Retirement Board Agenda May 21, 2020

PLEDGE OF ALLEGIANCE

- 1. Roll Call
- 2. Approval of Minutes (R-3)

INVESTMENT REPORT

- 3. Annual Portfolio Review Opportunistic and Tactical
- 4. Asset Allocation Transition (R)
- 5. Wilshire Associates Quarterly Performance Report
- 6. Quarterly Investment Report
- 7. Draft Annual Investment Plan
- 8. Draft Investment Department Incentive Program (R)
- 9. Corporate Governance New Proxy Issues 2020
- 10. Summary of Investment Transactions (R-2)

EXECUTIVE DIRECTOR'S REPORT

- 11. Executive Director's Update
 - Board Self-Evaluation discussion
 - Quarterly Financials
- 12. Executive Session pursuant to R.C. 121.22 (G)(6) to discuss a security matter (R)
- 13. Administrative Budget Execution and Management
- 14. Review SERS FY 2021 Administrative Budget
- 15. Final Filing of Amended and New Administrative Rules (R)
- 16. Ballot Certification Retiree Member (R)
- 17. Superannuation and Survivor Benefits (R)
- 18. Special Cases (R)

RETIREMENT REPORT

- 19. Executive Session pursuant to R.C. 121.22 (G)(5) to review applications for Disability Retirement Benefits (R)
- 20. Approval of Disability Benefits (R)
- 21. Disapproval of Disability Benefits (R)
- 22. Termination of Disability Benefits (R)
- 23. Approval of Appeal for Disability Benefits (R)
- 24. Termination of Disability Benefits Any Occupation (R)
- 25. Disapproval of Appeal of Termination Any Occupation (R)
- 26. Disapproval of Appeal of Termination on Personal Appearance Any Occupation (R)
- 27. Approval of Appeal of Termination Any Occupation (R)
- 28. Disapproval of Survivor Benefits (R)

HEALTH CARE REPORT

- 29. Presentation of 2021 Self-Insured Rates by Actuary
- 30. 2021 Health Care Review and Benefit Considerations
- 31. Presentation of Know Your Rx. Coalition 1st Quarter Results

BOARD COMMUNICATION AND POLICY ISSUES

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

EXECUTIVE DIRECTOR'S REPORT (continued)

- 34. Executive Session pursuant to R.C. 121.22 (G)(1) to discuss the employment and compensation of a public employee (R)
- 35. Pension Sustainability (Friday, May 22)

Adjournment (R)

APPROVAL OF MINUTES OF THE RETIREMENT BOARD MEETING HELD ON <u>March 19, 2020</u>

_____ moved and ______ seconded the motion to approve the minutes of the Retirement Board meeting held on Thursday, March 19, 2020.

APPROVAL OF MINUTES OF THE SPECIAL RETIREMENT BOARD MEETING HELD ON April 2, 2020

_____ moved and ______ seconded the motion to approve the minutes of the Special Retirement Board meeting held on Thursday, April 2, 2020.

APPROVAL OF MINUTES OF THE SPECIAL RETIREMENT BOARD MEETING HELD ON April 24, 2020

_____ moved and ______ seconded the motion to approve the minutes of the Special Retirement Board meeting held on Friday, April 24, 2020.

ITEM 3.

INVESTMENT MONTHLY AGENDA MEMO

School Employees Retirement System

Memo

То:	Retirement Board
From:	Farouki Majeed
cc:	Richard Stensrud, Karen Roggenkamp
Date:	May 8, 2020
Re:	Investment Report for the May Board Meeting

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

- Annual Portfolio Review Opportunistic and Tactical
- Quarterly performance report for the period ended March 31, 2020 presented by Wilshire Associates
- Investment report and economic update for the period ended March 31, 2020
- Asset Allocation Transition. If acceptable to the Board, a motion has been prepared for a vote to approve.
- Draft Annual Investment Plan for fiscal year 2021 will be distributed at the May Board meeting for discussion during the June Board meeting. If acceptable to the Board, a motion will be prepared for a vote to approve the Plan at the June Board meeting.
- The Investment Department Incentive Plan for fiscal year 2021 will be presented by Joe Bell for the Board's review. If acceptable to the Board, a motion has been prepared for a vote to approve if the Board is comfortable in doing so this month.

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

- > Annual Investment Committee Policy and Procedures Update
- Manager Reviews Opportunistic and Tactical
- Monthly Top 20 Equity and Fixed Income Holdings Reports March 31, 2020
- Monthly Compliance Update memo March 31, 2020
- Quarterly Iran/Sudan Investment Activity Report March 31, 2020
- Quarterly Proxy Activity Report March 31, 2020
- Quarterly Securities Lending Review Report March 31, 2020

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

Opportunistic and Tactical Investments Portfolio Review

May 2020



Serving the People Who Serve Our Schools

Overview

- **Role**: The role of SERS' Opportunistic and Tactical portfolio is to earn a return above the Total Fund Policy Benchmark return by investing in assets and strategies that do not fit within the existing asset classes. The investments are defined as tactical or non-traditional investment opportunities.
- **Performance Objective:** The performance objective is to earn a net of fee return in excess of the Total Fund Policy Benchmark, with a meaningful component of the total return coming from current income.

Portfolio Snapshot as of March 31, 2020
9 managers / 15 investments
\$355 million market value
2.6% Total Fund allocation
0.3% 1-yr net of fee return
6.2% net return since inception (June 2013)
\$358 million unfunded commitments
All managers ranked A or B with one exception



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Portfolio Construction





Investment Yields



Blue bars represent investments currently in the Opportunistic portfolio

Source: US Direct Lending – manager current yield as of Dec 31, 2019; MLPs: manager current yield; Europe Direct Lending: manager portfolio yield as of Dec 31, 2019, 2019; Non US Equity: MSCI ACWI ex US; US Equity: Russell 3000 dividend yield; all information as of March 31, 2020, unless otherwise noted



Portfolio Yield



- Portfolio generated more than \$12 million of income in 2019
- In 2018 several funds had significant exits that resulted in a temporary bump in the income return
- The portfolio is expected to yield at least 4% as assets mature



Portfolio Performance



Serving the People Who Serve Our Schools



Portfolio Performance

As of 3/31/2020	1 Year	3 Year	5 Year	Since Inception
SERS Opportunistic	0.33%	5.69%	5.23%	6.22%
Direct Lending (35%)	6.90%	8.14%	7.71%	7.69%
Distressed Debt (35%)	3.49%	13.30%	10.74%	10.46%
Structured Credit (19%)	10.54%	10.69%	9.97%	10.18%
Real Assets (11%)	-10.60%	-6.90%	n/a	-2.10%
Opportunistic Benchmark	-2.12%	4.08%	4.43%	5.79%
Excess Return	2.44%	1.62%	0.80%	0.43%

- The Direct Lending, Structured Credit and Distressed Debt investments have performed well.
- Direct Lending investments are generating an annualized return of 7.69% since inception.
- Structured Credit investments have an annualized return of 10.18% since inception.
- Distressed Debt investments are generating an annualized return of 10.46% since inception.
- Real Assets investments have not met performance expectations, due to poor performance of MLPs.



Current Market Conditions

The economic slowdown has been unprecedented

- Initial unemployment claims totaled 30 million as of April 30
- GDP contracted at an annualized rate of 4.8% in Q1 and is expected to be significantly worse in Q2

Corporate balance sheets were highly leveraged going into the crisis

- Leverage as a multiple of cash flow is higher than the 2008 Global Financial Crisis
- The amount of high risk debt outstanding is 2.6x higher than 2008

Risk assets sold off sharply in February and March

- US Equities posted losses of 21% in Q1
- High yield bonds returned -12.7% year to date through March
- Nearly \$45 million of capital was invested to fund Opportunistic investments in March and April as managers took advantage of attractive investment opportunities





Portfolio Changes Effective July 1



- The Direct Lending funds will move to the Private Credit portfolio as of July 1, 2020.
 - Results in 8 funds with market value of \$124 million moving to private credit.
- Two MAS funds will move to the Opportunistic and Tactical Portfolio.
- The Opportunistic portfolio will consist of the existing Distressed Debt, Structured Credit, and Real Assets funds as well as one Diversified Multi Strategy fund.
- The Opportunistic Policy benchmark will be Barclays Aggregate Bond Index + 2%, which reflects the fixed income emphasis of the portfolio and provides a 2% illiquidity premium.



ASSET ALLOCATION TRANSITION

School Employees Retirement System

Memo

To:	Retirement Board
From:	Farouki Majeed
cc:	Richard Stensrud, Karen Roggenkamp
Date:	May 8, 2020
Re:	Asset Allocation Interim Targets

The Board approved new asset allocation targets for the SERS Total Fund at the February 20, 2020 meeting. Private Credit was approved as a new asset class with a target of 5% and MAS was reduced from 10% to 0%. Real Assets and Private Equity were each increased by 2% and cash was increased to 2%. Since Private Credit, Private Equity and Real Assets would require time to ramp up to the new targets, staff indicated to the Board that the new targets would be implemented over a two year period. Staff recommends that the Board approve interim targets for FY2021 as shown in the table below. The revised targets will be effective July 1, 2021, onwards.

					Interim Targets
Asset Class	Previous Target	Previous Range	Revised Target	Revised Range	FY2021
Equity	55%	45% - 65%	57%	47% - 67%	56%
Global Equities	45%	35% - 55%	45%	35% - 55%	45%
Global Private Equity	10%	5% - 15%	12%	8% - 16%	11%
Income	35%	30% - 40%	43%	38% - 48%	40%
Global Bonds	19%	12% - 26%	19%	12% - 26%	19%
Private Credit	N/A	N/A	5%	3% - 7%	3%
Global Real Assets	15%	10% - 20%	17%	14% - 20%	16%
Cash Equivalents	1%	0% - 5%	2%	0% - 5%	2%
Multi-Asset Strategies	10%	5% -15%	N/A	N/A	4%
TOTAL FUND	100%		100%		100%
Strategy					
Opportunistic & Tactical Investments	0%	0% - 5%	0%	<mark>0% - 5%</mark>	

ASSET ALLOCATION INTERIM TARGETS

As discussed during the May 21, 2020 Board meeting, _____moved and _____ seconded the motion to approve interim targets for FY2021 as shown in the table below.

					Interim Targets
Asset Class	Previous Target	Previous Range	Revised Target	Revised Range	FY2021
Equity	55%	45% - 65%	57%	47% - 67%	56%
Global Equities	45%	35% - 55%	45%	35% - 55%	45%
Global Private Equity	10%	5% - 15%	12%	8% - 16%	11%
Income	35%	30% – 40%	43%	38% - 48%	40%
Global Bonds	19%	12% - 26%	19%	12% - 26%	19%
Private Credit	N/A	N/A	5%	3% - 7%	3%
Global Real Assets	15%	10% - 20%	17%	14% - 20%	16%
Cash Equivalents	1%	0% - 5%	2%	0% - 5%	2%
Multi-Asset Strategies	10%	5% -15%	N/A	N/A	4%
TOTAL FUND	100%		100%		100%
Strategy					
Opportunistic & Tactical Investments	0%	0% - 5%	0%	0% - 5%	

WILSHIRE QUARTERLY PERFORMANCE REPORT

Review of Wilshire Quarterly Performance Report





WILSHIRE ASSOCIATES

Wilshire Consulting



Executive Summary of Investment Performance

As of March 31, 2020



CAPITAL MARKETS REVIEW



Wilshire Consulting ASSET CLASS PERFORMANCE

	ASSET	CLASS RETUR	NS - BEST TO V	WORST		ANNUALIZE 5-YEAR
2015	2016	2017	2018	2019	2020 YTD	AS OF 3/202
REITs	MLPs	Emrg Mrkts	T-Bills	U.S. Equity	Core Bond	U.S. Equity
4.2%	18.3%	37.7%	1.9%	31.0%	3.2%	6.0%
U.S. Equity	High Yield	Developed	Core Bond	REITs	U.S. TIPS	Core Bond
0.7%	17.1%	25.6%	0.0%	25.8%	1.7%	3.4%
Core Bond	U.S. Equity	U.S. Equity	U.S. TIPS	Developed	T-Bills	High Yield
0.6%	13.4%	21.0%	-1.3%	22.7%	0.6%	2.8%
T-Bills	Commodities	High Yield	High Yield	Emrg Mrkts	High Yield	U.S. TIPS
0.1%	11.8%	7.5%	-2.1%	18.9%	-12.7%	2.7%
Developed	Emrg Mrkts	REITs	REITs	High Yield	U.S. Equity	T-Bills
-0.4%	11.6%	4.2%	-4.8%	14.3%	-20.7%	1.2%
U.S. TIPS	REITs	Core Bond	U.S. Equity	Core Bond	Developed	Emrg Mrkts
-1.4%	7.2%	3.6%	-5.3%	8.7%	-22.7%	0.0%
High Yield	U.S. TIPS	U.S. TIPS	Commodities	U.S. TIPS	Commodities	Developed
-4.5%	4.7%	3.0%	-11.2%	8.4%	-23.3%	-0.1%
Emrg Mrkts	Core Bond	Commodities	MLPs	Commodities	Emrg Mrkts	REITs
-14.6%	2.6%	1.7%	-12.4%	7.7%	-23.6%	-0.2%
Commodities	Developed	T-Bills	Developed	MLPs	REITs	Commodities
-24.7%	1.5%	0.8%	-13.4%	6.6%	-25.6%	-7.8%
MLPs	T-Bills	MLPs	Emrg Mrkts	T-Bills	MLPs	MLPs
-32.6%	0.3%	-6.5%	-14.2%	2.3%	-57.2%	-20.7%

Data sources: Wilshire Compass Note: Developed asset class is developed equity markets ex-U.S., ex-Canada



Wilshire Consulting MARKET COMMENTARY

U.S. Equity

The U.S. stock market was down -20.7% for the first quarter, the worst quarter since the Global Financial Crisis. Uncertainty and a declining outlook were the driving forces behind the sell-off as the COVID-19 pandemic worsened, resulting in significant limitations on global commerce. Government action so far has included cutting short-term rates to near zero and the passage of a \$2 trillion stimulus bill.

The world of investing has been introduced to an unprecedented set of conditions in 2020. As the COVID-19 virus spreads globally, the response has been to separate people and close nonessential businesses, with others working remotely. The economic expectations are that the unemployment rate will rise into the teens and U.S. GDP will fall by one-third. Investors are facing challenges reminiscent of the Global Financial Crisis.

Non-U.S. Equity

Economic growth in the U.K. was already nonexistent during the fourth quarter, before the country had to deal with the virus in earnest. Across continental Europe, quarantine efforts are starting to bear fruit as cases in Italy and Spain appear to be approaching a peak. China has recently been relaxing severe travel restrictions while the official Purchasing Manager's Index for China indicates that manufacturing in the country expanded during March after a dramatic slowdown.

Fixed Income

The U.S. Treasury yield curve fell dramatically during the quarter. The 10-year Treasury yield ended the quarter at 0.70%, down 122 basis points. The FOMC decreased its overnight rate by a total of 1.50% during two unscheduled meetings in March. The Fed also announced quantitative easing measures totaling at least \$700 billion over the coming months.



Wilshire Consulting CORONAVIRUS TIMELINE

AS OF MAY 4

https://wilshire.com/covid19-timeline





Wilshire Consulting MARCH 2020 ASSET CLASS ASSUMPTIONS

			EQI	JITY					FIXED II	NCOME				RE	AL ASSE	TS		
		Dev		Global					LT			Dev ex-		Real Estate	;			
	US	ex-US	Emg	ex-US	Global	Private		Core	Core		High	US Bond	US	Global	Private		Real	US
	Stock	Stock	Stock	Stock	Stock	Equity	Cash	Bond	Bond	TIPS	Yield	(Hdg)	RES	RES	RE	Cmdty	Assets	CPI
COMPOUND RETURN (%)	6.75	7.25	7.25	7.50	7.20	8.40	0.70	1.80	2.70	0.70	5.40	0.80	5.60	5.80	7.00	1.85	5.65	1.15
ARITHMETIC RETURN (%)	8.05	8.70	10.20	9.10	8.50	11.75	0.70	1.95	3.15	0.90	5.85	0.85	6.95	6.95	7.90	2.95	6.00	1.15
EXPECTED RISK (%)	17.00	18.00	26.00	18.95	17.10	28.00	1.25	5.15	9.85	6.00	10.00	3.50	17.00	15.80	14.00	15.00	8.75	1.75
CASH YIELD (%)	2.25	3.75	3.00	3.55	2.80	0.00	0.70	1.90	2.65	1.15	7.40	1.10	4.75	4.75	2.95	0.70	2.50	0.00
CORRELATIONS																		
US Stock	1.00																	
Dev ex-US Stock (USD)	0.81	1.00																
Emerging Mkt Stock	0.74	0.74	1.00															
Global ex-US Stock	0.83	0.96	0.87	1.00														
Global Stock	0.95	0.92	0.83	0.94	1.00													
Private Equity	0.74	0.64	0.62	0.67	0.74	1.00												
Cash Equivalents	-0.05	-0.09	-0.05	-0.08	-0.07	0.00	1.00											
Core Bond	0.28	0.13	0.00	0.09	0.20	0.31	0.19	1.00										
LT Core Bond	0.31	0.16	0.01	0.12	0.23	0.32	0.11	0.93	1.00									
TIPS	-0.05	0.00	0.15	0.05	0.00	-0.03	0.20	0.60	0.47	1.00								
High Yield Bond	0.54	0.39	0.49	0.45	0.51	0.34	-0.10	0.25	0.32	0.05	1.00							
Dev ex-US Bond (Hdg)	0.16	0.25	-0.01	0.18	0.18	0.26	0.10	0.67	0.66	0.39	0.26	1.00						
US RE Securities	0.59	0.47	0.44	0.49	0.56	0.50	-0.05	0.17	0.23	0.10	0.56	0.05	1.00					
Global RE Securities	0.65	0.59	0.56	0.62	0.66	0.58	-0.05	0.17	0.22	0.11	0.62	0.03	0.94	1.00				
Private Real Estate	0.54	0.44	0.44	0.47	0.52	0.51	-0.05	0.19	0.25	0.09	0.57	0.05	0.78	0.76	1.00			
Commodities	0.25	0.34	0.39	0.38	0.32	0.27	0.00	-0.02	-0.02	0.25	0.29	-0.10	0.25	0.28	0.25	1.00		
Real Assets	0.42	0.43	0.50	0.48	0.47	0.43	0.01	0.24	0.25	0.41	0.53	0.06	0.65	0.69	0.69	0.59	1.00	
Inflation (CPI)	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	-0.08	0.05	0.03	0.05	0.44	0.26	1.00



Wilshire Consulting ECONOMIC GROWTH



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Wilshire Consulting CONSUMER ACTIVITY



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Wilshire Consulting BUSINESS ACTIVITY



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Wilshire Consulting INFLATION AND EMPLOYMENT



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Wilshire Consulting U.S. EQUITY MARKET

U.S. SECTOR	WEIGHT AN	ND RETURN (%)
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AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
WILSHIRE 5000 INDEX	-20.7	-20.7	-8.9	4.1	6.0	10.2
WILSHIRE U.S. LARGE CAP	-19.7	-19.7	-7.3	5.0	6.7	10.5
WILSHIRE U.S. SMALL CAP	-31.4	-31.4	-25.0	-5.0	-0.5	7.4
WILSHIRE U.S. LARGE GROWTH	-17.1	-17.1	-2.7	8.6	8.5	11.9
WILSHIRE U.S. LARGE VALUE	-22.1	-22.1	-11.5	1.5	4.7	9.1
WILSHIRE U.S. SMALL GROWTH	-28.2	-28.2	-20.0	-1.1	1.0	8.8
WILSHIRE U.S. SMALL VALUE	-34.5	-34.5	-29.6	-8.9	-2.1	6.0
WILSHIRE REIT INDEX	-25.6	-25.6	-19.4	-2.5	-0.2	7.7
MSCI USA MIN. VOL. INDEX	-17.1	-17.1	-5.9	6.6	7.9	11.8
FTSE RAFI U.S. 1000 INDEX	-26.4	-26.4	-16.1	-0.9	2.8	8.6



Quarter 1 Year



LARGE GROWTH VS LARGE VALUE



Data sources: Wilshire Compass, Wilshire Atlas

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Wilshire Consulting RISK MONITOR





Data sources: Federal Reserve, Bloomberg Barclays ©2020 Wilshire Associates Inc.



Wilshire Consulting RETURNS BY QUALITY SEGMENT

Higher quality names trailed, somewhat, although losses were generally broad based



RETURN BY S&P QUALITY RATING



Wilshire Consulting NON-U.S. GROWTH AND INFLATION



Data sources: Bloomberg ©2020 Wilshire Associates Inc.



EMERGING MARKETS REAL GDP GROWTH YoY (%)



Wilshire Consulting NON-U.S. EQUITY MARKET

AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
MSCI ACWI EX-US (\$G)	-23.3	-23.3	-15.1	-1.5	-0.2	2.5
MSCI EAFE (\$G)	-22.7	-22.7	-13.9	-1.3	-0.1	3.2
MSCI EMERGING MARKETS (\$G)	-23.6	-23.6	-17.4	-1.3	0.0	1.0
MSCI FRONTIER MARKETS (\$G)	-26.6	-26.6	-18.7	-4.0	-2.5	1.4
MSCI ACWI EX-US GROWTH (\$G)	-18.2	-18.2	-6.9	2.9	2.5	4.3
MSCI ACWI EX-US VALUE (\$G)	-28.5	-28.5	-23.2	-5.9	-2.9	0.7
MSCI ACWI EX-US SMALL (\$G)	-28.9	-28.9	-20.8	-4.5	-0.3	3.2
MSCI ACWI MINIMUM VOLATILITY	-15.9	-15.9	-7.0	4.3	5.3	8.7
MSCI EAFE MINIMUM VOLATILITY	-16.3	-16.3	-9.0	2.1	2.7	6.1
FTSE RAFI DEVELOPED EX-US	-27.6	-27.6	-20.8	-4.7	-1.8	1.8
MSCI EAFE LC (G)	-20.4	-20.4	-12.1	-1.3	0.3	4.9

MSCI EAFE: LARGEST COUNTRIES & RETURN (USD)



MSCI EM: LARGEST COUNTRIES & RETURN (USD)



1st Quarter

Data sources: Wilshire Compass

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W Wilshire

Wilshire Consulting U.S. FIXED INCOME

AS OF 3/31/2020	YTM	DURATION	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS AGGREGATE	1.6	5.7	3.2	3.2	8.9	4.8	3.4	3.9
BLOOMBERG BARCLAYS TREASURY	0.6	7.0	8.2	8.2	13.2	5.8	3.6	3.8
BLOOMBERG BARCLAYS GOV'T-REL.	2.0	5.6	0.5	0.5	6.2	4.1	2.9	3.4
BLOOMBERG BARCLAYS SECURITIZED	1.4	1.9	2.7	2.7	6.9	4.0	2.9	3.4
BLOOMBERG BARCLAYS CORPORATE	3.4	8.0	-3.6	-3.6	5.0	4.2	3.4	4.9
BLOOMBERG BARCLAYS LT G/C	2.7	16.4	6.2	6.2	19.3	9.7	6.0	8.1
BLOOMBERG BARCLAYS LT TREASURY	1.3	19.2	20.9	20.9	32.6	13.4	7.3	9.0
BLOOMBERG BARCLAYS LT GOV't-REL.	3.9	12.6	-3.6	-3.6	7.3	6.3	4.3	7.0
BLOOMBERG BARCLAYS LT CORP.	3.9	14.5	-4.5	-4.5	9.6	6.7	4.7	7.3
BLOOMBERG BARCLAYS U.S. TIPS *	0.7	7.8	1.7	1.7	6.8	3.5	2.7	3.5
BLOOMBERG BARCLAYS HIGH YIELD	9.5	4.1	-12.7	-12.7	-6.9	0.8	2.8	5.6
TREASURY BILLS	0.1	0.25	0.6	0.6	2.2	1.8	1.2	0.6

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







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Wilshire Consulting FEDERAL RESERVE

- Restarted unlimited asset purchase programs
- Reduced reserve requirements for the banking sector
- Restarted Term asset backed securities loan facility (TALF), expanding to include CMBS
- Launched a Primary (PMCCF) and Secondary Corporate Credit Facility (SMCCF)
- Allowed municipal debt to be eligible as collateral in Money Market Fund Liquidity Facility (MMLF) and Commercial Paper Funding Facility (CPFF)
- Total stimulus FOMC plus U.S. government – in excess of \$3.75 T as of first week of April

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Data Source: Federal Reserve, Bloomberg, J.P. Morgan



Wilshire Consulting NON-U.S. FIXED INCOME

AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
DEVELOPED MARKETS						
BLMBRG BRCLYS GLBL AGGREGATE XUS	-2.7	-2.7	0.7	2.6	2.0	1.4
BLMBRG BRCLYS GLBL AGGREGATE XUS *	0.5	0.5	5.0	4.5	3.6	4.2
BLMBRG BRCLYS GLOBAL INF LNKD XUS	-5.9	-5.9	-2.8	2.0	1.3	2.9
BLMBRG BRCLYS GLOBAL INF LNKD XUS *	-0.7	-0.7	2.8	3.9	4.4	5.5
EMERGING MARKETS (HARD CURRENCY)						
BLMBRG BRCLYS EM USD AGGREGATE	-9.5	-9.5	-2.9	1.5	3.3	5.1
EMERGING MARKETS (FOREIGN CURRENCY)						
BLMBRG BRCLYS EM LOCAL CURR. GOV'T	-7.6	-7.6	-1.1	1.5	1.7	2.1
BLMBRG BRCLYS EM LOCAL CURR. GOV'T *	0.7	0.7	6.9	4.6	3.5	3.6
EURO vs. DOLLAR	-2.2	-2.2	-2.3	0.9	0.4	-2.1
YEN vs. DOLLAR	0.7	0.7	2.5	1.1	2.1	-1.4
POUND vs. DOLLAR	-6.4	-6.4	-4.8	-0.3	-3.5	-2.0

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





Data sources: Wilshire Compass, Bloomberg Barclays, Federal Reserve Bank of St. Louis


Wilshire Consulting GLOBAL INTEREST RATES

Negative rates found in Germany and France; low but positive rates, and at similar levels, in the U.S., Australia and U.K.



GOVERNMENT BOND YIELDS



Wilshire Consulting HIGH YIELD BOND MARKET

AS OF 3/31/2020		YTW	QTR	YTD	1 YR	3 YR	5 YR
BLOOMBERG BARCLAYS HIGH YIELD		9.4	-12.7	-12.7	-6.9	0.8	2.8
S&P LSTA LEVERAGE LOAN INDEX		7.3	-9.9	-9.9	-5.1	0.5	1.6
HIGH YIELD QUALITY DISTRIBUTION	WEIGHT						
Ba U.S. HIGH YIELD	52.3%	7.2	-10.2	-10.2	-3.2	2.1	3.4
B U.S. HIGH YIELD	34.8%	9.2	-13.0	-13.0	-6.8	0.8	2.5
Caa U.S. HIGH YIELD	11.9%	17.5	-20.6	-20.6	-18.8	-4.1	0.9
Ca to D U.S. HIGH YIELD	0.8%	44.2	-29.7	-29.7	-40.3	-10.2	-8.2
Non-Rated U.S. HIGH YIELD	0.3%	11.8	-11.9	-11.9	-9.6	-0.6	-1.8

BLOOMBERG BARCLAYS HIGH YIELD INDEXES



Data sources: Wilshire Compass, Bloomberg Barclays

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Wilshire Consulting REAL ASSETS

AS OF 3/31/2020	QTR	YTD	1 YR	3 YR	5 YR	10 YR
BLOOMBERG BARCLAYS U.S. TIPS	1.7	1.7	6.8	3.5	2.7	3.5
BLOOMBERG COMMODITY INDEX	-23.3	-23.3	-22.3	-8.6	-7.8	-6.7
WILSHIRE GLOBAL RESI INDEX	-27.2	-27.2	-21.4	-2.7	-0.7	6.5
NCREIF ODCE FUND INDEX	1.0	1.0	4.9	6.8	8.5	11.4
NCREIF TIMBERLAND INDEX	0.1	0.1	1.3	2.5	2.8	4.5
ALERIAN MLP INDEX (OIL & GAS)	-57.2	-57.2	-61.0	-28.9	-20.7	-5.0







Data sources: Wilshire Compass, National Council of Real Estate Investment Fiduciaries ©2020 Wilshire Associates Inc.



TOTAL FUND REVIEW

Wilshire Consulting Asset Allocation Summary Total Fund

Periods Ended March 31, 2020



\$13,452,605,596



W Wilshire

Wilshire Consulting Composite Performance Summary

Total Fund Periods Ended March 31, 2020



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Wilshire Consulting Plan Sponsor Peer Group Analysis

592

590

Total Fund vs All Public Plans-Total Fund Periods Ended March 31, 2020



555

512

Parentheses contain percentile rankings.

Median

Population

Calculation based on monthly periodicity.

422

Wilshire Consulting Plan Sponsor Peer Group Analysis-Multi Statistics

Total Fund Periods Ended March 31, 2020



Parentheses contain percentile rankings.

Median

Calculation based on monthly periodicity.

W Wilshire

W Wilshire

Wilshire Consulting

Plan Sponsor Scattergram

Total Fund vs All Public Plans-Total Fund Periods Ended April 1, 2017 To March 31, 2020



W Wilshire

Wilshire Consulting Attribution Analysis

Total Fund One Quarter Ending March 31, 2020



Management Effect

Allocation Effect Residual

	TOTAL	US Equity	Int'l Equity	Fixed Income	Multi-Strategy	Real Assets	Private Equity	Opportunistic	Cash
Total	-1.33%	0.08%	0.03%	-0.89%	-0.43%	0.23%	-0.11%	0.18%	-0.67%
Mgmt Effect	-1.11%	0.30%	0.13%	-0.47%	-0.26%	-0.07%	-0.05%	0.18%	-0.87%
Allocation	-0.46%	-0.22%	-0.10%	-0.42%	-0.17%	0.30%	-0.07%	0.00%	0.20%
Residual	0.25%								

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Wilshire Consulting Asset Class Performance

Total Fund

Periods Ended March 31, 2020

			Fiend				Annualized			Incontion
	QTD	YTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date
Total Fund	-11.2	-11.2	-5.7	-2.8	4.4	4.9	7.0	4.7	7.2	10/1/1994
OSERS Policy BM	-9.8	-9.8	-4.8	-1.8	4.2	4.5	6.7	4.8	7.4	
Value Added	-1.3	-1.3	-0.9	-0.9	0.2	0.4	0.3	-0.2	-0.2	
Global Equities	-21.2	-21.2	-13.9	-10.7	1.6	3.1	6.6		6.2	7/1/2002
Custom GbI Equities BM	-22.1	-22.1	-15.4	-12.4	1.0	2.6	6.2		5.9	
Value Added	0.9	0.9	1.5	1.7	0.6	0.5	0.4		0.3	
US Equity	-19.7	-19.7	-11.7	-8.0	4.2	5.6	10.1	4.6	8.7	10/1/1994
Russell 3000 Index	-20.9	-20.9	-12.7	-9.1	4.0	5.8	10.1	4.9	9.0	
Value Added	1.2	1.2	1.0	1.1	0.2	-0.1	-0.1	-0.3	-0.3	
Non-US Equity	-22.8	-22.8	-16.3	-13.6	-1.0	0.6	3.1	3.1	5.4	12/1/1994
Custom Non-US Equity BM	-23.4	-23.4	-18.0	-15.6	-2.0	-0.6	2.2	2.3	4.9	
Value Added	0.6	0.6	1.7	2.0	1.0	1.3	0.9	0.8	0.5	
Global Fixed Income	0.2	0.2	2.9	6.1	4.2	3.3	4.5	5.7	6.0	10/1/1994
Bloomberg U.S. Aggregate	3.1	3.1	5.7	8.9	4.8	3.4	3.9	5.1	5.6	
Value Added	-3.0	-3.0	-2.8	-2.8	-0.7	-0.1	0.6	0.6	0.4	
Multi-Asset Strategies	-10.6	-10.6	-8.6	-7.1	-0.2	0.3	2.9		2.6	6/1/2008
Custom MAS BM	-7.0	-7.0	-4.6	-2.9	1.5	1.3	2.6		2.1	
Value Added	-3.7	-3.7	-4.1	-4.1	-1.7	-1.1	0.3		0.5	
Global Private Equity	3.6	3.6	10.9	15.6	17.3	15.9	15.7	4.9	12.4	10/1/1994
Custom GbI Private Equity BM	4.1	4.1	9.0	13.6	13.8	11.6	14.0	7.8	12.4	
Value Added	-0.5	-0.5	2.0	1.9	3.6	4.3	1.7	-2.9	0.0	
Global Real Assets	1.1	1.1	5.2	7.5	8.9	9.4	10.7	6.7	7.5	9/1/1994
Custom GbI Real Assets BM	1.5	1.5	4.5	6.4	6.7	8.2	10.0	9.0	9.5	
Value Added	-0.5	-0.5	0.7	1.1	2.2	1.2	0.7	-2.3	-2.0	
Opportunistic	-1.8	-1.8	-1.2	0.3	5.7	5.2			6.2	6/1/2013
OSERS Policy BM	-9.8	-9.8	-4.8	-1.8	4.2	4.5			5.8	
Value Added	8.0	8.0	3.6	2.1	1.5	0.7			0.4	
Cash Equivalents*	-28.8	-28.8	-28.2	-27.3	-8.3	-4.8	-2.3		-0.1	7/1/2002
Citigroup 30 Day Treasury Bill	0.4	0.4	1.4	2.0	1.7	1.1	0.6		1.3	
Value Added	-29.2	-29.2	-29.5	-29.3	-10.0	-5.9	-2.9		-1.4	

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*Cash Equivalents includes Russell Enhanced Allocation Overlay



Wilshire Consulting Plan Sponsor TF Asset Allocation

Total Fund vs All Public Plans-Total Fund *Periods Ended March 31, 2020*





US EQUITY

Wilshire Consulting **Performance Summary**

US Equity Periods Ended March 31, 2020





12/19

3/19

W Wilshire



NON-US EQUITY

Wilshire Consulting Performance Summary

Non-US Equity

Periods Ended March 31, 2020





GLOBAL FIXED INCOME

Wilshire Consulting Performance Summary

Global Fixed Income

Periods Ended March 31, 2020



W Wilshire



MULTI-ASSET STRATEGIES

Wilshire Consulting Manager Summary

Multi-Asset Strategies

Periods Ended March 31, 2020





MAS Benchmark

2016

2015

2014

W Wilshire

Comparative Performance

3-Yr Rolling Absolute Risk Statistics

2017



2019

2018

MAS

12.00

9.00

6.00

3.00

0.00

-3.00

-6.00

Return



9/15 3/16 9/16

2.00

0.00

-2.00

-4.00

Return (%)



GLOBAL PRIVATE EQUITY

Wilshire Consulting Manager Summary Global Private Equity

Periods Ended March 31, 2020





GLOBAL REAL ASSETS

Wilshire Consulting Manager Summary

Global Real Assets

Periods Ended March 31, 2020

Comparative Performance



Relative Performance



15.00

12.00

9.00

6.00

3.00

0.00

Return

8.8

6.2

2019

Comparative Performance

9.2

2017

6.9

10.2

7.2

2018

Real Assets

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13.5

2015

12.7

9.1 9.2

2016

Real Asset Benchmark

13.0

2014

1.3



OPPORTUNISTIC

Wilshire Consulting Manager Summary

Opportunistic

Periods Ended March 31, 2020



—Cumulative Annualized Over/Under Relative Performance

W Wilshire

QUARTERLY INVESTMENT REPORT

• Review of the Investment Blue Book (Period ended March 31, 2020)

Quarterly Report to the Board

For the period ending: March 31, 2020

Prepared by Investment and IAD Staff

Farouki Majeed, Chief Investment Officer

Meeting Date: May 2020



Serving the People Who Serve Our Schools®



Investment Agenda

Annual Portfolio Review – Opportunistic & Tactical Asset Allocation Transition (possible vote) Wilshire Associates Quarterly Performance Report (March 31, 2020) Quarterly Investment Report (March 31, 2020) Draft of Annual Investment Plan Draft of Investment Department Incentive Program (possible vote) Corporate Governance – New Proxy Issues 2020



Quarter Ending: 03/31/2020

Economic and Financial Market Outlook



- Q1 2020 US real GDP contracted at an annualized rate of 4.8%. The main drivers of Q1 contraction were negative contributions from personal consumption expenditures (PCE), nonresidential fixed investment, exports, and private inventory investment. As the Coronavirus pandemic was reaching its peak, most business activities were paused. The Blue Chip Economic consensus expected the GDP to drop at a 24.5% annualized rate in Q2. (*Source: Bureau of Economic Analysis and Blue Chip Economic Indicators*).
- The US labor market severely deteriorated, losing 71,000 jobs in March and the unemployment rate increased to 4.4%. The employment situation continued to worsen in April amid widespread business closing related to containment of spread of the corona virus. The Blue Chip Economic Consensus forecasted the unemployment rate to increase to 8.8% for 2020, and 7.2% for 2021. (Sources: Bureau of Labor Statistics and Blue Chip Economic Indicators).
- The US headline inflation declined to 1.5%. Over the last 12 months, the energy index declined 5.7% as the demand for oil and gas collapsed in March. The food index increased 1.9%. The core inflation, excluding food and energy was 2.1%. (Source: Bureau of Labor Statistics).
- During March, the 10-year Treasury nominal yield declined to 0.70 on March 31st from 1.10% on March 1^s. The 10- year real yield was -0.80%. The Fed exercised two emergency rate cuts (50 bps on March 3rd, and 100 bps on March 15th) and planned a large purchase of bond and mortgage-backed securities to support the economy.
- The housing market, S&P Case-Shiller 20-City home price index, posted an annual increase of 3.5% in February which was before the pandemic had any significant impact on the house market.
- The Consumer Sentiment Index released by Thomson Reuters and University of Michigan was down to 89.1, which was 12% lower than the precious month and 10% lower than the historical average. The Leading Economic Index (LEI) issued by the Conference Board was down to 104.2 from 112.1
- The March Global Composite PMI was 39.4, indicating a significant contraction of the world economy. The service sectors were hit the hardest as the Non-Manufacturing PMI was 37.0 while the Manufacturing PMI was 47.6. The US did relatively better as the US Manufacturing PMI was 52.5, indicating a soft expansion and Non-Manufacturing PMI was 49.1, substantially higher than the global level. *(Source: Institute for Supply Management, Markit).*
- Equity markets were sharply down in March. USE equity markets returned (13.75%); the Non-US developed and emerging markets were down 14.12% and 15.5%, respectively. The markets were extremely volatile in March. The average level of the VIX index was 57.7, about 3 times as high as the long term historical average.
- The US fixed income markets, Bloomberg Barclay's US Aggregate Bond Index was down 0.59% for the month.

Notes: Acronym - PMI - Purchasing-Managers' Index



Quarter Ending: 03/31/2020

ECONOMY US Real GDP Growth and Labor Market





Ohio SERS Investment Report ECONOMY Headline Inflation

Quarter Ending: 03/31/2020



Sources: www.research.stlouisfed.org, www.oecd.org, www.inflation.eu, and www.tradingeconomics.com



Ohio SERS Investment Report Quarter Ending: 03/31/2020 ECONOMY US & Global Manufacturing Activities

ISM Manufacturing New Order and **Production Indices** ISM New Orders Index ISM Production Index 80 70 60 50 40 30 20 10 Mar-07 Sep-07 Mar-08 Sep-08 Mar-09 Sep-09 Sep-10 Sep-11 Sep-11 Sep-12 Sep-12 Sep-12 Mar-13 Sep-13 Var-14 Var-15 Sep-16 Sep-14 Sep-15 Mar-16 War-17 Sep-17 Mar-18 Mar-19 Var-20





Ohio SERS Investment Report ECONOMY US Housing Market



Date	S&P Case-Shiller 20-City Home Price Index January 2000 = 100, Seasonally Adjusted
Jul-15	179.35
Jul-16	188.69
Jul-17	199.85
Jul-18	211.70
Jul-19	216.09
Feb-20	221.95

Sources: www.research.stlouisfed.org



Ohio SERS Investment Report ECONOMY

Consumer Sentiment



Index of Consumer Sentiment							
Feb-20 Mar-20 Mar-19 M-M Change Y-Y Change							
101.0	89.1	98.4	-11.8%	-9.5%			

Quarter Ending: 03/31/2020

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



Index	Jan-20	Feb-20	Mar-20	Month -Month Percent Change	6-Month Percent Change
LEI	111.9	111.7 r	104.2 p	-6.7	-6.6
CEI	107.3	107.6	106.6 p	-0.9	-0.3


Ohio SERS Investment Report ECONOMY

Quarter Ending: 03/31/2020







Source: The Conference Board



Ohio SERS Investment Report MARKETS Equity



	Return as of 3/31/2020		
_	1 Year	FYTD	
S&P 500	-6.98	-10.82	
MSCI - EAFE + Canada Index (\$Net)	-14.89	-18.00	
MSCI - Emerging Markets Index (\$Net)	-17.69	-18.18	



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 : -23.7%



Ohio SERS Investment Report MARKETS Fixed Income







Ohio SERS Investment Report MARKETS Foreign Exchange



	Trade Weighted Broad U.S. Dollar
Date	Index January 1997=100
June-15	106.51
June-16	112.15
June-17	111.97
June-18	113.27
June-19	114.56
March-20	122.82





Date	U.S. / Euro Foreign Exchange Rate U.S. Dollars to One Euro
June-15	1.12
June-16	1.10
June-17	1.14
June-18	1.17
June-19	1.14
March-20	1.10







Ohio SERS Investment Report VALUATION US Equity

Quarter Ending: 03/31/2020



Source: Wilshire Compass



Quarter Ending: 03/31/2020

VALUATION Non US Developed Market Equity

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



Source: Wilshire Compass



Ohio SERS Investment Report
VALUATION Emerging Market Equity

Quarter Ending: 03/31/2020

MSCI EM P/E Ratios and Next 1 Year (\$ Net) Returns 100% 80% 25 60% MAR P/E: 13.40 20 40% P/E: +2 STDEV = 18.74 P/E: +1 STDEV = 16.49 **1** Year Returns 20% Avg P/E = 14.25 P/E Ratios 15 0% Next -20% P/E: 12.00 = 10 P/E: -2 STDEV = 9.76 -40% -60% 5 -80% 0 -100% Mar-07 Mar-16 Mar-20 Mar-08 Mar-09 Mar-10 Mar-11 Mar-12 Mar-13 Mar-14 Mar-15 Mar-17 Mar-18 Mar-19

Next 1 Year (\$ Net) Returns — P/E Ratios



Quarter Ending: 03/31/2020



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



Quarter Ending: 03/31/2020

SERS' Investment Portfolios Review



Quarter Ending: 03/31/2020

Total Fund: Asset Allocation & Valuation

Asset Class	Market Value \$	Actual	Target	Range
Global Equities	5,764,423,153	42.8%	45.0%	35% - 55%
US Equity	3,018,862,838	22.4%	22.5%	17.5% - 27.5%
Non-US Equity	2,745,560,314	20.4%	22.5%	17.5% - 27.5%
Global Private Equity	1,509,884,097	11.2%	10.0%	5% - 15%
Global Fixed Income	2,294,383,567	17.1%	19.0%	12% - 26%
Multi-Asset Strategies	993,860,633	7.4%	10.0%	5% - 15%
Global Real Assets	2,283,241,955	17.0%	15.0%	10% - 20%
Opportunistic & Tactical	355,481,592	2.6%	0.0%	0% - 5%
Cash Equivalents	251,330,599	1.9%	1.0%	0% - 5%
Short-Term	165,443,742	1.2%	1.0%	
Russell EA Overlay	45,625,825	0.3%	0.0%	
Direct Rebalance Overlay	-12,202,388	-0.1%	0.0%	
Currency Overlay	52,463,421	0.4%	0.0%	
Total Fund	13,452,605,596	100.0%	100.0%	

Source: BNY Mellon GRS







Total Fund: Portfolio Structure



Note: Enhanced Allocation Overlay included in USE LC Passive, NUSE DM Passive, FI Core and Cash



CHANGE IN NET ASSETS

	vs. One Year Ago, since 03/01/2019	vs. Three Years Ago, since 03/01/2017
Beginning Market Value	14,341,862,068	13,226,739,121
Gain/Loss	(301,268,134)	2,016,579,254
Expenses	(61,238,338)	(192,212,779)
Net Transfer	(526,750,000)	(1,598,500,000)
End of Period Market		
Value	13,452,605,596	13,452,605,596

*Origins of the Net Transfer

Dividends/Interest	117,266,445
Net Distributions	136, 191, 420
Cash on Hand	273,292,136

SERS

Ohio SERS Investment Report













Quarter Ending: 03/31/2020

Total Fund Performance



22.5% Russell 3000 22.5% MSCI ACWI ex US Index (net dividends) 10% Burgiss All Private Equity benchmark (1q lag) (BAPE) 19% Bloomberg Barclays Aggregate Bond 15% NCREIF Property (1q lag) 10% HFRI Fund of Funds Composite plus 1% 1% Citigroup 30 Day US T-Bill 0% Opportunistic & Tactical (OSERS Policy-Benchmark)

Current Benchmark:

Actuarial Rate

(7.5% adopted 4/21/16)

	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD*
Total Fund (Gross)	(11.00)	(11.00)	(5.24)	(2.14)	5.06	5.58	7.69	7.71
Total Fund (Net)	(11.15)	(11.15)	(5.70)	(2.75)	4.39	4.91	6.96	7.20
OSERS Policy	(9.82)	(9.82)	(4.80)	(1.81)	4.19	4.50	6.65	7.39
Value Added (Net of Fee)	(1.33)	(1.33)	(0.90)	(0.94)	0.20	0.41	0.31	(0.19)

Source: BNY Mellon GRS



Net of Fee Excess Return Attribution













5 Year Risk and Return



Risk (Annualized Standard Deviation)

Realized Risk Forecast Risk

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



3 Year Risk and Return



Realized Risk

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



Global Equities Performance



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year	
Global Equities (Gross)	(21.14)	(21.14)	(13.72)	(10.46)	1.95	3.44	6.95	
Global Equities (Net)	(21.20)	(21.20)	(13.92)	(10.72)	1.63	3.12	6.58	L
Global Equity Benchmark	(22.13)	(22.13)	(15.37)	(12.37)	1.04	2.58	6.15	L
MSCI ACWI	(21.26)	(21.26)	(14.03)	(10.76)	2.05	3.41	6.45	
Value Added (Net of Fee)	0.93	0.93	1.45	1.65	0.59	0.54	0.43	



Quarter Ending: 03/31/2020

US Equity Performance



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year	
US Equity Portfolio (Gross)	(19.64)	(19.64)	(11.56)	(7.87)	4.43	5.88	10.40	
US Equity Portfolio (Net)	(19.67)	(19.67)	(11.68)	(8.04)	4.20	5.63	10.08	
US Equity Policy Benchmark	(20.90)	(20.90)	(12.70)	(9.13)	4.00	5.77	10.15	
Value Added (Net of Fee)	1.22	1.22	1.02	1.08	0.20	(0.14)	(0.07)	



Non-US Equity Performance



	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Non-US (Gross)	(22.71)	(22.71)	(16.00)	(13.19)	(0.58)	1.03	3.51
Non-US (Net)	(22.80)	(22.80)	(16.27)	(13.56)	(1.00)	0.63	3.08
Non-US Equity Policy Benchmark	(23.36)	(23.36)	(18.02)	(15.57)	(1.96)	(0.64)	2.19
Value Added (Net of Fee)	0.55	0.55	1.74	2.01	0.96	1.27	0.89

Current Benchmark: MSCI ACWI Ex US Index

(Net dividends)



Global Private Equity Performance



Source: BNY Mellon GRS

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



Public vs Private Equity - Performance (Net)

	3 Year	5 Year	10 Year
US Equity	4.20	5.63	10.08
Non-US Equity	(1.00)	0.63	3.08
Global Equity	1.63	3.12	6.58
Private Equity	17.32	15.89	15.72

* Private Equity returns are lagged one quarter



Global Fixed Income Performance





Quarter Ending: 03/31/2020

0.28

(1.08)

Multi-Asset Strategies Performance



(3.65)

(4.06)

(1.71)

(4.13)

Source: BNY Mellon GRS

Value Added (Net of Fee)

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

(3.65)



Quarter Ending: 03/31/2020

Global Real Assets Performance



Source: BNY Mellon GRS

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



Opportunistic & Tactical Performance



Source: BNY Mellon GRS



Quarter Ending: 03/31/2020

Short-Term Performance



FTSE 30 Day Treasury Bill



Russell EA Overlay Performance





Currency Overlay Performance



	Qtr	CYTD	FYTD	1 Year	3 Year
Total Fund (Gross)	(11.00)	(11.00)	(5.24)	(2.14)	5.06
Total Fund w/o Currency Overlay (Gross)	(11.19)	(11.19)	(5.44)	(2.34)	4.96
Total Fund (Net)	(11.15)	(11.15)	(5.70)	(2.75)	4.39
Total Fund w/o Currency Overlay (Net)	(11.32)	(11.32)	(5.85)	(2.75)	4.32
Currency Overlay Impact (Net of Fee)	0.17	0.17	0.15	0.00	0.08



Quarter Ending: 03/31/2020

Proposed Investment Agenda – Next Meeting

Annual Investment Plan (possible vote) Monthly Investment Report (April 30, 2020)

DRAFT ANNUAL INVESTMENT PLAN

• Review of the Draft Annual Investment Plan


2021

Annual Investment Plan For the Year Ended June 30, 2021

April

June .

Jub



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SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO ANNUAL INVESTMENT PLAN

For the year ended June 30, 2021

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

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Executive Summary

EXECUTIVE SUMMARY

The Board's Statement of Investment Policy (SIP) requires the Chief Investment Officer prepare and present to the Board for its approval an Annual Investment Plan (Plan). The following document outlines the recommended Plan for Fiscal Year (FY) 2021.

As in prior years, the Plan reviews the economic environment based upon consensus reports from leading sources, SERS' asset allocation target and long-term performance objective for each portfolio, last year's objectives and accomplishments, a review of the market conditions over the last year and objectives for FY2021. Implementation Guidelines for each asset class portfolio are included to provide further details on how each portfolio will be managed in the coming year relative to portfolio construction parameters and risk limits. **This Plan is meant to be a living document subject to adjustment during the year.** If circumstances change or opportunities arise during the year, items will be discussed with the Board which may lead to intra-year changes to the Plan or Strategy Statements.

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The general objectives of the Investment Department for FY2020 were as follows:

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

Staff added an opportunistic High Yield portfolio within the Global Fixed Income structure. The intent was to start with a nominal allocation and increase the funding as high yield spreads widened, as they normally do in times of market stress, to predetermined levels. During the March/April period spreads widened to hit those targets and the portfolio was funded accordingly.

Staff also approved commitments to new stressed/distressed credit opportunities to take advantage of market dislocations due to the COVID-19 pandemic.

• Conduct Asset/Liability study with the Board, facilitate approval of a new asset allocation framework and targets in collaboration with the Investment Consultant and Actuaries.

The Asset/Liability study process began in September 2019 with a presentation to the Board on expected returns for the various asset classes and other inputs for modeling. In subsequent months, Staff and Wilshire presented various asset allocation scenarios including the consideration of Global Private Credit as a new asset class and eliminating the allocation to the MAS (Hedge Funds) portfolio. The Board approved Staff's recommended Asset Allocation in February, 2020. The new allocation is effective July 1, 2020.

• Continue to develop and engage the Investment team.

The Investment team is well aligned in terms of goals, focus, processes and collaboration. The Investment Committee process is working well and decisions are contributing to positive performance. Two new Staff members were hired in February, 2020 to fill vacancies.

FY2021 OBJECTIVES

- Our major strategic goals remain unchanged. The focus will continue to be on value added performance, risk management, cost effectiveness and maintenance of an investment program that meets or exceeds investment objectives over the long-term.
- Implement the new asset allocation framework and targets approved by the Board in FY2020.
- Conduct a search for a General Investment Consultant as the current agreement will expire June 30, 2021.
- Continue to research and invest in opportunities arising from the economic impact of the COVID-19 pandemic.
- Explore and implement leverage strategy of the Total Fund not exceeding 5% consistent with the Statement of Investment Policy and Leverage Policy.
- Continue to develop and engage the Investment team.

EXECUTIVE SUMMARY

CONCLUSION

Staff has been shifting the fund allocations to a more defensive position beginning in early 2019. Equity allocation was reduced and Fixed Income allocation were increased. After a steep decline in March equity markets rebounded somewhat in April, but the path to economic recovery appears uncertain. The bias is to be defensive in the short term until there is clarity about the pickup in economic activity following the gradual opening announced in May. However, staff has already been making new commitments to investments arising from the dislocations in the credit markets.

Staff appreciates the support and guidance received from the Board in FY2020 and looks forward to working with the Board in FY2021 for another successful year.

ACKNOWLEDGEMENTS

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

- Economic Outlook Farouki Majeed and Hai Yen Le
- Global Equities Judi Masri and Dustin Matthiessen
- Global Private Equity Steve Price and Phil Sisson
- Multi Asset Strategies Judi Masri and Jason Naber Global Fixed Income Jason Naber
- Global Private Credit Adam Messerschmitt
- Global Real Assets Nancy Turner and Michael Browning
- Cash Equivalents Jason Naber
- Opportunistic and Tactical Farouki Majeed, Phil Sisson, Nancy Turner and Michael Browning
- Overlav Program Farouki Majeed, Hai Yen Le and Nancy Turner
- Investment Risk Management and Analytics Hai Yen Le and Michael Browning
- Investment Operations Terri Martin and Katie Swank

We would appreciate the opportunity to review the Annual Investment Plan with you at the June 2020 Board meeting. If you have any questions or comments before then, please let me know.

Respectfully submitted,

Farmigin Mymid

Farouki A. Majeed Chief Investment Officer

Global Economic Outlook

GLOBAL ECONOMIC OUTLOOK

The global economy performed below par in 2019 at a growth rate of 2.9% while US GDP grew modestly at 2.3%. Economic growth accelerated in the second half of 2019 as trade tensions eased. global trade improved and the Federal Reserve (Fed) as well as other central banks shifted to more accommodative monetary policy. Entering 2020, the global economic outlook was positive with all indicators (PMI) showing upward trends. However, this picture was unexpectedly disrupted by the COVID-19 global pandemic in February as countries around the world including the US adopted containment measures which effectively shuttered economic activity. US unemployment claims reached 30 million by the end of April indicating an unemployment rate of around 18% which is unprecedented since the Great Depression of the 1930s. The US Fed has taken various measures to inject liquidity into the financial system including the purchase of treasuries and mortgage securities, vastly expanding the Fed's balance sheet. The US Government has also stepped in with fiscal packages totaling \$3.0 trillion to protect payrolls, expand unemployment benefits and provide funds to small businesses. These extensive measures may cushion the impact of the economic decline by filling some part of the income shortfall but the path of economic recovery remains uncertain and will cause markets to be volatile well into 2021. Equity markets fell sharply from the mid-February highs resulting in a 20% drawdown for 1Q and have since trended up in April. The US 10 year yield has compressed to 0.6% from 2.0% at the end of 2019 and 3.0% in 2018. Credit markets show a high level of stress with spreads widening to a scale not seen since the financial crisis of 2008. US consumer sentiment has fallen from 101.0 in February to 71.8 in April.

The emergency fiscal spending undertaken by the US government will lead to a spike in deficits and add to the already high level of debt. While current conditions are deflationary, the increase in deficits and debt may cause inflation in the future and debase the value of the US dollar.

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

US Economy:

The Blue Chip consensus economic forecast (April 2020) expects the US to be in a deep recession in the first half of 2020 with a projected GDP annualized growth rate of -3.8% in Q1 and -24.5% in Q2. Then, GDP is expected to recover to 7.4% in Q3 and 7.9% in Q4. Overall the US economy is expected to shrink 4.1% in 2020. The actual GDP for Q1 was -4.8%, higher than expected. The consensus expectation is for positive GDP growth of 3.8% in 2021. The US economic crisis has been strongly supported by highly accommodative monetary policy from the Fed, and a large, broad-based fiscal stimulus package from the government. The Fed aggressively cut the federal funds short-term interest rate to 0.25% from 1.75% in a single stroke and has also engaged in quantitative easing measures.

According to the Blue Chip Economic forecasts, labor markets are expected to deteriorate steeply as the unemployment rate is expected to jump up to 8.8% in 2020 then slightly ease to 7.2% in 2021 (Table 1). Inflation is expected to decline to 0.9% in 2020 and rebound in 2021 to 1.7% closer to the Fed's target of 2.0%. The yield on 10-year US Treasuries is expected to fall an average of 1.0% in 2020 and marginally increase to 1.2% in 2021. Corporate profit growth rate is expected to plunge to -14.6% in 2020 and bounce back to 14.0 in 2021.

Period	Unemployment Rate	Inflation Rate CPI	T-Bill 3-Mo.	T-Note 10-Yr.	Corporate Profits
2016	4.9	1.3	0.3	1.8	(0.4)
2017	4.3	2.1	0.9	2.3	(3.0)
2018	3.9	2.4	2.0	2.9	3.4
2019	3.7	1.8	2.1	2.1	0.0
2020 Consensus Forecast	8.8	0.9	0.3	1.0	-14.6
2021 Consensus Forecast	7.2	1.7	0.3	1.2	14.0

Table 1

Source: Blue Chip Economic Indicators, April 2020

GLOBAL ECONOMIC OUTLOOK

World Economy:

Global GDP is projected by the IMF to sharply contract by 3.0% in 2020 (Table 2). The US economy is projected to shrink by 5.9%. The emerging and developing economies are projected to steer the pandemic better than the advanced economies as the former are expected to contract by 1% while the latter by 6.1%. China and India, which are included in the emerging and developing group, are projected to grow at 1.2% and 1.9%, respectively, in 2020. Nevertheless, the global economy is expected to recover strongly in 2021 by 5.8%, which is twice as fast as the 2019 growth rate. The US growth rate in 2021 is projected at 4.7%, the same rate as the Euro area. The emerging and developing economies are expected to recover at a rate of 6.6% in 2021.

Table 2

Annual GDP Growth	2019 (estimated)	2020 (projected)	2021 (projected)
World	2.9	(3.0)	5.8
US	2.3	(5.9)	4.7
Advanced Economies (including US)	1.7	(6.1)	4.5
Emerging and Developing Economies	3.7	(1.0)	6.6

Source: International Monetary Fund World Economic Outlook, April 2020

Portfolio Strategy

PORTFOLIO STRATEGY - Global Equities

INVESTMENT STRATEGY

SERS invests in equity securities to earn a premium over government treasury bonds, which is compensation for assuming the relatively higher risk inherent in public equity securities. Global equities add diversification, liquidity and inflation protection to the SERS portfolio.

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

	Target	Permissible Range
Global Equities	45%	35% - 55%

The allocation within Global Equities is as follows (as percentage of Total Fund:

	Target	Permissible Range
US Equity Portfolio	22.5%	15% - 30%
Non-US Equity Portfolio	22.5%	15% - 30%

The performance objectives of the Global Equities portfolio are as follows:

- US Equities: Exceed the return on the Russell 3000 Index, net of manager fees. The target excess return is 20 basis points over three-year rolling periods.
- Non-US Equities: Exceed the return on the MSCI All Country World Free, excluding the United States Index (net of dividends reinvested), net of manager fees. The target excess return is 50 basis points over threeyear rolling periods.

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

FY2020 Annual Investment Plan objectives and related activities are as follows:

 Address underperformance in US Equity by increasing the Portfolio's passive allocation and investigating alternative sources of alpha.

Five active large cap mandates were terminated in calendar year 2019, moving these allocations to low cost passive management. This increased our US Equity portfolio's passive allocation to 68%, split between two accounts: a Russell 1000 account and a Russell 1000 Growth account. The Russell 1000 Growth account is new, allowing SERS to obtain crucial large cap growth exposure that our active managers were not successfully obtaining. FY2020 US Equity net excess returns through March are now a positive 102 basis points over the benchmark with an average management fee of 14 basis points FYTD.

Evaluate proper allocation between active and passive in Non-US portfolio and ensure Portfolio is
positioned to generate alpha in line with expectations.

The Non-US Equity passive allocation was reduced from 30% to 28% during the Fall of 2019 after funding two new active managers. The Non-US Equity passive allocation is appropriately lower than our US Equity passive allocation as SERS Non-US Equity managers have historically produced excess returns over the benchmark. However, the passive allocation helps reduce management fees, provides extra liquidity and reduces risk. Thus, the passive Non-US Equity allocation may be slowly reduced to 25%, but will continue to fulfill an important role in Non-US Equity portfolio management due to lower management fees, liquidity and risk reduction versus active managers.

• Regularly evaluate and rebalance the Global Equity Portfolio to ensure that country exposure, management mix, capitalization weight, and style orientation is appropriate and make recommendations as necessary.

Both the US and Non-US Equity portfolios remained nearly neutral in all primary characteristics over the last year. After the switch to more passive, the US portfolio slightly tilted to a large cap growth bias, overweighting technology. This bias was very helpful to returns in the second half of 2019 as large growth companies returned 36.39% in 2019, the highest equity market return for the calendar year. Even though the US portfolio has a beta of 1.0, many of our remaining active managers provide downside protection, which has provided good excess return during the 1st quarter of 2020.

PORTFOLIO STRATEGY - Global Equities

The Non-US Equity's portfolio's main tilt is to small cap, which has helped longer-term net excess returns, despite a shorter term headwind to performance. The portfolio has a slight value bias, although SERS is overweighted technology, which helped 2019 calendar year returns. Finally, our slight underweight to emerging markets has been helpful as developed market returns continue to outpace emerging market returns.

• Review Investment Manager Agreements (IMAs) and Investment Guidelines on the review schedule and make necessary adjustments as needed.

The passive IMA was fully renegotiated, adding our new Russell 1000 Growth account. An addition, amendments were added to a US small cap manager and a Non-US emerging market manager.

Cumulative Periods through March 31, 2020			Annu	alized	
	FYTD	1 Year	3 Year	5 Year	10 Year
Russell - 3000 Index	(12.70)	(9.13)	4.00	5.77	10.15
Russell - 3000 Growth Index	(4.73)	(0.44)	10.54	9.74	12.68
Russell - 3000 Value Index	(20.93)	(18.02)	(2.67)	1.62	7.47
Russell - 1000 Index	(11.77)	(8.03)	4.64	6.22	10.39
Russell - 2000 Index	(25.55)	(23.99)	(4.64)	(0.25)	6.90
MSCI - AC World Index (\$Net)	(14.35)	(11.26)	1.50	2.85	5.87
MSCI - AC World Ex-USA Index (\$Net)	(18.02)	(15.57)	(1.96)	(0.64)	2.19
MSCI - World Ex USA Index (\$Net)	(18.00)	(14.89)	(2.07)	(0.76)	2.43
MSCI - Emerging Markets Index (\$Net)	(18.18)	(17.69)	(1.62)	(0.37)	0.68

CURRENT MARKET CONDITIONS AND OUTLOOK

Source: Wilshire Compass

Fiscal years begin July 1 and end on June 30

Global equity markets have experienced two tales so far for FY2020. Both US and Non-US equities posted strong returns for calendar year 2019, led by US Large Cap Growth. Along with strong returns, the global equity markets continued to experience low volatility during 2019. These strong returns and low volatility changed in 2020 with the coronavirus pandemic. Global equity markets quickly fell with volatility increasing, reversing 2019 gains. A more detailed summary of calendar year 2019 and first quarter of 2020 follows for both US and Non-US equity markets.

The broad US equity market outperformed international developed and emerging markets in 2019. Strong US market returns were helped by a 2018 market valuation rebound, good profit margins and the Federal Reserve lowering interest rates three times in 2019. The Russell 3000 Index which captures both large and small capitalization stocks, returned 31.02% in 2019, the best return since 2013. Large cap stocks finished the year up 31.43% (Russell 1000 Index), while small cap stocks (Russell 2000 Index) posted a 25.53% return. Continuing a theme from previous years, growth stocks outperformed value stocks in 2019 by 9.59% with the Russell 3000 Growth Index posting a 35.85% return. The best two returning sectors were technology (up 46.73%) and financials (up 32.93%) while energy (up 9.63%) posted the lowest return in US markets.

Although lower than US equity markets, Non-US markets also posted strong returns in 2019 with developed markets returning 22.49% while emerging markets returned 18.42%. Just like in the US, Non-US equity markets were led by large cap growth stocks with growth posting a 27.34% return versus 15.71% for value. Again, the technology sector (up 41.38%) led the way with communications (up 12.81%) and energy (up 15.74%) posting the lowest returns in Non-US equity.

Non-US markets began their decline in January 2020 with the coronavirus outbreak in China whereas US markets posted new highs in February. That changed with the news of the virus spreading throughout Asia, then to Europe, and finally to the United States in late February. The global equity market sell-off worsened in March due to COVID-19 spreading along with a technical sell-off from levered funds being force to sell liquid assets to meet increasing margin calls. The broad US market declined (20.90%), Non-US developed markets

PORTFOLIO STRATEGY - Global Equities

fell (23.26%) and emerging equities dropped (23.60%) during the first quarter of 2020. Large growth stocks still outperformed value so far in this market decline with the S&P 500 technology sector only declining (11.9%) while energy dropped (50.5%).

Faced with a global pandemic, the global equity market outlook remains uncertain. The world is undoubtedly in a global recession. Analysts are predicting second quarter 2020 GDP to decline anywhere from (9%) to (40%). This uncertainty is compounded as this is the first recession ever caused by a government decree from many world governments, shutting all non-essential business and much consumer activity. On the positive side, the world looks to China whose PMI began a slight rebound in March as business very slowly returned. The world economy was growing and the US consumer was strong pre-virus, so this pent up demand may rebound if COVID-19 can be controlled soon. Many world governments have also implemented rapid and large scope fiscal and monetary policy measures. On the negative side, globalization may never be the same. Companies may add redundancy processes and determine that global supply chains and just-in-time inventory is too risky, adding extra costs for onshore production. Governments may continue travel restrictions and leisure and business travel may never be the same. Oil's 67% decline this year along with a strong US dollar may hurt emerging markets for some time, just as they were rebounding. SERS' equity portfolio may face a difficult calendar year 2020, even as our active managers implement capital preservation strategies.

PORTFOLIO STRUCTURE

At the beginning of SERS' fiscal year, the US portfolio was approximately 2.0% over the policy target, which was kept throughout the fiscal year due to strong US equity returns versus Non-US equity and other asset classes. The Non-US portfolio was kept slightly below its 22.5% policy target for the fiscal year due to better US equity absolute returns. Both portfolios remained nearly neutral versus their benchmarks in regards to size, style, and in the Non-US, geography. A structural overweight to small cap remains in Non-US, though this is less pronounced than in years past. Staff expects to keep the passive allocation near 70% in the US portfolio as active US large cap management net excess performance is difficult to find, particularly in US large cap growth. Non-US passive management will be 25-30% as active management has historically been successful in this portfolio. Both portfolios will continue to be monitored for performance, especially for capital preservation if market drawdowns continue.

FY2021 OBJECTIVES

- Monitor the portfolio for possible performance enhancement given FY2020 portfolio changes of US active large cap terminations and Non-US equity active manager additions. Compare SERS active managers to peers and conduct any manager searches, if appropriate.
- Ensure the global equity portfolio has appropriate risk and return characteristics given the current equity market decline and volatility pickup.
- Regularly evaluate and rebalance the Global Equity Portfolio to ensure that country exposure, management mix, capitalization weight, and style orientation is appropriate and make recommendations as necessary.
- Review IMAs and Investment Guidelines on the review schedule and make necessary adjustments as needed.

PORTFOLIO STRATEGY – Global Private Equity

INVESTMENT STRATEGY

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

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

	Target	Permissible Range
Global Private Equity	11%	8% - 16%

The performance objective for private equity is to provide returns in excess of the Burgiss All Private Equity Benchmark.

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

Manage the private equity portfolio and fiscal year commitments to reflect the investment bias of actively
overweighting private equity relative to its target of 10% of the Total Fund, subject to identifying
opportunities that meet SERS' investment criteria.

Staff has been actively working toward this goal and to date nearly \$350 million has been committed to eight private equity investment opportunities. This exceeds the typical investment pacing of \$150 million to \$250 million in private equity commitments per fiscal year that has been the target since the allocation was increased to 10% of the total fund.

• Review the private equity portfolio strategy and structure and develop a plan to improve risk and return characteristics of the portfolio, achieve fee reductions and optimize manager counts as appropriate.

To date seven commitments have been made to private equity funds with an average management fee of 1.6%. Additionally, one commitment has been made to a co-investment that has no management fees or carried interest. Together the average management fees for all fiscal year 2020 commitments is 1.4%. These private equity commitments are diversified by investment strategy, sector focus and geography.

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

Staff reviewed several co-investment opportunities throughout the fiscal year. One opportunity met SERS' criteria and was funded in October 2019. The private equity portfolio has a total of four co-investments totaling approximately \$35 million. The co-investments are in various stages of their lifecycle and are currently generating an IRR of 17% and a 1.6x multiple of invested capital.

- Research and identify new managers who offer compelling opportunities and return expectations that may replace current managers who no longer meet SERS' investment criteria.
- Staff reviewed over 100 investment offerings during fiscal year 2020. One opportunity met the investment criteria and SERS committed \$50 million to this new manager in September 2019.

	Commitments as of March 31, 2020	Target Range
Buyout	79%	75%
Venture Capital	2%	0%
Special Situations	19%	25%
Domestic	74%	75%
International	26%	25%

PORTFOLIO COMPOSITION

PORTFOLIO STRATEGY – Global Private Equity

CURRENT MARKET CONDITIONS AND OUTLOOK

Despite growing macroeconomic and political uncertainty across all markets globally, the private equity industry marched on during 2019. Private equity firms continued to invest, exit companies, raise capital and generate solid returns while at the same time navigating the challenges of a high valuation environment that raised the bar for investors looking to create value. Many PE firms took advantage of the higher prices and moved toward the exits before any impending recession. Fund-raising continued to be strong but was skewed by larger firms raising capital. Although returns are still attractive, they continue to come under pressure as the industry matures and competition intensifies. Taking a closer look, the total number of platform companies purchased in 2019 came in at around 3,500 transactions globally totaling approximately \$551 billion. Both the value and number of these purchases remained relatively flat from the previous year. The large amount of deal flow is a direct result of the abundance of low-cost debt financing and the estimated \$2.5 trillion of dry powder available across all fund types and all geographies at the end of 2019. The intense competition for assets has led to increased purchase price multiples and made it very difficult for private equity firms to find and purchase companies. Purchase price multiples have risen from 8.5 times earnings in 2008 to an average of 11.5 times earnings in 2019. Nevertheless, the same factors that complicated deal making paved the way for an excellent exit market for private equity funds in 2019. Exits slowed a bit in 2019 to 1.078 exit transactions valued at \$405 billion but was still a solid contributor to the strong six-year stretch of exits that have produced significant levels of distributions for investors. The continued positive momentum for private equity produced an abundant fundraising market and private equity backed funds raised a record \$894 billion in 2019. Buyout funds led the way closing on over \$361 billion of new commitments, however, this total was aided by the number of large and mega buyout funds raised during the year. The level of investment activity at increased purchase valuations and steady uplift in dry powder once again underscores the importance of identifying and backing high quality private equity managers that remain disciplined in their process, due diligence and selection criteria throughout investment cycles.

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

Performance for Periods Ended March 31, 2020				
Fund Type	1-Year	3-Years	5-Years	10-Years
SERS Private Equity	15.56	17.32	15.89	15.72
Burgiss Benchmark	8.95	12.13	10.61	13.50

Source: Burgiss All Private Equity Index

Although 2019 was a solid year for private equity, moving into 2020 the picture is less clear. In the near term, the industry could be influenced by a wide range of factors that may include the economic effects of a global pandemic, increased valuations, political uncertainty and global trade implications. Although it is too early to tell what impact these issues may have on the private equity market, in general it is expected that fundraising and exit activity will continue to cool in 2020. Additionally, as was mentioned earlier, the recent strength of the private equity market has resulted in increased price expectations for sellers. As a result, private equity firms on average are currently paying more to acquire new portfolio companies. However, private equity firms with finely tuned strategies and repeatable value-creation models will prosper. Top quartile private equity managers find ways to overcome problems, generate returns for their limited partners and earn the capability to raise additional funds.

With this in mind, the outlook for the SERS private equity portfolio is favorable. Current market conditions reflect positively on the style of investing employed by the general partners that make up the core of the SERS private equity portfolio. Quality investments can be identified in the current market; however, finding these companies requires patience, discipline and the ability to fully understand the operations of the target company. The pandemic's impact on private equity remains to be seen. As prices are clearly depressed for target companies, legislation is threatened to limit "vulture" acquisitions. Cash flow pressure from the global shut-down and uncertainty about resumption of pre-pandemic norms will force the re-evaluation of previously sound business plans. Additionally, value can be created in target companies through hands-on, proactive and experienced management teams. SERS' private equity portfolio is comprised primarily of general partners who have demonstrated their ability to identify, create value and exit companies in all market environments. In an effort to ensure the portfolio is properly positioned for future uncertainty, our goals for the fiscal year include;

PORTFOLIO STRATEGY – Global Private Equity

continuing to identify and invest with operationally focused managers who primarily target the middle market and avoid the competition in the large and mega space, increasing exposure to attractive investments that meet our criteria and offer lower costs through co-investments, and ensuring that we stay on top of market trends and opportunities by continuing to research and seek out managers offering investment strategies that deliver private equity like returns with differentiated and unique strategies. Additionally, as the Total Fund moves into what many believe will be a low return environment we will seek to increase the allocation level of private equity to its new target of 12% in an effort to obtain the benefit of this higher returning assets class to the Total Fund level. This will however take time as private equity is a long-term asset class where manager selection is critical and additional capital takes more time to deploy.

FY2021 OBJECTIVES

- Manage the private equity portfolio and fiscal year commitments to reflect the increased investment allocation of 12% of the total fund. Seeking to achieve a target of 11% of the Total Fund by the end of fiscal year 2021 and 12% by the end of fiscal year 2022, subject to identifying opportunities that meet SERS' investment criteria.
- Review the private equity portfolio strategy and structure and develop a plan to improve risk and return characteristics of the portfolio, achieve fee reductions and optimize manager counts as appropriate.
- Actively seek co-investment opportunities where appropriate with current SERS' private equity general partners who meet co-investment criteria, as outlined in the private equity co-investment guidelines.
- Research and identify new managers who offer compelling opportunities and return expectations that may replace current managers who no longer meet SERS' investment criteria.

PORTFOLIO STRATEGY – Multi-Asset Strategies

INVESTMENT STRATEGY

The role of the Multi-Asset Strategies portfolio (MAS) is to generate consistent returns with managed volatility and beta to global equities, resulting in risk diversification and downside protection to the Total Fund.

SERVE Statement of investment i bidy sets the Multi-Asset Strategies target allocation as follows.			
	Target	Permissible Range	
Multi-Asset Strategies	Interim target of 4% to be reduced to 0% by June 30, 2021	0% – 4%	

SERS' Statement of Investment Policy sets the Multi-Asset Strategies target allocation as follows:

The performance benchmark for the MAS portfolio is the HFRI Fund of Funds Composite Index plus 1% annually, calculated on a time-weighted basis.

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

 Actively manage the strategy and portfolio allocations, ensuring appropriate risk and return characteristics. Actively seek to improve risk-adjusted returns and fee efficiency by making allocation adjustments, including new strategies and terminations, between managers and sectors.

During FY2020, four manager terminations were completed along with two new hires. Several manager and sector rebalancings also occurred. Even with Staff attempts to restructure the portfolio, MAS underperformed its benchmark FYTD through February 2020 by (1.35%) with negative excess return through five years.

 Continue to evaluate the passive hedge fund replication strategy for appropriate performance and risk tracking.

The passive hedge fund replication strategy had a net excess return of 36 basis points versus its benchmark since its February 2019 inception through February 2020. Staff has contributed a net \$10 million to the strategy during FY2020 due to its successful outperformance and low fee structure.

• Complete FY2019 manager searches for relative value and tactical trading managers, improving performance and balancing sector underweights.

The new relative value mandate was funded in December 2019 with an initial \$20 million subscription. The performance through February 2020 was an excess net return of 21 bps over the benchmark. The fund's 75 bps management fee and 20% over 3-month LIBOR hurdle performance fee is much lower than the MAS portfolio average. The new tactical trading mandate was funded in November 2019 with an initial \$20 million subscription. The inception date through February 2020 performance was an excess net return of 21 bps over the benchmark and this mandate has a 90bps management fee with no performance fee, which is also lower than the portfolio average. Both of these mandates are being considered for transfer into the Global Fixed Income portfolio in FY2021 as complements to the existing strategies in that portfolio.

• Evaluate different fund structures with longer lock ups that offer reduced fees and/or appropriate hurdle rates that can capitalize on developing market opportunities and enhance returns.

Although our last few hires have had reduced fees and/or performance hurdles rates, no additional different fee structures were negotiated with current managers as the MAS portfolio is being liquidated according to the new asset allocation approved in February 2020.

CURRENT MARKET CONDITIONS. OUTLOOK AND PORTFOLIO STRUCTURE

The MAS asset allocation was eliminated at the February 2020 Board meeting with an effective date of July 1, 2020. Since most of the current 10% MAS allocation is being redirected to private asset classes that take time to implement, an interim asset allocation of 4% will remain for MAS through FY2021. Given that MAS is in liquidation and hedge funds are strategies, not a stand-alone asset class, current market conditions and outlook

PORTFOLIO STRATEGY – Multi-Asset Strategies

are covered in the relevant asset class write-up. The MAS portfolio structure going forward will be comprised of two fund types. First, MAS will contain highly liquid strategies that will be redeemed as cash needs occur in other asset classes. Second, MAS will contain funds with quarterly or longer redemption terms that will be redeemed throughout FY2021 as MAS liquidity becomes available. Staff plans to transfer several high conviction managers in the portfolio to the Global Fixed Income, Private Credit and Opportunistic portfolios on July 1, 2020.

FY2021 OBJECTIVES

- Submit the MAS portfolio manager redemptions and transfers to other portfolios reducing the portfolio from its FY2020 10% allocation down to 4% on July 1, 2020. Redemptions will continue in FY2021 as short-term cash needs dictate, with the MAS allocation being completely liquidated by June 30, 2021.
- Monitor the portfolio to ensure appropriate risk and return during the redemption phase.

PORTFOLIO STRATEGY - Global Fixed Income

INVESTMENT STRATEGY

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

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

	Target	Permissible Range
Global Fixed Income	19%	12% – 26%

The performance objective for the fixed income portfolio is to exceed the Bloomberg Barclays Capital US Aggregate Bond Index, net of manager fees, by 50 basis points over rolling three-year periods.

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

 Ensure the fixed income portfolio has appropriate risk and return characteristics given that spreads are near ten-year historical tights and volatility is expected to rise.

Due to the impacts of the coronavirus in Q1 2020, the portfolio underperformed the Bloomberg Barclays US Aggregate by (2.79%) through March 2020 of the current fiscal year. This significant underperformance also led to negative excess returns for three and five years of (0.67%) and (0.09%), respectively. The allocations to emerging market debt and high yield were the most significant detractors due to their higher sensitivity to slowing economic growth. The annualized three-year tracking error in March 2020 rose to 1.7% from 0.8% one year ago. The increase in tracking error was due to portfolio over-weights to investment grade, high yield, structured credit and emerging market debt that all diverged significantly in performance relative to the higher US Treasury exposure of the benchmark.

Tactically manage core and core plus allocations to enhance risk and return. Staff has already added to
core assets and may continue to add to core due to expected late cycle environment volatility.

The following allocation changes were implemented:

- In October 2019, \$100 million was contributed from short-term cash. The contributions were split \$65 million to core and \$35 million to core plus.
- In February 2020, \$10 million was contributed to the new high yield dislocation strategy from cash.
- In March 2020, \$155 million in withdrawals were transferred to short-term cash with \$60 million from core and \$95 million from core plus. In addition, \$53 million was added from cash to the high yield dislocation strategy in three separate tranches during the month at attractive high yield spread levels.
- In April 2020, \$10 million was contributed to a core strategy that focuses on structured credit opportunities.

During the fall of 2019, Staff continued to increase the core sector from 51% to 52% and decrease the portfolio underweight relative to the target allocation of 19%. The net withdrawals in March 2020 were transferred to short-term cash to fund other opportunities.

Review IMAs and Investment Guidelines making necessary adjustments as needed.

An IMA for the new high yield dislocation strategy was successfully negotiated in Q1 2020. In Q2, 2020, SERS will be updating the portfolio investment guidelines to create a new sub-sector called Tactical and Diversifying to include return seeking and diversifying strategies including emerging market debt, high yield and fixed income arbitrage strategies.

PORTFOLIO STRATEGY - Global Fixed Income

CURRENT MARKET CONDITIONS AND OUTLOOK

The Bloomberg Barclays Capital US Aggregate Bond Index returned 5.68% for FY2020 through March. US Treasuries were the best performing sector posting a 9.92% return as short-term interest rates declined to the lower bound of 0 - 0.25%. The benchmark 10-year US Treasury yield declined from 2.00% in July 2019 to 0.70% as of March 31, 2020. Residential mortgages returned 4.97% during the same period. Investment grade corporate debt returned 0.48%, as spreads widened drastically in February and March 2020 from coronavirus fears. After posting healthy returns during 2019, the coronavirus also hurt riskier fixed income sectors of emerging market debt local currency with a decline of (4.40%) and high yield, which dropped the most (9.21%) for FY2020 through March.

The Fed lowered rates five times during FY2020. Starting in the second half of 2019, the Fed lowered rates by 25 basis points in July 2019, September 2019 and October 2019 to the range of 1.50% - 1.75% to keep economic growth from stalling. The Fed then held rates steady with two meetings late in the year with no interest rate action. Coronavirus changed everything with the Fed holding two March 2020 emergency meetings, cutting rates to the 0% - 0.25% range. The Fed and the US Congress implemented several monetary and fiscal programs to support the economy after the mandated government shut down of non-essential businesses caused unemployment to skyrocket.

Fixed income spreads widened dramatically in March 2020. Investment grade corporates widened from 100 basis points over US Treasuries to 325 basis points while high yield widened from 370 basis points to over 1,000 basis points. Spreads recovered some in April after the Fed announced additional programs for purchasing corporate and agency mortgage securities.

Now that fixed income markets have repriced, managers are deploying cash and government reserves to buy securitized and corporate securities. For the most part, managers began their purchases buying higher quality credit, as opportunities were so plentiful that there was no reason to take on excess credit risk. The portfolio has a slightly short duration stance as rates are at historic low levels. The current yield on the portfolio is 3.07%, which will generate more gains going forward. Although fixed income markets have quickly rebounded from the March lows, managers are cautious about future opportunities as the impacts from the coronavirus may not be clear until the economy restarts and people go back to work. Corporate defaults remain low, but are expected to go higher as the impact to businesses from the extended shutdown becomes clear. The next year in fixed income is expected to more volatile than the last few years, but this should provide opportunities for managers to buy securities at cheaper valuations.

PORTFOLIO STRUCTURE

The fixed income portfolio is currently weighted 53% core, 43% core plus, 2% high yield and 2% EMD with a bias towards income producing assets. The portfolio continues to be underweight government assets and overweight credit sectors to earn more yield than the benchmark. Fixed income strategies that produce more income historically produce more return over the long-term, but short-term performance usually suffers as risk elevates and US Treasuries are favored as safe haven assets.

Over the last two years, Staff has been slowly rotating capital from core plus into core fixed income assets as fixed income markets became expensive and markets often take a downturn at the end of an interest rate hiking cycle. By March 2020, the core allocation had increased from 45% in December 2017 to 53% and the underweight to fixed income had decreased from 5% to 2%, better positioning the portfolio for capital preservation. Going forward, the opportunity set for fixed income assets is rich. Investment grade and high yield spreads continue to offer attractive entry points, the Federal Reserve and US Treasury have implemented programs designed to support fixed income markets and the economy, and interest rates are expected to remain low for an extended period of time. Staff intends to cautiously add capital to core plus strategies in FY2021 while being mindful that the full impacts of the coronavirus may not be known for some time. Several high conviction strategies from the MAS portfolio will be moved into a new sector of the portfolio called Tactical and Diversifying on July 1. This sector is intended to increase portfolio performance and diversify the sources of return by investing in alternative fixed income strategies with higher expected outperformance and tracking error relative to the Bloomberg Barclays US Aggregate Index.

PORTFOLIO STRATEGY - Global Fixed Income

FY2021 OBJECTIVES

- Implement the new fixed income guidelines pertaining to the new Tactical and Diversifying sector ensuring the selected strategies are optimally weighted relative to the expected risk and return objectives.
- Ensure the fixed income portfolio has appropriate risk and return characteristics given the new tactical and diversifying sector manager changes and expected negative economic impacts from coronavirus.
- Review IMAs and Investment Guidelines to make any necessary adjustments.

PORTFOLIO STRATEGY – Global Private Credit

INVESTMENT STRATEGY

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

	Target	Permissible Range
Global Private Credit	3%	3% - 7%

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

The target for Global Private Credit during the ramp-up period is set at 3% for fiscal year 2021 and will increase to the policy target allocation of 5% for fiscal year 2022. The performance objective for global private credit is to produce net of fee returns in excess of the 3-month LIBOR + 4.5%.

CURRENT MARKET CONDITIONS AND OUTLOOK

The private credit market continued to grow in 2019 and reached \$812 billion in assets under management, its highest point since the asset class began to take off post the Global Financial Crisis. Investors continued to seek out higher risk adjusted returns relative to traditional fixed income asset classes in what continued to be a relatively low interest rate environment. The continued momentum of private equity deals helped fuel the need for borrowers to access capital in the private markets. However, the number of private credit fund launches decreased marginally in 2019 as investor sentiment about the potential for an economic slowdown dampened capital commitments. The asset class saw dry powder marginally shrink for the first time since 2014 as fund managers struggled to raise capital faster than they could deploy it. Direct lending continued to be the largest sub asset class within the private credit market, accounting for over half of all private credit funds. The ability to structure deals with an acceptable level of covenants continued to be an attractive aspect of private credit in comparison to the growing number of covenant-lite public fixed income issuances, particularly within the syndicated loan market. The continued growth of the private credit asset class and the amount of capital available to invest will require managers to be more diligent in seeking out quality investments.

The rise of the COVID-19 pandemic in the first quarter of 2020 caused global economies to shut down and increased volatility in markets around the world. Investors became sharply concerned about the ability of companies to service their debt and high yield spreads widened to over 1,000 basis points, the highest since the Global Financial Crisis. The primary origination of debt began to slow, while the secondary market remained active as many existing deals began to trade at lower prices. The economic impact of the pandemic is still uncertain and the number of credit downgrades continues to increase. Nonetheless, opportunities still exist within the private credit market, particularly within stressed and distressed sub asset classes, as well as direct lending. During this time of market dislocation, many companies need liquidity and are looking to private lenders for assistance. Private credit managers are seeing a plethora of borrowing needs in the U.S. and Europe from high quality companies across all sectors, but particularly within those sectors directly impacted by the pandemic.

FY2021 OBJECTIVES

- Increase the private credit allocation towards 5% of the Total Fund by making new investments that fit the SERS' investment policy. Target an allocation to private credit of 3% of the Total Fund by the end of fiscal year 2021 and 5% of the Total Fund by the end of fiscal year 2022, subject to identifying opportunities that fit SERS' investment criteria.
- Build the private credit allocation in line with the implementation guidelines and ensure appropriate risk and
 return characteristics are present within the new target allocation.
- Make new investments that serve a primary purpose of the private credit allocation to generate consistent income for the Total Fund.

PORTFOLIO STRATEGY - Global Real Assets

INVESTMENT STRATEGY

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

SERS' Statement of Investment Polic	y sets the Global Real Assets target allocation as follows:
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	Target	Permissible Range
Global Real Assets	16%	14% - 20%

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

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

 Achieve 15% target allocation to Real Assets with the addition of approximately \$100 million to new managers.

The allocation to Real Assets ranged between 14.5% and 15.0% during FY2020 with \$126.5 million in commitments made to two managers during the fiscal year. These commitments were made to strategies including infrastructure debt, which is expected to distribute a yield of approximately 7-8% after the end of the investment period, and traditional infrastructure sectors including transportation, energy, and telecommunications. In February 2020, the target allocation to Real Assets increased to 17%, effective July 1, 2020. A two-year plan will be formulated and implemented to reach and maintain the new allocation.

 Tactically manage real estate and infrastructure allocations to improve returns without increasing risk. During FY2020, infrastructure will slightly exceed its 20% target allocation while private and public real estate will be slightly below its 80% target allocation.

As of December 31, 2019, real estate was 81% of real assets and infrastructure was 19%. Infrastructure has been beneficial to Real Assets in terms of performance, exceeding the benchmark return by 493 basis points and 708 basis points over the one and three year periods respectively.

Actively manage real estate property type exposures to ensure proper weights during late stage property
market cycle. The current property type exposures will continue into the next fiscal year, with overweights
to industrial and specialty property types such as student and senior housing and corresponding
underweights to office and retail.

Due to changing consumer behaviors around e-commerce, the industrial sector continues to lead all other property sectors while the retail sector continues to suffer. As of December 31 2019, the industrial sector outperformed the benchmark return by 694 basis points and 687 basis points over the one and three year periods. Within Real Assets, the industrial exposure is 11.5% overweight to the benchmark while the retail exposure is 8.5% underweight to the benchmark. Specialty property types remained overweight to the benchmark and included assets such as self-storage and senior housing.

• Maintain income yield as it will be a significant part of total return going forward.

The income return from the Real Assets portfolio is 4.06%, representing nearly half of the total return from Real Assets. Maintaining this yield level is uncertain for the near term and will be harder to maintain given the struggles of many tenants needing rent relief and the possibility of lower income distributions.

CURRENT MARKET CONDITIONS AND OUTLOOK

Returns for real estate properties continued to moderate in 2019 as the current real estate cycle entered its tenth year. SERS' Real Assets portfolio returned 8.76% net of fees in 2019 versus an NPI return of 6.24% gross of fees, producing an excess return of 2.52%. The income return gross of fees during 2019 was 4.06%.

PORTFOLIO STRATEGY - Global Real Assets

In general, 2019 was a strong year for real estate. Real estate returns are driven by demographics, economic growth, interest rates, and property type fundamentals. Strong job growth helped office properties achieve a 2019 vacancy rate that is lower than peak before the global financial crisis in 2008. Rent growth in 2019 of 5.2% for office space was at its fastest pace since 2016 because demand for office space was higher than supply in 2019. Industrial finished 2019 as the best performing property type because of record high asking rent, a vacancy rate of 4.4%, and strong demand for last-mile warehouses. Multifamily properties vacancy level of 4.1% is the lowest rate since 2000. The amount of supply and demand in the near term will be impacted by the severity and duration of the COVID-19 pandemic. Retail continues to struggle because of the growth of e-commerce and changing consumer behaviors. The vacancy rate for retail remains low because of the limited new supply being built.

Valuations for properties remain high and cap rates were low at the end of 2019. SERS' is currently overweight industrial, neutral to multifamily, and underweight office and retail. For diversification, SERS' portfolio also has properties that are not in the benchmark, such as self-storage and senior housing. The coronavirus has significantly impacted the outlook for 2020 real estate returns. Properties will likely see some dislocation and provide a strong buying or recapitalization opportunity for the SERS' real estate managers. Hotels and retail will have an immediate impact from coronavirus while logistics, office, and multifamily will be impacted if the duration of the pandemic is long and the economy enters a period of contraction or slow growth. Returns for Real Assets will mostly be driven by income in 2020 and total returns for the benchmark are expected to be approximately -3%, per an industry consensus forecast.

Infrastructure ended 2019 with an allocation of 19.4% of the Real Assets portfolio with the expectation for a higher allocation in 2020 as capital commitments are called by managers. SERS' exposure to telecommunications, social, and healthcare are more defensive assets with contracted cash flows. The transportation and energy assets in the portfolio are more exposed to economic cycles. The coronavirus will impact the more cyclical assets in 2020.

FY2021 OBJECTIVES

- Formulate and implement a two-year plan to achieve and maintain a 17% allocation to Real Assets.
- Target demographic-driven real estate investments such as data centers, life science, and medical office versus GDP-driven sectors such as office. These sectors are anticipated to have higher rent growth and more durable income. This would maintain the overweight to the specialty property types within Real Assets.
- Evaluate specific opportunities arising from the impacts of coronavirus and economic slowdown, including opportunistic strategies involving real estate recapitalizations.
- As the infrastructure portfolio has been built out and is at its target allocation, switch focus to actively soliciting co-investment opportunities with existing infrastructure managers.

PORTFOLIO STRATEGY - Cash Equivalents

INVESTMENT STRATEGY

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

SERS' Statement of Investment Policy sets the cash equivalent target allocation as follows:

	Target	Permissible Range
Cash Equivalents	2%	0% – 5%

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

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

Research and monitor commercial paper credits and money market funds.

Bloomberg is utilized to check the daily commercial paper issuance and short-term market. Staff continues to utilize the Fidelity Investments (Fidelity) money market complex for investing the daily short-term cash. Fidelity offers competitive yields relative to both money market competitors and higher liquidity to the commercial paper market.

• Evaluate opportunities to improve the cash management system and maintain liquidity requirements.

The Fidelity institutional money market fund provides the best overall yield for SERS short-term cash investments in FY2020. Staff invests in both Fidelity's US government fund with same day liquidity and the prime fund with a higher yield and next day liquidity. Staff keeps only enough cash in the US government fund to manage the daily cash needs of the portfolio and invests the remainder in the higher yielding prime fund, which earns on average 20 basis points more.

CURRENT MARKET CONDITIONS AND OUTLOOK

The Federal Reserve (Fed) cut interest rates by 25 basis points in July, August and September for a total of 75 basis points, bringing the range to 1.5 - 1.75 % on concerns about falling inflation and global economic growth. In March 2020, the Fed held two emergency meetings that reduced interest rates to the range of 0 - 0.25% and also introduced several other stimulus measures totaling over \$4.5 trillion over the next month in an effort to stabilize the economy from the impact of COVID-19. Based on the Fed's current guidance, interest rates are expected to remain low for an extended period of time and therefore, the yield on short-term cash will also remain low.

FY2021 OBJECTIVES

- Research and monitor commercial paper issuers and money market funds.
- Evaluate opportunities to improve the cash management process and maintain liquidity needs for the portfolio.

PORTFOLIO STRATEGY – Opportunistic & Tactical

INVESTMENT STRATEGY

SERS invests in opportunistic investments for the purpose of earning returns greater than the Bloomberg Barclays US Aggregate Bond Index + 2% for investments that do not fit within the existing asset classes. The investments are defined as tactical or non-traditional investment opportunities. Such investments may involve capitalizing on short-term market dislocations or other unique situations or innovative strategies including tactical allocation.

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

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

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

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

 Search for possible opportunistic investments for the Fund that are expected to exceed the Total Fund return objective, with an emphasis on high-yielding investments. This will be accomplished through the evaluation of markets, strategies and specific funds that offer compelling risk-adjusted returns. Investments that pass initial screening will undergo detailed due diligence prior to staff recommendation.

As of mid-March, three new investments have been made, totaling \$225 million of commitments. The first commitment is a re-up with a direct lending manager that provides loans to middle market businesses located in the US. The second commitment is a re-up with a direct lending manager that provides loans to large companies primarily located in the US and to European and Asian companies on a selective basis. These investments are attractive because of their high levels of current income and total expected returns of 8% to 10%.

The third commitment is to a fund that will invest in the debt of privately-owned technology companies. The fund is sponsored by a long-tenured private equity manager that has a dedicated team to deploy an opportunistic strategy that can invest in different debt structures, depending on where they identify good risk adjusted returns. This fund will pay a quarterly income distribution and is expected to generate a net return in the mid-teens.

• Actively manage the liquid portion of the portfolio to improve the risk and return profile of the portfolio.

Historically, the portfolio has been designed to generate a return greater than the Total Fund Policy Benchmark. Starting in FY 2021 the performance objective will be the Bloomberg Barclays US Aggregate Bond Index + 2%. The liquid portion of the portfolio has not performed in line with expectations. These investments have underperformed relative to their benchmark and have been highly volatile. As a result of the combination of underperformance and high volatility, staff has actively reduced the exposure to these investments this fiscal year.

CURRENT MARKET CONDITIONS AND OUTLOOK

The opportunistic portfolio has made investments in funds that seek to take advantage of market dislocations or which do not fit within the risk and return objectives of other asset classes. The return objective of the portfolio is to outperform the Total Fund Policy Benchmark. In addition, there is a priority on investments that generate current income. Several themes have arisen in the portfolio including financial deleveraging, distressed assets, structured credit, financial restructuring, private credit, energy and peripheral European market opportunities.

The opportunity set is rapidly changing as a result of COVID-19, which has created an emerging set of investment themes across the financial landscape. The first area of focus is the credit markets, which have experienced an increase in spreads across the spectrum. For example, in March high yield spreads peaked in excess of 1,000 basis points. Historically when spreads have reached this threshold, the subsequent one-year returns of high yield have been greater than 10%. Investment managers are also reporting a lack of liquidity in credit markets, which is creating attractive opportunities in the investment grade space. For example, many

PORTFOLIO STRATEGY – Opportunistic & Tactical

borrowers with refinancings in the next 18 months are looking to refinance existing debt now, even if the cost is substantially higher than it would have been earlier this year. In this environment, borrowers are willing to pay a premium for the certainty of capital.

The energy markets continue to be volatile in 2020 with energy trading at \$20/barrel at the end of March compared to more than \$60 at the beginning of the year. The lower prices have been a result of excess supply after negotiations between Saudi Arabia and Russia broke down earlier in March. Both countries have increased their output in an effort to gain market share. These low prices are hurting producers in the US, who need oil to be in the \$50 to \$60 range to remain profitable. In an effort to cut costs, these producers have reduced their capital expenditures budgets and cut back on their 2020 drilling programs. These reductions have had a significant impact on an already fragile MLP industry, which is down approximately 50% year to date. Staff will continue to closely monitor these markets to manage the existing energy exposure and determine if there are actionable investment opportunities.

FY2021 OBJECTIVES

- Search for possible opportunistic investments for the Fund that are expected to exceed the Bloomberg Barclays US Aggregate Bond Index + 2%, with an emphasis on high yielding investments. This will be accomplished through the evaluation of markets, strategies and specific funds that offer compelling risk adjusted returns. Investments that pass initial screening will undergo detailed due diligence prior to staff recommendation.
- Actively manage the liquid portion of the portfolio to improve the risk and return profile of the portfolio.

PORTFOLIO STRATEGY – Overlay Program

INVESTMENT STRATEGY

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

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

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

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

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

• Actively monitor the Tactical Asset Allocation Strategy to enhance the impacts of the strategy to the Total Fund's performance.

In September 2019, the Staff adjusted the strategy guideline to allow its exposure per asset class including US Equity, Non-US equity and US Fixed Income, up to 7% from 5% based on its strong track record and conviction in the strategy. Since the inception in December 2014 to June 2019, the program added 0.05% to the Total Fund's annualized return; its risk contribution was 0.01%, which offered an attractive risk adjusted return contribution to the Total Fund's performance over the period. In 2020, the program put on positions in January and closed shortly afterward. In late February and early March when the markets started tumbling, responding to the Coronavirus spread, the program phased in positions. The positions were kept on throughout March and stayed open through the time this report was written. As markets declined sharpley in late March, the strategy incurred a substantial loss. As of the end of March, the strategy contributed (0.76%) to the Total Fund's FYTD 2020 return. The risk contribution was 0.25%. The positions are expected to remain open as the markets are expected to recover from the lows.

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

During FY2020, Staff rebalanced the currency portfolio based on managers' performance and Staff's conviction in their strategies. Staff increased the notional allocation to one manager by \$100 million and terminated two other managers. The program added 0.19% to the Total Fund's FYTD 2020 return, lowered the Total Fund's risk by 0.08% through currency risk reduction. As of April 2020, the currency portfolio's notional exposure is \$450 million, which is 16.4% of the Non-US Equity portfolio's value vs. 50% maximum limit by the currency program's guideline.

Overall Overlay Program:

The overlay program in aggregate detracted 0.58% from the Total Fund's FYTD 2020, return and added 0.17% to the Total Fund's risk.

FY2021 OBJECTIVES

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

PORTFOLIO STRATEGY - Investment Risk Management & Analytics

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

Equity market volatility was mild in 2019 with an average daily S&P 500 Implied Volatility (VIX) level of 15.5%. As the Coronavirus spread and became an unprecedented global pandemic, crippling major portions of the global economy, the markets experienced a rapid sell-off. The VIX daily average in March, the most volatile month, was 57.74%, almost four times higher than the 2019 average. The VIX fell materially in April, and is expected to normalize in the second half of 2020, but it will likely stay above the historical average. The Total Fund's total risk is expected to increase materially, as will active risk, closer to the 3% limit stated in the Statement of Investment Policy.

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION:

The FY2020 Annual Investment Plan objectives and related activities are as follows:

• Provide risk forecast and analyses of the Total Fund and asset class portfolios.

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

• Continue to report risk of the Total Fund to the Board on a quarterly basis.

Staff reported volatility of the Total Fund's returns, providing both total risk and active risk decomposition analysis by asset classes and by major risk factor groups. The total risk decomposition by asset classes focused on their role in the Total Fund. The total risk decomposition by factors focused on cross factor exposures, especially equity factors among the asset class portfolios as the equity factors are the largest risk driver of the Total Fund. The active risk decomposition showed risk contribution from the investment implementation, which is comprised of active allocation among the asset classes and active selection of strategy and securities.

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

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

 Provide return attribution analysis of Total Fund and asset classes of the Fund to the Investment Strategy Team.

Staff reported monthly return attribution analysis of the Total Fund, analyzing effects of active weights on alpha generation of each asset class. The analyses were presented to the Investment Strategy Team.

Staff also delivered to the Investment Strategy Team attribution reports of each asset class portfolio analyzing the contribution of each account within an asset class.

• Evaluate the existing risk analytics provider's capacity and service quality then consider to extend the current agreement or search for a better provider.

Staff issued a public Request for Quotation (RFQ) for investment risk analytics tool and service in April and will select the one that offers the highest quality and cost-effective holdings-based investment risk analytics for SERS.

• Perform other portfolio and market analyses and research as needed.

PORTFOLIO STRATEGY - Investment Risk Management & Analytics

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

FY2021 OBJECTIVES:

- Provide risk forecast and analyses of the Total Fund and asset class portfolios.
- Report risk of the Total Fund to the Board on a quarterly basis.
- Communicate asset class portfolio's risk with asset class investment officer(s) and discuss any potential changes of the portfolio structure on a quarterly basis.
- Provide return attribution analysis of the Total Fund and asset classes of the Fund to the Investment Strategy Team.
- Implement a new risk system should SERS select a new provider, ensure a smooth and efficient transition, and develop report packages tailored to fit the investment management needs.
- Perform other portfolio and market analyses and research as needed.

Investment Operations

The Investment Operations area is responsible for managing administrative activities for the Investment department, assisting the CIO and investment officers, and providing reports and information to Staff and the Board. The objectives for FY2021 remain consistent with those of FY2020 as these three broad categories reflect the primary duties of Investment Operations.

REVIEW OF FY2020 OBJECTIVES AND IMPLEMENTATION

The FY2020 Annual Investment Plan objectives and related activities are as follows:

• Coordinate, assist and participate in organizational initiatives including Policies, Procedures and Practices; fiscal budget; Subject Matter Experts (SMEs); and Corporate Emergency Preparedness Project (CEPP).

Investment Operations assisted with the annual review and revisions to the Investment Department Policies, Procedures and Practices and participated in the system-wide Records Management Project. Staff prepared and analyzed the fiscal budget for executive approval as well as participated in and provided feedback in relation to SME and CEPP activities.

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

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

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

Operations coordinated revisions to and produced the FY2020 Annual Investment Plan and the amended Statement of Investment Policy, assisted the SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis project, the realignment of Investment Officer duties, and new manager searches throughout the fiscal year.

FY2021 OBJECTIVES:

- Coordinate, assist and participate in organizational initiatives including Policies, Procedures and Practices; fiscal budget; Subject Matter Experts (SMEs); and Corporate Emergency Preparedness Project (CEPP).
- Perform administrative duties and attend meetings for the Investment Committee, Strategy Team and Board meetings including establishing meeting dates and agendas, organizing and distributing documents to team members, producing reports and taking minutes.
- Assist with projects for the CIO and Investment officers including revising the Annual Investment Plan, updating the Statement of Investment Policy as needed, searches for a new General Investment Consultant and new Investment managers as needed, and aiding with special projects for Staff.

Implementation Guidelines

IMPLEMENTATION GUIDELINES - Global Equities

I. ROLE

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

II. ASSET ALLOCATION

		Range	
	Target	Minimum	Maximum
Global Equity	45%	35%	55%
US Equity (USE)	22.5%	17.5<u>15.0</u>%	27.5<u>30.0</u>%
Non-US Equity (NUSE)	22.5%	17.5<u>15.0</u>%	27.5<u>30.0</u>%

III. BENCHMARK:

The Global Equity benchmark is a composite benchmark comprised of:

US Equity Portfolio	50%	Russell 3000 Index
Non-US Equity Portfolio	50%	MSCI All Country World ex-US Index (\$net)

IV. PERFORMANCE OBJECTIVE

The annualized return objective, net of management fees, is as follows:

	Excess Return Target (over 3-year rolling periods)	
US Equity Portfolio	20 basis points over USE benchmark	
Non-US Equity Portfolio	50 basis points over Non-USE benchmark	

V. PORTFOLIO DESIGN AND CONSTRUCTION:

The USE and NUSE portfolios are constructed using a multi-manager line-up and a combination of active and passive strategies to deliver risk-adjusted performance relative to their respective benchmarks. Portfolio design will consider risk/return characteristics, manager count and investment management fees.

VI. PERMISSIBLE INVESTMENTS

Security Type	US Equity Portfolio	Non-US Equity Portfolio
Common Stock	Y	Y
Stock Treated as Common Stock	Y	Y
Cash / Treasuries	Y	Y
Preferred Stock	Y	Y
Convertible Rights	Y	Y
Warrants	Y	Y
Depository Receipts	Y	Y
REITS	Y	Y
Rule 144a Issues	Y	Y
Private Placement	Y	Y
IPOs	Y	Y
Commingled Funds	Y	Y
Exchange Traded Funds	Y	Y
Futures	Y	Y
Options	Y	Y
Currency Forwards	Ν	Y
Currency Futures	Ν	Y
Currency Options	Ν	Y
Country Funds	Ν	Y

IMPLEMENTATION GUIDELINES - Global Equities

VII. RISK MANAGEMENT

	Active Risk Target
US Equity Portfolio	Tracking Error of <u>1</u> 0.75<u>00</u>% with a range of 0.<u>0</u>5% to 1.<u>5</u>0%
Non-US Equity Portfolio	Tracking Error of 2.5% within a range of 20% to 4%

US Equity Implementation Guidelines			
	Investment Benchmark	Target Allocation	Permissible Range
US Equity Allocation	Russell 3000 Index	22.50%	17.5<u>15.0</u>% - <u>27.5030.0</u>%
	Portfolio Structure		
Capitalization			
Large Cap Equity	Russell 1000 Index	Neutral to BM	+/- 5%
Large Cap Active	Manager Specific	20%	15% - 25%
Large Cap Passive	Russell 1000 Index	80%	75% - 85%
Small Cap Equity	Russell 2000 Index	Neutral to BM	+/- 10%
Small Cap Active	Manager Specific	100%	n/a
Style			
Growth	Manager Specific	Neutral to BM	+/- 5%
Value	Manager Specific	Neutral to BM	+/- 5%
Portfolio Risk/Return Characteris	tics		
Total Expected Excess Return	Russell 3000 Index	0.20%	
Total Expected Tracking Error	Russell 3000 Index	0<u>1</u>.75<u>00</u>%	0 .50 % - 1. <u>05</u> %

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

Non-L	JS Equity Implementation	Guidelines	
	Investment Benchmark	Target Allocation	Permissible Range
Non-US Equity Allocation	MSCI All Country World ex-US Index (\$net)	22.50%	17.5<u>15.0</u>% - <u>27.5</u>30.00%
· ·	Broad Market Exposur	e	
ACW ex-US + Developed Markets Active	Manager Specific	70%	60% - 80%
Developed Markets Passive	MSCI World ex US Index (\$net)	30%	20% - 40%
Emerging Markets Active	MSCI Emerging Markets Index (\$net)	100%	+/- 10%
Portfolio Structure			-
Capitalization			
Large Cap Equity	Manager Specific	BM Weight	+/- 10%
Small to Mid-Cap Equity	Manager Specific	BM Weight	+/- 10%
Small Cap Equity	Manager Specific	BM Weight	+/- 10%
Micro Cap Equity	Manager Specific	BM Weight	+/- 5%
Style			
Growth	Manager Specific	Neutral to BM	+/- 10%
Value	Manager Specific	Neutral to BM	+/- 10%
Portfolio Risk/Return Characterist	ics		-
Total Expected Excess Return	MSCI All Country World ex-US Index (\$net)	0.50%	
Total Expected Tracking Error	MSCI All Country World ex-US Index (\$net)	2.50%	2 <u>0</u> % - 4%

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

IMPLEMENTATION GUIDELINES - Global Equities

a reasonable range of the Non-US equity benchmark.

IMPLEMENTATION GUIDELINES – Global Private Equity

I. ROLE

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

II. ASSET ALLOCATION

The private equity target asset allocation is established with periodic asset allocation studies. The most recent asset allocation study authorized an $\frac{10\%11}{15\%8\% - 16\%}$ allocation target to private equity with a range of $\frac{5\%}{15\%8\% - 16\%}$.

III. BENCHMARK

Private equity performance is benchmarked to the Burgiss All Private Equity benchmark.

IV. PERFORMANCE OBJECTIVE

The performance objective for private equity is to provide net returns in excess of the SERS Global Equity portfolio over time periods five years and longer.

V. PORTFOLIO DESIGN AND CONSTRUCTION

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

		Rai	nge
	Target	Minimum	Maximum
Buyout			
Small/Middle	60%	50%	70%
Large/Mega	15%	5%	25%
Total Buyout	75%	55%	95%
Venture Capital	0%	0%	10%
Special Situations	25%	5%	35%
Total	100%		
Domestic	75%	55%	85%
International	25%	15%	45%
Total	100%		
Primary Commitments	100%	80%	100%
Fund of Funds	0%	0%	15%
Co-Investments	0%	0%	10%
Total	100%		

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

The portfolio is tilted toward buyout investments and does not have a target allocation to venture capital due to higher risk and manager selection issues. Within buyouts, the preference is for small and middle market managers with a significant value creation approach and away from larger firms with a financial engineering approach.
IMPLEMENTATION GUIDELINES – Global Private Equity

VI. PERMISSIBLE INVESTMENTS

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

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

Buyout

Net Expected Return 10-15%, Moderate Risk

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

Venture Capital

Net Expected Return: 15-25%, High Risk

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

Special Situations

Net Expected Return: 10-20%, Moderate Risk

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

Co-Investments

Net Expected Return: 15-20%, Moderate Risk

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

VII. RISK MANAGEMENT

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

Liquidity

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

IMPLEMENTATION GUIDELINES – Global Private Equity

Geography

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

Vintage Risk

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

Manager Risk

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

Firm Risk

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

Currency

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

Industry

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

Leverage

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

I. ROLE

The role of the Multi-Asset Strategies portfolio (MAS) is to generate consistent returns with constrained volatility and beta to global equities, resulting in risk diversification and downside protection to the Total Fund.

II. ASSET ALLOCATION

The MAS allocation is established with periodic asset allocation studies. The most recent asset allocation approved by the Board in February 2020 eliminated the MAS allocation effective July 1, 2020. However, Staff has requested an interim asset allocation to be approved by the Board setting an interim 4% MAS allocation for FY2021. This interim allocation is needed as private asset classes require implementation time, authorized a 10% allocation target with a permissible range of 5% to 15%.

III. BENCHMARK

MAS performance is benchmarked to the HFRI Fund of Funds Composite Index plus 1.0% annually and will be calculated on a time-weighted basis.

IV LIQUIDATION GUIDELINES AND PLAN

The MAS allocation was eliminated at the February 2020 Board meeting with an effective date of July 1, 2020. Since most of the MAS allocation is being moved to private assets that take implementation time. Staff has asked the Board for an interim MAS allocation of 4% through FY2021. The portfolio will be composed of either highly liquid strategies that will be liquidated to fund the cash needs of other asset classes or funds with quarterly or longer redemption terms that will be redeemed throughout FY2021 as liquidity becomes available. The MAS allocation will be completely liquidated by June 30, 2021. The following quidelines no longer pertain to MAS:

- Volatility Objective
- Portfolio Design and Construction
- Investment Styles
- Permissible Investments
- Risk Management

<u>Staff will liquidate the portfolio in an orderly manner, while continuing to monitor the funds for performance team and firm changes. Liquidations will occur simultaneously with other asset class short-term cash needs so SERS can remain as fully invested as possible.</u>

IV. PERFORMANCE AND VOLATILITY OBJECTIVE

The long term volatility target for MAS is to be less than 50% of global equity volatility measured over a three year period. The correlation of the MAS returns to global equity returns should not exceed 0.75 and the beta of the MAS to global equity returns should not exceed 0.30.

V. PORTFOLIO DESIGN AND CONSTRUCTION

MAS will be classified as having Directional and Non Directional strategies. Exposures ranges are shown below:

Sector	Three Year Equity Beta*	Allocation Range
Non Directional	<mark>< 0.25</mark>	<mark>50% 80%</mark>
Directional	<mark>≥ 0.25</mark>	<mark>20% 50%</mark>

*In cases where the strategy's three year equity beta is close to 0.25, Staff may incorporate additional relevant factors/information in categorizing a fund as directional or non directional.

In order to be properly diversified, sector ranges have been established to allow the portfolio to be optimally positioned based on the forward looking return environment. Staff intends to manage the exposures by

capitalizing on opportunities and market environments in which each sector has the greatest opportunity set. SERS works closely with the specialist hedge fund consultant to form the sector outlooks and rebalance between sectors and strategies. As market opportunities change, rebalancing in MAS can be frequent and different mandate hires and terminations are expected to occur. Below are the ranges for each sector:

Sector	Range
Long/Short Equity	<mark>10% 30%</mark>
<mark>Event Driven</mark>	<mark>10% 30%</mark>
<mark>Relative ∀alue</mark>	<mark>5% 25%</mark>
Tactical Trading	<mark>5% 25%</mark>
Multi Strategy	<mark>10% 30%</mark>

VI. INVESTMENT STYLES

Investment strategies may utilize the following investment styles:

Long/Short Equity: strategies that involve buying some equity securities and short selling of others. Several investment philosophies and styles may be executed this way. Portfolios are primarily constructed in this way to reduce volatility and market exposure.

Event Driven: strategies that most commonly seek to profit from corporate action, political change or technical market disruptions. Event Driven investors will take long or short positions in a wide range of securities on the basis of their views on events such as mergers, takeovers, liquidations, bankruptcies, legislative changes, spin offs, special dividends, liquidations, index reconstitutions and others.

Relative Value: strategies that attempt to extract value from the normalization of mispriced relationships between instruments. These strategies include fixed income, convertibles, quantitative equities and volatility RV.

Tactical Trading: strategies which make directional trades within fixed income, equities, commodities, and/or currencies. The strategy group is typically split between discretionary (fundamental, technical based) and systematic (model based) managers.

Multi Strategy: investing in more than one strategy, often utilizing long only investments with lower fees. The goal is typically to diversify risk and/or allow the manager to increase allocations to strategies it believes have a better opportunity set, focus on the allocation of risk rather than the allocation of capital or access common liquid alternative strategies.

VII. PERMISSIBLE INVESTMENTS

Permissible investments in the MAS portfolio include:

- Active investment strategies that apply non-traditional portfolio management techniques including, but not restricted to shorting securities, leverage, arbitrage and creating synthetic exposures using financial instruments.
- b. Active investment strategies that focus on the allocation of risk (usually defined as volatility) rather than the allocation of capital.
- c. Active investment strategies that tactically allocate across asset classes and/or geographical regions depending upon the relative attractiveness of the respective asset classes.
- d. All types of investible securities or derivative instruments in equities, fixed income, commodities, foreign exchange and insurance linked products.

VIII. RISK MANAGEMENT

Leverage

Leverage will be prudent for the given strategy and consistent with the fund's offering memorandum. Managers are not required to maintain a constant leverage ratio and may adjust the fund's leverage according to their views on the risks and returns of their portfolio or for various other reasons. No leverage will be permitted at the MAS portfolio level.

Liquidity

Liquidity will be monitored regularly to ensure the portfolio can be reduced or rebalanced within a reasonable timeframe. As with some funds where lower fees may be obtained in exchange for a longer lockup of capital, Staff may elect longer lockups for funds if overall portfolio liquidity is sufficient. Funds in the MAS portfolio may have soft, hard or rolling lockup periods of three years or less, although most lockup periods will be one year or less. Most funds in the MAS portfolio will have monthly or quarterly redemptions, but such periodic liquidity is not required.

Operational/Business Risk

The operational or business risks of each investment will be carefully considered and evaluated. Operational considerations that may create risks include but are not limited to back office staffing levels, service providers, pricing policies and procedures, anti money laundering and transfer agency information, systems and technology, trading cash management, disaster recovery, regulatory, compliance, personnel

backgrounds, financial statements, fund documents and firm policies and procedures.

Limits

- a. No more than 7% of the MAS net asset value will be allocated to a single fund at time of purchase and no single fund will exceed 10% of MAS net asset value at any time.
- b. No more than 15% of the MAS net asset value will be allocated to multiple funds of a single manager.

IMPLEMENTATION GUIDELINES – Global Fixed Income

I. ROLE

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

II. ASSET ALLOCATION

The global fixed income allocation is established with periodic asset allocation studies. The most recent asset allocation study authorized a 19% market value exposure to global fixed income with a range of 12% - 26%.

III. BENCHMARK

Global fixed income performance is benchmarked to the Bloomberg Barclays US Aggregate Bond Index for the asset class.

IV. PERFORMANCE OBJECTIVE

The annualized return objective for the global fixed income portfolio is 50 basis points net of fees above the benchmark over rolling three year periods broken into the following strategies:

	Expected	Tracking	
Strategy	Excess Return	Error	Benchmark
Core	20 basis points	<u>N/A</u> 1 2%	Bloomberg Barclays US Aggregate
Core Plus	60 basis points	<u>N/A</u> 2 4%	Bloomberg Barclays US Aggregate
Tactical/Diversifying	175 <u>200</u> basis points	<u>N/A</u> 3 9%	Bloomberg Barclays US Aggregate
Total Portfolio	50 basis points	2-<u>0</u> – 4%	Bloomberg Barclays US Aggregate- <mark>Bond-</mark> I <mark>ndex</mark>

V. PORTFOLIO DESIGN AND CONSTRUCTION

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

Below are the current sector exposure limits:

	Range		
Strategy	Minimum	Maximum	
Core	30%	70%	
Core Plus	30<u>25</u>%	55<u>50</u>%	
Tactical & Diversifying	0<u>5</u>%	15<u>20</u>%	

IMPLEMENTATION GUIDELINES – Global Fixed Income

VI. PERMISSIBLE INVESTMENTS

Security Type	Core	Core Plus	Tactical & Diversifying
Governments:			
US Treasuries and Agencies	Y	Y	Y
Sovereigns <u>/Quasi-Sov.</u> in US \$	Y	Y	Y
Sovereigns/Quasi-Sov. in local currency	Ν	Y	Y
Corporates:			
US Corporates	Y	Y	Y
Non-US Corporates in US \$	Y	Y	Y
Non-US Corporates in local currency	N	Y	Y
High Yield	N	Y	Y
Bank Loans	N	Y	Y
Mortgages	Y	Y	Y
Municipals	Y	Y	Y
Other:			
144 (A)s	Y	Y	Y
Commingled Funds	Y	Y	Y
Currency	N	Y	Y
Derivatives	N	Y	Y
Money Markets	Y	Y	Y
Repurchase Agreements	Y	Y	Y

VII. RISK MANAGEMENT

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

Interest Rate

Controlled by duration band limits around the benchmark duration.

Yield Curve Risk

Controlled by duration band limits around the benchmark duration.

Sector Risk

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

Credit Risk

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

Currency Risk

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

Issuer Risk

Issuer limits are specified in each IMA investment guidelines.

IMPLEMENTATION GUIDELINES – Global Fixed Income

Liquidity Risk

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

Active Risk

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

IMPLEMENTATION GUIDELINES – Private Credit

I. ROLE

<u>The role of SERS' private credit portfolio is to provide risk adjusted returns in excess of those provided by</u> publicly traded fixed income securities and to generate a consistent stream of income.

II ASSET ALLOCATION

<u>SERS' Statement of Investment Policy sets the private credit target allocation at 5%, with a range of 3% to 7%. The target for Global Private Credit during the ramp-up period is set at 3% for fiscal year 2021 and will increase to the policy target allocation of 5% for fiscal year 2022.</u>

III BENCHMARK

The private credit benchmark is 3-month LIBOR + 4.5%.

IV PERFORMANCE OBJECTIVE

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

V. PORTFOLIO DESIGN AND CONSTRUCTION

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

Long-term sub asset target exposure is detailed below:

	_			Range
	_	Target	Minimum	<u>Maximum</u>
Direct Lending		<u>80%</u>	<u>60%</u>	<u>100%</u>
<u>Mezzanine</u>		<u>0%</u>	<u>0%</u>	<u>10%</u>
Stressed/Distressed		<u>10%</u>	<u>0%</u>	<u>15%</u>
Structured Credit/Other		<u>10%</u>	<u>0%</u>	<u>15%</u>
	<u>Total</u>	<u>100%</u>		_
Domestic		<u>50%</u>	<u>40%</u>	<u>85%</u>
International	_	<u>50%</u>	<u>15%</u>	<u>60%</u>
	<u>Total</u>	<u>100%</u>	_	_
Primary Commitments		<u>100%</u>	<u>80%</u>	<u>100%</u>
Secondaries		<u>0%</u>	<u>0%</u>	<u>10%</u>
Co-Investments	_	<u>0%</u>	<u>0%</u>	<u>10%</u>
	Total	<u>100%</u>		_

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

IMPLEMENTATION GUIDELINES – Private Credit

VI. PERMISSIBLE INVESTMENTS

Investment Structure	
Limited partnership Interests	<u>Y</u>
Co-Investments	<u> </u>
Separate Accounts	Y

Investment Type	
Direct Lending	<u>⊥</u>
Mezzanine	Ĭ
Stressed/Distressed	<u>¥</u>
Structured Credit and Other (specialty finance. etc.)	<u>Y</u>

Direct Lending

Net Expected Return 6-8%, Moderate Risk

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

<u>Mezzanine</u>

<u>Net Expected Return: 8-12%, High Risk</u>

<u>Mezzanine debt is subordinated to senior loans and typically is structured as a floating rate loan with an equity component. Mezzanine is targeted to represent 0% of the private credit portfolio.</u>

Stressed/Distressed

Net Expected Return: 12-25%, High Risk

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

Structured Credit & Other

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

Structured credit includes investments in collateralized loan obligation tranches and other asset backed securities. Other private credit investments include specialty financing, non-performing loans, and other investment types that do not fit within the other categories. Structured Credit & Other is targeted to represent 10% of the private credit portfolio.

VII. RISK MANAGEMENT

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

Credit Risk

Credit risk is the primary risk associated with the asset class. Thorough due diligence of investments will be completed to ensure the general partners have sufficient measures in place to monitor and assess the risks involved with underlying investments.

<u>Interest Rate Risk</u>

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

IMPLEMENTATION GUIDELINES – Private Credit

Liquidity Risk

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

<u>Geography Risk</u>

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

<u>Vintage Risk</u>

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

<u>Manager Risk</u>

Manager risk consists of two elements, managing the exposure within a partnership and controlling the number of general partners in the private credit portfolio. Partnership exposure is controlled by limiting the commitment size within a partnership and the maximum commitment to a partnership will be 25% of a fund's size. The 25% limit does not apply to funds committed to a discretionary manager or a separate account. The maximum market value exposure to a single manager is targeted to be less than 35% of the portfolio. The optimum number of general partners in the partners in the portfolio.

<u>Firm Risk</u>

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

Currency Risk

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

Industry/Sector Risk

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

Leverage Risk

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

Valuation Risk

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

IMPLEMENTATION GUIDELINES – Global Real Assets

I. ROLE

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

II. ASSET ALLOCATION

SERS' Statement of Investment Policy sets the global real asset target allocation at <u>15%16%</u>, with a permissible range of <u>10%14%</u> to 20%.

III. BENCHMARK

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

IV. PERFORMANCE OBJECTIVE

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

V. PORTFOLIO DESIGN AND CONSTRUCTION

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

	Range		
Strategy	Target	Minimum	Maximum
Private Core Real Estate	60%	40%	80%
Private Non-Core Real Estate	15%	5%	25%
Private Infrastructure	20%	10%	30%
Public Market Real Assets	5%	0%	10%

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

Non-core real estate investments include value-added and opportunistic strategies in which properties or projects are re-leased, re-developed, or newly constructed, particularly in developing or transitional markets. This strategy has a higher return expectation, but also comes with greater risk due to the uncertainty of cash flows. Non-core real estate strategies are typically implemented through closed-end commingled funds.

Private infrastructure typically involves the movement of goods, people, water and energy (definition provided by JPMorgan Asset Management). The sectors include but are not limited to transportation, communication, social and regulated assets. Infrastructure revenue streams are typically long-dated, contractual and inflation linked. Private infrastructure is implemented through both open and closed end commingled funds.

IMPLEMENTATION GUIDELINES – Global Real Assets

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

VI. PERMISSIBLE INVESTMENTS

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

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

VII. RISK MANAGEMENT

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

Real Estate Life Cycle Risk

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

	Operating	Non-Operating
Target Exposure	≥85%	≤15%
Current Exposure	94%	6%

Real Estate Property Type Risk

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

IMPLEMENTATION GUIDELINES – Global Real Assets

(as of December 31, 2019)	NCREIF Property Index	Private Market Portfolio	Range
Apartment	24<u>26</u>%	24%	15% - 40%
Industrial	1 6<u>8</u>%	2 <u>9</u> 7%	15% - 40%
Office	3 <u>5</u> 6%	2 <u>6</u> 7%	20% - 40%
Retail	2 <u>30</u> %	1 <u>3</u> 4%	10% - 30%
Subtotal	99%	92%	80% - 100%
Hotel/Other	1%	8%	5% - 20%
Total	100%	100%	

Real Estate Geographic Risk

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

(as of December 31, 2019)	NCREIF Property Index	Private Market Portfolio	Range
West	<u>40</u> 39%	3 <u>5</u> 4%	20% - 50%
East	32%	3 <u>6</u> 4%	20% - 50%
Midwest	<u>8</u> 8%	<u>8</u> 12%	5% - 20%
South	20%	<u>21</u> 20%	10% - 30%
Total	100%	100%	

Global Real Assets Geographic Risk

Non-US exposure refers to the level of exposure of non-US investments in the total global real assets portfolio. Non-US exposure will be limited to 20% of the private market portfolio.

Liquidity Risk

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

Leverage Risk

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

Currency Risk

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

Valuation Risk

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

Manager Concentration Risk

A single manager utilizing core strategies shall not constitute more than 25% of the net assets of the global real assets program. For non-core strategies, a single fund commitment shall not constitute more than 7% of the net assets of the global real assets program and a single manager with multiple fund commitments, including co-investments, shall not constitute more than 20% of the net assets of the global real assets program.

IMPLEMENTATION GUIDELINES – Cash Equivalents

I. ROLE

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

II. ASSET ALLOCATION

The cash allocation is established with periodic asset allocation studies. The most recent asset allocation study authorized a $\frac{1\%2\%}{2}$ exposure to cash with a range of 0% - 5%.

III. BENCHMARK

The short-term cash benchmark is the Citigroup 30-day Treasury Bill Index.

IV. PERFORMANCE OBJECTIVE

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

V. PORTFOLIO DESIGN AND CONSTRUCTION

The cash portfolio is designed with preservation of capital in mind. The officer compares daily treasury, commercial paper and money market offerings for new purchases. The cash balance is kept as small as possible to allow for one to three months of expenditures. The average weighted maturity of the portfolio will not exceed 20 days.

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

VI. PERMISSIBLE INVESTMENTS

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

VII. RISK MANAGEMENT

Liquidity Risk

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

Credit Risk

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

Issuer Risk

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

IMPLEMENTATION GUIDELINES – Opportunistic and Tactical

I. ROLE

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

II. ASSET ALLOCATION

SERS' Statement of Investment Policy sets the opportunistic target allocation at 0%, with a range of 0% to 5%.

III. BENCHMARK

The opportunistic benchmark is the <u>Bloomberg Barclays US Aggregate Bond Index + 2%Total Fund Policy</u> Benchmark.

IV. PERFORMANCE OBJECTIVE

The performance objective of the opportunistic portfolio is to earn a net of fee return in excess of the <u>Bloomberg Barclays US Aggregate Bond Index + 2%</u> <u>Total Fund Policy Benchmark</u>, with a meaningful component of the total return coming from current income.

V. PORTFOLIO DESIGN AND CONSTRUCTION

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

VI. PERMISSIBLE INVESTMENTS

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

VII. RISK MANAGEMENT

Leverage

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

Liquidity

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

Currency

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

IMPLEMENTATION GUIDELINES – Overlay Program

I. ROLE

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

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

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

II. ASSET ALLOCATION

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

The tactical asset allocation program's notional exposure limit is +/-57% of the Total Fund to each of the following assets: US fixed income, US equity and Non-US equity. Since the tactical asset allocation positions are employed for short periods, the notional exposures are not subject to the policy asset allocation ranges set forth in the Statement of Investment Policy; however, the active risk contribution by the overlay program as a whole is subjected to the overall guideline on active risk for the management of the Total Fund specified in the Risk Management Policy.

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

III. BENCHMARK

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

IV. PERFORMANCE OBJECTIVE

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

V. PORTFOLIO DESIGN AND CONSTRUCTION

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

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

VI. PERMISSIBLE INVESTMENTS

Tactical asset allocation: equity futures and fixed income futures.

Currency overlay: currency forwards, currency futures, <u>gold forwards, gold futures</u>, <u>with</u> limited currency options.

IMPLEMENTATION GUIDELINES – Overlay Program

VII. RISK MANAGEMENT

Counter-party risk management:

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

Volatility management:

- The tactical asset allocation program's tracking error range is 5 to 15 bps.
- All active currency strategies have targeted tracking error equal to or less than 48%; the aggregate active currency program's tracking error is expected to be in the range of 2-5 to 48%.

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Glossary

GLOSSARY

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

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

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

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

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

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

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

Citigroup 30-day T-Bill Index – an index that measures the rate of return for 30-day US Treasury Bills, which are considered representative of the performance of short-term money market instruments. The Citigroup 30-day T-Bill index is SERS' policy benchmark for Cash Equivalents.

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

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

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

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

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

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

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

Global Equities – reflects the consolidation of what had been treated by SERS as US Equity and Non-US Equity asset classes; includes equities of US and non-US origin, equities of various capitalizations (e.g., large

GLOSSARY

cap, small cap, mid cap, etc.), equities from developed, emerging and frontier markets, growth and value equities and passive and active strategies. Investments in Global Equities strategies are made in accordance with established investment guidelines, and amended as necessary, by mutual agreement between the Chief Investment Officer and the Investment Consultant.

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

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

HFRI Fund of Funds Composite Index – published by Hedge Fund Research, Inc., the HFRI Fund of Funds Composite Index is an equally weighted index of funds of hedge funds, offshore and onshore. Funds in the index must have at least \$50 million under management or must have been trading actively for at least 12 months.

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

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

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

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

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

LIBOR – London Interbank Offered Rate, the interest rate that is commonly used as the benchmark reference rate for lenders. The 3-month LIBOR is the reference rate utilized by Staff.

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

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

Multi-Asset Strategies – active investment strategies that aim to generate absolute returns with managed volatility, using all types of investable securities (equities, bonds, commodities, currencies, derivatives, etc.). These strategies typically apply non-traditional portfolio management techniques including, but not restricted to shorting securities, leverage, arbitrage and creating synthetic exposures using financial instruments. In addition, funds in this portfolio may tactically allocate across asset classes and/or geographical regions depending upon

GLOSSARY

the relative attractiveness of the respective asset classes. Generally, multi- asset strategies have low to medium correlation with global equities and much lower volatility.

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

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

Options contract - a form of financial derivatives. In an options contract, two parties (buyer and seller) agree that the buyer, who pays an option premium to the seller, has the right to exercise an option whether or not to buy or sell a particular asset at a specified price at a specified future date.

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

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

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

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

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

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

Total Fund – refers to SERS' total investment assets.

Tracking Error – otherwise known as active risk (see Active Risk).

SCHOOL EMPLOYEES RETIREMENT SYSTEM OF OHIO

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ITEM 8.

DRAFT INVESTMENT DEPARTMENT INCENTIVE PROGRAM

School Employees Retirement System

Memo

To: Retirement Board

From: Joe Bell

cc: Richard Stensrud

Date: May 8, 2020

Re: Investment Department Incentive Plan for Fiscal Year 2021

Ohio Administrative Code section 3309-1-05 requires the Board to annually approve SERS' Investment Department Incentive Plan. Attached to this memo please find a redlined Plan for fiscal year 2021.

The Incentive Plan Committee is recommending the following changes:

 Chief Risk Officer to replace the Enterprise Risk Management Officer for the calculation and verification of incentive compensation amounts of eligible participants in the Investment Department Incentive Plan.

If the Board is comfortable with the attached Investment Department Incentive Plan, a resolution has been prepared for a vote to approve the fiscal year 2021 Plan.

School Employees Retirement System of Ohio



Investment Department Incentive Plan for Fiscal Year 20202021

Amended May 1621, 202019

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Section 1: Plan Purpose

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

Section 2: Plan Objectives

The objectives of the Plan are to:

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

Section 3: Performance Period

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

Section 4: Eligibility

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

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

Table 1. Eligibility by Job Title

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

Section 5: Incentive Compensation Criteria

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

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

Fund Performance

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

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

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

Section 6: Incentive Compensation Opportunity

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

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

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

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

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

Section 7: Performance Goals

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

Individual Goals

Portfolio Performance

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

Department Goals

Total Fund

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

Section 8: Incentive Compensation Calculation

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

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

Table 3. Performance Goal Weights

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

Multiple Year Results

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

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

Asset Class Assignments

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

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

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

Section 9: Incentive Compensation Adjustment

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

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

Table 6. Incentive Compensation Adjustments

Additionally, if the five-year annualized return of the total fund (net of fees) is less than the actuarial assumed rate of return (currently 7.5%), the total incentive compensation for each incentive-eligible employee will be reduced by 10%. For example, if the total fund one-year net return is negative 5%, and the five-year annualized return of the total fund is less than the actuarial assumed rate of return, then the incentive compensation for each incentive eligible employee will be reduced by 30%.

Section 10: Plan Administration

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

Calculation of Performance

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

Termination of Employment

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

by 12. The pro-rata compensation is paid at the same time all other payments are made under the Plan. The target compensation payment date is September following the end of the performance period.

New Hires, Promotions and Salary Adjustments

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

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

Other Adjustments

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

Plan Amendment, Suspension, or Termination

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

Deferral of Compensation

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

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

- a. the action shall specify a date of payment of the Deferrals that satisfies the requirements of the applicable two and one-half (2 ½) month period specified in Treas. Reg. § 1.409A-1(b)(4) (the "Payment Date");
- b. the action shall state:
 - *(i)* the period of substantial services to be performed and/or the business condition(s) to be satisfied prior to any payment of a Deferral, however, if satisfaction of such a business

condition is not required prior to deferral, the period of services required shall be at least as long as reasonably required under then applicable statutory, regulatory or other requirements or guidance so as to constitute a substantial risk of forfeiture; and

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

Dispute Resolution

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

Action

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

Approval Period

July 1, 2001 through June 30, 2002
July 1, 2004 through June 30, 2005
July 1, 2005 through June 30, 2006
July 1, 2006 through June 30, 2007
July 1, 2007 through June 30, 2008
July 1, 2008 through June 30, 2009
July 1, 2008 through June 30, 2009
July 1, 2009 through June 30, 2010
July 1, 2010 through June 30, 2011
July 1, 2011 through June 30, 2012
July 1, 2012 through June 30, 2013
July 1, 2013 through June 30, 2014
July 1, 2013 through June 30, 2014
July 1, 2014 through June 30, 2015
July 1, 2014 through June 30, 2015
July 1, 2015 through June 30, 2016
July 1, 2016 through June 30, 2017
July 1, 2017 through June 30, 2018
July 1, 2018 through June 30, 2019
July 1, 2018 through June 30, 2019
July 1, 2019 through June 30, 2020
July 1, 2020 through June 30, 2021

School Employees Retirement System of Ohio Investment Department Incentive Plan

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

ATTACHMENT 1

INVESTMENT DEPARTMENT INCENTIVE PLAN FISCAL YEAR 2021

moved and seconded the motion to approve the Investment Department Incentive Plan for fiscal year ending June 30, 2021 which replaces the Fiscal Year 2020 Investment Department Incentive Plan approved May 16, 2019.

ITEM 9.

CORPORATE GOVERNANCE - NEW PROXY ISSUES 2020

School Employees Retirement System

Memo

To:Retirement BoardFrom:Chris Collinscc:Richard StensrudDate:May 8, 2020Re:New Proxy Issues for 2020

Attached to this memo is a summary list of the new and/or updated proxy issues our proxy voting advisor, ISS, expects to see on proxy ballots in 2020. There are 35 issues on the list.

SERS' staff has reviewed the 35 issues, contemplated ISS' recommendations and decided upon the voting stance SERS will take on each issue. SERS' staff relied upon guidance from the Board-adopted Corporate Governance Principles in deciding how SERS will vote. High-level information regarding ISS policy updates and new policies as they relate to SERS' voting instructions is provided in the attached matrix.

With this month's materials, you have received an updated Proxy Voting book for 2020. As in years past, this booklet contains some background information on our proxy voting program, our Proxy Voting Policy, our Corporate Governance Principles, and our Proxy Voting Guidelines. The Corporate Governance Principles were approved by the Board in 2012, and the issue-specific Proxy Voting Guidelines were developed by the internal Proxy Voting Committee to outline SERS' approach to specific proxy voting issues including director elections, "say on pay" votes, mergers and acquisitions, board diversity, and environmental, social and governance (ESG) issues. The Guidelines contain some of the more frequently occurring proxy issues and are not intended to be all-inclusive of every issue that SERS will vote on this year. All of the guidelines are subject to revisions over time, but there have been no substantive changes to the guidelines for this year.

To promote diversity on corporate boards, SERS continues to be an active member of the Midwest Investors Diversity Initiative, which is a group of Midwestern institutional investors that engages public companies that are also located in the Midwest with the goal of encouraging diversity on their boards of directors. The group asks nominating and governance committees at these companies to consider adopting a policy that would require them to expand their candidate pools to include qualified, diverse candidates each time they initiate a search to fill an open board seat. Over the past year, the group has had a number of successful engagements with companies that have agreed to adopt a diverse director search policy.

This year, SERS continues its involvement in the Investors for Opioid and Pharmaceutical Accountability (IOPA) Group. The IOPA is a group of institutional investors that engages with public companies associated with the opioid crisis and pharmaceutical pricing to encourage corporate governance reforms that include increased oversight and transparency. The group has had successful engagements with a number of companies who have agreed to issue reports on governance measures they have implemented to more effectively manage opioid-related risks. SERS is also a part of the Investor Stewardship Group (ISG), which is a nationwide initiative that developed a Framework for U.S. Stewardship and Governance best practices. The ISG Framework has been recognized as the definitive corporate governance code in the United States, and includes basic investment stewardship and corporate governance standards for U.S. institutional investors and boardroom conduct. SERS is a signatory to the ISG Framework and continues to support the group's efforts.

Additionally, SERS is an active member of the Council of Institutional Investors (CII). We have been supportive of their advocacy at the federal level, and are in alignment with CII's opposition to the SEC's proposed rules regarding proxy advisors and shareholder proposals. The SEC's proposals include a new regulatory arrangement that would require proxy advisory firms to give public companies additional reviews of and opportunities to comment on their research, which will not only delay the delivery of reports to clients like SERS, but will increase management influence over those reports. The SEC is also proposing amendments to the shareholder submission and resubmission process which would make it more difficult for smaller shareholders, including SERS, to use the shareholder submission process in order to express concerns and highlight issues at the public companies in which they invest. We will continue to monitor the SEC's actions and any impact to SERS' corporate governance activities.

Finally, the global pandemic is having an effect on shareholder meetings and subsequently impacting the current proxy season. The SEC is allowing companies that have a filing due in March or April to delay filing for up to 45 days. This might cause a number of companies to take advantage of the extra time. Secondly, many meetings are expected to disallow in-person attendance and move to virtual only meetings. The situation will vary by region and affect the proxy season in various markets differently. The likely result is that it may lower the peaks of proxy season and alter the workflow, which may make the "season" last longer than normal.

I will keep you apprised of our efforts in all of these areas through my quarterly memos to the Board. If you have any questions, please let me know.

New/Updated Proxy Issues for 2020 - SUMMARY

lssu	le	ISS: Updated or New Policy	Current SERS Policy	New SERS Policy
US	DIRECTOR ELECTIONS – UNC	CONTESTED ELECTIONS		
	Board Composition –	Update to an existing ISS	Vote against/withhold	Agree with
1	Diversity	policy.	director votes if certain	policy update;
-			concerns are identified,	no change to
			otherwise vote with ISS.	current
				instructions.
	Board Accountability –	Update to an existing ISS	Vote against/withhold	Agree with
2	Problematic Governance	policy.	director votes if certain	policy update;
2	Structures – Newly Public		concerns are identified;	no change to
	Companies		otherwise vote with ISS.	current
				instructions.
	Board Accountability –	Update to an existing ISS	Vote against/withhold	Agree with
3	Restrictions on	policy.	director votes if certain	policy update;
3	Shareholders' Rights		concerns are identified;	no change to
			otherwise vote with ISS.	current
				instructions.
	Other Board-Related	Update to an existing ISS	SERS' policy is to vote for	No change.
4	Proposals – Independent	policy.	shareholder proposals	
-	Board Chair		requiring an independent	
			board chair.	
CA	PITAL/RESTRUCTURING	1	-	r
	Share Repurchase	Update to an existing ISS	Vote with ISS.	No change.
5	Programs	policy.		
СО	MPENSATION			
	Equity-Based and Other	Update to an existing ISS	Vote against if the	Agree with
_	Incentive Plans –	policy.	compensation committee is	policy update;
6	Evergreen Provision		not fully independent,	no change to
			otherwise vote with ISS.	current
604				instructions.
300	CIAL AND ENVIRONMENTAL			America
	Diversity – Gender Pay	Update to an existing ISS	Vote case-by-case.	Agree with
7	Gap	policy.		policy update;
				vote with ISS.
CAI	VADA			
	Board Composition –	Update to an existing ISS	Vote against/withhold	Agree with
	Voting on Director	policy.	director votes if certain	policy update;
8	Nominees in		concerns are identified;	no change to
	Uncontested Elections:		otherwise vote with ISS.	current
	Committee Composition			instructions.

lssu	le	ISS: Updated or New Policy	Current SERS Policy	New SERS Policy
9	Overboard Directors	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
10	Compensation – Equity- Based Compensation	New ISS policy.	Vote against if the compensation plan lacks performance conditions, otherwise vote with ISS.	Agree with new policy language; no change to current instructions.
EUF	ROPE, MIDDLE EAST & AFRIC	CA (EMEA)	•	
11	Board Composition - Voting on Director Nominees in Uncontested Elections: Diversity (UK & Ireland)	New ISS policy.	Vote against/withhold director votes if certain concerns are identified, otherwise vote with ISS.	Agree with policy update; no change to current instructions.
12	Director Elections – Tenure	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
13	Board and Committee Composition	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
14	Board and Committee Composition – Smaller Companies	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
СОІ	NTINENTAL EUROPE			
15	Operational Items: Approval of Non- Financial Information Statement/Report	New ISS policy.	Vote with ISS.	Vote with ISS.

lssu	e	ISS: Updated or New	Current SERS Policy	New SERS
16	Board Composition – Voting on Director Nominees in Uncontested Elections: Director Terms	Policy Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Policy Agree with policy update; no change to current instructions.
17	Board Independence – Widely-Held Company: Board Leadership and Luxembourg Inclusion	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
18	Board Composition – Diversity	New ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
19	Compensation-Related Voting Sanctions: Remuneration Committee Responsiveness	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
20	Employee Share Purchase Plans	New ISS policy.	Vote with ISS.	Vote with ISS.
RUS	SSIA AND KAZAKHSTAN			
21	Appointment of Auditors and Auditor Fees	Update to an existing ISS policy.	Vote against if insiders sit on the audit committee, non- audit fees exceed 25% of total audit fees paid, or non- independent director(s) sit on the audit committee; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
EM	EA REGIONAL			
22	Board Composition – Voting on Director Nominees in Uncontested Elections: Director Attendance	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.

ไรรเ	le	ISS: Updated or New Policy	Current SERS Policy	New SERS
23	Director Elections – Overall Board Independence and Audit Committee Independence (Middle East, Africa, Turkey)	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Policy Agree with policy update; no change to current instructions.
24	Director Elections – Director Disclosure – Cumulative Voting (UAE, Saudi Arabia, Jordan, Egypt, Qatar)	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
ASI	A PACIFIC	•		•
25	Board Composition – Voting on Director Nominees in Uncontested Elections: Director Elections – Bangladesh, Pakistan	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
IND	PIA			
26	Board of Directors – Board Composition – Overboarding, Gender Diversity	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
27	Board Accountability	Update to an existing ISS policy.	Vote against/withhold director votes if certain concerns are identified; otherwise vote with ISS.	Agree with policy update; no change to current instructions.
28	Remuneration – Director Commission and Executive Director Compensation	Update to an existing ISS policy.	Vote with ISS.	No change.
29	Related-Party Transactions	Update to an existing ISS policy.	Vote with ISS.	No change.
30	Dividend Distribution	Update to an existing ISS policy.	Vote with ISS.	No change.
JAP	AN			
31	Japan: Board Independence – Controlled Companies	Update to an existing ISS policy.	Vote with ISS.	No change.
SIN	GAPORE			

lssu	e	ISS: Updated or New Policy	Current SERS Policy	New SERS Policy
	Voting on Director	Update to an existing ISS	Vote against/withhold	Agree with
22	Nominees in	policy.	director votes if certain	policy update;
32	Uncontested Elections –		concerns are identified;	no change to
	Independence		otherwise vote with ISS.	current
				instructions.
	Capital – Share	Update to an existing ISS	Vote with ISS.	No change.
33	Repurchase Pricing Limit	policy.		
	Proposals			
SOL	ITH KOREA			
	Director Accountability –	Update to an existing ISS	Vote against/withhold	Agree with
	Governance Failures	policy.	director votes if certain	policy update;
34			concerns are identified;	no change to
			otherwise vote with ISS.	current
				instructions.
ΤΑΙ	WAN			
	Article Amendment	New ISS policy.	Vote with ISS.	Vote with ISS.
35	Proposals – Cash			
33	Dividend Distribution			
	Plans			
	ALL OTHER ISSUE	S NOT LISTED	Refer to SERS	No change

SUMMARY OF INVESTMENT TRANSACTIONS

moved and seconded that the following summary of investment transactions made in compliance with the Ohio Revised Code Section 3309.15 during the period of **February 1, 2020** through **February 29, 2020** hereby be approved. A detailed list of these transactions is found in the Board Agenda posted prior to the May 2020 Retirement Board Meeting.

A. PURCHASES

Asset Class	Approximate Cost (in millions)
US Equities	\$ 94.8
Non-US Equities	123.1
Fixed Income	429.5
Multi-Asset Strategies	36.9
Private Equity Capital Calls	16.7
Real Asset Capital Calls	0.2
Opportunistic	3.3
Cash Equivalents	<mark>4</mark> 58.9

B. SALES

Asset Class	Approximate Net Proceeds (in millions)	Approximate Gain/(Loss) (in millions)
US Equities	\$ 91.4	\$ 22.3
Non-US Equities	130.1	<mark>6.1</mark>
Fixed Income	380.1	5.0
Multi-Asset Strategies	3.6	(1.0)
Private Equity distributions	14.9	n/a
Real Asset distributions	2.0	n/a
Opportunistic	0.4	(0.2)
Cash Equivalents	472.5	n/a

SUMMARY OF INVESTMENT TRANSACTIONS

moved and seconded that the following summary of investment transactions made in compliance with the Ohio Revised Code Section 3309.15 during the period of **March 1, 2020** through **March 31, 2020** hereby be approved. A detailed list of these transactions is found in the Board Agenda posted prior to the May 2020 Retirement Board Meeting.

A. PURCHASES

Asset Class	Approximate Cost (in millions)
US Equities	\$ 60.6
Non-US Equities	245.3
Fixed Income	59 <mark>1</mark> .9
Multi-Asset Strategies	27.4
Private Equity Capital Calls	16.0
Real Asset Capital Calls	43.4
Opportunistic	18.0
Cash Equivalents	674.3

B. SALES

Asset Class	Approximate Net Proceeds (in millions)	Approximate Gain/(Loss) (in millions)
US Equities	\$ 34.1	\$ (7.0)
Non-US Equities	239.2	(40.6)
Fixed Income	624.6	18.3
Multi-Asset Strategies	57.2	(6.5)
Private Equity distributions	5.9	n/a
Real Asset distributions	8.3	n/a
Opportunistic	0.8	(0.6)
Cash Equivalents	914.6	0.1

EXECUTIVE DIRECTOR'S UPDATE

- Executive Director's Discussion Item
 - Board Self-Evaluation Discussion
 - Quarterly Financials

LEGISLATIVE REPORT

STATE LEGISLATION BOARD REPORT 133rd General Assembly (Prepared by Chris Collins as of May 8, 2020)

SB10 THEFT IN OFFICE PENALTIES Steve Wilson (R-Maineville) To expand the penalties for theft in office based on the amount stolen and to include as restitution audit costs of the entity that suffered the loss.

Current Status: 10/29/2019 - Re-Referred to Committee

HB326 PUBLIC EMPLOYEE RETIREMENT-DISABILITY BENEFIT Adam Miller (D – Columbus) 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: 11/12/2019 House Insurance, (First Hearing)

HCR13 GENDER REPRESENTATION Thomas West (D- Canton), Sara Carruthers (R-Hamilton) - To encourage equitable and diverse gender representation on the boards and in senior management of Ohio companies and institutions.

Current Status: 11/12/2019 House Civil Justice, (Second Hearing)

HB46 STATE GOVT EXPENDITURE DATABASE Dave Greenspan (R- Westlake) - To require the Treasurer of State to establish the Ohio State Government Expenditure Database

Current Status: 01/22/2020 Substitute Bill Accepted

HB530 OPERS PROTECTION 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: 03/10/2020 Referred to Financial Institutions Committee

HB514 BROADCAST RETIREMENT BOARD MEETINGS Brigid Kelly (D - Cincinnati) Haraz Ghanbari (R – Perrysburg) - To require the state retirement systems to publicly broadcast board meetings.

Current Status: 03/10/2020 Referred to Financial Institutions Committee

HB515 RETIREMENT SYSTEMS - FINANCIAL DISCLOSURES Brigid Kelly (D - Cincinnati) Haraz Ghanbari (R – Perrysburg) - To require the boards of the state retirement systems to disclose certain financial information regarding alternative investments.

Current Status: 03/10/2020 Referred to Financial Institutions Committee

HB516 FORMER STATE RETIREMENT PERSONNEL Brigid Kelly (D - Cincinnati) Haraz Ghanbari (R – Perrysburg) Regarding the prohibition against the state retirement systems doing business with a former state retirement system employee, officer, or board member.

Current Status: 03/10/2020 Referred to Financial Institutions Committee

HB197 OMNIBUS MEASURES ON CORONAVIRUS Jena Powell (R-Arcanum) Derek Merrin (R-Monclova) To continue essential operations of state government and maintain the continuity of the state tax code in response to the declared pandemic and global health emergency related to COVID-19, to make appropriations, and to declare an emergency.

Current Status: 03/27/2020 SIGNED BY GOVERNOR; eff. 3/27/20

FEDERAL LEGISLATION BOARD REPORT 116th United States Congress (Prepared by Chris Collins as of May 8, 2020)

H.R. 141

SPONSOR: Rep. Rodney Davis (R-IL) LAST ACTIONS: House - 01/31/2019 Referred to the Subcommittee on Social Security CAPTION: Social Security Fairness Act of 2019

COMMENT: Repeals the GPO and WEP. 245 co-sponsors; nine Ohioans

S. 521

SPONSOR: Sen. Sherrod Brown (D-OH) LAST ACTIONS: Senate - 02/14/2019 Referred to Committee on Finance CAPTION: Social Security Fairness Act of 2019

COMMENT: Repeals the GPO and WEP. 38 co-sponsors.

H.R.3934

SPONSOR: Rep. Kevin Brady (R-TX) LAST ACTIONS: House - 07/24/2019 Referred to the House Committee on Ways and Means. CAPTION: To amend title II of the Social Security Act to replace the windfall elimination provision with a formula equalizing benefits for certain individuals with non-covered employment, and for other purposes.

COMMENT: 45 co-sponsors; three Ohioans

H.R.4540

SPONSOR: Rep. Richard Neal (D-MA)

LAST ACTIONS: House - 09/27/2019 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 non-covered employment and to provide relief for individuals currently affected by the Windfall Elimination Provision.

COMMENT: 141 co-sponsors; four Ohioans

H.R.4763

SPONSOR: Rep. Kaptur, Marcy (D-OH) LAST ACTIONS: House - 10/18/2019 Referred to the House Committee on Energy and Commerce. CAPTION: To extend the limited wraparound coverage pilot program for an additional 5 years, and for other purposes.

COMMENT: Eight co-sponsors, all of whom are Ohioans.

H.R.748

SPONSOR: Courtney, Joe (D-CT) LAST ACTION: 03/27/2020 Became Public Law No: 116-136. CAPTION: CARES Act (Coronavirus Aid, Relief, and Economic Security Act) COMMENT: Initially introduced as a repeal of the health care "Cadillac Tax." 369 co-sponsors; 14 Ohioans. Ultimately became vehicle for COVID-19 relief legislation.

MEMORANDUM

To: Chris Collins, Government Relations Officer

From: Carol Nolan Drake, Federal Liaison

Date: May 6, 2020

Re: Federal Legislative and Regulatory Report

OVERVIEW

Highlights for April include: the continued effort by the federal government and states to limit the spread of the COVID-19 virus and address the economic impact of the global pandemic; the passage of another piece of legislation by the U.S. House of Representatives and Senate to provide stimulus dollars to impacted businesses; education to ensure that retirees receive rebate payments from the earlier stimulus package; advocacy to raise the cap on HRA Excepted Benefit Plans; communication on the next phases of legislation to determine whether surprise medical billing, lowering prescription drugs, Medicare Part D restructuring (and its impact on EGWPs) would be included; and education on state and local funding issues that are developing to ensure that legislation is not passed that would impact public pension plans.

The House of Representatives delayed its return to Washington, D.C. until Monday, May 11, with the first voting day set for Tuesday, May 12. The schedule shows only eight voting days in May. The House is still considering whether to institute remote voting in cases of emergency given that 435 members need to travel to Washington, D.C. from their home states. Speaker Nancy Pelosi (D-CA) has indicated that the House will take up legislation to increase funding for small businesses, i.e., CARES Act 2, and expand support for Americans impacted by job losses and health care coverage.

The Senate returned to session on Monday, May 4. From the news accounts, the Senate operations are quite different now. Senators are practicing social distancing and many staff members are still working from home. Senate President Mitch McConnell (R-KY) has expressed a desire to take up legislation that would limit the liability of businesses that could be sued by employees, vendors or other parties due to the COVID-19 virus. Democratic Senators, including Senator Sherrod Brown (D-OH) have voiced concerns with any effort to limit business liability with a broad stroke, particularly if companies did not put safeguards in place for their workers after the national emergency was declared.

The resolution which Senator Rob Portman (R-OH) introduced in March, S. Res. 548, to amend the Standing Rules of the Senate to enable the participation of absent Senators during a national crisis, now has 16 cosponsors. On April 30, Senators Portman and Thomas Carper (D-DE) held a virtual Roundtable to discuss continuity of Senate operations and remote voting in times of crisis. While the Resolution has bipartisan support from Republicans, Democrats and Independents, it has not moved.

CORONAVIRUS STIMULUS PACKAGE 3.5

The Senate Amendment to H.R. 266, the "Paycheck Protection Program and Health Care Enhancement Act," is the latest Coronavirus stimulus bill to pass. It is called the Phase 3.5 package to distinguish it from earlier bills. The bill was passed to replenish funding for the Small Business Administration's Paycheck Protection Program (PPP) that ran out quickly and the Economic Injury Disaster Loan (EIDL) program. Included in the bill are funds for hospitals, health care providers, and funding for testing development to help the states and businesses as they seek to reopen.

The Senate voted by voice vote, given that they were not called back to Washington. The House vote, which took place in the chamber on April 23, was 388-5, with one member voting present, who was Rep. Justin Amash (I-MI). All the Ohio House and Senate delegation members supported the bill, which was signed by President Trump on April 24. The bill appropriates another \$484 billion to address the economic downturn in several ways. The language includes:

• Another \$310 billion to the Paycheck Protection Program after banks distributed the initial \$349 billion from the previous bill. The terms for the loans include a provision that the loans will be forgiven by the federal government if at least 75% of the money is used to keep employees on the payroll. The EIDL program received another \$20 billion.

After the first tranche of money was used up by larger businesses, some of whom are now returning the money, Congress appropriated \$60 billion in this bill to be given to community financial institutions and credit unions. One of the criticisms that arose from the earlier bill is that many small businesses did not have established relationships with financial institutions and therefore missed out on the initial loans.

- The bill provides \$75 billion to "[P]revent, prepare for, and respond to Coronavirus, domestically or internationally, for necessary expenses to reimburse ...eligible health care providers for health care related expenses or lost revenues that are attributable to Coronavirus."
- The amount of \$25 billion is included for a Coronavirus testing program, to "prevent, prepare for, and respond to Coronavirus, domestically or internationally, for necessary expenses to research, develop, validate, manufacture, purchase, administer, and expand capacity for COVID–19 tests to effectively monitor and suppress COVID–19."
- Several provisions are included for reports to be issued by the Secretaries of specific federal agencies to Senate and House Committees as the funds are distributed and later when the funding has been expended. The Office of the Inspector General, within the Department of Health and Human Services, is given the authority to report to Senate and House Committees after the final stimulus payments are made.

Rep. Steve Chabot (R-OH), ranking member of the House Committee on Small Business, was concerned enough to write an Op-ed in the Cincinnati newspaper, on April 29, to urge small businesses to contact their local banks or credit unions to apply for the Paycheck Protection **Program.** Rep. Chabot recommended that businesses not wait "because there's no telling for sure just how long these additional funds will last."

In early April, Senators Mitt Romney (R-UT) and Jon Tester (D-MT) wrote a letter to President Trump asking him to ensure that the oversight requirements which Congress included in the \$2.2 trillion Coronavirus Aid, Relief and Economic Security (CARES) Act would be followed by his administration. As I reported in the last Federal Report, the bill required that a special Inspector General be appointed, a Congressional Oversight Committee and a Pandemic Response Accountability Committee (PRAC) be created. The Trump Administration has resisted oversight outside of the Cabinet Secretaries' responsibilities within the bill.

Congress is still discussing whether the next stimulus package should provide funding for state and local governments. After the president of the Illinois Senate, Don Harmon (D), wrote a letter to Senator Richard Durbin (D-IL) on April 14, the debate intensified whether stimulus dollars should be used to help states pay down their pension obligations. Senate President Mitch McConnell (R-KY) commented that perhaps some states should be able to declare bankruptcy to alleviate debts due to the pandemic, rather than seek federal dollars. On the Democratic side, several members have stated that federal dollars could be used to temporarily help states cover their budget shortfalls due to lower revenues.

Several national organizations, such as NASRA, NCTR and NCPERS have discussed with their memberships how to communicate on the solvency of public pension funds with Congressional members and stakeholders. Chris Collins, Government Relations Officer, and I had a call on May 5 with the Federal Legislative Director for Ohio Governor Mike DeWine (R) to discuss how Ohio's General Assembly, Retirement Study Council and the Boards of Trustees already have oversight over the pension funds.

NEXT STIMULUS PACKAGE

The Democratic House would like to pass the next piece of legislation upon its return. The bill, called CARES Act 2, after the first CARES legislation which passed in April, would provide additional funding. The ideas considered thus far include additional money for food stamps since many Americans are struggling to afford groceries, the U.S. Postal Service, community health centers, broadband for parts of the country without internet capabilities, housing relief, more money for small businesses, states and municipalities, unemployment insurance, Multiemployer Pension Plans, and infrastructure (although Speaker Pelosi seems to have backed away from infrastructure funding at this time). The Speaker indicated that over \$1 trillion may be needed for states and municipalities alone.

Senate Republicans have expressed a desire to pass legislation that would limit COVID-19-related liability for businesses and for health care workers. Senate President McConnell has mentioned that tort reform is a priority and that the appropriations need time to be distributed. He believes that Congress should see how these programs are working before passing more legislation. In the interim, many additional trade and professional associations are seeking funding for their memberships. For example, the Small Business Administration's Paycheck Protection Program set a limit for their loan eligibility for businesses and 501(c)(3) nonprofit groups that have less than 500 employees.

On May 5, a bipartisan group of Ohio delegation members and many other Representatives wrote to House and Senate Leadership, asking that hospitals be considered in future legislation. Eightyseven members, including Reps. Bob Gibbs (R-OH), Marcy Kaptur (D-OH), Joyce Beatty (D-OH), Anthony Gonzalez (R-OH), Tim Ryan (D-OH), Mike Turner (R-OH), Marcia Fudge (D-OH), Steve Stivers (R-OH), Bill Johnson (R-OH), Troy Balderson (R-OH), and David Joyce (R-OH), signed a letter to House and Senate leadership to express support for future legislation to include "a provision that forgives Medicare accelerated payments interest rates and pursues full loan forgiveness for hospitals and other providers." A copy of the letter may be read here:

https://gibbs.house.gov/sites/gibbs.house.gov/files/documents/GibbsKaptureBipartisanHospitalandHealth SystemLoanForgivenessLetter%20May%202020.pdf

STIMULUS PAYMENTS

The Internal Revenue Service (IRS) is alerting Americans to be vigilant and look out for people who are falsely claiming that they can transfer their stimulus payments to debit or electronic cards. Of course, the scammers steal the stimulus payments in the process. The IRS is warning people to avoid the text and email messages that are being sent out under the auspices of the IRS. As the IRS said, "We will not reach out to anyone via text, via phone, via email." More information is here: https://www.irs.gov/newsroom/irs-enhances-get-my-payment-online-application-to-help-taxpayers

One stumbling block to the outreach is the fact that many Americans that do not have access to the internet and Ohio is a state with some areas in which internet capabilities are limited. Lowincome citizens and the elderly may not be able to afford internet access, or have the equipment necessary to log into the internet and file the online IRS forms. In the past, citizens may have visited their local library to access the internet. As you know, the libraries are closed temporarily. We have asked the staff that work for the House Committee on Ways and Means, Subcommittee on Social Security, to ask the IRS to create and communicate that a simple tax form is available which people can fill out to receive their stimulus payments.

PANDEMIC BILLS

Several bills have been introduced in April to address a variety of pandemic response issues. A few of the noteworthy ones include:

- Rep. Adam Schiff (D-CA) introduced H.R. 6548, the "National Commission on the COVID-19 Pandemic in the United States Act," on April 17;
- Rep. David Cicilline (D-IL) introduced H.R. 6480, the "Global Pandemic Planning Act," on April 10;

- Rep. Austin Scott (R-GA) introduced H.R. 6611, for "Making supplemental appropriations for fiscal year 2020 for the Department of Agriculture to respond to the COVID-19 pandemic, and for other purposes," on April 23;
- Rep. Max Rose (D-NY) introduced H.R. 6610, on April 23, to "establish the Cabinet-level position of Director of Pandemic and Biodefense Preparedness and Response in the Executive Branch with the responsibility of developing a National Pandemic and Biodefense Preparedness and Response Strategy, to prepare for and coordinate the response to future pandemics, biological attacks, and other major health crises, including coordinating the work of multiple government agencies, and for other purposes;"
- Rep. Frank Lucas (R-OK) introduced H.R. 6599 on April 23, to "provide for coordination of research and development for pandemic disease prediction, forecasting and computing and for other purposes;" and
- Rep. Joyce Beatty (D-OH) cosponsored H.Res. 467, a resolution, "Recognizing the essential contributions of frontline health workers to strengthening the United States national security and economic prosperity, sustaining and expanding progress on global health, and saving the lives of millions of women, men, and children around the world."

SERS WRAPAROUND PLAN

The advocacy on the Wraparound Plan legislation, H.R. 4763, to move the bill introduced last year by Rep. Kaptur, has continued. During a call on May 5 with representatives from the offices of Reps. Marcy Kaptur (D-OH) and Tim Ryan (D-OH) with SERS and me, we discussed the opportunity to attach authorizing language to an appropriation bill later this year. Both staff members indicated that the COVID-19 pandemic legislation is taking up much of the House's time. They were concerned that the Wraparound Plan reauthorization language may not be added to an upcoming bill. Rather, language could be similar to last year's appropriation bill, asking CMS to reauthorize the program and report back to the Committee. CMS declined to issue a report or extend the program last year.

We also discussed a request for CMS to raise the \$1800 per family cap for HRA Excepted Benefit Plans. We explained that during our outreach to CMS recently, we heard that CMS was considering a number of regulatory changes to help plan sponsors, hospitals, doctors and citizens deal with costs arising from the pandemic. We were told by our CMS representative that he would discuss raising the cap with his colleagues at Treasury and the Department of Labor. We will continue this path while we pursue legislative authority for Wraparound Plans.

On April 29, SERS and I joined a call with representatives from Blue Cross Blue Shield and a company called FURTHER. We discussed the HRA Excepted Benefit Plan, the advocacy to raise the cap and whether they are aware of other plan sponsors that have offered the HRA plan option starting in January 2020. Neither BCBS nor FURTHER knew of any other HRA Excepted Benefit Plans.

WINDFALL ELIMINATION PROVISION

The "Social Security Fairness Act of 2019," which provides for the full repeal of WEP and GPO, has not been brought to the floor for a vote, and the Committee on Ways and Means has not had a hearing on it during the pandemic emergency. As of this report, nine Ohio Representatives have signed on to H.R. 141, which has 245 cosponsors including nine members from Ohio, who are Reps. Tim Ryan (D-OH), David Joyce (R-OH), Steve Stivers (R-OH), Bob Gibbs (R-OH), Marcy Kaptur (D-OH), Michael Turner (R-OH), Marsha Fudge (D-OH), Joyce Beatty (D-OH) and Troy Balderson (R-OH).

Chairman Richard Neal's (D-MA) WEP reform bill, H.R. 4540, the "Public Servants Protection and Fairness Act," has 141 cosponsors now, including cosponsors Reps. Marcy Kaptur (D-OH), Tim Ryan (D-OH), Joyce Beatty (D-OH) and Marcia Fudge (D-OH). Rep. Kevin Brady's (R-TX) version of WEP reform, H.R. 3934, the "Equal Treatment of Public Servants Act of 2019," has 45 cosponsors as of this date, with three from Ohio, Reps. Bob Latta (R-OH), Michael Turner (R-OH) and Anthony Gonzalez (R-OH). At this date, neither bill has a Senate companion bill. There has been no progress on either bill.

The Senate companion bill for full repeal of WEP and GPO, S. 521, the "Social Security Fairness Act," was introduced by Senator Sherrod Brown (D-OH) and has not added to the 38 cosponsors, including five Republicans and two Independents. There has been no action in the Senate and Senator Rob Portman (R-OH) is still not one of the co-sponsors.

SOCIAL SECURITY ADMINISTRATION (SSA)

The SSA has issued new warnings to recipients about scams that are popping up across the country as recipients receive their stimulus payments. The SSA released the following information to make sure that recipients are not tricked "out of your money and personal information:"

If you receive calls, emails, or other communications claiming to be from the U.S. Treasury Department, the Internal Revenue Service, the Social Security Administration, or another government agency offering COVID-19 related grants or economic impact payments in exchange for personal financial information, or an advance fee, or charge of any kind, including the purchase of gift cards, please do not respond. These are scams. <u>Visit Treasury's website</u> if you suspect economic impact payment fraud. <u>Report Social Security scams about COVID-19</u>.

Below are some of the scams we know about, but there can be many variations: The Inspector General of Social Security, Gail S. Ennis, is warning the public about fraudulent letters threatening suspension of Social Security benefits due to COVID-19-related office closures. We will not suspend or discontinue benefits because our offices are closed to the public for in-person service. <u>Read this and other fraud advisories</u>.

The U.S. Department of Health and Human Services (HHS) Office of Inspector General is alerting the public about fraud schemes related to COVID-19. For example, scammers are offering COVID-19 tests to Medicare beneficiaries in exchange for personal details, including Medicare information. However, the services are unapproved and illegitimate. Learn about this and other COVID-19 fraud from HHS.

The link is here for more details: <u>https://www.ssa.gov/coronavirus/</u>

There has been no movement on the bill, H.R. 860, the "Social Security 2100 Act," introduced by Rep. John Larson (D-CT). The bill has 208 cosponsors, who are all Democrats. All members of Ohio's Democratic delegation are cosponsors, Reps. Joyce Beatty, Marcia Fudge, Tim Ryan and Marcy Kaptur. The identical Senate bill is S. 269, introduced by Senator Richard Blumenthal (D-CT). Senator Chris Van Hollen (D-MD) is still the only cosponsor.

H.R. 2302, the "Protecting and Preserving Social Security Act," introduced by Rep. Theodore Deutsch (D-FL) still has only eight co-sponsors, including Rep. Marcy Kaptur (D-OH). This bill, like the "Social Security 2100" bill, H.R. 860, would make improvements in the old-age, survivors, and disability insurance program and provide for Social Security benefit protection. It has not moved forward.

MEDICARE AND MEDICAID

During a webinar on April 30, hosted by the Public Sector HealthCare Roundtable, Andrew MacPherson, senior policy advisor, discussed the previous bills that provided COVID-19 appropriations. Mr. MacPherson indicated that there are eleven trends that could emerge post-COVID for plan sponsors, including telemedicine, testing, bio-pharma and health disparities. He also mentioned a letter from the Roundtable which is being drafted, which will praise bipartisan action to address the pandemic and highlight the efforts which plan sponsors are taking to provide relief to public sector workers. The Roundtable will request that Congress:

- Protect access to high-quality health care coverage and improve Medicare;
- Address the impact of social isolation and loneliness as a result of physical distancing;
- Pass critical, bipartisan legislation to lower prescription drug prices (i.e. Prescription Drug Pricing Reduction Act of 2019 with key changes to Part D restructuring policies); and

• Ban surprise medical billing for treatment of COVID-19 and pass the Alexander-Murray-Pallone-Walden surprise billing compromise.

Neither H.R. 1346, the "Medicare Buy-In and Health Care Stabilization Act of 2019," a bill with 50 Democratic cosponsors, to provide individuals who are ages 50 to 64 to buy into Medicare," or S. 470, the "Medicare at 50 Act," with 20 Democratic cosponsors, the companion Senate bill that Senator Sherrod Brown (D-OH) co-sponsored, has advanced.

HEALTH CARE

While we had heard last month that efforts to move legislation to address surprise medical billing may be delayed until November 30, we have heard more recently that Congress may see a need to address the issue sooner. The COVID-19 medical expenses for patients and the ensuing expenses for hospitals to acquire medical supplies, such as ventilators, personal protective equipment (PPE) and additional ICU space for COVID-19 positive patients, could be significant. One of the sticking points is whether arbitration clauses should be included in lieu of traditional legal challenges for diagnoses, treatment and billing issues. The health care extenders package was approved until November 30. Congress may believe that it cannot wait until then to deal with surprise medical billing issues.

On April 27, the U.S. Supreme Court issued an 8-1 decision on the lawsuit involving the \$12 billion risk corridor program that was set up as a "temporary financial incentive to stabilize premiums and encourage participation in the insurance exchanges." Justice Sonia Sotomayor issued the majority opinion and said, "We conclude that [the ACA] established a money-mandating obligation, that Congress did not repeal this obligation, and that petitioners may sue the Government for damages in the Court of Federal Claims."

Rep. Joyce Beatty (D-OH) signed a letter with other members urging President Trump to reconsider the administration's Affordable Care Act lawsuit to repeal the remainder of the law. It was reported this week that Attorney General William Barr suggested that the administration tone down its push to repeal the ACA, however, President Trump said the suit will continue.

As reported, S. 3333 was introduced by Senator Lisa Murkowski (R-AK) to "amend the Public Health Service Act to provide for the implementation of curricula for training students, teachers, and school personnel to understand, recognize, prevent, and respond to signs of human trafficking and exploitation in children and youth, and for other purposes." While there are 15 cosponsors, neither Ohio Senators Brown nor Portman have signed on to the bill.

PRESCRIPTION DRUGS

Senator Chuck Grassley (R-IA) has expressed a desire to include language to lower drug prices in future stimulus bills, along with Senator Ron Wyden (D-OR). Discussions will continue as the COVID-19 priorities are addressed.

As reported, Rep. Dave Joyce (R-OH) introduced H.R. 5239, the "Prescription Drug Price Reporting Act," last year, cosponsored by Rep. Anthony Gonzalez (R-OH), to require reporting on prescription drug expenditures under group health plans and prescription drug price changes. The companion bill in the Senate, S.1664, was introduced by Senator Rick Scott (R-FL). The bill would create a public, consumer-friendly federal database of drug pricing information and compels drug companies to explain any price increases. Neither bill has moved.

RETIREMENT SECURITY

On April 20, the American Benefits Council (ABC) sent a letter to Congress, asking it to include the bill, the "Securing and Enabling Commerce Using Remote and Electronic Notarization Act," in the next Coronavirus relief package. The bipartisan bill, S.3533, (companion bill is H.R. 6364), which was introduced in March by Senators Mark Warner (D-VA) and Kevin Cramer (R-ND) would permit the nationwide use of remote online notarizations:

We are writing to highlight an issue of increasing importance to families across the country. There is an acute need to update a rule requiring spousal consent to certain pension plan distributions

to be witnessed in the physical presence of a plan representative or notary; such a physical presence requirement is directly contrary to the critical health needs of the country. In fact, as discussed further below, for safety reasons, the Federal Thrift Savings Plan has just waived the requirement that spousal consent be notarized at all. Private-sector families deserve safety protections just like federal workers.

A full copy of the letter may be read here: <u>https://www.americanbenefitscouncil.org/pub/?id=20F772FE-1866-DAAC-99FB-3BDDE4FE89D6</u>

Rep. Jimmy Panetta (D-CA) introduced H.R. 6257, the "Public Service Retirement Fairness Act of 2020." The bill is a companion to S. 1431, the "Retirement Security and Savings Act of 2019," a bill introduced last May by Senators Rob Portman (R-OH) and Ben Cardin (D-MD).

SECURITIES AND EXCHANGE COMMISSION (SEC)

The SEC has created a summary of operational initiatives, market-focused actions, guidance and targeted assistance and relief, investor protection efforts and other work in response to the effects of COVID-19. It provides "background and more specific context as to how the SEC is continuing to work with investors and other market participants as it executes its mission during this period of collective, national challenge." The website includes information on Agency Operations: Transition to Telework and Continuity of Operations; Market Monitoring and Engagement with Market Participants; Guidance and Targeted Regulatory Assistance and Relief; Enforcement, Examinations and Investor Education; and Effect on Comment Periods for Certain Pending Actions. The link is here: https://www.sec.gov/sec-coronavirus-covid-19-response

The Investor Advisory Committee (IAC), which provides investor perspectives to the SEC held a virtual public meeting on May 4, 2020. The agenda included two discussion items:

- Public Company Disclosure Considerations in the COVID-19 Pandemic Context; and
- Public Company Shareholder Engagement/Virtual Shareholder Meetings in the COVID-19 Pandemic Context

On April 24, the SEC announced the establishment of an internal, cross-divisional COVID-19 Market Monitoring Group. The group will "assist in the SEC's efforts to coordinate with and support the COVID-19-related efforts of other federal financial agencies and other bodies, including the President's Working Group on Financial Markets (PWG), Financial Stability Oversight Council (FSOC) and the Financial Stability Board (FSB), among others." To read the full release, please use this link: https://www.sec.gov/news/press-release/2020-95

The SEC has proposed to modernize the framework for fund valuation practices. On April 21, the SEC issued a press release that said:

[I]t has voted to propose a new rule that would establish a framework for fund valuation practices. The rule is designed to clarify how fund boards can satisfy their valuation obligations in light of market developments, including an increase in the variety of asset classes held by funds and an increase in both the volume and type of data used in valuation determinations.

The full release may be read here: https://www.sec.gov/news/press-release/2020-93

On April 28, the SEC posted Questions & Answers by the Division of Investment Management

(DIM). In the response to a question from an investment advisor, the staff indicated that investment advisors should disclose whether they have received a loan from the Paycheck Protection Program (PPP) to help them cover payroll during the pandemic. They said, "As fiduciaries, advisors are required to disclose to clients all material facts related to their advisory relationships with clients." The circumstances leading advisors to seek PPP loans or other types of financial help are material facts. These disclosures should include "the nature, amounts and effects of such assistance." The full Q&A may be viewed here: https://www.sec.gov/investment/covid-19-response-faq

REPORTS

The U.S. Census has extended the date for individuals to complete the Census until October 31, 2020. Thus far, the Census Bureau has reported that over "70 million households have responded to date, representing over 48% of all households in America." The full release may be viewed here: https://www.census.gov/newsroom/press-releases/2020/statement-covid-19-2020.html

On April 23, the Pew Center on the States released a new report entitled, "How the Market Downturn Could Affect Public Pension Funds." The Pew Center noted that states and cities face a host of short- and long-term challenges The full report may be accessed here: <u>https://www.pewtrusts.org/en/research-and-analysis/articles/2020/04/23/how-the-market-downturn-could-affect-public-pension-funds</u>

The Employee Benefit Research Institute (EBRI) issued its latest research on April 20, on the "Impact of the COVID-19 Pandemic on Retirement Income Adequacy: Evidence From EBRI's Retirement Security Projection Model®." The analysis finds:

- Market volatility may be the largest factor during this crisis in increasing retirement savings shortfalls and decreasing savings surpluses, especially in a worst-case scenario.
- However, for the youngest workers, permanent termination of the defined contribution (DC) plans under \$10 million in assets could have a large impact.
- Match suspensions by plan sponsors, contribution suspensions by workers, increases in withdrawals, and decreased eligibility do not have as much impact when spread over all U.S. households. (However, they may have a significant influence on those impacted by these factors.)

A summary of the report may be read here: <u>https://www.ebri.org/content/impact-of-the-covid-19-pandemic-on-retirement-income-adequacy-evidence-from-ebri-s-retirement-security-projection-model</u>

OTHER NEWS

On April 13, the U.S. Supreme Court announced that it will hear oral arguments by telephone conference on May 4, 5, 6, 11, 12 and 13 for several postponed cases due to the Coronavirus outbreak. The cases include access to President Donald Trump's financial records and the Trump administration's defense of its expanded "conscience exemption" for objectors to providing contraceptive health insurance under the Affordable Care Act.

ACTIVITIES:

- 1. Set up and participated in a call with SERS and the Office of Governor Mike DeWine's Federal Director to discuss state and local government assistance from the federal government.
- 2. Set up and participated in a call with SERS and the Offices of Reps. Marcy Kaptur and Tim Ryan to discuss legislative priorities for 2020 and HRA Excepted Benefit Plans.
- 3. Set up and participated in a call with representatives from SERS, Blue Cross Blue Shield, and Further, to discuss HRA Excepted Benefit Plans.
- 4. Participated in the NCPERS, GR Network calls and the Roundtable webinar to discuss COVID-19 issues and potential Congressional activity.
- 5. Conference calls with SERS representatives to discuss the Wraparound Plans bill, advocacy on prescription drug bills and the Coronavirus impacts on pension plans, retirees and members.
- 6. Provided a Memorandum on the provisions of the Phase 3.5 bill that would be of interest to SERS.
- 7. Monitored bills from the Committees on Appropriations, Finance, and others related to public pensions, COVID-19, retirement security, health care, prescription drugs, Social Security and kept informed of relevant House and Senate Committee hearings and witnesses.
- 8. Reviewed bills that were introduced by members of the Ohio delegation or other House/Senate members on issues that could impact SERS, retirement security and/or health care.
- 9. Reviewed public notices or proposed rules from the SEC, HHS/CMS and regulatory agencies.
- 10. Monitored organizations, such as the Social Security Administration, American Benefits Council, AHIP, BMA, AARP and other entities on pension, investment, and/or health-care-related issues.
- **11.** Reviewed reports and newsletters from CII, ICGN, NASRA, NCTR, NCPERS, and the Public Sector HealthCare Roundtable, Social Security, retirement issues and prepared the Federal Policy Memo.

ITEM 12.

EXECUTIVE SESSION

_____ moved and ______ seconded the motion that the Board go into Executive Session pursuant to R.C. 121.22 (G)(6) to discuss a security matter.

IN EXECUTIVE SESSION AT ______ A.M. / P.M.

RETURNED TO OPEN SESSION AT ______ A.M. / P.M.

ITEM 13.

ADMINISTRATIVE BUDGET EXECUTION AND MANAGEMENT

• Discussion item during the May Board meeting

ITEM 14.

REVIEW SERS FY 2021 ADMINISTRATIVE BUDGET

School Employees Retirement System

Memo

To: Retirement Board
From: Richard Stensrud, Executive Director
CC: Karen Roggenkamp, Deputy Executive Director
Date: May 14, 2020
Re: FY2021 Budget Review

At the meeting in May, you will receive the FY2021 Administrative Budgets for SERS and OSERS Holdings, LLC. At the June meeting, we will request approval of these budgets through separate resolutions: one for SERS' operating and capital budgets for the next fiscal year and one for the transfer of funds to OSERS Holdings, LLC to cover the net operating expenses of OSERS Broad Street, LLC.

As noted in the letter to the Board, found in the front of the budget book, the budget presented reflects a slight decrease over the FY2020 budget and an increase over the FY2020 projected expenses.

Please note that the proposed budget does not contain funding for an annual merit increase for SERS' staff. That is not because I do not believe a merit increase is warranted – to the contrary, I believe the outstanding job by staff in pivoting from onsite operations to a remote operating model while maintaining SERS' traditional high level of customer service truly warrants a merit increase. However, given the extraordinary circumstances prevailing it is appropriate that the Board have the opportunity to give measured consideration to the proposed budget, with and without a potential merit increase. To that end, if the Board were to consider adding a merit component to the budget, I would recommend that it be structured similar to the tiered model used in the current budget (i.e., a declining merit percentage as pay grades increase), for an overall allocation of 2.25%, which is consistent with the 2.25% merit allocation in the current budget. The dollar cost of a 2.25% merit increase relative to the current budget to \$35.1 million, a 0.41% increase relative to the current budget.

If you have any questions about either resolution, please call me at 614.222.5829.

FY2021 DRAFT Operating & Capital Expenditures Budget – Discussion

May 21, 2020

Presented by: Tracy Valentino, CPA Chief Financial Officer, SERS

Objectives for Today

- Budget Policy/Process
- Review proposed draft budget document
- Questions / requests for June meeting
- No action required today

Budget Policy

- The Retirement Board shall be responsible for:
- Approving the Administrative Budget before the start of the budget fiscal year.
- Approving authority levels for capital contributions to any SERS-controlled LLCs.
- Expenditures that cumulatively exceed 110% of the approved Administrative Budget for any Major Category or total expenditures in excess of total budgeted expenditures require prior approval of the Retirement Board.

Budget Policy

- At any time, the Retirement Board, Executive Director, Deputy Executive Director, Chief Financial Officer, or Assistant Director of Finance may request a Forecast of expected expenses be prepared for the remainder of the fiscal year.
- If the Forecast reveals that expenses for the fiscal year may cumulatively exceed the limits of the budget authority given to the Executive Director in the Budget Policy, the Chief Financial Officer shall draft a Budget Revision ("Revision") to present to the Retirement Board.

FY2021 Budget Process

- Zero-Based Starting Point
- 2020 Financial review and FY2021 carryover
- Strategic Planning
 - How are ongoing and new projects related to the strategic plan?
- New Capital Projects
- Projecting Business Area Needs

FY2021 Budget Process

- Template Standards and Activity Costing
 - Reference/Informational Materials to Assist with Budget Development
 - Inflation Consideration for Purchased Items
 - Travel Costs by Trip (in-state/out-of-state) within average of actual expenses and budget

FY2021 Budget Process

Illustration of detailed budget compilation

LEVEL	POSTAGE DESCRIPTION	POSTAGE UNIT PRICE	JUL-2020	AUG-2020	SEP-2020	Q1-FY21
820 - Print Shop	1099's	0.41				
820 - Print Shop	Bus Rep Acct #1412 (pp#9's)	0.64				
820 - Print Shop	Daily Mail - Morning	0.41	12,500	12,500	12,500	37,500
820 - Print Shop	Benefit Checks & EFT's	0.41	38,290	38,297	38,290	114,877
820 - Print Shop	Bulk Mail Fees	600.00				
820 - Print Shop	Columbus Corporate Courier	210.00	1	1	1	3
820 - Print Shop	Conference Fliers	0.41				
820 - Print Shop	Bus Rep Acot #95020 (add svo)	2,000.00				
820 - Print Shop	Daily Mail - Afternoon	0.69	9,637	9,637	9,637	28,911
820 - Print Shop	Future Matter 3rd	0.41				
820 - Print Shop	HMO Open Enrollment/Re-employed Retiree Mail	0.41			45,000	45,000
820 - Print Shop	Inactive Member Mailings	0.41	11,220	11,220	11,220	33,660
820 - Print Shop	Member Annual Statement (Future Matter 1st)	0.41			165,000	165,000

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Accomplishments in 2020

- Expanded Risk Management Office
- Successful transition to a remote working environment
- Implementation of tax and refund changes due to COVID-19 legislation
- Strengthened system network infrastructure
- Implementation of budget and financial analysis reporting tool
2021 Projects:

- SMART technical support & knowledge transfer
- Continued enterprise-wide document life-cycle evaluation and engagement on record retention project
- Analysis of current software environment for cloud compatibility & implementation of cloud solutions
- Cyclical replacement of enterprise server infrastructure, virtual storage & data backup solution

• Comparison of FY2020 budget to FY2021 proposed

	BUDGET				FORECAST	
Budget Category		FY2021		FY2020		FY2020
Personnel	\$	21,753,598	\$	22,034,653	\$	21,649,434
Professional Services	\$	6,714,785	\$	6,793,192	\$	6,397,311
Communications	\$	1,105,880	\$	958,100	\$	872,044
Other Operating Expense	\$	3,487,917	\$	3,362,922	\$	3,100,105
Capital	\$	305,351	\$	634,868	\$	631,294
Net Building Occupancy	\$	1,363,534	\$	1,169,064	\$	1,091,324
TOTAL OPERATING	\$	34,731,065	\$	34,952,799	\$	33,741,512

Decrease of 0.63% over FY2020 budget (0.29% decrease before capital expenses)

FY2020 Budget	\$ 34,952,799	
Personnel Services	\$ (281,055)	 Decreases in incentive compensation and retirement contributions with offset increases in sick leave expense due to more staff included in the five yr retirement eligibility pool and a slight increase in benefit expenses
Professional Services	\$ (78,407)	 Increase in actuarial costs for quinquennial study and modeling Decrease in Investment related tax costs will directly be expensed to the investment fund Increase in custodial banking costs due to new contract next fiscal year
Communications	\$ 147,780	 Three Board elections in FY21 and anticipated mailings that were postponed in FY20 Increase in network bandwidth and new telecommunications provider
Other Operating	\$ 116,515	 Increase with budget/financial analysis tool Decrease in seminars/conferences and travel/transportation Increase in SMART annual support Decrease in hardware maintenance due to multi-year contract included in prior yr Decrease in server maintenance & storage Increase for iPad replacement Increase in software subscription - ServiceNow/ImageNow Increase in fiduciary responsibility insurance Increase for multi-year renewal on performance enhancement subscription Increase in security enhancements
Capital	\$ (329,517)	Decrease in capital priorites Continued replacement of end-of-life of Storage Area Network Enhancements to security controls over network communications Digital workspace
SERS Broad Street LLC	\$ 202,950	 Increase for building remodel Increase for Gay Street showcase upgrade Decrease in lease revenue

FY2021 Operating Budget



	FY2020	FY2021
PERSONNEL	63%	63%
PROFESSIONAL SERVICES	19%	19%
COMMUNICATIONS	3%	3%
OTHER OPERATING	10%	10%
CAPITAL	2%	1%
NET BUILDING OCCUPANCY	3%	4%

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Personnel Services

Largest budget category at approximately 62.6% of the total budget

- No new positions (FTE = 181)
- No benefit package changes

Professional Services

19.3% of the total proposed budget

FY2021 budget includes:

-Actuarial (includes cost for five year experience study)

-Audit

- -Investment-related Services
- -Consulting Services

Consulting and Other Professional Services:

5.1% of total proposed budget

- Collaborative intranet and SMART platform enhancements
- Continued cloud infrastructure assessment
- Use evaluation of existing Microsoft services
- Pension & health care sustainability consulting
- Content management evaluation record retention
- Health care data warehouse services

Communications

3.2% of the total proposed budget

- Postage
- Telecommunications
- Member/Employer Education
- Printing & Publications

Computer Support Services

5.7% of the total proposed budget

- Annual maintenance contracts
- Software licenses and subscriptions
- Data Storage devices
- Network Security

Miscellaneous

4.3% of the total proposed budget

- Employee Professional Growth (e.g. association/membership dues, subscriptions, publications, training, and travel)
- Liability Insurance
- Office Equipment & Supplies

Capital Expenditures

0.9% of the total proposed budget

FY2021 budget includes:

- Cyclical replacement of:
- Enterprise server infrastructure
- Virtual data storage management platforms
- Data Backup solution

-Enhancements to security controls over network communication

OSERS Broad Street, LLC

- 3.9% of the total proposed budget
- Fully occupied

- Upgrade of fire alarm devices and fire panel
- Control devices for HVAC system
- Replacement of parking garage roll gates
- Elevator door safety upgrade phase 2
- Renovation of Gay street showcase

Key Takeaways

- Needs Based Budget
- Conservative Approach to Budget Development
- Aligns with Strategic Plan
- Remain Competitive in Job Market
- Responsive to New and Emerging Technology Needs



Questions

and Discussion

FINAL FILING OF PROPOSED AMENDED AND NEW ADMINISTRATIVE RULES

Legal Counsel discussed with the Retirement Board the following proposed new and amended administrative rules: 3309-1-09 Federal taxation; 3309-1-32, Cost of living; base allowance change; 3309-1-35 Health care; 3309-1-37 Surviving spouse or dependent may purchase credit; 3309-1-43 Service credit established under retirement incentive plan; 3309-1-55 Responsibility for health care coverage; and 3309-1-64 Supplemental health care coverage, that have been reviewed by JCARR and are ready for final adoption by the Board.

______ moved and ______ seconded that amended rules 3309-1-09, 3309-1-32, 3309-1-35, 3309-1-43, and 3309-1-64, and new rules 3309-1-37 and 3309-55 be adopted.

3309-1-09 Federal taxation.

- (A) For purposes of this rule, "benefit" refers to a payment from the accumulated contributions of the member or the employer, or both, under Chapter 3309. of the Revised Code and includes an account refund, pension, annuity, disability benefit, or survivor benefit.
- (B) Notwithstanding any provision in rules of school employees retirement system ("SERS") or Chapter 3309. of the Revised Code to the contrary, distributions to members and beneficiaries shall be made in accordance with section 401(a)(9) of the Internal Revenue Code of 1986, 26 U.S.C. 401(a)(9), and the following:
 - (1) The entire interest of a member shall be distributed to the member:
 - (a) Not later than the required beginning date; or
 - (b) Beginning not later than the required beginning date over the life of the member and a designated beneficiary within the meaning of section 401(a)(9) of the Internal Revenue Code.
 - (2) The required beginning date means April first of the calendar year following the later of:
 - (a) The calendar year in which the member attains age seventy and one half 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 this section, until the

end of the calendar year in which the member would have attained age <u>seventy-</u> <u>twoseventy two</u> and one half. 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 (A)(2) (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.

- (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.

 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

 Prior Effective Dates:
 5/1/18, 4/10/14, 4/1/13, 9/26/10, 4/3/09, 1/6/09 (Emer.)

3309-1-32 Cost-of-living; base allowance change

- (A) For purposes of this rule:
 - (1) "Base allowance" means the benefit amount due a benefit recipient on the later of July 1, 1979 or the effective date of such benefit, as adjusted pursuant to this rule. A base allowance excludes subsequent allowances for cost-of-living pursuant to section 3309.374 of the Revised Code, reimbursements for medicare part "B" pursuant to section 3309.69 of the Revised Code, or additional annuity payments pursuant to section 3309.47 of the Revised Code.
 - (2) "Benefit" means a periodic payment under an allowance, pension, or benefit granted under Chapter 3309. of the Revised Code, other than an annuity paid under section 3309.341 of the Revised Code.
 - (3) "Benefit amount" means the amount due a benefit recipient on the effective date of such benefit.
 - (4) "Benefit recipient" means an age and service retirant, disability benefit recipient, or a beneficiary as defined in section 3309.01 of the Revised Code, who is receiving monthly benefits due to the death of a member, age and service retirant or disability benefit

recipient.

- (5) "CPI-W" means the consumer price index for urban wage earners and clerical workers, not seasonally adjusted, U.S. city average, "All items 1982-84=100."
- (B) A base allowance upon which a cost-of-living is calculated shall be adjusted when any of the following occur:
 - (1) The enactment of any statutory ad hoc allowance increase but only if such statutory authority provides that such increase become part of the base allowance.
 - (2) Recalculation of a retirant's benefit due to a change in a plan of payment as permitted in section 3309.46 of the Revised Code.
 - (3) Recalculation of a benefit recipient's benefit amount after an audit.
 - (4) If a benefit recipient waives any portion of a benefit amount pursuant to section 3309.662 of the Revised Code, the base allowance shall be the portion being paid. If a waiver is revoked, the base allowance shall be the amount allowed under this rule.
- (C) For purposes of this rule and section 3309.374 of the Revised Code, the percentage increase in the CPI-W shall be determined by calculating the percentage change between the CPI-W for June of the immediately preceding calendar year and the CPI-W for June of the next preceding calendar year.
- (C)(D) (1) The recipient of any allowance, pension, or benefit that was effective before April 1, 2018 shall be eligible to receive an increase under section 3309.374 of the Revised Code upon receiving an allowance, pension, or benefit for twelve months.
 - (2) (a) The recipient of any allowance, pension, or benefit that becomes effective on or after April 1, 2018 shall be eligible to receive an increase under section 3309.374 of the Revised Code upon attainment of the fourth anniversary of the allowance, pension, or benefit.

(b) For purposes of paragraph $\frac{(C)(2)(a)(D)(2)(a)}{(D)(2)(a)}$ of this rule, a recipient shall be credited with anniversaries for any previous allowance, pension, or benefit attributable to the same member account in the retirement system that occurred on or after January 1, 2018.

 Promulgated Under:
 111.15

 Statutory Authority:
 3309.04

 Rule Amplifies:
 3309.374

 Prior Effective Dates:
 3/26/18, 4/2/10, 8/2/02, 1/2/93, 11/23/79, 12/24/76

3309-1-35 Health care.

(A) Definitions

As used in this rule:

(1) "Benefit recipient" means an age and service retirant, disability benefit recipient, or a beneficiary as defined in section 3309.01 of the Revised Code, who is receiving monthly benefits due to the death of a member, age and service retirant or disability benefit recipient.

- (2) "Member" has the same meaning as in section 3309.01 of the Revised Code.
- (3) "Age and service retirant" means a former member who is receiving a retirement allowance pursuant to section 3309.34, 3309.35, 3309.36 or 3309.381 of the Revised Code. A former member with an effective retirement date after June 13, 1986 must have accrued ten years of service credit, exclusive of credit obtained after January 29, 1981 pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code.
- (4) "Disability benefit recipient" means a member who is receiving a benefit or allowance pursuant to section 3309.35, 3309.39, 3309.40 or 3309.401 of the Revised Code.
- (5) "Dependent" means an individual who is either of the following:
 - (a) A spouse of an age and service retirant, disability benefit recipient, or member,
 - (b) A biological, adopted or step-child of an age and service retirant, disability benefit recipient, member, deceased age and service retirant, deceased disability benefit recipient, or deceased member or other child in a parent-child relationship in which the age and service retirant, disability benefit recipient, member, deceased age and service retirant, deceased disability benefit recipient, or deceased member has or had custody of the child, so long as the child:
 - (i) Is under age twenty-six, or
 - (ii) Regardless of age is permanently and totally disabled, provided that the disability existed prior to the age and service retirant's, disability benefit recipient's, or member's death and prior to the child reaching age twenty-six. For purposes of this paragraph "permanently and totally disabled" means the individual is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death, or which has lasted or can be expected to last for a continuous period of not less than twelve months.
- (6) "Health care coverage" means any of the following group plans offered by the system:
 - (a) A medical and prescription drug plan;
 - (b) Limited wraparound coverage, which provides limited benefits that wrap around an individual health insurance plan; or
 - (c) An excepted benefit health reimbursement arrangement, which provides reimbursement of medical expenses incurred under an individual health insurance plan.
- (7) "Premium" means a monthly amount that may be required to be paid by a benefit recipient to continue enrollment for health care coverage for the recipient or the recipient's eligible dependents.
- (8) "Employer" and "public employer" have the same meaning as in section 3309.01 of the Revised Code.
- (B) Eligibility
 - (1) A person is eligible for health care coverage under the school employees retirement system's health care plan so long as the person qualifies as one of the following:
 - (a) An age and service retirant or the retirant's dependent,
 - (b) A disability benefit recipient or the recipient's dependent,

- (c) The dependent of a deceased member, deceased age and service retirant, or deceased disability benefit recipient, if the dependent is receiving a benefit pursuant to section 3309.45 or 3309.46 of the Revised Code,
- (d) The dependent child of a deceased member, deceased disability benefit recipient, or deceased age and service retirant if the spouse is receiving a benefit pursuant to section 3309.45 or 3309.46 of the Revised Code and the spouse elects to be covered.
- (2) Eligibility for <u>SERS</u> health care coverage shall terminate when the person ceases to qualify as one of the persons listed in paragraph (B)(1) of this rule, except that a dependent described in paragraph (A)(5)(b)(i) of this rule shall cease to qualify on the first day of the calendar year following the dependent's twenty-sixth birthday.
- (3) Except for a dependent described in paragraph (A)(5)(b) of this rule, eligibility for <u>SERS</u> health care coverage shall terminate when the person is not enrolled in medicare part B and on or after January 1, 2016 commences employment that provides access to a medical plan with prescription coverage through the employer, or if employees of that employer in comparable positions have access to a medical plan available through the employer, provided the medical plan with prescription drug coverage available through the employer is equivalent to the medical plan with prescription coverage at the cost available to fulltime employees as defined by the employer. For purposes of this paragraph, employer means a public or private employer.
- (4) On or after January 1, 2021, eligibility for SERS health care coverage shall terminate when a person listed in paragraph (B)(1) of this rule becomes eligible for medicaid and is ineligible for medicare. For purposes of this rule, a benefit recipient and their dependent(s) shall be presumed to be eligible for medicaid if their gross monthly SERS benefit is less than the percentage of the federal poverty level used by the Ohio Department of Medicaid to determine medicaid eligibility under Chapters 5160 and 5160:1 of the Administrative Code. Upon request, a benefit recipient presumed to be eligible for medicaid in their state of residence within ninety days from the date of SERS' request.

(C) Enrollment

- (1) Except as otherwise provided in this rule, an eligible benefit recipient may enroll in school employees retirement system's health care coverage only at the time the benefit recipient applies for an age and service retirement, disability benefit, or monthly benefits pursuant to section 3309.45 of the Revised Code.
- (2) An eligible spouse of an age and service retirant or disability benefit recipient may only be enrolled in the system's health care coverage at the following times:
 - (a) At the time the retirant or disability benefit recipient enrolls in school employees retirement system's health care coverage.
 - (b) Within thirty-one days of the eligible spouse's:
 - (i) Marriage to the retirant or disability benefit recipient; or
 - -(ii) Voluntary or involuntary termination of health care coverage under medicaid; or
 - (ii)(iii)-Involuntary termination of health care coverage under another plan, including a medicare advantage plan, or medicare part D plan.
 - (c) Within ninety days of becoming eligible for medicare.
- (3) An eligible dependent child of an age and service retirant, disability benefit recipient, or

deceased member may be enrolled in the system's health care coverage at the following times:

- (a) At the time the retirant, disability benefit recipient, or surviving spouse enrolls in school employees retirement system's health care coverage.
- (b) Within thirty-one days of the eligible dependent child's:
 - (i) Birth, adoption, or custody order; or

-(ii) Voluntary or involuntary termination of health care coverage under medicaid;

- (ii)(iii) Involuntary termination of health care coverage under another plan, including a medicare advantage plan, or medicare part D plan.
- (c) Within ninety days of becoming eligible for medicare.
- (D) Cancellation of health care coverage
 - (1) Health care coverage of a person shall be cancelled when:
 - (a) The person's eligibility terminates as provided in paragraph (B)(2) of this rule;
 - (b) The person's eligibility terminates as provided in paragraph (B)(3) of this rule;
 - (c) The person's eligibility terminates as provided in paragraph (B)(4) of this rule;
 - (<u>d</u>)(c) The person's health care coverage is cancelled for default as provided in paragraph (F) of this rule;
 - $(\underline{e})(\underline{d})$ The person's health care coverage is waived as provided in paragraph (G) of this rule;
 - (f)(e) The person's health care coverage is cancelled due to the person's enrollment in a medicare advantage plan or medicare part D plan as provided in paragraph (H) of this rule;
 - (g)(f) The health care coverage of a dependent is cancelled when the health care coverage of a benefit recipient is cancelled; or
 - (h)(g) The person's benefit payments are suspended for failure to submit documentation required to establish continued benefit eligibility under division (B)(2)(b)(i) of section 3309.45 of the Revised Code, division (F) of section 3309.39 of the Revised Code, division (D) of section 3309.41 of the Revised Code, or division (D) of section 3309.392 of the Revised Code.
- (E) Effective date of coverage
 - The effective date of health care coverage for persons eligible for health care coverage as set forth in paragraph (B) of this rule shall be as follows:
 - (a) For a disability benefit recipient or dependent of a disability benefit recipient, health care coverage shall be effective on the first of the month following the determination and recommendation of disability to the retirement board or on the benefit effective date, whichever is later.
 - (b) For an age and service retirant or dependent of an age and service retirant, health care coverage shall be effective on the first of the month following the date that the retirement application is filed with the retirement system or on the benefit effective date,

whichever is later.

(c) For an eligible dependent of a deceased member, deceased disability benefit recipient, or deceased age and service retirant, 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 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 health care coverage shall be by deduction from the benefit recipient's monthly benefit. If the full amount of the monthly premium cannot be deducted from the benefit recipient's monthly benefit, the benefit recipient shall be billed for the portion of the monthly premium due after any deduction from the monthly benefit.
- (2) Premium payments billed to a benefit recipient shall be deemed in default after the unpaid premiums for coverage under this rule and supplemental health care coverage under rule 3309-1-64 of the Administrative Code reach a total cumulative amount of at least three months of billed premiums. The retirement system shall send written notice to the benefit recipient that payments are in default and that coverage will be cancelled on the first day of the month after the date of the notice unless payment for the total amount in default is received prior to the date specified in the notice. If coverage is cancelled due to a recipient's failure to pay premium amounts in default, the recipient shall remain liable for such amounts due for the period prior to cancellation of coverage.
- (3) After cancellation for default, health care coverage can be reinstated as provided in paragraph (I) of this rule, or upon submission of an application for reinstatement supported by medical evidence acceptable to SERS that demonstrates that the default was caused by the benefit recipient's physical or mental incapacity. "Medical evidence" means documentation provided by a licensed physician of the existence of the mental or physical incapacity causing the default. Health care coverage reinstated after termination for default shall be effective on the first of the month following the date that the application for reinstatement is approved and payment for the total amount in default is received.
- (4) A person enrolled in SERS' health care plan cannot receive a premium subsidy unless that person is:
 - (a) A dependent child.
 - (b) An age and service retirant:
 - (i) An age and service retirant with an effective retirement date before August 1, 1989; or
 - (ii) An age and service retirant with an effective retirement date on or after August 1, 1989 and before August 1, 2008 who had earned fifteen years of service credit; or
 - (iii) An age and service retirant with an effective retirement date on or after August 1, 2008 who had earned twenty years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, and who;
 - (a) Was eligible to participate in the health care plan of his or her employer at the time of retirement or separation from SERS service; or
 - (b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding retirement or separation from SERS service.

- (c) A disability benefit recipient:
 - (i) A disability benefit recipient with an effective benefit date before August 1, 2008; or
 - (ii) A disability benefit recipient with an effective benefit date on or after August 1, 2008 who:
 - (a) Was eligible to participate in the health care plan of his or her employer at the time of separation from SERS service; or
 - (b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding separation from SERS service.
- (d) A spouse:
 - (i) A spouse or surviving spouse of an age and service retirant or disability benefit recipient with an effective retirement date or benefit date before August 1, 2008 who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code;
 - (ii) A spouse or surviving spouse of an age and service retirant or disability benefit recipient with an effective retirement date or benefit date on or after August 1, 2008 who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, and who:
 - (a) Was eligible to participate in the health care plan of his or her employer at the time of retirement or separation from SERS service; or
 - (b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding retirement or separation from SERS service.
 - (iii) A surviving spouse of a deceased member who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, with an effective benefit date before August 1, 2008; or
 - (iv) A surviving spouse of a deceased member who had earned twenty-five years of service credit, exclusive of credit obtained after January 29, 1981, pursuant to sections 3309.021, 3309.301, 3309.31, and 3309.33 of the Revised Code, with an effective benefit date on or after August 1, 2008, and the member;
 - (a) Was eligible to participate in the health care plan of his or her employer at the time of death or separation from SERS service; or
 - (b) Was eligible to participate in the health care plan of his or her employer at least three of the last five years of service preceding the member's death or separation from SERS service.
- (e) For purposes of determining eligibility for a subsidy under paragraph (F)(4) of this rule, when the last contributing service of an age and service retirant, disability benefit recipient, or member was as an employee as defined by division (B)(2) of section 3309.01 of the Revised Code, the health care plan participation requirement shall be if the individual would have been eligible for the public employer's health care plan if the individual were an employee as defined by division (B)(1) of section 3309.01 of the Revised Code.

- (f) Any other individual covered under a SERS health care plan shall be eligible for a premium subsidy under the standard set forth for spouses.
- (g) In all cases of doubt, the retirement board shall determine whether a person enrolled in a SERS health care plan is eligible for a premium subsidy, and its decision shall be final.
- (G) Waiver
 - (1) A benefit recipient may waive health care coverage by completing and submitting a SERS waiver form to SERS.
 - (2) The health care coverage of a benefit recipient's dependent may be waived as follows:
 - (a) For non-medicare eligible dependents, the benefit recipient may waive their coverage by completing and submitting a signed written request to SERS on their behalf.
 - (b) For medicare eligible dependents, the dependent may waive their coverage by completing and submitting a signed written request to SERS.
- (H) Medicare advantage or medicare part D

SERS shall cancel the health care coverage of a benefit recipient or dependent who enrolls in a medicare advantage or medicare part D plan that is not offered by the system.

- (I) Reinstatement to SERS health care coverage
 - (1) An eligible benefit recipient, or dependent of a benefit recipient with health care coverage, whose coverage has been previously waived or cancelled may be reinstated to SERS health care coverage by filing a health care enrollment application as follows:
 - (a) The application is received no later than ninety days after becoming eligible for medicare. Health care coverage shall be effective the later of the first day of the month after becoming medicare eligible or receipt of the enrollment application by the system;
 - (b) The application is received no later than thirty-one days after <u>voluntary or</u> involuntary termination of coverage under medicaid. Health care coverage shall be effective the later of the first day of the month after termination of coverage or receipt of proof of termination and the enrollment application by the system; or
 - (c) The application is received no later than thirty-one days after involuntary termination of coverage under another plan, medicare advantage plan, or medicare part D plan with proof of such termination. Health care coverage shall be effective the later of the first day of the month after termination of the other plan or receipt of proof of termination and the enrollment application by the system.
 - (2) An eligible person whose coverage was cancelled pursuant to paragraph (D)(1)(g) (D)(1)(h) of this rule shall be reinstated to SERS health care plan when benefit payments are reinstated.
 - (3) An eligible person whose coverage was cancelled pursuant to paragraph (D)(1)(b) of this rule may be reinstated to SERS health care plan when they no longer have access to the medical plan of an employer by filing a health care enrollment application within thirty-one days of the employment ending.
 - (4) An eligible benefit recipient or dependent of a benefit recipient with health care coverage, whose coverage has been previously cancelled and who is enrolled in medicare parts A and B or medicare part B only on December 31, 2007 may be reinstated to SERS health care coverage by filing a healthcare enrollment application during the period of time beginning October 1, 2007 and ending November 30, 2007. Health care coverage shall be effective

January 1, 2008.

- (5) An eligible benefit recipient or dependent of a benefit recipient with health care coverage, whose coverage has been previously cancelled pursuant to paragraph (H) of this rule and who is enrolled in medicare parts A and B or medicare part B only on June 30, 2009 may be reinstated to SERS health care coverage by filing a health care enrollment application during the period of time beginning May 21, 2009 and ending July 15, 2009.
- (6) An eligible benefit recipient who had an effective retirement or benefit date on or after August 1, 2008, who qualifies for a premium subsidy under paragraph (F)(4) of this rule, and whose coverage has previously been waived as provided in paragraph (G) of this rule, may be reinstated to school employees retirement system health care coverage by submitting a complete health care enrollment application on or before December 14, 2012. Health care coverage shall be effective January 1, 2013.
- (7) An eligible benefit recipient for whom SERS is transferring funds to another Ohio retirement system in accordance with paragraph (G) of rule 3309-1-55 of the Administrative Code may be reinstated to SERS health care coverage by submitting a health care enrollment application during open enrollment periods for health care coverage starting January 1, 2015 or January 1, 2016.
- (J) Medicare part B
 - (1) A person who is enrolled in SERS' health care shall enroll in medicare part B at the person's first eligibility date for medicare part B.
 - (2)
- (a) The board shall determine the monthly amount paid to reimburse an eligible benefit recipient for medicare part B coverage. The amount paid shall be no less than forty-five dollars and fifty cents, except that the board shall make no payment that exceeds the amount paid by the recipient for the coverage.
- (b) As used in paragraph (J) of this rule, an "eligible benefit recipient" means:
 - (i) An eligible person who was a benefit recipient and was eligible for medicare part B coverage before January 7, 2013, or
 - (ii) An eligible person who is a benefit recipient, is eligible for medicare part B coverage, and is enrolled in SERS' health care.
- (3) The effective date of the medicare part B reimbursement to be paid by the board shall be as follows:
 - (a) For eligible benefit recipients who were a benefit recipient and were eligible for medicare B coverage before January 7, 2013 the later of:
 - (i) January 1, 1977; or
 - (ii) The first of the month following the date that the school employees retirement system received satisfactory proof of coverage.
 - (b) For eligible benefit recipients not covered under paragraph (J)(3)(a) of this rule, the later of:
 - (i) The first month following the date that the school employees retirement system received satisfactory proof of coverage, or

- (ii) The effective date of SERS health care.
- (4) The board shall not:
 - (a) Pay more than one monthly medicare part B reimbursement when a benefit recipient is receiving more than one monthly benefit from this system; nor
 - (b) Pay a medicare part B reimbursement to a benefit recipient who is eligible for reimbursement from any other source.

 Promulgated Under:
 111.15

 Statutory Authority:
 3309.04

 Rule Amplifies:
 3309.69

 Prior Effective Dates:
 1/2/20, 5/3/19, 10/13/16, 8/13/15, 12/4/14, 7/12/14, 1/1/14, 3/8/13, 1/7/13 (Emer.), 9/30/12, 8/14/11, 9/26/10, 7/1/10 (Emer.), 6/11/10, 8/10/09, 5/22/09 (Emer.), 1/8/09, 8/8/08, 12/24/07, 9/28/07 (Emer.), 3/1/07, 1/2/04, 6/13/03, 11/9/98, 8/10/98, 1/2/93, 7/20/89, 3/20/80, 1/1/77

<u>3309-1-37</u> Surviving spouse or dependent may purchase credit.

(A) For purposes of section 3309.451 of the Revised Code and this rule, "dependent" means a <u>"qualified child" or "qualified parent" as those terms are defined in division (B)(2) of section</u> <u>3309.45 of the Revised Code.</u>

<u>(B)</u>

(1) A spouse or dependent of a deceased member who wants to purchase service credit pursuant to section 3309.451 of the Revised Code must deliver a written request to purchase service to the school employees retirement system before they receive payment of a benefit under section 3309.44 or 3309.45 of the Revised Code.

(2) Eligibility shall be determined upon receipt of a written request.

(3) Service credit shall be purchased in accordance with the laws and policies of the retirement system in effect at the time of purchase.

(4) Benefit payments shall commence on the first of the month following the date the purchase of service credit is completed.

(C) Service credit purchased under section 3309.451 of the Revised Code shall be included in the member's total service credit as of the member's date of death.

(D) The commencement of benefit payments to a spouse or dependent not subject to paragraph (B) of this rule shall not be delayed due to a request to purchase service.

Promulgated Under:111.15Statutory Authority:3309.04Rule Amplifies:3309.451Prior Effective Dates:4/1/16, 1/2/93, 12/24/76

3309-1-43 Service credit established under retirement incentive plan.

Authority provided in section 3309.33 of the Revised Code as enacted in Substitute H.B. 410 in the 115th General Assembly.

- (A) Upon adoption of a Rretirement lincentive Pplan in accordance with section 3309.33 of the Revised Code, the employer shall notify the school employees retirement system on an official form approved by the school employees retirement board and attached as an appendix to this rule.
- (B) The cost to the employer for each year of credit purchased will be determined by factors recommended by the school employees retirement system actuary which yield an amount equal to the additional liability of the amount purchased. Actuarial cost will be revised no more than once annually and shall apply only to new credit established after such revision is approved by the school employees retirement board.

(C)

(1) Employers may make equal payments to the school employees retirement system for the cost of the year or years of credit purchased over the number of years equal to the number of years purchased under the employer adopted plan.

After the thirtieth of June of the year in which the service is purchased, interest, <u>compounded annually</u>, shall be calculated on the remaining payments at the rate established for other purchased credit.

- (2) Purchase of partial years is not permitted.
- (3) Notwithstanding paragraph (C)(1) of this rule, governing authorities of community schools shall pay the cost of the service credit purchased in one payment made within thirty days of receipt from <u>SERSthe retirement system</u> of the calculated cost.

(D)

(<u>1</u>) An employee may initiate action to retire under the locally adopted retirement incentive plan in accordance with section 3309.33 of the Revised Code by completing the employee section of <u>athe</u> form adopted by the school employees retirement board, attached as an appendix to this rule, and filing such form with the employer.

(2) Upon receipt of the form, the employer must complete the employer section of the form Subsequently, the form must be completed by the employer and filed_it with the school employees retirement systemboard within ninety days of the effective date of retirement, but in no event shall the employer file the formit be filed_later than the earlier of the last day of the employer's completion of the employer portion of the form constitutes the employer's acceptance of liability for the cost of the additional service credit. The effective date of the purchase of service under a retirement incentive plan shall be the date the retirement system receives the completed form.

- (3) Upon receipt of the completed form, the retirement system shall notify the employee by letter that service credit has been purchased for the employee under the retirement incentive plan. The date of this letter shall constitute the date the employee received notice that service credit has been purchased for the employee.
- (4) The retirement system must receive the employee's valid retirement application within ninety days of the employee's receipt of notice.
- (5) The employee's effective date of retirement must be within ninety days of the employee's receipt of notice.

(6) If an employee does not retire within ninety days of receiving notice, withdraws their application for retirement, or dies before their effective date of retirement and/or before the retirement system received a valid application, the purchase of service credit on behalf of the employee under section 3309.33 shall be cancelled and any amounts received from the employer refunded.

For purposes of section 3309.33 of the Revised Code and this rule, the effective date of the purchase of service under a retirement incentive plan shall be the date SERS receives the completed form.

(E) Employees who retire under section 3309.33 of the Revised Code shall not forfeit any rights or privileges provided in rules of Chapter 3309 1 of the Administrative Code in existence at the time of retirement.

Promulgated Under:111.15Statutory Authority:3309.04Rule Amplifies:3309.33Prior Effective Dates:4/1/16, 9/6/83 (Emer)

3309-1-55 Responsibility for health care coverage.

(A) This rule amplifies division (F) of section 3309.69 of the Revised Code.

(B) For the purpose of this rule:

- (1) "Age and service retirant" means a former member who is receiving a retirement allowance pursuant to section 3309.34, 3309.35, 3309.36 or 3309.381 of the <u>Revised Code.</u>
- (2) "Available coverage" means any of the following provided by another Ohio retirement system: a group plan, or a payment, stipend, or reimbursement provided for the purpose of obtaining medical or prescription drug coverage. Coverage shall be considered available if the individual is eligible for the coverage, regardless of whether the individual waived or declined to accept or enroll in the coverage. Coverage shall not be considered available if only provided as a dependent of another person.
- (3) "Disability benefit recipient" means a member who is receiving a benefit or allowance pursuant to section 3309.35, 3309.39, 3309.40 or 3309.401 of the <u>Revised Code.</u>
- (4) "Survivor benefit recipient" means a beneficiary receiving a benefit pursuant to section 3309.45 or 3309.46 of the Revised Code.
- (C) Except as otherwise provided in this rule, this retirement system shall be the system responsible for health care coverage for its eligible benefit recipients.
- (D) An individual otherwise eligible for health care coverage from this system may not enroll in this system's coverage if the individual also has available coverage in the following circumstances:

- (1) The individual is only eligible for health care coverage from this system as a dependent of an eligible benefit recipient; or
- (2) The individual is an age and service retirant or disability benefit recipient in both this system and another Ohio retirement system and the benefit recipient has less service credit in this system than in the other system. Where the service credit is the same in each system, the individual may not enroll in this system's health care coverage if the employee contributions in the account upon which the benefit in this system is based are less than the employee contributions in the account upon which the benefit in the other system is based; or
- (3) The individual is a survivor benefit recipient in this system and receiving an age and service retirement or disability benefit from another Ohio retirement system; or
- (4) The individual is a survivor benefit recipient in both this system and another Ohio retirement system and the benefit effective date in this system is later than the benefit effective date in the other system.
- (E) Each individual enrolled in health care coverage provided by this system shall notify the system of other available coverage at the time of enrollment in this system's coverage, and whenever the individual becomes eligible for any available coverage.

Promulgated Under:111.15 Statutory Authority: 3309.04 Rule Amplifies: 3309.375, 3309.69 Prior Effective Dates: 4/1/16, 7/12/14, 1/7/13, 12/10/09, 3/1/07, 5/2/01, 8/10/98

3309-1-64 Supplemental health care 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 coverage under this rule so long as the person meets the eligibility requirements in section 3309.69 of the Revised Code and 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 plans 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 plans 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 coverage shall be cancelled when:
 - The person's eligibility for health care coverage terminates as provided in paragraph (B)(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;
 - (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 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 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 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.

Promulgated Under: 111.15 Statutory Authority: 3309.04 Rule Amplifies: 3309.69 Prior Effective Dates: 5/3/19, 1/1/14

BALLOT CERTIFICATION – RETIREE MEMBER

The Executive Director submitted the following certification of the Judge on the canvass of the vote for the election of one retiree board member to the retirement Board for the term beginning July 1, 2020:

March 3, 2020

To the Retirement Board of the School Employees Retirement System of Ohio:

This is to certify that we, as Judges, appointed by the Retirement Board of the School Employees Retirement System, met in the office of the Retirement System on March 3, 2020, for the election of one retiree board member to the Retirement Board to serve for a term of four (4) years, beginning July 1, 2020.

Catherine Moss	9,286		
Beverly Woolridge	6,993		
Write-in	16		
Blank/Invalid	113		
Abstain	0		

Total <u>16,408</u>



Office: Ohio Attorney General

Name: Francis R. Schwinne Office: Auditor of the State of Ohio

moved and seconded that the certification be accepted and made a matter of record and that Catherine Moss be declared an elected retiree member of the Retirement Board for a term of four years beginning July 1, 2020.

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.

RETURNED TO OPEN SESSION AT ______ A.M. / P.M.

ITEM 19.

ITEM 29.

PRESENTATION OF 2021 SELF-INSURED RATES BY ACTUARY

School Employees Retirement System

Memo

To: Retirement Board

From: Christi Pepe, Health Care Director

CC: Richard Stensrud, Executive Director Karen Roggenkamp, Deputy Executive Director Joe Marotta, General Counsel

Date: May 8, 2020

Re: 2021 Health Care Planning

Alisa Bennett, FSA, an actuary with Cavanaugh Macdonald, will present the 2021 proposed rates for our selfinsured medical plans and prescription drug coverage at the May Board meeting.

I will present recommendations for program and plan design changes for your consideration.

Proposed changes to the medical plan design include no recommended benefit changes to the Aetna non-Medicare or Medicare Advantage plans. I will request the Board's recommendation regarding 2021 PrimeTime rates and benefit structure, particularly relating to SERS costs and member costs. I will also present the vision and dental rates for 2021.

As requested by the Board, Lucy Wells, RPh, Clinical and Operations Director for Know Your Rx Coalition, will present first quarter results for SERS' clinical pharmacy consulting contract.

Presentation of 2021 Self-Insured Rates by Actuary



The experience and dedication you deserve



Plan Year 2021 Health Insurance Preliminary Cost Estimates for Self Funded Plans

May 21, 2020 Alisa Bennett, FSA, Principal and Consulting Actuary



0 11 0 11



Rate Setting Data



Paid claims and enrollment data provided by SERS.

- Summarized separately for:
 - Medical and prescription drug
 - Medicare and non-Medicare
 - Medical Plans and Medicare Part D reimbursements
- ➤ Utilized calendar year 2018 and 2019 medical data. Rates are shown before and after adjustment for COVID 19.
- Utilized calendar year 2018 and 2019 Express Scripts prescription drug data and rebates. Medicare Part D reimbursements were applied to Medicare-eligible rates only.
- Staff completed contract extension negotiations with ESI last year which began January 1, 2020. Reductions are incorporated into rates for 2021 since rates are based on 2018 and 2019 data, before contract renewal.


Assumptions and Methods - Trend



Trend Assumptions –

- Medical and Prescription Drug Used industry projections for future trend. Industry projections suggest that trends are leveling off but still significantly outpace general inflation. Double digit specialty Rx trend expected for 2020.
- Trend from mid point of experience period to mid point of rate setting period (6/30/2021).
 - For Medical
 - Industry projections suggest 7% for future medical trend for actives and pre-Medicare retirees.
 - Last year, SERS successfully moved early (pre-65) retirees who are eligible for Medicare due to disability to Medicare. These members tend to have higher cost claims.
 - Per member per month (PMPM) medical costs in calendar year 2019 were lower than in calendar year 2018 due to these efforts.
 - For 2021 rate setting, due to staff efforts and actual SERS experience, we are assuming 5% per year to trend 2018 and 2019 medical claims.
 - For Prescription Drugs –

7% for Medicare and Non-Medicare

o No trend assumed on Medicare Part D reimbursements



Assumptions and Methods - Spouses and Child(ren)



- Two years ago, changed recommend using ratio of:
 - \circ 25% of retiree cost for child(ren),
 - \circ 80% of retiree cost for spouse.
- > Data supports continued use of those ratios.



2021 Non-Medicare Medical Plan Same As 2019 and 2020 ESI Contract Extension Savings for Prescription Drug Plan



	<u>2020</u>	Proposed Medical 2021
Deductible (Annual)	\$2,000/person \$4,000/family	\$2,000/person \$4,000/family
Co-insurance maximum	none	none
Out-of-Pocket Maximum	\$7,350/\$14,700	\$7,350/\$14,700
Office visit primary care	\$20 co-pay	\$20 co-pay
Specialist	\$40 co-pay	\$40 co-pay
Surgeon fee	20% coinsurance	20% coinsurance
Inpatient Hospital	20% coinsurance after \$250 co-pay	20% coinsurance after \$250 co-pay
Emergency Room	20% coinsurance	20% coinsurance
Ambulance	20% coinsurance	20% coinsurance
Urgent Care	\$40 co-pay	\$40 co-pay
Outpatient Diagnostic X-Ray	20% coinsurance	20% coinsurance
Outpatient Diagnostic Lab	20% coinsurance	20% coinsurance
Outpatient Surgery (Facility only)	20% coinsurance	20% coinsurance
Chiropractic	20% coinsurance	20% coinsurance
Durable Medical Equipment	20% coinsurance	20% coinsurance
Skilled Nursing Facility	20% coinsurance (100 day maximum)	20% coinsurance (100 day maximum)
Home Health Care	20% coinsurance	20% coinsurance
	Inpatient: 100% coverage after deductible,	Inpatient: 100% coverage after deductible,

Hospice

30 day lifetime limit. Outpatient: 20%
coinsurance after deductible30 day lifetime limit. Outpatient: 20%
coinsurance after deductible

2020 ESI contract extension saving incorporated in Prescription Drug Rates.



2021 Non-Medicare Medical Plan Same As 2020 Before COVID-19 Impact



Self Funded Non-Medicare

	Projected 2020	Projected 2021
	Medical	
Retiree	\$1,141.00	\$1,199.00
Spouse	\$913.00	\$959.00
Child	\$285.00	\$300.00
		Prescription Drug
Retiree	\$217.00	\$199.00
Spouse	\$174.00	\$159.00
Child	\$54.00	\$50.00
		Total
Retiree	\$1,358.00	\$1,398.00
Spouse	\$1,087.00	\$1,118.00
Child	\$339.00	\$350.00

5.1% increase in retiree medical costs, 8.3% decrease in retiree prescription drug cost, 2.9% increase in retiree total cost.



COVID – 19



- COVID-19 impact still uncertain as it is an evolving situation. Timing and severity of potential second wave is uncertain.
- Direct costs of COVID-19 in 2020 are offset in the short term due to delaying non-emergency care and surgeries.
- Increased use of tele-medicine could create cost savings going forward.
- Some concern about the supply chain of prescription drugs may impact availability of certain drugs or of generic drugs, which could lead to higher costs.
- Cost of any future treatment or vaccine. Vaccine will be covered under Medicare Part B instead of Part D for Medicare participants.



COVID – 19



- ➢ Greatest impact for self-funded plans for 2021 will be increased utilization in 2021 due to deferrals from 2020.
- Estimated impact on Non-Medicare Medical Plan is an additional \$6 million in care deferred from 2020. This will be offset somewhat by members who will have turned 65 and aged into Medicare before they receive deferred care.
- ➢ We are assuming no ultimate impact on drug trend at this time.



2021 Non-Medicare Medical Plan Same As 2020 After COVID-19 Impact



Self Funded Non-Medicare

	Projected 2020	Projected 2021
	Medical	
Retiree	\$1,141.00	\$1,314.00
Spouse	\$913.00	\$1,051.00
Child	\$285.00	\$329.00
		Prescription Drug
Retiree	\$217.00	\$199.00
Spouse	\$174.00	\$159.00
Child	\$54.00	\$50.00
		Total
Retiree	\$1,358.00	\$1,513.00
Spouse	\$1,087.00	\$1,210.00
Child	\$339.00	\$379.00

15.2% increase in retiree medical costs, 8.3% decrease in retiree prescription drug cost, 11.4% increase in retiree total cost.



Non-Medicare Eligible SERS Wraparound HRA Plan



- Marketplace Wraparound Plan Participants choose insurance from any insurer offering coverage in the federal Marketplace, and if eligible, receive a federal subsidy to lower the premium and costsharing amounts. The SERS Marketplace Wraparound Plan offers additional benefits to help pay for deductibles, co-pays, and other costs. There is no additional premium for the SERS Wraparound Plan.
- Reimbursement is capped at \$1,800 per participating family, per calendar year in accordance with federal limits.
- > 2018 and 2019 claims experience well below cost threshold.





- Medicare Part D Prescription Drug Plan (PDP) savings passed on to Medicare-eligible retirees only.
- Analysis of actual data for Calendar Year 2018 and 2019 indicated a Medicare Part D Prescription Drug Plan (PDP) direct reimbursement amount of approximately \$16 Per Member Per Month. This amount was not assumed to increase from experience period to 2021.
- Medicare Part D Prescription Drug Plan (PDP) receive other subsidies that are assumed to increase with trend:
 - CMS catastrophic reinsurance
 - Manufacturer coverage gap reimbursements





	Projected 2020 rate after contract extension savings	Projected 2021 rate after contract extension savings
Retiree	\$144.00	\$146.00
Spouse	\$144.00	\$146.00
Child	\$144.00	\$146.00



Indemnity Costs for Medicare Eligible



- Medicare eligible retirees (including those enrolled in Medicare Part B only) will continue to be enrolled in the fully insured Medicare Advantage Plan.
- However, some retirees (less than 1% of total) are not enrolled in the Medicare Advantage plan for various reasons. Medicare Indemnity rates are available for Medicare eligible members not in the Medicare Advantage Plan.
- Prescription drug rates for this group are the same as for other Medicare eligible members.
- Historical medical data for this group was very volatile and PMPM costs were high, so we had been holding the medical rates steady from year to year (\$950 for most members and \$800 for Part B only).
- Data has stabilized over the past few years and are trending lower, but the group remains a mix between long time members and members who use the plan for a short time before moving to Medicare Advantage.
- Therefore we have lowered the medical portion of the Medicare Indemnity rates somewhat and will continue to monitor the rates.



Results – Monthly Costs and Rates Current Prescription Drug Plan



Self Funded Medicare Indemnity Rates

	Projected 2019	Projected 2020	<u>2019 Part B</u> <u>Only</u>	2020 Part B Only
		Medical		
Retiree	\$950.00	\$600.00	\$800.00	\$600.00
Spouse	\$950.00	\$600.00	\$800.00	\$600.00
Child	\$950.00	\$600.00	\$800.00	\$600.00
	Prescription Drug			
Retiree	\$144.00	\$146.00	\$144.00	\$146.00
Spouse	\$144.00	\$146.00	\$144.00	\$146.00
Child	\$144.00	\$146.00	\$144.00	\$146.00
Total				
Retiree	\$1,094.00	\$746.00	\$944.00	\$746.00
Spouse	\$1,094.00	\$746.00	\$944.00	\$746.00
Child	\$1,094.00	\$746.00	\$944.00	\$746.00

2021 HEALTH CARE REVIEW AND BENEFIT CONSIDERATIONS

• Review of 2021 Health Care Review and Benefit Considerations

2021 Health Care Program

Christi Pepe, Director

Health Care Services

May 21, 2020

1



Health Care Fund Net Position





Serving the People Who Serve Our Schools®

Covid-19 Impact

- Deferred medical claims through 2020
- Potential increase in overall claims
- Uncertain expenses and revenues
- Approximately 700 non-Medicare plan enrollees will age into Medicare by 2021



Enrollment May 2020

Non-Medicare	
Aetna Choice	4,169
AultCare	211
Wraparound HRA	327
TOTAL	4,707

Optional Coverage		
Delta Dental	39,103	
VSP Vision	28,508	

Medicare	
Aetna Medicare	36,067
PrimeTime	1,017
TOTAL	37,084



Dental and Vision Rates

Delta Dental	2020 Premiums	2021 Premiums
Benefit Recipient	\$28.53	No change
Benefit Recipient and one dependent	\$57.06	No change
Benefit Recipient and two or more dependents	\$85.54	No change

VSP Vision	2020 Premiums	2021 Premiums
Benefit Recipient	\$7.11	No change
Benefit Recipient and one dependent	\$14.22	No change
Benefit Recipient and two or more dependents	\$16.70	No change



Aetna Choice / Aetna Medicare

- Statewide enrollment with national networks
- No 2021 proposed benefit changes
- Rate expectations

 non-Medicare Aetna Choice
 Aetna Medicare Advantage and ESLP





AultCare / PrimeTime History

Only available in Akron-Canton area

- AultCare offered in 18 counties since 2002
- PrimeTime offered in 10 counties since 2008

Costs

- Originally AultCare PrimeTime plans were less costly
- Historically provided combined plan savings



2020 AultCare / PrimeTime

AultCare

- Declining non-Medicare enrollment
- Full premium \$1,113 vs \$1,282 for Aetna Choice

PrimeTime

- Increasing premiums
- Full premium \$265 vs \$198 for Aetna Medicare

Savings advantage to SERS ended in 2018 Total 2020 cost to SERS: \$845,796



2021 AultCare / PrimeTime Rates

AultCare

• Proposed reduction in premium (\$17 reduction)

PrimeTime

• Proposed increase of \$15 increase

-or -

- Increase of just \$7 with benefit changes to match Aetna -and-
- Proposed SERS accept risk for Part D benefits



AultCare / PrimeTime Costs

AultCare Drime Time

Current 2020

	AultCare	Prime i ime
Enrollment	219	1,037
Savings/ <mark>(Cost)</mark> PMPM	\$128	(\$95)
Monthly Savings/ <mark>(Cost)</mark>	\$28,032	(\$98,515)
Net Impact per Year	(\$845,796)	

2021 Proposed Rates

AultCare PrimeTime

Savings/ <mark>(Cost)</mark> PMPM	\$141	(\$100)
Monthly Savings/ <mark>(Cost)</mark>	\$30,879	(\$103,700)
Net Impact per Year	(\$873,852)	

2021 Proposed Rates with PrimeTime Benefit Changes

AultCare PrimeTime

Savings/ <mark>(Cost)</mark> PMPM	\$141	(\$97)	
Monthly Savings/ <mark>(Cost)</mark>	\$30,879 (\$100,58		
Net Impact per Year	(\$836,520)		

AultCare / PrimeTime Costs

2021 Rates with Medical Only PrimeTime

	AultCare	PrimeTime
Enrollment	219	1,037
Savings/ <mark>(Cost)</mark> PMPM	\$141	(\$56)
Monthly Savings/ <mark>(Cost)</mark>	\$30,879	(\$58,072)
Net Impact per Year	(\$326,316)	

2021 Rates with Medical Only PrimeTime & Benefit Change

	AultCare	PrimeTime	
Enrollment	219	1,037	
Savings/ <mark>(Cost)</mark> PMPM	\$141	(\$51)	
Monthly Savings/ <mark>(Cost)</mark>	\$30,879	(\$52,887)	
Net Impact per Year	(\$264,096)		

AultCare / PrimeTime Options

- ✓ Continue AultCare and PrimeTime with 2021 premiums and no benefit changes (\$873,852 cost to SERS)
- ✓ Continue AultCare and PrimeTime with 2021 benefit changes to match Aetna Medicare Advantage (\$836,520 cost to SERS)
- ✓ Continue AultCare and PrimeTime Medical only transition Rx to SERS' ESI contract (\$326,316 cost to SERS)
- ✓ Continue AultCare and PrimeTime Medical only (transition Rx) and benefit changes to match Aetna Medicare Advantage (\$264,096 cost to SERS)
- ✓ Propose to continue AultCare; transition PrimeTime enrollees to
 ¹² Aetna Medicare (\$1.2M savings to SERS)

Discussion



KNOW YOUR RX. COALITION 1ST QUARTER RESULTS

• Presentation of Know Your Rx. Coalition 1st Quarter Results



Ohio SERS Board Meeting May 2020

Know Your Rx Coalition

Lucy Wells RPh, Clinical and Operations Director



Background – Know Your Rx Coalition Offering and SERS agreement



Optimal care and advocacy – Know Your Rx's Unique Advantage

	Know Your Rx	PBM
Additional unique clinical resources including management of Pharm-Assist offering	\checkmark	
Support to PBM account service model	\checkmark	
Educational resource for clients and members	\checkmark	
Oversight of PBM at individual claim level	\checkmark	
PBM claims data mining & analytics for issues detection	\checkmark	
Fundamental advocacy for clients and members	\checkmark	
Strategic planning and partnership	\checkmark	\checkmark
Submission and refill of a Mail order prescription	Coalition will contact prescribers for new Rxs after targeted member outreach	✓
Implementation		\checkmark
Day-to-day operational support		\checkmark
Basic Customer Service – ID cards, copay & coverage inquiry		\checkmark
Claims adjudication and pricing		\checkmark
Manufacturer rebate and formulary placement negotiation		\checkmark
Pharmacy network contracting		✓

3



Know Your Rx Coalition *Pharm-Assist* Offering

Free counseling service via live pharmacists

- Contact Members with lower cost prescription alternatives
- Contact Prescribers and Pharmacies on your behalf
- Guide you to lowest cost medication options (\$4 generic lists, copay cards, etc..)
- Contact PBM on your behalf as needed
- Provide medication information and prescription coverage information specific to your plan

www.KYRx.org

Lucy Wells – Clinical Director

Travis Albrecht – Associate Director

Marissa Boelhauf – Associate Director

Dedicated Clinical Pharmacists

Gina Beanland

Megan Clements

Whitney Deal

Trevor Freeman

Lea Goggin

Amy Griesser

Matt McMahan

Stacy Poskin

April Prather

Allison Russell

Patricia Walker

Zach Wilkerson



Agreement

Annual Fee to be billed in quarterly increments



Guaranteed ROI for SERS of Ohio

€

Statement of expectations of financial savings included in Memoradum if Agreement with guarantee of net zero to SERS of Ohio over life of contract



Termination options by either party based on financial performance included in MOA



Know Your Rx Coalition Results January – March 2020



March 2020 SERS - Pharm-Assist Results

January - March 2020 Activity and Savings

Entity	Unique Patient	% of Patients with Rx	Contacts	Actions	Annual patient savings	Annual plan savings	Total Annual Savings
SERS Medicare	509	1.5%	1905	1873	\$ 48,157.78	\$ 302,181.28	\$ 350,339.06
SERS Pre-65 Retiree	73	2.1%	261	253	\$ 2,898.12	\$ 66,090.52	\$ 68,988.64
SERS Employee	8	3.0%	36	39	\$ 240.00	\$ 6,223.56	\$ 6,463.56
Totals	590	1.6%	2202	2165	\$ 51,295.90	\$ 374,495.36	\$ 425,791.26

- Savings only captured/reported after alternative drug claim is actually dispensed
- Other patient interventions have been initiated and reporting will occur once confirmed drug has been dispensed

Contact Types

- Inbound from Patient, Plan, MD, PBM, Pharmacy
- Outbound from Patient, Plan, MD, PBM, Pharmacy
- Live Contact

Actions

- Fax
- MailReview
- PhoneEmail



Pharm-Assist Details (Jan-March 2020)

Drug	Patient Savings	Plan Savings	Intervention		
Basaglar	\$1,140	\$13,696	Lantus		
Calcipotriene	\$8	\$444	Podiatry Dispensing Prescriber		
Ciclopirox	\$318	\$0	GoodRx		
Fluoxetine	\$3,094	\$11,703	Tablets to Capsules		
Hyophen	\$73	\$ 0	generic		
Insulin Lispro	\$1,464	\$17,196	Humalog		
Invokana	\$400	\$0	Copay Card		
Jaridance	\$27,610	\$4,436	Invokana/Farxiga		
Ketoprofen	\$0	\$15,744	Podiatry Dispensing Prescriber		
Levemir	\$220	\$0	Lantus		
Levsin	\$354	\$1,143	generic		
Lyrica	\$1,958	\$12,574	generic		
Metformin	\$1,500	\$58,739	ER to XR		
Minocycline	\$0	\$6,608	lower cost version		
Novolin	\$280	\$6,388	Humulin		
Novolog	\$11,302	\$161,948	Humalog		
Nuvaring	\$0	\$289	generic		
Nystatin	\$8	\$876	Podiatry Dispensing Prescriber		
Oracea	\$240	\$4,472	lower cost doxycycline		
Oxiconazole	\$8	\$4,575	Podiatry Dispensing Prescriber		
Ozempic	\$400	\$0	Copay Card		
Phenohytro	\$0	\$4,653	liquid to tablets		
Uloric	\$898	\$458	generic		
Venlafaxine ER	\$22	\$48,554	Tablets to Capsules		
Total	\$51,296	\$374,495			



Cost Avoidance – Non-D Exclusion

- Know Your Rx Coalition identified Non-Part D drug claims that were processing on the SERS Medicare benefit in 2019
- Non-Part D drugs now excluded from coverage in 2020 with limited exceptions (Hemorrhoidal Suppositories/Creams, generic hyoscyamine, Syringes/needles)

2020 Cost Avoidance (Based on 2019 actual claims) \$533,197


Cost Avoidance – KYRx Custom Exclusion List

- SERS Commercial Plans (Non-Medicare Retirees and Employees)
- Effective 2/1/2020

Drug	Cost Avoidance	Number of Claims	Monthly Recurring
CICLOPIROX	\$215	3	No
CLOCORTOLONE PIVALATE	\$337	1	No
CLODERM	\$334	1	No
DOXYCYCLINE HYCLATE	\$830	1	No
DUEXIS	\$2,433	1	No
FLUOXETINE HCL*	\$722	4	Yes
METFORMIN ER OSMOTIC*	\$627	1	Yes
MINOCYCLINE HCL ER	\$1,393	1	No
ONEXTON	\$588	1	No
PENNSAID	\$6,808	3	No
RAYOS	\$5,408	1	No
TERBINAFINE HCL	\$639	2	No
TROKENDI XR *	\$1,564	2	Yes
VENLAFAXINE HCL ER*	\$2,719	4	Yes
XHANCE *	\$1,007	1	Yes
ZORVOLEX	\$401	1	No
ZTLIDO	\$295	1	No
TOTAL	\$26,322	29	

*maintenance medications

Savings only reported for initial attempt to fill, even though 5 of these Rxs would likely have had monthly recurring costs to plan



SERS Savings Summary/ROI

ROI thru March 2020 = 11.67 : 1

SERS/KYRX ROI	Jan-20	Feb-20	Mar-20	YTD 2020
PHARM-ASSIST	\$35,350	\$199,224	\$191,217	\$425,791
NON-D COST AVOIDANCE	\$533,197	\$0	\$0	\$533,197
CUSTOM EXCLUSION COST AVOIDANCE		\$9,636	\$16,685	\$26,322
TOTAL GROSS SAVINGS	\$568,547	\$208,860	\$207,902	\$985,310
KYRX FEES	\$28,125	\$28,125	\$28,125	\$84,375
TOTAL NET SAVINGS	\$540,422	\$180,735	\$179,777	\$900,935

Custom Exclusion List effective 2/1/2020 for SERS Commercial Plans



Comments

- Early activities focused around the "low hanging fruit"
 - Fluoxetine Tablets to Capsules
 - Venlafaxine ER Tablets to Capsules
- Progressed to driving out wasteful spend
 - Podiatrist offices as Dispensing Prescribers
 - Coalition Custom Exclusions
- Member costs/plan rebates in Insulin selections
- Savings are not being recorded until alternative drug is actually dispensed. With many members filling 90-day supplies, it will take a few months for savings from activities to be reported.



Discoveries – Shared with SERS and ESI Account Team



Opportunistic Dispensing

Florida Pharmacy – Eagle Ridge Pharmacy



- SERS Medicare Retirees receiving Rxs in mail from Florida Pharmacy
- Prescriber is unknown to the retirees (teledoc arrangement, ER?)
- Only \$\$\$\$ medications being shipped
- Often duplicate therapies with drug-drug interactions

Total plan expense Oct 2019-March 2020 = \$22K for only 3 patients

- KYRx Contacted SERS ESI Account Team for audit of claims
- KYRx recommendation to remove Eagle Ridge Pharmacy from network



Podiatry – Prescriber Dispensing

³harmacy offers Toe Fungus Foot Bath Treatments. Our foot bath treatments are for both toe fungus and foot fungus. Just soak your feet twice a day in a foot bath for 15 minutes with warm water and an anti-fungal medication.

Foot Bath Treatment:

- Generic medication less than 30.00 copay, foot
 bath comes free!
- Safer than any other treatment, does not



Progressive Podiatry and Foot & Ankle Specialists

- SERS Medicare Retirees being provided with multiple \$\$\$\$ medications to take home and use in a foot spa
- No indication of efficacy/stability of medications used in this manner
- Only \$\$\$\$ medications being provided

Total plan expense Oct 2019-March 2020 = \$156K for 8 patients

- KYRx Contacted SERS Benefits Administrator to check for medical claims on the Aetna side of the benefit
- KYRx contacted ESI Account Team possible removal from Rx network (Foot and Ankle Specialists no longer Rx provider)
- KYRx recommendation to remove both Progressive Podiatry and Foot & Ankle Specialist from Rx network





Observations

- 2019 coverage of Non- Medicare Part D drugs
 - Change for 2020 saving ~\$550K for 2020 plan
- Weight Loss drugs Medicare Part D exclusion
 - A few claims still processing with existing Prior Authorization
 - Notification to ESI account team for action
- Diclofenac 3% being prescribed in error for pain
 - Diclofenac 3% processing without Prior Authorization
 - 10 x more costly than Diclofenac 1% and only indication is dermatology
 - KYRx recommendation to adopt Diclofenac Prior Auth for 2021





Member Experience

Overwhelmingly outbound calls received well

- Members appreciate SERS providing this extra service and value
- Members have been delighted to realize copay savings (\$55 savings for 90 day fill has been impactful)
- SERS members have been properly cautious with contact from non-SERS phone number, but SERS newsletters have been helpful in validating Know Your Rx Coalition as vendor
- SERS members understand importance of driving out wasteful spend



Questions?

FUTURE CALENDAR DATES FOR 2020

AUDIT COMMITTEE MEETINGS

June 17 - 2:30 p.m. (Weds.) September 16 - 2:30 p.m. (Weds.) December 16 - 2:30 p.m. (Weds.)

COMPENSATION COMMITTEE MEETINGS

June 18 - 7:30 a.m. (Thurs.) September 17 - 7:30 a.m. (Thurs.) December 17 - 7:30 a.m. (Thurs.)

BOARD MEETINGS

June 18 and 19 (Thurs. and Fri.) July 16 and 17 (Thurs. and Fri.) September 17 and 18 (Thurs. and Fri.) October 15 and 16 (Thurs. and Fri.) November 19 and 20 (Thurs. and Fri.) December 17 and 18 (Thurs. and Fri.)

**NOTE: The above dates are tentative.

CONTINUED OR NEW BUSINESS Board Information Requested

ITEM 33.

ITEM 33 (A).

BOARD INFORMATION REQUESTS AND FOLLOW-UP ITEMS

EXECUTIVE SESSION

_____ moved and ______ seconded the motion that the Board go into Executive Session pursuant to R.C. 121.22 (G)(1) to discuss the employment and compensation of a public employee.

IN EXECUTIVE SESSION AT ______ A.M. / P.M.

RETURNED TO OPEN SESSION AT ______ A.M. / P.M.

ITEM 34.

PENSION SUSTAINABILITY

• Discussion item during the May Board meeting.

ADJOURNMENT

_____ moved that the Board adjourn to meet on Thursday, June 18, 2020 for their regularly scheduled meeting.

The meeting adjourned at ______ p.m.

Catherine Moss, Chair

Richard Stensrud, Secretary