Retirement Board Agenda
December 15, 2022

Thursday, December 15, 2022, 8:30 a.m.

Click Link to Join Zoom Meeting:
https://ohsers.zoom.us/j/96313171279?pwd=WEowQ1ozR1ZxelhKRE16K0I3Y0hIUT09

Meeting ID: 963 1317 1279 **Password:** 574830

To join by phone, dial: +1 (309) 205-3325 and enter the meeting ID: **963 1317 1279** and password: **574830** when prompted.

PLEDGE OF ALLEGIANCE
1. Roll Call

CONSENT AGENDA
2. Minutes of the **November 17&18, 2022** Retirement Board meeting
3. Summary of Investment Transactions – **October 1, 2022, to October 31, 2022**
4. Retirement Report
    - Superannuations, Survivor Benefits, and Transfers
5. Disability Report
    - Approval of Disability Benefits
    - Disapproval of Disability Benefits
    - Termination of Disability Benefits – Any Occupation
    - Disapproval of Appeal of Termination – Any Occupation

EXTERNAL AUDIT REPORT
6. External Audit Report

ANNUAL COMPREHENSIVE FINANCIAL REPORT (ACFR)
7. 2022 ACFR Highlights

INVESTMENT REPORT
8. Annual Portfolio Review – Opportunistic
9. Monthly Investment Report

EXECUTIVE DIRECTOR'S REPORT
10. Actuarial Audit Report
11. Certification of Candidates – Employee Member Seat (R)
12. Five-Year Review and Filing of No Change Administrative Rules (R)
13. Five-Year Review and Filing of Proposed Amended Administrative Rules (R-3)
14. 2023 Qualified Excess Benefit Plan Budget (QEBA) (R)

MEMBER APPEAL
15. Member Appeal – 10:30am

EXECUTIVE DIRECTOR'S REPORT (cont.)
16. Executive Director's Update
    - Federal Legislative Report - Jeannine Markoe Raymond (NASRA) – 11:00am
17. Review of Administrative Expenses
18. Executive Session pursuant to R.C. 121.22 (G)(3) to discuss Imminent Court Action (R)

COMPENSATION COMMITTEE UPDATE
19. Compensation Committee Report

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

EXECUTIVE DIRECTOR'S REPORT (cont.)
21. Healthcare Sustainability Discussion

BOARD COMMUNICATION AND POLICY ISSUES

22. Calendar Dates for Future Board Meetings
23. 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 **November 17&18, 2022,** Retirement Board meeting
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   - October 1, 2022, to October 31, 2022
3. Retirement Report
   - Superannuations, Survivor Benefits, and Transfers
4. Disability Report
   - Approval of Disability Benefits
   - Disapproval of Disability Benefits
   - Termination of Disability Benefits – Any Occupation
   - Disapproval of Appeal of Termination – 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 **November 17&18, 2022,** Retirement Board meeting
2. Summary of Investment Transactions
    - October 1, 2022, to October 31, 2022
3. Retirement Report
    - Superannuations, Survivor Benefits, and Transfers
4. Disability Report
    - Approval of Disability Benefits
    - Disapproval of Disability Benefits
    - Termination of Disability Benefits – Any Occupation
    - Disapproval of Appeal of Termination – Any Occupation

Upon roll call, the vote was as follows:

ROLL CALL:	**YEA**	**NAY**	**ABSTAIN**
Frank Weglarz	________	________	________
Hugh Garside	________	________	________
James Haller	________	________	________
Matthew King	________	________	________
Catherine Moss	________	________	________
Barbra Phillips	________	________	________
James Rossler	________	________	________
Daniel Wilson	________	________	________
Jeffrey DeLeone	________	________	________

SERS Retirement Board Meeting Minutes

November 17 and 18, 2022

The nine hundredth and fifty-fourth 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, November 17, 2022.

Pledge of Allegiance

The SERS Retirement Board meeting convened at 8:30 a.m. with the Pledge of Allegiance.

Roll Call

Following the Pledge of Allegiance, the roll call was as follows: Jeffrey DeLeone, Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, and Daniel Wilson were present. Frank Weglarz was absent. 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 November 17 and 18, 2022, included:

- Minutes from the **October 20, 2022,** Board Meeting
- Summary of Investment Transactions for the period of **September 1, 2022**, **through September 31, 2022.**
- Retirement Report – Superannuation and Survivor Benefits, Special Cases, and Transfers
- Disability Report - Approval of Disability Benefits, Disapproval of Disability Benefits, Disapproval 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, November 17, 2022. Upon roll call, the vote was as follows: Yea: Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. Absent: Frank Weglarz. The motion carried.

Executive Director's Report

Richard Stensrud, SERS Executive Director, introduced the actuaries from Cavanaugh Macdonald Consulting, LLC (CavMac), who provided a report on the SERS pension and health care valuations as of June 30, 2022.

John Garrett of CavMac began the presentation by discussing the fundamental principle of pension funding that contributions plus investment returns must be sufficient to offset benefit payments plus expenses. Mr. Garrett introduced his colleagues, Todd Green who discussed pension fund results and Alisa Bennett who discussed health care fund results.

Mr. Green reported that the funded status for Basic Benefits (pension, death benefits, and Medicare B funds) increased from 74.46% to 75.48% and the amortization period of the unfunded actuarial accrued liability decreased to 22 years. Mr. Green noted that while the fiscal year investment earnings were below the assumed rate of return of 7.0%, the actuarial value of the assets increased due to the smoothing methodology, under which investment experience is smoothed over a four-year period. Mr. Green explained that under the smoothing process the strong investment performance in previous years, particularly in FY 20-21, would provide deferred gains for the next few years that would help counter the weak performance in the most recent fiscal year, but there would be downward pressure on the funded status after that unless the future investment experience exceeded the investment return assumption.

Mr. Green and Mr. Garrett also reported that the valuation included the impact of the SERS Board decision in September that the entire employer contribution of 14% be allocated to Basic Benefits to enhance the sustainability of the pension fund, as well as the SERS Board decisions to provide a 2.50% COLA in calendar years 2022 and 2023.

Ms. Bennett reported that balance of the Health Care Fund as of June 30. 2022 was $611,574,409, up from $600,330,188 as of June 30, 2021. This represents a new high in the balance in the Health Care Fund. Ms. Bennett further reported that the funded ratio of the Health Care Fund as of June 30, 2022 was 45.36%, down slightly from 46.56% as of June 30, 2021, however the solvency period of the Health Care Fund as of June 30, 2022 was 38 years, up from 36 years as of June 30, 2021. Ms. Bennett explained that the solvency period increased while the funded ratio decreased due to higher-than-expected salary growth coupled with lower-than-expected claims. Ms. Bennett noted that this is the longest solvency period for the Health Care Fund to date.

Hugh Garside moved and Barbra Phillips seconded that after review and discussion of the actuary's Report on the Annual Basic Benefits Valuation of the School Employees Retirement System of Ohio (prepared as of June 30, 2022), the Board accept the actuary's recommended allocation of the 14% employer contribution for fiscal year 2023 as follows: Pension Fund (10.64%), Death Benefit Fund (0.04%), Medicare B Fund (0.54%) and Health Care Fund (0.00%). The remainder (2.78%) will be allocated proportionately to the Pension Fund, Death Benefit Fund and Medicare B Fund in accordance with the funding policy approved by the Board on June 18, 2015. Upon roll call the vote was as follows: Yea: Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. Absent: Frank Weglarz. The motion carried.

Healthcare Surcharge Level for FY2024

Mr. Stensrud advised the Board that Cavanaugh Macdonald was recommending the minimum salary level for purposes of determining the FY 2024 employer health care surcharge be set at $25,000. After discussion, Catherine Moss moved and Matthew King seconded the motion to accept the recommendation of SERS's actuary to establish $25,000 as the minimum compensation amount for purposes of the fiscal year 2024 Health Care surcharge. Upon roll call the vote was as follows: Yea: Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. Absent: Frank Weglarz. The motion carried.

The Board thanked Cavanaugh Macdonald for their reports and recommendations.

Investment Report

Annual Portfolio Review – Fixed Income

SERS Chief Investment Officer, Farouki Majeed, introduced SERS Investment Staff member Jason Naber who provided a Fixed Income Portfolio review. Mr. Naber began his presentation by summarizing the SERS fixed income portfolio which currently has a market value of $2.1 billion and is 6.4% below its 19% target. SERS staff has strategically underweighted fixed income due to the Federal Reserve's aggressive increase in interest rates to combat historically high inflation. Mr. Naber reported despite a -14.2% loss over the last 12 months, this portfolio has outperformed the benchmark over one year by 0.36%, three years by 1.38%, five years by 0.88%, and ten years by 0.86%.

Mr. Naber continued, stating as we look ahead, most of the conditions that caused fixed income investments to drop should ease in 2023. The Federal Reserve is expected to slow or stop the interest rate increases in 2023, and interest payments should provide higher fixed income returns going forward. Staff expects fixed income returns to be closer to the current portfolio yield of 5.05%.

After a brief discussion, the board thanked Mr. Naber for his report.

Wilshire Quarterly Investment Report

David Lindberg of Wilshire Associates provided the Board with an update of current global market conditions, as well as SERS' FY2023 first quarter (July-September) investment results. During the quarter, Lindberg noted that the U.S. stock market experienced a drop of 4.4%, now down 24.4% for the 2022 calendar year. Most sectors experienced negative returns, with the communication services, real estate, and materials sectors performing the worst.

Mr. Lindberg also reported inflation remains high and U.S. interest rates continue to increase. As inflation persists, the odds of a "soft landing," or a gradual slowdown in economic growth or spending that would avoid recession, are diminishing. As the Federal Reserve is pressured to decrease inflation aggressively, Lindberg noted that the result may be somewhere between a hard and a soft landing.

Mr. Lindberg continued his report stating the SERS portfolio is currently underweight in global equity and fixed income and overweight in real assets and opportunistic, which has helped with overall returns. Due to this asset allocation, the total fund outperformed the benchmark by 3.3% for the one-year period.

After several questions, the board thanked Mr. Lindberg for his report.

The board took a break at 10:13 a.m.

The board reconvened at 10:28 a.m.

SERS Monthly Investment Report

SERS Chief Investment Officer, Farouki Majeed, provided an update stating the US labor market is still strong, however, leading economic indicators have been trending down over the last few months, indicating a possible recession. The total fund balance as of September 30 is $16.53B, down $790M for the fiscal year. After a robust discussion and several questions, the board thanked Mr. Majeed for his report.

Executive Director's Report (cont.)

Richard Stensrud, SERS Executive Director, continued his report following the investment items.

Additional Pension Valuation Information of Note

Mr. Stensrud provided some additional information from the actuarial valuation that highlights the features of the membership SERS serves.

- 49.5% of current service retirees receive an annual benefit of $12,000 or less. 67.0% of current service retirees receive an annual benefit of $18,000 or less.
- 90.9% of current service retirees are age 65 or older. 28.5% of current service retirees are age 80 or older. 14.9% of current service retirees are age 85 or older. 4,309 (6%) of current service retirees are age 90 or older. Nine (9) current benefit recipients are age 105 or older.
- 73.8% of current benefit recipients are female, 26.2% are male.
- 49.7% of current active members make less than $20,000 annually. 81.4% make less than $40,000 annually.
- 73.7% of service retirees in 2022 had 20 years or more of service. 53.6% of service retirees in 2022 had 25 or more years of service. 33.1% had 30 or more years of service. This illustrates that SERS' retirees are long-serving career employees.
- 57.4% of service retirees in 2022 were age 65 or older at retirement.

Ohio Retirement Study Council (ORSC)

Mr. Stensrud reported that the November meeting had been cancelled and that the next scheduled meeting was December 8th.

State Legislative Update

Mr. Stensrud summarized the impact of the recent election results on the composition of the General Assembly. Mr. Stensrud discussed and answered questions from the Board on the likelihood of action on retirement system-related legislation during the 'lame duck' period. Mr. Stensrud noted that there would be a limited number of legislative sessions in the lame duck period which reduced the chances that action would be taken on retirement system legislation but that SERS would continue to look for opportunities to secure passage of SERS' Compensation Based Benefit Cap authorization (CBBC) proposal.

Federal Legislative Update

Mr. Stensrud reported that there has been no progress on the WEP and/or GPO legislation. Mr. Stensrud noted that cautious optimism remained that the leaders of the House Ways and Means committee can come together to move things forward on WEP reform and SERS will continue to lobby in support of those efforts.

Stakeholder, Member and Employer Engagement

Mr. Stensrud reported that SERS continues to engage with and keep stakeholders informed on issues of interest, including the CBBC proposal and pension and health care fund sustainability.

Mr. Stensrud reported that Staff had conducted a number of education, training and retirement preparation sessions with active members and employers. Mr. Stensrud noted that a new 'lunch and learn' session had been introduced to help active members learn about the fundamentals of SERS and their retirement plan. Mr. Stensrud noted that SERS would continue to explore opportunities to engage with members through virtual programs while maintaining its commitment to provide information in person.

Joint Trustee Training Session Recap

Mr. Stensrud reported there was a Joint Trustee Training program held at OPERS on November 9. Several Board Members and members of SERS staff attended the meeting along with participants from the other Ohio public pension systems.

Health Care Sustainability

Mr. Stensrud noted that the Board would have a Health Care Fund sustainability session on Friday, November 18th. Mr. Stensrud noted that no decisions would be made and that the purpose was to begin discussion of potential options for enhancing sustainability of the Health Care Fund and the benefits provided through the Fund. Mr. Stensrud noted that as reported by the actuary, the Health Care Fund continues to strengthen but that the Board believes it is prudent to continue to consider ways to further improve its sustainability.

Investment Performance Compensation

Mr. Stensrud reported that the topic of staff investment performance compensation continues to draw attention. Mr. Stensrud noted the importance of investment performance for maintaining sustainability of the pension fund, with approximately two thirds of benefits funded by investment returns. Mr. Stensrud noted that maintaining that level of funding requires attracting and retaining a staff with a high level of expertise. Mr. Stensrud noted that investment performance compensation is only paid when the performance exceeds investment market benchmarks, and that out-performance is even more important in down markets because it minimizes investment shortfall and provides a larger base of assets to invest when markets improve. Mr. Stensrud stated that SERS receives tremendous value for any performance compensation paid and supported that statement by noting: (1) The performance compensation paid in the previous fiscal year equates to 0.00049% of assets under management (AUM); (2) SERS outperformed the relevant benchmarks by 3.11%; (3) That means nearly $573.5 million more is in the pension and health care funds due to the investment decisions made by the investment staff; (4) That additional funding equates to a 68.79 times multiple of the performance compensation paid; and (5) The additional funding represents a 687% return on the performance compensation paid.

Final Filing of Proposed Amended Administrative Rule

Mr. Stensrud introduced Joe Marotta, SERS Chief Legal Counsel, who outlined the proposed administrative rule change. Mr. Marotta discussed filing with JCARR the following proposed amended rule: 3309-1-2, Determination of beneficiary that has been reviewed by JCARR and is ready for final adoption by the board.

Barbra Phillips moved and Catherine Moss seconded that the proposed amended rule 3309-1-26 be adopted:

3309-1-26 Determination of ~~statutory~~ beneficiary.

(A) This rule amplifies divisions (B), (C) and (D) of section 3309.44 and section 3309.50 of the Revised Code.

(B) An individual who does not survive a member or retiree by one hundred twenty hours will be deemed to have predeceased the member or retiree.

(C) For purposes of division (B) of section 3309.44 of the Revised Code, when a designated beneficiary dies more than one hundred twenty hours after the member, but before receiving payment, the payment shall be paid to the estate of the designated beneficiary.

(D) For purposes of divisions (C) and (D) of section 3309.44 and section 3309.50 of the Revised Code, a person is considered "not located" and ceases to qualify as beneficiary if:

(1) No valid mailing address can reasonably be determined for the person; or

(2) The person fails to file an application for payment within one hundred eighty days from the date the school employees retirement system first notifies the person of beneficiary status.

History:	7/27/15
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.44, 3309.50
Review Date:	2/1/24

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

Executive Session

Catherine Moss moved and Matthew King seconded the motion that the board convene in executive session pursuant to R.C. 121.22 (G)(2) to discuss the purchase of property. Upon roll call, the vote was as follows: Yea: Hugh Garside, James Haller, Matthew King, Catherine Moss, Barbra Phillips, James Rossler, Daniel Wilson, and Jeffrey DeLeone. Absent: Frank Weglarz. The motion carried.

The board convened in executive session at 11:39 a.m.

The board reconvened in open session at 11:59 a.m.

SERS Retirement Board Meeting Minutes

November 17 and 18, 2022

Retirement Report

There was no retirement report.

Board Communication and Policy Issues

The board reviewed the meeting dates for the remainder of 2022 and for 2023.

AUDIT COMMITTEE MEETINGS

December 14, 2022 - 2:30 p.m. (Weds.)

COMPENSATION COMMITTEE MEETINGS

December 15, 2022 - 7:30 a.m. (Thurs.)

TECHNOLOGY COMMITTEE MEETINGS

December 15, 2022 – 12:30 p.m. (Thurs.)

BOARD MEETINGS

December 15-16, 2022 – 8:30 a.m. (Thurs. and Fri.)

CALENDAR DATES FOR SERS BOARD MEETINGS FOR 2023

AUDIT COMMITTEE MEETINGS

March 15, 2023 – 2:30 p.m. (Weds.)
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

March 16, 2023 – 7:30 a.m. (Thurs.)
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

March 16, 2023 – 12:30 p.m. (Thurs.)
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

February 16 – 17, 2023 - 8:30 a.m. (Thurs. and Fri.)
March 16 – 17, 2023 - 8:30 a.m. (Thurs. and Fri.)

SERS Retirement Board Meeting Minutes

November 17 and 18, 2022

April 20 – 21, 2023 - 8:30 a.m. (Thurs. and Fri.)
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.)

Continued or New Business

The Board continued with the review of continued or new business.

Recess

Board Chair, Jeffrey DeLeone, recessed the meeting until Friday, November 18, 2022, at 8:30 a.m. for the SERS Healthcare Sustainability discussion. The meeting recessed at 12:19 p.m.

Healthcare Sustainability Session

The SERS Board reconvened at 8:35 a.m. on Friday, November 18, 2022, for a Healthcare Sustainability discussion. SERS Executive Director Richard Stensrud noted that the Health Care Fund is stronger than it's ever been which provides an opportune time to review the state of the Fund to ensure that the Fund remains strong. Mr. Stensrud noted that it was expected that this would be the first of several discussions on Health Care Fund sustainability and that no decisions were anticipated at this first discussion.

Mr. Stensrud outlined the topics to be covered including:

- Review of the sustainability of the SERS' Medicare plan.
- Review of the sustainability of SERS' non-Medicare plan.
- Review of the costs and benefits of SERS' marketplace/Wraparound HRA program compared to the costs and benefits of SERS' non-Medicare plan.
- Potential options for encouraging enrollment in the marketplace/Wraparound HRA program rather than the non-Medicare plan when it is advantageous for the participant.

Members of SERS' health care staff presented the information to and answered questions by the Board. There was robust discussion that noted, among other things, the importance of drawing upon SERS' credibility with its members to help facilitate informed decision making.

The Board and Mr. Stensrud commended Health Care Services Director Christi Pepe and her team for their hard work and the information they provided.

Adjournment

Board Chair Jeffrey DeLeone adjourned the meeting with the Board reconvening on Thursday, December 15, 2022, at 8:30 a.m. for the SERS regularly scheduled Retirement Board meeting.

The SERS board meeting adjourned at 10:25 a.m.

Jeffrey DeLeone, Board Chair

Richard Stensrud, Secretary

Board Meeting Agenda Item

SCHOOL EMPLOYEES RETIREMENT BOARD OF OHIO

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

The following is a summary of the investment transactions made during the period of October 1, 2022 through October 31, 2022. 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	$ 180.7
Fixed Income	428.6
Private Equity Capital Calls	31.3
Real Asset Capital Calls	28.1
Opportunistic & Tactical	13.6
Global Private Credit	41.6
Cash Equivalents	593.9

B. SALES

Asset Class	Approximate Net Proceeds (in millions)	Approximate Gain/(Loss) (in millions)
Global Equities	$ 222.3	$ 10.5
Fixed Income	402.4	(13.8)
Private Equity distributions	25.7	n/a
Real Asset distributions	13.1	n/a
Opportunistic & Tactical	51.4	(1.8)
Global Private Credit	n/a	n/a
Cash Equivalents	479.6	n/a

School Employees Retirement System of Ohio

Report to the Audit Committee and Retirement Board
December 9, 2022

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December 9, 2022

Audit Committee & Retirement Board
School Employees Retirement System of Ohio
Columbus, Ohio

We are pleased to present this report related to our audit of the financial statements of School Employees Retirement System of Ohio (the System) as of and for the year ended June 30, 2022. This report summarizes certain matters required by professional standards to be communicated to you in your oversight responsibility for the Company's financial reporting process.

This report is intended solely for the information and use of the Audit Committee, the Retirement Board, and management, and is not intended to be, and should not be, used by anyone other than these specified parties. It will be our pleasure to respond to any questions you have about this report. We appreciate the opportunity to continue to be of service to School Employees Retirement System of Ohio.

RSM US LLP

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REQUIRED COMMUNICATIONS

Auditing standards generally accepted in the United States of America (AU-C 260, *The Auditor's Communication With Those Charged With Governance*) require the auditor to promote effective two-way communication between the auditor and those charged with governance. Consistent with this requirement, the following summarizes our responsibilities regarding the financial statement audit as well as observations arising from our audit that are significant and relevant to your responsibility to oversee the financial reporting process.

Our Responsibilities With Regard to the Financial Statement Audit

Our responsibilities under auditing standards generally accepted in the United States of America and *Government Auditing Standards* issued by the Comptroller General of the United States have been described to you in our arrangement letter dated July 8, 2022. Our audit of the financial statements does not relieve management or those charged with governance of their responsibilities, which are also described in that letter.

Overview of the Planned Scope and Timing of the Financial Statement Audit

We have issued a separate communication dated September 14, 2022 regarding the planned scope and timing of our audit and identified significant risks.

Accounting Policies and Practices

Preferability of Accounting Policies and Practices
Under accounting principles generally accepted in the United States of America, in certain circumstances, management may select among alternative accounting practices. In our view, in such circumstances, management has selected the preferable accounting practice.

Significant Accounting Policies
We did not identify any significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Unusual Transactions
We did not identify any significant unusual transactions.

Management's Judgments and Accounting Estimates
Summary information about the process used by management in formulating particularly sensitive accounting estimates and about our conclusions regarding the reasonableness of those estimates is in the attached Summary of Significant Accounting Estimates.

Audit Adjustments and Uncorrected Misstatements

There were no audit adjustments made to the original trial balance presented to us to begin our audit.

We are not aware of any uncorrected misstatements other than misstatements that are clearly trivial.

Other Information Included in Annual Reports

Our responsibility for other information included in annual reports is to read the information and consider whether its content or the manner of its presentation is materially inconsistent with the financial information covered by our auditor’s report, whether it contains a material misstatement of fact or whether the other information is otherwise misleading. We read the System’s Required Supplementary Information and Other Supplementary Information. We did not identify material inconsistencies with the audited financial statements.

Observations About the Audit Process

Disagreements With Management
We encountered no disagreements with management over the application of significant accounting principles, the basis for management’s judgments on any significant matters, the scope of the audit or significant disclosures to be included in the financial statements.

Consultations With Other Accountants
We are not aware of any consultations management had with other accountants about accounting or auditing matters.

Significant Issues Discussed With Management
No significant issues arising from the audit were discussed or were the subject of correspondence with management.

Significant Difficulties Encountered in Performing the Audit
We did not encounter any significant difficulties in dealing with management during the audit.

Difficult or Contentious Matters That Required Consultation
We did not encounter any significant and difficult or contentious matters that required consultation outside the engagement team.

Significant Written Communications Between Management and Our Firm

Copies of significant written communications between our firm and the management of the System are attached as Exhibit A. The communications include the representation letter provided to us by management and a copy of our independent auditor’s report on internal control over financial reporting and on compliance and other matters based on an audit of financial statements performed in accordance with *Government Auditing Standards*.

SIGNIFICANT ACCOUNTING ESTIMATES

Accounting estimates are an integral part of the preparation of financial statements and are based upon management's current judgment. The process used by management encompasses their knowledge and experience about past and current events, and certain assumptions about future events. You may wish to monitor throughout the year the process used to determine and record these accounting estimates. The following summarizes the significant accounting estimates reflected in the Company's June 30, 2022 financial statements.

Significant Accounting Estimates	
Investments	
Accounting policy	The fair value of investments is determined monthly and the investments are stated at fair value. Unrealized gains and losses are reported on the statement of changes in fiduciary net position.
Management's estimation process	The System adjusts its investments to fair value on a monthly basis based on fair values provided by the custodian that holds the investments in safekeeping.
Basis for our conclusion on the reasonableness of the estimate	We tested the propriety of information provided by the custodian and found the methodology used is reasonable and appropriate. We also performed independent testing over fair value of a sample of investments and found the values assigned to be reasonable.
Pension Benefit Liabilities and Assumptions (for the System)	
Accounting policy	The System's pension benefit liabilities and disclosures are based upon numerous assumptions and estimates including the interest rate used to determine the present value of liabilities and certain participant-related factors.
Management's estimation process	The System's pension benefit liabilities are calculated by an independent actuary using participant-related factors including, but not limited to, turnover, mortality, inclusion date, retirement age and rate of retirement. These factors and the estimated discount rate are based upon historical and general market data.
Basis for our conclusion on the reasonableness of the estimate	We have tested the reliability of the census data submitted to the System actuary and have utilized an actuarial specialist to review the methodology and assumptions used by the System actuary. Based on our procedures, we have determined that census data compiled by the System is reliable. Using our internal specialists, we analyzed the methodologies and assumptions that were used by the independent actuary and concluded that the estimates used are reasonable for the pension benefit liabilities.

Significant Accounting Estimates (Continued)	
Postretirement Benefit Liabilities and Assumptions (for the System)	
Accounting policy	The System's postretirement benefit liabilities and disclosures are based upon numerous assumptions and estimates including demographic data, benefit coverage and the interest rate used to determine the present value of liabilities and certain other participant-related factors.
Management's estimation process	The System's postretirement benefit liabilities are calculated by an independent actuary using participant-related factors including, but not limited to, turnover, mortality, inclusion date, retirement age and rate of retirement. These factors and the estimated discount rate are based upon historical and general market data.
Basis for our conclusion on the reasonableness of the estimate	We have tested the reliability of the census data and claims data submitted to the System actuary and have utilized an actuarial specialist to review the methodology and assumptions used by the System actuary. Based on our procedures, we have determined that census data and claims data compiled by the System is reliable. Using our internal specialists, we analyzed the methodologies and assumptions that were used by the independent actuary and concluded that the estimates used are reasonable for the postretirement benefit liabilities.

EXHIBIT A

Significant Written Communications Between Management and Our Firm

December 9, 2022

RSM US LLP
1001 Lakeside Avenue, Suite 200
Cleveland, Ohio 44114

This representation letter is provided in connection with your audit of the financial statements of School Employees Retirement System of Ohio (the System) which comprise the statement of fiduciary net position as of June 30, 2022; the related statements of changes in fiduciary net position for the year then ended; and the related notes to the financial statements for the purpose of expressing an opinion on whether the financial statements are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

We confirm, to the best of our knowledge and belief, having made such inquiries as we considered necessary for the purpose of appropriately informing ourselves, that as of the date of this letter:

Financial Statements

1. We have fulfilled our responsibilities, as set out in the terms of the audit arrangement letter dated July 8, 2022, for the preparation and fair presentation of the financial statements referred to above in accordance with U.S. GAAP.

2. We acknowledge our responsibility for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

3. We acknowledge our responsibility for the design, implementation and maintenance of controls to prevent and detect fraud.

4. The methods, data, and significant assumptions used by us in making accounting estimates and their related disclosures are appropriate to achieve recognition, measurement, or disclosure that is reasonable in the context of U.S. GAAP, and reflect our judgment based on our knowledge and experience about past and current events, and our assumptions about conditions we expect to exist and courses of action we expect to take.

5. We are responsible for the estimation methods, assumptions and data used in measuring assets and liabilities reported or disclosed at fair value, including information obtained from brokers, pricing services or other third parties, and result in an estimate that is appropriate for financial statement measurement and disclosure purposes and have been consistently selected and applied in making the estimates. Significant judgments made in making the estimates have taken into account all relevant information of which we are aware. Appropriate specialized skills or expertise has been applied in making the estimates. All disclosures related to the estimates, including disclosures describing estimation uncertainty, are complete and reasonable in the context of U.S. GAAP. No subsequent events have occurred that would require adjustment to the estimates and related disclosures included in the financial statements.

6. All significant estimates and material concentrations known to management that are required to be disclosed have been properly recorded and/or disclosed in the financial statements. Significant estimates are estimates at the statement of fiduciary net position date that could change materially within the next year. Concentrations refer to the nature and type of investments held by the System, or markets in which events could occur that would significantly disrupt normal finances within the next year.

7. Related-party transactions have been recorded in accordance with the economic substance of the transaction and appropriately accounted for and disclosed in accordance with the requirements of U.S. GAAP.

8. All events subsequent to the date of the financial statements, and for which U.S. GAAP requires adjustment or disclosure, have been adjusted or disclosed.

9. The effects of all known actual or possible litigation and claims have been accounted for and disclosed in accordance with U.S. GAAP.

10. We have no direct or indirect legal or moral obligation for any debt of any organization, public or private, or to special assessment bond holders, that is not disclosed in the financial statements.

11. We have complied with all aspects of laws, regulations and provisions of contracts and agreements that would have a material effect on the financial statements in the event of noncompliance. In connection therewith, we specifically represent that we are responsible for determining that we are not subject to the requirements of the Single Audit Act because we have not received, expended or otherwise been the beneficiary of the required amount of federal awards during the period of this audit.

12. We have no knowledge of any uncorrected misstatements in the financial statements.

13. We are responsible for determining that significant events or transactions that have occurred since the statement of fiduciary net position date and through the date of this letter, have been recognized or disclosed in the financial statements. No events or transactions have occurred subsequent to the statement of fiduciary net position date and through the date of this letter that would require recognition or disclosure in the financial statements. We further represent that as of the date of this letter, the financial statements were complete in form and format that complied with U.S. GAAP, and all approvals necessary for issuance of the financial statements had been obtained.

14. Management has followed applicable laws and regulations in adopting, approving and amending budgets.

15. Risk disclosures associated with deposit and investment securities and derivative transactions are presented in accordance with GASB requirements.

16. The financial statements include all fiduciary activities required by GASB Statement No. 84, *Fiduciary Activities*, as amended.

Information Provided

17. We have provided you with:

    a. Access to all information of which we are aware that is relevant to the preparation and fair presentation of the financial statements such as records, documentation and other matters.

    b. Additional information that you have requested from us for the purpose of the audit.

    c. Unrestricted access to persons within the System from whom you determined it necessary to obtain audit evidence.

    d. Minutes of the meetings of the Retirement Board, or summaries of actions of recent meetings for which minutes have not yet been prepared.

18. All transactions have been recorded in the accounting records and are reflected in the financial statements.

19. We have disclosed to you the results of our assessment of risk that the financial statements may be materially misstated as a result of fraud.

20. It is our responsibility to establish and maintain internal control over financial reporting. One of the components of an entity's system of internal control is risk assessment. We hereby represent that our risk assessment process includes identification and assessment of risks of material misstatement due to fraud. We have shared with you our fraud risk assessment, including a description of the risks, our assessment of the magnitude and likelihood of misstatements arising from those risks, and the controls that we have designed and implemented in response to those risks.

21. We have no knowledge of allegations of fraud or suspected fraud affecting the System's financial statements involving:

    a. Management.

    b. Employees who have significant roles in internal control.

    c. Others where the fraud could have a material effect on the financial statements.

22. We have no knowledge of any allegations of fraud or suspected fraud affecting the System's financial statements received in communications from employees, former employees, analysts, regulators, or others.

23. We have no knowledge of noncompliance or suspected noncompliance with laws and regulations.

24. We have disclosed to you all known actual or possible litigation and claims whose effects should be considered when preparing the financial statements.

25. We have disclosed to you the identity of all of the System's related parties and all the related-party relationships and transactions of which we are aware.

26. We are aware of no significant deficiencies, including material weaknesses, in the design or operation of internal controls that could adversely affect the System's ability to record, process, summarize and report financial data.

27. There have been no communications from regulatory agencies concerning noncompliance with, or deficiencies in, financial reporting practices.

28. The System has complied, in all material respects with the 2022 Ohio Compliance Supplement.

29. We have no plans or intentions that may materially affect the carrying value or classification of assets of liabilities.

30. The System has satisfactory title to all owned assets that recorded at fair value, and all liens, encumbrances or security interests have been properly disclosed.

31. The following information about financial instruments with off-balance-sheet risk and financial instruments with concentrations of credit risk has been properly disclosed in the financial statements.

    a. Extent, nature, and terms of financial instruments with off-balance sheet credit risk;

    b. The amount of credit risk of financial instruments with off-balance sheet credit risk and information about the collateral supporting such financial instruments; and

   c. Significant concentrations of credit risk arising from all financial instruments and such information about the collateral supporting such financial instruments.

32. We have considered the user controls identified in the Service Auditor Reports of Bank of New York Mellon, Huntington National Bank, Fifth Third Bank, Goldman Sachs, Aetna, and Express Scripts and believe that appropriate controls are in place.

33. Actuarial valuation reports were prepared by an actuary for the System.

34. With respect to the actuarial determined amounts reflected in the notes to the financial statements, required supplementary information and elsewhere:

    a. The information provided to the System's actuary to perform the valuation is accurate and there have been omissions from the participants' data provided to the System's actuary for the purpose of determining any actuarially determined amounts.

    b. There have been no changes in the actuarial methods or assumptions used in calculating amounts disclosed in the financial statements other than those disclosed in the actuary's report or financial statements.

    c. We are not aware of any matters that have impacted the independence or objectivity of the System's actuary.

    d. There have been no changes to the System provisions between actuarial valuation date and the date of this letter.

    e. In addition, we believe that actuarial assumptions and methods used by the actuary for funding purposes and for determining the net pension and OPEB liabilities are appropriate in the circumstances. We did not give or cause any instruction to be given to the specialist with respect to the value or amounts derived in an attempt to bias their work, and we are not otherwise aware of any matters that have had an impact on the independence or objectivity of the System's actuary.

35. During the course of your audit, you may have accumulated records containing data that should be reflected in our books and records. All such data have been so reflected. Accordingly, copies of such records in your possession are no longer needed by us.

Compliance Considerations

In connection with your audit conducted in accordance with *Government Auditing Standards*, we confirm that management:

36. Is responsible for the preparation and fair presentation of the financial statements in accordance with the applicable financial reporting framework.

37. Is responsible for compliance with the laws, regulations and provisions of contracts and grant agreements applicable to the auditee.

38. Is not aware of any instances of identified and suspected fraud and noncompliance with provisions of laws, regulations, contracts, and grant agreements that have a material effect on the financial statements.

39. Is responsible for the design, implementation and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

40. Acknowledges its responsibility for the design, implementation and maintenance of controls to prevent and detect fraud.

41. Has a process to track the status of audit findings and recommendations.

42. Has identified for the auditor previous audits, attestation engagements and other studies related to the objectives of the audit and whether related recommendations have been implemented.

43. Is not aware of any investigations or legal proceedings that have been initiated with respect to the period under audit.

Supplementary Information

44. With respect to supplementary information presented in relation to the financial statements as a whole:

    a. We acknowledge our responsibility for the presentation of such information.

    b. We believe such information, including its form and content, is fairly presented in accordance with U.S. GAAP.

    c. The methods of measurement or presentation have not changed from those used in the prior period.

    d. Were believe that the supplementary information, including its form and content, is fairly stated in all material respects.

    e. There are no underlying significant assumptions or interpretations regarding the measurement or presentation of such information.

    f. When supplementary information is not presented with the audited financial statements, we will make the audited financial statements readily available to the intended users of the supplementary information no later than the date of issuance of the supplementary information and the auditor's report thereon.

45. With respect to (i) management's discussion and analysis, (ii) the Schedule of Changes in the Employers' Net Pension Liability, (iii) Schedule of the Net Pension Liability, (iv) Schedule of Employer Contributions, (v) Schedule of Investment Returns, (vi) Schedule of Changes in the Net OPEB Liability, (vii) Schedule of the Net OPEB Liability, (viii) Schedule of Employer Contributions - OPEB, (ix) Schedule of Investment Returns – OPEB, (x) Schedule of SERS' Proportionate Share of Net Pension Liability – Ohio Public Employees Retirement Plan – Traditional Pension Plan, (xi) Schedule of SERS' Proportionate Share of the Net Pension Liability – Ohio Public Employees Retirement Plan – Combined Pension Plan, (xii) Schedule of Contributions – Ohio Public Employees Retirement Plan – Traditional Pension Plan, (xiii) Schedule of Contributions – Ohio Public Employees Retirement Plan – Combined Pension Plan, (xiv) Schedule of SERS' Proportionate Share of the Net OPEB Liability – Ohio Public Employees Retirement Plan and (xv) Schedule of OPEB Contributions – Ohio Public Employees Retirement Plan presented as required by the Governmental Accounting Standards Board to supplement the basic financial statements:

    a. We acknowledge our responsibility for the presentation of such required supplementary information.

b. We believe such required supplementary information is measured and presented in accordance with guidelines prescribed by U.S. GAAP.

c. The methods of measurement or presentation have not changed from those used in the prior period.

d. Underlying significant assumptions or interpretations regarding the measurement or presentation of such information, if any, have been properly disclosed.

School Employees Retirement System of Ohio

DocuSigned by:
Richard Stensrud
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Richard Stensrud, Executive Director

DocuSigned by:
Marni Hall
5618FF699ABF46B...

Marni Hall, Chief Financial Officer

DocuSigned by:
Farouki Majeed
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Farouki Majeed, Chief Investment Officer

DocuSigned by:
Joseph M. Marotta
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Joseph M. Marotta, General Counsel

DocuSigned by:
Stacy Easterday
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Stacy Easterday, Assistant Director, Financial Accounting

DocuSigned by:
Trisha Rider
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Trisha Rider, Manager, General Accounting

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

Independent Auditor's Report

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

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of School Employees Retirement System of Ohio, which comprise the statement of fiduciary net position as of June 30, 2022, and the related statement of changes in fiduciary net position for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise School Employees Retirement System of Ohio's basic financial statements, and have issued our report thereon dated December 9, 2022.

Report on Internal Control over Financial Reporting
In planning and performing our audit of the financial statements, we considered School Employees Retirement System of Ohio's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of School Employees Retirement System of Ohio's internal control. Accordingly, we do not express an opinion on the effectiveness of School Employees Retirement System of Ohio's internal control.

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

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

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

Purpose of this Report

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

RSM US LLP

Cleveland, Ohio
December 9, 2022

Sunshine Law Star Rating System (StaRS)
(IPA Audit/AUP Engagements)

Entity Name: School Employees Retirement System of Ohio

Project Number: 67097-F37DB

In order to determine each applicable entity's StaRS level per Section 2-23 of the current *Ohio Compliance Supplement*, the following form **MUST** be completed prior to submission of the audit report for release.

Instructions:
1. If a written citation (GAGAS level or management letter) regarding any of the 13 mandatory testing requirements has been approved by legal counsel, and was included in the audit report or management letter, click the "Noncompliance Reported" button in the StaRS Results section below and skip to step 4.

2. If noncompliance was **NOT** reported and **NO** best practices were implemented, click the "NO Noncompliance Reported and NO Best Practices Implemented" button in the StaRS Results section below and skip to step 4.

3. If noncompliance was **NOT** reported and best practices **WERE** implemented, click the checkbox next to each best practice that has been implemented by the entity at the time of audit, based on the testing performed and documentation maintained in the audit work papers. (Although compliance with the ORC statutes should be only tested for the audit period, the entity should be provided "credit" for implementation of any best practice that is in place at the time of audit, regardless of whether it was in place during the audit period.)

NOTE: If an entity, such as a county, has multiple public records processes, at least one process must have implemented the best practice to get "credit." (i. e. every process tested does **not** need to demonstrate implementation of the best practice in order for the entity to receive "credit" for implementation.)

4. Submit the completed form (with the entity name and project number listed) to the Center for Audit Excellence with the final audit/AUP report.

StaRS Results:

○ Noncompliance Reported

○ **NO** Noncompliance Reported and **NO** Best Practices Implemented

◉ **NO** Noncompliance Reported and the following Best Practices Implemented

(please click the box next to the description for each best practice implemented)

1. ☒ **Method to Track Public Records Requests**
2. ☐ **Standard Request Forms**
3. ☐ **Public Records Request Acknowledgement**
4. ☒ **Public Records Custodian Identified and Trained**
5. ☒ **Prompt Certified Public Records Training**
6. ☒ **Online Presence – Upcoming Events and Office Operations**
7. ☒ **Online Presence – Official Documents**

2022 SERS ACFR Highlights

Serving the People Who Serve Our Schools ®

What is an ACFR

- Annual Comprehensive Financial Report (ACFR)
- Meets standards of Government Accounting Standards Board (GASB)
- Audited
- Contains 5 sections
  - Introductory
  - Financial (audited)
  - Investment
  - Actuarial
  - Statistical
- Award winning!
  - 37 years in a row through 6/30/2021

Introduction Section

- Transmittal letter includes (pages 6-9):
  - High level accomplishments:
    - Operations and customer service improvements
    - Invasion of Ukraine triggered investment changes
    - 5-Year technology road map
    - Management and protection of data
    - Health Care developments
    - Pension and Health Care sustainability
  - Investment holdings and returns
  - Funding
  - Awards
    - GFOA
      - ACFR (37 years)
      - SAFR (9 years)
    - Public Pension Coordinating Council

Legislative

- A summary of enacted or pending legislation (page 10-11)
  - State – 133rd General Assembly
  - Federal – 117th Congress
  - Regulatory

Financial Section

Category	Description
Opinion letter (pages 14-16)	• Clean unqualified opinion • New format – opinion moved to beginning
Management's Discussion and Analysis (pages 17-23)	• High level overview of SERS financial performance • Tells the story
Statements (pages 24-25)	• Pension Fiduciary Net Position **decreased** $875 million • Health Care Fiduciary Net Position **increased** $11 million • Total Fiduciary Net Position **decreased** from $18.4 billion (6/30/21) to $17.6 billion (6/30/2022)
Footnotes (pages 26-45)	• Provides additional information to better understand the statement numbers • No new notes in 2022 • GASB 96 - Subscription-Based Information Technology Arrangements - 2023

Financial Section, cont.

Category	Description

Footnote 8 – Net Pension Liability (page 38)	• GASB 67 required disclosure of SERS' net pension liability
	• Allocated to each school based on their proportionate share of contributions to SERS
	• Fluctuates based on investment returns, expected versus actual experience, and change in assumptions
	  • 6/30/2022 - $5.4 billion
	  • 6/30/2021 - $3.7 billion
	  • 6/30/2020 - $6.6 billion
	  • 6/30/2019 - $6.0 billion
	  • 6/30/2018 - $5.7 billion
	• GASB 67 report to be issued in early January

Footnote 9 – Pension Plans for Employees of SERS (page 39)	• GASB 68/75 requirements • Represents SERS proportionate share of OPERS net pension liability and OPERS net OPEB asset • Details included in Required Supplementary Information (pages 54-56)

Financial Section, cont.

Category	Description

Footnote 16 - Net OPEB Liability (page 41)	• GASB 74 required disclosure of SERS' net OPEB liability
	• Net OPEB liability is allocated to each school based on their proportionate share of contributions to SERS
	• Net OPEB liability fluctuates based on investment returns, expected versus actual experience, and change in assumptions
	  • 6/30/2022 - $1.4 billion
	  • 6/30/2021 - $1.9 billion
	  • 6/30/2020 - $2.2 billion
	  • 6/30/2019 - $2.5 billion
	  • 6/30/2018 - $2.8 billion
	• GASB 74 report to be issued in early January

Footnote 17 – Recently issued pronouncements (page 44)	• GASB 96 – Subscription-Based Information Technology Arrangements • GASB 99 – Omnibus; clean up of previously issued standards • GASB 100 – Accounting changes and error corrections • GASB 101 – Compensated absences

Required Supplemental Schedules

- Required GASB schedules and notes (pages 46-56)
  - 10 years when available

  - GASB 67 – Pension (pages 46-49)
    - Changes in SERS' Net Pension Liability
    - SERS' Net Pension Liability
    - SERS' Employer Contributions
    - SERS' Investment Returns

  - GASB 74 – OPEB (pages 50-52)
    - Changes in SERS' Net OPEB Liability
    - SERS' Net OPEB Liability
    - SERS' Employer Contributions
    - SERS' Investment Returns

Required Supplementary Pension, Cont.

- Required GASB schedules and notes (pages 46-56), Cont.
  - GASB 68 – SERS' participation in OPERS' Pension (pages 54-55)
    - SERS' Share of OPERS Net Pension Liability
    - SERS' Employer Contributions to OPERS' Pension
  - GASB 75 – SERS' participation in OPERS' OPEB (page 56)
    - SERS' Share of OPERS Net OPEB Liability/(Asset)
    - SERS' Employer Contributions to OPERS' OPEB

Other Supplementary Information

- Schedule of Administrative Expenses
  - General versus investment related
- Schedule of Investment Expenses
  - Management fees
  - Custody
  - Master recordkeeper
  - Consulting, performance and analytics
  - Investment department operations
- Payments to Consultants

Investment Section

- Information focused on investment strategy including (pages 60-80):
  - Asset allocation targets
  - Asset class descriptions
  - Performance
  - Largest holdings
  - List of consultants and managers
  - Broker commissions
  - Policy

	June 30,		
Total Fund Results (Net of Fees)	2022	2021	2020
SERS	(0.5)	26.8	3.0
Policy Benchmark	(3.6)	23.6	3.7

Actuarial Section

- 6/30/2022 Actuarial Valuation information as presented at the November 2022 board meeting (pages 82-99):
  - Letter from actuary
  - Pension and health care information:
    - Summary of assumptions
    - Actuarial Accrued Liabilities
    - Funding progress
    - Financial experience
    - Solvency test
    - Retirees added to and removed from the rolls

Pension Funding Progress ($ in millions)

Year		Unfunded AAL	Funded Ratio	Amortization Period
2022	$	5,330	75.7%	22
2021		5,316	74.8%	23
2020		5,790	71.9%	24
2019		5,823	71.0%	25
2018		5,735	70.7%	26

Health Care Funding Progress ($ in millions)

Year		Unfunded AAL	Funded Ratio	Solvency Period
2022	$	736	45.4%	38
2021		689	46.6%	37
2020		1,314	26.9%	34
2019		1,735	21.1%	15
2018		2,089	17.3%	17

Statistical Section

- Historical ten-year information (pages 102-114)
  - Financial
    - Fiduciary Net Position by Fund
    - Changes in Fiduciary Net Position
    - Benefit and Refund Deductions by Type
    - Employee and Employer Contribution Rates
    - Average Benefits for New Recipients
  - Demographic and Benefit payments
    - Active and Benefit Recipient Counts
    - Retired Members by Type
    - Health Care Participant Counts
    - Principal Participating Employers
    - Average Benefit Payments for New Retirees

Opportunistic and Tactical Investments Portfolio Review

As of October 31, 2022

Presented by Investment Staff

Meeting Date: December 2022

Farouki Majeed and Phil Sisson

Portfolio Summary

$633 Million Market Value

- 12 Managers / 21 Fund Investments
  - 7 Ranked as A
  - 1 Ranked as B
  - 1 Ranked as C
  - 3 are new to the portfolio and not yet ranked
- Unfunded commitments: $405 million

Recent Performance

- -1.1% one-year net return; 6.2% three-year annualized net return
- Portfolio is exceeding the policy benchmark across all time periods

Portfolio Activity

- Seven funds totaling $355 million added to the portfolio in last 12 months
- Focus on diversification and inflation protection
- Ongoing market volatility creates investment opportunities
- Research new opportunities

Implementation Guidelines

Role

- SERS invests in opportunistic strategies that do not fit with the existing asset classes.
- 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 asset allocation.

Performance Objective

- Earn a net-of-fee return in excess of the Bloomberg US Aggregate Bond Index + 2%

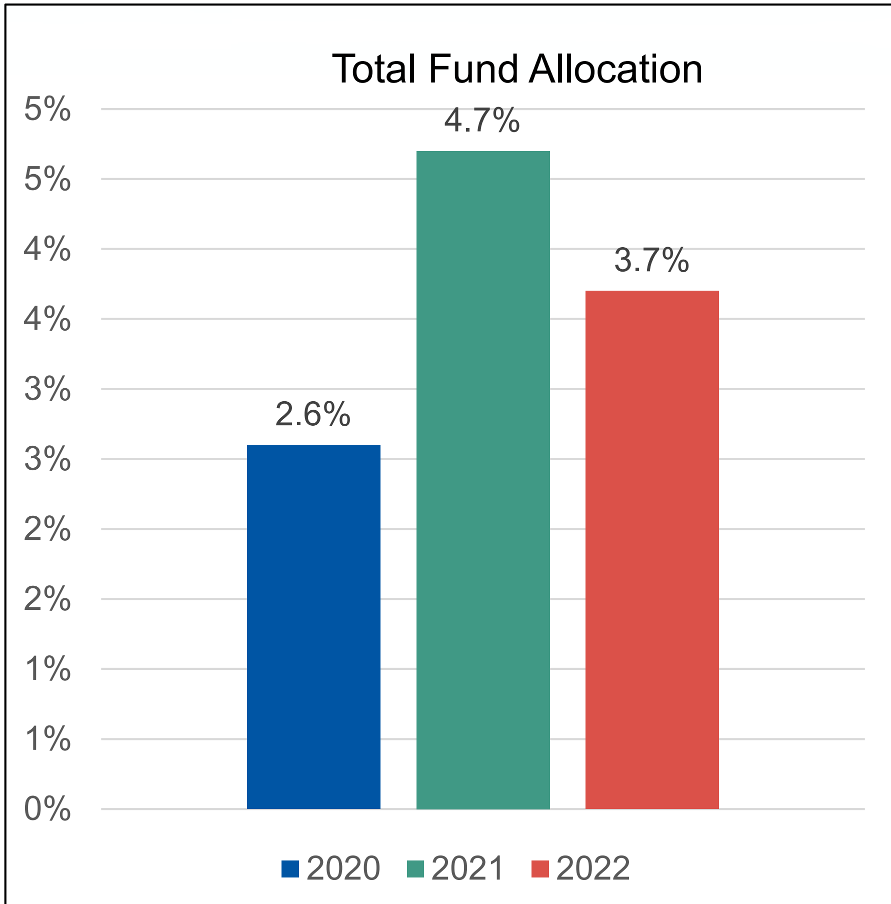
*Benchmark changed from Total Fund Policy Benchmark effective July 1, 2020

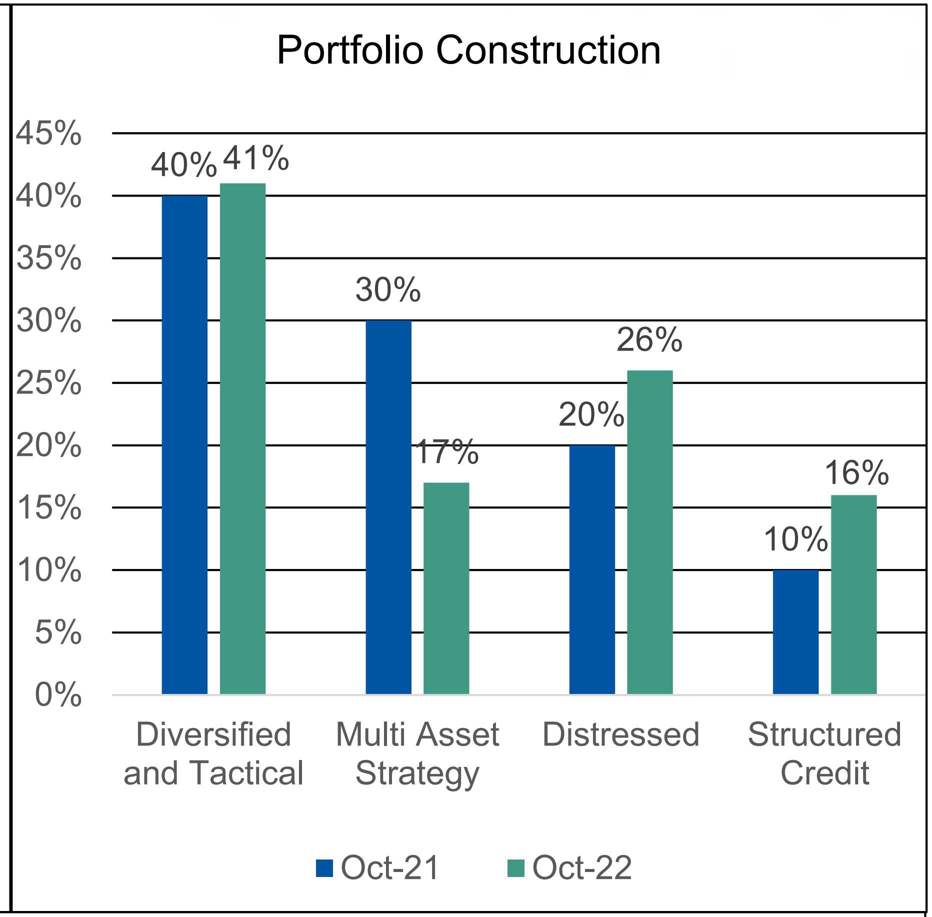
Allocation

- The allocation range is 0-7%

OPPORTUNISTIC &
TACTICAL INVESTMENTS

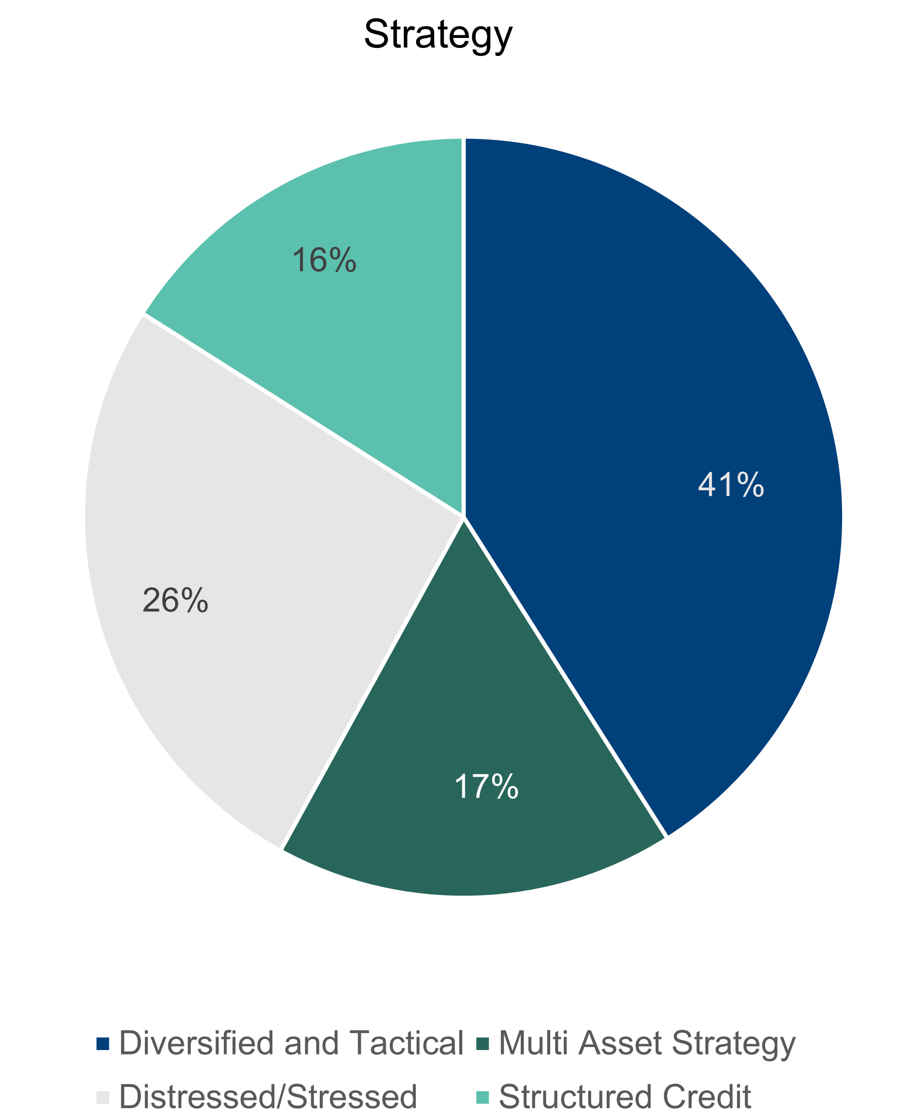
Portfolio Updates





- Portfolio value changed from $883 million to $633 million since October 2021
- Allocation decreased from 4.7% to 3.7% due to net redemptions of approximately $245 million
- New funds added across all strategies
- These funds provide liquidity, current income, and inflation protection to the portfolio

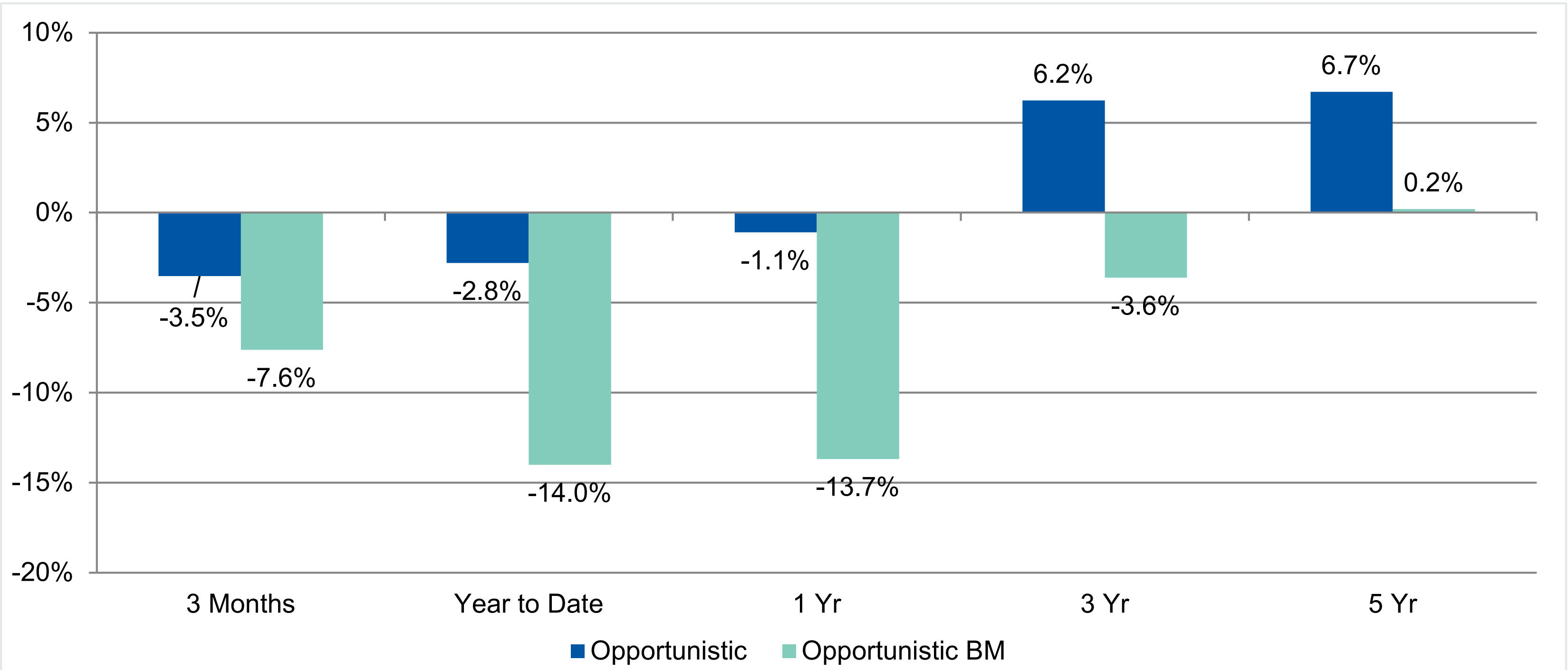
Portfolio Construction



- **Diversified and Tactical (41%)**
  - Tactical investments are long-only strategies that can actively allocate between opportunities and provide inflation protection
- **Multi Asset Strategy (17%)**
  - Diversified portfolios investing in debt and equity investments; includes investments that were previously in the MAS portfolio
- **Distressed Debt (26%)**
  - Distressed debt investing is the process of investing in the debt of a financially distressed company. This can include companies undergoing operational challenges or operating in cyclical industries (i.e., energy, retail, media)
- **Structured Credit (16%)**
  - Structured credit includes investments in commercial real estate, mortgages, and other asset-backed securities

OPPORTUNISTIC & TACTICAL INVESTMENTS

Portfolio Performance



As of Oct 31, 2022 (net of fees)	3 Months	Year to Date	1 Year	3 Year	5 Year
Opportunistic	-3.53	-2.80	-1.10	6.23	6.71
Opportunistic Policy Benchmark	-7.62	-14.01	-13.68	-3.62	0.20
Excess Return	***4.10***	***11.20***	***12.58***	***9.86***	***6.51***

Ohio SERS Investment Report

Monthly Report to the Board

For the period ending: October 31, 2022

Prepared by Investment and IAD Staff

Farouki Majeed, Chief Investment Officer

Meeting Date: December 2022

Investment Agenda

- Annual Portfolio Review – Opportunstic & Tactical
- Monthly Investment Report (October 31, 2022)

Economic and Financial Market Outlook

- US growth rate was 2.9% in Q3. Consumer spending was revised up from 1.4% to 1.7% in Oct. The main drivers of 3Q GDP were surge in net exports and consumer spending. (*Source: Bureau of Economic Analysis)*

- US labor market was strong in November with 263,000 jobs added and unemployment rate still low at 3.7%. The labor force participation rate was 62.3%, remaining below the pre-pandemic level 63.3%, indicating a tight labor market. *(Sources: Bureau of Labor Statistics and Department of Labor)*

- US headline inflation trended down to 7.7% and the core rate was down to 6.3% in October. The energy index and food index increased 17.6% and 10.9% for the last 12 months. November Blue Chip Consensus projected the headline rate to be 7.6% in Q4 2022 and 6.3% in Q1 2023. *(Source: Bureau of Labor Statistics and Blue Chip Economic Indicators)*

- The 10-year Treasury nominal yield was 3.68% the end of November, down from 4.10% in October. The current 10-year real yield, estimated by the gap between the 10-year Treasury nominal yield and the current headline inflation was negative 3.6% in October. The Fed conducted six rate hikes from January to November to curb inflation. The Fed Fund rate currently is in the range of 3.75-4.0%.

- The S&P Case-Shiller 20-City home price index was down 1.5% for the month and up 10.4% for the last 12 months as of September, indicating house prices are trending down.

- Consumer Sentiment Index released by Thomson Reuters and University of Michigan was down to 56.8 in November, remaining below the historical average. November US Economic Surprise index improved to 14. The Leading Economic Index (LEI) issued by the Conference Board was down to 114.9 in October. The LEI index has trended down for the last six months.

- The US manufacturing PMI was 50.2 in October, indicating a very soft expansion while the Global Manufacturing PMI reading was 49.4, indicating a marginal deterioration. Worldwide supply disruptions, high inflation especially in energy and food prices, labor shortages, and tightening financial conditions across the world continue to be the largest challenges to the global economy. *(Source: Institute for Supply Management, S&P Global).*

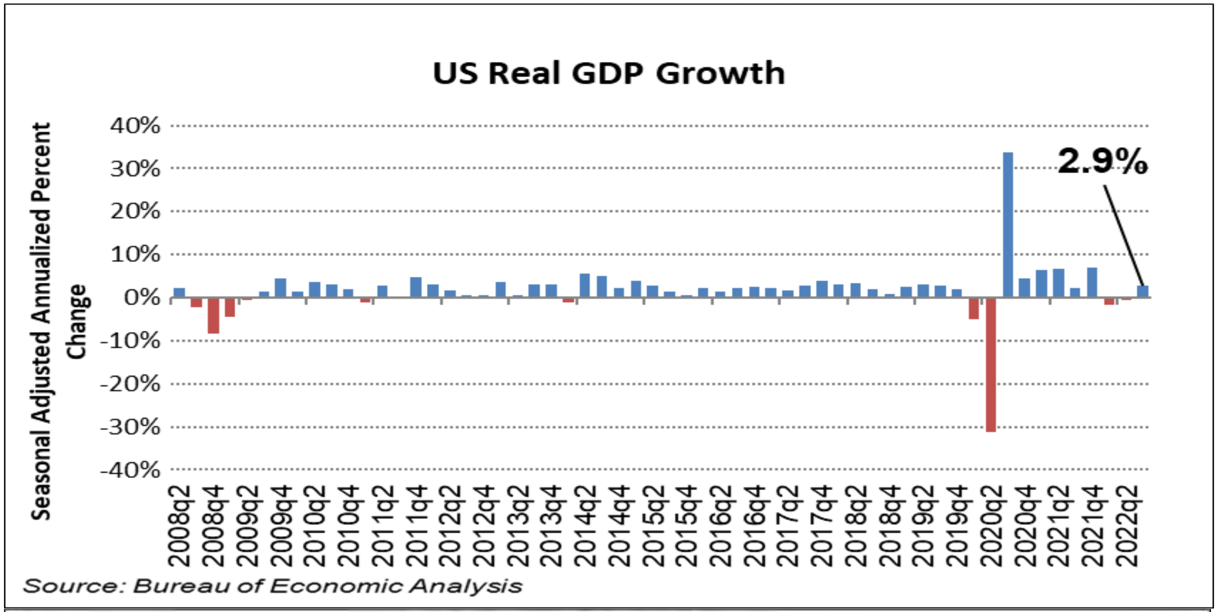
- Equity markets were up in November. US market (Russell 3000) and Non-US developed markets (MSCI World ex-USA) were up 5.22% and 10.65%, respectively. Emerging markets gained 14.83%

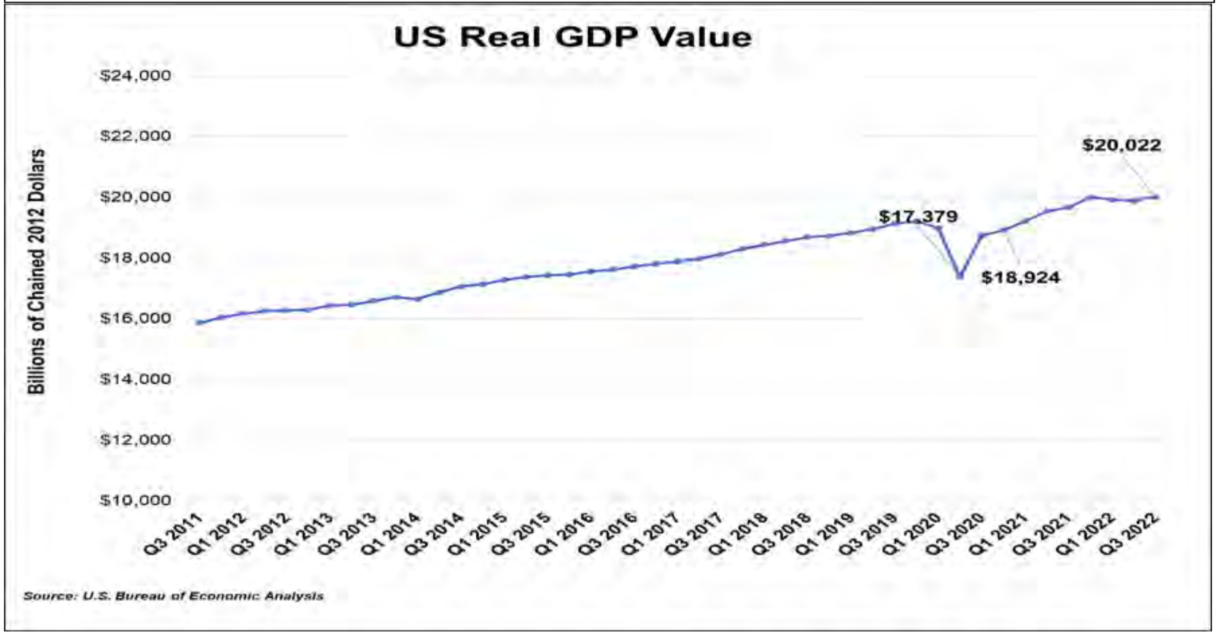
- The US fixed income market, Bloomberg Barclay's US Aggregate Bond Index, was up 3.68% in November.

Notes: Acronym – PMI – Purchasing-Managers' Index

ECONOMY

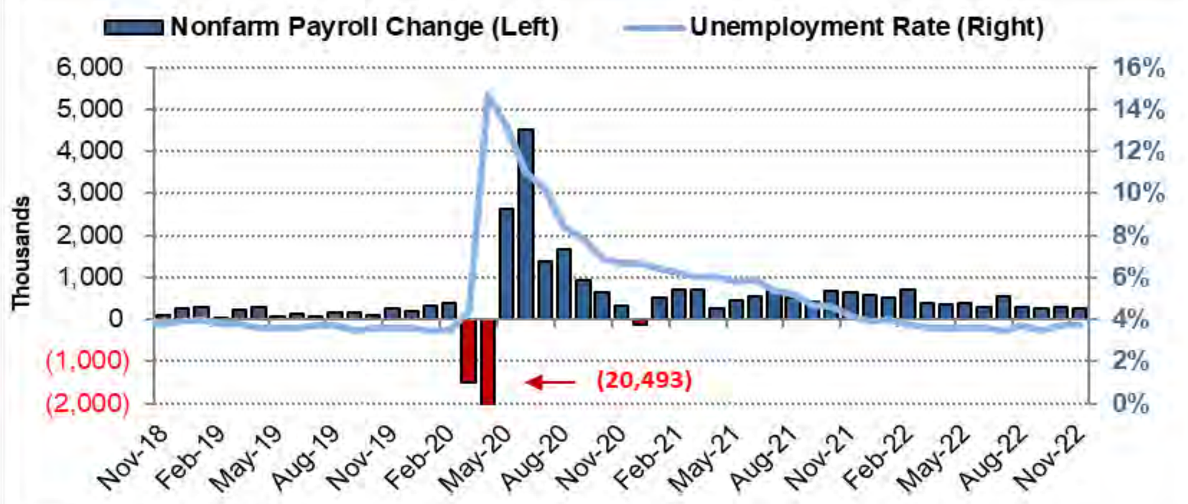
US Real Gross Domestic Product



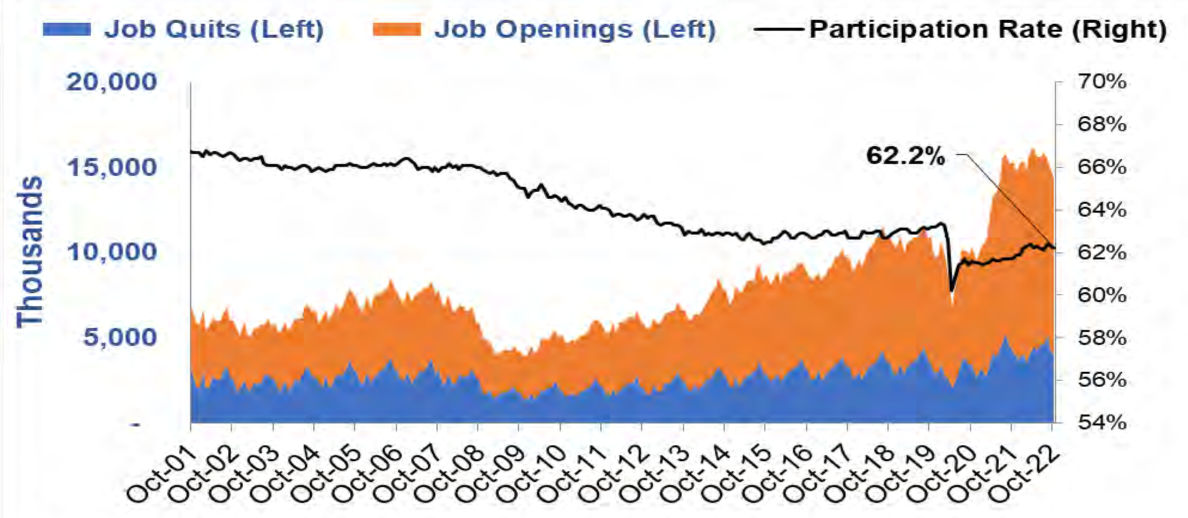


ECONOMY

US Labor Market



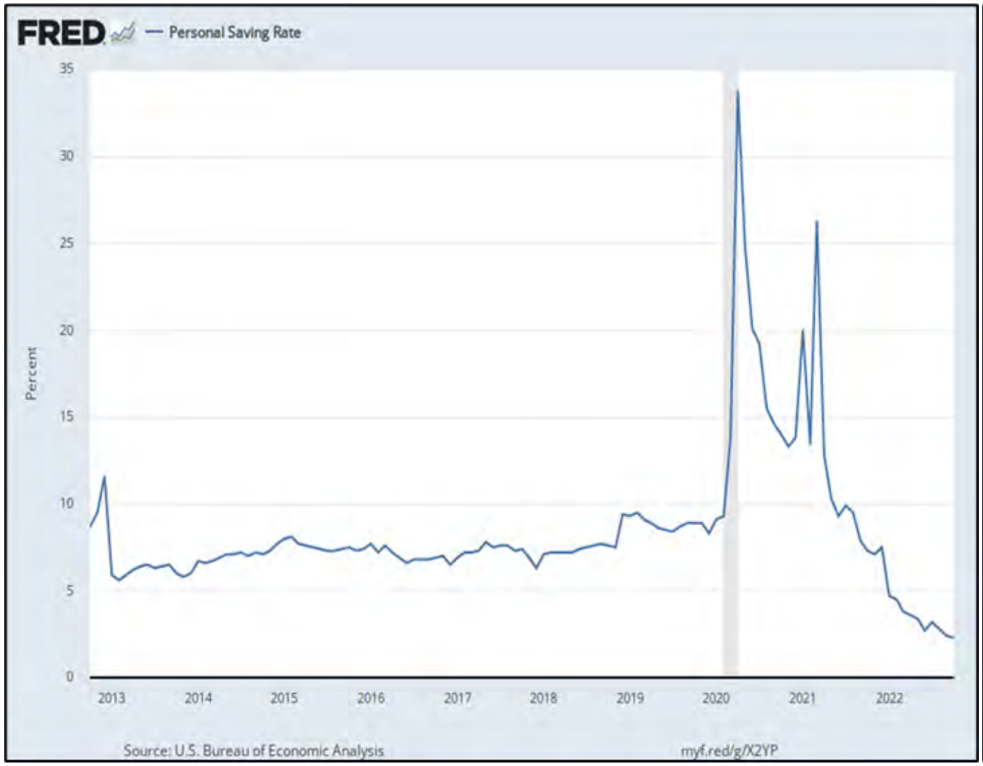
Source: Bureau of Labor Statistics

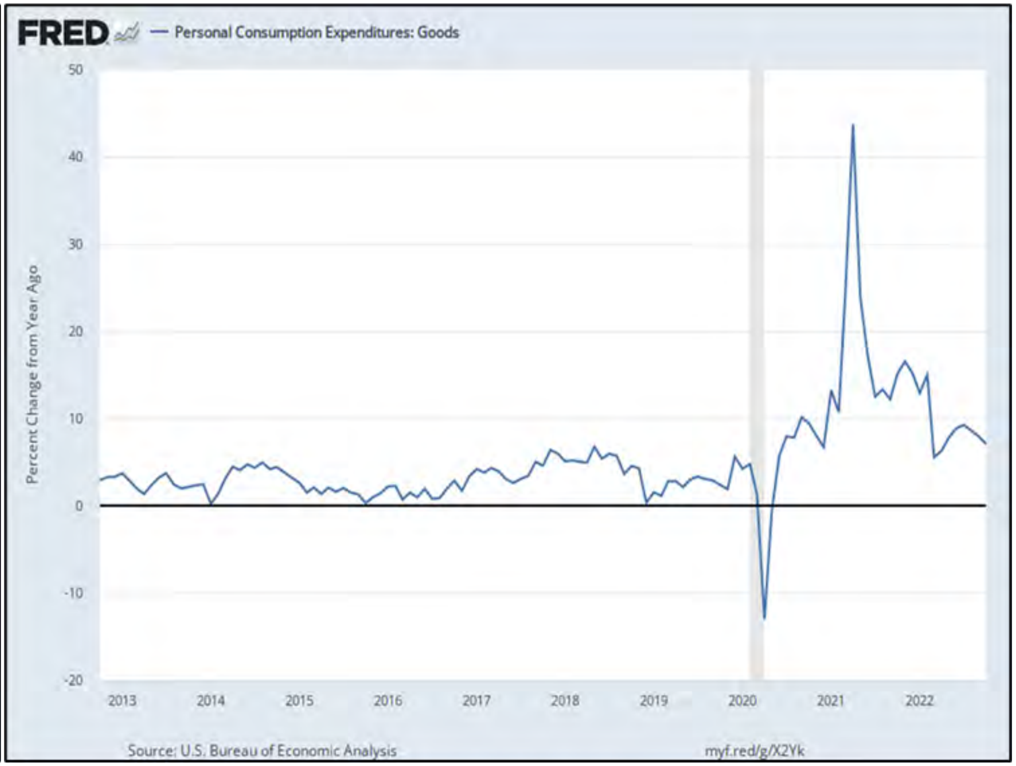


Source: https://fred.stlouisfed.org

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%
Oct-22	2.3%

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%
Oct-22	7.1%

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

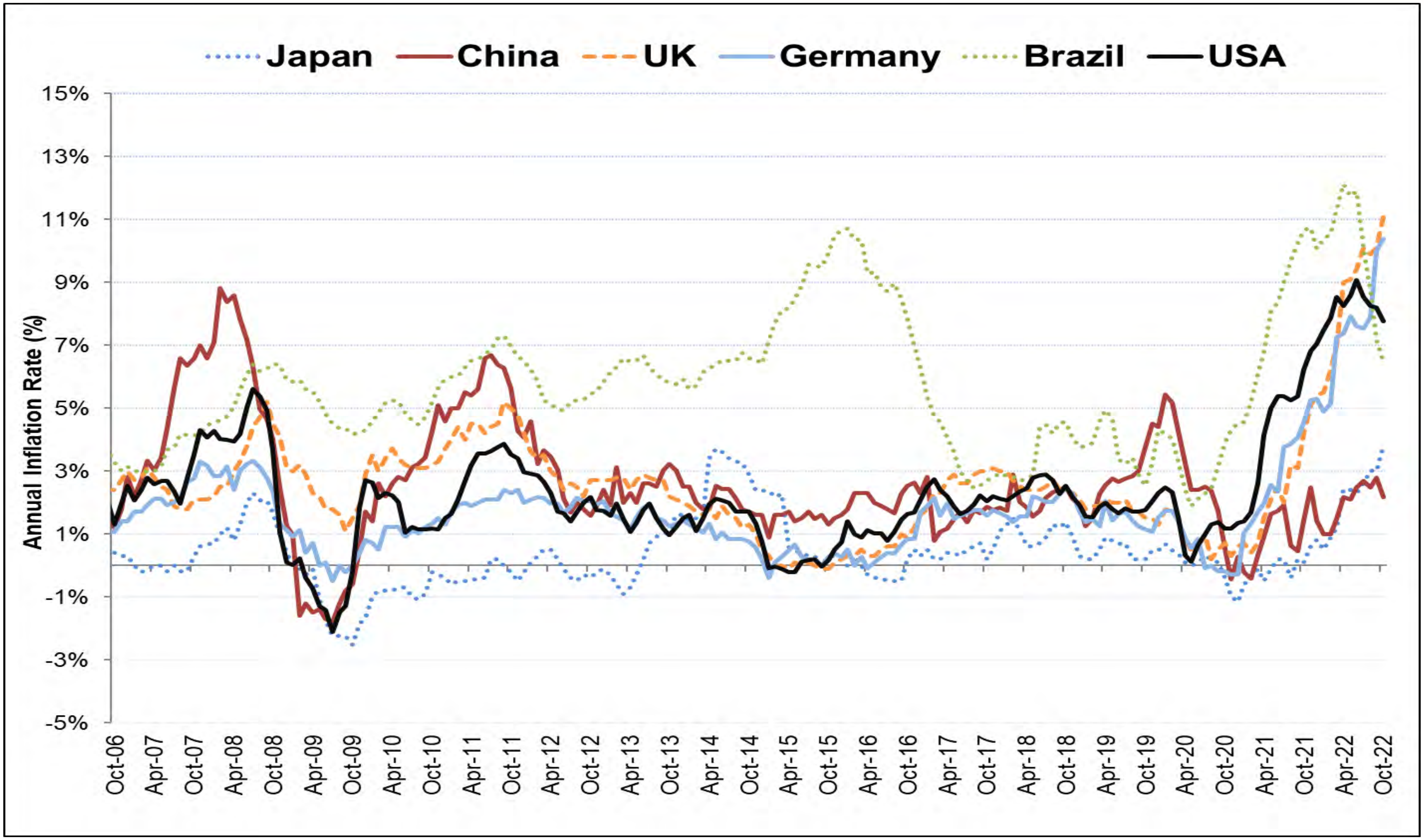
ECONOMY

Federal Debt as Percent of GDP

Source: FRED, U.S. Office of Management and Budget

ECONOMY

Headline Inflation

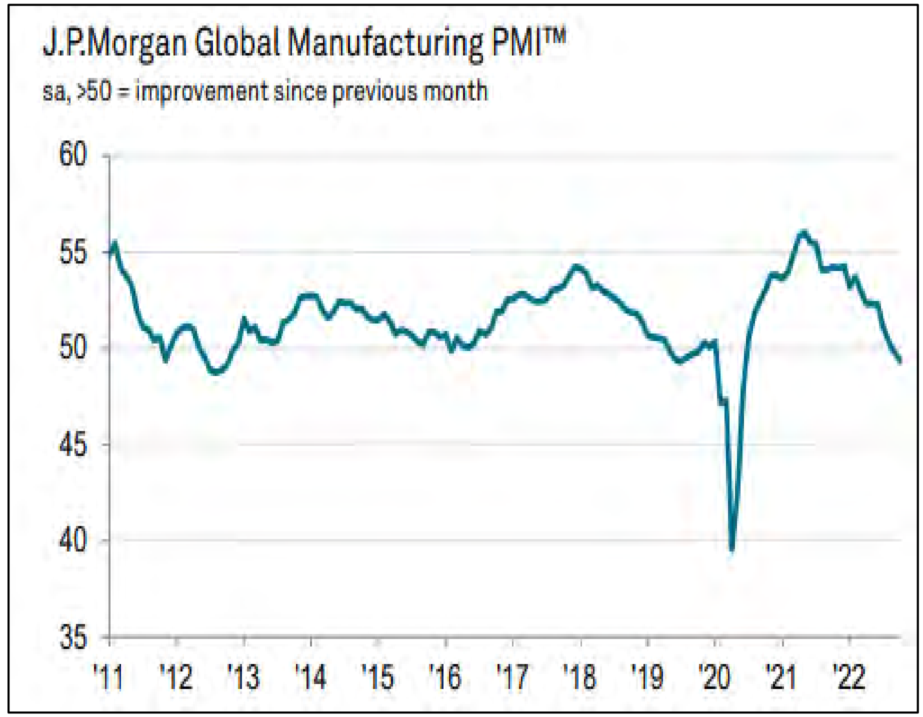


	Japan	China	UK	Germany	Brazil	USA
Oct-22	3.8	2.2	11.1	10.4	6.5	7.8

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

ECONOMY

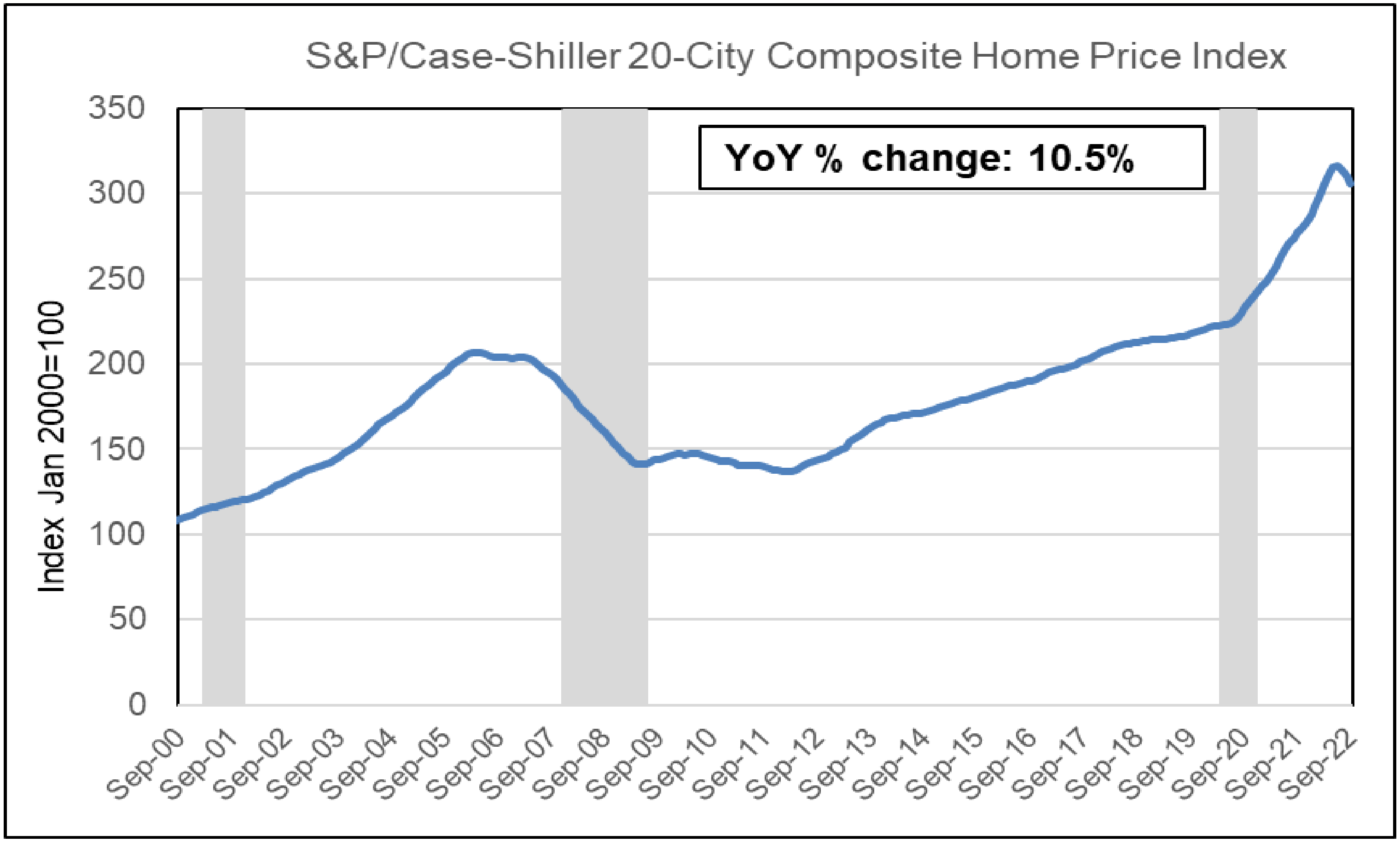
US & Global Manufacturing Activities



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

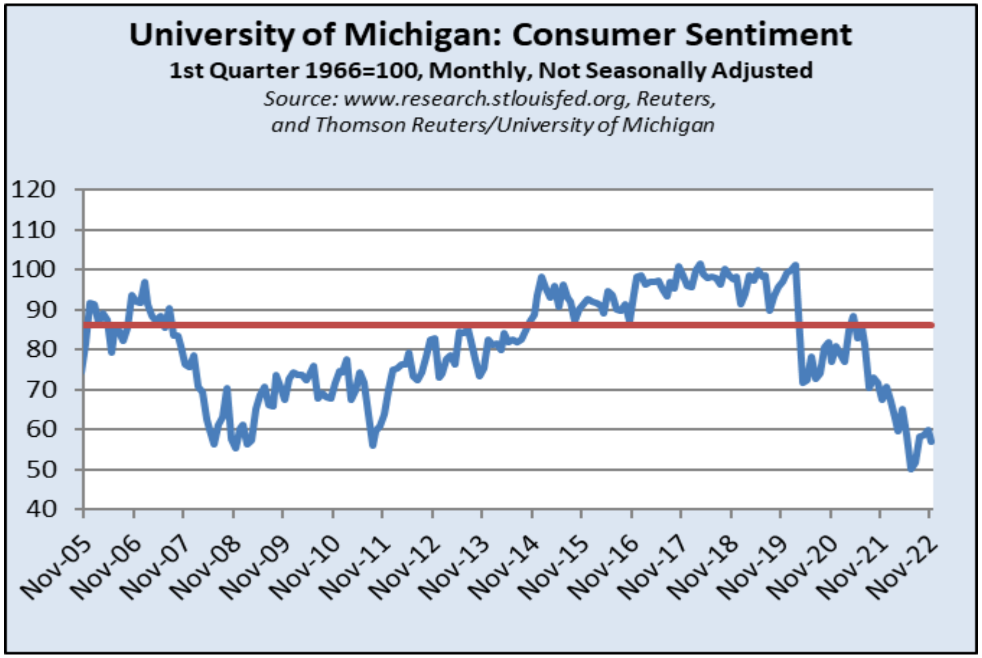


Date	S&P Case-Shiller 20-City Home Price Index January 2000 = 100, Seasonally Adjusted
Jul-19	216.09
Jul-20	225.42
Jul-21	270.56
Jul-22	313.84
Sep-22	305.93

Source: www.research.stlouisfed.org

ECONOMY

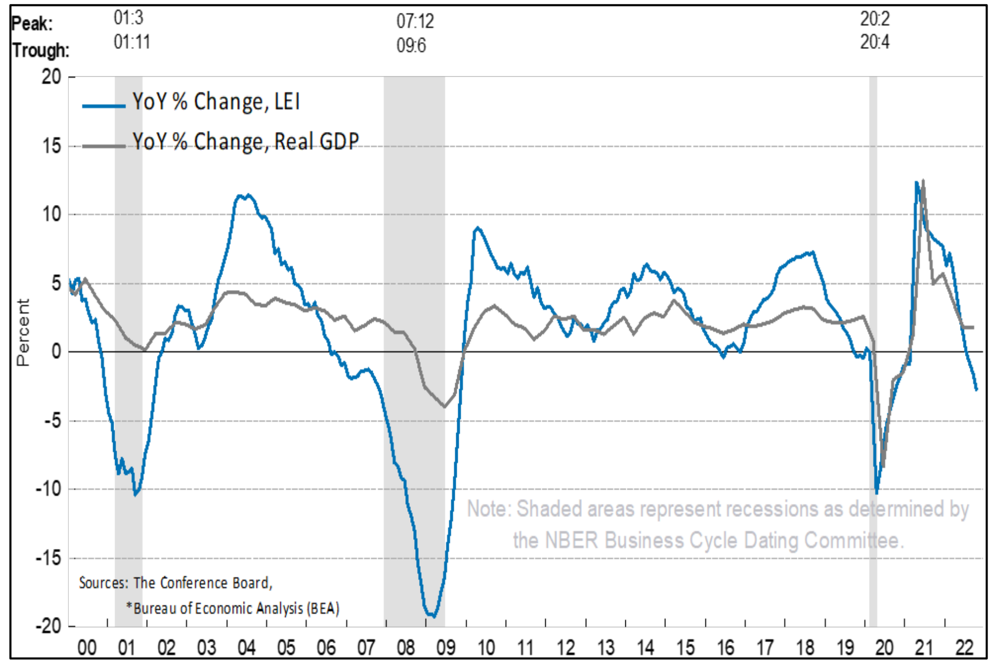
Consumer Sentiment



Index of Consumer Sentiment				
Oct-22	Nov-22	Nov-21	M-M Change	Y-Y Change
59.9	56.8	67.4	-5.2%	-15.7%

Sources: Thomson Reuters / University of Michigan

The Leading Economic Index (LEI) for the United States



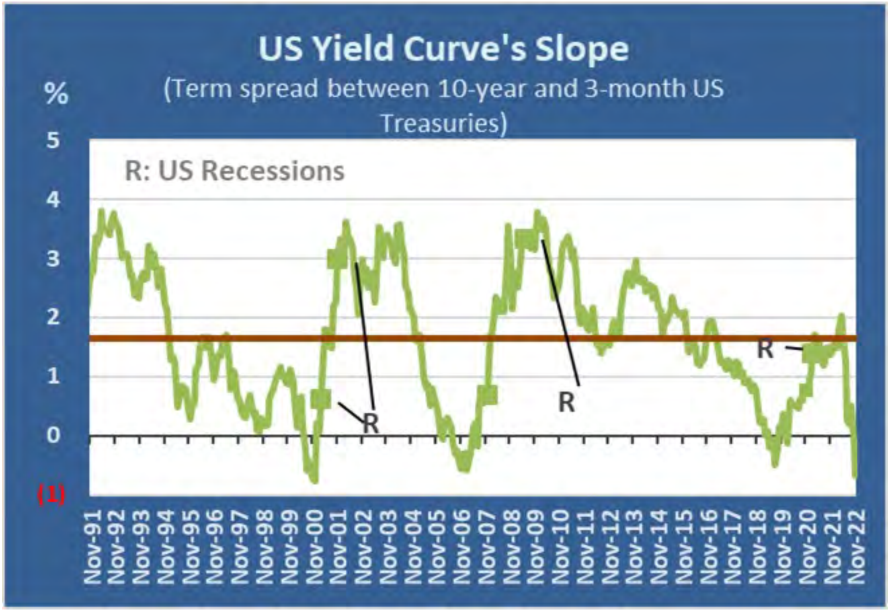
Shaded areas represent US recessions

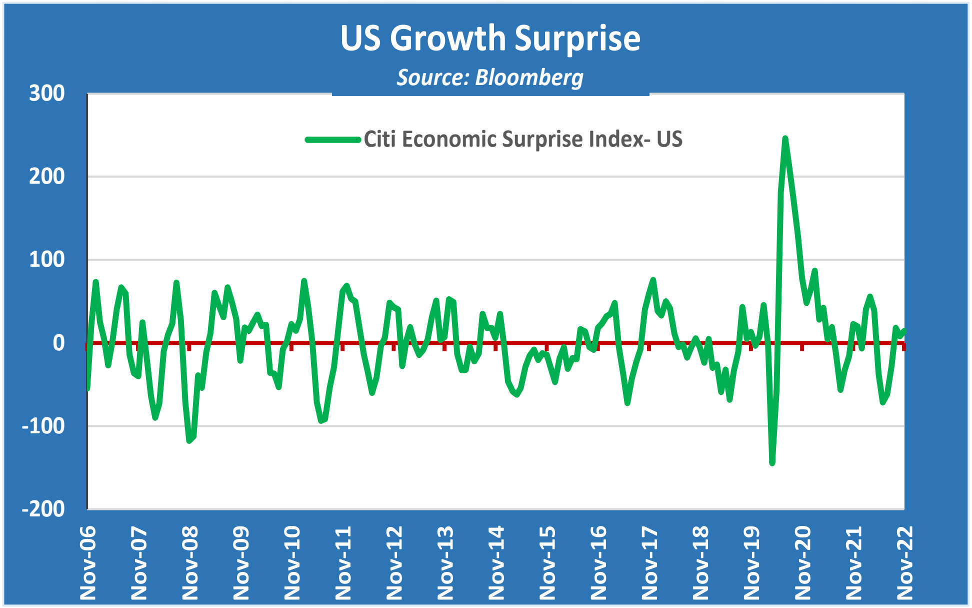
Index	Sep-22	Oct-22	Month -Month Percent Change	6-Month Percent Change (Apr-Oct)
LEI	115.8 r	114.9 p	-0.8	-3.2

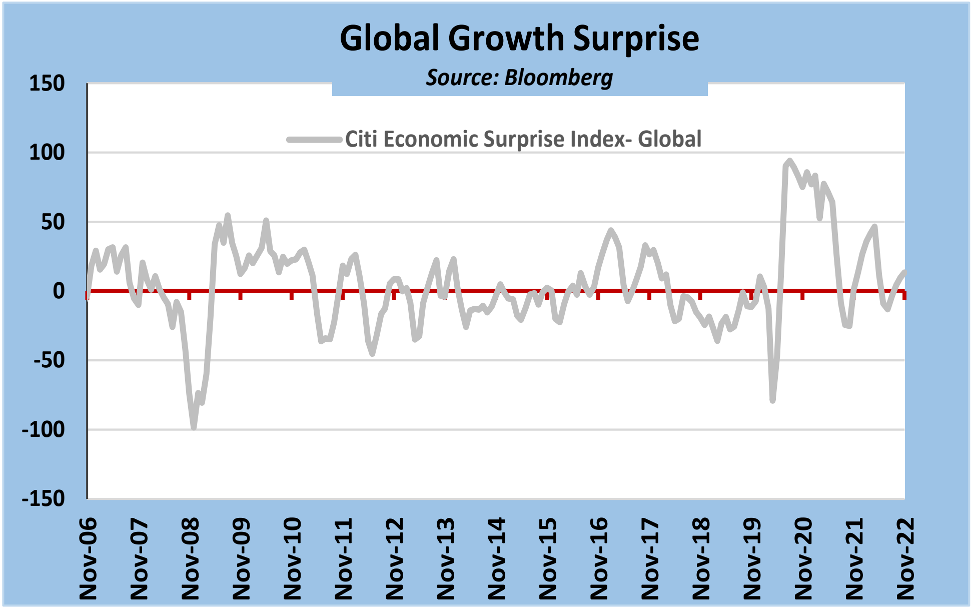
p Preliminary; r Revised; Indexes equal 100 in 2016

Sources: The Conference Board and advisorperspectives.com

ECONOMY

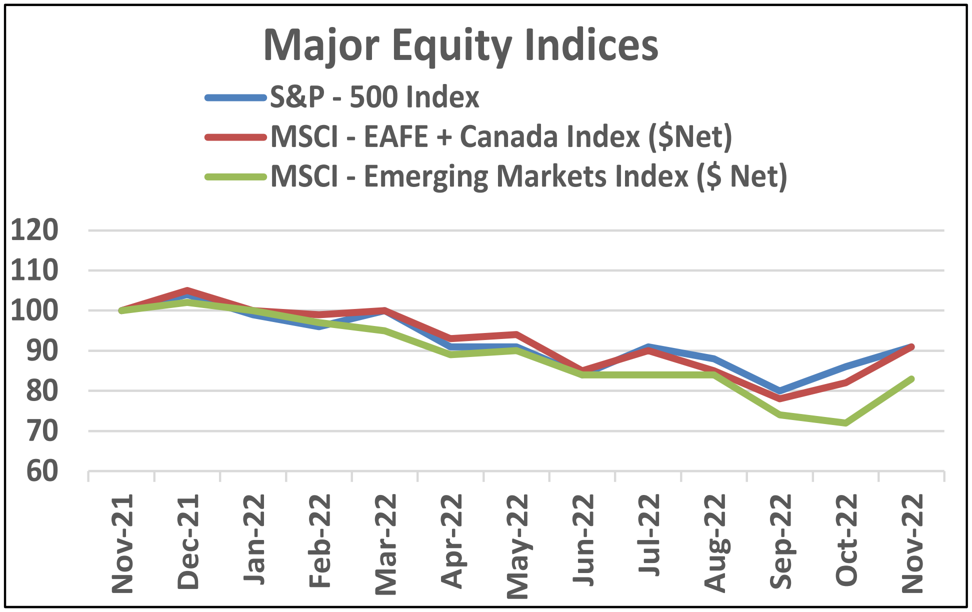

US Yield Curve's Slope
(Term spread between 10-year and 3-month US Treasuries)
%
R: US Recessions
R
R
R
5
4
3
2
1
0
(1)
Nov-91 Nov-92 Nov-93 Nov-94 Nov-95 Nov-96 Nov-97 Nov-98 Nov-99 Nov-00 Nov-01 Nov-02 Nov-03 Nov-04 Nov-05 Nov-06 Nov-07 Nov-08 Nov-09 Nov-10 Nov-11 Nov-12 Nov-13 Nov-14 Nov-15 Nov-16 Nov-17 Nov-18 Nov-19 Nov-20 Nov-21 Nov-22

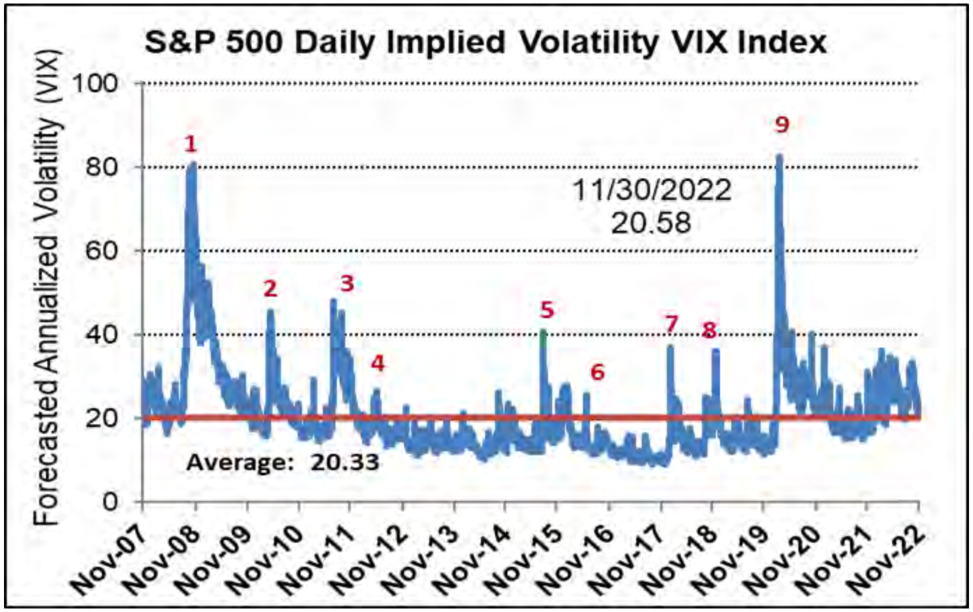

US Growth Surprise
Source: Bloomberg
Citi Economic Surprise Index- US
300
200
100
0
-100
-200
Nov-06 Nov-07 Nov-08 Nov-09 Nov-10 Nov-11 Nov-12 Nov-13 Nov-14 Nov-15 Nov-16 Nov-17 Nov-18 Nov-19 Nov-20 Nov-21 Nov-22


Global Growth Surprise
Source: Bloomberg
Citi Economic Surprise Index- Global
150
100
50
0
-50
-100
-150
Nov-06 Nov-07 Nov-08 Nov-09 Nov-10 Nov-11 Nov-12 Nov-13 Nov-14 Nov-15 Nov-16 Nov-17 Nov-18 Nov-19 Nov-20 Nov-21 Nov-22

MARKETS

Equity





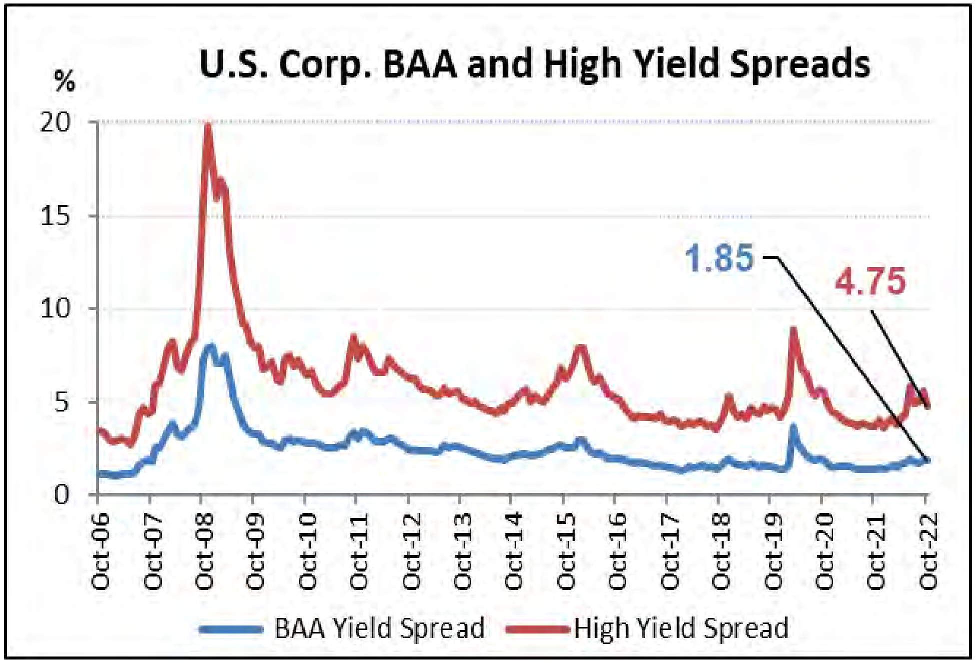
	Return as of 11/30/2022	
	1 Year	**FYTD**
S&P 500	(9.21)	8.56
MSCI - EAFE + Canada Index ($Net)	(9.50)	6.01
MSCI - Emerging Markets Index ($Net)	(17.43)	(1.61)

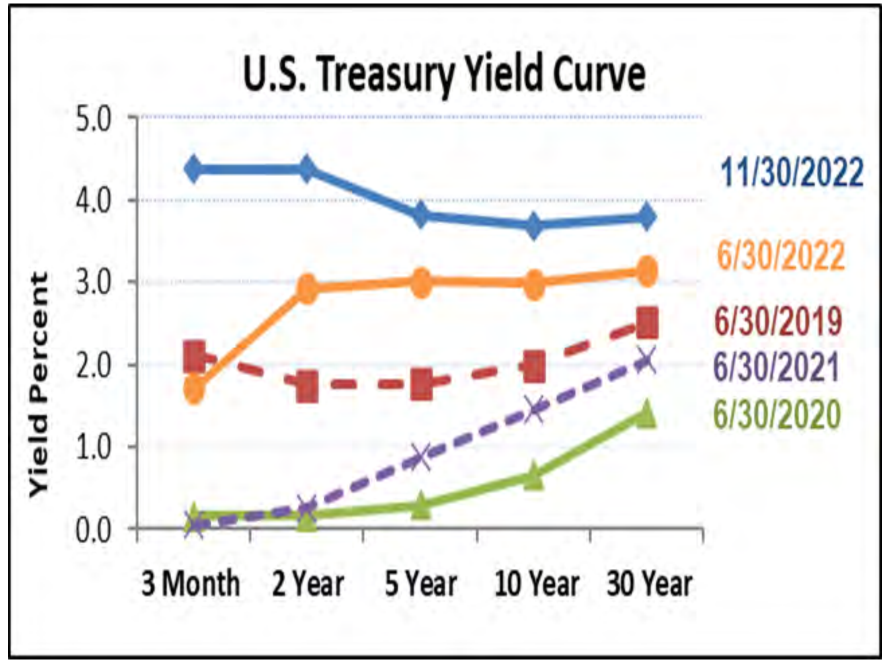
1	2008 (Nov.)	Financial Crisis S&P 500: - 48.8%
2	2010 (May)	Flash crash; Europe/ Greece debt S&P 500: -16%
3	2011 (Aug.)	US downgrade, Europe periphery S&P 500: -19.4%
4	2012 (June)	Eurozone double dip S&P 500: -9.9%
5	2015 (Aug.)	Global slowdown, China, Fed S&P 500: -12.4%
6	2016 (Feb.)	Oil crash, 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%

Sources: www.research.stlouisfed.org, and Wilshire Compass

MARKETS

Fixed Income

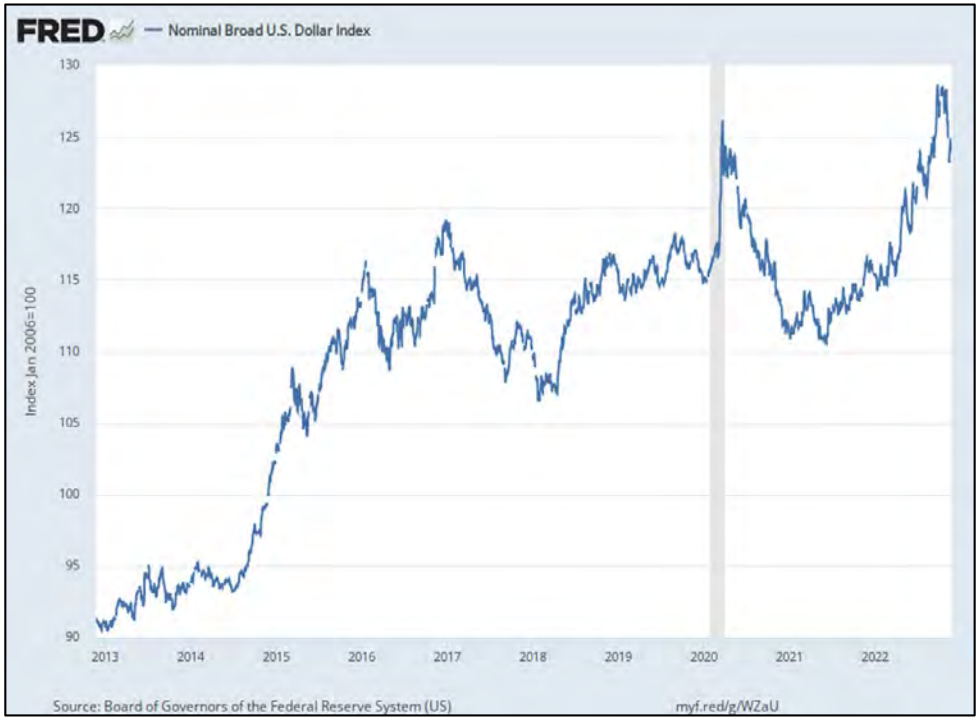


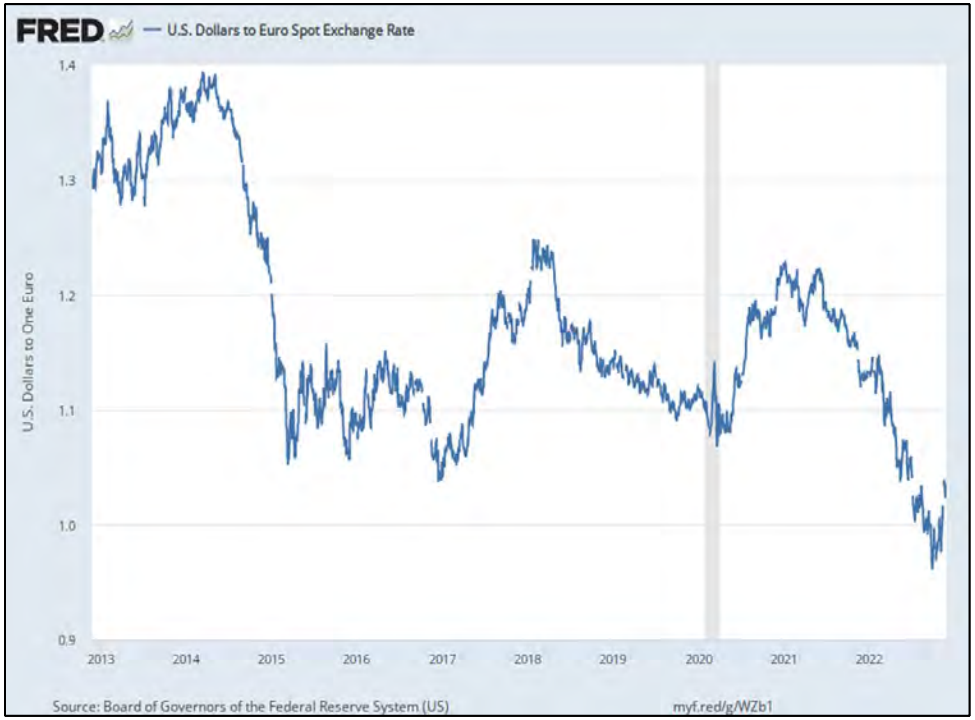


Sources: Wilshire Compass, ThomsonReuters, and Bloomberg

MARKETS

Foreign Exchange



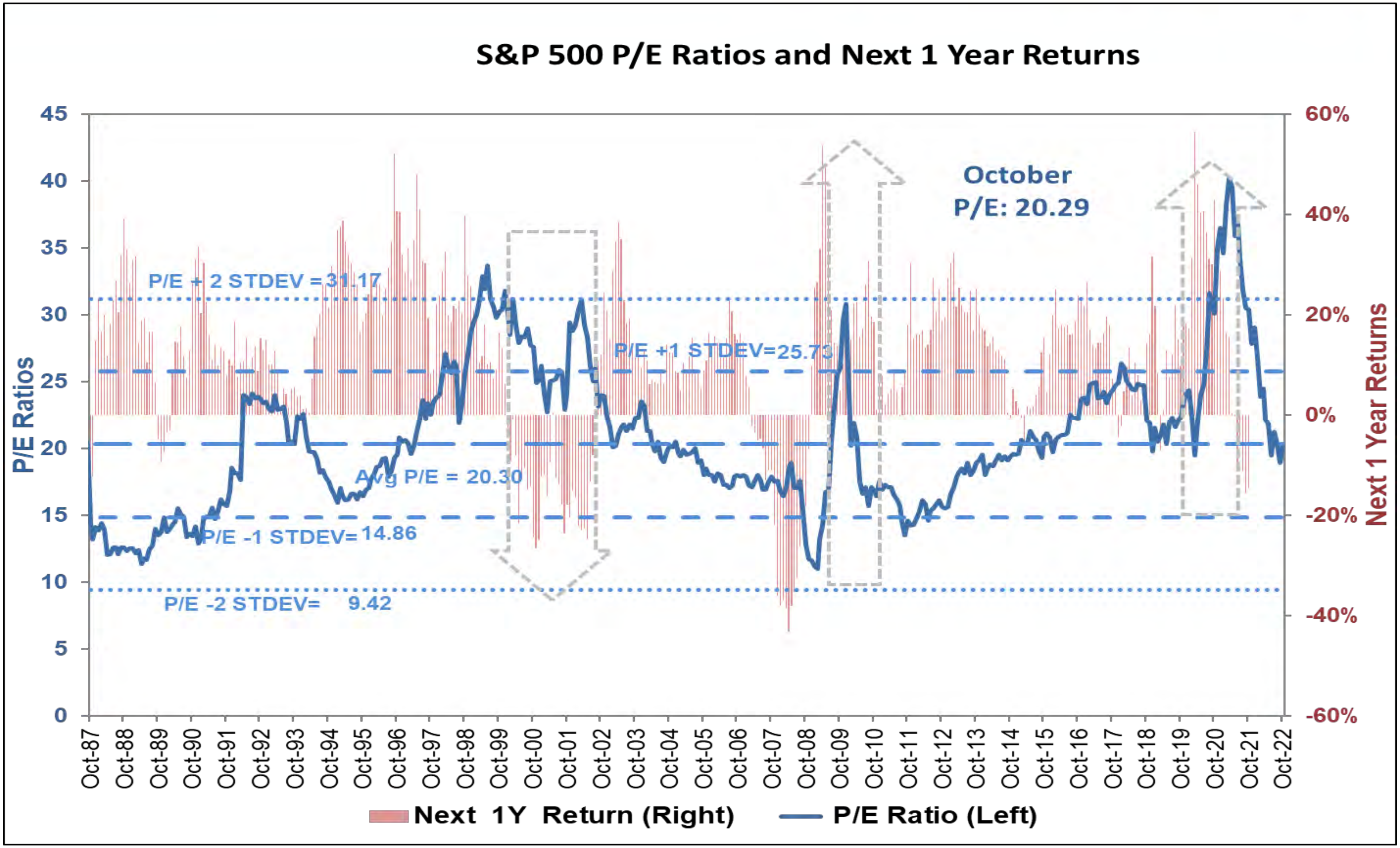


Date	Nominal Broad U.S. Dollar Index January 2006=100
June-19	114.56
June-20	120.86
June-21	112.85
June-22	121.05
11/25/2022	123.49

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
11/25/2022	1.04

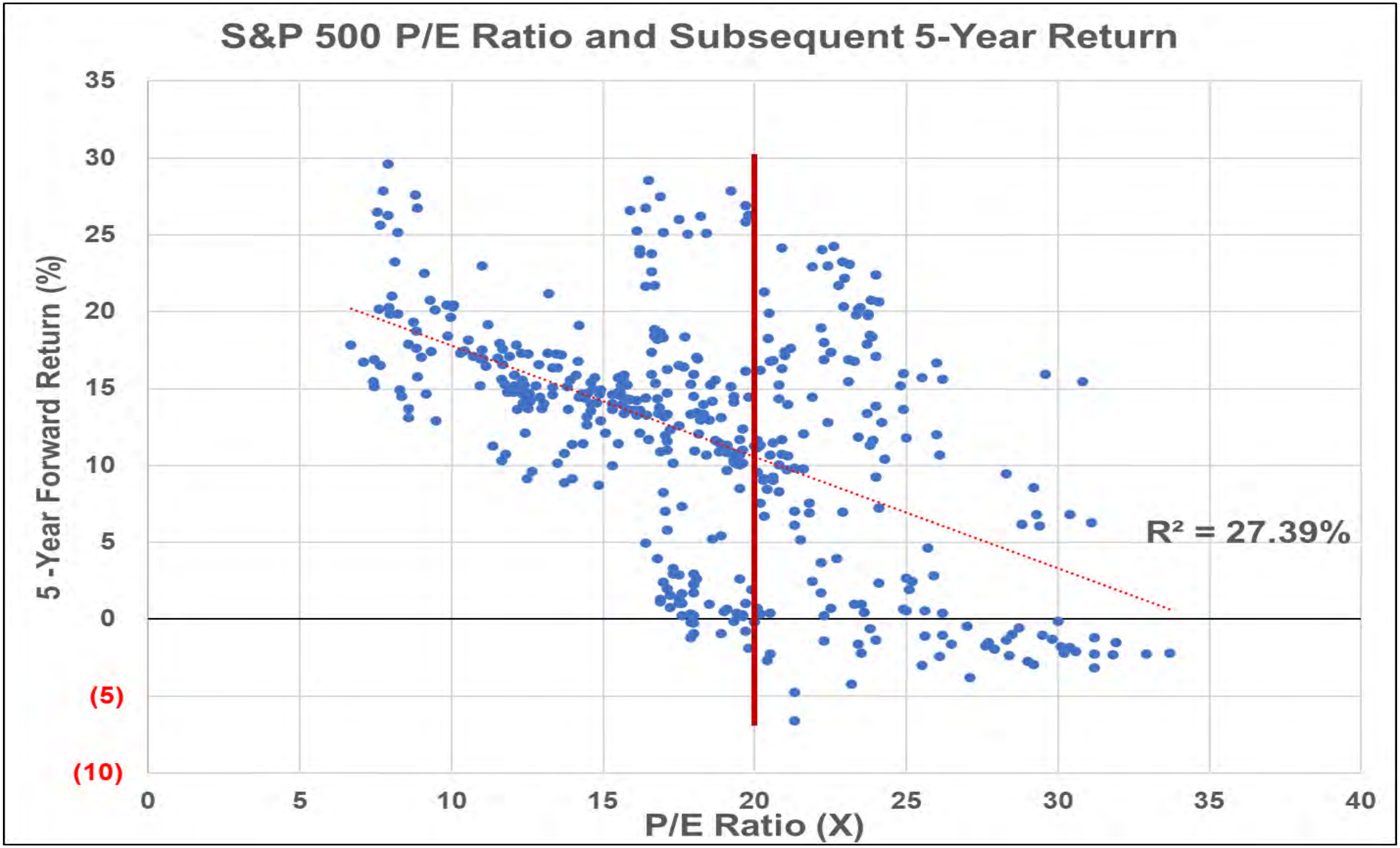
Source: www.research.stlouisfed.org

VALUATION US Equity



Source: Wilshire Compass

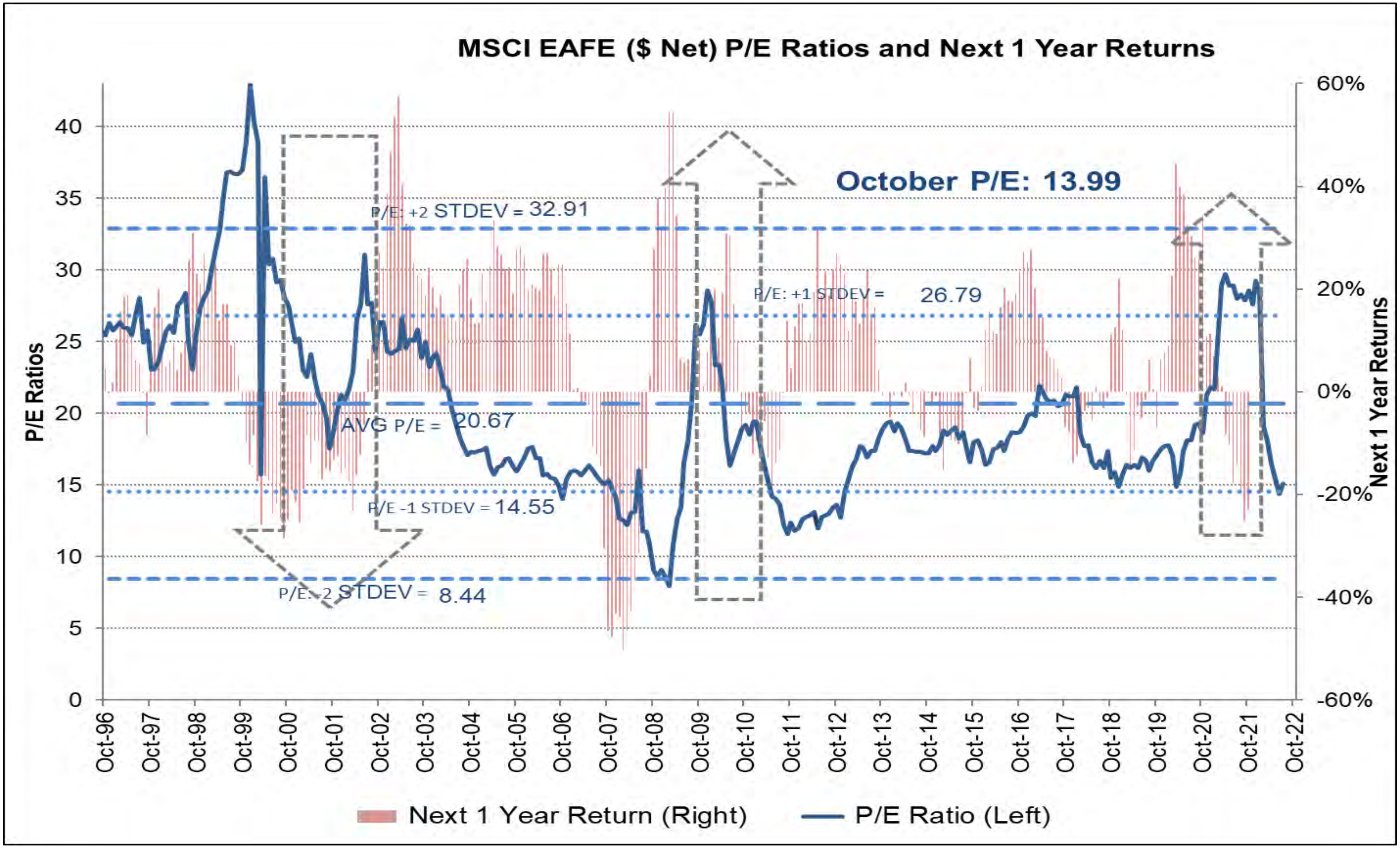
VALUATION US Equity



Source: Wilshire Compass

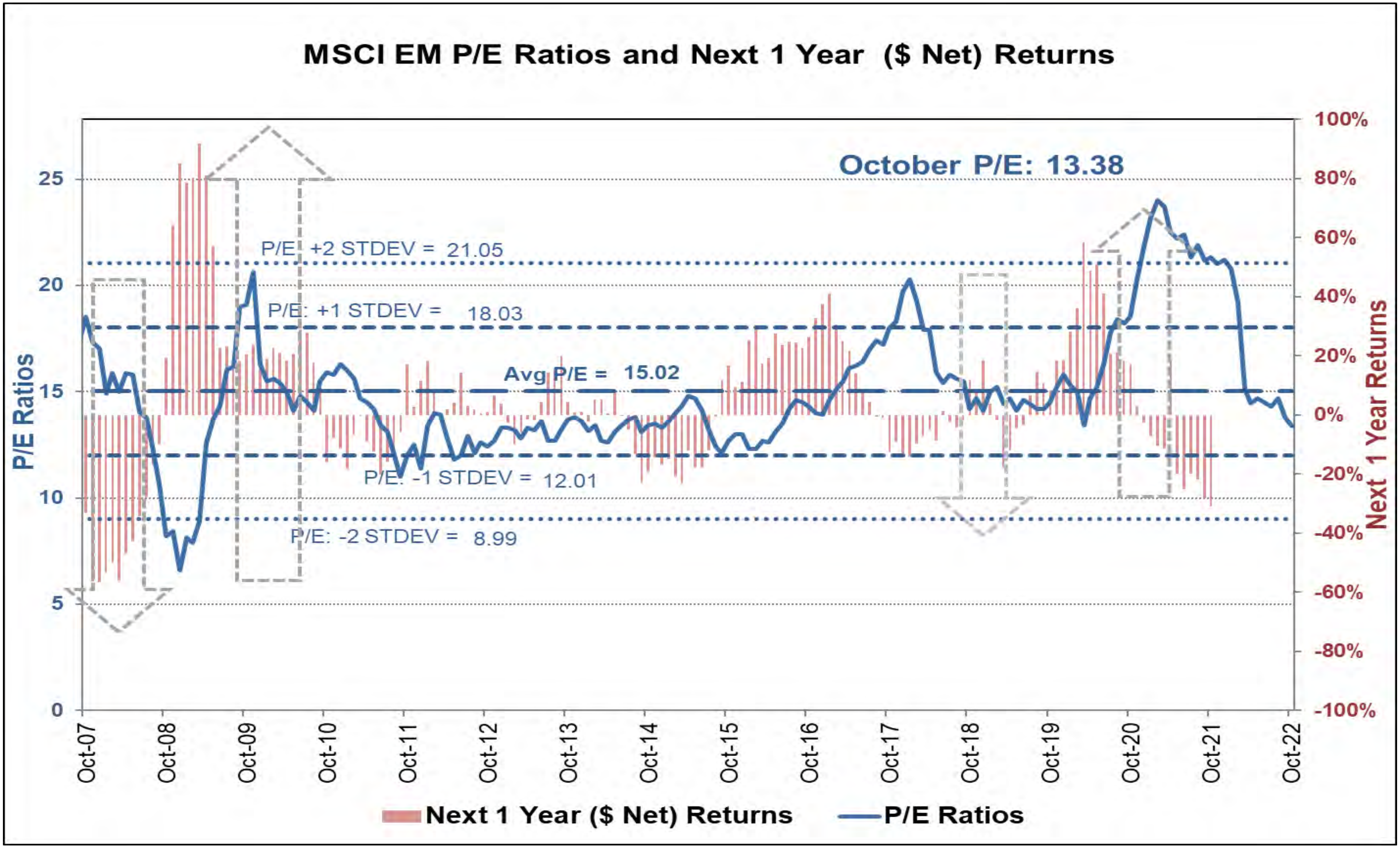
VALUATION

Non US Developed Market Equity



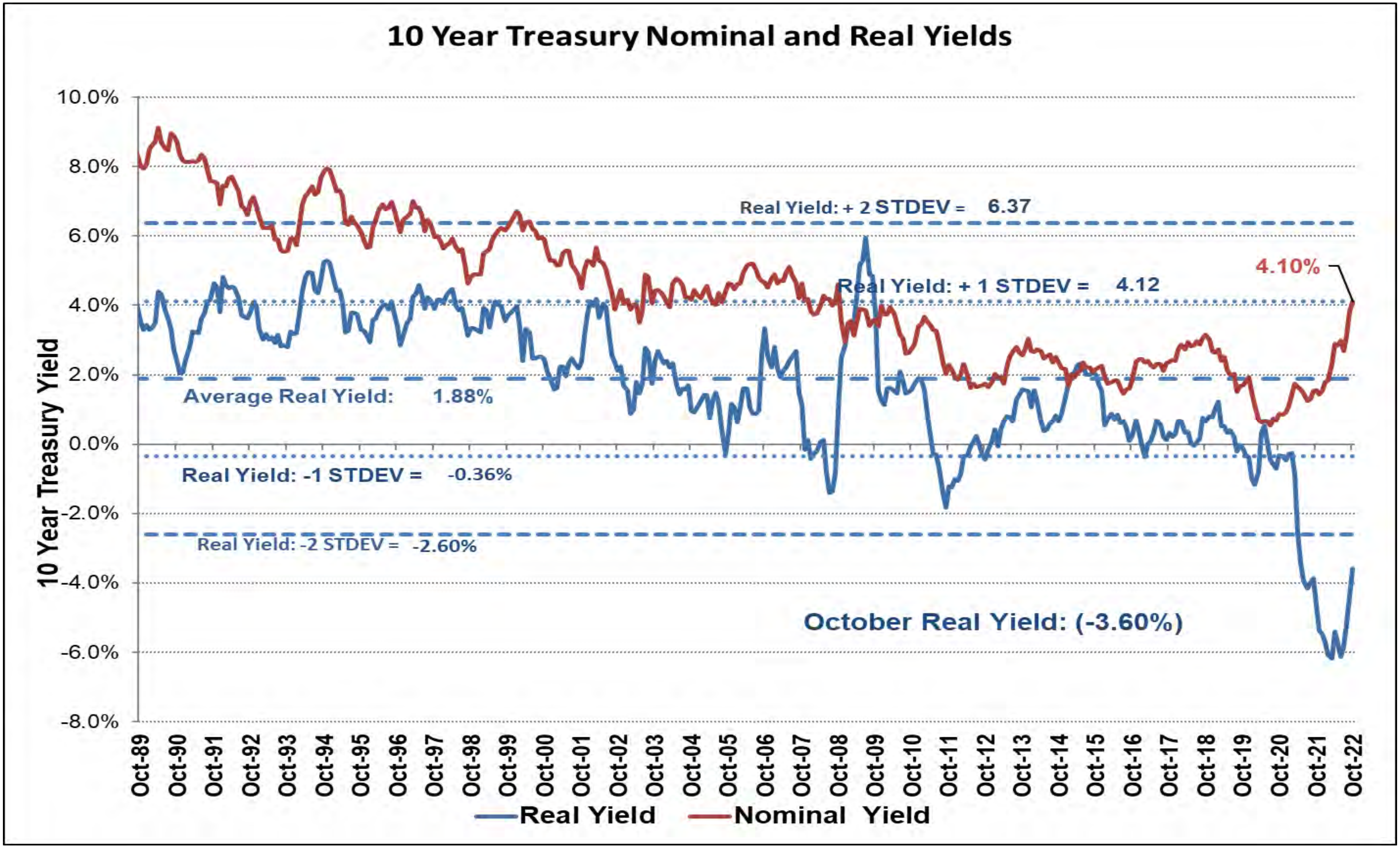
Source: Wilshire Compass

VALUATION Emerging Market Equity



Source: Wilshire Compass

VALUATION US Treasury Bonds



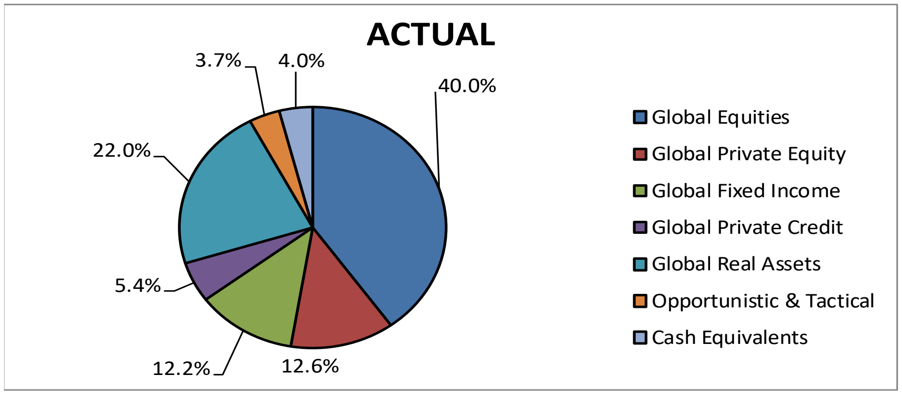
Sources: Wilshire Compass and U.S. Bureau of Labor Statistics

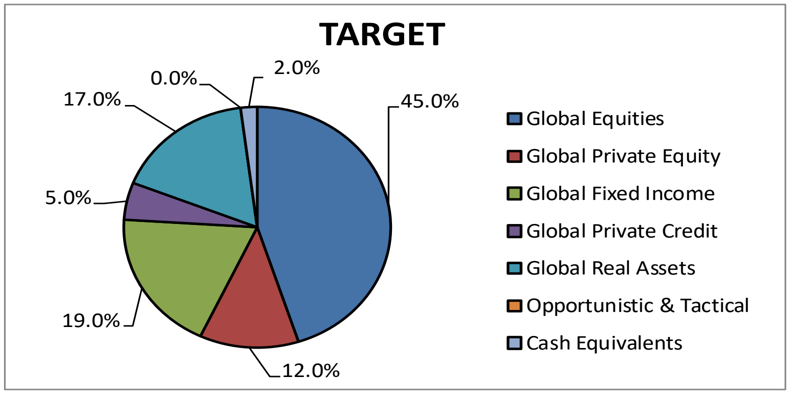
SERS' Investment Portfolios Review

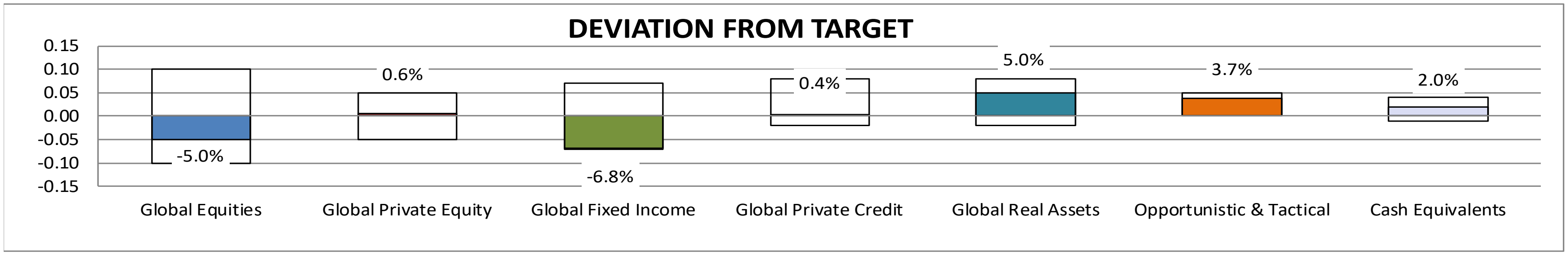
Total Fund Asset Allocation

Asset Class	Market Value $	Actual	Target	Range
Global Equities	**6,778,599,465**	**40.0%**	**45.0%**	35% - 55%
Global Private Equity	**2,132,879,850**	**12.6%**	**12.0%**	*8% - 16%*
Global Fixed Income	**2,059,907,681**	**12.2%**	**19.0%**	*12% - 26%*
Global Private Credit	**914,722,248**	**5.4%**	**5.0%**	*3% -7%*
Global Real Assets	**3,726,005,470**	**22.0%**	**17.0%**	*14% - 22%*
Opportunistic & Tactical	**632,727,652**	**3.7%**	**0.0%**	*0% - 7%*
Cash Equivalents	**684,846,094**	**4.0%**	**2.0%**	*0% - 5%*
Short-Term	644,520,439	*3.8%*	2.0%	
Russell EA Overlay	-3,040,487	*0.0%*	*0.0%*	
Aegis - Alpha Overlay	9,084,084	*0.1%*	*0.0%*	
Direct Rebalance Overlay	0	*0.0%*	*0.0%*	
Transition / Operational Account	1,834,802	*0.0%*	*0.0%*	
Currency Overlay	32,447,255	*0.2%*	*0.0%*	
Total Fund	**16,929,688,459**	**100.0%**	**100.0%**	

Source: BNY Mellon GRS



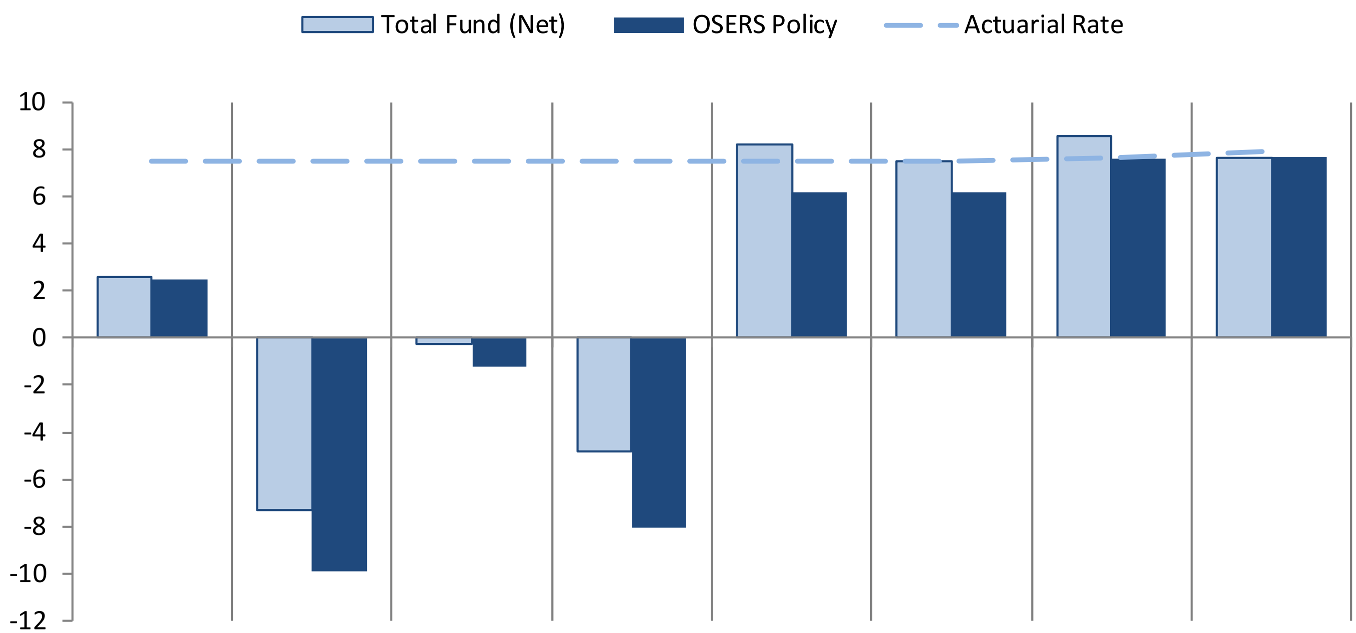




Total Fund Performance

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

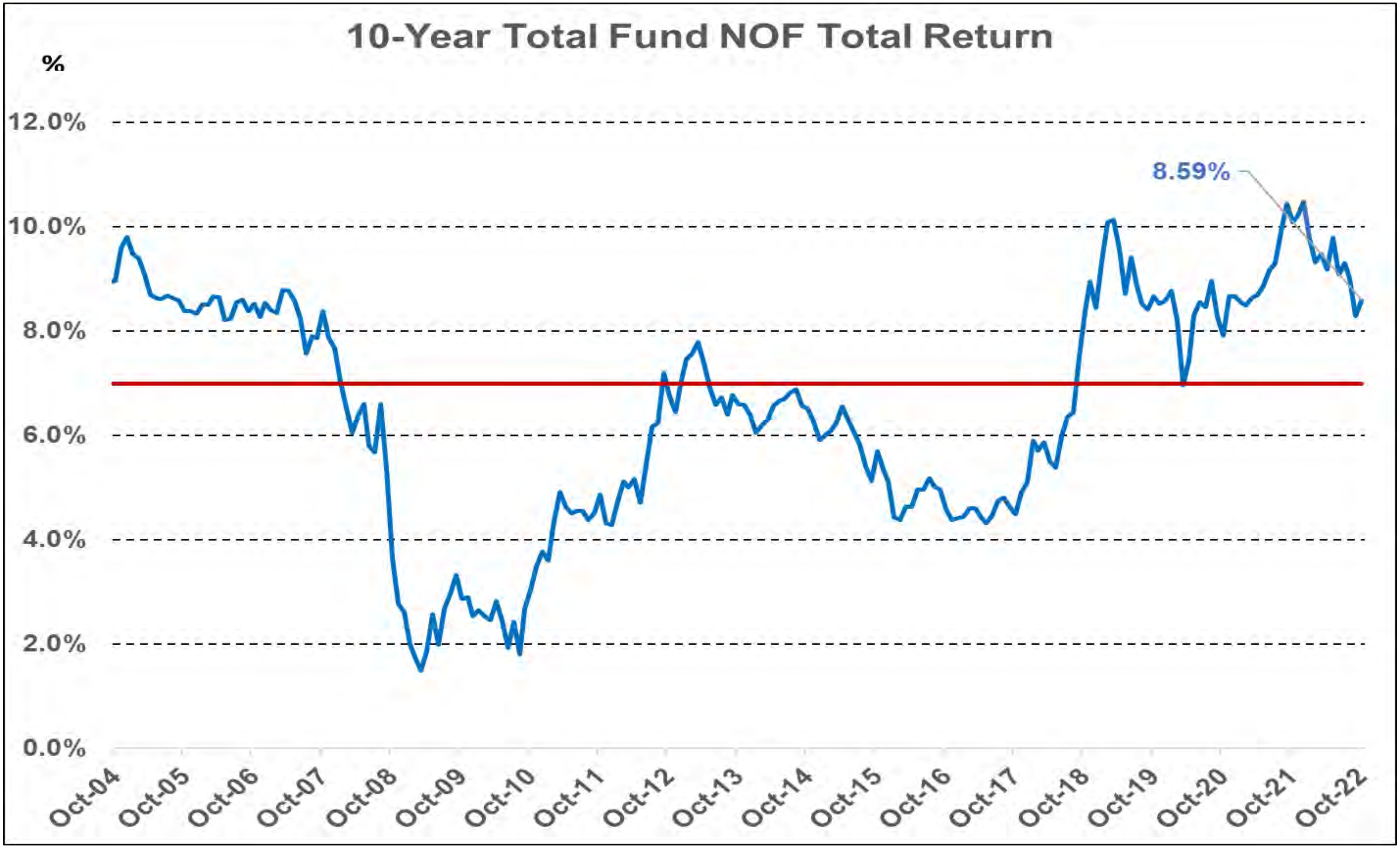
(7.0% effective 7/1/21, adopted 4/15/21)

	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD*
Total Fund (Gross)	2.63	(6.73)	(0.01)	(4.06)	8.85	8.17	9.28	8.25
Total Fund (Net)	2.62	(7.28)	(0.24)	(4.81)	8.18	7.49	8.59	7.73
OSERS Policy	2.50	(9.93)	(1.24)	(8.07)	6.15	6.18	7.58	7.64
Value Added (Net of Fee)	0.11	2.65	0.99	3.27	2.03	1.31	1.01	0.08

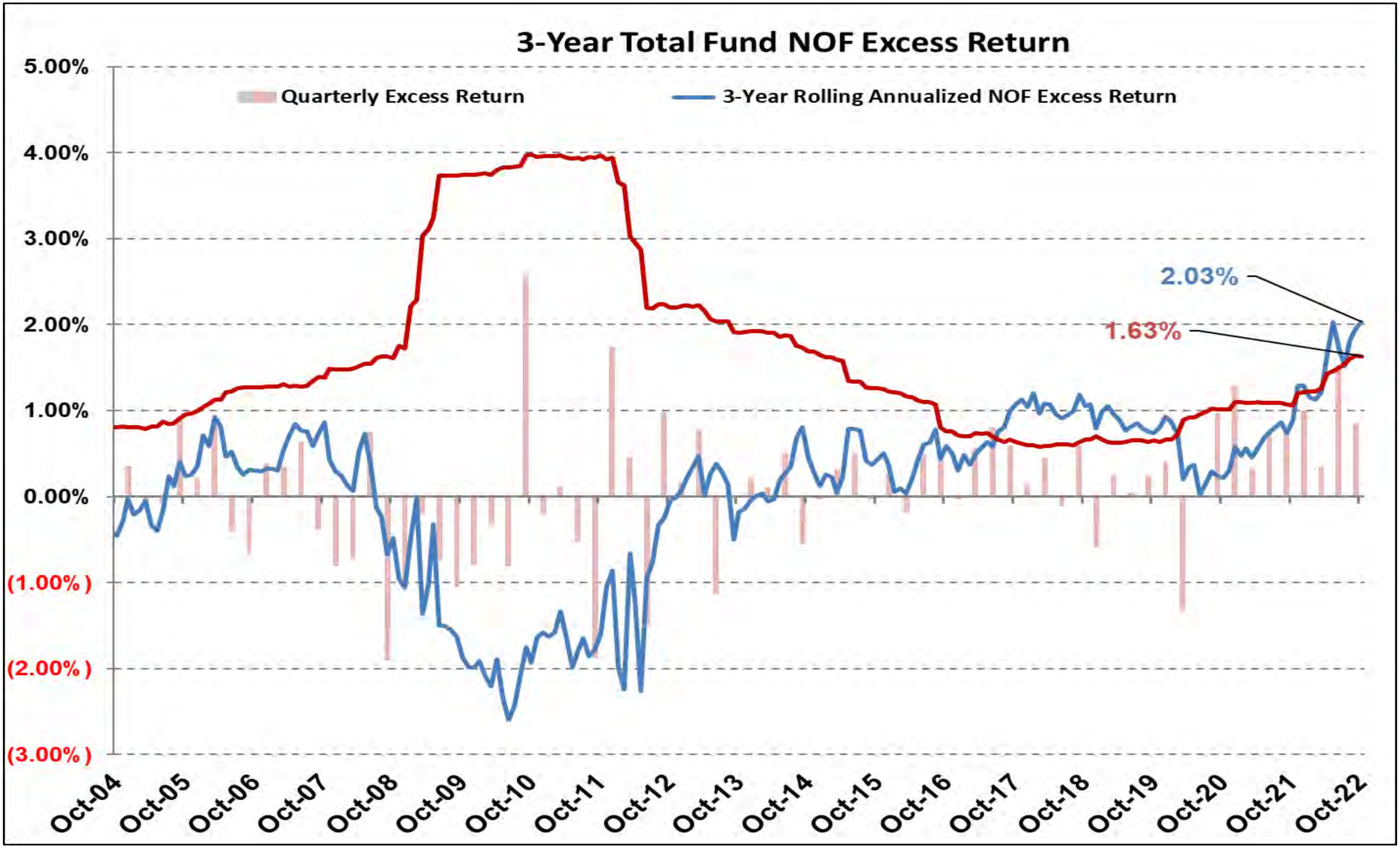
Source: BNY Mellon GRS

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

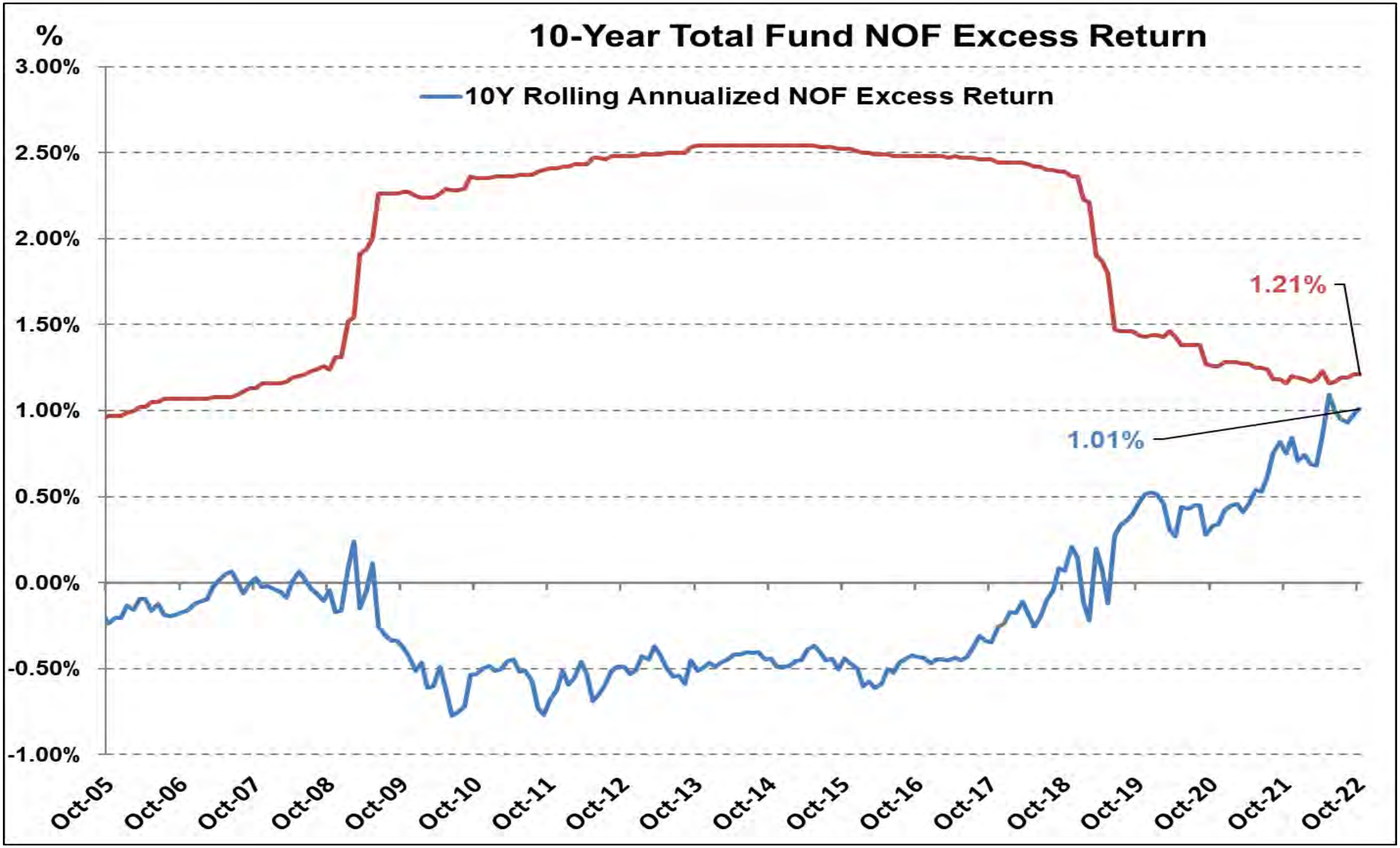
Total Fund Performance



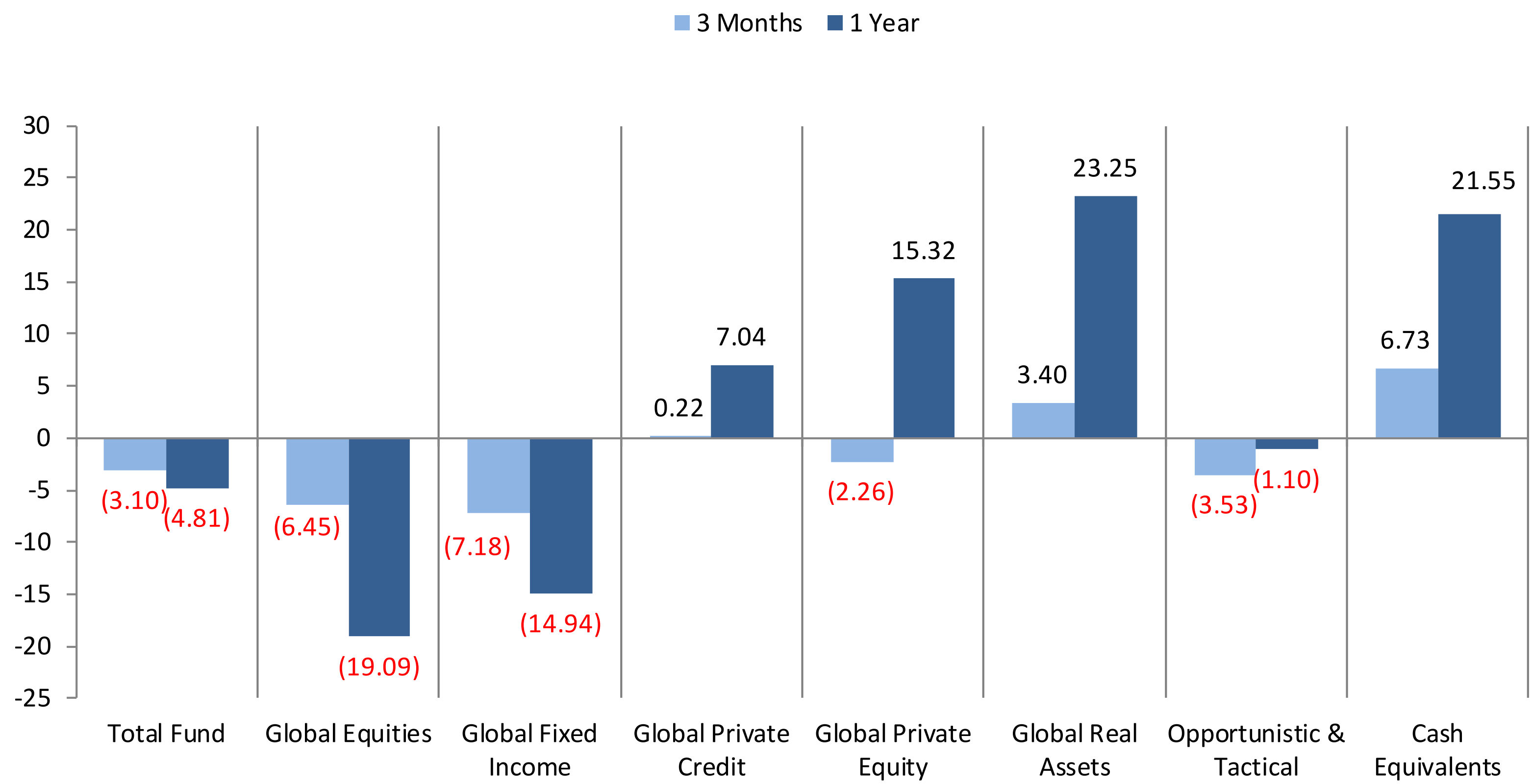
Total Fund Performance



Total Fund Performance



Total Fund and Asset Class Performance (Net)

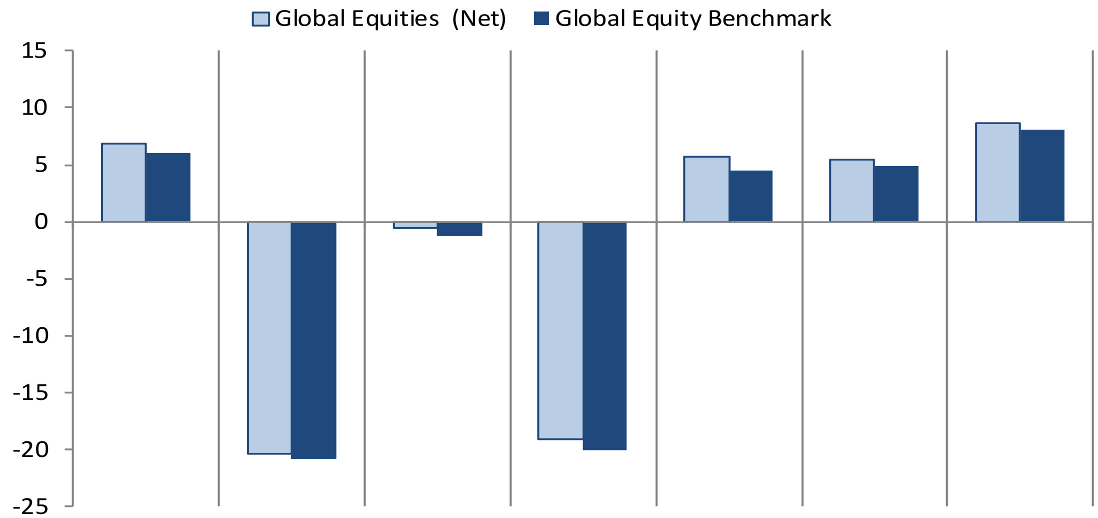


Source: BNY Mellon GRS

Global Equities Performance

Current Benchmark:

MSCI ACWI (Net Dividends)



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Global Equities (Gross)	6.89	(20.14)	(0.55)	(18.84)	6.02	5.83	9.01
Global Equities (Net)	6.89	(20.35)	(0.60)	(19.09)	5.71	5.51	8.67
Global Equity Benchmark	6.03	(20.81)	(1.20)	(20.01)	4.44	4.86	8.09
Value Added (Net of Fee)	0.85	0.46	0.60	0.93	1.27	0.65	0.58
Regional US Equity	8.29	(18.17)	3.33	(15.95)	9.81	9.51	12.30
Russell 3000 Index	8.20	(18.44)	3.37	(16.52)	9.79	9.87	12.46
Value Added (Net of Fee)	0.09	0.27	(0.04)	0.56	0.03	(0.36)	(0.17)
Regional Non-US Equity	2.99	(24.94)	(7.75)	(24.82)	0.18	0.71	4.63
Custom Non-US Equity BM	2.99	(24.25)	(7.21)	(24.73)	(1.76)	(0.65)	3.43
Value Added (Net of Fee)	0.00	(0.70)	(0.54)	(0.08)	1.94	1.36	1.20

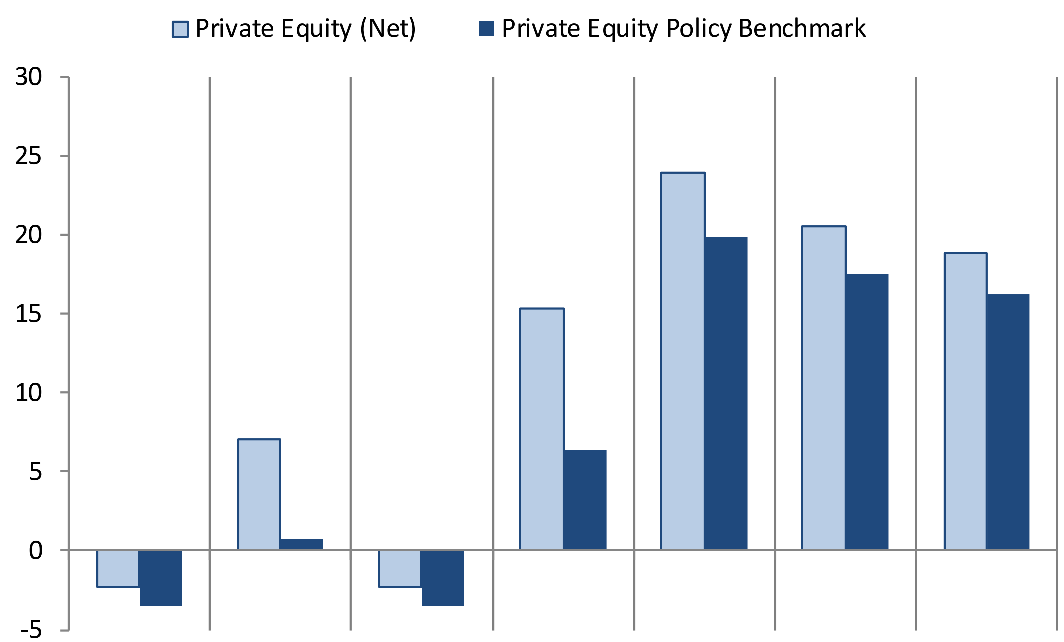
Source: BNY Mellon GRS

Global Private Equity Performance

Results as of: 09/30/2022

Current Benchmark:

Burgiss All Private Equity Index



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Private Equity (Gross)	(1.79)	8.22	(1.79)	17.28	25.82	22.34	20.60
Private Equity (Net)	(2.26)	7.01	(2.26)	15.32	23.90	20.58	18.88
Private Equity Policy Benchmark	(3.52)	0.79	(3.52)	6.33	19.88	17.48	16.23
Value Added (Net of Fee)	1.26	6.22	1.26	8.99	4.01	3.10	2.65

Source: BNY Mellon GRS

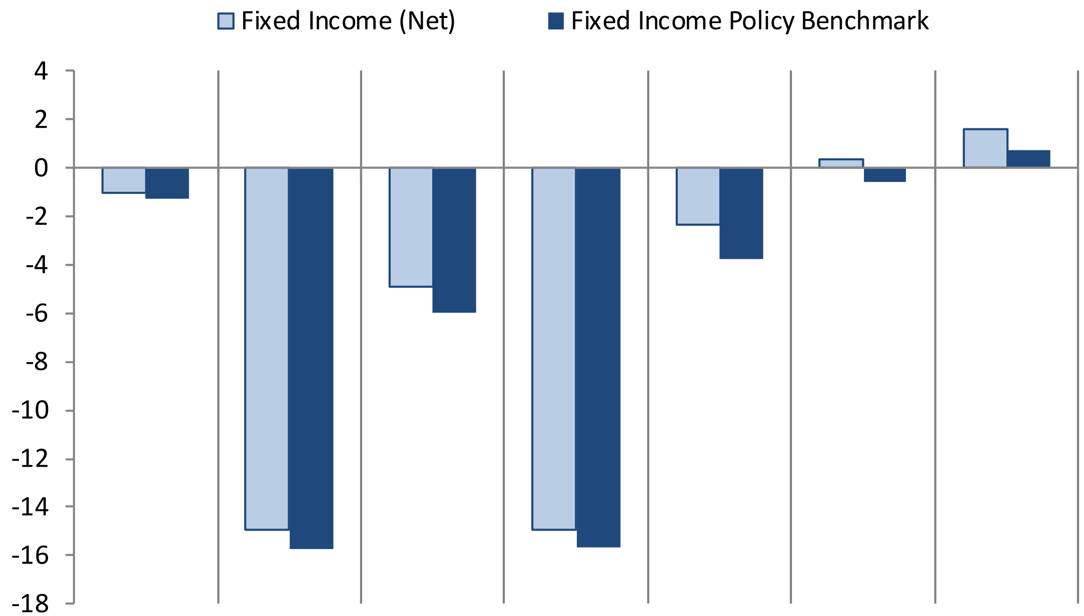
The difference between Gross and Net is management fee only. Performance based fees are captured in the Gross return.

Global Private Equity performance is reported one quarter in arrears.

Global Fixed Income Performance

Current Benchmark:

Bloomberg Aggregate Bond Index



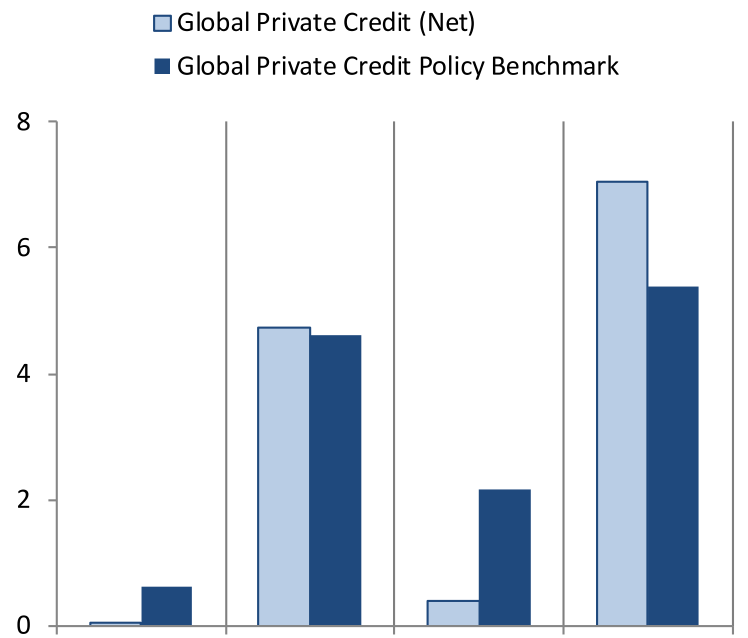
	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Fixed Income (Gross)	(1.04)	(14.78)	(4.85)	(14.71)	(2.10)	0.63	1.81
Fixed Income (Net)	(1.05)	(14.97)	(4.92)	(14.94)	(2.35)	0.40	1.58
Fixed Income Policy Benchmark	(1.30)	(15.72)	(5.99)	(15.68)	(3.77)	(0.54)	0.74
Value Added (Net of Fee)	0.24	0.75	1.06	0.74	1.42	0.94	0.84

Source: BNY Mellon GRS

Global Private Credit Performance

Current Benchmark:

90 Day T-Bill + 4.5%



	1 Month	CYTD	FYTD	1 Year
Global Private Credit (Gross)	0.05	5.63	0.73	8.30
Global Private Credit (Net)	0.05	4.74	0.38	7.04
Global Private Credit Policy Benchmark	0.61	4.60	2.16	5.38
Value Added (Net of Fee)	(0.55)	0.13	(1.78)	1.65

Source: BNY Mellon GRS

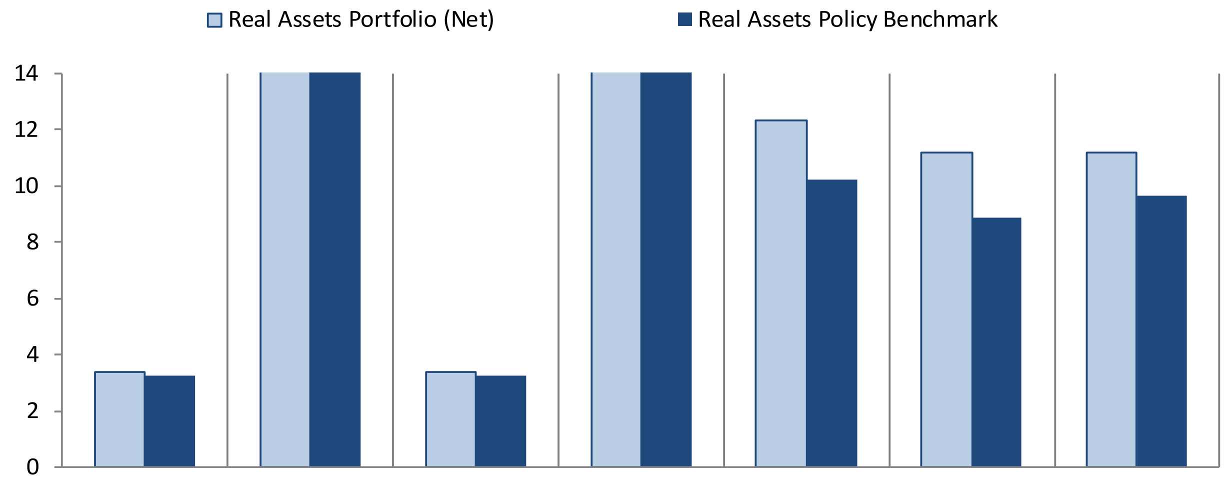
The difference between Gross and Net is management fee only. Performance based fees are captured in the Gross return.

Global Real Assets Performance

Results as of: 09/30/2022

Current Benchmark:

NCREIF Property Index (1q lag)



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Real Assets Portfolio (Gross)	3.62	16.14	3.62	24.48	13.26	12.21	12.27
Real Assets Portfolio (Net)	3.40	15.42	3.40	23.25	12.36	11.19	11.21
Real Assets Policy Benchmark	3.23	15.42	3.23	21.45	10.22	8.86	9.67
Real Assets Value Added (NOF)	0.17	0.00	0.17	1.80	2.13	2.34	1.54
Real Assets Core (Net)	5.52	24.76	5.71	35.08	16.08	13.35	12.59
Real Assets Policy Benchmark	3.23	15.42	3.23	21.45	10.22	8.86	9.67
Real Assets Core Value Added (NOF)	2.29	9.34	2.48	13.63	5.86	4.49	2.92
Real Assets Non-Core (Net)	(0.67)	8.19	(0.67)	16.32	8.67	8.81	10.55
Real Assets Policy Benchmark	3.23	15.42	3.23	21.45	10.22	8.86	9.67
Real Assets Non-Core Value Added (NOF)	(3.90)	(7.23)	(3.90)	(5.13)	(1.55)	(0.05)	0.88
Real Assets Infrastructure (Net)	0.54	4.42	0.54	7.16	8.70	10.98	10.55
Real Assets Policy Benchmark	3.23	15.42	3.23	21.45	10.22	8.86	n/a
Real Assets Infrastructure Value Added (NOF)	(2.69)	(11.00)	(2.69)	(14.29)	(1.52)	2.12	n/a

Source: BNY Mellon GRS

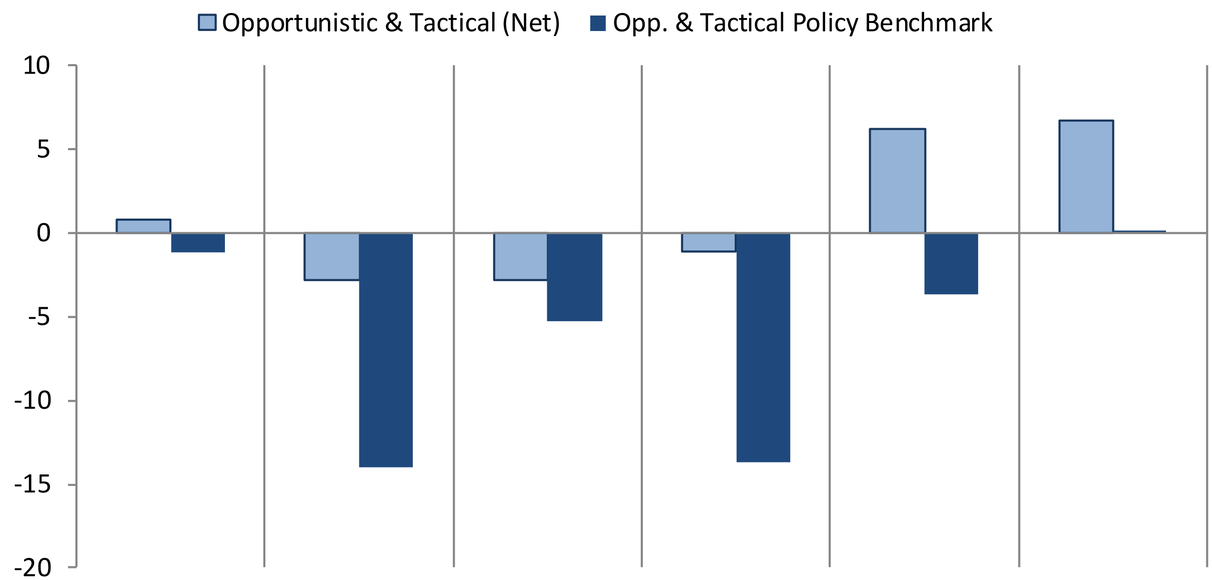
The difference between Gross and Net is management fee only. Performance based fees are captured in the Gross return.

Global Real Assets performance is reported one quarter in arrears.

Opportunistic & Tactical Performance

Current Benchmark:

Bloomberg Aggregate Bond Index + 2%



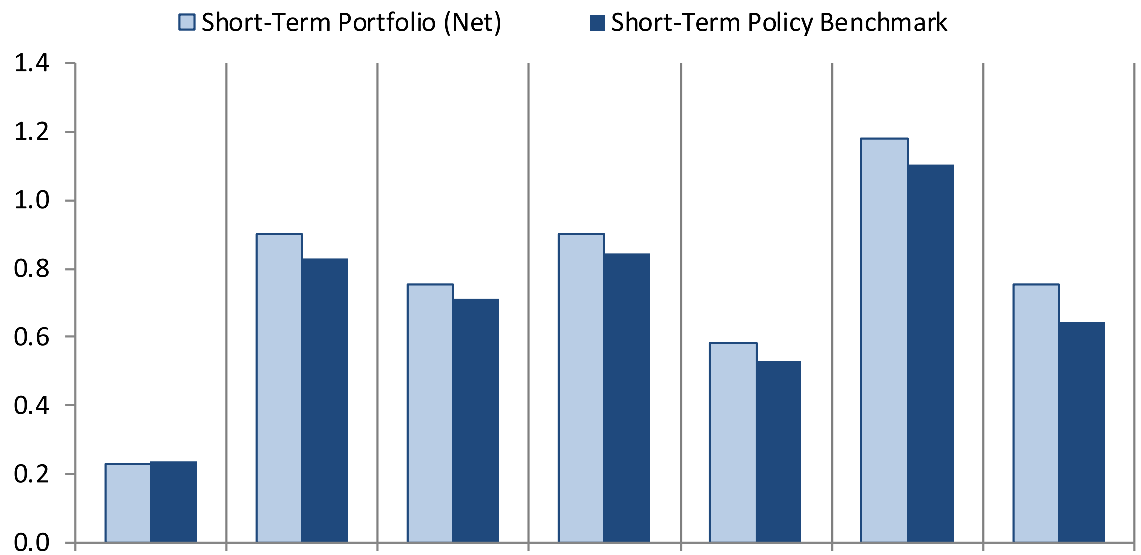
	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year
Opportunistic & Tactical (Gross)	0.82	(1.99)	(2.45)	0.05	7.58	8.17
Opportunistic & Tactical (Net)	0.81	(2.80)	(2.76)	(1.10)	6.23	6.71
Opp. & Tactical Policy Benchmark	(1.11)	(14.01)	(5.23)	(13.68)	(3.62)	0.20
	1.92	11.20	2.47	12.58	9.86	6.51

Source: BNY Mellon GRS

Short-Term Performance

Current Benchmark:

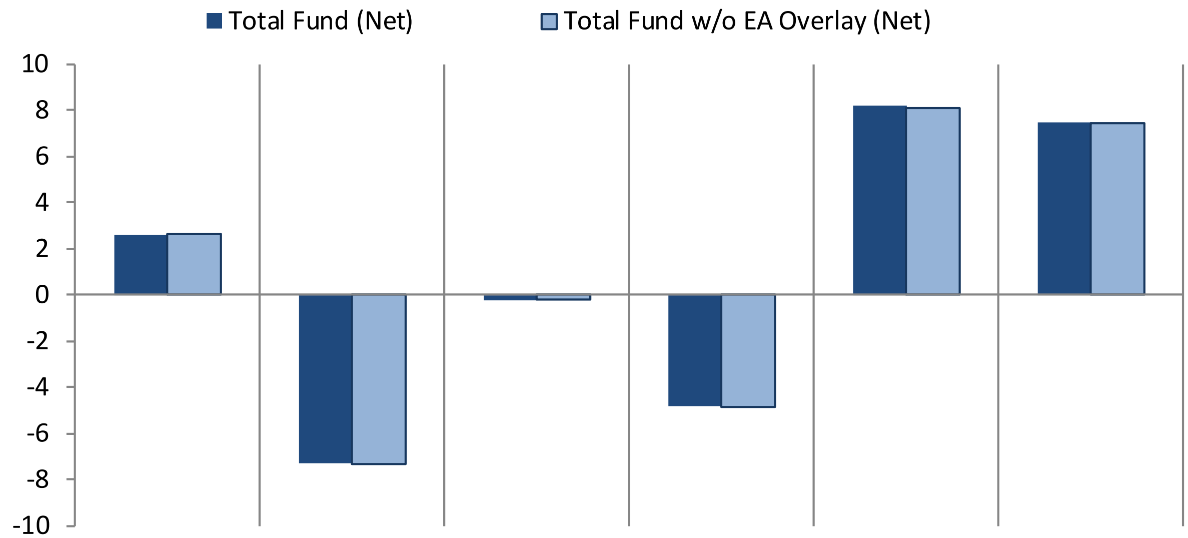
Citigroup 30 Day Treasury Bill Index



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Short-Term Portfolio (Gross)	0.23	0.90	0.76	0.90	0.58	1.18	0.75
Short-Term Portfolio (Net)	0.23	0.90	0.76	0.90	0.58	1.18	0.75
Short-Term Policy Benchmark	0.24	0.83	0.71	0.84	0.53	1.10	0.64
Value Added (Net of Fee)	(0.01)	0.07	0.04	0.06	0.05	0.08	0.12

Source: BNY Mellon GRS

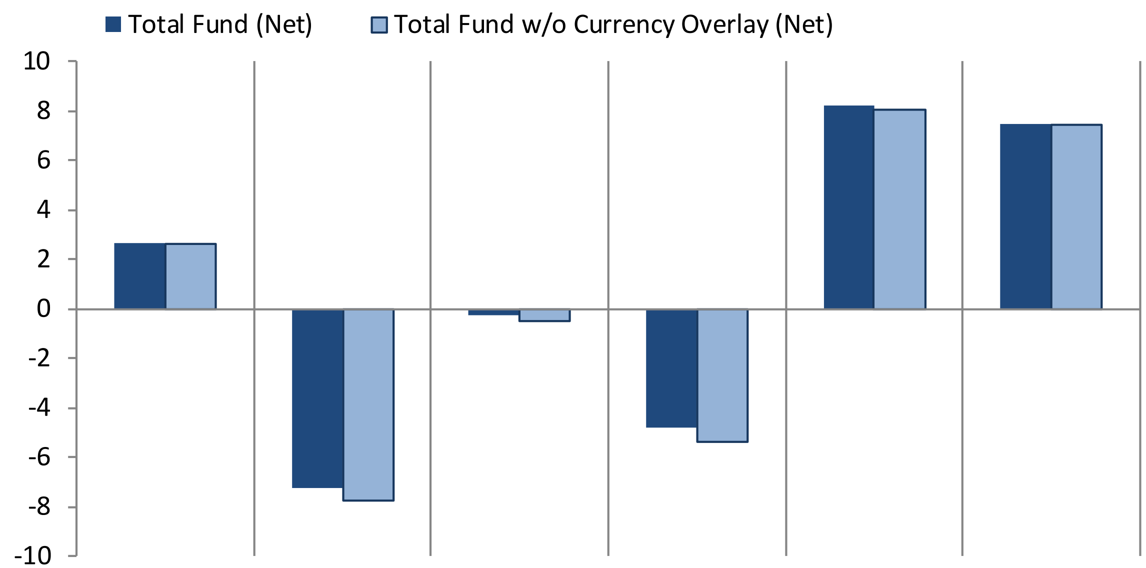
Enhanced Asset Overlay Performance



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year
Total Fund (Gross)	2.63	(6.73)	(0.01)	(4.06)	8.85	8.17
Total Fund w/o EA Overlay (Gross)	2.65	(6.82)	(0.00)	(4.16)	8.76	8.09
Total Fund (Net)	2.62	(7.28)	(0.24)	(4.81)	8.18	7.49
Total Fund w/o EA Overlay (Net)	2.64	(7.35)	(0.24)	(4.88)	8.11	7.43
EA Overlay Impact (Net of Fee)	(0.02)	0.07	(0.01)	0.07	0.07	0.06

Source: BNY Mellon GRS

Currency Overlay Performance



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year
Total Fund (Gross)	2.63	(6.73)	(0.01)	(4.06)	8.85	8.17
Total Fund w/o Currency Overlay (Gross)	2.62	(7.31)	(0.31)	(4.73)	8.67	8.05
Total Fund (Net)	2.62	(7.28)	(0.24)	(4.81)	8.18	7.49
Total Fund w/o Currency Overlay (Net)	2.61	(7.78)	(0.48)	(5.39)	8.04	7.40
Currency Overlay Impact (Net of Fee)	0.00	0.50	0.24	0.58	0.14	0.08

Source: BNY Mellon GRS

Proposed Investment Agenda – Next Meeting

- Annual Portfolio Review – Real Assets
- Wilshire Quarterly Performance Report (December 31, 2022)
- Quarterly Investment Report (December 31, 2022)
- Asset Allocation Discussion

School Employees
Retirement System of Ohio

Memo

To: SERS Retirement Board

From: Richard Stensrud, Executive Director

CC: Karen Roggenkamp, Deputy Executive Director
Marni Hall, CPA, Chief Financial Officer

Date: December 6, 2022

Re: Actuarial Audit Report

Pursuant to the Board's direction when extending the contract of the current retained actuary (Cavanaugh Macdonald), SERS engaged Milliman to conduct an actuarial audit of the work performed by Cavanaugh Macdonald. The impetus for securing the actuarial audit was not due to any concerns or lack of confidence regarding the reasonableness and accuracy of the actuarial work performed by Cavanaugh Macdonald, but rather, was based on the Board's view that given Cavanaugh Macdonald's long tenure as retained actuary, having an independent review of that work was prudent and reflective of 'best practice' in the operation of a public retirement system. The Board further believed that it was prudent to be proactive with this review rather than to wait for the next actuarial audit commissioned by the Ohio Retirement Study Council (ORSC), which will likely be conducted in 2023.

The actuarial audit commissioned every ten years by the ORSC is a Level 1 audit in which the auditing actuary fully replicates the most recent actuarial valuation conducted by the retained actuary. Given the close proximity of the upcoming ORSC actuarial audit, it was determined that the actuarial audit performed by Milliman would be a Level 2 audit which does not include a full replication but does provide independent verification and analysis of the assumptions, procedures, methods and calculations used by the retained actuary for:

* SERS' annual pension valuation as of June 30, 2021;
* The five-year experience review for the period July 1, 2015 to June 30, 2020;
* SERS' annual retiree health care valuation as of June 30, 2021; and

* Governmental Accounting Standards Board (GASB) 67, 68, 74 and 75 disclosures.

The actuarial audit includes the following elements:

1. A determination of whether the actuarial methods, considerations, and analyses used by Cavanaugh Macdonald are technically sound and conform to the Standards of Practice promulgated by the Actuarial Standards Board and the policies of the Government Accounting Standards Board (GASB).

2. An in-depth review and analysis of the valuation results, including an evaluation of the reasonableness and consistency of the data used as well as a review of the completeness and accuracy of the mathematical calculations.

3. Verification that all appropriate benefits have been valued and valued accurately.

4. Evaluation of the actuarial cost method and actuarial asset valuation method.

5. Verification of the reasonableness of the calculation of the unfunded actuarial accrued liability and amortization period.

6. Review and analysis of the economic and non-economic actuarial assumptions.

The Milliman actuarial audit report is presented for your review and consideration in the materials that follow. A response to the Milliman report by Cavanaugh Macdonald is also included in the materials that follow. Scott Porter, the head of the Milliman auditing team will be onsite at the meeting to present their report and answer any questions you might have. His colleague Nick Collier will participate remotely.

As you will see from the Milliman report, their overall assessment is that all major actuarial functions are being appropriately addressed, and that Cavanaugh Macdonald has employed generally accepted actuarial practices and principles in studying plan experience, selecting assumptions, determining liabilities and contribution rates, and presenting the results of their work. Specifically, they found the Cavanaugh Macdonald actuarial procedures and practices to be of high quality and in compliance with all major aspects of the applicable actuarial standards.

The Milliman report notes that no two actuarial firms are likely to use precisely the same methods and assumptions (and, therefore, arrive at precisely the same conclusions) when presented with the exact same circumstances and set of historical facts. Thus, in completing their review, Milliman focused on those aspects of the SERS plan and its actuarial functions where they believed there was an opportunity for improvement. While the suggestions by Milliman reflect their professional preferences, Milliman notes they would have minimal effect on the results and conclusions presented by Cavanaugh Macdonald.

We are pleased to report Milliman's favorable conclusions on the accuracy and soundness of Cavanaugh Macdonald's work and will work with Cavanaugh Macdonald in considering how to utilize the suggestions made by Milliman to improve SERS' actuarial procedures and practices.

I hope this information is helpful. We will be happy to answer any questions you might have.

Milliman

School Employees Retirement System of Ohio

Actuarial Audit of June 30, 2021 Actuarial Valuations

Prepared by:

Nick J. Collier, ASA, EA, MAAA
Principal & Consulting Actuary

Scott F. Porter, FSA, EA, MAAA
Principal & Consulting Actuary

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Issued December 7, 2022

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CONFIDENTIAL

December 7, 2022

Richard Stensrud
Executive Director
School Employees Retirement System of Ohio
300 E. Broad St., Suite 100
Columbus, Ohio 43215-3746

Re: Actuarial Audit of June 30, 2021 Actuarial Valuations

Dear Mr. Stensrud:

We are pleased to present the enclosed report summarizing our findings and recommendations resulting from our independent review of the actuarial methods, procedures, actuarial assumptions and membership data and the resulting actuarially computed normal costs and liabilities as shown in the June 30, 2021 reports on the Actuarial Valuation of Defined Benefit Allowances and Projections of Retiree Health Benefits for the School Employees Retirement System of Ohio (SERS).

This report presents an executive summary followed by separate sections discussing in detail our findings, analyses and recommendations. While some issues are discussed at greater length than others, this report is intended to provide a complete and independent third party review of SERS and its operations from an actuarial perspective. All comments and recommendations are intended to be constructive. Our purpose was to identify areas of possible improvement in the system, its operation and/or the actuarial procedures.

We would like to thank the staffs of SERS and CavMac for their cooperation. Their prompt and courteous responses to our questions and requests for information were of valuable assistance to us and greatly appreciated.

In preparing this report, we relied, without audit, on information (some oral and some in writing) supplied by SERS staff and CavMac. This information includes, but is not limited to, statutory provisions, employee data, and financial information. Since the audit results are dependent on the integrity of the data supplied, the results can be expected to differ if the underlying data is incomplete or missing. It should be noted that if any data or other information is inaccurate or incomplete, our calculations may need to be revised. The audit results were developed using models intended for actuarial valuations that use standard actuarial techniques.

A valuation report is only an estimate of the Plan's financial condition as of a single date. It can neither predict the Plan's future condition nor guarantee future financial soundness. Actuarial valuations do not affect the ultimate cost of Plan benefits, only the timing of Plan contributions. Future actuarial measurements may differ significantly from the current measurements presented in this analysis due to actual plan experience deviating from the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as potential additional contribution requirements due to changes in the System's funded status), and changes in plan provisions, actuarial assumptions, and applicable law. An assessment of the potential range and cost effect of such differences is beyond the scope of this analysis.

Milliman's work product was prepared exclusively for SERS for a specific and limited purpose. It is a complex, technical analysis that assumes a high level of knowledge concerning SERS' operations, and uses SERS' data, which Milliman has not audited. It is not for the use or benefit of any third party for any purpose. Any third party recipient of Milliman's work product who desires professional guidance should not rely upon Milliman's work product but should engage qualified professionals for advice appropriate to its own specific needs.

The consultants who worked on this assignment are retirement actuaries. Milliman's advice is not intended to be a substitute for qualified legal or accounting counsel.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with generally recognized and accepted actuarial principles and practices which are consistent with the Actuarial Standards of Practice promulgated by the Actuarial Standards Board and the applicable Code of Professional Conduct, amplifying Opinions, and supporting Recommendations of the American Academy of Actuaries.

We are members of the American Academy of Actuaries and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

The signing actuaries are independent of SERS. We are not aware of any relationship that would impair the objectivity of our work.

We look forward to having the opportunity to present this report and respond to questions regarding our review and recommendations.

Respectfully submitted,

Nick Collier, ASA, EA, MAAA

Scott Porter, FSA, EA, MAAA

NJC:SFP:78OHS01-10
SERS 2021 Audit Report.doc

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Executive Summary and Recommendations

This report summarizes the results of an actuarial review of the School Employees Retirement System of Ohio ("SERS") based on the June 30, 2021 actuarial valuations for basic benefits and healthcare benefits as well as the 2015 – 2020 Experience Study. The purposes of this review are to determine:

- The validity, completeness, and appropriateness of the demographic and financial information used by CavMac to meet SERS' funding objectives for both the basic benefits and healthcare benefits.
- The reasonableness of the consulting actuary's conclusions and the conformance of CavMac's work with generally accepted actuarial standards of practice.
- The reasonableness of CavMac's conclusions when reviewing retiree healthcare premiums and funding.

This analysis was conducted under a Level II limited-scope audit, which uses a review of sample cases (sample lives) provided by CavMac to determine if all of the benefits offered by SERS are reflected in the actuarial programs. Sample life refers to the development of liabilities for specific individuals in the valuation model. The sample life information provided by CavMac was a high-level summary of the liabilities for each of the samples. While we have no material concern with the overall determination of the liabilities for each of the plans based on the sample lives that we reviewed, we did not perform a full replication to determine if any programming differences would yield a materially different result.

Overall Assessment

Our overall assessment as a result of our review of CavMac's actuarial work for SERS is that all major actuarial functions are being appropriately addressed. CavMac has employed generally accepted actuarial practices and principles in studying plan experience, selecting assumptions, determining liabilities and contribution rates, and presenting the results of their work.

Review of Another Actuary's Work

In a system as large and complex as SERS, there are many operational aspects that have a bearing on the actuarial analysis of the plan. The reader should recognize that many of the issues that we reviewed and which we will discuss in this report are subject to opinion and professional preference. No two actuaries (or actuarial firms) are likely to use precisely the same methods and assumptions (and, therefore, arrive at precisely the same conclusions) when presented with the exact same circumstances and set of historical facts. In completing our review, we have attempted to focus on those aspects of the plan and its actuarial functions that could be meaningfully improved. In presenting our findings in this report, we have tried to limit discussion of aspects which reflect our professional preferences, but which would have minimal effect on the results and conclusions presented by the actuary.

By its nature, a review of another professional's work product will tend to focus on those aspects where the reviewer believes some modification in current procedures would be desirable. Hence, a report such as this will devote the majority of the presentation to commentary that, even though intended to be constructive, may give the reader the impression that only issues were found. ***Therefore, we would like to state clearly up front that we found the actuarial procedures and practices to be of a high quality and in compliance with all major aspects of the applicable actuarial standards.*** While we will discuss several areas where we believe some modifications in current data collection procedures, actuarial assumptions or methods would be beneficial, that discussion should be considered within the context of an overall favorable report concerning CavMac's work.

Audit Conclusions

Set forth below is a summary of the conclusions of the audit split into the various components considered in our review. In each subsection, we have provided commentary including any recommended changes we have or items that we think should be considered in the future. These comments should be viewed in the context of an overall favorable review of the actuarial work. We do not believe that if any of changes were implemented that they would significantly affect the results of the valuations.

Membership Data

We performed tests on both the raw data supplied by SERS staff and the processed data used by CavMac in the actuarial valuations. As part of our review, we reviewed twenty (20) benefit calculations reflecting members who retired in the year before or year after the valuation date allowing us to review the raw data for consistency with information used in the actual benefit calculation. Based on this review, we feel the individual member data used is appropriate and complete. Please note that we have combined our comments on the membership data with our comments on our review of the sample lives below. Please refer to the subsection below as well as *Section I – Data Validity* of this audit report for more details.

Actuarial Value of Assets

We have reviewed the calculations of the actuarial value of assets used in the June 30, 2021 actuarial valuation for the basic pension benefits. We found the calculations to be accurate and the methodology to be appropriate and in compliance with actuarial standards of practice. Please refer to *Section II – Actuarial Valuation Methods and Procedures* of this audit report for more details.

Actuarial Cost Method

We have reviewed the version of the Entry Age Normal cost method employed by CavMac and have found the methodology to be appropriate and in compliance with actuarial standards of practice. Please refer to *Section II – Actuarial Valuation Methods and Procedures* of this audit report for more details.

Funding Policy

SERS employs a fixed contribution rate where a portion of the contribution is allocated to healthcare benefits based on the funded percentage of the basic benefits. Under statute, if the maximum employer contribution rate of 14% of payroll does not fund the basic benefits over a period of 30 years or less, the Board is required to take action to reduce the period to no more than 30 years. To help place the current contribution rate in context for stakeholders, CavMac determines an actuarially determined contribution rate. The actuarially determined contribution rate is based on amortizing the unfunded liability over a closed period that declines by one year with each valuation. As of the June 30, 2021 valuation, the period is 23 years. We believe the calculation of the actuarially determined contribution is reasonable and provides valuable information to stakeholders.

The valuation report does not report the effective amortization period for comparison to the 30-year statutory minimum requirement. We suggest consideration be given to either adding this metric to the valuation report or simply making a statement that the 30-amortization requirement is or is not met (the requirement was satisfied in the most recent valuation).
For healthcare benefits, SERS' funding goal is to maintain solvency for at least a 20-year period. Based on projections included in the June 30, 2021 actuarial valuation, the trust is to remain solvent for a 37 year period until 2058. In addition to any portion allocated based on the maximum employer contribution rate of 14%, SERS also collects a surcharge of 1.5% of payroll from employers. To provide some context for determining the adequacy of the 1.5% surcharge, CavMac determines a minimum contribution rate based on an open 30-year amortization period. While we believe this does assist in providing stakeholders with some context on the adequacy of the surcharge rate, we would suggest greater focus be incorporated into the health care fund balance projections by including an exhibit in the report displaying the projected benefits out of the fund and incorporate reasons for changes in the solvency period into the report commentary.

Please note that the normal cost rate shown in the actuarial valuation report did not incorporate the mid-year interest adjustment similar to the other contribution rates. This would have increased the overall contribution rate from 2.46% of payroll to 2.50% of payroll.

Please refer to *Section II – Actuarial Valuation Methods and Procedures* of this audit report for more details.

Sample Life Review

A Level II audit requires a review of detailed sample lives provided by the actuary. Sample life refers to the development of liabilities for specific individuals in the valuation model. As requested by Milliman, CavMac provided 15 sample lives for various categories of individuals representing a cross section of members by hire age, grandfathered status, status, form of payment, etc. to review the projected benefits produced by the actuarial model for both the pension and healthcare actuarial valuations as of June 30, 2021.

CavMac provided a high-level summary of the present values calculated by decrement, i.e., the portion of the liability attributable to the future retirement, termination, disablement or death of the member. We independently programmed the primary features of the benefits provided by SERS to determine if the liabilities calculated by CavMac for the individuals are reasonable and are likely to lead to a reasonable aggregate result of the liabilities of the entire system.

While we have no material concern with the overall determination of the liabilities for each of the plans based on the sample lives that we reviewed, we did not perform a full replication to determine if any programming differences found would yield a materially different result. Please refer to *Section V – Sample Life Review* of this audit report for more details.

The following summarizes our findings for both the basic benefits and healthcare benefits. One particular area that our review focused on was the benefits provided upon disability, how the data is provided to the actuary for members receiving disability benefits, and how those benefits are valued in both the basic benefits and healthcare benefits actuarial valuations. We have combined all of our comments on disability benefits into a single subsection below.

Disability Benefits

We recommend both CavMac and SERS review the benefits valued and data provided on members who retired due to disability in both the basic benefits and healthcare valuations. The following summarizes our findings and recommendations:

- We recommend that SERS create a separate benefit type code of “C” for Converted Disability when a member converts a New Disability Plan benefit to a service retirement benefit at age 65 so these members can continue to be valued as disabled. After the date of conversion, these members are valued as service retirees and the health mortality table is applied. By utilizing the disability mortality table, the liability would decrease.

- When a disabled member dies, beneficiaries of that member are entitled to survivor benefits. Survivor benefits are available to Old Disability Plan members for lifetime and for New Disability Plan members until date of conversion (age 65). We recommend that these benefits be included in the actuarial valuation programming for active members and current disability retirees. We also suggest that SERS include a spouse date of birth and other dependent information on the retiree data, to the extent available, so that these benefits can be valued more accurately. Adding these benefits will increase the liability of the plans.

- When a New Disability Plan member converts to a service retirement benefit, the date of commencement reported is updated to the date of conversion. Since COLAs are deferred until the 4^{th} anniversary of date of commencement (if commence on or after April 1, 2018), we suggest that SERS include the first date a COLA would apply so that the change in the date of commencement does not result in CavMac assuming a COLA is deferred until a future date rather than immediately applicable. While we do not believe this is resulting in any issue currently, it could potentially prevent the liability from being understated in future valuations.

- For New Disability Plan members, SERS provides the date of conversion and estimated benefit at this conversion date on the data. However, this information was not included in the valuation data provided to us by CavMac, and consequently we believe CavMac is assuming the current disability benefit would be paid for the member's lifetime. We recommend that CavMac review its data procedures and incorporate the estimated converted benefit into its coding for current retirees and active members. We estimated that the converted benefit is less than the disability benefit and would result in a lower liability.

- SERS indicates which retirees are receiving the Medicare Part B subsidy, which may include disabled members who are under age 65. Our understanding is that CavMac assumes the Medicare Part B benefit begins at age 65 regardless of the indicator on the data. We recommend that CavMac value the Medicare Part B subsidy for disabled members indicated by SERS and incorporate an assumption for disabled members who are within 24 – 30 months of their commencement date. Medicare includes a 25 month elimination period.

  While the healthcare valuation includes an assumption for future disability members who are eligible for Medicare (see our comments in the next paragraph), we are unsure if this assumption is utilized in the valuation of Medicare Part B subsidy. Therefore, we also recommend that an assumption be included in the active programming for the potential of Medicare Part B subsidy benefits provided prior to age 65. Incorporating this benefit into the valuation program would result in an increase in the liability.

- For healthcare benefits, retirees contribute a portion of the premium based on years of service. For New Disability Plan members, the years of service used to determine the contribution premium percentage includes the period of disability at the date of conversion. We believe CavMac is assuming the contribution premium percentage remains the same based on years of service at the time of disability. We recommend that CavMac review its actuarial programs to reflect a possible lower contribution premium percentage at the date of conversion for current New Disability Plan retirees and for active employees. Incorporating this change will result in an increase in the liability for healthcare benefits.

- In the healthcare valuation report, CavMac assumes that 15% of future disabled retirees will become eligible for Medicare. In our review of the retiree data, we found the percentage receiving the Medicare Part B subsidy to be about 40%. We suggest that SERS and CavMac review the percentage of members on disability who qualify for Medicare.

- Since records for New Disability Plan members are being communicated as service retirements rather than disability retirements after the date of conversion, their mortality experience is being analyzed as healthy mortality as opposed to disability mortality in the experience study in developing the appropriate adjustments to the selected mortality tables. We would expect these members to have higher rates of mortality than other service retirements which could lead to lower life expectancies assumed for the entire service retirement population. We recommend that these members be identified and combined with the disability retirements in the next experience study.

Basic Benefits

The following are a summary of comments related to other basic benefits.

- **Accumulated Contributions**: For members who elect the maximum single life annuity, a beneficiary may still be entitled to a death benefit equal to their accumulated contribution balance less the amount of payments received in retirement. For New Plan Disability members, the accumulated contribution balance is reduced by benefits receive after the date of conversion. While SERS includes this information in the data, the data provided by CavMac did not incorporate it as they indicated the balance is assumed to have been exhausted by date of death.

  For future retirees, it is our understanding that CavMac assumes that this death benefit is equal in value to approximately a 1-year certain. Based on the information in the benefit calculations, we estimated that the average period for which a death benefit would be applicable is 40 months or 3.3 years. We recommend that CavMac incorporate this benefit for current retirees and increase its assumption for future retirees reflecting benefit difference for grandfathered versus non-grandfathered members. Modifying this assumption would result in an increase in the liability.

- **Multiple Plan Beneficiaries:** CavMac values retirees who elected a joint and survivor annuity with multiple plan beneficiaries as had elected a 100% joint and survivor annuity for ease of coding. The data provided by SERS indicates the amounts payable to each beneficiary and the cumulative joint and survivor percentage could be determined. While there are few members who elect this option, we would recommend that CavMac review their data procedures and value the actual cumulative joint and survivor percentage. We would also suggest using the date of birth for the youngest beneficiary. Making these modifications would result in a very small decrease in the liability.

- **Medicare Part B:** The Medicare Part B subsidy of $45.50 is paid to each recipient of a service retirement benefit, disability recipient or a survivor who had at least 10 years of service and has elected healthcare coverage. For members who elect a joint and survivor annuity, the benefit continues to be paid to the spouse upon death of the retiree. For the pension benefits, the election of a joint and survivor annuity would have the same present value as the value of a single life annuity due to the actuarial equivalent factors that are provided. For the Medicare Part B continuation, this provision effectively provides the retiree with a subsidized 100% joint and survivor annuity for any member who elected a joint and survivor annuity. We recommend that CavMac review the percentage of members who this may apply to and incorporate in future actuarial valuations.

Healthcare Benefits

The following are a summary of comments related to other healthcare benefits.

- **Contribution Premium Percentage:** The percentage of the premium paid by SERS and the retiree is based on years of service at retirement. At 35 years, the percentage decreases by 1% for each additional year of service if the member retired on or after August 1, 2008 such that at 50 years the premium is fully subsidized by SERS. In addition, the retiree is not charged the $35 surcharge. In reviewing the edited retiree data, the contribution premium percentage is 20% rather than 0%. In addition, CavMac is valuing the surcharge for these members. We recommend that CavMac review its data procedures and programs to verify the proper contribution premium percentage is determined. Adjusting the contribution premium percentage for these members will result in an increase in the liability.

- **Participation Assumption:** Upon retirement, members have two chances to elect healthcare coverage from SERS (members may also elect coverage if any other healthcare coverage is involuntarily terminated). The first opportunity is upon retirement and the second opportunity is upon becoming eligible for Medicare. Based on analysis conducted in the experience study, there is a percentage of members who first elect healthcare coverage from SERS upon becoming eligible for Medicare. However, no liability is included for current retirees who have not elected healthcare coverage upon retirement but may do so upon becoming eligible for Medicare. We recommend that CavMac and SERS identify current retirees and determine a liability for members who may elect coverage upon becoming eligible for Medicare. By including these retirees in the healthcare valuation, this will result in an increase in the liability.

Actuarial Assumptions

We have reviewed the actuarial assumptions used in the June 30, 2021 valuations as recommended in the 2015 – 2020 experience study and have found the assumptions to be appropriate and in compliance with actuarial standards of practice. In some instances, we suggest additional disclosure for the assumption be noted in the experience study and/or valuation report. For these comments, please refer to *Section IV – Actuarial Valuation Report*. For comments related to the actuarial assumptions, please refer to *Section III – Actuarial Assumptions*. A summary is provided below:

- Due to a significant change in capital market assumptions and inflation since the 2021 valuation, there may be a desire to reflect off-cycle (i.e. between experience studies) changes to specific economic assumptions, such as the investment return assumption, COLA assumption and salary inflation. While we believe these types of assumptions should be reviewed annually, at least internally, we are not recommending any changes to assumptions at this time due to the volatility in the markets. As time progresses, it may make sense to consider whether changes should be made prior to the next experience study.

- We performed an analysis on the investment return assumption as of June 30, 2021 using Milliman capital market assumptions. Our analysis shows a 30-year expected median return of 6.86%, which is very similar to the Wilshire analysis noted in the experience study report of 6.81%. After applying the decrease due to administrative expenses of 0.22%, our calculation of 6.64% is somewhat below the current assumption. It should be noted that although our estimated expected return is less than the current 7.0% assumption, the difference is not enough that we would say it is unreasonable. Also, our analysis is based on our understanding of SERS' assets which is not as extensive as Wilshire's. Furthermore, with changes in capital market assumptions since the 2021 valuation that are resulting in higher return expectations, we would not recommend any change in the investment return assumption at this time.

- In the 2020 experience study, CavMac reviewed the experience of current survivors and beneficiaries and recommended use of the contingent survivor mortality table as the basis for these beneficiaries. Mortality among contingent survivors is found to be higher after their spouse has died. However, it is our understanding that CavMac is applying the contingent survivor mortality to spouses of retirees who are alive where the mortality may be expected to be lower. This may result in lower actuarial equivalent reductions for members who elect a joint and survivor annuity and lower liability for spouses in the healthcare valuation than if the healthy annuitant mortality is used. We recommend that CavMac review its use of this table in these situations. Limiting the application of this table to apply only to survivors currently in payment would result in a higher liability for the basic benefits and healthcare valuations.

- While we agree with using benefit-weighting in determining the post-retirement mortality assumption for the pension valuation, we recommend consideration be given to using headcount-weighting for the healthcare valuation. Use of headcount-weighted mortality rates would most likely result in a lower liability for the healthcare valuation.

- For determining the rates of disability applicable to current active members, we suggest CavMac eliminate members not yet eligible for benefits (less than 5 years of service) or members where the service retirement benefit exceeds the disability benefit when reviewing the actual experience. Furthermore, in our experience there may be a delay in determining when a member qualifies for disability benefits, and we suggest this delay be incorporated into the experience analysis.

- For the healthcare valuation, we recommend CavMac review its procedures for developing age-based per capita costs and healthcare trends to reflect differences between coverages, specifically the Medicare Advantage plan and the prescription drug plan, as well as reviewing its long-term trend for consistency between pre-Medicare and Medicare and long-term economic factors, including considering health costs share of GDP.

Valuation Reports

In *Section IV – Actuarial Valuation Report*, we provide commentary on the applicable actuarial standards of practice as well as the summary of plan provisions and actuarial assumptions contained in the reports. While we note some items for improvement or additional disclosure, we find that CavMac is meeting the applicable actuarial standards.

Section I – Data Validity

Background

The member data used by the actuary is one of the basic foundations of an actuarial valuation. It forms the basis for actuarially projecting the benefits provided to members by SERS. Thus, an important step in an actuarial audit is reviewing the validity of the member data.

As part of our review process, we performed independent edits on the raw data and then compared our results with the valuation data used by CavMac. We found our results to be consistent. Our results did not match exactly in some cases; however, this is understandable since CavMac, as the retained actuary, has more extensive data-editing procedures. Overall, each data key component matched within an acceptable level, and we believe the individual member data used by CavMac was appropriate for valuation purposes.

A summary of the data in aggregate is shown in the following exhibits for the pension and healthcare benefits. A couple of comments:

- We have separated retirees by the type of retirement or survivor. In the totals, benefits for Re-Employed retirees are included but not their count as these records also have a service retiree record. The data in the system contains two records for these individuals.

- Please note that the valuation salary reported in the valuation reflects anticipated salary increases for the upcoming year as well as annualizing salaries reported for new hires. Based on similar calculations, we match closely. We suggest that CavMac include a comment or footnote that the valuation salary reflects anticipated increases for the upcoming year.

Comparison of June 30, 2021 Valuation Data
Pension Valuation

Ohio School Employees Retirement System	CavMac Valuation Report	Milliman's Review of Valuation Data	Ratio of Milliman / CavMac
Total Retirees, Beneficiaries and Survivors			
Total number	80,721	80,722	100.00%
Annual pension benefits	$1,254,934,762	$1,254,956,475	100.00%
Average age	74.4	74.4	100.00%
Service Retirees			
Total number	66,265	66,266	100.00%
Annual pension benefits	$1,070,518,506	$1,070,532,237	100.00%
Average age	74.6	74.6	100.00%
Re-Employed Retirees			
Total number	912	912	100.00%
Annual pension benefits	$3,344,726	$3,344,726	100.00%
Average age	77.1	77.1	100.00%
Disability Retirees			
Total number	4,868	4,868	100.00%
Annual pension benefits	$87,390,489	$87,379,575	99.99%
Average age	66.7	66.7	100.00%
Beneficiaries			
Total number	5,392	5,392	100.00%
Annual pension benefits	$53,845,057	$53,874,053	100.05%
Average age	80.1	80.1	100.00%
Survivors			
Total number	4,196	4,196	100.00%
Annual pension benefits	$39,835,984	$39,825,884	99.97%
Average age	72.6	72.6	100.00%
Active Members			
Total number	146,646	146,644	100.00%
Average age	47.7	47.7	100.00%
Average service	8.1	8.1	100.00%
Total salary	$3,622,097,199	$3,611,022,883	99.69%
Average salary	$24,700	$24,624	99.70%
Inactive			
Vested	5,972	5,972	100.00%
Annual pension benefits	$38,777,532	$38,718,057	99.85%
Average age	56.2	56.2	100.00%

Comparison of June 30, 2021 Valuation Data
Healthcare Valuation

Ohio School Employees Retirement System	CavMac Valuation Report	Milliman's Review of Valuation Data	Ratio of Milliman / CavMac
Service Retirees			
Total number	30,898	30,898	100.00%
Average age	76.0	76.0	100.00%
Disability Retirees			
Total number	2,580	2,580	100.00%
Average age	69.5	69.5	100.00%
Spouses			
Total number	7,143	7,141	99.97%
Average age	78.1	78.1	100.00%
Non-spouse Dependents			
Total number	276	278	100.72%
Average age	31.0	31.4	101.29%
Active Members			
Total number	146,646	146,651	100.00%
Average age	47.7	47.7	100.00%
Average service	8.1	8.1	100.00%
Total salary	$3,622,097,199	$3,611,022,883	99.69%
Average salary	$24,700	$24,623	99.69%
Inactive			
Vested	5,972	6,117	97.63%
Average age	56.2	56.4	100.36%

Benefit Calculation Review - Background

Our data review process included an extra layer of data verification by comparing valuation data and benefit calculation data. The purpose of the valuation is to determine the liability for benefits to be paid in the future. Therefore, verifying the consistency between the data used for valuation purposes and the data used for benefit calculation purposes is a critical and integral component of the audit process.

To perform this task, we requested the data SERS provided to CavMac for the June 30, 2021 valuation and additional information from SERS regarding members who retired after June 30, 2021. After reviewing this data, we then requested twenty (20) individual benefit calculations from SERS that were randomly selected to encompass all employee categories and the majority of the benefits SERS members receive. These benefits include service retirement benefits, disability benefits, survivor benefits, and lump sum options in the plan. Ten (10) of the requested calculations were intended for members whose benefits commenced subsequent to June 30, 2021 (they were reported as active members on the valuation date) and ten (10) of the requested calculations were for members whose benefits commenced prior to June 30, 2021 (they were reported as retired members on the valuation date). Please note that three records selected who we believe had retired actually represented a disability conversion or a rehired retiree, and thus the verification of active salary data was not possible. This information was the basis for our review.

The purpose of reviewing actual benefit calculations is two-fold. First, we reviewed the benefit calculations for reasonableness, consistency and compliance with the Legislative Code governing SERS as well as the SERS Member Handbook. Second, we reviewed the data used in the benefit calculations for consistency with the valuation data provided to the plan actuary for the June 30, 2021 valuation.

Plan Provisions

Before we discuss our findings regarding the data, we have a few comments regarding the member handbook and other materials contained on the SERS website communicating the system benefits.

SERS is a complex system providing various different retirement plans and health care benefits containing varying eligibility requirements dependent on the type of member and membership group. Although we understand that the benefit offerings to members could be overwhelming, the website is well-organized and contains numerous links and information booklets to describe the specific benefits an individual may be reviewing. While certain details in the member handbook could be clarified or expanded, much of this information is contained on the website. One item where we believe clarification could be helpful is regarding disability benefits:

For disability benefits paid under the new plan, we would suggest including a section on benefits paid at the date of conversion such as benefit formula, service used in the benefit formula, and options to members upon commencement as well as the impact on eligibility for retiree healthcare benefits and the percentage of the premium subsidy to be received.

Benefit Calculation Review – Retiree Data

The following table describes the items reviewed for members who were reported with the retiree data in the June 30, 2021 actuarial valuation.

	Benefit Calculation Review: Retiree Data	Milliman
1.	Benefits were generally computed accurately in the calculation based on the information contained in the calculation and were reasonable and consistent with the Handbook	✓
2.	Basic data information (date of birth, gender, date of commencement) was provided accurately in the retiree data to the actuary	✓

Benefit Calculation Review: Retiree Data		Milliman
3.	Benefit amounts (current benefit, original benefit, employee contributions) were provided accurately in the retiree data	✓
4.	Form of payment information was provided accurately	✓
5.	Information on beneficiaries (spouse date of birth, survivor type) was provided accurately	✓
6.	For members receiving a disability benefit, the benefit type, benefit amount, date of conversion and benefit at date of conversion were provided accurately (see discussion below)	✓
7.	Information on beneficiaries for members receiving a disability benefit (see discussion below)	X
8.	Information on former disability members who have converted to a service retirement benefit (record type, commencement date) (see discussion below)	X
9.	For survivors, benefit and other information was provided accurately	✓
10.	Service credit, final average compensation and employee contribution balance were consistent with amounts computed in the benefit calculation (see discussion on employee contribution refunds)	✓

In our experience, this degree of matching indicates that high quality retiree data is being provided to the actuary by the System. We did notice a few items in our review where the data provided to the actuary did not exactly match the final benefit calculation provided to us. For example, there was one situation where the benefit and contributions were not finalized at the time the actuary data was produced (we also found two situations in the preliminary 2022 retiree data provided for members who retired subsequent to the June 30, 2021 valuation date). One suggestion we have been providing to clients is to provide an indicator on the data whether the information on the data reflects an estimated calculation or final calculation, although based on our review, we do not believe there is a significant lag in completing calculations.

Old Disability Plan

SERS offers two different types of disability benefits based on when a member is hired. If hired prior to July 29, 1992 and did not elect the New Disability Plan, then the member is eligible for the Old Disability Plan.

Under the Old Disability Plan, the benefit is paid for the lifetime of the member assuming they remain eligible for disability during their period of service. Upon the death of the member, eligible beneficiaries are able to receive survivor benefits under any of the Schedules depending on years of service. The form of payment provided for these members is a single life annuity and no potential survivor information is provided. We do note that dependent information is provided in the healthcare data. As such, CavMac is not valuing the potential for survivor benefits to be paid to Disability Old Plan members.

Recommendation: We would suggest that SERS include a spouse date of birth and other dependent information on the data to the extent available. Based on available data, CavMac may need to make certain assumptions on if a beneficiary is eligible to receive a benefit, the number of qualified beneficiaries eligible at the time of death and how long beneficiaries would be eligible to receive the survivor benefit. Such an assumption may vary by age of the retiree. We do believe that the years of service used to calculate the Schedule III survivor benefit is currently included in the data.

New Disability Plan – During Period of Disability

Under the New Disability Plan, the benefit is paid until age 65 if the member became disabled at age 60 or earlier. For members who become disabled after age 60, the benefit ceases at ages varying from 66 to 70. The date that the member's disability ceases is referred to as the conversion date. At the date of conversion, the member can retire and receive a service retirement benefit. During the period of disability, members are eligible for cost-of-living adjustments (COLA) and upon death, survivor benefits similar to those available to Old Disability Plan members. Similar to Old Disability Plan members, the form of payment provided is single life annuity for all members and no potential survivor information is provided.

We do note that the member's current benefit including COLA adjustments during the period of disability up until the valuation date is included on the data.

We also note that expected conversion date and projected benefit at date of conversion are also included in the data although we do not believe they are used in the actuarial programming. We discuss these items in Section V of this report.

Recommendation: Similar to Old Disability Plan members, we would suggest that SERS include a spouse date of birth and other dependent information on the data to the extent available with CavMac making similar assumptions as noted above. Although any assumptions made by CavMac should only apply until the date of conversion.

New Disability Plan – After Conversion

Once a New Disability Plan member reaches their date of conversion, the benefit is re-determined in accordance with the applicable benefit formula and the member makes an election under the available forms of payment. COLA benefits received are also adjusted based on the converted retirement benefit versus the disability retirement benefit.

On the data, several fields are then updated:

- Benefit Type – is updated from disability to service
- Commencement Date – is updated from date of disability to conversion date
- Benefit amounts – all fields are updated to reflect converted retirement benefit

- Form of Payment – updated to reflect election made by the member
- Beneficiary information – updated to reflect the election made by the member
- Accumulated Contributions – unchanged from accumulated amount as of date of disability
- Service – updated to reflect period of disability

Based on the updated fields, CavMac is treating the converted New Disability Plan member as a service retirement. This can have two implications:

- The applicable mortality table used in developing the valuation liability is the healthy annuitant table.
- In the experience study, the tabulation of exposures and actual deaths would reflect converted disability members as healthy retirees rather than disability retirees.

By treating these members as healthy retirees, the liability for these members would reflect a longer life expectancy than anticipated by the disability mortality table. Furthermore, by including them as healthy retirees in the experience study, the average rate of mortality for healthy retirees would most likely provide the impression that it is higher for this group relative to a base table which could lead to underestimating the life expectancy for other “true” healthy retirees.

For members with a commencement date on or after April 1, 2018, the COLA is deferred until the 4th anniversary of commencement. Since the commencement date is updated to the conversion date, the actuarial programming may be deferring COLAs to a future date although the applicable date of commencement to receive COLA adjustments is the original date of disability.

Recommendation: We suggest SERS create a separate benefit type code of “C” for Converted Disability. This would then allow CavMac to treat these members as disability plan members for valuation and experience study purposes. We would also suggest that SERS include the first date a COLA would apply so that the change in the date of commencement does not result in CavMac assuming a COLA is deferred until a future date rather than immediately applicable. Although, if a benefit type code of C is provided, we believe it would be reasonable for CavMac to assume the COLA would apply immediately since the period of disability would almost always be longer than the COLA deferral period.

Benefit Calculation Review – Active Data

The following table describes the items reviewed for members who were reported with the active data in the June 30, 2021 actuarial valuation and retired subsequent to the valuation date.

	Benefit Calculation Review: Active Data	Milliman
1.	Benefits were generally computed accurately in the calculation based on the information contained in the calculation and were reasonable and consistent with the Handbook	✓
2.	Basic data information (date of birth, gender, date of hire) was provided accurately in the active data to the actuary	✓
3.	Total service credit was generally consistent with the active data (see discussion on other service credit)	✓
4.	Annual salary and final average salary were generally consistent with the active data (see discussion when final average salary is not based on last three years)	✓
5.	Employee contribution balance was generally consistent with the active data	✓

In our experience, this degree of matching indicates that high quality active data is being provided to the actuary by the System.

However, we did identify the following items in our review related to the active data. Some of these may be record keeping items with no impact on the calculation of benefits or liability and some of them may be considered to have an immaterial effect on the calculation of liability. Nevertheless, we have included all items that we identified for SERS to review and determine if any actions should be taken.

Other Service Credit

Members may receive service credit for employment with other governmental employers, including other Ohio statewide systems, such as STRS and OPERS. We found three instances for members who retired subsequent to the valuation date where the service credit in the actual calculations reflected service or earnings from STRS or OPERS. There was also 1 instance for a member who retired prior to the valuation date. The total service credited from these other systems ranged from 0.11 years up to 6 years of service. Note that one member did not receive any additional service credit but was credited with additional earnings from STRS. We are unsure if SERS receives service information from STRS or OPERS prior to retirement to provide to the actuary or if this service is not known until retirement. Either way, the value of the additional benefit due to this service or earnings is not reflected in the actuarial valuation until retirement.

Recommendation: We recommend SERS reviews its procedures for collecting and providing other system service to the actuary in the active data. We suggest a more detailed study be performed to understand the impact that this additional service and earnings can have on the actuarial valuation to determine if any additional loads should be incorporated into the process.

Final average salary

In our review of the calculation, we noticed numerous instances where the member's final average salary used in the calculation was based on earnings from an earlier time period. In other words, a member's final average earnings were based on earnings from 2014–2016 rather than from 2019 – 2021. In the valuation data, SERS provides a member's current year and prior year earnings on the active valuation data. In addition, CavMac incorporates earnings from prior valuation periods since 2013 onto the edited actuary data. It is our understanding that CavMac is utilizing this prior earnings information in the development of the projected final average earnings within the actuarial programming. We agree with this approach and recommend it continue.

Valuation Data Review

In preparing an actuarial valuation, the actuary will review the "raw" data provided by the plan sponsor and will "edit" the data as needed to complete missing data and/or to remove discrepancies. We requested and received a copy of the edited data from CavMac. Based on our understanding of the data provided to the actuary, we reviewed the edited data to review the reasonableness of interpretations, estimates and adjustments made in the data editing process.

A general review of the valuation data should include the following:

General Annual Data Review

1.	Compare data with prior year's data to ensure all records from prior year are accounted for	✓
2.	Prepare data reconciliation from prior year to current year and identify status changes, such as new members, terminations, retirements, deaths, etc. during the year (see discussion below)	X
3.	Compare data reconciliation with prior year reconciliation to identify trends and anomalies	X
4.	Interpreting the data fields appropriately	✓
5.	Determining the applicable records to be included in the actuarial valuation based on the various status codes	✓

Overall, we found CavMac's procedures to be reasonable and appropriate for the scope of the project and consistent with Actuarial Standard of Practice 23 - *Data Quality*. The following represent a few minor comments regarding the general data procedures employed by CavMac.

Data Reconciliation

We understand that a system as complex as SERS requires significant amount of data editing and review to understand movement in membership from one year to the next. However, identifying this movement in data is important in understanding the reason for actuarial gains and losses and continual review of actuarial assumptions, etc. Furthermore, it may be helpful in understanding when members change status such as disability to service retirement upon benefit conversion and members electing healthcare coverage upon becoming eligible for Medicare.

Recommendation: We recommend CavMac incorporate a data reconciliation in the actuarial valuation report for basic benefits and healthcare benefits. We believe this exercise may assist in understanding how disabled plan members are potentially provided as a service retirement in a subsequent valuation and the number of retirees who did not elect healthcare coverage at retirement but do so upon becoming eligible for Medicare.

<u>Data Review – Overall Data</u>

For a system as complex as SERS, a significant part of the valuation is ensuring that the data provided to the actuary is accurate and provides all information necessary to value all the benefits that could be payable upon future contingent events. In the prior section, our comments focused on data items verified against member's specific calculations. In this section, we provide commentary on the reasonableness of the data files provided to the actuary.

Data Review - Retiree Data

The following table describes the items reviewed for members who were reported with the retiree data in the June 30, 2021 actuarial valuation.

	Valuation Data Review: Retiree Data	**Milliman**
1.	Member's status is reasonable and consistent with other data fields in file	✓
2.	Basic data information (date of birth, gender, date of commencement) was reasonable	✓
3.	Relationship between the current monthly allowance including COLA and the base amount at retirement was reasonable; verified annuity for benefit associated with a rehired retiree did not increase with COLA	✓
4.	For members electing a joint and survivor benefit, the beneficiary information provided was reasonable	✓
5.	The member's accumulated contributions information is included on the data (see discussion below)	X
6.	For members receiving a New Disability Plan benefit, the benefit amount and date of conversion were reasonable, including the service credit and final	X

Valuation Data Review: Retiree Data		Milliman
	average compensation information to estimate the benefit at date of conversion (see discussion below)	
7.	For beneficiaries receiving the survivor portion of the retirement benefit, the benefit amount reflects the survivor percentage appropriately	✓
8.	Basic Healthcare data information (health plan information, Medicare eligibility, etc.) was reasonable	✓
9.	Basic Healthcare dependent data information (dependent type, date of birth, health plan information, Medicare eligibility, etc.) was reasonable	✓
10.	For Healthcare, percentage of premium to be paid by member is reasonable based on years of service provided	✓

While we believe that the System is providing the information accurate to the actuary, we did identify the following items in our review that were not incorporated in the edited data used by the actuary.

Accumulated Contributions

For members who elect the maximum single life annuity, a beneficiary may still be entitled to a death benefit equal to their accumulated contribution balance less the amount of payments received in retirement. For New Plan Disability members, the accumulated contribution balance is only reduced by benefits received after the date of conversion. While SERS is including this information, the data provided by CavMac did not incorporate this information as they indicated the balance is assumed to have been exhausted by date of death. For future retirees, it is our understanding that CavMac assumes that this death benefit is equal in value to approximately a 1-year certain.

Based on the information in the benefit calculations, we estimated that the average period for which a death benefit would be applicable is 40 months or 3.3 years by dividing the balance at retirement by the applicable retirement benefit. By individual, the range varies from 23 months (nearly 2 years) to 72 months (6 years).

Recommendation: Based on this analysis, we recommend that CavMac incorporate this benefit for current retirees. This feature also has a little more value than prior years since the COLAs are now deferred 3 years for employees who retire on or after April 1, 2018. In addition, the balance is only applied at date of conversion for New Plan Disability members.

We also recommend that CavMac increase its assumption for future retirees. We also note that members retiring after August 1, 2017 who do not qualify for the grandfathered benefits would either receive a lower benefit or decide to work longer than similar situated grandfathered members. Therefore, for these members, the number of years that this death benefit may be applicable would most likely be higher for non-grandfathered members than grandfathered members.

Disability Data

For New Disability Plan members, SERS provides the date of conversion and estimated benefit at this conversion date on the data. However, this information was not included in the valuation data provided to us by CavMac, and consequently we believe CavMac is assuming the current disability benefit would be paid for the member's lifetime.

Based on members who had their benefits converted between July 1, 2021 and June 30, 2022, we estimate that the average converted benefit is 87% of the disability benefit meaning that the liability held is higher than if the converted benefited was reflected.

Data Review - Active Data

The following table describes the items reviewed for members who were reported with the active data in the June 30, 2021 actuarial valuation.

	Valuation Data Review: Active Data	**Milliman**
1.	Basic data information (date of birth, gender), including adjustments for missing data, was reasonable	✓
2.	Salary information was reasonable including CavMac's adjustments to annualize salary for members hired within the last year	✓
3.	Employee contribution balance was generally consistent with service and compensation information	✓

Based on our review, we believe that CavMac is correctly reflecting the data provided by SERS into the actuarial valuation process.

Section II – Actuarial Valuation Methods and Procedures

In this section, we discuss the various actuarial methods used in the actuarial valuation to measure the plan's liabilities and funded status. Since the contribution rate paid by employers and its members is specified in statute, one of the purposes of the actuarial valuation is to determine if the contribution rate is adequate to fund the promised benefits. SERS also calculates a non-binding actuarially determined contribution rate calculated to pay off the unfunded liability over a closed period of 23 years in the June 30, 2021 pension actuarial valuation and an open period of 30 years in the June 30, 2021 healthcare valuation. In this section, we provide commentary on the reasonableness of the various methods employed in the actuarial valuations in determining these rates.

Asset Valuation Method

For the pension valuation, the asset valuation method recognizes the difference between the actual and expected investment income on the market value of assets based on the valuation return assumption over a period of four years. Additionally, the actuarial value of assets is limited to a 20% corridor, i.e., no less than 80% nor more than 120% of market value. The purpose of the asset valuation method is to reduce the impact that market volatility has on valuation results. We agree with the use of the asset valuation method and that four years is a reasonable period. Additionally, we find that this method is reasonable and consistent with the guidance provided in Actuarial Standard of Practice 44 - *Selection and Use of Asset Valuation Methods for Pension Valuations*.

We also reviewed the numerical calculation of the actuarial valuation of assets and found it to be accurate.

On the healthcare valuation, there is no separate asset valuation method as the market value of assets is used to determine the actuarially determined contribution rate. Since there is no specific actuarial funding goal, we believe the use of market value is appropriate.

Actuarial Cost Method

Both the pension and retiree healthcare valuations use the Entry Age Normal actuarial cost method to determine the cost of benefits accrued during the upcoming year (known as the normal cost) plus the value of benefits accrued for all years of past service (known as the accrued liability) as of the valuation date.

The purpose of any cost method is to allocate the cost of future benefits to specific time periods. Most public plans follow one of a group of generally accepted funding methods, which allocate the cost over the members' working years. In this way, benefits are financed during the time in which services are provided.

The Entry Age Normal actuarial cost method is the most common cost method used by public plans. The 2022 Public Fund Survey from the National Association of State

Retirement Administrators shows that about 90% of the retirement systems surveyed are using the Entry Age Normal cost method.

The focus of the Entry Age Normal cost method is the level allocation of costs over the member's working lifetime. For a public plan, this means current taxpayers pay their fair share of the pensions of the public employees who are currently providing services. Current taxpayers are not expected to pay for services received by a past generation, nor are they expected to pay for the services that will be received by a future generation. The cost method does not anticipate increases or decreases in allocated costs.

We find that the actuarial cost method used in both the pension and retiree healthcare valuations is reasonable and consistent with the guidance provided in Actuarial Standard of Practice 4 - *Measuring Pension Obligations and Determining Pension Plan Costs or Contributions* and Actuarial Standard of Practice 6 – *Measuring Retiree Group Benefits Obligations and Determining retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions.*

For GASB Statements Nos. 67, 68, 74 and 75, the Entry Age Normal actuarial cost method is the only permissible cost method for financial reporting purposes.

Funding Policy

As set in statute, SERS receives contributions from employers at 14% of payroll and employees at 10% of payroll for a total rate of 24% of payroll. The portion of employer contributions allocated to fund the basic pension benefits depends on the funded ratio of the pension plan with the remainder being allocated to the Health Care Fund in accordance with the following table. In addition, there is a surcharge of 1.5% of payroll received from employers for the Health Care Fund.

Funded Ratio	Basic Benefit Rate	Health Care Fund
Less than 70%	14.00%	0.00%
70% to 80%	At least 13.50%	0.50% or less
80% to 90%	At least 13.25%	0.75% or less
90% or Greater	Amount needed to fund basic benefits	Remainder of 14.00%

Although there is the possibility of some adjustment in the allocation of the contribution rate, SERS is basically funded on a fixed-rate basis. The Conference of Consulting Actuaries Public Plans Committee issued a white paper ("CCA White Paper") on model actuarial funding policies which include guidelines for amortizing the unfunded liability, but it only addresses situations where the contribution rates are set on an actuarial basis. The Committee is currently working on a paper specific to pension plans that have fixed contribution rates. The one comment made in the paper is retirement systems with fixed contribution rates should develop an actuarially determined contribution rate for comparison to the fixed rate. For SERS, a contribution rate is determined in both the pension and healthcare valuations. For the pension valuation, the actuarially determined rate is calculated to pay off the unfunded liability over a declining period of 23 years in the June 30, 2021 actuarial valuation.

In the healthcare valuation, the contribution rate is based on an open amortization period of 30 years, but the funding objectives for these benefits are slightly different. After satisfying the funding objectives for the basic benefits, the goal is to achieve a 20-year solvency period.

Actuarially Determined Employer Contribution Rate – Basic Benefits

We independently calculated the actuarially determined employer contribution rate and found the 12.50% of payroll rate determined by CavMac to be accurate based on the assets, liabilities, and payroll reported in the June 30, 2021 actuarial valuation. If 12.50% of payroll, combined with employee contributions, were the only contributions received by SERS, the funded ratio would be projected to be 100% in 2044 (23 years from the 2021 valuation date) if all assumptions are met. Since the current employer contribution rate of 14% exceeds 12.50%, the projected date would be earlier assuming the employer rate continues to be allocated 100% to basic benefits, although future experience will impact this date.

Actuarially Determined Employer Contribution Rate – Healthcare

We independently calculated the actuarially determined employer contribution rate and found the 2.46% of payroll rate determined by CavMac to be slightly different than our calculation based on the assets, liabilities, and payroll reported in the June 30, 2021 actuarial valuation. Please note that we calculated a total rate of 2.50%, which reflects a normal cost rate of 1.26% versus the reported rate of 1.22%. We believe the difference is that CavMac calculated the rate based on the normal cost dollars at the beginning of year rather than using the dollars adjusted to mid-year, which would have been consistent with the calculation of the unfunded liability rate and the calculation of the pension contribution rates.

Currently the only funding received by the healthcare trust is the 1.5% surcharge, which exceeds our calculation of the normal cost rate by 0.24%. If this was the only contribution rate, the amortization period is infinite. However, the funding goal on the healthcare trust is not necessarily to meet an actuarial funding goal, but rather to maintain solvency for at least a 20-year period.

Contribution Adequacy

Under statute, if the maximum contribution rate does not fund the basic benefits over a period of 30 years or less, the Board is required to take action to reduce the period to no more than 30 years. As of the June 30, 2021 actuarial valuation, the effective amortization period based on the current employer contribution rate of 14% is less than 20 years; however, it is possible that future experience could cause the amortization period to exceed 30 years at some point in the future. Allocating the maximum contribution rate of 14% to fund basic benefits reduces the likelihood of this occurring.

The actuarially determined contribution rate is based on amortizing the unfunded liability over a period that declines by one year with each valuation. As of the June 30, 2021 valuation, the period is 23 years which is longer than actuarial guidance (CCA White Paper model practices) would suggest for systems where the contribution rates are calculated on an actuarial basis. A long amortization period (if the contribution rate were based on that period) results in negative amortization, where the unfunded liability if projected to grow from year to year. However, under the fixed maximum SERS contribution rate, which is greater than the actuarially determined rate, negative amortization is not currently occurring, and the unfunded liability is projected to decrease in the year following the June 30, 2022 actuarial valuation (if all assumptions are met). We believe that moving toward a shorter amortization period for use in the calculation of the actuarially determined contribution rate is appropriate in determining the portion of the contribution allocated to pension and healthcare and provides valuable information to stakeholders.

There will always be a competition between providing strong funding to the system and having reasonable contribution rates. We believe that SERS's funding policy strikes a reasonable balance between the two.

Recommendation: The valuation report does not report the effective amortization period for comparison to the 30-year statutory minimum requirement. We suggest consideration be given to either adding this metric to the valuation report or simply making a statement that the 30-amortization requirement is or is not met (the requirement was satisfied in the most recent valuation).

For the healthcare valuation, there are many changes that can be made to the underlying health benefits to assist with meeting the funding goal of maintaining solvency for at least a 20-year period. These items include modifying the premiums, copays, deductibles, etc. on the underlying health plans. Based on projections included in the June 30, 2021 actuarial valuation, the trust is to remain solvent for 37 year period until 2058, which was an increase from the prior valuation of three years. However, in the actuarial valuations from 2017 – 2019, the fund balance was anticipated to be exhausted prior to the 20 year stated period.

While we agree that displaying a minimum contribution rate based on a 30-year amortization period provides some context for determining the adequacy of the 1.5% surcharge, we would suggest greater focus be incorporated into the health care fund balance projections.

Recommendation: We suggest an exhibit be included in the report displaying the projected benefits out of the fund and reasons for changes in the solvency period from one year to the next be incorporated into the report commentary.

Normal Cost Rates by Group

Unreduced retirement eligibility varies for members who had completed 25 years of service as of August 1, 2017 or have not. Members who have met the criteria would have a higher normal cost rate, all else being equal, and would be replaced by members with the later retirement conditions.

Recommendation: We recommend that the normal cost rates be reported for each group to understand the relative difference in the Plan provisions.

Section III – Actuarial Valuation Assumptions

Selection of Actuarial Assumptions

The purpose of the actuarial valuation is to analyze the resources needed to meet the current and future obligations of the System. To provide the best estimate of the long-term funded status of the System, the actuarial valuation should be predicated on methods and assumptions that will estimate the future obligations of the System in a reasonable manner.

An actuarial valuation uses various methods and two different types of assumptions: economic and demographic. Economic assumptions are related to the general economy and its long-term impact on the System, or to the operation of the System itself. Demographic assumptions are based on the emergence of the specific experience of the System's members.

Choosing actuarial assumptions is highly subjective. It is unlikely that any two actuaries, given the same set of experience statistics, would arrive at exactly the same set of actuarial assumptions for any system as complex as SERS. Even allowing for the minor variations that occur because of the variability of the underlying statistics and possible data anomalies, differences among actuarial approaches will occur in analyzing trends. Some actuaries prefer to match the results of recent experience very closely in setting future assumptions, while other actuaries will use recent experience as a guide but tend to change existing assumptions gradually over time. Valid arguments can be made for either approach.

We will comment on the demographic and the economic assumptions recommended in the Experience Study for the Five-Year Period Ending June 30, 2020 and used in the June 30, 2021 annual basic benefits valuation and the retiree health care valuation. We will provide commentary and make suggestions to be considered for future experience studies.

Economic Assumptions

Overview

In our opinion, the packages of economic assumptions used in the June 30, 2021 valuations of annual basic benefits and retiree health care are reasonable.

Inflation

Inflation, as referred to here, means price inflation. The inflation assumption has an indirect impact on the results of the actuarial valuation through the development of the assumptions for investment return and wage growth. It has a direct impact on the valuation results to the extent it affects the COLA increase assumption.

There is expected to be a long-term relationship between inflation and the investment return assumption. The basic principle is that the investors demand a “real return” – the excess of actual investment returns over inflation. If inflation rates are expected to be high, investors will demand expected investment returns that are also expected to be high enough to exceed inflation, while lower inflation rates will result in lower demanded expected investment returns, at least in the long run.

As CavMac discussed in their experience study report, since the U.S. Treasury started issuing inflation-indexed bonds (TIPS), it is possible to determine the approximate rate of inflation anticipated by the financial markets by comparing the yields on inflation-indexed bonds with traditional fixed government bonds. As of December 31, 2020, the end date of the experience study, the yield for both the 20-year and 30-year inflation-indexed Treasury bonds implied inflation was about 2.0% per year. Recently (end of November 2022), the implied inflation has increased to 2.5% and 2.3% for 20- and 30-year periods respectively.

Another source for a long-term inflation forecast is the expected increase in the CPI by the Office of the Chief Actuary for the Social Security Administration. Consistent with timing of the experience study, in the 2020 Trustees Report, the projected ultimate average annual increase in the CPI under the intermediate cost assumptions was 2.40%. This is unchanged in the 2022 Trustees report.

Although assumptions should not be set based on what other systems are doing, it is informative to see how SERS compares. According to the National Association of State Retirement Administrators (NASRA) Public Fund Survey (a survey of approximately 200 large municipal and statewide systems), the median inflation assumption for statewide systems was 2.50% as of 2020 and 2022. Please note that inflation has increased dramatically since the 2021 valuation, but long-term inflation is not anticipated to be significantly different than the 2.4% assumption although it is expected to be higher in the very near-term. For use in the June 30, 2021 actuarial valuation, we believe that a 2.40% price inflation assumption was reasonable.

COLA Assumption

The rate of the annual Cost-of -Living Adjustment (COLA) is the annual rate of increase in the Consumer Price Index, but not less than 0% and capped at 2.5%. The assumption was lowered from 2.5% to 2.0% at the time of the experience study to reflect the lower inflation assumption. Note that the COLA assumption only applies once a retiree becomes eligible for the COLA which is on their anniversary of their retirement date if they retire prior to April 1, 2018 or on their 4th anniversary of their retirement date if they retire on or after April 1, 2018.

In developing the recommended annual COLA assumption, CavMac stochastically modeled the distribution of expected COLAs using the 2.40% assumed rate of inflation and an annual standard deviation in rates of inflation of 1.75%. Their calculated average rate of COLA over a 30- year period was 1.85%, and they recommended using 2.00% to maintain a margin above the modeled average COLA. We confirmed their calculation of 1.85% was accurate and agree that the current 2.00% annual COLA assumption is reasonable. Due to short-term higher levels of inflation, some actuaries may wish to reflect a higher short-term assumption. However, with the 2.5% cap on COLA adjustments, we do not believe it is necessary for SERS.

Wage Inflation

As noted in the CavMac experience study report, wage inflation consists of two components, 1) a portion due to pure price inflation (i.e., increases due to changes in the CPI), and 2) increases in average salary levels in excess of pure price inflation (i.e., increases due to changes in productivity levels, supply and demand in the labor market and other macroeconomic factors) referred to as real wage growth. CavMac cites the 2020 Social Security Trustees Report which has a wage inflation assumption exceeding the price inflation assumption by 0.52% to 1.76%. CavMac indicated they favored the lower end with a recommendation of 0.85%, which was adopted for use in the valuation. We believe the resulting 3.25% (2.40% price inflation plus 0.85% real wage growth) wage growth assumption used in the June 30, 2021 valuation is reasonable.

Payroll Growth

The annual payroll growth assumption used in the amortization of the Unfunded Actuarial Accrued Liability, which is part of the calculation of the actuarially determined contribution, is equal to 1.75% in the June 30, 2021 actuarial valuation. Typically, the payroll growth is equal to the general wage growth assumption, although analysis for the individual system should be done. In the experience study, CavMac notes that recent experience has shown payroll increases have averaged less than 2%. CavMac's open-group projections are also forecasting future increases less than 2%, so they recommended the lower 1.75% assumption which was adopted. We believe this assumption is reasonable.

Salary Increases due to Merit & Promotion

CavMac studied merit and promotion pay increases by length of service. We agree that length of service is generally the best predictor of future merit increases. Based on CavMac's analysis, they recommended adjustments to the prior rates: reductions in assumed increases with service of 5 years of less and higher increases for members with 10 or more years of service. Overall, the recommended rates appear reasonable based on the reported experience. We do note that no merit increases are assumed after 17 years of service. Typically, we observe some merit or promotion increases throughout a member's career in our public sector clients, although we believe it is reasonable to assume that non-teacher school employees have different salary patterns than other public sector employees. For 18 years or later, the observed increase for SERS was a non-zero increase (+0.23%), so we think this assumption should be monitored going forward. We suggest consideration be given to studying merit increase over a longer period (10 years or more) in future experience studies, as isolating merit increases from general wage increases can cause variations when viewed over a shorter period.

Over the next few years, salary increases are expected to be higher due to the current inflation levels. This could potentially lead to actuarial losses as salary increases exceed that expected. Alternatively, some actuaries may wish to reflect higher salary increases in the near-term. While we do not feel such an assumption is necessary at this time, if such an assumption is considered we suggest the actuaries consider how the assumption would apply for time periods prior to the valuation date in context of determining the actuarial accrued liability and normal cost under the Entry Age Normal cost method as sometimes near-term assumptions can have unintended consequences depending on how it is applied.

Administrative Expenses

The investment return is assumed to be net of administrative and investment expenses. CavMac analyzed actual administrative expenses over the past 5 years and recommended a long-term administrative expense ratio of 0.22%. We believe this is a reasonable assumption.

Investment Return

The investment return assumption is one of the primary determinants in the calculation of the expected cost of SERS' benefits, providing a discount of the estimated future benefit payments to reflect the time value of money. This assumption has a direct impact on the calculations of actuarial accrued liabilities, normal cost rate, and the actuarially determined contribution rate. The discount rate is the rate used to discount future benefit payments into an actuarial present value. The traditional actuarial approach used for public sector funding sets the discount rate equal to, or approximately equal to, the expected investment return over a long time horizon.

To develop an analytical basis for assessing the investment return assumption, CavMac relied on forward looking long-term capital market assumptions developed by Wilshire (SERS' investment consultant) and also considered those of other investment consultants by doing separate analysis using the capital market assumptions in the *Survey of Capital Market Assumptions: 2020 Edition* published by Horizon Actuarial Services, LLC. Based on SERS' target allocation, these analyses showed median expected real returns (real return is the expected return in excess of inflation) of 4.38% for Wilshire with a 30-year time horizon and 5.26% for Horizon with a 20- to 30-year time horizon. CavMac took the average of these two estimates to come up with an expected real return of 4.82%.

Combining the inflation assumption of 2.40% and the 4.82% expected real return and netting the assuming administrative expenses of 0.22%, CavMac calculated an expected return of 7.00% (2.40% + 4.82% - 0.22%) and recommended this for use as the investment assumption. Based on this recommendation, the assumption was decreased from 7.50% in the June 30, 2019 actuarial valuation to 7.00% for the June 30, 2020 actuarial valuation. The 7.00% assumption was also used for the June 30, 2021 actuarial valuation.

We find the analysis and recommend assumption reasonable and have the following additional comments.

- **Independent Milliman Analysis**: We performed additional analysis on the investment return assumption as of June 30, 2021 using Milliman capital market assumptions. Our analysis shows a 30-year expected median return of 6.86%, which is very similar to the Wilshire analysis noted in the report of 6.81%. After applying the decrease due to administrative expenses of 0.22%, our calculation of 6.64% is somewhat below the current assumption. It should be noted that although our estimated expected return is less than the current 7.0% assumption, the difference is not enough that we would say it is unreasonable. Also, our analysis is based on our understanding of SERS' assets which is not as extensive as Wilshire's.

- **Assumption Review Timing**: If warranted by the actuary's analysis, a detailed off-cycle review should be presented to the Board for consideration. This type of off-cycle review allows for smaller adjustments more often than larger adjustments that may take place after a 5-year period. While a system wants to avoid frequent changes in assumptions due to short-term fluctuations, if it waits until the end of a 5-year period, large changes in the assumption may be politically and/or economically more difficult to implement, and the assumptions have the potential to fall out of compliance with actuarial standards of practice.

- **Time Horizon**: CavMac analysis is based on a 30-year expected return (or 20 to 30 years in the cased of the Horizon Survey). Traditionally, actuaries have focused on the long term. We do note that in a typical public sector plan, close to two-thirds of the present value of benefits for current members is paid out in the next 20 years. That means that returns in years 20 to 30 have a relatively small impact on the current liabilities of SERS, but CavMac is giving them equal weighting to returns in the next 10 years which have a much more significant impact on the liabilities for current members. We would suggest consideration be given to the impact of different time horizons or reflecting actual cash flows when the expected return is analyzed in the future.

- **Investment Expertise**: Given Wilshire has specific expertise with SERS investments and not all of SERS asset classes are reported in the Horizon Survey, consideration should be given in the future to giving more weight to Wilshire's expected return. Timing of the Horizon Survey can also have an impact on differences with SERS' investment consultant. The Horizon Survey is typically published in August reflecting capital market assumptions as of January 1 whereas Wilshire's assumption may be more reflective of capital markets as of June 30. While most years this timing difference is not significant, there can be situations where they can be significantly different, such as 2022.

- **Recent Changes in Investment Environment**: Our commentary has focused on the assumption in relation to the time of the experience study and use in the June 30, 2021 valuation. However, driven by increasing fixed income yields and lower price-to-earnings ratios, capital market assumptions have increased significantly as of June 30, 2022, as compared to a year ago. Based on Milliman's capital market assumptions as of June 30, 2022, the 30-year median return would increase by nearly 70 basis points from Milliman's 2021 expected return. We would not suggest modifications to the investment return assumption at this time, but as noted above, we do recommend an off-cycle review be presented to the Board if it is determined by the actuary that that a change should be considered prior to the next experience study.

Demographic Assumptions

Overview

Actuarial Standard of Practice (ASOP) No. 35 governs the selection of demographic and other noneconomic assumptions for measuring pension obligations. ASOP 35 states that the actuary should use professional judgment to estimate possible future outcomes based on past experience and future expectations, and select assumptions based upon application of that professional judgment. The actuary should select reasonable demographic assumptions in light of the particular characteristics of the defined benefit plan that is the subject of the measurement. A reasonable assumption is one that is expected to appropriately model the contingency being measured and is not anticipated to produce significant cumulative actuarial gains or losses over the measurement period.

We found that the methodologies used to prepare the experience study were appropriate and that the assumptions developed comply with the guidance provided by ASOP 35. We have offered a few suggestions for considerations in future experience studies. The ultimate purpose of any actuarial experience study is to provide a basis for setting the actuarial assumptions for future valuations. We believe that the statistical analysis included in the CavMac experience study report and the resulting recommendations are reasonable.

Annuitant Mortality Assumption

Please note that our comments are based on the assumption in place as of June 30, 2021, and do not reflect any potential adjustments or comments due to the Covid-19 pandemic.

Mortality rates are used to project the length of time benefits will be paid to current and future retirees and beneficiaries. The selection of a mortality assumption affects plan liabilities because the estimated value of retiree benefits depends on how long the benefit payments are expected to continue. There are clear differences in the mortality rates by gender and non-disabled versus disabled retired members.

We reviewed CavMac results for the probability of death for healthy and disabled retired members and found them to be reasonable and generally consistent with the methods we usually recommend. We have the following observations, but we have no recommended changes; however, we believe the approach in setting the contingent mortality should be reviewed with the next experience study.

1. **Benefit Weighting**: We recommend mortality rates be studied on either benefits-weighted or liability-weighted basis. Analysis has shown that higher benefit/liability retirees tend to live longer than lower benefit/liability retirees. CavMac uses a benefit-weighted approach in their mortality analysis to account for this relationship; we agree with this approach.

2. **New Mortality Tables**: The Retirement Plans Experience Committee (RPEC) of the Society of Actuaries ("SOA") issued the "Pub-2010" family of static base mortality tables in 2019. The 2010 in the title refers to the central year of collected study data. These are the first tables published by the RPEC based solely on public sector experience. The Pub-2010 tables, with customization to SERS retiree experience, were recommended in the experience study are being used in the valuation; we agree with the use of these tables.

3. **Contingent Survivor Mortality**: The analysis of contingent survivor mortality experience reflects the experience of survivors where the member has previously died, and the survivor is now receiving payments. That is, it excludes contingent beneficiaries where the retiree is receiving the payment and no pension benefit is currently being paid to the contingent beneficiary. We caution against using the experience of the in-payment survivors to set the assumption for the not-in-payment contingent beneficiaries, as studies have shown in-payment survivors have materially higher mortality rates. This is often referred to as the "grieving widow effect." This could also impact the development of the actuarial equivalent factors for retirees electing a joint and survivor annuity. Assuming a shorter life span for a beneficiary will reduce the cost of these options and produce a larger relative benefit.

4. **Disability Mortality**: In reviewing the data used in the experience study, the age bands with the most weighted disability deaths are ages 60 - 70 whereas the age bands with the most weighted deaths for the service retirements are ages 80 - 89. We believe this is due to the fact that New Disability Plan members are converted to a service retirement and reflected in the healthy annuitant experience rather than in the disabled annuitant experience. For the next experience study, we suggest a review of the data to determine what service retirements were due to converted disability retirements and categorize them appropriately. We also caution on the use of adjustments and set forwards that increase the rates of mortality for a group that is only partially credible.

5. **Applicable Mortality for Healthcare Benefits**: For healthcare benefits, mortality would not typically reflect benefit weighting as the liability is not based on benefit amount. For healthcare benefits, we suggest consideration be given in the experience study to incorporating an analysis on the number of deaths as compared to the headcount-weighted version of the Pub-2010 mortality tables. We would anticipate that use of headcount-weighted tables would produce a lower liability in the healthcare valuation.

   As with the basic benefits, we would caution against using the contingent survivor mortality for dependents of current retirees. This could have a greater impact on the liabilities of the healthcare valuation since benefits are provided to dependents while the retiree is alive.

6. **Pandemic Impact**: In the US, there was a significant increase in mortality rates in second quarter of 2020 through the first quarter of 2022, which were likely driven by the pandemic and may not be indicative of future experience. For purposes of the experience study, CavMac made no explicit adjustment for this. Since only the last quarter of the study overlapped with the higher mortality period, the impact on the results should have been relatively small. We do note that even including this experience, the actual experience during the study period was less than expected based on the prior assumption.

Pre-Retirement Mortality

CavMac notes that active mortality experience during the study period was not sufficient to be credible. Therefore, they recommended using a standard table, the Pub-2010 General Amount Weighted Below Median Employee mortality table. We believe this is a reasonable assumption.

Mortality Improvement Scale

It is difficult to predict how much future mortality will improve compared to mortality today. The SOA has created projections of mortality improvement in “MP” (Mortality Projection) tables that are updated annually. The valuation uses the 2020 version of the MP scale, as it was the most recent table as of the last experience study. The table projects small declines in the base mortality rates over time and is often referred to as the “generational” approach, as each generation is projected to live longer than the previous generation. We strongly support the use of generational mortality and believe the table being used is reasonable.

Withdrawal

We reviewed the rates of withdrawal (probability of leaving active employment for reasons other than service retirement, death or disability). The current assumption varies by length of service, with members early in their career (low levels of service) having higher probabilities of withdrawing than members later in their career (higher levels of service). We agree that service level is generally the most significant factor in projecting withdrawal rates.

Based on CavMac’s analysis, the withdrawal rates proposed in the experience study and used in the June 30, 2021 valuation are aligned with actual experience, and the assumptions appear reasonable.

According to the experience study, CavMac uses a liability-weighted approach in their analysis:

> *As a result, we liability weighted the experience to better reflect the impact of the current assumption on liability measures. The liability is approximated by using the member’s compensation and years of service to estimate the member’s benefit level. The exposure and actual occurrences are then multiplied by the benefit level to provide the liability-weighted experience.*

However, the analysis presented in the report appears to be compensation weighted. That is, the actual occurrences appear to be multiplied by compensation, not benefit level. Because the analysis is separated by service level, we do not believe this difference materially affects the analysis. The two methods (liability weighted and compensation weighted) result in different aggregate results. For example, a liability-weighted approach would provide a higher weight to older members since they will be closer in age to commencing their benefit and liability-weighting in a healthcare valuation would be significantly different than a pension valuation with benefits based on compensation. Regardless, the recommendations of the withdrawal rates by service level closely represent the actual experience on this basis; our conclusion is that the withdrawal assumption is reasonable.

While we believe setting rates of withdrawal based on weighting the results by compensation is reasonable, we believe it would be useful for the report to include the results by number as well. This will help the readers understand the impact of compensation weighting.

The withdrawal assumptions are higher than a typical public sector retirement system, especially for longer-service members; however, this relationship is consistent with our observations of other school employee retirement systems where certificated teachers are not covered.

In addition to the probability a member withdraws from active employment, an assumption must be made as to whether that member will take a refund of their contributions upon withdrawal or keep their contributions with SERS and receive a deferred monthly allowance at a later date. No mention of any analysis on this assumption is included in the experience study, and no assumption for the probability of refund is disclosed in the valuation report. We would recommend that CavMac disclose this assumption in future valuation reports and consider including an analysis of this assumption in future experience studies.

Rates of Service Retirement

The valuation includes separate retirement assumptions depending on whether the member is eligible to retire prior to August 1, 2017 to reflect the different benefit and eligibility provisions before and after this date. The retirement assumption is further differentiated by whether the member is eligible for reduced or unreduced benefits and whether it is their first year of eligibility for an unreduced benefit.

First eligibility for unreduced retirement benefits is determined to be the first age that meets the conditions for normal retirement as shown in the following chart:

Normal Retirement Eligibility	
Grandfathered	**Non-Grandfathered**
Age 65 with 5 Years of Service	Age 67 with 10 Years of Service
30 Years of Service	Age 57 with 30 Years of Service

In the experience study, CavMac groups all members who meet the above retirement eligibility conditions together, with separate analysis by grandfather eligibility. In our experience, we find that members who attain the service condition for retirement, even if after the age condition for normal retirement, experience a greater rate of retirement than members who just reach the age condition. For example, members age 65 and older who attain 30 years of service would retire at a greater rate than members age 65 and older with less than 30 years of service even though they are both eligible for an unreduced retirement.

We believe this could be one reason that experience for non-grandfathered participants is lower than grandfathered participants at ages 68 and older even though the benefits received would be the same by service. CavMac set the assumption for non-grandfathered participants at nearly half the rate of the grandfathered participants at these ages. We recommend that the next experience study review experience by service even after meeting the age requirement for normal retirement.

For early retirement, CavMac separates the experience for members with at least 25 years of service and less. Based on our experience, surprisingly the rates of early retirement for members with at least 25 years of service is much less than those with less than 25 years. The rates set by CavMac do reflect the actual experience of the group.

As experience for the non-grandfathered group is not yet fully observable, CavMac made adjustments based on professional judgement. We believe the rates used for this group are reasonable for these age / service conditions that are not fully observable.

Based on the analysis shown in the experience study, we noticed that there were significant changes made to the valuation assumptions. The following table displays the actual to expected ratios of the current assumption that was in effect in the 2020 valuation to the proposed assumption that was adopted for the 2021 and later valuations. An actual to expected ratio of 1.0 means that the experience matches that expected by the assumption. A ratio of more than 1.0 indicates that members are retiring at greater rates than expected and less than 1.0 indicates that members are retiring later than expected.

Retirement Experience for Grandfathered Members
Reported in 2020 Experience Study
Actual to Expected Ratio

	Current (Pre-2021)	Proposed 2021+
First Eligibility for Normal Retirement	1.42	0.92
Subsequent to First Eligibility	1.17	0.93
Early Retirement	2.65	1.01

Based on the experience study, actual retirement experience was greater than that expected anywhere from 17% greater for normal retirement subsequent to first eligibility to 165% greater for early retirement. The proposed assumptions resulted in higher rates of retirement to bring the actual expected ratios much closer to 1.0. While the proposed assumptions appear to be reasonable based on this 5-year period of experience, we do wonder if there were any events during this period that may have caused the actual experience to be that much higher than expected or if this was the result of weighting the assumption by compensation level for the first time.

Neither the valuation report nor the experience study appears to disclose an assumption for when deferred vested members commence. We recommend the assumption and rationale be added to future reports.

Disabilities among Active Members

The assumptions for rates of disability from active status vary by age and gender. In the experience study CavMac recommended rates that were greater than indicated by the experience to maintain a margin to account for the significant increase in costs when disabilities occur. This means that the valuation is anticipating a greater number of disabled members than expected. We believe this could be due to two possible reasons:

- **Disability Lag:** It is has been our experience that there is often a lag between when a member leaves active employment and when they are approved for a disability retirement, so not all disability retirements may be included in the experience study. We would suggest that future studies attempt to adjust for the reporting lag.

- **Disability benefit is not requested:** There are situations where a member may become disabled, but may not apply for disability:

  - Members with less than 5 years of service are not eligible and therefore if these members terminate employment due to disability would most likely be categorized as a termination. As such, we would recommend not applying the rates of disability prior to the member reaching the eligibility requirement.

  - Once a member has accrued a retirement benefit in excess of 75% (34 years of service) for Old Disability Plan members and 60% for New Disability Plan members (28 years of service), the member is more likely to elect a service retirement pension rather than disability retirement. We would recommend that the rates of disability be studied excluding these members.

  - Once a member reaches a certain age, disability benefits are no longer eligible (age 65 for Old Disability Plan members and age 70 for New Disability Plan members). We would recommend that the rates of disability be studied excluding these members.

The rates of disability used in the actuarial valuation do decline once a member attains age 60, which most likely account for the situations noted above. However, actual rates of disability would not necessarily decline; just the election of a disability benefit would decline. If the above situations are accounted for, we would not expect the rates to decline.

Medicare Part B

The Medicare Part B subsidy of $45.50 is paid to each recipient of a service retirement benefit, disability recipient or a survivor who had at least 10 years of service. For members who elect a joint and survivor annuity, the benefit continues to be paid to the spouse upon death of the retiree. For the pension benefits, the election of a joint and survivor annuity would have the same present value as the value of a single life annuity. For the Medicare Part B continuation, this provision effectively provides the retiree with a subsidized 100% joint and survivor annuity for any member who elected a joint and survivor annuity. We recommend that CavMac review the percentage of members who this may apply to and incorporate in future actuarial valuations.

<u>Retiree Healthcare Assumptions</u>

Many of the assumptions used in the valuation of basic benefits are also used in the valuation of health care benefits. Additional assumptions used in the June 30, 2021 retiree health valuation are discussed below. Actuarial Standards of Practice No. 6 (ASOP 6) provides guidance to actuaries measuring retiree group benefit obligations.

Age-Specific Claims Costs

Section 3.7.7 of ASOP 6, provides that the actuary use age-specific costs in the development of the per capita costs. The ASOP 6 practice note dated March 2021 notes that Medicare Advantage (MA) and Medicare Advantage Prescription Drug (PDP) Plans have a relatively flat age and gender curve after federal payments. Based on ASOP 6 and the ASOP 6 practice note, we recommend CavMac consider the following:

- Utilizing MA and PDP specific aging factors to develop per capita costs to reflect the flat age and gender curve. Alternatively, the ASOP 6 practice note also supports the practice of not age-rating per capita costs for these types of plans.

In addition, although not required under ASOP 6, Milliman generally recommends age, gender, status (spouse or retiree) specific factors to develop aged costs.

To review the reasonableness of CavMac's assumptions, we determined the aging factors using Milliman's Healthcare Cost Guidelines ™ for the MA Plan and Aetna Choice POS II (Pre-Medicare) for medical and the Express Scripts prescription drug plan. Based on information provided by SERS, the majority of retirees participate in these plans. Based on this comparison, CavMac's aging factors are higher than what Milliman would recommend for both Medicare medical and prescription drug. CavMac's age curves anticipate that MA and PDP costs would increase with age while Milliman generally expects MA and PDP costs to remain relatively flat across age bands.

In addition, we recommend that CavMac consider developing separate aging factors for the Aetna Traditional Choice plan as we would expect the aging factors for this plan to be different than the factors used for the MA plan.

Healthcare Trend on Claims Costs

In setting trend rates ASOP 6 provides the following guidance under Section 3.12:

- "The actuary should consider separate trend rates for major cost components such as hospital, prescription drugs, other medical services, Medicare integration, and administrative expenses. Even if the actuary develops one aggregate set of trend rates, the actuary should consider these cost components when developing the aggregate set of trend rates."

- When developing a long-term trend assumption and the select period for transitioning, the actuary should consider relevant long-term economic factors such as projected growth in per capita gross domestic product (GDP), projected long-term wage inflation, and projected health care expenditures as a percentage of GDP. The actuary should select a transition pattern and select period that reasonably reflects anticipated experience.

Based on ASOP 6, we recommend CavMac consider the following:

1. The Medicare Advantage (MA) and prescription drug cost components in developing Medicare trends due to the different structures of the MA plan (fully insured Medical) and prescription drug plan (self-insured Medicare).

2. The time to the ultimate rate for both pre-Medicare and Medicare. The time to ultimate rate is inconsistent for pre-Medicare and Medicare. In addition, CavMac reaches the ultimate rate sooner for Medicare than Milliman normally recommends to its clients.

3. Relevant long-term economic factors, including considering health costs share of GDP.

To illustrate the impact of these considerations, we developed trend assumptions incorporating the Getzen model developed by the Society of Actuaries (SOA). The Society of Actuaries (SOA) developed and regularly updates this long-term medical trend model based on detailed research performed by a committee of economists and actuaries, which included a representative from Milliman. Milliman uses this model as the foundation for the trend that it recommends to our clients for postretirement medical valuations, with certain adjustments designed to produce trends that are appropriate for employer plans. These adjustments include incorporating assumed administrative cost trend where applicable and removing the impact of age-related morbidity (since age-related morbidity assumptions are applied separately in the valuation when applicable).

Ultimate rates were determined considering historic and projected rates of real growth, long-term inflation and additional growth attributable to technology, and medical costs as a component of gross domestic product (GDP).

A summary of the cumulative impact on the liability of the difference between the actuary's trend assumptions and Milliman's assumptions is shown below.

Comparison of Cumulative Healthcare Trend Based on Milliman's Model vs CavMac		
Duration from Valuation Date	**Pre-Medicare**	**Medicare**
5	-4.6%	2.7%
10	-5.0%	4.0%
20	-3.7%	5.4%

Based on this analysis, Milliman would determine a liability lower by 4% - 5% for pre-Medicare benefits and higher by 4% - 5% for Medicare-eligible benefits.

Based on information provided by SERS, the majority of retirees participate in the Aetna Medicare Plan (PPO) (MA) and Aetna Choice POS II (Pre-Medicare) for medical and participate in the Express Scripts prescription drug plan. The discussion above primarily focuses on these plans. CavMac should also consider developing trends for the Aetna Traditional Choice plan separate from the MA plan trends used in the valuation, as this is not a MA plan and has different cost components.

Retiree Contributions

To estimate the portion of the premium paid by the member, CavMac uses a weighted average of current premiums, separately for current retirees and future retirees, based on actual health plan elections for current retirees and assumed elections upon retirement for future retirees. This methodology is consistent with how the per capita claims costs are developed and applied in the actuarial valuation. This methodology does not reflect the actual elections made by current retirees on an individual basis. We believe this methodology is reasonable, although we suggest that CavMac monitor the elections of the current retirees to make sure that older retirees, with lower life expectancies, are not impacting the reasonableness of the average elections being utilized.

Participation Assumptions

Upon retirement, SERS subsidizes the cost of healthcare coverage by covering a portion of the premium. The portion covered by SERS increases based on years of service and thus the member's portion decreases based on years of service. The percentage also varies on whether the event is a service retirement or a disability retirement. Since members may be eligible for healthcare coverage outside of SERS, not all members elect coverage through SERS. Furthermore, pre-65 members who do not elect coverage upon retirement may elect coverage upon becoming eligible for Medicare. In addition, members may also elect coverage if any other healthcare coverage is involuntarily terminated.

CavMac developed election percentages that vary by years of service at retirement and by retirement type. Furthermore, a greater percentage is assumed for members reaching eligibility for Medicare which reflects the fact that members who initially waived coverage do elect coverage upon becoming eligible for Medicare.

While a greater percentage of future retirees is assumed to elect coverage upon becoming eligible for Medicare, no assumption is made for current retirees who are under age 65 and may elect coverage upon becoming eligible for Medicare. For example, the participation assumption for a member with 25 years of service is 50% upon retirement and 75% upon becoming eligible for Medicare. Meaning that 50% of the members elect coverage upon retirement for life, 25% elect coverage beginning at eligibility for Medicare and 25% would not elect any coverage. Therefore, for retirees who are under age 65 who have not elected coverage, we would expect that half (25% / 50%) of them would elect coverage upon becoming eligible for Medicare. Currently no liability is held for these members.

We recommend SERS and CavMac review current retirees who are under age 65 to determine how they should be incorporated into the healthcare valuation.

Disability Coverage

When a member qualifies for a disability benefit from SERS, they may also qualify for a disability benefit from Social Security once disabled for 6 months. If qualify for a Social Security disability, the individual would qualify for Medicare if remain disabled after 24 months. Once eligible for Medicare, health claims payable by insurance carrier are reduced significantly as Medicare becomes the primary payor. In the healthcare valuation report, 15% of future disabled retirees are assumed to become eligible for Medicare. In the retiree data, SERS indicates those members receiving the Medicare Part B subsidy. In reviewing the percentage of less than age 65 disabled members who have been retired more than two years, we found the percentage receiving the Medicare Part B subsidy to be 40%.

We suggest that SERS and CavMac review the percentage of members on disability who qualify for Medicare. We also suggest that CavMac specify how this would impact the future claims costs valued in the valuation program.

Section IV – Actuarial Valuation Report

Actuarial Standards of Practice

We have reviewed the June 30, 2021 actuarial valuation reports from the perspective of serving as an actuarial communication and Statement of Actuarial Opinion (SAO). There are a number of Actuarial Standards of Practice (ASOPs) that apply to the development of the valuation results and the preparation of the actuarial valuation report. We have found that the valuation report is in compliance with the applicable ASOPs (see below), but we have identified several suggestions for consideration for future valuation reports.

The following ASOPs are applicable to pension actuarial reports:

- ASOP 4: Measuring Pension Obligations and Determining Pension Plan Costs or Contributions
- ASOP 6: Measuring Retiree Group Benefits Obligations and Determining retiree Group Benefits Program Periodic Costs or Actuarially Determined Contributions
- ASOP 23: Data Quality
- ASOP 27: Selection of Economic Assumptions for Measuring Pension Obligations
- ASOP 35: Selection of Demographic and Other Noneconomic Assumptions for Measuring Pension Obligations
- ASOP 41: Actuarial Communications
- ASOP 44: Selection and Use of Asset Valuation Methods for Pension Valuations
- ASOP 51: Assessment and Disclosure of Risk Associated with Measuring Pension Obligations and Determining Pension Plan Contributions
- ASOP 56: Modeling

Review of Compliance with the ASOPs and Suggestions for Future Reports

ASOP 4: This ASOP provides guidance to actuaries when preparing pension valuations, as well as certain other SAOs. The ASOP requires the actuary to include a number of items in the actuarial report, including the purpose of the measurement, summary of plan provisions, data and actuarial methods and assumptions, as well as certain additional information. The valuation report appeared to include the required information.

ASOP 6: This ASOP provides guidance to actuaries when preparing healthcare valuations including the selection of healthcare specific assumptions. Effectively, it incorporates the provisions of ASOP 4 for pension valuations in terms of selection and disclosure of actuarial methods and the provisions of ASOP 35 but applicable to healthcare specific assumptions.

As discussed above in Section III, the healthcare assumptions selected appear to be reasonable and appropriate. In addition, the valuation report contains a description of the assumptions used, and the experience study referenced in the valuation report contains justification for the assumptions that were selected. Therefore, the valuation report is in compliance with ASOP 6.

ASOP 23: This ASOP provides guidance to actuaries when selecting, reviewing, using, or relying on data supplied by others, when performing actuarial services. The ASOP requires the actuary to disclose the source of the data, whether the actuary reviewed the data, and to indicate any concerns about the data and if there are any limitations on the actuarial work product as a result of those concerns.

The cover letter of the report indicates the source of the data and notes that while the actuary checked for year to year consistency, they did not audit the data. This approach is consistent with the requirements of the ASOP and general actuarial practice.

ASOP 27: This ASOP provides guidance to actuaries when selecting economic assumptions for measuring pension obligations in a defined benefit plan. The ASOP also requires actuaries to disclose the assumptions used as well as the rationale for the selection of the assumptions.

As discussed above in Section III, the economic assumptions selected appear to be reasonable and appropriate. In addition, the valuation report contains a description of the assumptions used, and the experience study referenced in the valuation report contains justification for the assumptions that were selected. Therefore, the valuation report is in compliance with ASOP 27.

Please refer to Section III above for our comments on the economic assumptions.

ASOP 35: This ASOP provides guidance to actuaries when selecting demographic assumptions for measuring pension obligations in a defined benefit plan. The ASOP also requires actuaries to disclose the assumptions used as well as the rationale for the selection of the assumptions.

As discussed above in Section III, the demographic assumptions selected appear to be reasonable and appropriate. In addition, the valuation report contains a description of the assumptions used, and the experience study referenced in the valuation report generally contains justification for the assumptions that were selected. Therefore, the valuation report is in compliance with ASOP 27.

Please refer to Section III above for our comments on the demographic assumptions as well as below for some additional disclosure suggestions.

ASOP 41: This ASOP provides guidance to actuaries when issuing actuarial communications. The ASOP requires actuaries to include various disclosure items in the actuarial report including the intended user, scope, purpose, actuarial qualifications. The report prepared by CavMac included the required information. Therefore, the valuation report is in compliance with ASOP 41.

ASOP 44: This ASOP provides guidance to actuaries when selecting an asset valuation method for an actuarial valuation. The asset valuation method recognizes 1/4th of actuarial investment gains and losses and contains a 12% corridor around the market value of assets. This method satisfies Section 3.3 and 3.4 of the ASOP without any bias. Therefore, the valuation report is in compliance with ASOP 44.

ASOP 51: This ASOP provides guidance to actuaries on the assessment and disclosure of the risks that future measurements may differ from that which is expected. The valuation report discusses several risks facing SERS and presents various risk metrics with an explanation of the importance of those metrics. Therefore, the report is in compliance with ASOP 51.

Summary of Plan Provisions

CavMac's valuation reports provide a robust summary of the applicable plan provisions, but recommend the following items be included for additional clarity:

- Specify the current actuarial equivalent rates that apply upon early retirement
- Clarify how the benefits are determined upon date of conversion under the New Disability Plan
- Clarify that the Survivor Allowances apply to disability recipients
- Clarify that joint and survivor options include a pop-up element
- Clarify that the single life allowance includes a modified cash refund equal to the member's contribution balance
- For the healthcare valuation, clarify how recipient premium contribution percentage is calculated

Summary of Actuarial Assumptions

The summary of actuarial assumptions included in the actuarial valuation report is a robust summary and includes nearly all of the assumptions reflected in the valuation model. In future valuation reports, we suggest the following assumptions be included:

- Provide sample rates of the base mortality tables reflecting the adjusted base rates in 2017
- Note that the contingent survivor mortality rates apply to beneficiaries of retirees currently receiving benefits and to dependents in the healthcare valuation
- Denote any assumptions used to estimate the benefits payable upon conversion for New Disability Plan members for both the pension and healthcare valuations
- Specify the commencement age for members who terminate prior to eligibility for retirement
- Disclose assumption for whether a current active member upon withdrawal will take a refund of their contributions or keep their contributions with SERS and receive a deferred monthly allowance at a later date.

- Specify any assumptions made in valuing certain plan features such as:
  - Accumulated contributions are assumed to be exhausted at time of death and no additional liability is held for payment of these benefits
  - Retirees who elect multiple beneficiaries are assumed to have elected a 100% joint and survivor annuity; specify the joint date of birth used
- Denote when disabled members are assumed to be eligible for the Medicare Part B premium and the impact on per capita claims costs and premiums in the healthcare valuation
- Disclose the estimated average premiums used to determine the retiree contributions for current and future retirees
- Clarify how the healthcare cost trends apply to retiree contributions including the $35 surcharge.
- Suggest expanding the table of per capita claims cost to detail the expected costs at ages other than 65.

Section V – Sample Life Review

A Level II audit requires a review of detailed sample lives provided by the actuary. Sample life refers to the development of liabilities for specific individuals in the valuation model. As requested by Milliman, CavMac provided 15 sample lives for various categories of individuals representing a cross section of members by hire age, grandfathered status, status, form of payment, etc. to review the projected benefits produced by the actuarial model for both the pension and healthcare actuarial valuations as of June 30, 2021.

CavMac provided a high-level summary of the present values calculated by decrement, i.e., the portion of the liability attributable to the future retirement, termination, disablement or death of the member. The present values reflected the following liability determinations:

- Present Value of Benefits (PVB) - the total measure of an individual's liability. A reasonable match on the PVB indicates that we are valuing the benefits provided by SERS consistent with the current actuary.

- Entry Age Accrued Liability (EAAL) – the portion of an individual's liability attributable to past service as determined by the Entry Age Normal cost method. For retirees, survivors and deferred inactive members, the EAAL equals the PVB. For active members the EAAL is typically less than the PVB reflecting benefits expected to be accrued in the future. Differences in the application of the cost method, such as the determination of the assumed salary a member earned from date of hire to the valuation date, can impact the match on active members from one actuary's determination to another. We typically see a wider range of results for the EAAL.

- Entry Age Normal Cost (EANC) – the portion of an individual's liability attributable to the current year of service. Similar to the EAAL, the application of the cost method can result in even wider differences than the EAAL between one actuary's method to another. There is no normal cost for retirees, survivors and deferred inactive members.

Programming differences can lead to higher variability at the individual level, but in total, would produce reasonably similar results when performing a full replication. For example, how a valuation system determines age or service for a particular decrement may result in differences at the individual level, but when applied to the entire population may result in the determination of similar aggregate liabilities.

Since we were only provided high level information for the samples and not specific projected benefits by individual, our calculations will not be expected to match each individual exactly. We independently programmed the benefits and actuarial assumptions, incorporating clarifications provided by CavMac to determine if the results produced by CavMac are reasonable for the individuals provided. Please note that our reasonableness coding may not have incorporated all of the features of the plans, such as the $86 minimum benefit.

While we have no material concern with the overall determination of the liabilities for each of the plans based on the sample lives that we reviewed, we did not perform a full replication to determine if any programming differences would yield a materially different result in aggregate.

Basic Pension Benefits – Retirees & Survivors

The following chart displays our comparison of the liability for basic benefits for nine (9) different sample lives who are currently in payment. Basic benefits include the pension benefits, Medicare Part B subsidy and post-retirement lump sum death benefit. The sample lives varied by status (service retiree, disabled retiree and survivor) and by form of payment (straight life, joint and survivor, multiple beneficiaries, etc.).

The following table describes the items reviewed for the basic benefits for retirees.

	Actuarial Program of Basic Pension Benefits: Retiree Liability	Milliman
1.	Mortality tables applied appropriately for healthy retirees, disabled retirees and survivors (see discussion Section III regarding use of contingent survivor mortality tables and disabled retirees who subsequently converted to service retirees)	✓
2.	Cost-of-living-adjustment was calculated on a simple interest basis based on the original retirement benefit and reflected the 3-year delay for members who retired on or after April 1, 2018	✓
3.	Refund of contributions were valued for members who elected a single life annuity (see discussion in Section I)	✓
4.	Joint and survivor benefits were valued properly based on retiree's age and spouse's age (see discussion below on Multiple Plan beneficiaries)	✓
5.	Survivor benefits were valued properly for disabled members (see discussion in Section I for survivor benefits for Old Disability Plan members, New Disability Plan members until age 65, and refund of contributions for New Disability Plan members beginning at age 65)	✓
6.	For members receiving a New Disability Plan benefit, properly reflecting the conversion benefit at age 65 (see discussion in Section I)	✓
7.	For eligible members receiving the Medicare Part B subsidy (see discussion below on eligible and not yet eligible disabled members)	✓

Based on our match, we are within 2% for each retiree for each benefit except the member with multiple plan beneficiaries and the disabled member receiving the Medicare Part B subsidy. The following details these situations:

- **Multiple Plan Beneficiaries:** CavMac values retirees who elected a joint and survivor annuity with multiple plan beneficiaries as had elected a 100% joint and survivor annuity for ease of coding. The data provided by SERS does indicate the amounts payable to each beneficiary and the cumulative joint and survivor percentage could be determined. For example, the sample life member with multiple beneficiaries had a cumulative joint and survivor percentage of 33%. While there are few members who elect this option, we would recommend that CavMac review their data procedures and value the actual cumulative joint and survivor percentage. We would also suggest using the youngest beneficiary. Note that CavMac's method of assuming all multiple plan beneficiaries elected a 100% joint and survivor annuity is conservative in that it will result in a higher liability in most cases.

- **Medicare Part B:** SERS indicates which retirees are receiving the Medicare Part B subsidy, which may include disabled members who are under age 65. CavMac assumes the Medicare Part B benefit begins at age 65 regardless of the indicator on the data. We recommend that CavMac value the Medicare Part B subsidy for disabled members indicated by SERS and incorporate an assumption for disabled members who are within 24 – 30 months of their commencement date. Medicare includes a 25 month elimination period.

Comparison of June 30, 2021 Retiree Sample Life Review
Basic Benefits Valuation

	CavMac Liability (PVB)	Milliman Liability (PVB)	Ratio of Milliman / CavMac
Total Basic Benefits			
Straight Life	250,900	245,855	97.99%
Joint & 100% Survivor	270,553	272,771	100.82%
Joint & 50% Survivor	242,719	245,658	101.21%
10-Year Certain & Life	354,533	360,043	101.55%
Multiple Beneficiaries [1]	1,054,428	662,759	62.85%
Survivor with Life Benefit	92,371	93,658	101.39%
Disabled - Less than 10 Years of Service	181,336	186,159	102.66%
Disabled - At least 10, but less than 25 Years of Service	221,063	224,281	101.46%
Disabled - 25 or more Years of Service	62,583	63,198	100.98%
Grand Total	2,730,487	2,354,382	86.23%
Pension Benefits			
Straight Life	250,221	245,177	97.98%
Joint & 100% Survivor	266,120	268,338	100.83%
Joint & 50% Survivor	238,502	241,442	101.23%
10-Year Certain & Life	354,029	359,539	101.56%
Multiple Beneficiaries [1]	1,051,405	659,736	62.75%
Survivor with Life Benefit	92,371	93,658	101.39%
Disabled - Less than 10 Years of Service	180,939	185,763	102.67%
Disabled - At least 10, but less than 25 Years of Service	217,087	219,314	101.03%
Disabled - 25 or more Years of Service	58,039	58,654	101.06%
Medicare Part B			
Straight Life	0	0	100.00%
Joint & 100% Survivor	3,808	3,808	100.00%
Joint & 50% Survivor	3,611	3,611	100.00%
10-Year Certain & Life	0	0	100.00%
Multiple Beneficiaries	2,308	2,308	100.00%
Survivor with Life Benefit	0	0	100.00%
Disabled - Less than 10 Years of Service	0	0	100.00%
Disabled - At least 10, but less than 25 Years of Service [2]	3,535	4,526	128.03%
Disabled - 25 or more Years of Service	4,044	4,044	100.00%
Lump Sum Death Benefit			
Straight Life	679	679	99.93%
Joint & 100% Survivor	625	625	99.92%
Joint & 50% Survivor	606	605	99.92%
10-Year Certain & Life	504	503	99.91%
Multiple Beneficiaries	715	715	99.93%
Survivor with Life Benefit	0	0	100.00%
Disabled - Less than 10 Years of Service	397	396	99.89%
Disabled - At least 10, but less than 25 Years of Service	441	441	99.90%
Disabled - 25 or more Years of Service	501	500	99.91%

[1] See discussion on multiple plan beneficiaries

[2] See discussion on Medicare Part B

Basic Pension Benefits - Actives

The following chart displays our comparison of the liability for basic benefits for six (6) different sample lives. Basic benefits include the pension benefits, Medicare Part B subsidy and post-retirement lump sum death benefit. The sample lives varied by the age at hire (young age 23, middle age 30, and older age 50) and whether grandfathered status (25 years of service by August 1, 2017 or not).

The following table describes the items reviewed for the basic benefits for retirees.

	Actuarial Program of Basic Pension Benefits: Active Liability	Milliman
1.	Proper application of the various decrements (termination, retirement, disability and pre-retirement death)	✓
2.	Projection of compensation based on salary increase assumption, including ages prior to the valuation date	✓
3.	Projection of termination and retirement benefits at each projected age by for each service component, including ages prior to the valuation date reflecting actual compensation history	✓
4.	Applying eligibility criteria for each benefit type by grandfathered status	✓
5.	Proper application of early retirement factors	✓
6.	Determination of cost-of-living-adjustment on a simple interest basis reflecting the 3-year delay	✓
7.	Refund of contributions were valued for members assumed to die after commencement (see discussion in Section I)	✓
8.	Projection of benefits paid upon disability, including those occurring beginning on date of conversion (see discussion in Section 1 and below)	X
9.	Projection of benefits paid upon death, including benefits paid under Schedules I, II and III and the 100% joint and survivor annuity for those eligible for retirement	✓

Based on our match, we are within 4% for the total liability for active members reviewed on each liability basis (PVB, EAAL and EANC). There are a few situations where the match is further apart on a particular liability basis, but we believe these differences are due to differences in valuation systems that can result in larger variations at an individual level.

As noted in this report, we believe the programming for disability benefits needs to be reviewed to account for the following. Our reasonableness calculations did not incorporate these items.

- The adjustment to the benefit that occurs at the date of conversion, essentially age 65 for New Disability Plan members, including the cost-of-living adjustment.

- The valuation of survivor benefits for the lifetime of Old Disability Plan members and until date of conversion for New Disability Plan members.
- The Medicare Part B subsidy occurring prior to age 65.
- The elimination of the disability decrement prior to accruing the 5 years of service eligibility criteria and at the point that the service retirement benefit is greater than the disability.

Comparison of June 30, 2021 Active Sample Life Review
Basic Benefits Valuation - Present Value of Benefits

	CavMac Liability (PVB)	Milliman Liability (PVB)	Ratio of Milliman / CavMac
Total Basic Benefits			
Attained 25 YOS before 8/1/2017 - EA of 23	754,675	731,222	96.89%
Attained 25 YOS before 8/1/2017 - EA of 30	47,222	45,158	95.63%
Attained 25 YOS before 8/1/2017 - EA of 50	169,282	168,338	99.44%
Attained 25 YOS after 8/1/2017 - EA of 23	434,063	409,535	94.35%
Attained 25 YOS after 8/1/2017 - EA of 30	77,768	74,169	95.37%
Attained 25 YOS after 8/1/2017 - EA of 50	40,017	40,968	102.38%
Grand Total	1,523,026	1,469,388	96.48%
Pension Benefits			
Attained 25 YOS before 8/1/2017 - EA of 23	751,643	728,146	96.87%
Attained 25 YOS before 8/1/2017 - EA of 30	42,549	40,262	94.63%
Attained 25 YOS before 8/1/2017 - EA of 50	163,781	162,825	99.42%
Attained 25 YOS after 8/1/2017 - EA of 23	432,339	407,777	94.32%
Attained 25 YOS after 8/1/2017 - EA of 30	77,314	73,745	95.38%
Attained 25 YOS after 8/1/2017 - EA of 50	38,836	39,802	102.49%
Medicare Part B			
Attained 25 YOS before 8/1/2017 - EA of 23	2,898	2,938	101.36%
Attained 25 YOS before 8/1/2017 - EA of 30	4,479	4,695	104.83%
Attained 25 YOS before 8/1/2017 - EA of 50	5,276	5,282	100.10%
Attained 25 YOS after 8/1/2017 - EA of 23	1,620	1,657	102.33%
Attained 25 YOS after 8/1/2017 - EA of 30	427	401	93.98%
Attained 25 YOS after 8/1/2017 - EA of 50	1,126	1,100	97.72%
Lump Sum Death Benefit			
Attained 25 YOS before 8/1/2017 - EA of 23	135	138	102.26%
Attained 25 YOS before 8/1/2017 - EA of 30	195	201	103.10%
Attained 25 YOS before 8/1/2017 - EA of 50	224	231	102.79%
Attained 25 YOS after 8/1/2017 - EA of 23	104	100	96.52%
Attained 25 YOS after 8/1/2017 - EA of 30	27	23	84.22%
Attained 25 YOS after 8/1/2017 - EA of 50	55	65	119.15%

Comparison of June 30, 2021 Active Sample Life Review
Basic Benefits Valuation - Entry Age Accrued Liability

	CavMac Liability (EAN)	Milliman Liability (EAN)	Ratio of Milliman / CavMac
Total Basic Benefits			
Attained 25 YOS before 8/1/2017 - EA of 23	716,176	698,451	97.53%
Attained 25 YOS before 8/1/2017 - EA of 30	44,521	43,228	97.09%
Attained 25 YOS before 8/1/2017 - EA of 50	152,975	151,625	99.12%
Attained 25 YOS after 8/1/2017 - EA of 23	363,459	337,733	92.92%
Attained 25 YOS after 8/1/2017 - EA of 30 [1]	21,876	17,335	79.24%
Attained 25 YOS after 8/1/2017 - EA of 50	10,404	11,039	106.11%
Grand Total	1,309,410	1,259,411	96.18%
Pension Benefits			
Attained 25 YOS before 8/1/2017 - EA of 23	713,346	695,558	97.51%
Attained 25 YOS before 8/1/2017 - EA of 30	40,138	38,548	96.04%
Attained 25 YOS before 8/1/2017 - EA of 50	148,002	146,512	98.99%
Attained 25 YOS after 8/1/2017 - EA of 23	362,080	336,263	92.87%
Attained 25 YOS after 8/1/2017 - EA of 30 [1]	21,744	17,159	78.91%
Attained 25 YOS after 8/1/2017 - EA of 50	10,084	10,737	106.47%
Medicare Part B			
Attained 25 YOS before 8/1/2017 - EA of 23	2,709	2,770	102.24%
Attained 25 YOS before 8/1/2017 - EA of 30	4,209	4,495	106.81%
Attained 25 YOS before 8/1/2017 - EA of 50	4,779	4,916	102.87%
Attained 25 YOS after 8/1/2017 - EA of 23	1,299	1,392	107.13%
Attained 25 YOS after 8/1/2017 - EA of 30 [1]	124	169	136.76%
Attained 25 YOS after 8/1/2017 - EA of 50	305	289	94.82%
Lump Sum Death Benefit			
Attained 25 YOS before 8/1/2017 - EA of 23	120	124	102.71%
Attained 25 YOS before 8/1/2017 - EA of 30	175	184	105.43%
Attained 25 YOS before 8/1/2017 - EA of 50	194	197	101.57%
Attained 25 YOS after 8/1/2017 - EA of 23	80	79	99.56%
Attained 25 YOS after 8/1/2017 - EA of 30 [1]	8	7	84.02%
Attained 25 YOS after 8/1/2017 - EA of 50	15	14	91.87%

[1] We believe difference is due to application of actuarial cost method in estimating portion of total present value allocated to past service.

Comparison of June 30, 2021 Active Sample Life Review
Basic Benefits Valuation - Entry Age Normal Cost

	CavMac Normal Cost (EAN)	Milliman Normal Cost (EAN)	Ratio of Milliman / CavMac
Basic Benefits			
Attained 25 YOS before 8/1/2017 - EA of 23	8,846	7,553	85.39%
Attained 25 YOS before 8/1/2017 - EA of 30	705	542	76.86%
Attained 25 YOS before 8/1/2017 - EA of 50	7,297	7,429	101.81%
Attained 25 YOS after 8/1/2017 - EA of 23	7,035	7,127	101.31%
Attained 25 YOS after 8/1/2017 - EA of 30	4,733	4,724	99.81%
Attained 25 YOS after 8/1/2017 - EA of 50	3,410	3,418	100.21%
Grand Total	32,026	30,793	96.15%
Pension Benefits			
Attained 25 YOS before 8/1/2017 - EA of 23	8,799	7,511	85.36%
Attained 25 YOS before 8/1/2017 - EA of 30 [1]	629	481	76.48%
Attained 25 YOS before 8/1/2017 - EA of 50	7,060	7,251	102.70%
Attained 25 YOS after 8/1/2017 - EA of 23	7,001	7,099	101.40%
Attained 25 YOS after 8/1/2017 - EA of 30	4,706	4,703	99.93%
Attained 25 YOS after 8/1/2017 - EA of 50	3,311	3,319	100.24%
Medicare Part B			
Attained 25 YOS before 8/1/2017 - EA of 23	43	39	89.07%
Attained 25 YOS before 8/1/2017 - EA of 30	70	56	79.68%
Attained 25 YOS before 8/1/2017 - EA of 50	222	162	73.04%
Attained 25 YOS after 8/1/2017 - EA of 23	32	26	82.53%
Attained 25 YOS after 8/1/2017 - EA of 30	26	20	79.06%
Attained 25 YOS after 8/1/2017 - EA of 50	95	93	97.96%
Lump Sum Death Benefit			
Attained 25 YOS before 8/1/2017 - EA of 23	3	3	98.76%
Attained 25 YOS before 8/1/2017 - EA of 30	5	4	84.75%
Attained 25 YOS before 8/1/2017 - EA of 50	14	15	109.70%
Attained 25 YOS after 8/1/2017 - EA of 23	2	2	86.09%
Attained 25 YOS after 8/1/2017 - EA of 30	2	1	85.86%
Attained 25 YOS after 8/1/2017 - EA of 50	5	6	126.95%

[1] We believe difference is due to application of $86 minimum benefit as Milliman did not incorporate it in our reasonableness calculations.

Healthcare Benefits - Retirees

The following chart displays our comparison of the liability for healthcare benefits for the same retiree sample lives used for pension benefits. Due to the nature of healthcare benefits, we would expect our match on healthcare benefits to vary further than pension benefits due to the application of healthcare specific assumptions such as age-based per capita costs, trend assumptions and determination of portion of benefits paid by retirees.

The following table describes the items reviewed for the healthcare benefits for retirees that are in addition to those used for pension benefits.

	Actuarial Program of Healthcare Benefits: Retiree Liability	Milliman
1.	Application of age-based per capita costs	✓
2.	Application of healthcare trend on age-based on per capita costs	✓
3.	Determination of retiree and dependent costs	✓
4.	Determination of portion of premium covered by retiree (see comment below)	✓
5.	Application of healthcare trend on retiree's portion of cost (see comment below on application of surcharge)	✓

The following table details our match for each retiree. The reason for the differences is noted below:

- **Contribution Premium Percentage:** The percentage of the premium paid by SERS and the retiree is based on years of service at retirement. At 35 years, the percentage decreases by 1% for each additional year of service if the member retired on or after August 1, 2008 such that at 50 years the premium is fully subsidized by SERS. In addition, the retiree is not charged the $35 surcharge. In reviewing the edited retiree data, the contribution premium percentage is 20% rather than 0%. In addition, CavMac is valuing the surcharge for these members. We recommend that CavMac review its data procedures and valuation programs to verify the contribution premium percentage is determined correctly.

  Please note that the majority of the samples provided to us just happened to have at least 50 years of service, so the results of the match appear to be larger than if we valued the entire population which only has a small proportion with 50 or more years of service.

- **Surcharge:** In addition to the contribution premium percentage, each retiree contributes a $35 per month surcharge. CavMac assumes this surcharge increases with the applicable healthcare trend each year in the future. While we are uncertain on the history of the surcharge that SERS has charged, we recommend that SERS and CavMac verify that 1) future increases should be applied to this feature in the valuation and 2) the future increases are consistent with healthcare trend or if a separate assumption should be developed for this purpose.

Comparison of June 30, 2021 Retiree Sample Life Review
Healthcare Benefits

	CavMac Liability (PVB)	Milliman Liability (PVB)	Ratio of Milliman / CavMac
Total Basic Benefits			
Straight Life	7,885	9,564	121.30% [1]
Joint & 100% Survivor	9,704	9,142	94.21%
Joint & 50% Survivor	9,907	12,231	123.46% [1]
10-Year Certain & Life	12,666	15,981	126.17% [1]
Multiple Beneficiaries	6,937	8,313	119.83% [1]
Survivor with Life Benefit	31	28	90.32%
Disabled - Less than 10 Years of Service	29,138	28,539	97.95%
Disabled - At least 10, but less than 25 Years of Service	24,064	23,437	97.39%
Disabled - 25 or more Years of Service	16,895	16,242	96.13%
Grand Total	117,227	123,478	105.33%

[1] These retired participants were reported with 50 or more years of service and retirement dates after August 1, 2008. Milliman's liability reflects a 0% retiree contribution, whereas CavMac's liability reflects a 20% retiree contribution. See discussion on Contribution Premium Percentage.

Healthcare Benefits - Actives

The following chart displays our comparison of the liability for healthcare benefits for the same active sample lives used for pension benefits.

The following table describes the items reviewed for the basic benefits for retirees.

	Actuarial Program of Healthcare Benefits: Active Liability	Milliman
1.	Proper application of the various decrements (termination, retirement, disability and pre-retirement death)	✓
2.	Projection of age-based per capita costs upon termination and retirement at each projected age	✓
3.	Projection of spouse and/dependent costs at each projected age	✓
4.	Projection of retiree’s and spouse’s portion of the contribution	✓
5.	Projection of costs paid upon disability, including those occurring beginning on date of conversion (see discussion below)	✓
6.	Projection of costs paid upon death	✓

Based on our match, we are within 3% for the total liability for active members reviewed on each liability basis (PVB, EAAL and EANC). There are a few situations where the match is further apart on a particular liability basis, but we believe these differences are due to differences in valuation systems that can result in larger variations at an individual level.

As noted in this report, we believe the programming for disability benefits needs to be reviewed to account for the following. Our reasonableness calculations did not incorporate this item.

- **Disability Benefits:** For New Disability Plan members, the years of service used to determine the contribution premium percentage includes the period of disability at the date of conversion. We believe CavMac is assuming the contribution premium percentage remains the same based on years of service at the time of disability. We recommend that CavMac review its actuarial programs to reflect a possible lower contribution premium percentage at the date of conversion for future and current retirees.

Comparison of June 30, 2021 Active Sample Life Review
Healthcare Benefits

	CavMac Liability (PVB)	Milliman Liability (PVB)	Ratio of Milliman / CavMac
PVFB			
Attained 25 YOS before 8/1/2017 - EA of 23	73,466	73,996	100.72%
Attained 25 YOS before 8/1/2017 - EA of 30	30,286	30,051	99.23%
Attained 25 YOS before 8/1/2017 - EA of 50 [1]	407	0	0.00%
Attained 25 YOS after 8/1/2017 - EA of 23	41,956	41,584	99.11%
Attained 25 YOS after 8/1/2017 - EA of 30	9,237	9,359	101.32%
Attained 25 YOS after 8/1/2017 - EA of 50	1,025	1,100	107.28%
Grand Total	156,377	156,090	99.82%
Entry Age Accrued Liability			
Attained 25 YOS before 8/1/2017 - EA of 23	69,982	70,638	100.94%
Attained 25 YOS before 8/1/2017 - EA of 30	28,454	28,212	99.15%
Attained 25 YOS before 8/1/2017 - EA of 50 [1]	341	0	0.00%
Attained 25 YOS after 8/1/2017 - EA of 23	35,795	35,557	99.33%
Attained 25 YOS after 8/1/2017 - EA of 30	2,677	2,707	101.14%
Attained 25 YOS after 8/1/2017 - EA of 50	278	296	106.62%
Grand Total	137,527	137,411	99.92%
Entry Age Normal Cost			
Attained 25 YOS before 8/1/2017 - EA of 23	800	768	96.00%
Attained 25 YOS before 8/1/2017 - EA of 30	478	478	99.97%
Attained 25 YOS before 8/1/2017 - EA of 50 [1]	30	0	0.00%
Attained 25 YOS after 8/1/2017 - EA of 23	600	586	97.66%
Attained 25 YOS after 8/1/2017 - EA of 30	556	562	101.13%
Attained 25 YOS after 8/1/2017 - EA of 50	86	92	107.22%
Grand Total	2,550	2,486	97.50%

[1] Milliman estimate of the retiree's portion of the contribution exceeds the value of the gorss claims cost such that the liability equals $0. We believe this could be due to differences in valuation programming parameters that can result in differences at an individual level.

Cavanaugh Macdonald
CONSULTING, LLC
The experience and dedication you deserve

December 7, 2022

Ms. Marni Hall, CPA
Chief Financial Officer
School Employee Retirement System of Ohio
300 East Broad Street, Suite 100
Columbus, OH 43215

Re: Response to the Actuarial Audit Report

Dear Marni:

We have received and reviewed a draft copy of the Actuarial Audit of the June 30, 2021 Actuarial Valuations for Basic Benefits and Healthcare, as well as the 2015 – 2020 Experience Study performed for the School Employees Retirement System of Ohio (SERS). The audit was prepared by Milliman, Inc., a firm experienced with public sector actuarial consulting for large public sector retirement systems. Cavanaugh Macdonald fully supports the actuarial audit process. As a firm which specializes in providing services to public sector retirement systems, we have been audited many times, as well as having frequently served as auditor to other plans. We believe it is prudent to periodically have a second opinion with respect to the actuarial work being performed. We commend the professionalism of the actuaries performing the audit and the thoroughness of their report.

We are pleased that Milliman reported no material findings or discrepancies and as stated in their report, "***we would like to state clearly up front that we found the actuarial procedures and practices to be of a high quality and in compliance with all major aspects of the applicable actuarial standards.***." Milliman offered some observations and/or recommendations which we will certainly consider for the upcoming valuation and the next experience study. We believe their suggestions will result in an improvement to the actuarial valuation process and our reports. In our opinion, that is the overarching objective of an audit.

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Our actuarial procedures improve by having other experienced professionals review our work, make suggestions, and challenge our thinking. Our goal is to continually refine and improve our procedures, as well as the communication of our actuarial findings. Milliman's suggestions give us another actuary's perspective which helps us in this endeavor. We appreciate their effort and collaborative approach.

Sincerely,

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

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

Alisa Bennett, FSA, EA, FCA, MAAA
President

CERTIFICATION OF CANDIDATES – EMPLOYEE MEMBER SEAT

__________moved and __________seconded that having met the eligibility requirements of Chapter 3309 of the Ohio Revised Code, and having received sufficient and proper petitions to meet the qualifications of Section 3309.07 of the Ohio Revised Code, the following candidates be placed upon the ballots for the election of an employee member to the School Employees Retirement Board for the term July 1, 2023, to June 30, 2027:

NAME	SCHOOL DISTRICT	COUNTY
Rebekah R. Roe	Columbus City Schools	Franklin
Aimee Russell	Ashland City Schools	Ashland

In accordance with Section 3309-1-04 of the Ohio Administrative Code, the Secretary of State's Office has reviewed the certification that Rebekah R. Roe and Aimee Russell are qualified to run for the employee member seat.

Upon roll call, the vote was as follows:

ROLL CALL:	YEA	NAY	ABSTAIN
Frank Weglarz			
Hugh Garside			
James Haller			
Matthew King			
Catherine Moss			
Barb Phillips			
James Rossler			
Daniel Wilson			
Jeff DeLeone			

RETURN TO OPEN SESSION AT______________A.M. / P.M.

SERS

Memo

To: Retirement Board

From: SERS Legal Department

CC: Richard Stensrud

Date: December 2, 2022

Re: Administrative Rules

Two categories of resolutions on Administrative Rules are on the December Board Agenda.

I. **Approval to file with JCARR the following rules as no change rules under the five-year review of rules:**

- **3309-1-03 Staff authority and appeals**
- **3309-1-09 Federal taxation**
- **3309-1-15 Applicable law in determining survivor benefits**
- **3309-1-17 Allowances and benefits payable**
- **3309-1-21 Estimated retirement allowances**
- **3309-1-23 Contributing status; compulsory and optional**
- **3309-1-31 Adjusting retirement eligibility requirements**
- **3309-1-36 Restoration of cancelled SERS service credit**
- **3309-1-38 Interest rate**
- **3309-1-39 Purchase of police and fire and highway patrol service**
- **3309-1-52 Travel and expense reimbursement**
- **3309-1-61 Reemployment covered by section 3309.345 of the Revised Code**

II. **Approval to file with JCARR the following proposed amended rules under the five-year review of rules:**

- **3309-1-04 Election of retirement board members**

  This rule sets forth how the retirement board conducts elections in accordance with Chapter 3309 of the Revised Code. The proposed amendments fill in additional details regarding the election process and clarify the intent of language in section 3309.07 whose meaning is subject to more than one possible interpretation.

  New language in paragraph (C) makes clear that only active members may sign nominating petitions for employee board candidates, identifies the information that must be provided in order for a signature on a nominating petition to be valid, and makes clear that ballots contain space for a write-in candidate. New language in paragraph (F) states that an employee member of the board retires while a member of the board when the member served on the board in the month immediately preceding the members' effective date of retirement.

- **3309-1-13 Obtaining optional or compulsory service credit**

  This rule addresses how a member may obtain service credit for non-contributing optional service and non-contributing compulsory service. The proposed amendments are intended to provide a historical reference to the changes to optional and compulsory service effective July 1,1991 and fill in additional detail on the procedures for purchasing optional service credit.

  New language in paragraph (A)(1) makes clear that optional service ceased to be a type of service as of June 30, 1991. New language in (A)(2) makes clear that optional service may be purchased in increments of one month and that when only a portion of service is purchased the order of purchase is to be most recent month to oldest month. New language in paragraph (B)(3) clarifies that R.C. 3309.48 applies to compulsory service prior to June 30, 1991.

- **3309-1-64 Supplemental health care coverage**

  This rule provides the eligibility requirements for enrollment in SERS' optional dental and vision coverage. The amendments change the name of the rule to more accurately describe its purpose. Additional amendments clarify that an individual is eligible to enroll in dental and/or vision coverage so long as they satisfy the eligibility threshold for SERS' medical coverage. The individual does not have to be enrolled in SERS' medical coverage to enroll in dental or vision coverage.

Please call Susan Russell at 614-222-5809 if you have any questions before the meeting.

FIVE YEAR REVIEW AND FILING OF NO CHANGE ADMINISTRATIVE RULES

Legal Counsel discussed with the Retirement Board filing with JCARR the following rules as no change rules: 3309-1-03 Staff authority and appeals; 3309-1-09 Federal taxation; 3309-1-15 Applicable law in determining survivor benefits; 33309-1-17 Allowances and benefits payable; 3309-1-21 Estimated retirement allowances; 3309-1-23 Contributing status; compulsory and optional; 3309-1-31 Adjusting retirement eligibility requirements; 3309-1-36 Restoration of cancelled SERS service credit; 3309-1-38 Interest rate; 3309-1-39 Purchase of police and fire and highway patrol service; 3309-1-52 Travel and expense reimbursement; 3309-1-61 Reemployment covered by section 3309.345 of the Revised Code.

______________________ moved and ____________________ seconded that rules 3309-1-03, 3309-1-09, 3309-1-15, 3309-1-17, 3309-1-21, 3309-1-23, 3309-1-31, 3309-1-36, 3309-1-38, 3309-1-39, 3309-1-52, and 3309-1-61 be filed with JCARR as no change rules as discussed.

3309-1-03 Staff authority and appeals.

(A) The school employees retirement board authorizes its administrative staff to make determinations on member and benefit matters in accordance with Chapter 3309. of the Revised Code, this chapter, and policies of the retirement board. This authority includes, but is not limited to, membership, compensation, benefits, and employer reporting matters. Final determinations by the staff may be appealed to the retirement board pursuant to this rule.

(B) Except as provided in rules 3309-1-40 and 3309-1-41 of the Administrative Code, any affected person may appeal a final determination of the staff of the school employees retirement system as provided in this rule.

(C)

(1) A notice of appeal shall be submitted to the executive director in writing, and must be received by the retirement system no more than thirty days after the date of the final staff determination. It shall state the determination to be reviewed, the basis for the review, and whether a personal appearance before the retirement board is requested.

(2) The retirement system shall notify the person of the time and place of the personal appearance, if one was requested, and the deadline for submitting any documentation the person wants the retirement board to consider on appeal.

(D)

(1) The retirement board shall review each appeal and determine whether to uphold the staff determination based upon information in the files of the retirement system.

(2) The affected persons and their representatives shall be notified of the retirement board's determination which shall be final.

(E) Any notice required or permitted to be given by the retirement system under this rule shall be sent by regular U.S. mail by the administrative staff of the retirement system addressed to the last address on file in the records of the retirement system.

History:	5/1/18, 4/1/13, 10/6/08, 3/30/07, 9/27/04
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.14
Review Date:	2/1/23

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) The calendar year in which the member attains seventy-two years of age; 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. 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:	2/1/2023

3309-1-15 Applicable law in determining survivor benefits.

The law in effect at the time a deceased member's beneficiary is first eligible for a survivor benefit shall determine the benefits payable to such beneficiary or to any other person who subsequently becomes eligible to receive a survivor benefit by reason of the member's death prior to retirement.

History:	5/9/03, 11/9/98, 12/24/76
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.661
Review Date:	1/27/2023

3309-1-17 Allowances and benefits payable.

The administrative staff is hereby authorized to pay retirement allowances, disability benefits, and other benefits during the interim period which may occur between the date such allowances and benefits are payable and the date the retirement board can receive and act upon the application, as such authority so granted is considered as necessary to the proper operation of the retirement system.

For purposes of this rule, disability benefits are payable after the submission of a determination and recommendation of disability to the retirement board and after the retirement system has received the employer's certification of final deposits on behalf of the member.

History:	12/4/14, 5/8/04, 12/24/76
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.14
Review Date:	1/27/2023

3309-1-21 Estimated retirement allowances.

(A) For purposes of this rule:

(1) "Final retirement allowance" means a monthly retirement allowance paid pursuant to section 3309.35, 3309.36 or 3309.46 of the Revised Code that the retirement system calculates after the employer certifies the final contributions and service credit made on behalf of the member.

(2) "Estimated retirement allowance" means a monthly retirement allowance paid pursuant to section 3309.35, 3309.36 or 3309.46 of the Revised Code prior to the certification of a member’s final contributions and service credit and the calculation of the final retirement allowance.

(B) A member retiring on or after March 1, 2014 under section 3309.35, 3309.36 or 3309.46 of the Revised Code who meets the following requirements shall receive an estimated retirement allowance:

(1) The retirement system has received the member’s application for age and service retirement and all required forms and documents necessary to process the retirement application at least thirty days prior to the effective date of retirement.

(2) The member has sufficient service credit in this system to retire under section 3309.34 of the Revised Code, not including the following:

(a) Any additional service that may be credited following receipt of the certification of final deposits from the employer; and

(b) Service credit purchases not completed at least thirty days prior to the benefit effective date.

(C) Notwithstanding paragraph (B) of this rule, an estimated retirement allowance will not be issued if:

(1) The member elects to receive health care coverage and the amount of the benefit recipient's health care premium will exceed the amount of the estimated retirement allowance; or

(2) The member's retirement allowance is subject to any court order.

(D) An estimated retirement allowance shall be calculated using the accumulated contributions and service credit available in the account of the member at the time the retirement application is received. The retirement system shall calculate the final retirement allowance following the receipt of the employer's certification of final deposits and all contributions on behalf of the member.

(1) If no additional contributions are received by the retirement system, the estimated retirement allowance shall be the final retirement allowance.

(2) If the final retirement allowance is greater than the estimated retirement allowance, the retirement system shall issue a retroactive payment for the difference between the total amount paid as estimated retirement allowances and the amount that would have been paid had the member received payments in the amount of the final retirement allowance.

(3) If the final retirement allowance is less than the estimated retirement allowance, the retirant shall repay any overpayment to the retirement system pursuant to section 3309.70 of the Revised Code.

(E) In order to change a retirement plan of payment selection, including an election to take or change the amount of a partial lump sum option payment, a member must withdraw their retirement application in accordance with rule 3309-1-33 of the Administrative Code and file a new application.

(F) If the member elects to receive a partial lump sum option payment pursuant to division (B)(4) of section 3309.46 of the Revised Code, the retirement system shall make such payment following the calculation of the final retirement allowance under paragraph (D) of this rule.

HISTORY:	5/3/19, 5/1/18, 12/14/13
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.35, 3309.45, 3309.46
Review Date:	2/1/23

3309-1-23 Contributing status; compulsory and optional.

(A) The following standards shall apply for the determination of contributing status in the school employees retirement system.

(B) Contributing status shall be required for any employee of an employer as defined in divisions (A) and (B) of section 3309.01 of the Revised Code beginning with the first date of service, unless contributing status is otherwise made optional under this rule or the provisions of Chapter 3309. of the Revised Code.

(C)

(1) Employees who are eligible pursuant to division (B) or (C) of section 3309.23 of the Revised Code to elect to be exempt from contributing status, shall make such election by filing a written application for exemption with their employer within the first month of being employed.

(2) Once an exemption is filed, it is irrevocable during the current period of employment for the same employer provided the employee remains qualified for an exemption pursuant to division (B) or (C) of section 3309.23 of the Revised Code. Should the employee no longer qualify for an exemption, the previously filed exemption shall be invalid and contributing status shall be mandatory.

(3) An exemption shall be valid only during the current period of employment for the employer by whom the employee is employed at the time that the exemption is filed. When such employment terminates, the exemption also terminates. Upon return to employment, either for the former or for another employer, contributing status is mandatory unless the employee qualifies and timely applies for an exemption.

(D)

(1) Within thirty days of initially taking office, school board members or governing board members who are compensated by the school district for their services as board members may elect to be members by filing a written election with the treasurer of the board of education. If the board member elects to be a member, the treasurer of the board of education shall notify the system of the election on a form provided by the school employees retirement board. Board members who are not compensated for their services, or who receive only reimbursement or payment for their expenses, are not eligible to be members.

(2) A board member who is a SERS retirant or other system retirant as defined in section 3309.341 of the Revised Code and who has elected to be a member shall contribute under the provisions of section 3309.341 of the Revised Code.

(3) The election to become a member, once made, is irrevocable during the board member's current term as a board member, and during any successive terms where the board member has not, prior to the commencement of the term, refunded his accumulated contributions or taken a retirement benefit from the school employees retirement system.

History: 5/3/19, 4/3/09, 5/8/04, 1/2/96, 2/1/92, 3/1/89, 1/1/86, 2/18/77, 12/24/76
Promulgated Under: 111.15
Statutory Authority: 3309.04
Rule Amplifies: 3309.23, 3309.012
Review Date: 2/1/23

3309-1-31 Adjusting retirement eligibility requirements.

(A) This rule applies only to members who retire under division (A)(2)(a) of section 3309.34 of the Revised Code.

(B) For each quinquennial actuarial review conducted under division (B) of section 3309.21 of the Revised Code, the school employees retirement board shall direct its actuary to evaluate the retirement eligibility requirements in division (A)(2)(a) of section 3309.34 of the Revised Code.

(1) If the actuary determines that an adjustment to the retirement eligibility criteria is necessary to ensure that the retirement system meets the thirty-year amortization period requirement of section 3309.211 of the Revised Code, the retirement board shall direct its administrative staff to develop recommendations for changes to the retirement eligibility criteria consistent with the actuarial determination.

(2) The recommendations developed under paragraph (B)(1) of this rule shall be submitted to the retirement board at a regularly scheduled board meeting. The retirement board shall take no formal action on the recommendations at the meeting the recommendations are first presented.

(3) No sooner than thirty days after the recommendations are presented to the retirement board, the retirement board shall schedule at least one special meeting, held in accordance with section 121.22 of the Revised Code, for the purpose of receiving public comments on the recommendations.

(4) The retirement board shall modify the retirement eligibility criteria only after considering the recommendations and any public comments.

(C) Any modifications to the retirement eligibility requirements made pursuant to this rule will go into effect no earlier than two years after the effective date of the administrative rule adopted under division (D) of section 3309.34 of the Revised Code.

History:	9/30/13
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.34
Review Date:	1/27/2023

3309-1-36 Restoration of cancelled SERS service credit.

(A) For purposes of section 3309.26 of the Revised Code and this rule:

(1) "Contributing service credit" means contributing service credit in this system, the public employees retirement system, the state teachers retirement system, the Ohio police and fire pension fund, or the state highway patrol retirement system.

(2) "Eligible member" means a member of this system who has cancelled service in this system and who has earned at least one and one-half years of contributing service credit subsequent to the withdrawal of contributions and cancellation of service credit in this system.

(3) "Eligible former member" means a former member of this system who has cancelled service in this system, who has earned at least one and one-half years of contributing service credit subsequent to the withdrawal of contributions and cancellation of service credit in this system, and who is not eligible to buy the cancelled service as a member of the Ohio police and fire pension fund, the state highway patrol retirement system, or the city of Cincinnati retirement system.

(B) Eligible members and eligible former members may restore all or a portion of cancelled service credit in this system by paying to the system the amount withdrawn plus interest compounded annually.

(C) Compound interest shall accrue from the first of the month of withdrawal through the month of repayment.

(D) Cancelled service credit may be restored in increments of one month.

(E) Service credit restored under this rule shall receive .125 per cent of a year service credit per month of service rendered prior to July 1, 1955, and .111 per cent of a year service credit per month of service rendered after June 30, 1955 and before July 1, 1977. Service performed after June 30, 1977 shall be determined by dividing the number of days paid by one hundred eighty, if the employee worked less than one hundred twenty days in the partial year to be restored. All other service restored under this rule shall receive .083 per cent of a year service credit per month of service rendered.

History:	4/1/13, 4/3/08, 5/2/01, 11/9/98, 12/24/76
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.26
Review Date:	1/27/2023

3309-1-38 Interest rate.

Except as otherwise provided in Chapter 3309. of the Revised Code or SERS rules, the rate of compound interest for the purchase or restoration of service credit under Chapter 3309. of the Revised Code or SERS rules shall be the rate guaranteed by the retirement board at time of purchase, as recommended by the actuary, and such rate of compound interest shall be applied to the entire period purchased or restored.

History:	5/1/18, 4/1/13, 5/9/03, 2/11/02, 5/2/01, 11/9/98, 11/1/96, 1/2/93, 2/1/92, 12/24/76
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.01(I), 3309.021, 3309.022, 3309.26, 3309.31, 3309.451, 3309.473, 3309.474, 3309.73, 3309.75
Review Date:	2/1/2023

3309-1-39 Purchase of police and fire and highway patrol service.

(A) A member may purchase all or a portion of service credit for Ohio police and fire service and Ohio highway patrol service as provided in section 3309.73 or 3309.731 of the Revised Code.

(B) A member is not eligible to purchase or obtain credit if being paid, or eligible to be paid, a benefit based on the service in another pension plan.

(C) Service purchased under section 3309.73 or 3309.731 of the Revised Code shall be properly certified by an official of the Ohio police and fire pension fund, or the state highway patrol retirement system, or the official employer or custodian of records, on a form furnished by the retirement board.

(D) Service credit may be purchased in increments of one month.

(E) Interest shall be calculated as provided in section 3309.73 or 3309.731 of the Revised Code.

History:	4/3/08, 5/3/02, 5/2/01, 11/9/98, 12/24/76
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.73, 3309.731
Review Date:	1/27/2023

3309-1-52 Travel and expense reimbursement.

(A)

(1) Members of the school employees retirement board and staff members of the school employees retirement system shall be reimbursed by the retirement system for actual, proper and reasonable expenses incurred for attendance at appropriate meetings, sessions, seminars and conferences.

(2) "Actual, proper and reasonable expenses" means that the particular service or accommodation was in fact used by, or provided to, the board or staff member, was appropriate under the circumstances and within the bounds of prudent judgment.

(3) "Appropriate meetings, sessions, seminars and conferences" include, but are not limited to, the following:

(a) Meetings of the retirement board or its committees;

(b) Meetings sponsored by the retirement board or the retirement system;

(c) Member or retiree related meetings;

(d) Other educational meetings, sessions, seminars and conferences that serve to make the board or staff member more knowledgeable and are related to the general purposes of the retirement system and in the interest of the system's participants.

(e) Other meetings which involve the retirement system's business operations.

(B) Reimbursable expenses include, but are not limited to, the following:

(1) Transportation.

(a) Air fare will be reimbursed at coach or economy class rates when such was available and efforts will be made to use other cost-saving plans offered by carriers. In accordance with Ohio ethics commission advisory opinion No. 91-010, airline frequent flyer miles shall not be used for personal travel or benefit.

(b) In-state travel by personal automobile will be reimbursed at the reimbursable rate established by the system. Out-of-state personal automobile or other surface vehicle travel will be reimbursed at the lesser of "portal-to-portal" or "air travel cost".

(i) "Portal-to-portal" reimbursable expenses include the actual cost of lodging, meals, parking at place of lodging and mileage at the reimbursable rate established by the retirement system or the actual cost of coach or economy class fare or the cost of a rental vehicle.

(ii) "Air travel cost" reimbursable expenses include the actual cost of coach or economy air fare, airport parking, transportation from the airport to destination lodging, and mileage between the board or staff member's home and the local airport at the reimbursable rate established by the retirement system.

(c) The cost of a rental vehicle where it is a reasonable alternative means of transportation under the circumstances.

(d) The cost of parking for a personal or rental vehicle.

(e) The cost of taxi cabs or other public transportation where reasonable under the circumstances.

(2) Lodging at the single occupancy rate.

(3) Meals and beverages, excluding alcohol, in reasonable amounts not to exceed limits as set by the retirement board.

(4) Tips as customary and reasonable.

(5) Telephone calls or other electronic transmissions for retirement system business; or personal telephone calls to home and/or family not to exceed limits set by the retirement board.

(6) Registration fees for appropriate meetings, sessions, seminars and conferences.

(C) Reimbursable expenses do not include the following:

(1) Expenditures of a personal nature except as provided in this rule.

(2) Expenditures for travel other than for retirement system business.

(3) Except in the case of an emergency, expenditures by a board member for out-of-state travel not approved by the retirement board.

(D) Requests for approval of out-of-state travel by a board member shall be submitted by the board member to the executive director of the retirement system who shall present the request to the board at its next regular meeting.

(E) Requests for reimbursement for authorized travel shall be submitted on the appropriate form attached as an appendix to this rule and in accordance with the retirement system's reimbursement procedures.

History:	9/30/13, 8/11/05, 8/10/98, 1/2/96
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.041, 3309.10, 3309.14
Review Date:	1/27/2023

3309-1-61 Reemployment covered by section 3309.345 of the Revised Code.

(A) Where a position is one that is customarily filled by vote of members of a board or commission and an employer proposes to:

(1) Continue the employment of a person as a reemployed retirant in the same position that the person held prior to retirement; or

(2) Rehire a person as a reemployed retirant in the same position that the person last held prior to retirement

The employer shall comply with the public notice and hearing requirements of section 3309.345 of the Revised Code and so certify to the retirement system on a form provided by the system.

(B) Where such reemployment is in the same position and continuous from year to year, no certification to the system shall be required for subsequent years.

(C) The person reemployed shall be subject to any other provisions applicable to reemployment.

History:	01/04/04,10/17/03 (Emer.)
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.341, 3309.345
Review Date:	1/27/2023

Upon roll call, the vote was as follows:

ROLL CALL:	**YEA**	**NAY**	**ABSTAIN**
Frank Weglarz	______	______	______
Hugh Garside	______	______	______
James Haller	______	______	______
Matthew King	______	______	______
Catherine Moss	______	______	______
Barb Phillips	______	______	______
James Rossler	______	______	______
Daniel Wilson	______	______	______
Jeff DeLeone	______	______	______

FIVE YEAR REVIEW AND FILING OF PROPOSED AMENDED ADMINISTRATIVE RULE

Legal Counsel discussed with the Retirement Board filing with JCARR the following proposed amended administrative rule: 3309-1-04 Election of retirement board members.

______________________ moved and ____________________ seconded that proposed amended rule 3309-1-04 be filed with JCARR as discussed.

3309-1-04 Election of retirement board members.

(A) The school employees retirement board shall conduct elections in accordance with Chapter 3309. of the Revised Code and this rule.

(B) Notifications

(1) At a regular meeting of the retirement board but no later than July in the fiscal year in which an election of members to the board is required, the retirement board shall establish an election time schedule.

(2) This schedule shall include, a statement of the requirements for nomination by petition, the date after which nominating petitions shall be available, the final date for receipt of completed nominating petitions, the final date for receipt of completed election ballots being the first Monday in March, and the date and place for the election count to be conducted under the supervision of judges as designated in paragraph (D) of this rule.

(C) Nominations

(1) Candidates for board members shall be nominated by petition on forms provided by the school employees retirement system.

(2)

(a) Not later than the last business day of September in the fiscal year in which an election is held for an employee member, notice of election posters shall be sent to employers and petitions and required forms shall be available to members.

(b) Any member, except a member receiving a disability benefit pursuant to section 3309.40 or 3309.401 of the Revised Code, who is not otherwise ineligible under Chapter 3309. of the Revised Code, may be nominated for election as an employee member of the board by petitions that contain at least five hundred valid nominating signatures with not less than twenty signatures of members from each of at least ten different counties in Ohio. In order for a nominating signature to be valid, the member must be actively contributing to SERS and their SERS ID or last 4 digits of their social security number and the name of their school employer and the county in which the employer is located must be provided. The member's place of employment shall determine the county for such member.

(3)

(a) Not later than the last business day of September in the fiscal year in which an election is held for a retirant member, a notice of election shall be sent to retirants at their home addresses of record and petitions and required forms shall be available to retirants.

(b) Any retirant, who is not otherwise ineligible under Chapter 3309. of the Revised Code, may be nominated for election as a retirant member by petitions which contain at least one hundred fifty valid nominating signatures, with not less than ten signatures of retirants from each of at least five different counties in Ohio. In order for a nominating signature to be valid, the retirant's SERS ID or last four digits of their social security number, their home address and county must be provided. The retirant's place of residence shall determine the county of such retirant.

(4)

(a) Petitions and completed required forms for a candidate must be received by the system by the petition filing date established by the retirement board pursuant to paragraph (B) of this rule to be valid.

(b) Petition signatures and candidate eligibility shall be verified based on records of the retirement system and the requirements of Chapter 3309. of the Revised Code. Signatures that cannot be conclusively verified shall not be counted.

(c) The names of qualified candidates shall be certified by a director of the retirement system and shall be subject to review and audit by the secretary of state. A qualified candidate is one who meets the requirements of Chapter 3309. of the Revised Code. In the event that there is a discrepancy between the certification by the officer of the retirement system and the results of the review and audit by the secretary of state, the determination of the secretary of state shall control and be final.

(d) Based on the final certification, the names of qualified candidates shall be placed on the ballot for election. Each ballot shall also include a space for a write-in candidate.

(D) Voting

(1) The retirement board may conduct an election by paper ballots or through electronic methods.

(2)

(a) Voting materials for each voting member or retirant of the retirement system shall include a list of candidates, information on each candidate, voting instructions, and any other materials the retirement board deems necessary.

(b) Voting materials shall be sent to eligible members or retirants no later than the last business day in January in an election year at the address on file with the retirement system.

(3)

(a) For any election requiring a vote by members, the retirement board shall distribute ballots for such election to all members whose accounts have had contributions posted within the eighteen month period immediately preceding the month in which ballots are distributed; and

(b) To members whose accounts have not had contributions posted within the eighteen month period immediately preceding the month in which ballots are scheduled to be distributed, upon the members written request for a ballot.

(4) The election count shall be monitored by a panel of judges consisting of representatives of the secretary of state and the attorney general. The representative of the secretary of state shall be the chief judge. If a representative from such offices is not available, a representative of the retirement system's independent auditor and/or the auditor of state may be substituted. If a representative of the secretary of state is not available, the chief judge, in order of precedence, shall be the representative of the attorney general, the representative of the auditor of state, or the representative of the retirement system's independent auditor.

(5) If the ballot count results in a tie vote, the election shall be determined by a coin toss conducted by the judges with "heads" being assigned to the candidate whose last name is first alphabetically and "tails" assigned to the other candidate.

(6) If a candidate is elected by a margin of less than one percent of the votes cast, a recount will automatically be conducted.

(7) The chief judge shall provide a certification of the election results signed by all judges. The election results shall be submitted to the retirement board for its approval at the first regular retirement board meeting that is not less than thirty-one calendar days after certification of the results of the election.

(8) Within thirty calendar days after the certification of the election count, an unsuccessful candidate may request a recount in writing to the retirement board together with a check payable to the retirement system for the costs of the recount in the amount of one hundred dollars; provided however, if the recount results in the requesting candidate winning the election, the cost shall be refunded.

(E) Vacancies

(1) When an election is held to fill the vacant term of an elected member of the board, the election shall be held pursuant to paragraph (E) of this rule.

(2) The retirement board by majority vote of the board shall declare the seat vacant and establish a board-meeting schedule to nominate, interview and select a successor member to fill the position.

(3) The retirement board shall provide notice of the vacancy and the procedure and forms required to be considered as a qualified candidate to fill the vacancy.

(a) Candidates shall qualify under the same eligibility requirements as the predecessor in office.

(b) The names of qualified candidates shall be certified by a director of the retirement system and shall be subject to review and audit by the secretary of state. In the event that there is a discrepancy between the certification by the officer of the retirement system and the results of the review and audit by the secretary of state, the determination of the secretary of state shall control and be final.

(4) At a public board meeting, each board member may nominate one candidate to fill the vacancy.

(5) The board members shall interview the nominated candidates.

(6) A successor member shall be elected from the list of candidates by a majority vote of the retirement board in a public meeting as follows:

(a) Two successive votes shall occur in order for one candidate to receive a majority. If no candidate receives a majority, successive votes shall continue with the candidate receiving the least number of votes eliminated after each vote until one candidate receives a majority vote of the board or until only two candidates remain.

(b) In the event no candidate receives a majority vote and two candidates remain, one final vote shall occur. If neither candidate receives a majority vote, the winner shall be decided by a coin toss conducted by the election judge with “heads” assigned to the candidate whose last name is first in alphabetical order and “tails” to the other candidate.

(7) The election shall be monitored by a representative of the secretary of state, or if unavailable, by a representative of the attorney general, who shall serve as election judge and certify the results of the election.

(8) All documents regarding filling the vacancy, including resumes and forms required by the retirement system, shall be made available to any person upon request and payment of the cost of compiling, copying and mailing the documents.

(F) An employee member of the board who retires while a member of the board shall be eligible to become a retirant member of the board when three years have elapsed from the member’s effective date of retirement and the date of the scheduled election for the retirant member seat. <u>An employee member of the board retires while a member of the board when the member served on the board in the month immediately preceding the member’s effective date of retirement.</u>

History:	4/10/14, 1/7/13, 4/3/09, 8/10/07, 12/2/04
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.05, 3309.06, 3309.07, 3309.071, 3309.075, 3309.22
Review Date:	1/27/2023

Upon roll call, the vote was as follows:

ROLL CALL:	**YEA**	**NAY**	**ABSTAIN**
Frank Weglarz	______	______	______
Hugh Garside	______	______	______
James Haller	______	______	______
Matthew King	______	______	______
Catherine Moss	______	______	______
Barb Phillips	______	______	______
James Rossler	______	______	______
Daniel Wilson	______	______	______
Jeff DeLeone	______	______	______

FIVE YEAR REVIEW AND FILING OF PROPOSED AMENDED ADMINISTRATIVE RULE

Legal Counsel discussed with the Retirement Board filing with JCARR the following proposed amended administrative rule: 3309-1-13, Obtaining optional or compulsory service credit.

______________________ moved and ____________________ seconded that proposed amended rule 3309-1-13 be filed with JCARR as discussed.

3309-1-13 Obtaining optional or compulsory service credit.

(A) Optional service credit

(1) Except as provided by section 3309.012 of the Revised Code, a member of the school employees retirement system, public employees retirement system, or state teachers retirement system shall be eligible to purchase service credit for <u>school employment on or before June 30, 1991 for </u>~~any period during~~ which contributing service was optional. Contributing service shall be deemed to be optional when contributions were not required by the school employees retirement system and no contributions or member record was received. In order to receive optional service credit, payments shall be made as provided in this paragraph.

(2)<u>(a)</u> For any period of optional service, the member shall pay to the school employees retirement system an amount equal to the employee's and employer's contributions for such period, plus interest at the rate to be set by the school employees retirement board from the end of each year compounded annually. Such amounts paid by the member shall be credited to the employees' savings fund.

<u>(b) Optional service may be purchased in one month increments.</u>

<u>(c) When only a portion of a period of optional service is purchased, service shall be purchased in reverse chronological order from the most recent month to the oldest month.</u>

(3) In lieu of the member paying the amounts described in this paragraph, the employer for which the optional service was performed may pay an amount equal to either the employee's and employer's, or only the employer's, contributions for such period, plus interest at the rate set by the retirement board from the end of each year compounded annually. If paid by the employer, such amounts shall be credited as follows:

(a) The amount and interest attributable to the employee's back contributions shall be credited to the employees' savings fund; and,

(b) The amount attributable to the employer's contributions shall be deposited in the employers' trust fund and the interest collected on such amount shall be credited to the guarantee fund.

If the employer pays only the amount equal to the employer's contributions and interest on that amount, the member shall pay the amount equal to the employee's contributions and interest on that amount.

(B) Compulsory service credit

(1) Except as provided in paragraph (B)(3) of this rule, to receive service credit for periods of compulsory service prior to June 30, 1991, for which the employer did not deduct and transmit contributions, the member shall pay the employee's share of the back contributions and the employer shall pay the employer's share of the back contributions. Payments for both the employee's and the employer's shares of back contributions shall include a charge for interest at the rate set by the retirement board from the end of each year, compounded annually.

(a) The employee's back contributions and interest shall be credited to the employees' savings fund, and in the event of death or withdrawal from service prior to retirement, shall be paid in the same manner as accumulated contributions pursuant to sections 3309.42 and 3309.44 of the Revised Code.

(b) The employer's share of back contributions shall be deposited in the employers' trust fund and the interest collected thereon shall be credited to the guarantee fund.

(2) Except as provided in paragraph (B)(3) of this rule, to receive service credit for periods of compulsory service after June 29, 1991, for which the employer did not deduct and transmit contributions, the employer shall pay both the employer's share and the employee's share of the back contributions. Payments for both the employee's and the employer's shares of back contributions shall include a charge for interest at the rate set by the retirement board from the end of each year, compounded annually.

(a) The employee's back contributions and interest shall be credited to the employees' savings fund, and in the event of death or withdrawal from service prior to retirement, shall be paid in the same manner as accumulated contributions pursuant to sections 3309.42 and 3309.44 of the Revised Code.

(b) The employer's share of back contributions shall be deposited in the employers' trust fund and the interest collected thereon shall be credited to the guarantee fund.

(3) When a member has left service with an employer after attaining sixty-five and applies for retirement, the member shall receive service credit in accordance with section 3309.48 of the Revised Code for periods of compulsory service prior to June 30, 1991, for which the employer did not deduct and transmit contributions.

(C) The compensation and service of the member shall be certified by a fiscal officer of the school district who has knowledge of and access to the records of the district. A member cannot certify his own compensation or service.

(D) The member's share of back contributions may be paid directly to the retirement system.

(E) The employer's share of back contributions may be paid either by an official warrant or collection from the employer's share of the state school foundation fund.

(F) Service credit for any period described in this rule shall be credited to the member’s account on the date payment in full has been received by the retirement system for both the employee and employer shares of back contributions.

History:	12/22/19, 4/1/13, 5/9/03, 11/1/01, 7/30/01 (Emer), 2/11/00, 6/12/95, 2/1/92, 12/24/76
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.23, 3309.34, 3309.47, 3309.48, 3309.49, 3309.51, 3309.56, 3309.57
Review Date:	1/27/2023

Upon roll call, the vote was as follows:

ROLL CALL:	**YEA**	**NAY**	**ABSTAIN**
Frank Weglarz	______	______	______
Hugh Garside	______	______	______
James Haller	______	______	______
Matthew King	______	______	______
Catherine Moss	______	______	______
Barb Phillips	______	______	______
James Rossler	______	______	______
Daniel Wilson	______	______	______
Jeff DeLeone	______	______	______

FIVE YEAR REVIEW AND FILING OF PROPOSED AMENDED ADMINISTRATIVE RULE

Legal Counsel discussed with the Retirement Board filing with JCARR the following proposed amended administrative rule: 3309-1-64 Supplemental health care coverage.

______________________ moved and ____________________ seconded that proposed amended rule 3309-1-64 be filed with JCARR as discussed.

3309-1-64 ~~Supplemental health care~~Dental and vision coverage.

(A) Definitions

(1) "Benefit recipient," "Member," "Age and service retirant," "Disability benefit recipient," and “Dependent” shall have the meanings set forth in paragraph (A) of rule 3309-1-35 of the Administrative Code.

(2) ~~"Supplemental health care coverage" means any dental or vision plan offered by the school employees retirement system.~~

~~(3)~~ "Premium" means a monthly amount that may be required to be paid by a benefit recipient to continue enrollment ~~for the supplemental health care coverage~~ for the recipient or the recipient's eligible dependents.

(B) Eligibility

~~(1)~~ A person is eligible for ~~supplemental health care~~ dental or vision coverage under this rule so long as the person meets the eligibility requirements in section 3309.69 of the Revised Code and paragraph (B)(1) of rule 3309-1-35 of the Administrative Code for the retirement system’s health care coverage.

~~(2) Eligibility for supplemental health care coverage shall terminate when the person ceases to qualify as one of the persons listed in paragraph (B)(1) of rule 3309-1-35 of the Administrative Code. A person described in paragraph (B)(4) of rule 3309-1-35 of the Administrative Code shall remain eligible for supplemental health care coverage under this rule.~~

(C) Enrollment

(1) An eligible benefit recipient may only enroll in ~~one or more supplemental health care~~ a dental or vision plan~~s~~ as follows:

(a) At the time the benefit recipient applies for an age and service retirement, disability benefit, or monthly benefit pursuant to section 3309.45 of the Revised Code;

(b) At the time the benefit recipient reinstates previously waived or cancelled health care coverage as provided in paragraph (I) of rule 3309-1-35 of the Administrative Code;

(c) Within thirty-one days after involuntary termination of another dental or vision plan; or,

(d) During the retirement system’s open enrollment period.

(2) An eligible dependent of an age and service retirant or disability benefit recipient may only enroll in ~~one or more supplemental health care~~ a dental or vision plan~~s~~ as follows:

(a) At the time the age and service retirant or disability benefit recipient enrolls in the ~~supplemental health care~~ plan;

(b) During the retirement system's open enrollment period so long as the age and service retirant or disability benefit recipient is also enrolled in the ~~supplemental health care~~ plan; or

(c) Within thirty-one days after involuntary termination of another medical, dental, or vision plan, so long as the age and service retirant or disability benefit recipient is also enrolled in the ~~supplemental health care~~ plan.

(D) A person's ~~supplemental health care~~ dental or vision coverage shall be cancelled when:

(1) The person~~'s eligibility for health care coverage terminates as provided~~ ceases to qualify as one of the persons listed in paragraph (B)(1)~~(2)~~ of rule 3309-1-35 of the Administrative Code;

(2) The ~~supplemental health care~~ coverage of a dependent is cancelled when the ~~supplemental health care~~ coverage of a benefit recipient is cancelled;

(3) The person's ~~supplemental health care~~ coverage is cancelled for default as provided in paragraph (F) of this rule;

(4) 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, ~~or~~ division (D) of section 3309.41 of the Revised Code, or division (D) of section 3309.392 of the Revised Code; or

(5) The benefit recipient elects to cancel the ~~supplemental health care~~ coverage ~~for the following calendar year~~ during the open enrollment period.~~; or~~

~~(6) The benefit recipient elects to cancel health care coverage under paragraph (D) of rule 3309-1-35 of the Administrative Code.~~

(E) Effective date of coverage

(1) When a benefit recipient elects to enroll in ~~supplemental health care~~ dental or vision coverage during an open enrollment period, the effective date of coverage shall be the first day of the calendar year following the open enrollment period.

(2) When a benefit recipient elects to enroll in ~~supplemental health care~~ dental or vision coverage upon receipt of a benefit, the effective date of coverage shall be as follows:

(a) For a disability benefit recipient or dependent of a disability benefit recipient, the ~~supplemental health care~~ coverage shall be effective on the first day of the month following approval of the benefit or the benefit effective date, whichever is later.

(b) For an age and service retirant or dependent of an age and service retirant, the ~~supplemental health care~~ coverage shall be effective on the first day of the month following the date that the retirement application is filed with the retirement system or 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 retirant, the ~~supplemental 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 retirant's death, or the first day 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 retirant's death.

(F) Premiums

(1) Payment of premiums ~~for supplemental 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 health care coverage under rule 3309-1-35 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. The benefit recipient shall be ineligible for reinstatement of coverage until payment for the total amount in default is received.

History:	6/5/20, 5/3/19, 1/1/14
Promulgated Under:	111.15
Statutory Authority:	3309.04
Rule Amplifies:	3309.69
Review Date:	2/1/23

Upon roll call, the vote was as follows:

ROLL CALL:	**YEA**	**NAY**	**ABSTAIN**
Frank Weglarz	______	______	______
Hugh Garside	______	______	______
James Haller	______	______	______
Matthew King	______	______	______
Catherine Moss	______	______	______
Barb Phillips	______	______	______
James Rossler	______	______	______
Daniel Wilson	______	______	______
Jeff DeLeone	______	______	______

SCHOOL EMPLOYEES
RETIREMENT SYSTEM

Memo

To: SERS Retirement Board

From: Marni Hall

Date: December 1, 2022

Re: 2023 Qualified Excess Benefit Arrangement (QEBA) Budget

SERS established a separate plan, effective January 2003, to provide for the payment of a retiree's service retirement benefit that otherwise would have been payable by the System except for the limitations of Internal Revenue Code ("IRC") §415(b). This code section limits the amount of annual benefit that a defined benefit plan, such as SERS, can pay to a retiree. However, IRC §415(m) allows governmental plans to set up a qualified excess benefit arrangement (QEBA) to pay the excess amount. SERS' Qualified Excess Benefit Plan is funded on a calendar year basis from contributions from the retiree's last employer. Estimated expenses for administering the plan are included in the annual funding request.

Each year a budget is prepared using the new IRS plan limits, calculating current QEBA recipients' projected benefits, adding new QEBA recipients and projecting the cash balance remaining in the QEBA account at year end. For calendar year 2023, we are requesting that $ 187,000 of employer contributions be assigned to the QEBA Fund.

2023 QUALIFIED EXCESS BENEFIT PLAN BUDGET (QEBA)

______________________ moved and __________________seconded the motion to assign $ 187,000 of employer contributions from the last employer of retirees covered by the SERS Qualified Excess Benefit Plan to the QEBA Fund for calendar 2023. The QEBA Fund is authorized to pay benefits of approximately $ 182,000 to qualified retirees; with the balance allocated to QEBA Fund operating expenses.

Upon roll call, the vote was as follows:

ROLL CALL:	**YEA**	**NAY**	**ABSTAIN**
Frank Weglarz	________	________	________
Hugh Garside	________	________	________
James Haller	________	________	________
Matthew King	________	________	________
Catherine Moss	________	________	________
Barbra Phillips	________	________	________
James Rossler	________	________	________
Daniel Wilson	________	________	________
Jeffrey DeLeone	________	________	________

TRENA KELLY APPEAL – AFFIRM FINAL STAFF DETERMINATION

____________ moved and ____________ seconded to affirm the Final Staff Determination that declined the member's request to be granted a retirement allowance based on the final average salary used in estimates she received prior to retirement.

Upon roll call, the vote was as follows:

ROLL CALL:	**YEA**	**NAY**	**ABSTAIN**
Frank Weglarz	______	______	______
Hugh Garside	______	______	______
James Haller	______	______	______
Matthew King	______	______	______
Catherine Moss	______	______	______
Barbra Phillips	______	______	______
James Rossler	______	______	______
Daniel Wilson	______	______	______
Jeffrey DeLeone	______	______	______

TRENA KELLY APPEAL – REVERSE FINAL STAFF DETERMINATION

____________ moved and ____________ seconded to reverse the Final Staff Determination that declined the member's request to be granted a retirement allowance based on the final average salary used in estimates she received prior to retirement.

Upon roll call, the vote was as follows:

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

School Employees
Retirement System

Memo

To: Retirement Board

From: Chris Collins

cc: Richard Stensrud, Karen Roggenkamp

Date: December 2, 2022

Re: **Federal Legislative Report**

OVERVIEW

Elections 2022

After a grueling Republican primary and a hard-fought general election campaign, J.D. Vance will be the next U.S. senator representing the state of Ohio. As the polls predicted, the race between Vance and U.S. Rep. Tim Ryan (D-Niles) was much closer than the other statewide races. Vance will replace U.S. Sen. Rob Portman (R-OH), who is retiring at the end of his term.

While there weren't many bright spots for Ohio Democrats on election night, they did win the three competitive U.S. House seats. Cincinnati City Councilman Greg Landsman defeated U.S. Rep. Steve Chabot (R-Cincinnati) in the 1st Congressional District; U.S. Rep. Marcy Kaptur (D-Toledo) beat J.R. Majewski to retain her seat in the 9th Congressional District; and Rep. Emilia Sykes (D-Akron) won against Madison Gesiotto Gilbert in the 13th Congressional District. In addition to new delegation members Landsman and Sykes, Max Miller (R-Shaker Heights) won, replacing retiring incumbent Bob Gibbs, bringing the total of new Ohio Members of Congress to 3 of 15 total seats. (10 Republicans and 5 Democrats.)

Nationally the Democrats retained control of the Senate with the Georgia Senate race to be determined by a run-off scheduled December 6th. The results will determine if Democrats will lead the Senate with 50 or 51 seats.

The Republicans have won control of the House but by a much smaller margin than originally anticipated. As of December 1st, the Republicans have won 221 seats compared to 213 for the Democrats. (District 13 in California remains too close to call pending final ballot counts.) These results give Republicans only a 3 or 4 seat majority.

Current Speaker Nancy Pelosi (D-CA) has announced that she will be stepping down as the Democratic caucus leader. House Democrats on November 30th officially elected Rep. Hakeem Jeffries (D-NY) as the next minority leader by unanimous consent, making him the first Black lawmaker to lead a congressional party caucus.

House Minority Leader Kevin McCarthy (R-CA) is favored to take over the gavel as Speaker in January when the new Congress is sworn in and the full chamber votes on the top position, which is second in line to the presidency, after the vice president. He is still working to secure enough votes to become Speaker. Even if McCarthy does achieve the required support, lawmakers and aides predict he will face major challenges presiding over a congressional chamber in which legislation can be blocked by just a handful of members.

A few Ohioans are positioned to take on key committee positions in the coming Congress.

Ohio Rep Jim. Jordan (R-Urbana), who is expected to take the gavel as the chair of the House Judiciary Committee, sent letters to Attorney General Merrick Garland and FBI Director Christopher Wray the week before the election outlining lengthy lists of materials the panel was seeking and directing the agency heads to preserve materials ahead of continuing probes in 2023.

Rep. Michael Turner (R-Dayton) is predicted to become chair of the House Permanent Select Committee on Intelligence after serving at the Ranking member in the last Congress.

FEDERAL APPROPRIATIONS

Congressional leaders and top appropriators have been meeting to work through differences on a potential omnibus spending agreement.

President Joe Biden and Vice President Kamala Harris, along with a few top White House aides, met with Speaker Nancy Pelosi, House Minority Leader Kevin McCarthy, Senate Minority Leader Mitch McConnell and Schumer at the end of November to discuss the lame-duck agenda.

Schumer said the leaders had a “productive discussion” about funding the government and said all four leaders aim to come together to pass an omnibus.

The prospects of a lame duck omnibus remain murky as Republicans and Democrats have not reached a topline spending agreement. The current continuing resolution (CR) runs out December 16th, though lawmakers have discussed a stopgap extension of perhaps a week to buy extra time.

McConnell said that while there is widespread agreement an omnibus is better than a CR, Republicans want increased defense spending and more funding for Ukraine. House Republicans are willing to punt government funding into January if no agreement is reached, McCarthy said.

The Biden administration and top Democrats have been warning of the danger that the two parties may not be able to come together at all, however, and instead resort to a full-year stopgap bill.

A yearlong CR would give government agencies more certainty about funding next year and avoid a government shutdown scenario in a Republican-controlled House in January if there were a shorter stopgap bill.

RETIREMENT SECURITY

On November 29th, U.S. Senators Cory Booker (D-NJ) and Todd Young (R-IN) made their case during a webinar hosted by the Bipartisan Policy Center in favor of passage of retirement savings legislation before the end of the year. They focused their advocacy primarily on the Emergency Savings Act of 2022, a bill that was included as part of a broader legislation package passed earlier this year out of the Senate Health, Education, Labor and Pensions Committee. The broader bill passed by the Senate HELP Committee is known as the Rise & Shine Act.

The package of three retirement reform bills, known as “SECURE 2.0,” would likely be attached to another must-pass bill, Young said. “As we approach year’s end, we have a national defense authorization bill to consider, we want to keep government funded, there may be an omnibus — a grab bag of legislative items as we approach year’s end to include various tax bills,” he said.

Booker and Young conceded that while they remain optimistic that Secure Act 2.0 could pass during the lame-duck session, passage of the retirement bill may slip into next year.

WINDFALL ELIMINATION PROVISION (WEP) AND GOVERNMENT PENSION OFFSET (GPO)

WEP and GPO repeal advocates having been putting on a last push to get congressional leaders to consider including full repeal bills (HR 82 or S 1302) into any potential end-of-year omnibus spending legislation.

HR 82, the "Social Security Fairness Act of 2021," which addresses the full repeal of WEP and GPO, now has 305 cosponsors, including ten Ohio members, Reps. Tim Ryan (D-OH), David Joyce (R-OH), Mike Carey (R-OH), Bob Gibbs (R-OH), Marcy Kaptur (D-OH), Michael Turner (R-OH), Shontel Brown (D-OH), Joyce Beatty (D-OH), Steve Chabot (R-OH) and Troy Balderson (R-OH). While there was some hope that it might be taken up directly on the House floor due to passing the necessary threshold of co-sponsors, the Ways and Means committee reported the bill without recommendation so it is not required to receive a floor vote. If that remains the case at the end of the year it would need to be introduced in the next session.

Senator Sherrod Brown (D-OH) is the lead sponsor of the Senate companion bill, S. 1302, the "Social Security Fairness Act." The bill would also fully repeal the WEP and GPO. There are still 42 cosponsors, including 36 Democrats, 4 Republicans and 2 Independents. Senator Rob Portman (R-OH) is not one of the cosponsors and there has been no action in the Senate Committee on Finance. It too would need to be re-introduced next session.

There has been no movement on either bill introduced by Ways and Means Chairman Richard Neal (D-MA) or Ranking Member Kevin Brady (R-TX) to reform the WEP formula. Of course, Rep. Brady is retiring at the end of the year and the Ways and Means committee will have different leadership in the new Congress making the future of WEP reform uncertain.

HEALTH CARE

Health Care Roundtable Conference

SERS staff attended the Roundtable's annual conference from November 9th to 11th in Old Town Alexandria, Virginia. Panels covered topics including: challenges facing public sector purchasers, the White House agenda for health care policy, market trends in health policy, and implementation of the drug cost provisions of the Inflation Reduction Act.

SERS' health care staff member, Mike Steiner, participated in a panel addressing Medicare Advantage and EGWP federal policy from a stakeholder perspective.

Attendees also heard from keynote speaker Sam Stein, White House Editor at POLITICO and an MSNBC contributor. His remarks focused on the results of the mid-term election, the potential for gridlock in a divided Congress, the political environment as we look ahead to the next presidential election, and the state of journalism in America.

Prescription Drug Price Reform

Top Republicans in line to chair important House healthcare committees have stated that they intend to focus on how the Centers for Medicare and Medicaid Services (CMS) implements the drug pricing provisions included in the Inflation Reduction Act, but are not expected to attempt repealing the law. While the GOP-led House could pass legislation to repeal the Inflation Reduction Act, for the next 26 months they would face a Democratic-led Senate and a President who wields veto power. By then, however, many of the Act's provisions will have been implemented, at least to a large degree. Therefore 2025 would be the earliest Republicans could take action to successfully rescind the law. Most of the drug pricing provisions will likely remain on the books permanently.

SERS

Memo

To: Retirement Board

From: Richard Stensrud

CC: Karen Roggenkamp, Chris Collins

Date: December 15, 2022

Re: Federal Level Developments Presentation

Traditionally, at the December Board Meeting the Board receives a presentation on federal level issues of interest. by SERS' federal liaison. The presentation this year will be made by Jeannine Markoe Raymond, Director of Federal Relations for the National Association of State Retirement Administrators (NASRA).

Jeannine is a highly respected and influential advocate on behalf of public retirement systems, with extensive first hand federal level engagement on issues important to public retirement systems. A copy of Jeannine's bio is attached.

She will be presenting remotely, with the presentation scheduled to start at 11:00 am.

JEANNINE MARKOE RAYMOND, DIRECTOR OF FEDERAL RELATIONS

Ms. Raymond has served as director of federal relations for the National Association of State Retirement Administrators since 1997. In this role, she educates staff and officials in Congress, the Administration and its many federal agencies, and other organizations on issues affecting state and local retirement systems, and is a liaison to other professional associations, interest groups, and policy institutions. She also frequently speaks and writes on federal legislative and regulatory matters and is a contributor to publications on state retirement system policies and administration.

Ms. Raymond serves on the advisory board of the Wharton Business School's Pension Research Council, the International Foundation of Employee Benefit Plans' Government Liaison Committee, the board of directors for the Coalition to Preserve Retirement Security, and the advisory board of the Modern Markets Initiative. She was a congressionally appointed delegate to the 2002 National Summit on Retirement Savings.

Formerly, Ms. Raymond was the legislative analyst for the Government Finance Officers Association. She also worked as a graduate student associate for the California Debt Advisory Commission within the California State Treasurer's Office.

She received a Bachelor's degree in economics from the University of California, San Diego, and a Master's degree, with honors, in public administration and intergovernmental management from the University of Southern California.

FEDERAL LEGISLATION BOARD REPORT
117th United States Congress
(Prepared by Chris Collins as of December 2, 2022)

H.R.82

SPONSOR: Rep. Rodney Davis (R-IL)
LAST ACTIONS: House - 09/21/2022 Placed on the Union Calendar, Calendar No. 372.
CAPTION: Social Security Fairness Act of 2021

COMMENT: Repeals the GPO and WEP. 305 co-sponsors; ten Ohioans

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H.R.328

SPONSOR: Rep. Peter DeFazio (D-OR)
LAST ACTION: House - 01/15/2021 Referred to the House Committee on Ways and Means.
CAPTION: To amend the Internal Revenue Code of 1986 to impose a tax on certain trading transactions.

COMMENT: 28 co-sponsors; one Ohioan

H.R.1319

SPONSOR: Rep. John Yarmuth (D-KY)
LAST ACTIONS: 03/11/2021 Became Public Law No: 117-2.
CAPTION: American Rescue Plan Act of 2021

COMMENT: Provides additional relief to address the continued impact of COVID-19 on the economy, public health, state and local governments, individuals, and businesses.

H.R.2337

SPONSOR: Rep. Richard Neal (D-MA)
LAST ACTIONS: House - 04/01/2021 Referred to the House Committee on Ways and Means.
CAPTION: To amend title II of the Social Security Act to provide an equitable Social Security formula for individuals with noncovered employment and to provide relief for individuals currently affected by the Windfall Elimination Provision.

COMMENT: 190 cosponsors; three Ohioans

S.1302

SPONSOR: Sen. Sherrod Brown (D-OH)
LAST ACTIONS: Senate - 04/22/2021 Read twice and referred to the Committee on Finance.
CAPTION: A bill to amend title II of the Social Security Act to repeal the Government pension offset and windfall elimination provisions.

COMMENT: 42 cosponsors

H.R.3

SPONSOR: Rep. Frank Pallone (D-NJ)
LAST ACTIONS: House - 04/27/2021 Referred to the Subcommittee on Oversight and Investigations
CAPTION: Elijah E. Cummings Lower Drug Costs Now Act

COMMENT: 92 cosponsors; three Ohioans

H.R.5376

SPONSOR: Rep. John Yarmuth (D-KY)
LAST ACTIONS: 08/16/2022 Became Public Law No: 117-169. (All Actions)
CAPTION: Inflation Reduction Act of 2022

COMMENT: This bill provides funding, establishes programs, and otherwise modifies provisions relating to a broad array of areas, including education, labor, child care, health care, taxes, immigration, and the environment.

H.R.5834

SPONSOR: Rep. Kevin Brady (R-TX)
LAST ACTIONS: House - 11/03/2021 Referred to the House Committee on Ways and Means
CAPTION: Equal Treatment of Public Servants Act of 2021

COMMENT: 55 cosponsors; four Ohioans

H.R.5723

SPONSOR: Rep. Larson, John B. [D-CT-1]
LAST ACTIONS: House - 10/26/2021 Referred to the Committee on Ways and Means, and in addition to the Committees on Education and Labor, and Energy and Commerce, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned
CAPTION: Social Security 2100: A Sacred Trust

COMMENT: 202 cosponsors; four Ohioans

STATE LEGISLATION BOARD REPORT
(Prepared by Chris Collins as of December 2, 2022)

134th General Assembly

HB110 OPERATING BUDGET Scott Oelslager (R- North Canton) To make operating appropriations for the biennium beginning July 1, 2021, and ending June 30, 2023, to levy taxes, and to provide authorization and conditions for the operation of state programs.

Current Status: 07/01/2021 SIGNED BY GOVERNOR; effective 7/1/21

HB14 REGARDS STATE RETIREMENT SYSTEM Diane Grendell (R – Chesterland) Regarding state retirement system fiduciary duties, Public Employees Retirement System management fees and employee pay, and creating the Committee on Pension Salaries and Fees.

Current Status: 02/04/2021 Referred to Financial Institutions Committee

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SB233 SCHOOL NURSE LICENSURE, RETIREMENT Louis Blessing III (R - Cincinnati) Regarding licensure and state retirement system membership for school nurses.

Current Status: 02/15/2022 Senate Primary and Secondary Education, (Second Hearing)

HB416 AUTO-ENROLLMENT RETIREMENT PROGRAM FOR PRIVATE EMPLOYEES Juanita Brent, (D – Cleveland) Stephanie Howse (D – Cleveland) To establish an auto-enrollment retirement savings program for private sector employees.

Current Status: 10/27/2021 House Insurance, (First Hearing)

HB499 ALLOW ELECTED OPERS/SERS RECIPIENTS TO RECEIVE BENEFITS (Miller, A) - To allow a Public Employees Retirement System or School Employees Retirement System disability benefit recipient elected to certain offices to continue receiving a disability benefit during the term of office.

Current Status: 6/1/2022 Third Hearing, All Testimony, SUBSTITUTE BILL

HB512 POLICE, FIRE PENSION FUND (Abrams, C; Baldridge, B) - To increase employer contributions to the Ohio Police and Fire Pension Fund.

Current Status: 11/16/2022 SUBSTITUTE BILL ACCEPTED & AMENDED, House Insurance, (Third Hearing)

HB539 STATE RETIREMENT SYSTEMS - PUBLIC BROADCAST (Kelly, B; Ghanbari, H) - To require the state retirement systems to publicly broadcast board meetings.

Current Status: 11/16/2022 House Insurance, (First Hearing)

HB540 STATE RETIREMENT SYSTEMS – FINANCIAL INFORMATION (Kelly, B; Ghanbari, H) - To require the state retirement system boards to disclose certain financial information regarding alternative investments.

Current Status: 11/16/2022 House Insurance, (Second Hearing)

HB541 STATE RETIREMENT SYSTEMS – FORMER EMPLOYEES (Kelly, B; Ghanbari, H) - Regarding the prohibition against the state retirement systems doing business with a former state retirement system employee, officer, or board member.

Current Status: 11/16/2022 House Insurance, (Second Hearing)

HB601 STRS COST-OF-LIVING ADJUSTMENTS (Lightbody, M; Miller, A) - Regarding increasing contributions for employers to the State Teachers Retirement System and School Employees Retirement System, establishing minimum amounts for certain STRS cost-of-living adjustments, and eliminating an age-related eligibility criterion for retirement in STRS.

Current Status**:** 04/06/2022 House Insurance, (First Hearing)

SB308 DIVESTMENT, RESTRICTIONS-RUSSIA (Antani, N) - To prohibit state and local governments from investing in, granting incentives to, or contracting with Russia or companies based in Russia, to require Ohio's pension and other investment funds to divest from any such holdings, and to declare an emergency.

Current Status**:** 03/16/2022 Referred to General Government Budget Committee

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SB347 SERS CONTRIBUTION BENEFIT CAP (Schuring, K; Hottinger, J) - To establish a contribution based benefit cap in calculating a School Employees Retirement System member's retirement benefit.

Current Status: 05/31/2022 Referred to Insurance Committee

SB348 SERS MEMBERSHIP DETERMINATION PROCEDURE (Reineke, W) To establish a School Employees Retirement System membership determination procedure and to limit the amount that the retirement system can charge for late contributions.

Current Status: 06/01/2022 Referred to Senate Insurance

SB367 REGARDING STATE GOVERNANCE POLICIES (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: 11/16/2022 Introduced

School Employees Retirement System of Ohio

Summary of administrative operation expenses during the period **November 1, 2022-November 30, 2022**.

Actuals

Nov-2022

Account	**Amount**
Salaries & Wages	1,133,787.43
Salaries & Wages- Overtime	13,699.95
Vacation Leave Expense	105,329.15
Sick Leave Expense	27,699.90
Employer Contributions- PERS	168,188.62
Group Life	9,337.57
Long Term Disability	3,247.03
Short Term Disability	2,541.72
Group Health Claims	190,126.72
Group Health- Admin Fees	9,017.20
Prescription Claims	92,482.42
Group Health- Stop Loss Admin	15,735.20
Group Health- Stop Loss Claims	(18,069.83)
Vision Claims	2,145.30
Vision Admin Fees	120.96
Group Health- Employee Cost	(28,891.34)
Group Health- Wellness Incentive	3,930.00
Group Health- Tobacco Premiums	(760.00)
Medicare Premium- Employer	17,190.78
Deferred Compensation Match	4,680.00
Actuarial Services	57,000.00
Audit	27,870.00
Custodial Fees	80,023.40

Custodial Banking	153.72
Master Recordkeeper Fees	88,333.33
Investment Advisory Fees	43,664.38
Performance/ Analytics Fee	37,401.66
Other Prof. Inv. Related Consulting	17,928.50
Bloomberg Terminal Rentals	19,775.50
Medical Consultant	3,750.00
Special Counsel	24,517.50
Technical	56,902.39
Other Professional Services	8,569.33
Postage	102,041.28
Telecommunications Services	15,384.12
Member/Employer Education	815.11
Software Maintenance	35,458.09
Software Subscriptions	47,344.96
Equipment Repairs & Maintenance	8,537.40
Office Supplies & Expenses	460.50
Records Storage	1,930.00
Seminars & Conferences	13,226.69
Travel & Transportation	21,212.51
Subscriptions	8,657.39
Memberships	958.00
Operations Maintenance	2,019.18
Interior Landscaping	3,360.37
Vehicle Expense	1,214.78
Staff Support	6,258.62
Recruiting Expense	13,073.36
Board Member- School Board Reimb.	678.48

Reimbursement of Leased Svcs.	(25,416.67)
Total Administrative Expenses	2,474,642.66

School Employees Retirement System of Ohio
REVIEW OF ADMINISTRATIVE EXPENSES
Nov-22

Expense Account	Vendor		Amount
53100 - Salaries & Wages	ADP, LLC		1,133,787.43
		Subtotal	1,133,787.43
53110 - Salaries & Wages - Overtime	ADP, LLC		13,699.95
		Subtotal	13,699.95
53111 - Vacation Leave Expense	ADP, LLC		105,329.15
		Subtotal	105,329.15
53112 - Sick Leave Expense	ADP, LLC		27,699.90
		Subtotal	27,699.90
53200 - Employer Contributions - PERS	ADP, LLC		168,188.62
		Subtotal	168,188.62
53300 - Group Life	American United Life Insurance Company		9,337.57
		Subtotal	9,337.57
53310 - Long Term Disability	American United Life Insurance Company		3,247.03
		Subtotal	3,247.03
53315 - Short Term Disability	American United Life Insurance Company		2,541.72
		Subtotal	2,541.72
53320 - Group Health Claims	Aetna Daily Wires - ESERS		18,069.83
	Aetna Daily Wires - ESERS		172,056.89
		Subtotal	190,126.72
53321 - Group Health - Admin Fees	Mount Carmel Occupational Health		1,680.00
	Aetna Admin - ESERS		7,337.20
		Subtotal	9,017.20
53322 - Prescription Claims	Express Scripts - ESERS		92,482.42
		Subtotal	92,482.42
53324 - Group Health - Stop Loss Admin	Aetna Admin - ESERS		15,735.20
		Subtotal	15,735.20
53325 - Group Health - Stop Loss Claims	Aetna Admin - ESERS stop loss credit		(18,069.83)
		Subtotal	(18,069.83)
53326 - Vision Claims	VSP - (OH)		2,145.30
		Subtotal	2,145.30
53327 - Vision Admin Fees	VSP - (OH)		120.96
		Subtotal	120.96
53330 - Group Health - Employee Cost	Employee Premiums		(28,891.34)
		Subtotal	(28,891.34)
53331 - Group Health - Wellness Incentive	ADP, LLC		3,930.00
		Subtotal	3,930.00
53332 - Group Health - Tobacco Premiums	ADP, LLC		(760.00)
		Subtotal	(760.00)
53340 - Medicare Premium - Employer	ADP, LLC		17,190.77
	ADP, LLC		0.01
		Subtotal	17,190.78
53380 - Deferred Compensation Match	ADP, LLC		4,680.00
		Subtotal	4,680.00
54100 - Actuarial Services	Cavanaugh MacDonald Consulting, LLC		12,000.00
	Cavanaugh MacDonald Consulting, LLC		45,000.00
		Subtotal	57,000.00
54200 - Audit	RSM US LLP		27,700.00
	Treasurer of State of Ohio		170.00
		Subtotal	27,870.00
54310 - Custodial Fees	BNY Mellon Asset Servicing		80,023.40
		Subtotal	80,023.40
54320 - Custodial Banking	Treasurer of State - Warrants		153.72
		Subtotal	153.72
54410 - Master Recordkeeper Fees	BNY Mellon Asset Servicing		88,333.33
		Subtotal	88,333.33
54420 - Investment Advisory Fees	Wilshire/Aksia		43,664.38
		Subtotal	43,664.38
54430 - Performance/Analytics Fee	BNY Mellon Asset Servicing		34,401.66
	Wilshire Advisors, LLC		3,000.00
		Subtotal	37,401.66

54450 - Other Prof. Inv. Related Consulting	MSCI ESG Research LLC		17,928.50
		Subtotal	17,928.50
54460 - Bloomberg Terminal Rentals	Bloomberg Finance LP		19,775.50
		Subtotal	19,775.50
54520 - Medical Consultant	Borchers, M.D., Glen G.		3,750.00
		Subtotal	3,750.00
54610 - Special Counsel	Ice Miller LLP		1,380.00
	Seyfarth Shaw LLP		18,480.00
	Calfee Halter & Griswold LLP		4,657.50
		Subtotal	24,517.50
54620 - Technical	Sagitec Solutions, LLC		35,574.00
	LexisNexis Risk Data Management, Inc		1,685.94
	Sigital, LLC		1,757.50
	ComResource		4,513.75
	Velosio		2,332.50
	Alight Solutions LLC		900.00
	Vaco, LLC		10,138.70
		Subtotal	56,902.39
54630 - Other Professional Services	Wickert, Kimberly		405.00
	Vorys Advisors LLC		3,333.33
	Contoural, Inc.		831.00
	CPS HR Consulting		3,900.00
	Public Pension Coordinating Council		100.00
		Subtotal	8,569.33
55100 - Postage	Pitney Bowes Inc.		1,493.78
	United States Postal Service		100,000.00
	Columbus Courier & Freight LLC		135.45
	Unishippers Association		412.05
		Subtotal	102,041.28
55200 - Telecommunications Services	Verizon Wireless		417.02
	XO Communications		1,792.34
	Nextel Communications		55.76
	AT&T		40.10
	LUMEN		4,634.52
	Spectrum		4,497.22
	Spectrum AWS		2,571.16
	Everstream		1,376.00
		Subtotal	15,384.12
55300 - Member/Employer Education	Vaughan, Cameron		168.42
	Talbert, Katie		132.17
	Nass, Alisa		54.69
	Richards, Michelle		459.83
		Subtotal	815.11
56030 - Software Maintenance	Sagitec Solutions, LLC		35,000.00
	Dell Marketing LP		458.09
		Subtotal	35,458.09
56035 - Software Subscriptions	Shi International Corp.		25,900.00
	ADP, LLC		3,623.76
	KnowBe4 Inc.		2,093.00
	Liquid Web Inc		321.59
	Zoho Corporation		1,195.00
	Zoom		556.81
	Wellable LLC		460.20
	Expedient		12,957.00
	Amazon Web Services		237.60
		Subtotal	47,344.96
56110 - Equipment Repairs & Maintenance	Ricoh USA, Inc		674.75
	Digital Print Solutions		1,116.22
	Canon Financial Services, Inc		2,191.27
	US Bank Equipment Finance		4,555.16
		Subtotal	8,537.40
56130 - Office Supplies & Expenses	Continental Office Environments		460.50
		Subtotal	460.50
56160 - Records Storage	Vital Records Holdings, LLC		1,930.00
		Subtotal	1,930.00
56210 - Seminars & Conferences	Association of Public Pension Fund Auditors		700.00
	Government Finance Officers Association		625.00
	NCTR		1,340.00
	Ohio State University		2,700.00
	Event Brite		597.00
	CFA Institute		700.00
	International Foundation of Employee Benefit Plans		1,495.00
	Kaplan Schweser		1,278.98
	Mightevent.com		898.00
	Red Gate Software, Ltd.		2,195.00
	Conexus Financial Pty Ltd		172.71
	Central Ohio AGA		375.00
	ICSUMMITS.COM		150.00
		Subtotal	13,226.69
56310 - Travel & Transportation	Greer, David		516.00
	Price, Steve		1,041.00
	Kroger		96.55
	Rossler, James		738.33
	Haller, James		445.95
	Phillips, Barbra		663.17
	Miller, Michelle		338.98
	Bell, Joe		808.30
	Trickett, Kirk		784.60

	Majeed, Farouki		4,052.05
	Moss, Catherine		888.09
	Browning, Michael		1,342.97
	Wilson, Daniel L.		610.26
	King, Matt		576.27
	Potbelly Sandwich Works		262.79
	Patel, Jay		40.00
	Steiner, Mike		371.20
	Weglarz, Frank		1,757.65
	Messerschmitt, Adam		1,366.85
	International Foundation of Employee Benefit Plans		500.00
	Collins, Chris		525.42
	Cheng, Paul		1,961.80
	Davis, Jeff		761.35
	IFC Core Investment Management, LLC		125.32
	Scurlock, William		637.61
		Subtotal	21,212.51
56410 - Subscriptions	Wall Street Journal		116.97
	Constant Contact		457.00
	Hannah News Service		6,599.00
	Shutterstock, Inc.		29.00
	Amazon.com		192.43
	Toledo Blade		12.99
	Currency Research Associates LLC		1,250.00
		Subtotal	8,657.39
56420 - Memberships	AICPA		315.00
	Government Finance Officers Association		150.00
	Society for Human Resource Management		278.00
	Institute of Internal Auditors		175.00
	Leonard, Kewalin		40.00
		Subtotal	958.00
56610 - Operations Maintenance	Amtrec, LLC		1,666.00
	South Central Power Company		180.00
	Northeast Ohio Natural Gas Corp.		173.18
		Subtotal	2,019.18
56630 - Interior Landscaping	Ambius Inc. (05)		3,360.37
		Subtotal	3,360.37
56640 - Vehicle Expense	ACA Auto Club of America		299.90
	Moo Moo Car Wash		28.00
	Exhaust Works		886.88
		Subtotal	1,214.78
56620 - Staff Support	Cintas Corporation		560.40
	ADP, LLC		3,690.00
	Mount Carmel Occupational Health		936.00
	Premier ProduceOne		151.70
	PayFlex Systems USA, Inc.		329.00
	Unisan, LLC		85.53
	Culligan Bottled Water of Columbus		92.87
	Jimmy Johns		130.52
	Aetna Behavioral Health, LLC		282.60
		Subtotal	6,258.62
56621 - Recruiting Expense	LinkedIn Corporation		12,770.00
	ADP Screening & Selection Services		146.92
	Indeed		156.44
		Subtotal	13,073.36
56710 - Board Member - School Board Reimb.	Ashland City School District		678.48
		Subtotal	678.48
56900 - Reimbursement of Leased Svcs	Reimbursement of Leased Services		(25,416.67)
		Subtotal	(25,416.67)
	Total SERS Administrative Expense		2,474,642.66

EXECUTIVE SESSION

_____________ moved and__________seconded the motion that the Board convene in Executive Session pursuant to R.C. 121.22 (G)(3) to discuss imminent court action.

IN EXECUTIVE SESSION AT_______________A.M./P.M.

Upon roll call, the vote was as follows:

ROLL CALL:	YEA	NAY	ABSTAIN
Frank Weglarz	_________	_________	_________
Hugh Garside	_________	_________	_________
James Haller	_________	_________	_________
Matthew King	_________	_________	_________
Catherine Moss	_________	_________	_________
Barb Phillips	_________	_________	_________
James Rossler	_________	_________	_________
Daniel Wilson	_________	_________	_________
Jeff DeLeone	_________	_________	_________

RETURN TO OPEN SESSION AT______________A.M. / P.M.

SERS COMPENSATION COMMITTEE REPORT

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.

ROLL CALL:	YEA	NAY	ABSTAIN
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.

SERS Health Care Sustainability

December 2022

Agenda

- Review November Sustainability Discussion
- Discussion of Alternatives Presented
- Communicating the Marketplace Wraparound HRA
  - –Marketplace Plan counseling demonstration
- Identify Next Steps

Review: Financial Condition

Health Care Fund	FY2009	FY2020	FY2021	FY2022
Health Care Expenses	$218 M	$138 M	$131 M	$129 M
Health Care Income	$274 M	$146 M	$138 M	$151 M
Investment Returns*	$(59 M)	$11 M	$112 M	$(11 M)
Closing Fund Value	$376 M	$483 M	$600 M	$611 M
Funded Years**	5 years	34 years	37 years	38 years

*Investment returns are not smoothed for the Health Care Fund
**2008 Board-adopted funding goal is 20 years

Medicare Plan Financial Status **July 2022 Enrollment: 36,592**	Funded Indefinitely 2019 to 2021 Aetna Medicare Advantage + Part D net cost was ≈ $1 per member per month or $500,000 annually Risks to Medicare plan sustainability are external - Medicare Advantage and Part D revenue streams - Pharmacy cost inflation

SERS Non-Medicare Plan

- July 2022 enrollment: 3,398
- 84% of disability enrollees under 65 are in this plan
- Per Member Per Year (PMPY) expenses continue to grow

Service Retiree Net Spend	$11,766
Disability Beneficiary Net Spend	$25,628
Total Net Spend	**$44.9 million**

- Spouses and dependents had no negative impact on the plan in 2021, which is typical for the group

Marketplace Wraparound HRA

- Since 2017, enrollment has leveled-off, at about 10% of non-Medicare enrollment.
  - 14% of disability enrollees under 65 are enrolled in this plan.
  - $3 million annual sustainability impact
- The American Rescue Plan Act enhanced federal subsidies in April 2021, and the Inflation Reduction Act extends these through 2025.
  - Federal subsidy for individuals up to $120,000 annual income
- SERS Wraparound HRA reimburses for out-of-pocket Marketplace expenses.
  - The maximum annual reimbursement increases to $1,950 for 2023
  - Federal subsidies also reduce some OOP expenses for low-income Marketplace enrollees
- Marketplace Wraparound HRA is the best financial option for many members, but they select our group plan because of the substantial SERS premium reduction for YOS and resemblance to employer model.

Non-Medicare Plan Sustainability

Further sustainability changes may focus on redirecting group plan enrollment to the more affordable Marketplace Wraparound HRA:

1. Increase SERS member premium to encourage the Marketplace Wraparound HRA selection

2. Make disability and service premiums the same
   – Encourages highest cost disability members to select the Marketplace Wraparound HRA
   – Resolves current scenario - the most expensive members pay the least premium

3. Require Marketplace counseling for group plan enrollment

4. Continue current strategy – monitor and fine tune

Marketplace Plans

Sally, a 60-year-old retired bus driver with 30 years of service and an annual household income of $30,000.

	SERS Group Plan	Anthem Bronze Plan	Anthem Silver Plan	Oscar Gold Plan
Full Premium	$1,524	$711	$877	$1,036
Premium Subsidy	-$1,191	-$711	-$801	-$801
Net Premium	**$333**	**$0**	**$76**	**$234**
Out-of-Pocket Expenses	$1,850	$3,520	$2,642	$1,333
SERS HRA	N/A	-$1,950	-$1,950	-$1,333
Net Out-of-Pocket Expenses	**$1,850**	**$1,570**	**$692**	**$0**
Total Annual Expenses for Member	**$5,846**	**$1,570**	**$1,605**	**$2,802**
Total Annual Expenses for SERS	**$12,000**	**$1,950**	**$1,950**	**$1,333**

Compare Costs

Marketplace Plans

Sally, a 60-year-old retired bus driver with 30 years of service, and her 60-year-old husband, Tim, with an annual household income of $60,000.

	SERS Group Plan	Anthem Bronze Plan	Anthem Silver Plan	Oscar Gold Plan
Full Premium	$2,751	$1,423	$1,733	$2,096
Premium Subsidy	-$1,429	-$1,409	-$1,409	-$1,409
Net Premium	**$1,322**	**$14**	**$324**	**$660**
Out-of-Pocket Expenses	$3,700	$7,040	$5,249	$2,666
SERS HRA	N/A	-$1,950	-$1,950	-$1,950
Net Out-of-Pocket Expenses	**$3,700**	**$5,090**	**$3,299**	**$716**
Total Annual Expenses for Member	**$18,496**	**$5,255**	**$7,190**	**$8,696**
Total Annual Expenses for SERS	**$12,000**	**$1,950**	**$1,950**	**$1,950**

Marketplace Plans

Aaron, a 60-year-old disability beneficiary with 20 years of service and an annual household income of $30,000.

	SERS Group Plan	Anthem Bronze Plan	Anthem Silver Plan	Oscar Gold Plan
Full Premium	$1,524	$711	$877	$1,036
Premium Subsidy	-$998	-$711	-$801	-$801
Net Premium	**$526**	**$0**	**$76**	**$234**
Out-of-Pocket Expenses	$6,000	$7,450	$7,563	$5,500
SERS HRA	N/A	-$1,950	-$1,950	-$1,950
Net Out-of-Pocket Expenses	**$6,000**	**$5,500**	**$5,613**	**$3,550**
Total Annual Expenses for Member	**$12,312**	**$5,500**	**$5,613**	**$6,352**
Total Annual Expenses for SERS	**$26,000**	**$1,950**	**$1,950**	**$1,950**

Compare Costs

SERS Years of Service Subsidy*

Years of Service	Service Retirees		Disability Beneficiaries	
	Member Share	SERS Contribution	Member Share	SERS Contribution
5 to 9.9	N/A	N/A	50%	50%
10 to 19.9	100%	0%	33%	67%
20 to 24.9	50%	50%	33%	67%
25 to 29.9	30%	70%	17.5%	82.5%
30 to 34.9	20%	80%	17.5%	82.5%
35+	15%	85%	17.5%	82.5%

*Board-approved subsidy structure effective 2008

Potential Increases:
Subsidized Premiums for 20+ YOS

Years of Service	Current Premium Service / Disability		30% Lowest Premium Service / Disability		40% Lowest Premium Service / Disability		50% Lowest Premium Service / Disability	
5 to 9.9	N/A	50%	N/A	50%	N/A	50%	N/A	50%
10 to 19.9	100%	33%	100%	33%	100%	40%	100%	50%
20 to 24.9	50%	33%	50%	33%	50%	40%	50%	50%
25 to 29.9	30%	17.5%	30%	30%	40%	40%	50%	50%
30 to 34.9	20%	17.5%	30%	30%	40%	40%	50%	50%
35+	15%	17.5%	30%	30%	40%	40%	50%	50%
Members Impacted	3,042 Current Members		2,274		2,944		2,944	
Lowest Premium	$333 (most common)		$482		$631		$780	
Increased Premiums	N/A		$2.7 M		$3.5 M		$5.5 M	
Reduced Claims	N/A		$6.8 M		$13.2 M		$15.9 M	
Estimated Impact	$45 M Current Cost		$9.5 M		$16.7 M		$21.4 M	

Member Marketplace HRA Savings with SERS Premium Increases

		Current	30%
SERS Group Plan	Monthly Premium	$333	$482
	Est. Annual Cost	$5,846	**$7,634**
Marketplace Silver Plan ($30,000 income)	Monthly Premium	$76	$76
	Est. Annual Cost	$1,605	$1,605
Marketplace Silver Plan ($50,000 income)	Monthly Premium	$326	$326
	Est. Annual Cost	$4,605	$4,605
Marketplace Silver Plan ($70,000 income)	Monthly Premium	$425	$425
	Est. Annual Cost	$5,426	$5,426
Marketplace Silver Plan ($90,000 income)	Monthly Premium	$567	$567
	Est. Annual Cost	$7,229	**$7,229**
Marketplace Silver Plan ($110,000 income)	Monthly Premium	$708	$708
	Est. Annual Cost	$9,133	$9,133

Member Marketplace HRA Savings with SERS Premium Increases

		Current	30%	40%
SERS Group Plan	Monthly Premium	$333	$482	$631
	Est. Annual Cost	$5,846	$7,634	**$9,422**
Marketplace Silver Plan ($30,000 income)	Monthly Premium	$76	$76	$76
	Est. Annual Cost	$1,605	$1,605	$1,605
Marketplace Silver Plan ($50,000 income)	Monthly Premium	$326	$326	$326
	Est. Annual Cost	$4,605	$4,605	$4,605
Marketplace Silver Plan ($70,000 income)	Monthly Premium	$425	$425	$425
	Est. Annual Cost	$5,426	$5,426	$5,426
Marketplace Silver Plan ($90,000 income)	Monthly Premium	$567	$567	$567
	Est. Annual Cost	$7,229	$7,229	$7,229
Marketplace Silver Plan ($110,000 income)	Monthly Premium	$708	$708	$708
	Est. Annual Cost	$9,133	$9,133	**$9,133**

Member Marketplace HRA Savings with SERS Premium Increases

		Current	30%	40%	50%
SERS Group Plan	Monthly Premium	$333	$482	$631	$780
	Est. Annual Cost	$5,846	$7,634	$9,422	**$11,210**
Marketplace Silver Plan ($30,000 income)	Monthly Premium	$76	$76	$76	$76
	Est. Annual Cost	$1,605	$1,605	$1,605	$1,605
Marketplace Silver Plan ($50,000 income)	Monthly Premium	$326	$326	$326	$326
	Est. Annual Cost	$4,605	$4,605	$4,605	$4,605
Marketplace Silver Plan ($70,000 income)	Monthly Premium	$425	$425	$425	$425
	Est. Annual Cost	$5,426	$5,426	$5,426	$5,426
Marketplace Silver Plan ($90,000 income)	Monthly Premium	$567	$567	$567	$567
	Est. Annual Cost	$7,229	$7,229	$7,229	$7,229
Marketplace Silver Plan ($110,000 income)	Monthly Premium	$708	$708	$708	$708
	Est. Annual Cost	$9,133	$9,133	$9,133	$9,133

Make Disability and Service Premiums the Same

(Impacts 419 members)

- Disability beneficiaries currently pay lower premiums based on YOS

Current Most Common Premium	Most Common Premium when Same as Service
$296	$482

Estimated Impact

- $72,000 increase in collected premiums
- 108 disability members likely pick the Marketplace Wraparound HRA or another option, reducing claims expenses by $3.1 million

Estimated Total Annual Sustainability Impact: $3.2 million

Require Marketplace Consultation

- Marketplace Wraparound HRA enrollees currently work with HealthSCOPE Benefit's Marketplace-trained agents to select a plan
- SERS could require members who want to enroll in the SERS group plan to first engage with a Marketplace-trained agent to see what plan options are available in their region and review cost savings
- Would require an administrative rule change
- Out-of-state members and Medicare-split families would be exempted
- $1 M annual impact for every 10% reduction in new uptake, additive over time

Communicating Marketplace Wrap HRA

Member Ready to Retire or Considering Future Retirement:

– In-office or virtual appointment with SERS Counselor
– Enrollment in Retirement Conference or Webinar
– Mailing of Service Retirement Packet or Mailing Upon Request

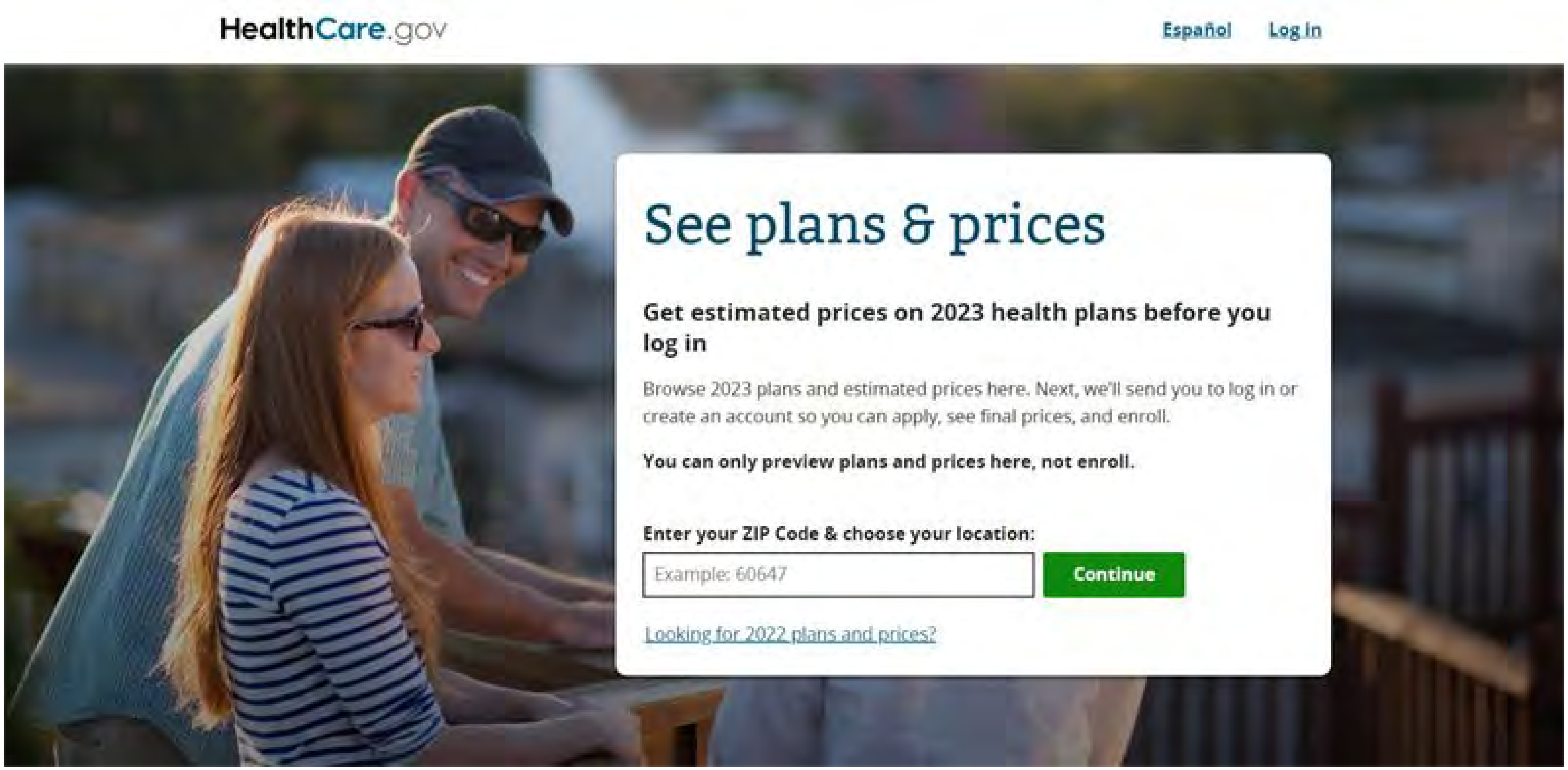
Board-Approved Disability Recipient:

– Health Care Application Packet Mailing
– Follow-up Call from Health Care Outreach Specialist

Optimize Marketplace Wraparound HRA Member Awareness

- Expand trusted SERS staff knowledge of Marketplace Wraparound HRA and member cost advantages
- Improve prominence and clarity of Marketplace Wraparound HRA and member cost advantages in SERS materials
- Provide member-specifics earlier to SERS' enrollment vendor upon member's request for service retirement and disability packet
- Require Marketplace Wraparound HRA counseling before enrollment in SERS group plan

Marketplace Plan Counseling



Sustainability Impact Review

Considerations	
Increase Member Premiums (lowest to 30% / 40% / 50%)	$10 M to $20 M
Make Disability and Service Premiums the Same	$3 M
Mandatory Wraparound HRA Counseling	$1 M per 10%
Continue Current Course (Monitor and Fine Tune)	

Estimated impact on projected solvency, provided by Cavanaugh Macdonald:

$5 million reduction → Adds 4 years of solvency (42 total).

$10 million reduction → Adds 22 years of solvency (60 total).

Discussion- future direction

CALENDAR DATES FOR SERS BOARD MEETINGS FOR 2023

AUDIT COMMITTEE MEETINGS

March 15, 2023 – 2:30 p.m. (Weds.)
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

March 16, 2023 – 7:30 a.m. (Thurs.)
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

March 16, 2023 – 12:30 p.m. (Thurs.)
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

February 16 – 17, 2023 - 8:30 a.m. (Thurs. and Fri.)
March 16 – 17, 2023 - 8:30 a.m. (Thurs. and Fri.)
April 20 – 21, 2023 - 8:30 a.m. (Thurs. and Fri.)
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.)

NOTE: The above dates are* ***tentative.

CONTINUED OR NEW BUSINESS

Board Information Requested

ADJOURNMENT(R)

__________________ moved that the SERS Retirement board adjourn to meet on for their next regularly scheduled meeting.

The meeting adjourned at __________________ p.m.

____
Jeffrey DeLeone - Chair

____
Richard Stensrud, Secretary