITAL BUDGETS	\$ 38,729,855	\$ 37,686,576	\$ 35,419,335	2.8%

THREE-YEAR REVIEW FY2022 – FY2024 BUDGET PRESENTATION

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Description	FY2024 Budget	FY24 Budget- FY23 Forecast Difference	Change % (+/-)
\$ 16,812,893	\$ 17,857,222	\$ 1,044,329	6.2%	Salaries & Wages	\$ 18,832,675	\$ 975,453	5.5%
2,243,212	2,371,205	127,993	5.7%	OPERS Retirement Contributions	2,527,867	156,662	6.6%
4,637,752	3,272,159	(1,365,593)	-29.4%	Benefits	4,090,399	818,240	25.0%
23,693,857	23,500,586	(193,271)	-0.8%	PERSONNEL	25,450,941	1,950,355	8.3%
278,054	382,439	104,385	37.5%	Actuarial	292,500	(89,939)	-23.5%
205,718	190,971	(14,747)	-7.2%	Audit Services	234,000	43,029	22.5%
1,285,192	1,192,671	(92,521)	-7.2%	Banking Fees	1,262,940	70,269	5.9%
2,541,225	2,433,788	(107,437)	-4.2%	Investment Related	2,465,349	31,561	1.3%
45,000	45,000	-	0.0%	Medical	45,000	-	0.0%
1,979,506	1,529,097	(450,409)	-22.8%	Technical	2,156,516	627,419	41.0%
6,334,695	5,773,966	(560,729)	-8.9%	PROFESSIONAL SERVICES	6,456,305	682,339	11.8%
545,502	623,499	77,997	14.3%	Postage	661,302	37,803	6.1%
227,425	253,774	26,349	11.6%	Telecommunication Services	196,208	(57,566)	-22.7%
2,202	10,456	8,254	374.9%	Member/Employer Education	11,750	1,294	12.4%
112,962	130,565	17,603	15.6%	Printing & Publication	146,450	15,885	12.2%
888,091	1,018,294	130,203	14.7%	COMMUNICATIONS	1,015,710	(2,584)	-0.3%
2,196,691	2,268,250	71,559	3.3%	Computer Support Services	2,737,127	468,877	20.7%
144,011	159,279	15,268	10.6%	Office Equipment & Supplies	167,803	8,524	5.4%
80,913	149,956	69,043	85.3%	Conferences & Education	274,586	124,630	83.1%
93,982	163,321	69,339	73.8%	Transportation & Travel	228,602	65,281	40.0%
163,090	191,462	28,372	17.4%	Memberships & Subscriptions	203,794	12,332	6.4%
443,027	519,591	76,564	17.3%	Property & Management Liability Insurance	582,403	62,812	12.1%
66,998	55,847	(11,151)	-16.6%	Maintenance	36,225	(19,622)	-35.1%
106,445	117,185	10,740	10.1%	Staff Support	122,462	5,277	4.5%
6,105	8,229	2,124	34.8%	School District Reimbursement	12,540	4,311	52.4%
38,403	48,387	9,984	26.0%	Mandatory Costs - ORSC	48,400	13	0.0%
(305,000)	(305,000)	(0)	0.0%	Reimbursement from OSERS Broad Street, LLC, for Leased Services	(305,000)	0	0.0%
3,034,665	3,376,507	341,842	11.3%	OTHER OPERATING EXPENSE	4,108,942	732,435	21.7%
\$ 33,951,308	\$ 33,669,353	\$ (281,955)	-0.8%	TOTAL DEPARTMENT EXPENSES	\$ 37,031,898	\$ 3,362,545	10.0%
-	-	-	0.0%	Furniture & Equipment > 5,000	-	-	0.0%
132,502	54,109	(78,393)	-59.2%	Computer Hardware > 5,000	-	(54,109)	-100.0%
-	-	-	0.0%	Computer Software > 25,000	-	-	0.0%
-	-	-	0.0%	Vehicles	-	-	0.0%
132,502	54,109	(78,393)	-59.2%	ADMINISTRATIVE CAPITAL	-	(54,109)	-100.0%
\$ 34,083,810	\$ 33,723,462	\$ (360,348)	-1.1%	TOTAL ADMINISTRATIVE EXPENSES	\$ 37,031,898	\$ 3,308,436	9.8%
1,105,067	1,695,873	590,806	53.5%	OSERS BROAD STREET, LLC	1,697,957	2,084	0.1%
\$ 35,188,877	35,419,335	230,458	0.7%	TOTAL OPERATING AND CAPITAL EXPENSES	\$ 38,729,855	\$ 3,310,520	9.3%

DRAFT



FY2024

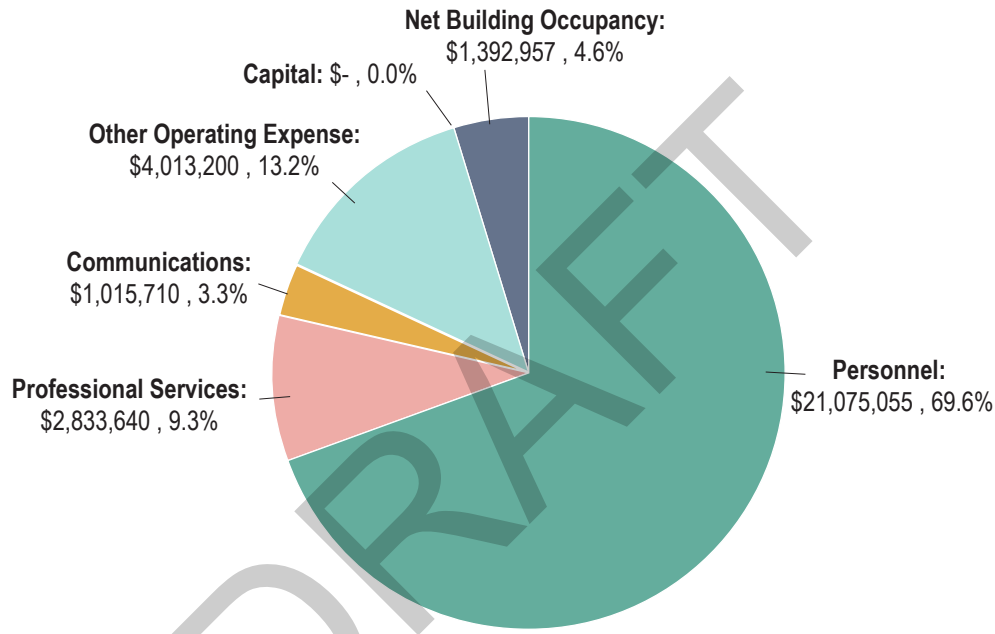
SERS OPERATING BUDGET DETAIL



FY2024 SERS OPERATING BUDGET BY CATEGORY

EXCLUDING INVESTMENTS

Total: \$30,330,562



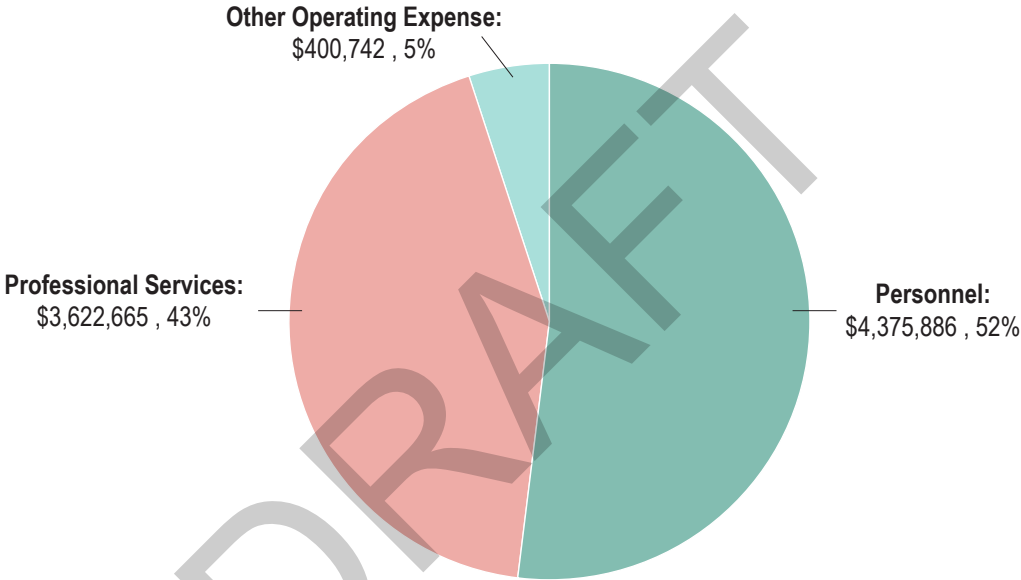
Budget Category	BUDGET		FORECAST
	FY2024	FY2023	FY2023
Personnel	\$ 21,075,055	\$ 20,455,948	\$ 19,622,498
Professional Services	\$ 2,833,640	\$ 2,690,690	\$ 2,203,155
Communications	\$ 1,015,710	\$ 1,011,873	\$ 1,018,294
Other Operating Expense	\$ 4,013,200	\$ 3,606,715	\$ 3,372,966
Capital	\$ -	\$ 54,109	\$ 54,109
Net Building Occupancy	\$ 1,392,957	\$ 1,813,137	\$ 1,390,873
TOTAL OPERATING	\$ 30,330,562	\$ 29,632,472	\$ 27,661,895

THREE-YEAR REVIEW FY2022 – FY2024 SERS BUDGET PRESENTATION EXCLUDING INVESTMENTS

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Description	FY2024 Budget	FY24 Budget- FY23 Forecast Difference	Change % (+/-)
\$ 13,745,146	\$14,680,850	\$ 935,704	6.8%	Salaries & Wages	\$ 15,349,376	\$ 668,526	4.6%
1,876,415	1,983,117	106,702	5.7%	OPERS Retirement Contributions	2,085,286	102,169	5.2%
4,208,194	2,958,531	(1,249,663)	-29.7%	Benefits	3,640,393	681,862	23.0%
19,829,755	19,622,498	(207,257)	-1.0%	PERSONNEL	21,075,055	1,452,557	7.4%
278,054	382,438	104,384	37.5%	Actuarial	292,500	(89,938)	-23.5%
205,718	190,971	(14,747)	-7.2%	Audit Services	234,000	43,029	22.5%
190,606	176,109	(14,497)	-7.6%	Banking Fees	194,940	18,831	10.7%
57,266	58,429	1,163	2.0%	Investment Related	59,684	1,255	2.1%
45,000	45,000	-	0.0%	Medical	45,000	-	0.0%
1,774,450	1,350,208	(424,242)	-23.9%	Technical	2,007,516	657,308	48.7%
2,551,094	2,203,155	(347,939)	-13.6%	PROFESSIONAL SERVICES	2,833,640	630,485	28.6%
545,710	623,499	77,789	14.3%	Postage	661,302	37,803	6.1%
227,425	253,774	26,349	11.6%	Telecommunication Services	196,208	(57,566)	-22.7%
2,202	10,456	8,254	374.9%	Member/Employer Education	11,750	1,294	12.4%
112,962	130,565	17,603	15.6%	Printing & Publication	146,450	15,885	12.2%
888,299	1,018,294	129,995	14.6%	COMMUNICATIONS	1,015,710	(2,584)	-0.3%
2,051,191	2,120,137	68,946	3.4%	Computer Support Services	2,535,127	414,990	19.6%
143,727	158,935	15,208	10.6%	Office Equipment & Supplies	167,095	8,160	5.1%
69,939	137,013	67,074	95.9%	Conferences & Education	253,636	116,623	85.1%
62,915	93,466	30,551	48.6%	Transportation & Travel	136,598	43,132	46.1%
104,376	114,218	9,842	9.4%	Memberships & Subscriptions	118,884	4,666	4.1%
443,027	519,591	76,564	17.3%	Property & Management Liability Insurance	582,403	62,812	12.1%
66,998	55,847	(11,151)	-16.6%	Maintenance	36,225	(19,622)	-35.1%
106,445	117,143	10,698	10.0%	Staff Support	122,292	5,149	4.4%
6,105	8,229	2,124	34.8%	School District Reimbursement	12,540	4,311	52.4%
38,403	48,387	9,984	26.0%	Mandatory Costs - ORSC	48,400	13	0.0%
(305,000)	(305,000)	(0)	0.0%	Reimbursement from OSERS Broad Street, LLC, for Leased Services	(305,000)	0	0.0%
2,788,126	3,067,966	279,840	10.0%	OTHER OPERATING EXPENSE	3,708,200	640,234	20.9%
\$ 26,057,274	\$ 25,911,913	(\$ 145,361)	-0.6%	TOTAL DEPARTMENT EXPENSES	\$ 28,632,605	\$ 2,720,692	10.5%
-	-	-	0.0%	Furniture & Equipment > 5,000	-	-	0.0%
132,502	54,109	(78,393)	-59.2%	Computer Hardware > 5,000	-	(54,109)	-100.0%
-	-	-	0.0%	Computer Software > 25,000	-	-	0.0%
-	-	-	0.0%	Vehicles	-	-	0.0%
132,502	54,109	(78,393)	-59.2%	ADMINISTRATIVE CAPITAL	-	(54,109)	-100.0%
\$ 26,189,776	\$ 25,966,022	(\$ 223,754)	-0.9%	TOTAL ADMINISTRATIVE EXPENSES	\$ 28,632,605	\$ 2,666,583	10.3%

FY2024 INVESTMENTS OPERATING BUDGET BY CATEGORY

Total: \$8,399,293



Budget Category	BUDGET		FORECAST
	FY2024	FY2023	FY2023
Personnel	\$ 4,375,886	\$ 3,936,246	\$ 3,878,088
Professional Services	\$ 3,622,665	\$ 3,812,193	\$ 3,570,810
Other Operating Expense	\$ 400,742	\$ 305,664	\$ 308,542
TOTAL OPERATING	\$ 8,399,293	\$ 8,054,103	\$ 7,757,440

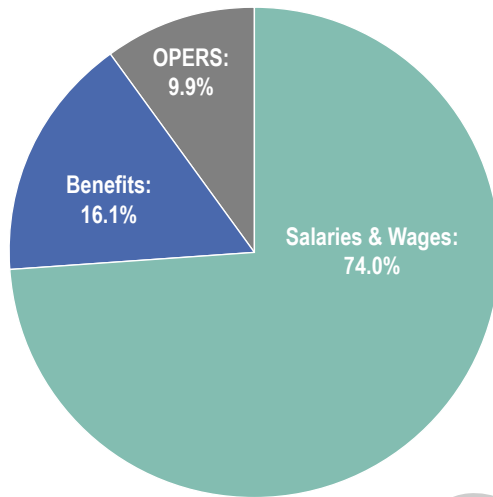
THREE-YEAR REVIEW FY2022 – FY2024 INVESTMENTS BUDGET PRESENTATION

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Description	FY2024 Budget	FY24 Budget-FY23 Forecast Difference	Change % (+/-)
\$ 3,067,748	\$ 3,176,372	\$ 108,624	3.5%	Salaries & Wages	\$ 3,483,299	\$ 306,927	9.7%
366,798	388,088	21,290	5.8%	OPERS Retirement Contributions	442,581	54,493	14.0%
429,558	313,628	(115,930)	-27.0%	Benefits	450,006	136,378	43.5%
3,864,104	3,878,088	13,984	0.4%	PERSONNEL	4,375,886	497,798	12.8%
-	-	-	0.0%	Actuarial	-	-	0.0%
-	-	-	0.0%	Audit Services	-	-	0.0%
1,094,586	1,016,562	(78,024)	-7.1%	Banking Fees	1,068,000	51,438	5.1%
2,483,959	2,375,359	(108,600)	-4.4%	Investment Related	2,405,665	30,306	1.3%
-	-	-	0.0%	Medical	-	-	0.0%
205,056	178,889	(26,167)	-12.8%	Technical	149,000	(29,889)	-16.7%
3,783,601	3,570,810	(212,791)	-5.6%	PROFESSIONAL SERVICES	3,622,665	51,855	1.5%
-	-	-	0.0%	Postage	-	-	0.0%
-	-	-	0.0%	Telecommunication Services	-	-	0.0%
-	-	-	0.0%	Member/Employer Education	-	-	0.0%
-	-	-	0.0%	Printing & Publication	-	-	0.0%
-	-	-	0.0%	COMMUNICATIONS	-	-	0.0%
145,500	148,114	2,614	1.8%	Computer Support Services	202,000	53,886	36.4%
284	344	60	21.1%	Office Equipment & Supplies	708	364	105.8%
10,974	12,943	1,969	17.9%	Conferences & Education	20,950	8,007	61.9%
31,067	69,855	38,788	124.9%	Transportation & Travel	92,004	22,149	31.7%
58,714	77,244	18,530	31.6%	Memberships & Subscriptions	84,910	7,666	9.9%
-	-	-	0.0%	Property & Management Liability Insurance	-	-	0.0%
-	-	-	0.0%	Maintenance	-	-	0.0%
-	42	42	0.0%	Staff Support	170	128	304.8%
-	-	-	0.0%	School District Reimbursement	-	-	0.0%
-	-	-	0.0%	Mandatory Costs - ORSC	-	-	0.0%
-	-	-	0.0%	Reimbursement from OSERS Broad Street, LLC, for Leased Services	-	-	0.0%
246,539	308,542	62,003	25.1%	OTHER OPERATING EXPENSE	400,742	92,200	29.9%
\$ 7,894,244	\$ 7,757,440	\$ (136,804)	-1.7%	TOTAL DEPARTMENT EXPENSES	\$ 8,399,293	\$ 641,853	8.3%
-	-	-	0.0%	Furniture & Equipment > 5,000	-	-	0.0%
-	-	-	0.0%	Computer Hardware > 5,000	-	-	0.0%
-	-	-	0.0%	Computer Software > 25,000	-	-	0.0%
-	-	-	0.0%	Vehicles	-	-	0.0%
-	-	-	0.0%	ADMINISTRATIVE CAPITAL	-	-	0.0%
\$ 7,894,244	\$ 7,757,440	\$ (136,804)	-1.7%	TOTAL ADMINISTRATIVE EXPENSES	\$ 8,399,293	\$ 641,853	8.3%

PERSONNEL

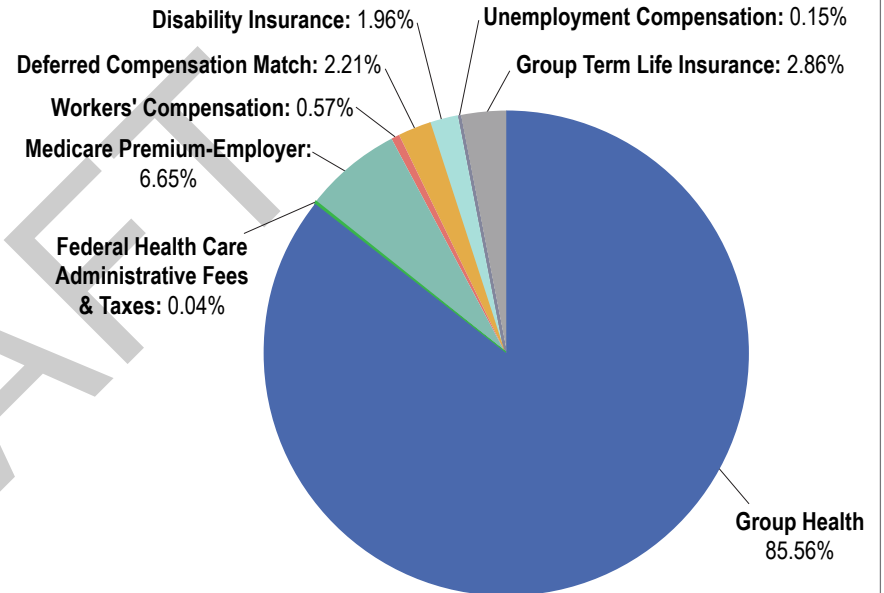
Personnel FY2024 Budget

PERSONNEL



Personnel Budget	FY2023
Salaries & Wages	\$ 18,832,675
Benefits	\$ 4,090,399
OPERS Retirement Contributions	\$ 2,527,867
TOTAL	\$ 25,450,941

BENEFITS



Benefits	FY2024
Group Health	\$ 3,499,812
Federal Health Care Administrative Fees & Taxes	\$ 1,272
Medicare Premium- Employer	\$ 272,161
Workers' Compensation	\$ 23,346
Deferred Compensation Match	\$ 90,516
Disability Insurance	\$ 80,340
Unemployment Compensation	\$ 6,000
Group Term Life Insurance	\$ 116,952
TOTAL	\$ 4,090,399

PERSONNEL

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Budget Category	FY2024 Budget	FY224 Budget-FY23 Forecast Difference	Change % (+/-)
\$ 15,995,775	\$ 17,023,599	\$ 1,027,824	6.4%	Salaries & Wages	\$ 17,980,675	\$ 957,076	5.6%
\$ 817,118	\$ 833,623	\$ 16,505	2.0%	Incentive Payout	\$ 852,000	\$ 18,377	2.2%
\$ 16,812,893	\$ 17,857,222	\$ 1,044,329	6.2%	Salaries & Wages	\$ 18,832,675	\$ 975,453	5.5%
\$ 2,243,212	\$ 2,371,205	\$ 127,993	5.7%	OPERS Retirement Contributions	\$ 2,527,867	\$ 156,662	6.6%
\$ 2,120	\$ 2,500	\$ 380	17.9%	Unemployment Compensation	\$ 6,000	\$ 3,500	140.0%
\$ 105,463	\$ 110,986	\$ 5,523	5.2%	Group Term Life Insurance	\$ 116,952	\$ 5,966	5.4%
\$ 66,092	\$ 71,691	\$ 5,599	8.5%	Disability Insurance	\$ 80,340	\$ 8,649	12.1%
\$ 4,154,059	\$ 2,754,489	\$ (1,399,570)	-33.7%	Group Health	\$ 3,499,812	\$ 745,323	27.1%
\$ -	\$ 1,493	\$ 1,493	0.0%	Federal Health Care Administrative Fees & Taxes	\$ 1,272	\$ (221)	-14.8%
\$ 233,880	\$ 250,680	\$ 16,800	7.2%	Medicare Premium- Employer	\$ 272,161	\$ 21,481	8.6%
\$ 13,123	\$ 10,242	\$ (2,881)	-22.0%	Workers' Compensation	\$ 23,346	\$ 13,104	127.9%
\$ 63,015	\$ 70,078	\$ 7,063	11.2%	Deferred Compensation Match	\$ 90,516	\$ 20,438	29.2%
\$ 4,637,752	\$ 3,272,159	\$ (1,365,593)	-29.4%	Benefits	\$ 4,090,399	\$ 818,240	25.0%
\$ 23,693,857	\$ 23,500,586	\$ (193,271)	-0.8%	PERSONNEL	\$ 25,450,941	\$ 1,950,355	8.3%

SALARIES AND WAGES

- The **Personnel** budget is based on 183 full-time equivalent personnel. This budget includes a performance-based merit increase of 4.5% and salary adjustments based on recommendations from the compensation advisory consultants to align with current market conditions.
- **Incentive Payouts** are payments calculated for Investment staff professionals according to Retirement Board policy and are based on FY2023 Investment portfolio performance.

RETIREMENT CONTRIBUTIONS

- **OPERS Retirement Contributions** are based on the portion of Salaries & Wages and incentive payments subject to OPERS coverage.

BENEFITS

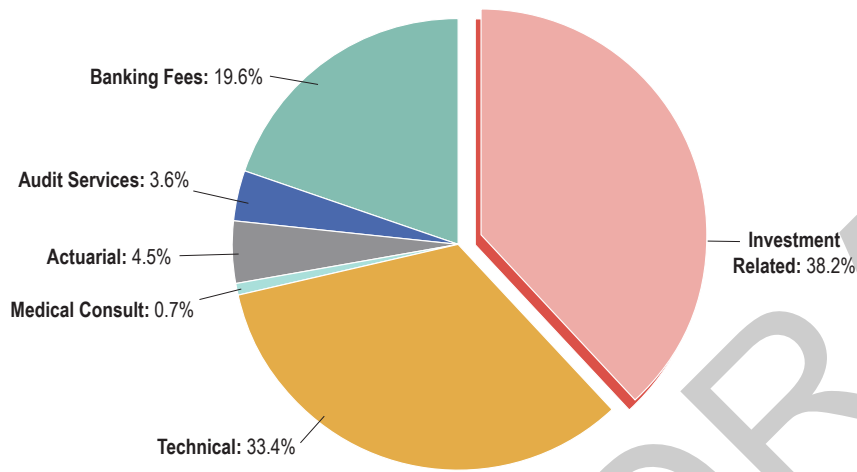
- Employee **Group Health** expenses have been budgeted based on rates supplied by SERS' actuary, considering the number of covered lives on the plan, national trends, and SERS' experience.

- SERS holds a stop-loss insurance policy for group claims and prescriptions. It provides protection for self-insured employers that serves as a reimbursement mechanism for catastrophic claims that exceed a certain level.
- Employee Health Plan Premiums have increased slightly this year which will offset the cost of group claims.
- SERS' **Unemployment Compensation** is self-funded. In FY2024, there are no anticipated reductions in staff or on-going unemployment claims.
- Salary-based benefits include **Group Term Life Insurance, Disability Insurance, and Medicare**. The level of benefits remains unchanged for FY2024.
- As mandated by the Affordable Care Act, SERS is required to pay **Federal Health Care Administrative Fees & Taxes**.
- **Worker's Compensation** is based on payroll-driven rates.
- SERS' per-pay match contribution to the Ohio Public Employees **Deferred Compensation Match** program are made on behalf of the SERS' employees who are actively enrolled in the program.

PROFESSIONAL SERVICES

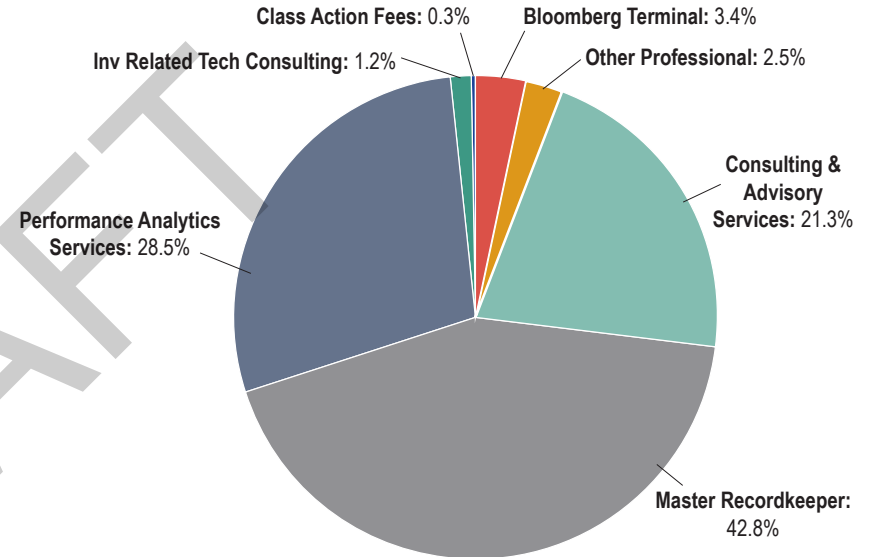
Professional Services FY2024 Budget

TOTAL SERS PROFESSIONAL SERVICES



Total SERS Professional Services Budget	FY2024
Investment Related	\$ 2,465,349
Technical	\$ 2,156,516
Medical Consult	\$ 45,000
Actuarial	\$ 292,500
Audit Services	\$ 234,000
Banking Fees	\$ 1,262,940
TOTAL	\$ 6,456,305

INVESTMENT-RELATED (38.2% OF TOTAL)



Investment-Related Professional Services Budget	FY2024
Bloomberg Terminal	\$ 84,000
Other Professional	\$ 61,084
Consulting & Advisory Services	\$ 525,000
Master Recordkeeper	\$ 1,056,000
Performance Analytics Services	\$ 703,265
Inv Related Tech Consulting	\$ 30,000
Class Action Fees	\$ 6,000
TOTAL	\$ 2,465,349

PROFESSIONAL SERVICES

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Budget Category	FY2024 Budget	FY24 Budget-FY23 Forecast Difference	Change % (+/-)
\$ 278,054	\$ 382,439	\$ 104,385	37.5%	Actuarial	\$ 292,500	\$ (89,939)	-23.5%
\$ 205,718	\$ 190,971	\$ (14,747)	-7.2%	Audit Services	\$ 234,000	\$ 43,029	22.5%
\$ 1,094,586	\$ 1,016,562	\$ (78,024)	-7.1%	Custodial Banking	\$ 1,068,000	\$ 51,438	5.1%
\$ 190,606	\$ 176,109	\$ (14,497)	-7.6%	Administrative Banking Expense	\$ 194,940	\$ 18,831	10.7%
\$ 1,285,192	\$ 1,192,671	\$ (92,521)	-7.2%	Banking Fees	\$ 1,262,940	\$ 70,269	5.9%
\$ 1,016,714	\$ 1,010,276	\$ (6,438)	-0.6%	Master Recordkeeper	\$ 1,056,000	\$ 45,724	4.5%
\$ 650,000	\$ 527,714	\$ (122,286)	-18.8%	Investment Consulting & Advisory Services	\$ 525,000	\$ (2,714)	-0.5%
\$ 705,636	\$ 704,384	\$ (1,252)	-0.2%	Performance Analytics Services	\$ 703,265	\$ (1,119)	-0.2%
\$ 31,930	\$ 33,087	\$ 1,157	3.6%	Investment-Related Technical Consulting	\$ 30,000	\$ (3,087)	-9.3%
\$ 58,607	\$ 59,762	\$ 1,155	2.0%	Other Professional Investment-Related	\$ 61,084	\$ 1,322	2.2%
\$ 78,338	\$ 79,691	\$ 1,353	1.7%	Bloomberg Terminal Rental	\$ 84,000	\$ 4,309	5.4%
\$ -	\$ 18,874	\$ 18,874	0.0%	Class Action Fees	\$ 6,000	\$ (12,874)	-68.2%
\$ 2,541,225	\$ 2,433,788	\$ (107,437)	-4.2%	Investment -Related	\$ 2,465,349	\$ 31,561	1.3%
\$ 45,000	\$ 45,000	\$ -	0.0%	Medical Consultant	\$ 45,000	\$ -	0.0%
\$ 283,101	\$ 219,531	\$ (63,570)	-22.5%	Special Counsel	\$ 240,000	\$ 20,469	9.3%
\$ 1,263,120	\$ 950,873	\$ (312,247)	-24.7%	Technical	\$ 1,360,084	\$ 409,211	43.0%
\$ 433,285	\$ 358,693	\$ (74,592)	-17.2%	Other Professional Services	\$ 556,432	\$ 197,739	55.1%
\$ 1,979,506	\$ 1,529,097	\$ (450,409)	-22.8%	Technical	\$ 2,156,516	\$ 627,419	41.0%
\$ 6,334,695	\$ 5,773,966	\$ (560,729)	-8.9%	PROFESSIONAL SERVICES	\$ 6,456,305	\$ 682,339	11.8%

ACTUARIAL

- Actuarial fees include amounts for studies on calculations of joint retirement system transfers, special analyses, and legislative analyses. In addition, SERS' health care plan and actuarial premiums calculations will occur along with Government Accounting Standards Board (GASB) Statement evaluations for pension reporting requirements.

AUDIT SERVICES

- FY2024 Audits include an outsourced IT Audit over Active Directory and year-end financial audit.

BANKING FEES

- Custodial Banking fees have decreased slightly due to lower transaction volumes and associated costs.

INVESTMENT-RELATED PROFESSIONAL SERVICES

- Master Recordkeeper fees decreased due to reduction in total assets.
- Investment Consulting & Advisory Services decreased due to a contract renegotiation for less required services from a current provider.
- Investment-Related Technical Consulting included investment-related database and local tax advisors in countries that require special tax consultants.

PROFESSIONAL SERVICES, CONTINUED

- **Other Professional Investment-Related Consulting** includes proxy and divestiture services.
- **Bloomberg Terminal Rental** fees are for the licenses to use the Bloomberg information systems.

MEDICAL

- The **Medical Consultant** reviews about 1,500 cases per year with the Disability Section staff, participates in the monthly meetings of the Medical Advisory Committee, and attends Board Meetings as needed.

TECHNICAL

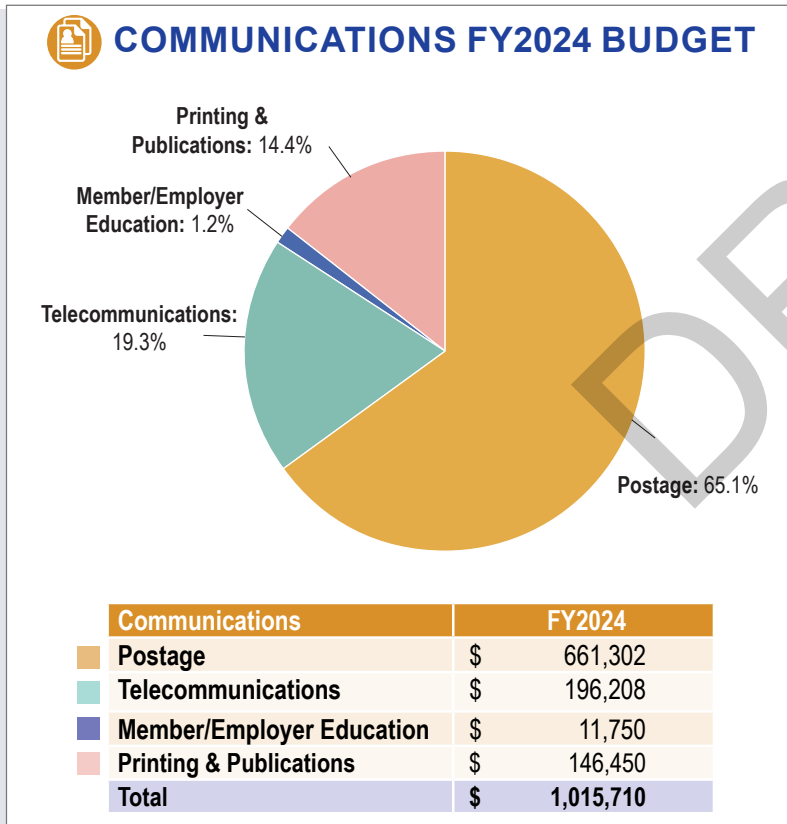
- **Special Counsel** are contingent amounts for the costs of outside legal counsel. Anticipated legal fees for investment contracts comprise approximately 62% of the FY2024 Special Counsel budget.

- The **Technical** account includes the cost of outside consultants that provide computer security, health care data warehouse services, medical and prescription program pricing, specialized benefit system support, and website administration and design. FY2024 also includes organizational wide consulting for project management training focused on developing flexibility, adaptability, and collaboration among staff.
- **Other Professional Services** include the cost for other consultants and advisory services, such as legislative news and political consulting providers, organizational leadership and development, professional work-study internships, surveying and focus groups, and Attorney General Staff reimbursement. Also included are consulting on initiatives around pension and health care sustainability along with the continuation of the enterprise-wide document life cycle evaluation.

DRAFT

COMMUNICATIONS

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Budget Category	FY2024 Budget	FY24 Budget-FY23 Forecast Difference	Change % (+/-)
\$ 545,502	\$ 623,499	\$ 77,997	14.3%	Postage	\$ 661,302	\$ 37,803	6.1%
\$ 227,425	\$ 253,774	\$ 26,349	11.6%	Telecommunications	\$ 196,208	\$ (57,566)	-22.7%
\$ 2,202	\$ 10,456	\$ 8,254	374.9%	Member/Employer Education	\$ 11,750	\$ 1,294	12.4%
\$ 36,787	\$ 45,479	\$ 8,692	23.6%	Printing Paper & Supplies	\$ 46,200	\$ 721	1.6%
\$ 76,175	\$ 85,086	\$ 8,911	11.7%	Communications & Publications	\$ 100,250	\$ 15,164	17.8%
\$ 112,962	\$ 130,565	\$ 17,603	15.6%	Printing & Publications	\$ 146,450	\$ 15,885	12.2%
\$ 888,091	\$ 1,018,294	\$ 130,203	14.7%	COMMUNICATIONS	\$ 1,015,710	\$ (2,584)	-0.3%



POSTAGE

- The **Postage** budget increased due to two Retirement Board elections and an increase in the cost of postage.

TELECOMMUNICATIONS

- The **Telecommunications** budget reflects monthly services for websites, point-to-point connection, hybrid work environment video/audio communication resources and webhosting. A savings was realized from the decommissioning of the business continuity site.

MEMBER/EMPLOYER EDUCATION

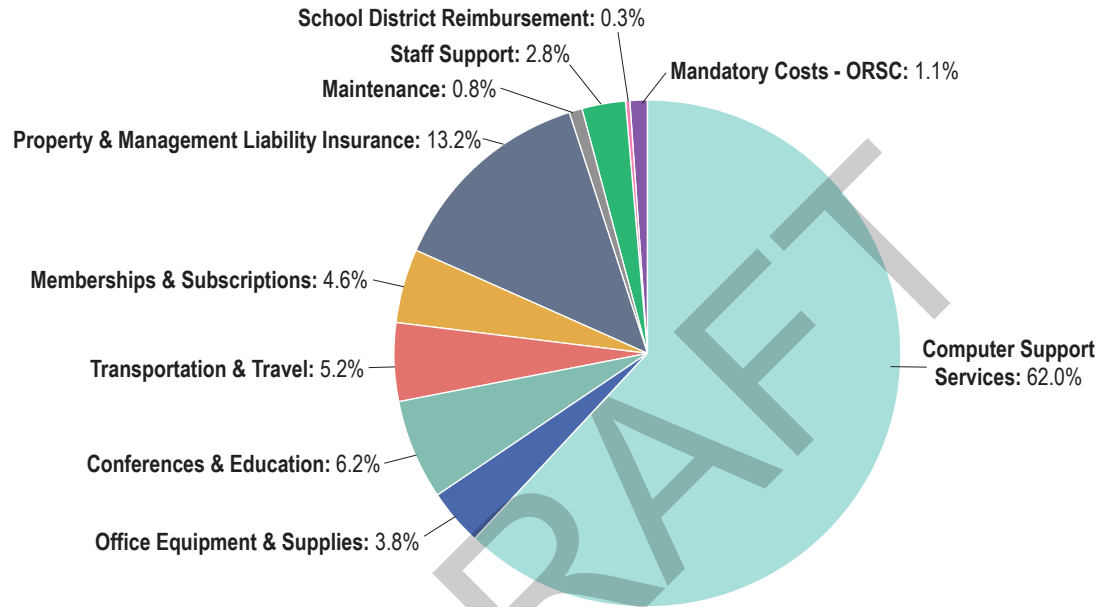
- SERS continues to maintain its outstanding service to members and retirees and plans to continue in-person meetings, conducting membership meetings in school facilities, and remaining in partnership with organizations that benefit SERS' member population. Member Services and Health Care plan to conduct in-house counseling, remote sessions, and virtual open enrollment conferences based upon need and membership requests. In FY2024, Member Services plans to continue to offer retirement conferences and counseling sessions virtually in response to positive member feedback and outreach Employer Services will continue to provide outreach services and group training for the member benefits system in-person and virtually.

PRINTING & PUBLICATIONS

- This category includes the costs of paper and supplies, and large-quantity specific outsourced printing jobs. The Print Shop continually increases SERS' internal printing capabilities by producing items such as the *Open Enrollment Guide* booklets, *Member Benefit* and *Disability Guides*, and member benefit statements.

OTHER OPERATING EXPENSE FY2024 BUDGET

Other Operating Expense FY2024 Budget



Other Operating Expense	FY2024
Computer Support Services	\$ 2,737,127
Office Equipment & Supplies	\$ 167,803
Conferences & Education	\$ 274,586
Transportation & Travel	\$ 228,602
Memberships & Subscriptions	\$ 203,794
Property & Management Liability Insurance	\$ 582,403
Maintenance	\$ 36,225
Staff Support	\$ 122,462
School District Reimbursement	\$ 12,540
Mandatory Costs- ORSC	\$ 48,400
Reimbursement of Leased Services	\$ (305,000)
Total	\$ 4,108,942

OTHER OPERATING EXPENSE

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Budget Category	FY2024 Budget	FY24 Budget-FY23 Forecast Difference	Change % (+/-)
\$ 70,556	\$ 129,361	\$ 58,805	83.3%	Hardware Maintenance	\$ 197,000	\$ 67,639	52.3%
\$ 1,064,585	\$ 968,853	\$ (95,732)	-9.0%	Software Maintenance	\$ 1,047,108	\$ 78,255	8.1%
\$ 910,372	\$ 1,100,323	\$ 189,951	20.9%	Software Subscriptions	\$ 1,444,815	\$ 344,492	31.3%
\$ 143,918	\$ 63,722	\$ (80,196)	-55.7%	Hardware < \$ 5,000	\$ 33,204	\$ (30,518)	-47.9%
\$ 7,260	\$ 5,991	\$ (1,269)	-17.5%	Software < \$ 25,000	\$ 15,000	\$ 9,009	150.4%
\$ 2,196,691	\$ 2,268,250	\$ 71,559	3.3%	Computer Support Services	\$ 2,737,127	\$ 468,877	20.7%
\$ 144,011	\$ 159,279	\$ 15,268	10.6%	Office Equipment & Supplies	\$ 167,803	\$ 8,524	5.4%
\$ 80,913	\$ 149,956	\$ 69,043	85.3%	Conferences & Education	\$ 274,586	\$ 124,630	83.1%
\$ 93,982	\$ 163,321	\$ 69,339	73.8%	Transportation & Travel	\$ 228,602	\$ 65,281	40.0%
\$ 163,090	\$ 191,462	\$ 28,372	17.4%	Memberships & Subscriptions	\$ 203,794	\$ 12,332	6.4%
\$ 443,027	\$ 519,591	\$ 76,564	17.3%	Property & Management Liability Insurance	\$ 582,403	\$ 62,812	12.1%
\$ 66,998	\$ 55,847	\$ (11,151)	-16.6%	Maintenance	\$ 36,225	\$ (19,622)	-35.1%
\$ 106,445	\$ 117,185	\$ 10,740	10.1%	Staff Support	\$ 122,462	\$ 5,277	4.5%
\$ 6,105	\$ 8,229	\$ 2,124	34.8%	School District Reimbursement	\$ 12,540	\$ 4,311	52.4%
\$ 38,403	\$ 48,387	\$ 9,984	26.0%	Mandatory Costs- ORSC	\$ 48,400	\$ 13	0.0%
\$ (305,000)	\$ (305,000)	\$ (0)	0.0%	Reimbursement from OSERS Broad Street, LLC, for Leased Services	\$ (305,000)	\$ 0	0.0%
\$ 3,034,665	\$ 3,376,507	\$ 341,842	11.3%	OTHER OPERATING EXPENSE	\$ 4,108,942	\$ 732,435	21.7%

COMPUTER SUPPORT SERVICES

- The **Hardware Maintenance** category contains annual maintenance contracts to support SERS' computer servers.
- The **Software Maintenance** account includes licenses to use specific software products. SERS maintains a master list of these licenses, which is reviewed each year as part of the budgeting process.
- **Software Subscriptions** cover software used by SERS that is provided as a service and hosted locally on SERS servers. Annual renewed subscriptions include the Human Resources management system, ServiceNow, comprehensive Microsoft product license, member benefits system performance and stress testing, conferencing services, financial and investment accounting system, and tools, ERM risk repository, USPS data feeds, media and publishing licenses, security compliance, e-Discovery litigation services, a transition to monthly phone services, a software as a service model for disaster recovery and cloud storage for system back-ups.

- The FY2024 **Hardware less than 5,000** account is comprised of routine maintenance and repair and unplanned hardware needs that may arise throughout the fiscal year.
- The **Software less than 25,000** category includes routine software purchases and unplanned software needs that may arise throughout the fiscal year.

OFFICE EQUIPMENT & SUPPLIES

- The majority of this category consists of equipment repairs and maintenance. Furniture and office supplies are purchased to meet staff needs.

CONFERENCES & EDUCATION

- This category includes both staff and Board training. This includes out-of-state conferences, courses included in the Learning Management System within the ADP platform, and continuing education for professional designations.

OTHER OPERATING EXPENSE, CONTINUED

TRANSPORTATION & TRAVEL

- Travel costs are associated with both in-state and out-of-state conferences, and due diligence trips to current and prospective investment managers. Whenever possible, staff access training either virtually or via teleconferences instead of travel and combine trips.

MEMBERSHIPS & SUBSCRIPTIONS

- SERS holds memberships in several national organizations that advocate and educate on issues that affect our members and retirees. The major organizations are:
 - Coalition to Preserve Retirement Security
 - Council of Institutional Investors
 - International Foundation of Employee Benefit Plans (IFEBP)
 - National Association of State Retirement Administrators
 - National Council for Real Estate Investment Fiduciaries
 - Professional Resources in Information Systems Management (PRISM)
 - Public Pension Financial Forum
 - Public Sector HealthCare Roundtable
 - State and Local Government Benefits Association
- In addition to attending conferences and receiving publications from these organizations, SERS' staff serves on the boards of some of these industry organizations.

PROPERTY & FIDUCIARY INSURANCE

- SERS' insurance policies cover fiduciary liability, directors and officers liability, crime, cyber liability, auto and property and general liability.

MAINTENANCE

- The category is comprised of rent and other expenses for the Business Continuity Hot Site, interior plants maintenance, and SERS' vehicle maintenance.

STAFF SUPPORT

- Staff Support includes kitchen supplies, cleaning supplies, and first-aid items. This account also includes SERS' staff wellness program, employee assistance program, innovation awards, the administrative expenses associated with employee flexible spending accounts (health and dependent care), employee recruitment and onboarding, and cellular phone reimbursement.

BOARD MEMBER REIMBURSEMENT

- Employers of SERS' Board may receive reimbursement for compensation paid while Board Members attend to Board business.

MANDATORY COSTS - ORSC

- The five Ohio retirement systems are required to pay a proportionate share of the Ohio Retirement Study Council's (ORSC) expenses based on their respective assets under management.

REIMBURSEMENT FROM OSERS BROAD STREET, LLC, FOR LEASED SERVICES

- SERS' Administrative Services staff provides building management services to OSERS Broad Street. To allow OSERS Broad Street expenses to reflect the value of these services and to pass the proportionate costs to tenants, OSERS Broad Street pays a monthly fee to SERS for the use of these services. This amount is accounted for under Facilities Expense in SERS' Annual Financial Report.

ADMINISTRATIVE CAPITAL

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Budget Category	FY2024 Budget	FY24 Budget-FY23 Forecast Difference	Change % (+/-)
\$ 132,502	\$ 54,109	\$ (78,393)	-59.2%	Computer Hardware > \$ 5,000	\$ -	\$ (54,109)	-100.0%
\$ -	\$ -	\$ -	0.0%	Computer Software > \$ 25,000	\$ -	\$ -	0%
\$ 132,502	\$ 54,109	\$ (78,393)	-59.2%	CAPITAL	\$ -	\$ (54,109)	-100.0%

- There is no Administrative Capital planned for FY2024.

DRAFT



DRAFT

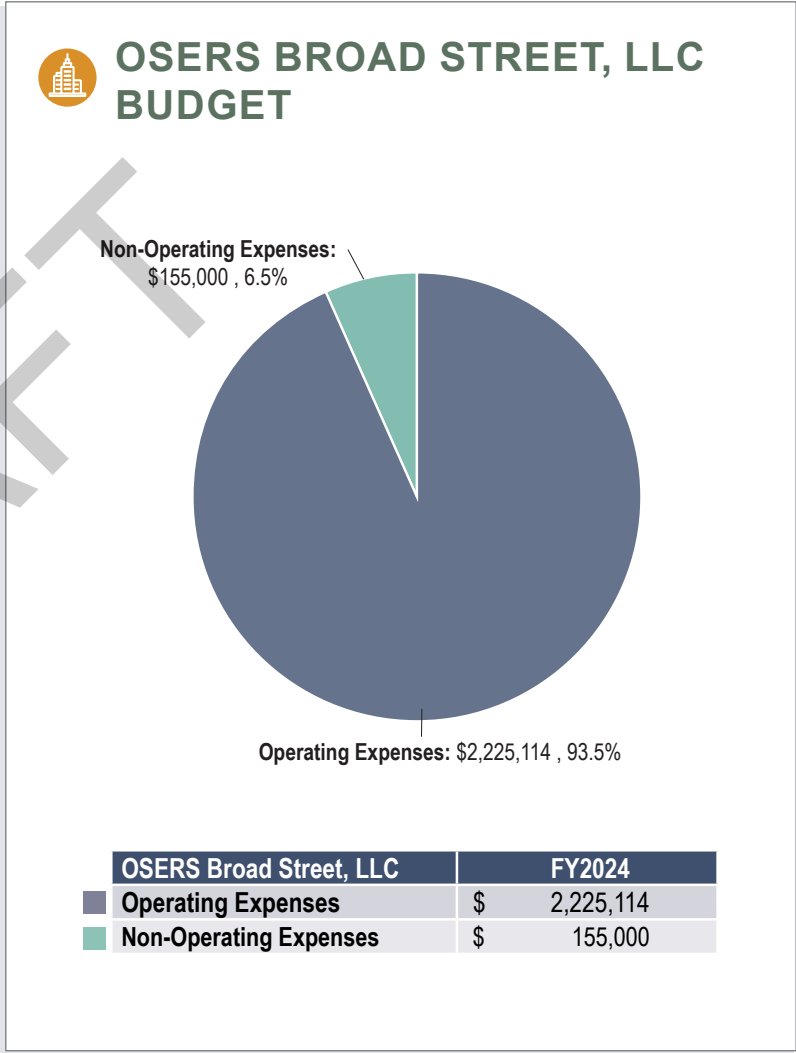


OSERS BROAD STREET, LLC AND OSERS HOLDINGS, LLC BUDGET

BUILDING OCCUPANCY BUDGET / OSERS HOLDINGS, LLC

- OSERS Holdings is a limited liability company set up to own and oversee the property of its subsidiary, OSERS Broad Street, LLC, which holds the title to and operates 300 East Broad Street, a class “A” office building with 168,632 square feet of rentable space. SERS occupies 71.1% of the rentable space (119,823 square feet).
- SERS does not pay rent to OSERS Broad Street, LLC; however, net expenses and operating capital in excess of rental income are funded by SERS upon request from OSERS.
- The Board of Directors of SERS Broad Street, LLC, requests operating contributions from SERS to cover the OSERS Broad Street, LLC, Operating Budget, not to exceed \$1,697,957.
- Net building occupancy is \$1,392,957 after deducting budgeted operating revenue and reimbursement of leased services.

DRAFT



OSERS BROAD STREET, LLC

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Budget Category	FY2024 Budget	FY24 Budget- FY23 Forecast Difference	Change % (+/-)
\$ 750,589	\$ 438,376	\$ (312,213)	-41.6%	Suite Leases	\$ 506,057	\$ 67,681	15.4%
\$ 181,276	\$ 213,620	\$ 32,344	17.8%	Parking	\$ 206,100	\$ (7,520)	-3.5%
\$ 74,281	\$ 30,807	\$ (43,474)	-58.5%	Miscellaneous	\$ -	\$ (30,807)	-100.0%
\$ 1,006,146	\$ 682,803	\$ (323,343)	-32.1%	Operating Revenue	\$ 712,157	\$ 29,354	4.3%
\$ 305,000	\$ 305,000	\$ 0	0.0%	Property Management & Labor	\$ 305,000	\$ (0)	0.0%
\$ 15,111	\$ 6,486	\$ (8,625)	-57.1%	Other Administrative Expenses	\$ 6,825	\$ 339	5.2%
\$ 999,440	\$ 1,035,137	\$ 35,697	3.6%	Building Operations & Maintenance	\$ 1,129,299	\$ 94,162	9.1%
\$ 367,701	\$ 363,595	\$ (4,106)	-1.1%	Utilities	\$ 408,940	\$ 45,345	12.5%
\$ 84,975	\$ 71,396	\$ (13,579)	-16.0%	Building/ Equipment Insurance	\$ 87,000	\$ 15,604	21.9%
\$ 286,835	\$ 302,118	\$ 15,283	5.3%	Real Estate Taxes	\$ 288,050	\$ (14,068)	-4.7%
\$ 2,059,062	\$ 2,083,732	\$ 24,670	1.2%	Operating Expenses	\$ 2,225,114	\$ 141,382	6.8%
\$ -	\$ 12,000	\$ 12,000	0.0%	Lease Commission Fees	\$ -	\$ (12,000)	-100.0%
\$ 27,040	\$ 4,994	\$ (22,046)	-81.5%	Special Counsel & Other Fees	\$ 5,000	\$ 6	0.1%
\$ 25,110	\$ 2,950	\$ (22,160)	-88.3%	Remodeling for Tenants	\$ 150,000	\$ 147,050	4984.7%
\$ 52,150	\$ 19,944	\$ (32,206)	-61.8%	Non-Operating Expenses	\$ 155,000	\$ 135,056	677.2%
\$ -	\$ 275,000	\$ 275,000	0.0%	Capital Improvements	\$ 30,000	\$ (245,000)	-89.1%
\$ -	\$ 275,000	\$ 275,000	0.0%	Capital Improvements	\$ 30,000	\$ (245,000)	-89.1%
\$ 1,105,066	\$ 1,695,873	\$ 590,807	53.5%	OSERS Broad Street, LLC Budget	\$ 1,697,957	\$ 2,084	0.1%
\$ (305,000)	\$ (305,000)	\$ -	0.0%	Less Reimbursement to SERS for Leased Services	\$ (305,000)	\$ -	0.0%
\$ 800,066	\$ 1,390,873	\$ 590,807	73.8%	Net Building Occupancy Expense	\$ 1,392,957	\$ 2,084	0.1%

OPERATING REVENUE

- **Suite Lease** revenue is based on contracted occupancy. **Parking** includes currently contracted tenant monthly parking and outside contracts. **Miscellaneous** includes contracted storage space rental for tenants and telecommunications.

OPERATING EXPENSES

- **Property Management & Labor is a Reimbursement to SERS for Leased Services** - the services provided to OSERS Broad Street, LLC by SERS' Administrative Services staff. The amount is based on a service agreement between OSERS Broad Street, LLC and SERS, that sets the reimbursement to a fair, reasonable and consistent market value rate.
- The **Other Administrative Expenses** category includes expenses budgeted to run the facility administrative offices, including the costs of office supplies and banking fees.

- The **Building Operations & Maintenance** category includes maintenance, supplies needed for the upkeep of the facility and its public spaces, the cost of janitorial and building security services, and an emergency notification system for life safety.
- **Building/Equipment Insurance** includes some policies that are shared with SERS. The FY2024 budget is based on general market rates and an estimate of the replacement cost of the building. Real Estate Taxes are based on the rates and assessed commercial value published by the Franklin County Auditor.

NON-OPERATING EXPENSES

- **Special Counsel** is budgeted for potential outside counsel needs regarding existing tenant lease agreements.
- **Remodeling** includes expense for tenant improvements, and new tenant renovations.



OSERS BROAD STREET, LLC CAPITAL IMPROVEMENTS

FY2022 Actual	FY2023 Forecast	FY2023-FY2022 Difference	Change % (+/-)	Budget Category	FY2024 Budget	FY24 Budget- FY23 Forecast Difference	Change % (+/-)
\$ -	\$ 275,000.00	\$ 275,000	0.0%	CAPITAL IMPROVEMENTS	\$ 30,000	\$ (245,000)	-89.1%



CAPITAL IMPROVEMENTS

- The **leasehold improvements** include continued upgrades to the floor lighting control panels.

DRAFT



DRAFT



FY2024

FIVE YEAR TECHNOLOGY ROADMAP

FIVE YEAR TECHNOLOGY ROADMAP BUDGET

Description	Total 5-Year Plan	FY2023 Forecast	FY2023 Forecast % of Plan Spend	FY2024 Plan*	Total Projected Spend FY23-FY24	Remaining Roadmap Amount
Telecommunications	\$ 250,000	\$ 175,848	70.3%	\$ 206,491	\$ 382,339	\$ (132,339)
Security Stack	\$ 899,600	\$ 16,000	1.8%	\$ 248,200	\$ 264,200	\$ 635,400
Network Infrastructure Refresh	\$ 886,000	\$ 602,996	68.1%	\$ 465,100	\$ 1,068,096	\$ (182,096)
Hybrid Technology Replacement	\$ 419,000	\$ 121,253	28.9%	\$ 10,000	\$ 131,253	\$ 287,747
Server Infrastructure	\$ 1,216,700	\$ -	0.0%	\$ 127,000	\$ 127,000	\$ 1,089,700
Backup and Recovery	\$ 532,754	\$ 128,905	24.2%	\$ 117,500	\$ 246,405	\$ 286,349
SMART Portals	\$ 196,000	\$ -	0.0%	\$ 196,000	\$ 196,000	\$ -
SMART Framework	\$ 760,000	\$ 175,000	23.0%	\$ 510,000	\$ 685,000	\$ 75,000
SMART Enhancements	\$ 2,623,000	\$ 49,533	1.9%	\$ 855,000	\$ 904,533	\$ 1,718,467
SMART Business Tools	\$ 500,000	\$ 178,100	35.6%	\$ 250,000	\$ 428,100	\$ 71,900
SMART TOTAL	\$ 4,079,000	\$ 402,633	9.9%	\$ 1,811,000	\$ 2,213,633	\$ 1,865,367
INFRASTRUCTURE TOTAL	\$ 4,204,054	\$ 1,045,002	24.9%	\$ 1,174,291	\$ 2,219,293	\$ 1,984,761
TOTAL BUDGET	\$ 8,283,054	\$ 1,447,635	17.5%	\$ 2,985,291	\$ 4,432,926	\$ 3,850,128

*Projects in FY24 include the continuation of projects from FY23 as well as new initiatives in FY24

FIVE YEAR TECHNOLOGY ROADMAP BUDGET, CONTINUED

Technology plays an important and extensive role in delivering on the mission of the SERS. The Technology Enhancement Plan provides a framework of needed investments in Technology over the next five years. It is a series of well planned initiatives that will enhance SERS' digital capabilities around SMART, add expanded tools for operational efficiencies, meet infrastructure needs, and respond to changing electronic expectations of our members, employers, and employees. This is not an considered as an operating

budget, but a framework of carefully planned annual projects that are in alignment with the SERS Strategic Plan goals with oversight by the SERS Technology Committee. The overall projects are intended to remain flexible/agile within the guardrails of SERS' strategic direction, while accommodating the fast pace of technology evolution so that our technology and operations continue to stay fresh and relevant as we support SERS' mission.

SMART

- SERS Member and Retiree Tracking is the enterprise-wide integrated system that enables SERS staff to service all customers.

SMART FRAMEWORK

- The technology and software layers underlying the Pension Administration Software. The Sagitec Framework includes the Sagitec Enterprise Application Management Services, the Sagitec Framework Services, and the .NET Foundation services as well as the development tool. The Sagitec Framework may sometimes be referred to as the "Neospin Framework." Included in the project budget are mandated upgrades.

SMART PORTALS

- SERS SMART application has a portal for the Employers and a different portal for Members and Retirees. The portals allow SERS to put out Alerts and Messages specific to an Employer or Person.
- The Employer Self-Serve provides Employers with an effective, time-saving way to submit and view critical financial and employee information online. Employers can upload files for enrolling new Employees as well as submit Contribution Reporting files.
- Member Self-Serve is a resource for Member and Retirees to access and manage their account with SERS. Features available include reviewing the account balance and service credit, creating estimates, completing applications for Service and Disability benefits, and updating personal information such as address, beneficiary, direct deposit and tax withholding. Members and Retirees can also review documents like Monthly Pay Statement, Member Annual Statements, and Tax Documents.

SMART ENHANCEMENT

- SMART Enhancement is a category to expand the features of the core business application. Exploring the next phase of SMART's evolution. The enhancements are the product of SERS re-imagining and re-engineering the SMART functionality to assist staff to provide better support to Employers and Members and Retirees. The goal is to preserve and enrich high touch engagement and outcomes.

BUSINESS TOOLS

- Included in this category are applications to improve the effectiveness and efficiency of

financial processes: Replacement of the financial software to a software-as-a-service cloud solution and a reconciliation tool to gain efficiencies in the reconciliation process.

TELECOMMUNICATIONS

- Refers to the technology supporting voice and other multi-modal communications, including fax, web chat and web conferencing. The modern phone system consists of software and hardware and physical connections to a phone service provider via fiber or copper trunks.

SECURITY STACK

- Security is an integrated set of services and cyber security tools used to protect the hardware, systems and data on SERS network. It includes both physical appliances such as a perimeter firewall and software appliances to scan documents for potential threats.

NETWORK INFRASTRUCTURE

- Refers to the hardware, software and wiring that provides a physical or wireless connection to the network and keeps the network running, allowing devices to communicate with each other and the outside world via the internet.

HYBRID TECHNOLOGY REPLACEMENT

- Technology deployed for end-users to support the hybrid work model at SERS, including laptops that can be used when working on-site or remote and conference room equipment for improved virtual meeting experiences.

SERVER INFRASTRUCTURE

- Servers are comprised of hardware and software, on-site or in the cloud that provide functionality for multiple programs or clients to perform work. Examples of typical servers are web, application, database, and file servers.

BACKUP AND RECOVERY

- Technology used to create multi-level backups of SERS data in compliance with information governance retention policies and support business continuity of critical processes in the event of a catastrophic failure of the onsite network and server infrastructure. Examples include Disaster Recovery as a Service or DRaaS and cloud storage of data backed up daily.

DRAFT



School Employees Retirement System of Ohio
300 E. Broad St., Suite 100, Columbus, Ohio, 43215
Toll-Free 800-878-5853 | www.ohsers.org



TRANSPARENCY



COMMITMENT



FY2024

ADMINISTRATIVE BUDGET

May 18, 2023



HONESTY

RELIABILITY

GOALS & OBJECTIVES



- Budget Policy/Process
- Review the Proposed FY2024 Budget
- Questions / requests for future meetings
- No action required today



The Retirement Board shall be responsible for:

- Approving the Administrative Budget before the start of the budget fiscal year.
- Approving authority levels for capital contributions to any SERS-controlled LLCs.
- Approving expenditures that cumulatively exceed 110% of the approved Administrative Budget for any Major Category or total expenditures in excess of total budgeted expenditures require prior approval of the Retirement Board.
- The approved Administrative Budget is the expenditure authority given to the Executive Director by the Retirement Board.

MAJOR CATEGORIES



Personnel

- Salaries & Wages
- Employee benefits



Other Operating Expenses

- Computer Support Services
- Network Security
- Travel & Transportation
- Liability Insurance
- Employee Professional Growth
- Office Equipment & Supplies



Professional Services

- Audit
- Actuarial
- Investment related services
- Technical consulting services



Capital Items

- Computer Hardware > \$5k
- Computer Software > \$25k
- Other Equipment



Communications

- Printing & Postage
- Member/Employer Education
- Telecommunications



Broad St. LLC

- Operating Expenses
- Capital Items

BUDGET MONITORING



- **Administrative Expense Report**
Detailed information of all expenses in that month. Provided to the Board, monthly agenda item, and posted to SERS website.
- **Parameters Report**
All budgeted purchases in excess of \$100,000 and all unbudgeted projects. Provided to the Board monthly and a quarterly agenda item.
- **Monthly Financial Reports**
Financial reports including a budget-to-actual and year-to-date Administrative Budget report provided to the Board monthly.
- **Quarterly Financial Updates**
Financial reports presented to the Board which includes review of budget-to-actual and year-to-date administrative expenses.



BUDGET PROCESS



- Zero-based expense justification
- FY2023 financial review and FY2024 carryover
- Strategic Planning
 - How are ongoing and new projects related to the strategic plan?
- Projected Business Area needs – identification by month



ACCOMPLISHMENTS IN FY2023



- The former backup site was successfully decommissioned after implementation of a cloud-based Disaster Recovery program
- Worked diligently to move all members to direct deposit, including refunds
- Negotiated contracts for medical and pharmacy benefits and implemented a Board-approved rule resulting in net savings and improved sustainability
- Completed system enhancement projects improving operational efficiencies and expanding functional capabilities on the Member Self-Serve Portal
- Technology upgrades focused on the wireless and network infrastructure and server hardware and backup storage capacity
- Continued implementation of information governance policies and tools to improve record retention and increase digital storage and retrieval options
- Advancements in our digital technology has given Member and Employer Services the opportunity to expand educational outreach

FY2024 ACTIVITIES AND PROPOSED PROJECTS



- Two planned Board elections
- Microfilm digitization conversion of our records currently stored on microfilm to a digital format
- Expansion of software tools for Investment operational due diligence automation and implementation of an account reconciliation solution
- Procurement of cyber security tools to protect hardware, systems, and data on SERS network
- Cyclical equipment upgrades and support as well as technical roadmap project continuation



CALENDAR



First Draft	Early February
Review by Executive Mgmt.	Early March
ORSC Draft ready for Board	Early April
Presentation of ORSC info	Late April
Initial Board Presentation	May
Vote by Board	June



FY2024 BUDGET SUMMARY



Budget Category	FY2024 Budget	FY2023 Budget	FY2023 Forecast	Budget Change % (+/-)
Salaries & Wages	\$ 18,832,675	\$ 17,783,788	\$ 17,857,222	5.9%
OPERS Retirement Contributions	2,527,867	2,389,275	2,371,205	5.8%
Benefits	4,090,399	4,219,132	3,272,159	-3.1%
PERSONNEL	25,450,941	24,392,195	23,500,586	4.3%
Actuarial	292,500	421,008	382,439	-30.5%
Audit Services	234,000	244,000	190,971	-4.1%
Custodial Banking Fees	1,068,000	1,073,544	1,016,562	-0.5%
Master Recordkeeper	1,056,000	1,116,000	1,010,276	-5.4%
Investment Consulting	1,409,349	1,548,622	1,423,511	-9.0%
Other Consulting	2,201,516	1,904,787	1,574,097	15.6%
Banking Expense	194,940	194,922	176,109	0.0%
PROFESSIONAL SERVICES, INCLUDING INVESTMENT COSTS	6,456,305	6,502,883	5,773,965	-0.7%
Printing & Postage	807,752	729,669	754,064	10.7%
Telecommunications	196,208	264,184	253,774	-25.7%
Member/Employer Education	11,750	18,020	10,456	-34.8%
COMMUNICATIONS	1,015,710	1,011,873	1,018,294	0.4%
Conferences & Education	274,586	230,451	149,956	19.2%
Travel	228,602	209,234	163,321	9.3%
Computer Support Services	2,737,127	2,343,770	2,268,250	16.8%
Other Operating Expenses (Insurance, Maintenance, Memberships, Supplies)	1,125,227	1,076,924	1,051,594	4.5%
Ohio Retirement Study Council	48,400	52,000	48,387	-6.9%
OTHER OPERATING	4,413,942	3,912,379	3,681,508	12.8%
TOTAL OPERATING	\$ 37,336,898	\$ 35,819,330	\$ 33,974,353	4.2%
Furniture & Equipment > 5,000	-	-	-	0.0%
Computer Hardware > 5,000	-	54,109	54,109	-100.0%
Computer Software > 25,000	-	-	-	0.0%
Vehicles	-	-	-	0.0%
CAPITAL	-	54,109	54,109	-100.0%
NET BUILDING OCCUPANCY EXPENSE	1,392,957	1,813,137	1,390,873	-23.2%
TOTAL OPERATING AND CAPITAL BUDGETS	\$ 38,729,855	\$ 37,686,576	\$ 35,419,335	2.8%

PROPOSED FY2024 DRAFT BUDGET



Comparison of FY2023 Budget to FY2024 Proposed

BUDGET CATEGORY	BUDGET		FORECAST
	FY2024	FY2023	FY2023
Personnel	25,450,941	24,392,195	23,500,586
Professional Services	6,456,305	6,502,883	5,773,965
Communications Expense	1,015,710	1,011,873	1,018,294
Other Operating Expense	4,413,942	3,912,379	3,681,508
Capital	0	54,109	54,109
Net Building Occupancy	1,392,957	1,813,137	1,390,873
TOTAL OPERATING	\$ 38,729,855	\$ 37,686,576	\$ 35,419,335

FY2024 Draft budget reflects 2.77% increase over the FY2023 budget and 9.35% increase over the FY2023 projected expenses

RECONCILIATION OF CHANGES FROM FY2023 BUDGET TO FY2024 BUDGET



FY2023 Budget	\$ 37,686,576	
Personnel Services	\$ 1,058,746	<ul style="list-style-type: none"> ▪ Increase in some base salaries and 4.5% performance-based merit due to recommendations from compensation advisory consultants to align with current market conditions ▪ Increase in retirement contributions ▪ Additional full- time employee
Professional Services	\$ (46,578)	<ul style="list-style-type: none"> ▪ Increase due to new managed security service provider and addition of security validation and testing ▪ Increase in consulting for organization wide Agile training, service desk support, and medical and prescription consulting ▪ Increase in other professional services due to review of 5-year strategic plan and microfilm conversion services ▪ Decrease in master recordkeeper fees, and investment related tech consulting, decrease in investment advisory fees ▪ Decrease in audit services ▪ Decrease in actuarial due to no actuarial audit or modeling tool
Communications	\$ 8,837	<ul style="list-style-type: none"> ▪ Increase due to two Board elections ▪ Increase due to rising cost of postage and printing and paper supplies ▪ Decrease in Telecommunications due to decommissioning of BCS, discontinuation of on-demand conference calling and AWS cloud service ▪ Decrease in member/employer education due to greater use of virtual meetings
Other Operating	\$ 501,563	<ul style="list-style-type: none"> ▪ Increase to seminars/conferences and travel/transportation due to return to pre-pandemic attendance of in-person meetings and visits ▪ Increase in hardware maintenance for Palo Alto support and new servers ▪ Increase in software subscription - on-prem transition to Cloud, operational due diligence software, new telecommunication service, increase in cost of various subscription licenses ▪ Increase in fiduciary responsibility and cyber security insurance ▪ Increase in hardware for planned equipment upgrades
Capital	\$ (54,109)	<p>Decrease in capital priorities:</p> <ul style="list-style-type: none"> ▪ No capital projects planned for FY2024
OSERS Broad Street LLC	\$ (420,180)	<ul style="list-style-type: none"> ▪ Increase in lease revenue ▪ Decrease in building insurance by securing a new vendor in FY23 ▪ Decrease in budgeted remodeling expense ▪ Decrease in capital- continued work on lighting panel upgrades
FY2024 Budget Requested	\$ 38,729,855	

RECONCILIATION OF CHANGES FROM FY2023 FORECAST TO FY2024 BUDGET

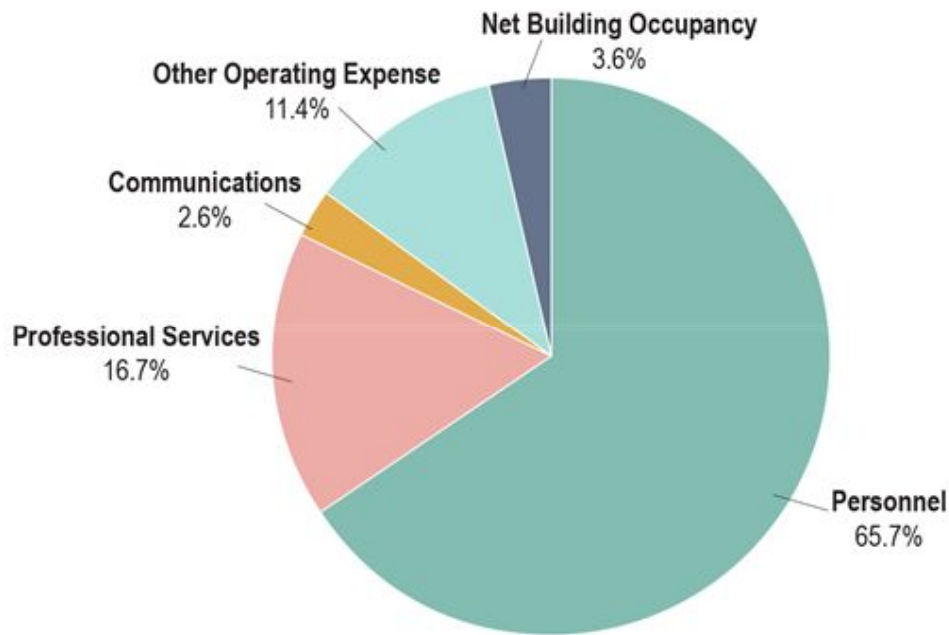


FY2023 Forecast	\$ 35,419,335	
Personnel Services	\$ 1,950,355	<ul style="list-style-type: none"> ▪ Increase in some base salaries and 4.5% performance-based merit increase due to recommendations from compensation advisory consultants to align with current market conditions, and additional full-time employee ▪ Increase in retirement contributions ▪ Decrease in benefit needs throughout FY2023
Professional Services	\$ 682,340	<ul style="list-style-type: none"> ▪ Increase due to new Managed Security Service Provider and addition of security validation and testing ▪ Increase in consulting for organization wide Agile training, service desk support and medical and prescription consulting ▪ Decrease in Master Recordkeeper Fees, and Investment related tech consulting, decrease in Investment Advisory Fees, no Actuarial modeling tool purchased ▪ Decrease in Audit Services due to planned external audit being pushed to FY24 ▪ Decrease in consulting for realized cost efficiencies relating to tabletop exercise, CBBC, M365, and Sagitec resources ▪ Decrease in Other Professional services due to less consulting for the information governance project, and no Federal Lobbyist utilized in FY2023
Communications	\$ (2,584)	<ul style="list-style-type: none"> ▪ Increase due to two Board elections ▪ Increase in Communications & Publications due to increased cost of postage and printing and paper supplies ▪ Decrease in Telecommunications due to decommissioning of the BCS site, discontinuation of on-demand conferencing, and AWS connection ▪ Decrease in Member/Employer education due to continuation of virtual meetings
Other Operating	\$ 732,434	<ul style="list-style-type: none"> ▪ Increase in Seminars/conferences and travel/transportation due to return to pre-pandemic attendance of conferences and operational due diligence visits ▪ Increase in Hardware Maintenance for Palo Alto support and new servers ▪ Increase in software subscriptions - on-prem transition to Cloud, Disaster Recovery as a Service, operational due diligence tool, increase in cost of various subscription licenses, phone service subscription, and security enhancements ▪ Increase in fiduciary responsibility and cyber liability insurance ▪ Increase in Hardware for planned equipment upgrades ▪ Decrease in FY2023 for software subscriptions some came under budget and others were not renewed
Capital	\$ (54,109)	<ul style="list-style-type: none"> ▪ No capital projects planned for FY2024
OSERS Broad Street LLC	\$ 2,084	<ul style="list-style-type: none"> ▪ Increase in lease revenue ▪ Decrease in building insurance due to securing a new vendor in FY2023 ▪ Decrease in budgeted remodeling expense ▪ Decrease in Capital but work continues on the lighting panel upgrades
FY2024 Budget Requested	\$ 38,729,855	

FY2024 OPERATING BUDGET BY CATEGORY



Total: \$38,729,855

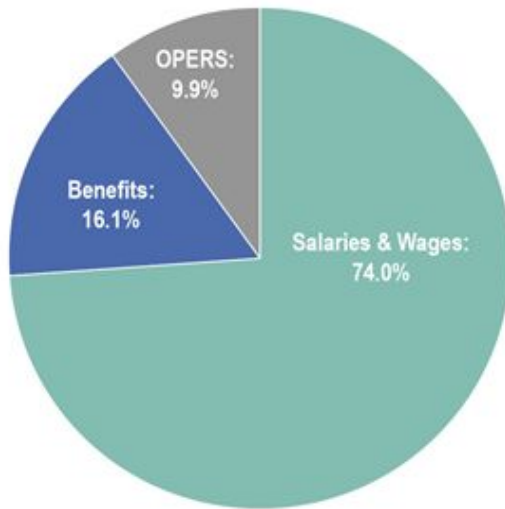


Category	Amount
Personnel	\$25,450,941
Professional Services	\$6,456,305
Communications	\$1,015,710
Other Operating Expense	\$4,413,942
Capital	\$0
Net Building Occupancy	\$1,392,957

PROPOSED FY2024 DRAFT BUDGET



Personnel Services



Personnel Budget	FY2024
Salaries & Wages	\$ 18,832,675
Benefits	\$ 4,090,399
OPERS Retirement Contributions	\$ 2,527,867
Total	\$ 25,450,941

65.7% of the Total Budget

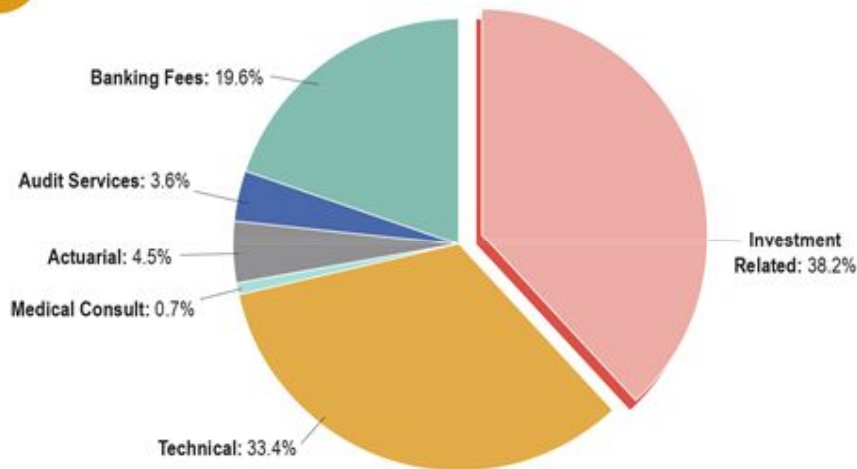
FY2024 Budget Summary:

- One new position (FTE = 183)
- Performance-based merit increase of 4.5%
- Incentive based compensation on FY2023 Investment Portfolio Performance
- Level of benefits remains unchanged for FY2024

PROPOSED FY2024 DRAFT BUDGET



Professional Services



Total SERS Professional Services	FY2024
Investment Related	\$ 2,465,349
Technical	\$ 2,156,516
Medical Consult	\$ 45,000
Actuarial	\$ 292,500
Audit Services	\$ 234,000
Banking Fees	\$ 1,262,940
Total	\$ 6,456,305

16.7% of the Total Budget

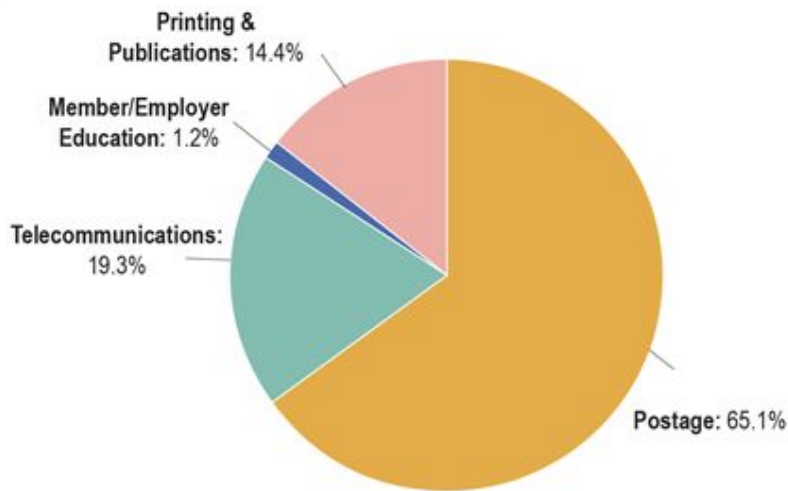
FY2024 Budget Summary:

- Actuarial and Audit fees
- Master Recordkeeper fees – decreased due to lower investment returns and transaction volumes
- Investment Consulting and Advisory, Performance Analytics and Investment-Related Technical Consulting
- Infrastructure third-party services, medical/pharmacy pricing advisement, strategic retirement guidance related to pension and health care sustainability, consulting services across the organization

PROPOSED FY2024 DRAFT BUDGET



Communications



Communications	FY2024	
Postage	\$	661,302
Telecommunications	\$	196,208
Member/Employer Education	\$	11,750
Printing & Publications	\$	146,450
Total	\$	1,015,710

2.6% of the Total Budget

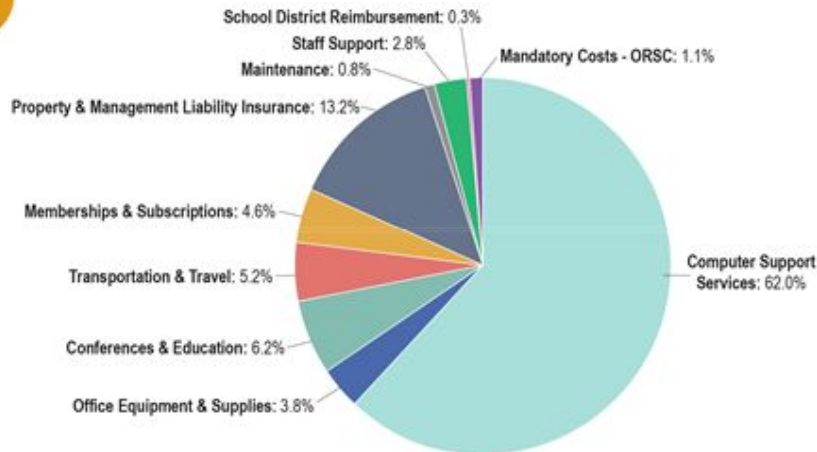
FY2024 Budget Summary:

- Increase in postage due to two Board elections and rising costs
- Telecommunication - includes service landlines, web services, hybrid work environment video/audio communication resources
- Member/Employer Education - includes costs associated with conducting meetings and outreach services
- Printing and Publications - includes costs of paper and supplies and large-quantity specific outsourced printing jobs

PROPOSED FY2024 DRAFT BUDGET



Other Operating Expense



Other Operating Expense	FY2024
Computer Support Services	\$ 2,737,127
Office Equipment & Supplies	\$ 167,803
Conferences & Education	\$ 274,586
Transportation & Travel	\$ 228,602
Memberships & Subscriptions	\$ 203,794
Property & Management Liability Insurance	\$ 582,403
Maintenance	\$ 36,225
Staff Support	\$ 122,462
School District Reimbursement	\$ 12,540
Mandatory Costs- ORSC	\$ 48,400
Reimbursement of Leased Services	\$ (305,000)
Total	\$ 4,108,942

11.4% of the Total Budget

FY2024 Budget Summary:

- Computer Support Services – includes Hardware and Software Maintenance as well as Software Subscriptions
- Office Equipment and Supplies
- Conferences and Education
- Transportation and Travel
- Memberships and Subscriptions
- Property and Fiduciary Insurance
- Maintenance
- Staff Support
- Board Member Reimbursement
- Mandatory ORSC costs
- Reimbursement from OSERS Broad Street, LLC for Leased Services

PROPOSED FY2024 DRAFT BUDGET



Administrative Capital



Description	Amount
No Capital	\$ 0

0.0% of the Total Budget

FY2024 Budget Summary:

- **Capital Priorities**

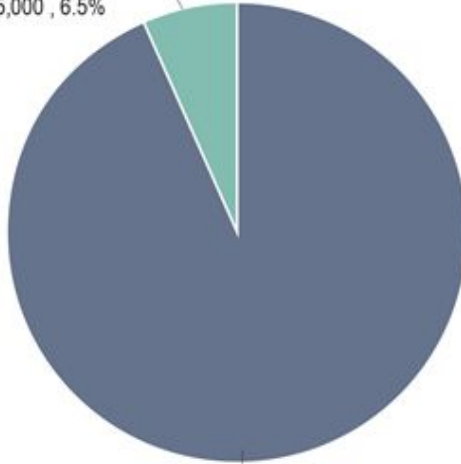
There are no planned capital initiatives for FY2024

PROPOSED FY2024 DRAFT BUDGET



OSERS Broad Street, LLC

Non-Operating Expenses:
\$155,000 , 6.5%



Operating Expenses: \$2,225,114 , 93.5%

OSERS Broad Street, LLC Budget	FY2024
Operating Expenses	\$ 2,225,114
Non-Operating Expenses	\$ 155,000

3.6% of the Total Budget

*Net building occupancy is \$1,392,957 after deducting budgeted operating revenue and reimbursement of leased services

FY2024 Budget Summary:

- Operating Revenue – includes Suite Lease revenue for tenants, parking, and miscellaneous rentals
- **Operating Expenses**
 - Property Management and Labor
 - Other Administrative Expenses
 - Building Operations and Maintenance
 - Utilities
 - Building/Equipment Insurance
- **Non-Operating Expenses**
 - Special Counsel
 - Remodeling – includes anticipated cost for tenant improvements

FIVE-YEAR TECHNOLOGY ROADMAP



Description	Total 5-Year Plan	FY2023 Forecast	FY2023 Forecast % of Plan Spend	FY2024 Plan*	Total Projected Spend FY23-FY24	Remaining Roadmap Amount
Telecommunications	\$ 250,000	\$ 175,848	70.3%	\$ 206,491	\$ 382,339	\$ (132,339)
Security Stack	\$ 899,600	\$ 16,000	1.8%	\$ 248,200	\$ 264,200	\$ 635,400
Network Infrastructure Refresh	\$ 886,000	\$ 602,996	68.1%	\$ 465,100	\$ 1,068,096	\$ (182,096)
Hybrid Technology Replacement	\$ 419,000	\$ 121,253	28.9%	\$ 10,000	\$ 131,253	\$ 287,747
Server Infrastructure	\$ 1,216,700	\$ -	0.0%	\$ 127,000	\$ 127,000	\$ 1,089,700
Backup and Recovery	\$ 532,754	\$ 128,905	24.2%	\$ 117,500	\$ 246,405	\$ 286,349
SMART Portals	\$ 196,000	\$ -	0.0%	\$ 196,000	\$ 196,000	\$ -
SMART Framework	\$ 760,000	\$ 175,000	23.0%	\$ 510,000	\$ 685,000	\$ 75,000
SMART Enhancements	\$ 2,623,000	\$ 49,533	1.9%	\$ 855,000	\$ 904,533	\$ 1,718,467
SMART Business Tools	\$ 500,000	\$ 178,100	35.6%	\$ 250,000	\$ 428,100	\$ 71,900
SMART TOTAL	\$ 4,079,000	\$ 402,633	9.9%	\$ 1,811,000	\$ 2,213,633	\$ 1,865,367
INFRASTRUCTURE TOTAL	\$ 4,204,054	\$ 1,045,002	24.9%	\$ 1,174,291	\$ 2,219,293	\$ 1,984,761
TOTAL BUDGET	\$ 8,283,054	\$ 1,447,635	17.5%	\$ 2,985,291	\$ 4,432,926	\$ 3,850,128

*Projects in FY24 include the continuation of projects from FY23 as well as new initiatives in FY24

FY2024 PROPOSED TECHNOLOGY ROADMAP PROJECTS



- Continued work on SMART framework upgrade to improve application performance and user interface
- Continued investment in the SMART system expanding the electronic payments capabilities.
- Registration Re-imagination project focusing on security enhancements to the Member and Employer Services portals



FY2024 PROPOSED TECHNOLOGY ROADMAP PROJECTS



- Portal Vision Re-imagination project that would improve the functionality and design as well as incorporate new features for the Member portal, including Health Care.
- Continued work on the replacement of our end-of-life telecommunications system that will enhance VoIP capabilities and offer improved member call center features and tracking
- Continued work on the refresh of the network infrastructure
- Replacement of the general accounting system, which includes a cloud-based solution.

Questions?

FINAL FILING OF PROPOSED AMENDED ADMINISTRATIVE RULES

Legal Counsel discussed with the Retirement Board the following proposed amended rules: 3309-1-09 Federal taxation; and 3309-1-35 Health care, that have been reviewed by JCARR and are ready for final adoption by the Board.

_____ moved and _____ seconded that proposed amended rules 3309-1-09 and 3309-1-35 be adopted.

3309-1-09 Federal taxation.

- (A) For purposes of this rule, "benefit" refers to a payment from the accumulated contributions of the member or the employer, or both, under Chapter 3309. of the Revised Code and includes an account refund, pension, annuity, disability benefit, or survivor benefit.
- (B) Notwithstanding any provision in rules of school employees retirement system ("SERS") or Chapter 3309. of the Revised Code to the contrary, distributions to members and beneficiaries shall be made in accordance with section 401(a)(9) of the Internal Revenue Code of 1986, 26 U.S.C. 401(a)(9), and the following:
- (1) The entire interest of a member shall be distributed to the member:
 - (a) Not later than the required beginning date; or
 - (b) Beginning not later than the required beginning date over the life of the member and a designated beneficiary within the meaning of section 401(a)(9) of the Internal Revenue Code.
 - (2) The required beginning date means April first of the calendar year following the later of:
 - (a)
 - (i) The calendar year in which the member attains seventy-two years of age, for members who attain seventy-two years of age before January 1, 2023; or
 - (ii) The calendar year in which the member attains seventy-three years of age, for members who attain seventy-two years of age after December 31, 2022; or-
 - (b) The calendar year in which the member retires.
 - (3) If distribution of a member's benefit has begun in accordance with section 401(a)(9) of the Internal Revenue Code, and the member dies, any survivor benefits will be distributed at least as rapidly as under the plan of payment selected and effective as of the date of the member's death.
 - (4) If a member dies before the distribution of the member's interest has begun in accordance with section 401(a)(9) of the Internal Revenue Code, the entire interest of the member will be distributed within five years after the death of such member. However, if a benefit is payable to or for the benefit of a designated beneficiary within the meaning of section 401(a)(9) of the Internal Revenue Code, the benefit

may be distributed, in accordance with applicable regulations, over the life of such beneficiary, or over a period not extending beyond the life expectancy of the beneficiary, provided that such distributions begin not later than one year after the date of the member's death. If the beneficiary is the surviving spouse of the member, distributions shall not be required to begin, pursuant to that section, until the end of the calendar year in which the member would have attained age ~~seventy-two~~, in the case of a member who would have attained age seventy-two before January 1, 2023, or age seventy-three, in the case of a member who would have attained age seventy-two after December 31, 2022. When the beneficiary is the surviving spouse and the surviving spouse dies before distributions commence, then the surviving spouse shall be treated as the member for purposes of this rule.

(5) Any death benefit amount payable under Chapter 3309. of the Revised Code must comply with the incidental death benefit requirements of section 401(a)(9)(G) of the Internal Revenue Code.

(C) When the retirement system is required to make a distribution in accordance with section 401(a)(9) of the Internal Revenue Code, and a member or retirant does not respond after notification of such event, the following shall apply notwithstanding any provision in SERS rules or Chapter 3309. of the Revised Code to the contrary.

(1) If the member is not eligible for a retirement allowance pursuant to section 3309.34 or 3309.35 of the Revised Code, the retirement system shall refund the member's account as authorized in section 3309.42 of the Revised Code.

(2) If the member is eligible for a retirement allowance pursuant to section 3309.34 or 3309.35 of the Revised Code, the retirement system shall calculate and pay a benefit as authorized in section 3309.36 or 3309.343 of the Revised Code, as a plan B, effective on the required beginning date as provided in paragraph (B)(2) of this rule.

(a) The member cannot purchase or receive any service credit after the effective date of the retirement allowance.

(b) A member who commences receipt of a retirement allowance under this rule, and who is married, may, not later than one year after the payment commenced, elect a plan of payment under division (B)(1), (B)(3)(b), or (B)(3)(c) of section 3309.46 of the Revised Code provided the spouse is named as the beneficiary. The election shall be made on a form provided by the retirement system and shall be effective on the later of the effective date of the retirement allowance or the marriage. Any overpayment may be recovered as provided in section 3309.70 of the Revised Code.

(c) If the member also was eligible for health care coverage pursuant to SERS rules and Chapter 3309. of the Revised Code, the member may, not later than sixty days after the commencement of payment of the retirement allowance, enroll for such health care coverage on a form provided by the retirement system. The effective date shall be no earlier than the first of the month after the retirement system receives the member's enrollment form.

(3) If the retirant is eligible for a benefit pursuant to section 3309.344 of the Revised Code, the retirement system shall calculate and pay a single lump sum benefit as

authorized in section 3309.344 of the Revised Code. If such retirant also is eligible for an annuity, the retirant may return the lump sum payment within sixty days of the receipt of the payment and request an annuity on a form provided by the retirement system.

- (4) If the benefit payment of a deceased member's spouse is subject to section 401(a)(9) of the Internal Revenue Code, then the retirement system shall treat the spouse as if the spouse was the member for the purposes of this rule.

(D)

- (1) Effective for the limitation year beginning on January 1, 2012, the final regulations promulgated April 5, 2007 with respect to section 415 of the Internal Revenue Code, 26 U.S.C. 415 are incorporated herein by reference. The 5.5 per cent interest rate assumption established by the Pension Funding Equity Act of 2004, which is applicable to any actuarial adjustments required because the member or retirant elects a form of payment to which section 415(b)(2)(E) of the Internal Revenue Code and section 417(e)(3) of the Internal Revenue Code, 26 U.S.C. 417(e)(3) apply based on the form of benefit and not the status of the plan, shall be effective as of that same date.

- (2) "Limitation year" is the year used in determining whether the limits set forth in section 415 of the Internal Revenue Code have been exceeded with respect to a member or retirant in the plan describe in sections 3309.18 to 3309.70 of the Revised Code. The limitation year for the plan is the calendar year.

- (E) Effective January 1, 2007, to the extent required by section 401(a)(37) of the Internal Revenue Code, 26 U.S.C. 401(a)(37) and notwithstanding any provision in Chapter 3309. of the Revised Code to the contrary, the survivor of a member on a leave of absence to perform military service with reemployment rights described in section 414(u) of the Internal Revenue Code, 26 U.S.C. 414(u), where the member cannot return to employment on account of his or her death, shall be entitled to any additional benefits (other than benefit accruals relating to the period of qualified military service) that would be provided under Chapter 3309. of the Revised Code had the member resumed employment and then terminated employment on account of death.

- (F) If there is a termination of the plan described in Chapter 3309. of the Revised Code or a complete discontinuance of contributions to the plan, the rights of each affected member, retirant, and beneficiary to the pension, annuity, or benefits accrued at the date of termination or discontinuance of contributions, to the extent then funded, are non-forfeitable.

History:	6/5/20, 5/1/18, 4/10/14, 4/1/13, 9/26/10, 4/3/09, 1/6/09 (Emer.)
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.03, 3309.34, 3309.344, 3309.36, 3309.44, 3309.45,3309.46, 3309.50
Review Date:	2/1/23

3309-1-35 Health care.

(A) Definitions

As used in this rule:

(1) "Benefit recipient" means an age and service retirant, disability benefit recipient, or a beneficiary as defined in section 3309.01 of the Revised Code, who is receiving monthly benefits due to the death of a member, age and service retirant or disability benefit recipient.

(2) "Member" has the same meaning as in section 3309.01 of the Revised Code.

(3) "Age and service retirant" means a former member who is receiving a retirement allowance pursuant to section 3309.34, 3309.35, 3309.36 or 3309.381 of the Revised Code. A former member with an effective retirement date after June 13, 1986 must have accrued ten years of service credit, exclusive of credit obtained after January 29, 1981 pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code.

(4) "Disability benefit recipient" means a member who is receiving a benefit or allowance pursuant to section 3309.35, 3309.39, 3309.40 or 3309.401 of the Revised Code.

(5) "Dependent" means an individual who is either of the following:

(a) A spouse of an age and service retirant, disability benefit recipient, or member,

(b) A biological, adopted or step-child of an age and service retirant, disability benefit recipient, member, deceased age and service retirant, deceased disability benefit recipient, or deceased member or other child in a parent-child relationship in which the age and service retirant, disability benefit recipient, member, deceased age and service retirant, deceased disability benefit recipient, or deceased member has or had custody of the child, so long as the child:

(i) Is under age twenty-six, or

(ii) Regardless of age is permanently and totally disabled, provided that the disability existed prior to the age and service retirant's, disability benefit recipient's, or member's death and prior to the child reaching age twenty-six. For purposes of this paragraph "permanently and totally disabled" means the individual is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death, or which has lasted or can be expected to last for a continuous period of not less than twelve months.

(6) "Health care coverage" means any of the following group plans offered by the system:

(a) A medical and prescription drug plan;

(b) Limited wraparound coverage, which provides limited benefits that wrap around an individual health insurance plan; or

(c) An excepted benefit health reimbursement arrangement, which provides reimbursement of medical expenses incurred under an individual health insurance plan.

(7) "Premium" means a monthly amount that may be required to be paid by a benefit recipient to continue enrollment for health care coverage for the recipient or the recipient's eligible dependents.

(8) "Employer" and "public employer" have the same meaning as in section 3309.01 of the Revised Code.

(9) "Marketplace counselor" means an individual licensed to determine eligibility for, and enroll individuals in, a marketplace plan.

(10) "Marketplace plan" means an individual health plan available through either a state or federal health insurance marketplace.

(B) Eligibility

(1) A person is eligible for health care coverage under the school employees retirement system's health care plan so long as the person qualifies as one of the following:

(a) An age and service retiree or the retiree's dependent,

(b) A disability benefit recipient or the recipient's dependent,

(c) The dependent of a deceased member, deceased age and service retiree, or deceased disability benefit recipient, if the dependent is receiving a benefit pursuant to section 3309.45 or 3309.46 of the Revised Code,

(d) The dependent child of a deceased member, deceased disability benefit recipient, or deceased age and service retiree if the spouse is receiving a benefit pursuant to section 3309.45 or 3309.46 of the Revised Code and the spouse elects to be covered.

(2) Eligibility for SERS health care coverage shall terminate when the person ceases to qualify as one of the persons listed in paragraph (B)(1) of this rule, except that a dependent described in paragraph (A)(5)(b)(i) of this rule shall cease to qualify on the first day of the calendar year following the dependent's twenty-sixth birthday.

(3) Except for a dependent described in paragraph (A)(5)(b) of this rule, eligibility for SERS health care coverage shall terminate when the person is not enrolled in Medicare part B and on or after January 1, 2016 commences employment that provides access to a medical plan with prescription coverage through the employer, or if employees of that employer in comparable positions have access to a medical plan available through the employer, provided the medical plan with prescription drug coverage available through the employer is equivalent to the medical plan with prescription coverage at the cost available to fulltime employees as defined by the employer. For purposes of this paragraph, employer means a public or private employer.

(4) On or after January 1, 2021, eligibility for SERS health care coverage shall terminate when a person listed in paragraph (B)(1) of this rule becomes eligible for Medicaid and is

ineligible for medicare. For purposes of this rule, a benefit recipient and their dependent(s) shall be presumed to be eligible for medicaid if their gross monthly SERS benefit is less than the percentage of the federal poverty level used by the Ohio department of medicaid to determine medicaid eligibility under agency 5160 and division 5160:1 of the Administrative Code. Upon request, a benefit recipient presumed to be eligible for medicaid must provide SERS with satisfactory proof of ineligibility for medicaid in their state of residence within ninety days from the date of SERS' request.

(5) Eligibility for SERS health care coverage shall terminate when a person eligible for medicare part B fails to:

(a) Enroll in medicare part B during the person's initial enrollment period or special enrollment period under 42 U.S.C. 1395p that includes a date on or after January 1, 2019. If the failure to enroll occurred on or after January 1, 2019 and prior to January 1, 2022, the person must enroll in medicare part B during the general enrollment period ending March 31, 2022; or

(b) Enroll in medicare part B during the general enrollment period available under 42 U.S.C. 1395p immediately following a loss of medicare part B coverage that began on or after January 1, 2019. If the loss of medicare part B coverage began on or after January 1, 2019 and prior to January 1, 2022, the person must enroll in medicare part B during the general enrollment period ending March 31, 2022.

(6) Eligibility for SERS health care coverage shall terminate when a benefit recipient who is not eligible for medicare, and whose initial SERS health care eligibility date or reinstatement to SERS health care coverage under paragraph (I) of this rule is on or after June 1, 2023, fails to complete counseling with a SERS approved marketplace counselor to review marketplace plan options.

(a) A benefit recipient whose initial SERS health care eligibility date is on or after June 1, 2023 shall complete counseling before the later of the following:

(i) December 31 of the calendar year of initial health care eligibility; or

(ii) Within three months of initial health care eligibility.

(b) A benefit recipient requesting reinstatement to SERS health care coverage under paragraph (I) of this rule on or after June 1, 2023 shall complete counseling before the later of the following:

(i) December 31 of the calendar year of the qualifying event entitling the benefit recipient to reinstatement; or

(ii) Within three months of the request for reinstatement.

(c) The benefit recipient shall provide the marketplace counselor with all information required to determine the cost of available marketplace plans. The marketplace counselor shall notify SERS when such counseling has been completed.

(d) A benefit recipient who fails to complete counseling in accordance with this rule shall be deemed to have waived SERS health care coverage until the

individual becomes eligible for reinstatement as permitted under paragraph (l) of this rule.

(e) Counseling shall not be required if the marketplace counselor is unable to determine available marketplace plans based on the benefit recipient's address or other demographic information. The marketplace counselor will notify SERS when a marketplace plan cannot be determined based on the circumstances.

(C) Enrollment

(1) Except as otherwise provided in this rule, an eligible benefit recipient may enroll in school employees retirement system's health care coverage only at the time the benefit recipient applies for an age and service retirement, disability benefit, or monthly benefits pursuant to section 3309.45 of the Revised Code.

(2) An eligible spouse of an age and service retiree or disability benefit recipient may only be enrolled in the system's health care coverage at the following times:

(a) At the time the retiree or disability benefit recipient enrolls in school employees retirement system's health care coverage.

(b) Within thirty-one days of the eligible spouse's:

(i) Marriage to the retiree or disability benefit recipient; or

(ii) Involuntary termination of health care coverage under another plan, including a medicare advantage plan, or medicare part D plan.

(c) Within ninety days of becoming eligible for medicare.

(3) An eligible dependent child of an age and service retiree, disability benefit recipient, or deceased member may be enrolled in the system's health care coverage at the following times:

(a) At the time the retiree, disability benefit recipient, or surviving spouse enrolls in school employees retirement system's health care coverage.

(b) Within thirty-one days of the eligible dependent child's:

(i) Birth, adoption, or custody order; or

(ii) Involuntary termination of health care coverage under another plan, including a medicare advantage plan, or medicare part D plan.

(c) Within ninety days of becoming eligible for medicare.

(D) Cancellation of health care coverage

(1) Health care coverage of a person shall be cancelled when:

(a) The person's eligibility terminates as provided in paragraph (B)(2) of this rule;

(b) The person's eligibility terminates as provided in paragraph (B)(3) of this rule;

(c) The person's eligibility terminates as provided in paragraph (B)(4) of this rule;

- (d) The person's eligibility terminates as provided in paragraph (B)(5) of this rule;
- (e) The person's health care coverage is cancelled for default as provided in paragraph (F) of this rule;
- (f) The person's health care coverage is waived as provided in paragraph (G) of this rule;
- (g) The person's health care coverage is cancelled due to the person's enrollment in a medicare advantage plan or medicare part D plan as provided in paragraph (H) of this rule;
- (h) The health care coverage of a dependent is cancelled when the health care coverage of a benefit recipient is cancelled; or
- (i) The person's benefit payments are suspended for failure to submit documentation required to establish continued benefit eligibility under division (B)(2)(b)(i) of section 3309.45 of the Revised Code, division (F) of section 3309.39 of the Revised Code, division (D) of section 3309.41 of the Revised Code, or division (D) of section 3309.392 of the Revised Code.

(E) Effective date of coverage

(1) Except as provided in paragraph (E)(2) of this rule, the effective date of health care coverage for persons eligible for health care coverage as set forth in paragraph (B) of this rule shall be as follows:

- (a) For a disability benefit recipient or dependent of a disability benefit recipient, health care coverage shall be effective on the first of the month following the determination and recommendation of disability to the retirement board or on the benefit effective date, whichever is later.
- (b) For an age and service retiree or dependent of an age and service retiree, health care coverage shall be effective on the first of the month following the date that the retirement application is filed with the retirement system or on the benefit effective date, whichever is later.
- (c) For an eligible dependent of a deceased member, deceased disability benefit recipient, or deceased age and service retiree, health care coverage shall be effective on the effective date of the benefit if the appropriate application is received within three months of the date of the member's or retiree's death, or the first of the month following the date that the appropriate application is received if not received within three months of the date of the member's or retiree's death.

(2) The effective date of coverage for a person described in paragraph (B)(6) of this rule shall be the later of the following:

- (a) The date provided under paragraph (E)(1) of this rule; or
- (b) The first of the month following completion of counseling.

A benefit recipient may elect to defer SERS health care coverage until their first available marketplace plan effective date.

(F) Premiums

(1) Payment of premiums for health care coverage shall be by deduction from the benefit recipient's monthly benefit. If the full amount of the monthly premium cannot be deducted from the benefit recipient's monthly benefit, the benefit recipient shall be billed for the portion of the monthly premium due after any deduction from the monthly benefit.

(2) Premium payments billed to a benefit recipient shall be deemed in default after the unpaid premiums for coverage under this rule and supplemental health care coverage under rule 3309-1-64 of the Administrative Code reach a total cumulative amount of at least three months of billed premiums. The retirement system shall send written notice to the benefit recipient that payments are in default and that coverage will be cancelled on the first day of the month after the date of the notice unless payment for the total amount in default is received prior to the date specified in the notice. If coverage is cancelled due to a recipient's failure to pay premium amounts in default, the recipient shall remain liable for such amounts due for the period prior to cancellation of coverage.

(3) After cancellation for default, health care coverage can be reinstated as provided in paragraph (I) of this rule, or upon submission of an application for reinstatement supported by medical evidence acceptable to SERS that demonstrates that the default was caused by the benefit recipient's physical or mental incapacity. "Medical evidence" means documentation provided by a licensed physician of the existence of the mental or physical incapacity causing the default. Health care coverage reinstated after termination for default shall be effective on the first of the month following the date that the application for reinstatement is approved and payment for the total amount in default is received.

(4) A person enrolled in SERS' health care plan cannot receive a premium subsidy unless that person is:

(a) A dependent child.

(b) An age and service retiree:

(i) An age and service retiree with an effective retirement date before August 1, 1989; or

(ii) An age and service retiree with an effective retirement date on or after August 1, 1989 and before August 1, 2008 who had earned fifteen years of service credit; or

(iii) An age and service retiree with an effective retirement date on or after August 1, 2008 who had earned twenty years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, and who;

(a) Was eligible to participate in the health care plan of his or her employer at the time of retirement or separation from SERS service; or

(b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding retirement or separation from SERS service.

(c) A disability benefit recipient:

(i) A disability benefit recipient with an effective benefit date before August 1, 2008; or

(ii) A disability benefit recipient with an effective benefit date on or after August 1, 2008 who:

(a) Was eligible to participate in the health care plan of his or her employer at the time of separation from SERS service; or

(b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding separation from SERS service.

(d) A spouse:

(i) A spouse or surviving spouse of an age and service retiree or disability benefit recipient with an effective retirement date or benefit date before August 1, 2008 who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code;

(ii) A spouse or surviving spouse of an age and service retiree or disability benefit recipient with an effective retirement date or benefit date on or after August 1, 2008 who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, and who:

(a) Was eligible to participate in the health care plan of his or her employer at the time of retirement or separation from SERS service; or

(b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding retirement or separation from SERS service.

(iii) A surviving spouse of a deceased member who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, with an effective benefit date before August 1, 2008; or

(iv) A surviving spouse of a deceased member who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to

sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, with an effective benefit date on or after August 1, 2008, and the member;

(a) Was eligible to participate in the health care plan of his or her employer at the time of death or separation from SERS service; or

(b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding the member's death or separation from SERS service.

(e) For purposes of determining eligibility for a subsidy under paragraph (F)(4) of this rule, when the last contributing service of an age and service retiree, disability benefit recipient, or member was as an employee as defined by division (B)(2) of section 3309.01 of the Revised Code, the health care plan participation requirement shall be if the individual would have been eligible for the public employer's health care plan if the individual were an employee as defined by division (B)(1) of section 3309.01 of the Revised Code.

(f) Any other individual covered under a SERS health care plan shall be eligible for a premium subsidy under the standard set forth for spouses.

(g) In all cases of doubt, the retirement board shall determine whether a person enrolled in a SERS health care plan is eligible for a premium subsidy, and its decision shall be final.

(G) Waiver

(1) A benefit recipient may waive health care coverage by completing and submitting a SERS waiver form to SERS.

(2) The health care coverage of a benefit recipient's dependent may be waived as follows:

(a) For non-medicare eligible dependents, the benefit recipient may waive their coverage by completing and submitting a signed written request to SERS on their behalf.

(b) For medicare eligible dependents, the dependent may waive their coverage by completing and submitting a signed written request to SERS.

(H) Medicare advantage or medicare part D

SERS shall cancel the health care coverage of a benefit recipient or dependent who enrolls in a medicare advantage or medicare part D plan that is not offered by the system.

(I) Reinstatement to SERS health care coverage

(1) An eligible benefit recipient, or dependent of a benefit recipient with health care coverage, whose coverage has been previously waived or cancelled may be reinstated to SERS health care coverage by filing a health care enrollment application as follows:

(a) The application is received no later than ninety days after becoming eligible for medicare. Health care coverage shall be effective the later of the first day of

the month after becoming medicare eligible or receipt of the enrollment application by the system;

(b) The application is received no later than thirty-one days after involuntary termination of coverage under medicaid. Health care coverage shall be effective the later of the first day of the month after termination of coverage or receipt of proof of termination and the enrollment application by the system; or

(c) The application is received no later than thirty-one days after involuntary termination of coverage under another plan, medicare advantage plan, or medicare part D plan with proof of such termination. Health care coverage shall be effective the later of the first day of the month after termination of the other plan or receipt of proof of termination and the enrollment application by the system.

(2) An eligible person whose coverage was cancelled pursuant to paragraph (D)(1)(i) of this rule shall be reinstated to SERS health care plan when benefit payments are reinstated.

(3) An eligible person whose coverage was cancelled pursuant to paragraph (D)(1)(b) of this rule may be reinstated to SERS health care plan when they no longer have access to the medical plan of an employer by filing a health care enrollment application within thirty-one days of the employment ending.

(4) An eligible benefit recipient or dependent of a benefit recipient with health care coverage, whose coverage has been previously cancelled and who is enrolled in medicare parts A and B or medicare part B only on December 31, 2007 may be reinstated to SERS health care coverage by filing a healthcare enrollment application during the period of time beginning October 1, 2007 and ending November 30, 2007. Health care coverage shall be effective January 1, 2008.

(5) An eligible benefit recipient or dependent of a benefit recipient with health care coverage, whose coverage has been previously cancelled pursuant to paragraph (H) of this rule and who is enrolled in medicare parts A and B or medicare part B only on June 30, 2009 may be reinstated to SERS health care coverage by filing a health care enrollment application during the period of time beginning May 21, 2009 and ending July 15, 2009.

(6) An eligible benefit recipient who had an effective retirement or benefit date on or after August 1, 2008, who qualifies for a premium subsidy under paragraph (F)(4) of this rule, and whose coverage has previously been waived as provided in paragraph (G) of this rule, may be reinstated to school employees retirement system health care coverage by submitting a complete health care enrollment application on or before December 14, 2012. Health care coverage shall be effective January 1, 2013.

(7) An eligible benefit recipient for whom SERS is transferring funds to another Ohio retirement system in accordance with paragraph (G) of rule 3309-1-55 of the Administrative Code may be reinstated to SERS health care coverage by submitting a health care enrollment application during open enrollment periods for health care coverage starting January 1, 2015 or January 1, 2016.

(J) Medicare part B

(1) A person who is enrolled in SERS' health care shall enroll in medicare part B at the person's first eligibility date for medicare part B. A person who fails to enroll in or maintain medicare part B coverage shall be ineligible for SERS health care coverage in accordance with paragraph (B)(5) of this rule.

(2)

(a) The board shall determine the monthly amount paid to reimburse an eligible benefit recipient for medicare part B coverage. The amount paid shall be no less than forty-five dollars and fifty cents, except that the board shall make no payment that exceeds the amount paid by the recipient for the coverage.

(b) As used in paragraph (J) of this rule, an "eligible benefit recipient" means:

(i) An eligible person who was a benefit recipient and was eligible for medicare part B coverage before January 7, 2013, or

(ii) An eligible person who is a benefit recipient, is eligible for medicare part B coverage, and is enrolled in SERS' health care.

(3) The effective date of the medicare part B reimbursement to be paid by the board shall be as follows:

(a) For eligible benefit recipients who were a benefit recipient and were eligible for medicare B coverage before January 7, 2013 the later of:

(i) January 1, 1977; or

(ii) The first of the month following the date that the school employees retirement system received satisfactory proof of coverage.

(b) For eligible benefit recipients not covered under paragraph (J)(3)(a) of this rule, the later of:

(i) The first month following the date that the school employees retirement system received satisfactory proof of coverage, or

(ii) The effective date of SERS health care.

(4) The board shall not:

(a) Pay more than one monthly medicare part B reimbursement when a benefit recipient is receiving more than one monthly benefit from this system; nor

(b) Pay a medicare part B reimbursement to a benefit recipient who is eligible for reimbursement from any other source.

History: 9/30/21, 6/5/20, 1/2/20, 5/3/19, 10/13/16, 8/13/15, 12/4/14, 7/12/14, 1/1/14, 3/8/13, 1/7/13 (Emer.), 9/30/12, 8/14/11, 9/26/10, 7/1/10 (Emer.), 6/11/10, 8/10/09, 5/22/09 (Emer.), 1/8/09, 8/8/08, 12/24/07, 9/28/07 (Emer.), 3/1/07, 1/2/04, 6/13/03, 11/9/98, 8/10/98, 1/2/93, 7/20/89, 3/20/80, 1/1/77

Promulgated Under: 111.15

Statutory Authority: 3309.04
Rule Amplifies: 3309.69
Review Date: 2/1/24

Upon roll call, the vote was as follows:

<u>ROLL CALL:</u>	<u>YEA</u>	<u>NAY</u>	<u>ABSTAIN</u>
Frank Weglarz	_____	_____	_____
Hugh Garside	_____	_____	_____
James Haller	_____	_____	_____
Matthew King	_____	_____	_____
Catherine Moss	_____	_____	_____
Barbra Phillips	_____	_____	_____
James Rossler	_____	_____	_____
Daniel Wilson	_____	_____	_____
Jeffrey DeLeone	_____	_____	_____

Only If Needed

EXECUTIVE SESSION

_____ moved and _____ seconded the motion that the Board go into Executive Session pursuant to R.C. 121.22 (G)(5) to review applications for Disability Retirement Benefits.

IN EXECUTIVE SESSION AT _____ A.M. / P.M.

<u>ROLL CALL:</u>	<u>YEA</u>	<u>NAY</u>	<u>ABSTAIN</u>
Frank Weglarz	_____	_____	_____
Hugh Garside	_____	_____	_____
James Haller	_____	_____	_____
Matthew King	_____	_____	_____
Catherine Moss	_____	_____	_____
Barbra Phillips	_____	_____	_____
James Rossler	_____	_____	_____
Daniel Wilson	_____	_____	_____
Jeffrey DeLeone	_____	_____	_____

RETURNED TO OPEN SESSION AT _____ A.M. / P.M.

CALENDAR DATES FOR SERS BOARD MEETINGS FOR 2023 **

AUDIT COMMITTEE MEETINGS

June 14, 2023 – 2:30 p.m. (Weds.)
September 20, 2023 - 2:30 p.m. (Weds.)
December 20, 2023 – 2:30 p.m. (Weds.)

COMPENSATION COMMITTEE MEETINGS

June 15, 2023 – 7:30 a.m. (Thurs.)
July 20, 2023 – 7:30 a.m. (Thurs.) * **Special Meeting** *
September 21, 2023 – 7:30 a.m. (Thurs.)
December 21, 2023 – 7:30 a.m. (Thurs.)

TECHNOLOGY COMMITTEE MEETINGS

June 15, 2023 – 12:30 p.m. (Thurs.)
September 21, 2023 – 12:30 p.m. (Thurs.)
December 21, 2023 – 12:30 p.m. (Thurs.)

BOARD MEETINGS

June 15 – 16, 2023 - 8:30 a.m. (Thurs. and Fri.)
July 20 – 21, 2023 - 8:30 a.m. (Thurs. and Fri.)
September 21 – 22, 2023 - 8:30 a.m. (Thurs. and Fri.) **** Board Picture Day ****
October 19 – 20, 2023 - 8:30 a.m. (Thurs. and Fri.)
November 16 – 17, 2023 - 8:30 a.m. (Thurs. and Fri.)
December 21 – 22, 2023 - 8:30 a.m. (Thurs. and Fri.)

****NOTE: The above dates are tentative.**

CALENDAR DATES FOR SERS BOARD AND COMMITTEE MEETINGS FOR 2024 **

AUDIT COMMITTEE MEETINGS

March 20, 2024 – 2:30 p.m. (Weds.)
June 19, 2024 – 2:30 p.m. (Weds.)
September 18, 2024 - 2:30 p.m. (Weds.)
December 18, 2024 – 2:30 p.m. (Weds.)

COMPENSATION COMMITTEE MEETINGS

March 21, 2024 – 7:30 a.m. (Thurs.)
June 20, 2024 – 7:30 a.m. (Thurs.)
July 18, 2024 – 7:30 a.m. (Thurs.) * **Special Meeting** *
September 19, 2024 – 7:30 a.m. (Thurs.)
December 19, 2024 – 7:30 a.m. (Thurs.)

TECHNOLOGY COMMITTEE MEETINGS

March 21, 2024 – 12:30 p.m. (Thurs.)
June 20, 2024 – 12:30 p.m. (Thurs.)
September 19, 2024 – 12:30 p.m. (Thurs.)
December 19, 2024 – 12:30 p.m. (Thurs.)

BOARD MEETINGS

February 15 - 16, 2024 - 8:30 a.m (Thurs. and Fri.)
March 21 - 22, 2024 – 8:30 a.m (Thurs. and Fri.)
April 18 – 19, 2024 - 8:30 a.m. (Thurs. and Fri.)
May 16 – 17, 2024 – 8:30 a.m (Thurs. and Fri.)
June 20 - 21, 2024 - 8:30 a.m (Thurs. and Fri.)
July 18 – 19, 2024 – 8:30 a.m. (Thurs. and Fri.)
September 19 – 20, 2024 – 8:30 a.m. (Thurs. and Fri.) **** Board Picture Day ****
October 17 – 18, 2024 – 8:30 a.m. (Thurs. and Fri.)
November 21 – 22, 2024 – 8:30 a.m (Thurs. and Fri.)
December 19 – 20, 2024 – 8:30 a.m (Thurs. and Fri.)

**** Please note that these dates and times are tentative.**

CONTINUED OR NEW BUSINESS

Board Information Requested

BOARD INFORMATION REQUESTS AND FOLLOW-UP ITEMS

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

ADJOURNMENT(R)

_____ moved that the SERS Retirement board adjourn to meet on for their next regularly scheduled meeting.

The meeting adjourned at _____ a.m./p.m.

Jeffrey DeLeone – Chair

Richard Stensrud, Secretary