SERS' June Board Meeting

June 18, 2020 8:30 a.m.



ZOOM

Retirement Board Agenda June 18, 2020

PLEDGE OF ALLEGIANCE

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

INVESTMENT REPORT

- 3. Annual Investment Plan (R)
- 4. Monthly Investment Report
- 5. Summary of Investment Transactions (R)

EXECUTIVE DIRECTOR'S REPORT

- 6. Executive Director's Update
- 7. Review of Administrative Expenses
- 8. FY 2021 Administrative Budget (R)
 - OSERS Holdings LLC (R)
- 9. Superannuation and Survivor Benefits (R)
- 10. Special Cases (R)

RETIREMENT REPORT

- 11. Executive Session pursuant to R.C. 121.22 (G)(5) to review applications for Disability Retirement Benefits (R)
 - Personal Appearance
 - Personal Appearance
- 12. Approval of Disability Benefits (R)
- 13. Approval of Appeal on Personal Appearance (R)
- 14. Disapproval of Appeal of Termination Any Occupation (R)

HEALTH CARE REPORT

- 15. Approval of 2021 Health Care Premiums and Plan Design Changes (R)
- 16. Approval of 2021 Dental and Vision Premiums (R)
- 17. Premium Discount Program (R)

AUDIT COMMITTEE REPORT

- 18. Amended Audit Committee Charter (R)
- 19. FY 2021 Internal Audit Plan and Audit Committee Update

BOARD COMMUNICATION AND POLICY ISSUES

- 20. Board Officer Election
- 21. Calendar Dates for Future Board Meetings
- 22. Continued or New Business
 - Board Information Requests and Follow-up Items

Adjournment (R)

APPROVAL OF MINUTES OF THE RETIREMENT BOARD MEETING HELD ON May 21 & 22, 2020

moved and	seconded the motion to approve the minutes of the Retirement
Board meeting held on Thursday and Fr	riday, May 21 & 22, 2020.

INVESTMENT MONTHLY AGENDA MEMO



Memo

To: Retirement Board

From: Farouki Majeed

cc: Richard Stensrud, Karen Roggenkamp

Date: June 5, 2020

Re: Investment Report for the May Board Meeting

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

- FY2021 Annual Investment Plan discussion. If acceptable to the Board, a resolution has been prepared for a vote to approve the FY21 Plan.
- Monthly Investment report for the period ended April 30, 2020

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

- Quarterly Risk Report March 31, 2020
- Monthly Top 20 Equity and Fixed Income Holdings Reports April 30, 2020
- ➤ Monthly Compliance Update memo April 30, 2020

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

ANNUAL INVESTMENT PLAN FY 2021

• Review of the Annual Investment Plan FY 2021





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®

TABLE OF CONTENTS

Executive Summary	2
Global Economic Outlook	5
Portfolio Strategies	
Global Equities	8
Global Private Equity	11
Multi-Asset Strategies	
Global Fixed Income	
Private Credit	19
Global Real Assets	20
Cash Equivalents	22
Opportunistic & Tactical	23
Overlay Program	25
Investment Risk Management and Analytics	26
Investment Operations	28
Investment Implementation Guidelines	
Global Equities	30
Global Private Equity	32
Multi-Asset Strategies	35
Global Fixed Income	36
Private Credit	39
Global Real Assets	42
Cash Equivalents	45
Opportunistic and Tactical	46
Overlay Program	47
References	
Sources	50
Glossary	52

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
- Overlay 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,

Farankin Mynid

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.

Table 1

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

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.

CURRENT MARKET CONDITIONS AND OUTLOOK

Cumulative Periods through March 31, 2020		Annualized			
	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

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 quidelines.

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.

PORTFOLIO COMPOSITION

	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 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.

SERS' Statement of Investment Policy 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%

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.

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

	Target	Permissible Range
Global Private Credit	3%	3% - 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. 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 Policy sets the Global Real Assets target allocation as follows:

	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 ecommerce 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 sharply 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%	15.0%	30.0%
Non-US Equity (NUSE)	22.5%	15.0%	30.0%

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

IMPLEMENTATION GUIDELINES - Global Equities

VII. RISK MANAGEMENT

	Active Risk Target
US Equity Portfolio	Tracking Error of 1.00% with a range of 0.0% to 1.5%
Non-US Equity Portfolio	Tracking Error of 2.5% within a range of 0% to 4%

US Equity Implementation Guidelines				
		Target	Permissible	
	Investment Benchmark	Allocation	Range	
US Equity Allocation	Russell 3000 Index	22.50%	15.0% - 30.0%	
	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	1.00%	0% - 1.5%	

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

Non-US Equity Implementation Guidelines				
		Target	Permissible	
	Investment Benchmark	Allocation	Range	
Non-US Equity Allocation	MSCI All Country World ex-US Index (\$net)	22.50%	15.0% - 30.00%	
1 7	Broad Market Exposur	е		
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%	0% - 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 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 11% allocation target to private equity with a range of 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.

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

		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%		

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.

IMPLEMENTATION GUIDELINES – Multi-Asset Strategies

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.

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 guidelines no longer pertain to MAS:

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

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 shortterm cash needs so SERS can remain as fully invested as possible.

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	N/A	Bloomberg Barclays US Aggregate
Core Plus	60 basis points	N/A	Bloomberg Barclays US Aggregate
Tactical/Diversifying	200 basis points	N/A	Bloomberg Barclays US Aggregate
Total Portfolio	50 basis points	0 – 4%	Bloomberg Barclays US Aggregate

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	25%	50%	
Tactical & Diversifying	5%	20%	

IMPLEMENTATION GUIDELINES – Global Fixed Income

VI. PERMISSIBLE INVESTMENTS

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

VII. RISK MANAGEMENT

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

Interest Rate

Controlled by duration band limits around the benchmark duration.

Yield Curve Risk

Controlled by duration band limits around the benchmark duration.

Sector Risk

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

Credit Risk

Portfolios must maintain a minimum exposure to investment grade securities. In addition, each manager 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.

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

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

II. ASSET ALLOCATION

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.

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

The portfolio is tilted toward direct lending investments and does not have a target allocation to mezzanine due to the structure of investments typically containing a 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	Υ
Co-Investments	Υ
Separate Accounts	Υ

Investment Type	
Direct Lending	Υ
Mezzanine	Υ
Stressed/Distressed	Υ
Structured Credit and Other (specialty finance, etc.)	Y

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.

Mezzanine

Net Expected Return: 8-12%, High Risk

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.

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.

Interest Rate Risk

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

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.

Geography Risk

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

Vintage Risk

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

Manager Risk

Manager risk consists of two elements, managing the exposure within a partnership and controlling the number of general partners in the 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 portfolio varies with time.

Firm Risk

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

Currency Risk

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

Industry/Sector Risk

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

Leverage Risk

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

Valuation Risk

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

IMPLEMENTATION GUIDELINES – Global Real Assets

I. ROLE

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

II. ASSET ALLOCATION

SERS' Statement of Investment Policy sets the global real asset target allocation at 16%, with a permissible range of 14% 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	Υ
Co-Investments	Υ
Separate Accounts	Υ
Commingled Funds	Υ
Joint Ventures	Υ
Private Real Estate Equity and Debt	Υ
Real Estate Investment Trusts (REITs)	Υ
Private Infrastructure Equity and Debt	Υ
Public Infrastructure Securities and MLPs	Υ
Natural Resources and Commodities	Υ

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	26%	24%	15% - 40%
Industrial	18%	29%	15% - 40%
Office	35%	26%	20% - 40%
Retail	20%	13%	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	NCREIF Property	Private Market	
December 31, 2019)	Index	Portfolio	Range
West	40%	35%	20% - 50%
East	32%	36%	20% - 50%
Midwest	8%	8%	5% - 20%
South	20%	21%	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 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	Υ
Commercial Paper rated A-1/P-1 or higher	Υ
Money Market Funds rated at least A-1/P-1	Υ
Unrated Market Funds comparable to a A-1/P-1 sister fund	Υ

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 Bloomberg Barclays US Aggregate Bond Index + 2% by investing in assets and strategies that do not fit within the existing asset classes. The investments are defined as tactical or non-traditional investment opportunities.

II. ASSET ALLOCATION

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

III. BENCHMARK

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

IV. PERFORMANCE OBJECTIVE

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

V. PORTFOLIO DESIGN AND CONSTRUCTION

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

VI. PERMISSIBLE INVESTMENTS

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

VII. RISK MANAGEMENT

Leverage

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

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

III. BENCHMARK

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

IV. PERFORMANCE OBJECTIVE

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

V. PORTFOLIO DESIGN AND CONSTRUCTION

The mandates are unfunded. The overlay strategies buy (long) or sell (short) futures or forwards 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, gold forwards, gold futures, 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 8%; the aggregate active currency program's tracking error is expected to be in the range of 5 to 8%.

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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 guoting 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 30day 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 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 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).



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ANNUAL INVESTMENT PLAN FY 2021

moved and			seconded the motion to
approve the Annual Investment Plan for fiscal	year ending June 3), 2021, whi	ch replaces the 2020
Annual Investment Plan, originally approved J	une 20, 2019.		

MONTHLY INVESTMENT REPORT

• Review of the Investment Blue Book (Period ended April 30, 2020)

Ohio SERS Investment Report

Monthly Report to the Board

For the period ending: April 30, 2020

Prepared by Investment and IAD Staff

Farouki Majeed, Chief Investment Officer

Meeting Date: June 2020



Ohio SERS Investment Report

Investment Agenda

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

Economic and Financial Market Outlook



Ohio SERS Investment Report

Month Ending: 04/30/2020

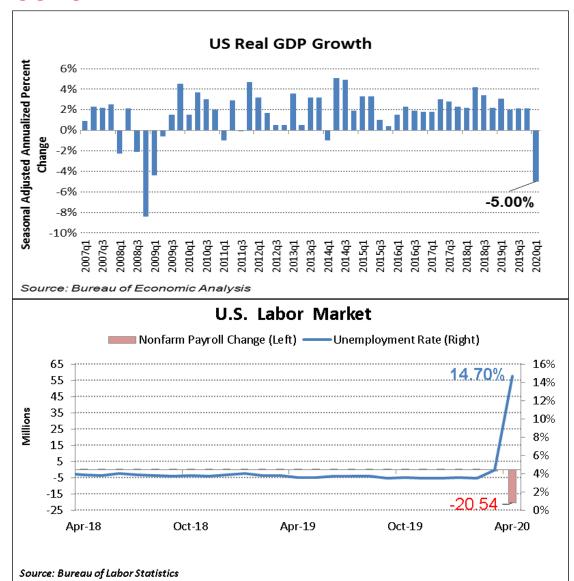
- Q1 2020 US real GDP contracted at an annualized rate of 5.0%. The main drivers of Q1 contraction were negative contributions from personal consumption expenditures (PCE), nonresidential fixed investment, exports, and private inventory investment. As the Coronavirus pandemic was reaching a peak, most business activities were paused in April. However, 90% of participants in the Blue Chips economic survey considered "April `as the month with the weakest activity". (Source: Bureau of Economic Analysis and Blue Chip Economic Indicators).
- The April US labor market showed more severe damage, losing 25 million jobs; the unemployment rate tripled to 14.5% in April. Although the number of workers receiving jobless payments was 21 million, initial weekly jobless claims have declined for eight straight weeks as of May 16. (Sources: Bureau of Labor Statistics and Department of Labor).
- The US headline inflation declined further to 0.30%. Over the last 12 months, the energy index declined 17.7% while the food index increased 3.5%, the largest 12-month increase since early 2012. The core inflation, excluding food and energy, was down to 1.4%. (Source: Bureau of Labor Statistics).
- The 10-year Treasury nominal yield was 64 bps in April, little changed from March. The 10- year real yield was 34 bps.
- The housing market, S&P Case-Shiller 20-City home price index, posted an annual gain of 3.9% in March.
- The Consumer Sentiment Index released by Thomson Reuters and University of Michigan was down 71.8, which was 19% lower than the previous month and 26% lower than a year ago. The US and Global Economic Surprise indices also plummeted sharply in April. The Leading Economic Index (LEI) issued by the Conference Board fell to 98.8 from 103.4.
- The JPMorgan PMI global composite Index declined in April to 26.5. The Global Service Index was down to 24 while the Manufacturing Index was down to 39. The US did relatively better as the US Manufacturing PMI and Non-Manufacturing PMI were down to 41.5 and 41.8, respectively. (Source: Institute for Supply Management, Markit).
- Equity markets bounced back in April in anticipation of reopening the economy. USE equity markets gained 13.24%. The Non-US developed and emerging markets returned 6.97% and 9.16%, respectively. The equity implied volatility index VIX retreated from the all time high in March to 53.54 on 3/31, and 34.15 on 4/30.
- The US fixed income markets, Bloomberg Barclay's US Aggregate Bond Index, gained 1.78% for the month.



Ohio SERS Investment Report

Month Ending: 04/30/2020

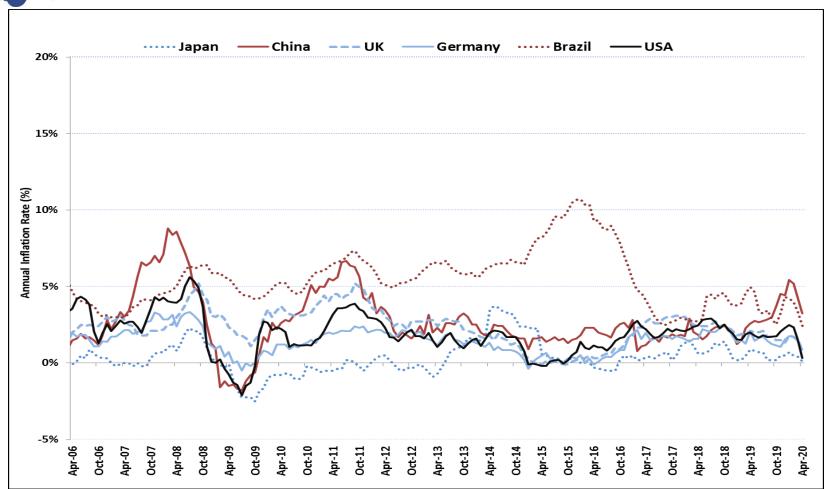
ECONOMY US Real GDP Growth and Labor Market







Ohio SERS Investment Report **ECONOMY** Headline Inflation



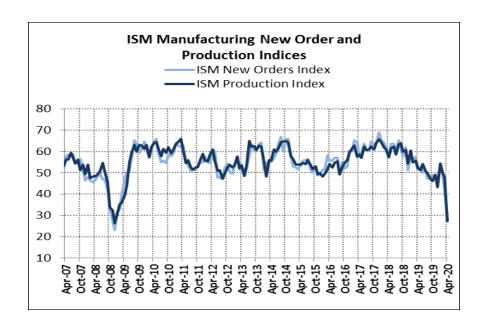
	Japan	China	UK	Germany	Brazil	USA
Apr-20	0.1	3.3	0.8	0.9	2.4	0.3

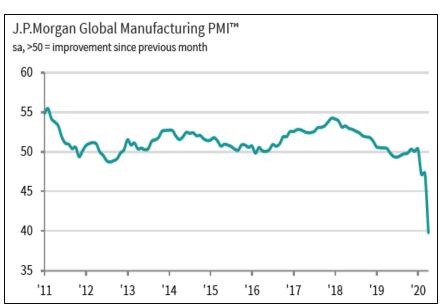


Ohio SERS Investment Report

Month Ending: 04/30/2020

ECONOMY US & Global Manufacturing Activities

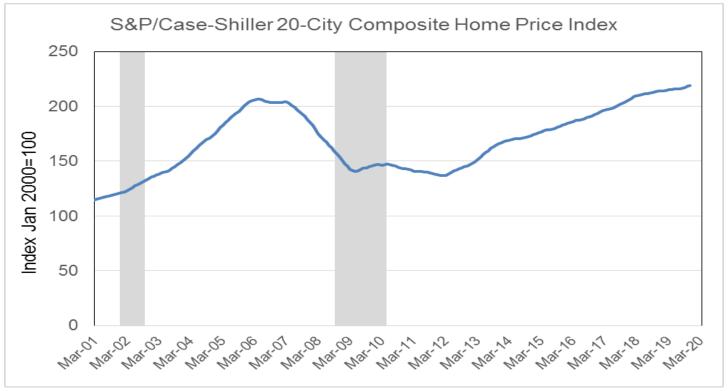






Ohio SERS Investment Report **ECONOMY** US Housing Market

Month Ending: 04/30/2020

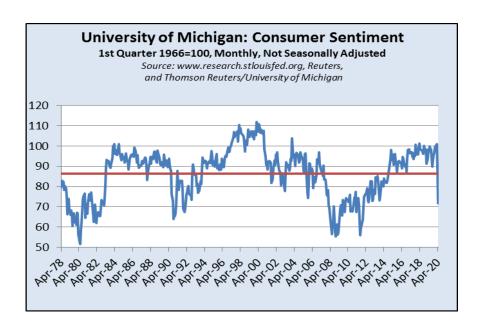


Date	S&P Case-Shiller 20-City Home Price Index January 2000 = 100, Seasonally Adjusted
Jul-15	179.35
Jul-16	188.69
Jul-17	199.85
Jul-18	211.70
Jul-19	216.09
Mar-20	223.21



Ohio SERS Investment Report **ECONOMY**

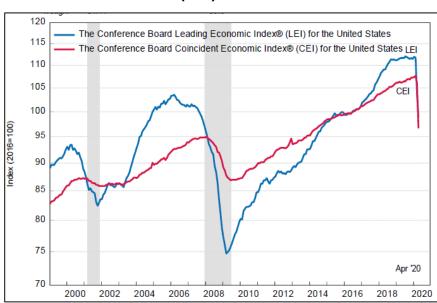
Consumer Sentiment



Index of Consumer SentimentMar-20Apr-20Apr-19M-M ChangeY-Y Change89.171.897.2-19.4%-26.1%

Month Ending: 04/30/2020

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



Index	Feb-20	Mar-20	Apr-20	Month -Month Percent Change	6-Month Percent Change
LEI	111.7	103.4 r	98.8 p	-4.4	-11.3
CEI	107.6	106.0 r	96.6 p	-8.9	-9.6

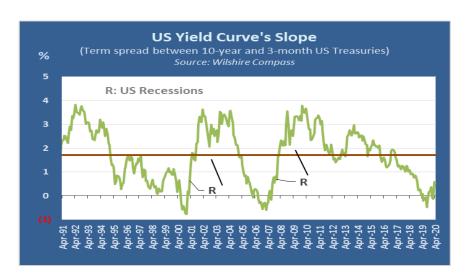
p Preliminary; r Revised

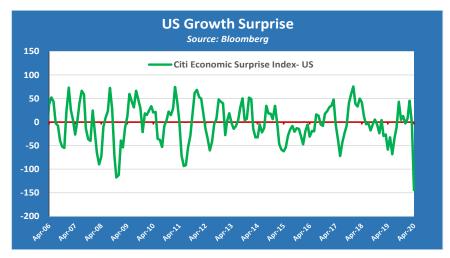
Source: The Conference Board



Ohio SERS Investment Report **ECONOMY**

Month Ending: 04/30/2020



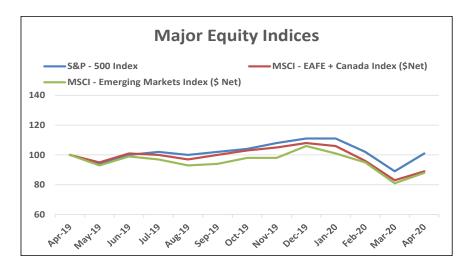




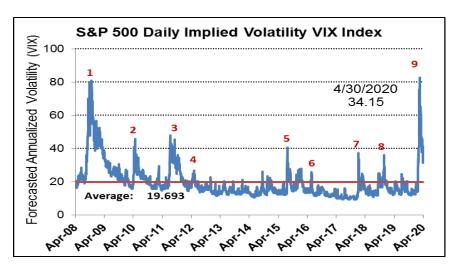


Ohio SERS Investment Report MARKETS Equity

Month Ending: 04/30/2020



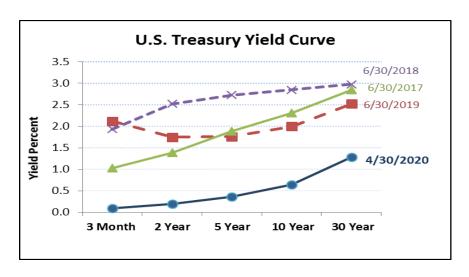
	Return as of 4/30/2020		
	1 Year	FYTD	
S&P 500	0.86	0.62	
MSCI - EAFE + Canada Index (\$Net)	-11.47	-12.28	
MSCI - Emerging Markets Index (\$Net)	-12.00	-10.69	

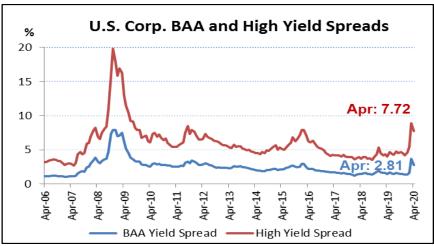


1	2008 (Nov.)	Financial Crisis S&P 500: - 48.8%
2	2010 (May)	Flash crash; Europe/ Greece debt S&P 500: -16%
3	2011 (Aug.)	US downgrade, Europe periphery S&P 500: -19.4%
4	2012 (June)	Eurozone double dip S&P 500: -9.9%
5	2015 (Aug.)	Global slowdown, China, Fed S&P 500: -12.4%
6	2016 (Feb.)	Oil crash,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

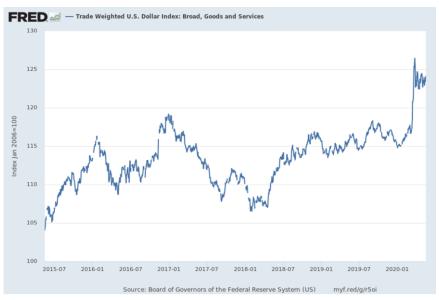




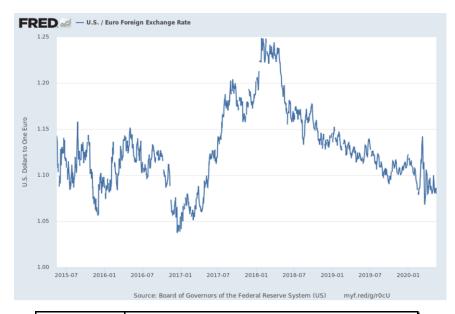


Ohio SERS Investment Report MARKETS Foreign Exchange

Month Ending: 04/30/2020



	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
April-20	122.67

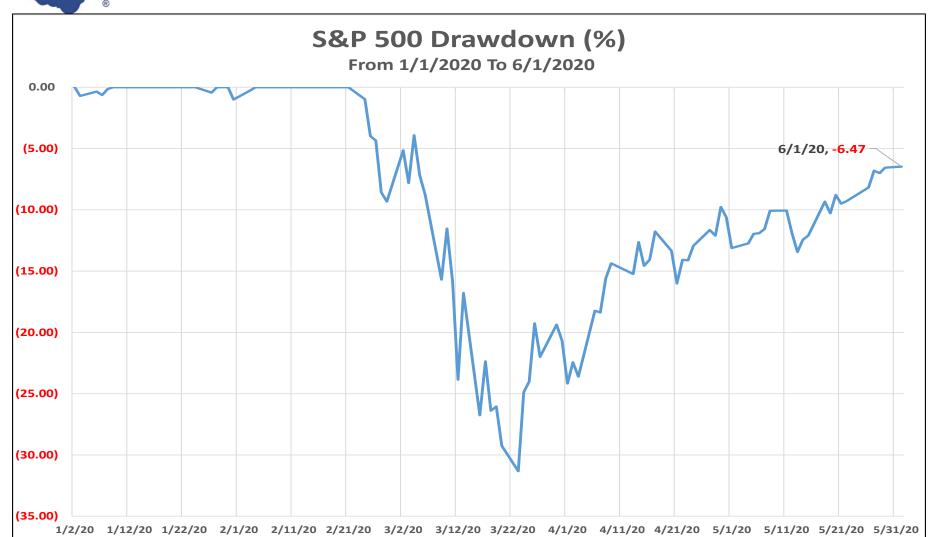


	U.S. / Euro Foreign Exchange Rate						
Date	U.S. Dollars to One Euro						
June-15	1.12						
June-16	1.10						
June-17	1.14						
June-18	1.17						
June-19	1.14						
April-20	1.09						

Source: www.research.stlouisfed.org

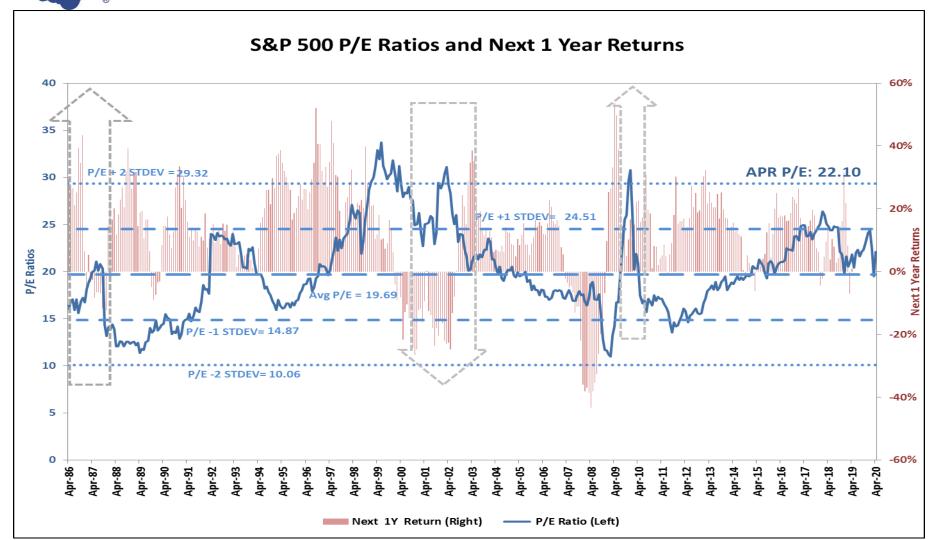


Month Ending: 04/30/2020



Ohio SERS Investment Report VALUATION US Equity

Month Ending: 04/30/2020



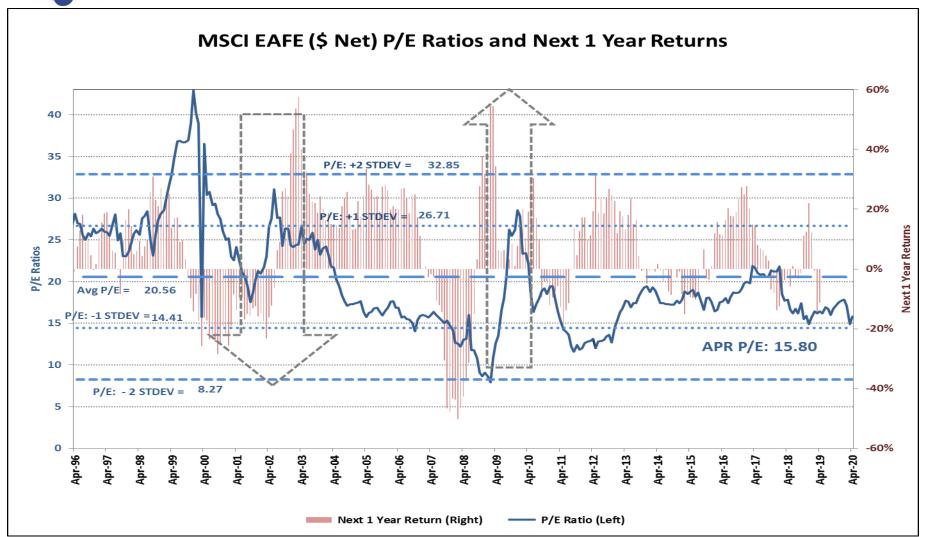
Source: Wilshire Compass



Month Ending: 04/30/2020

VALUATION

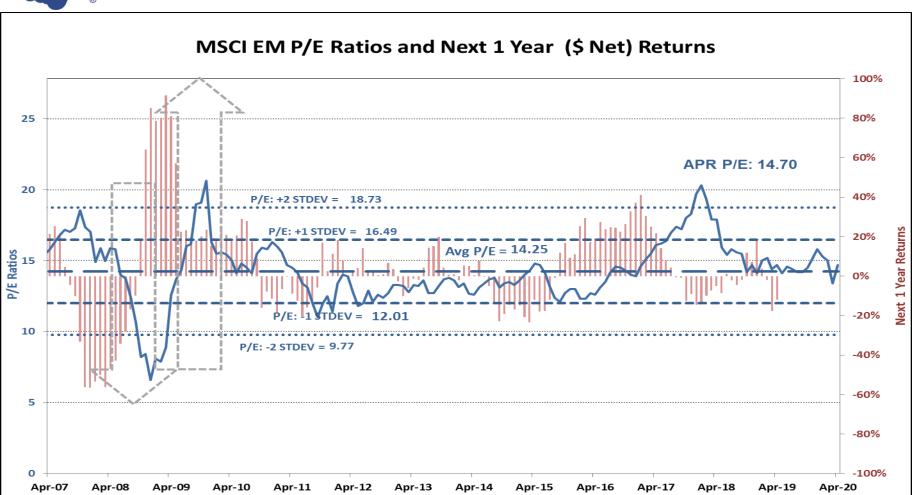
Non US Developed Market Equity



Source: Wilshire Compass

Ohio SERS Investment Report VALUATION Emerging Market Equity

Month Ending: 04/30/2020



Next 1 Year (\$ Net) Returns

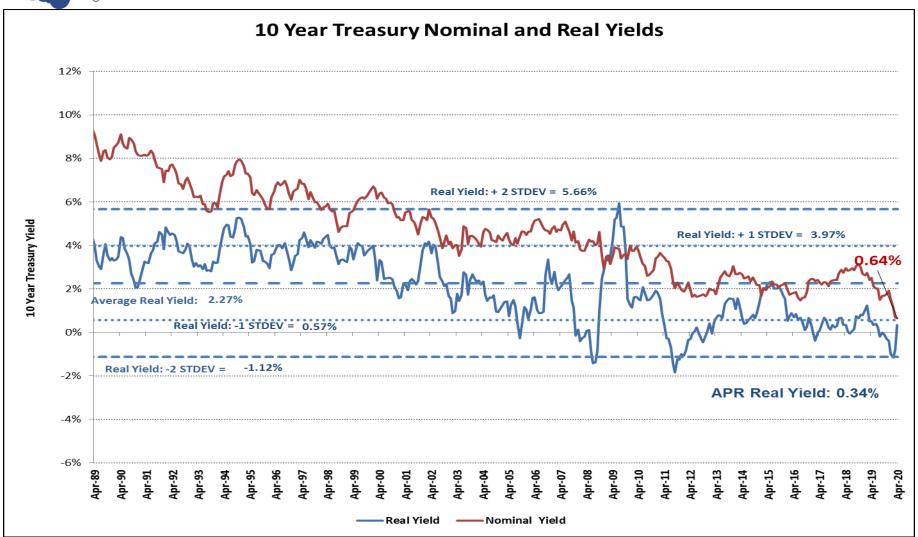
—P/E Ratios

Source: Wilshire Compass



Ohio SERS Investment Report VALUATION US Treasury Bonds

Month Ending: 04/30/2020



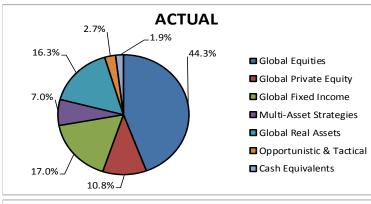
SERS' Investment Portfolios Review

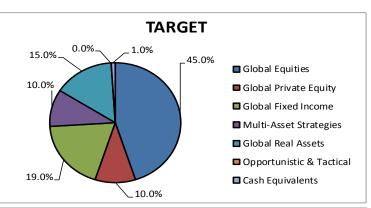


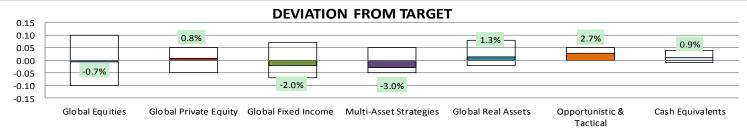
Month Ending: 04/30/2020

Total Fund: Asset Allocation & Valuation

Asset Class	Market Value \$	Actual	Target	Range
Global Equities	6,296,438,189	44.3%	45.0%	35% - 55%
US Equity	3,401,969,072	23.9%	22.5%	17.5% - 27.5%
Non-US Equity	2,894,469,117	20.4%	22.5%	17.5% - 27.5%
Global Private Equity	1,538,071,171	10.8%	10.0%	5% - 15%
Global Fixed Income	2,413,025,186	17.0%	19.0%	12% - 26%
Multi-Asset Strategies	995,385,034	7.0%	10.0%	5% - 15%
Global Real Assets	2,311,119,946	16.3%	15.0%	10% - 20%
Opportunistic & Tactical	384,964,521	2.7%	0.0%	0% - 5%
Cash Equivalents	273,145,759	1.9%	1.0%	0% - 5%
Short-Term	198,558,090	1.4%	1.0%	
Russell EA Overlay	40,230,588	0.3%	0.0%	
Direct Rebalance Overlay	7,877,071	0.1%	0.0%	
Currency Overlay	26,480,010	0.2%	0.0%	
Total Fund	14,212,149,805	100.0%	100.0%	

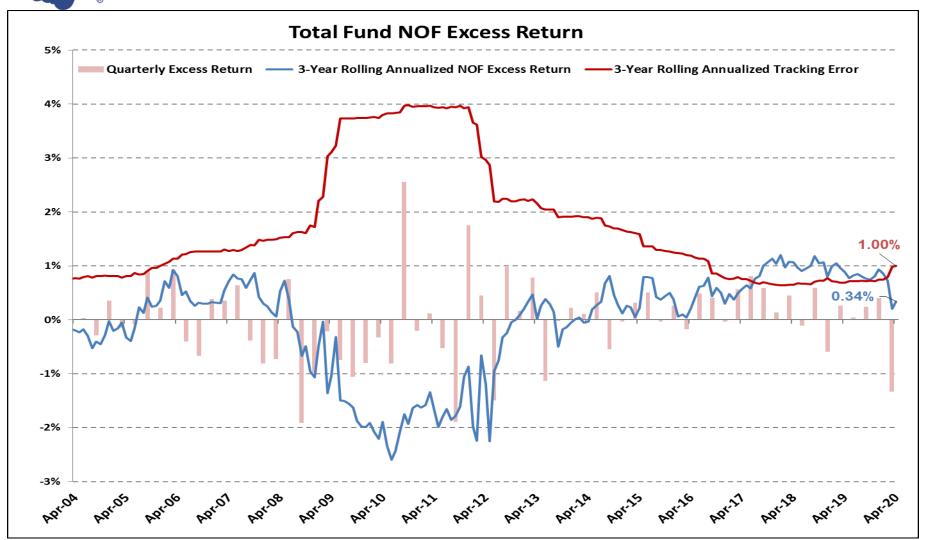






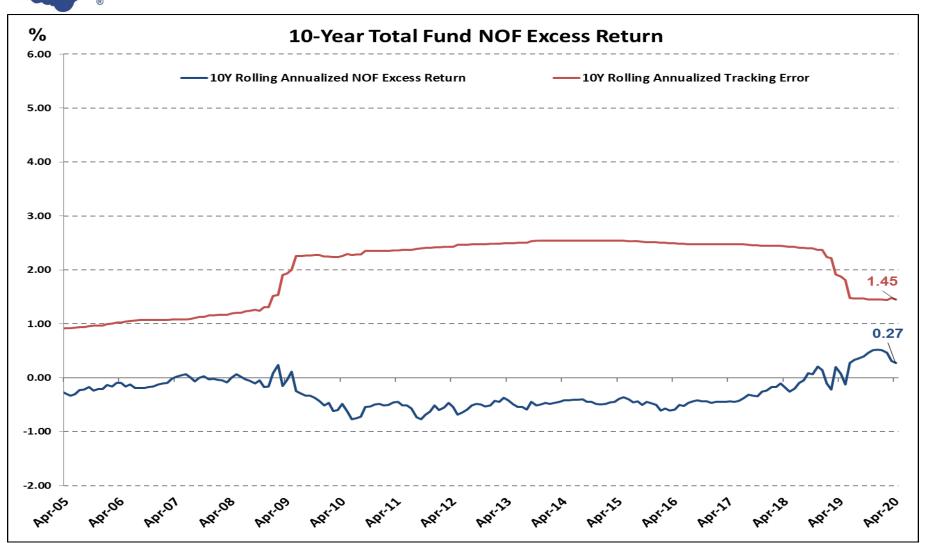












Month Ending: 04/30/2020

Total Fund Performance

Current Benchmark:

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

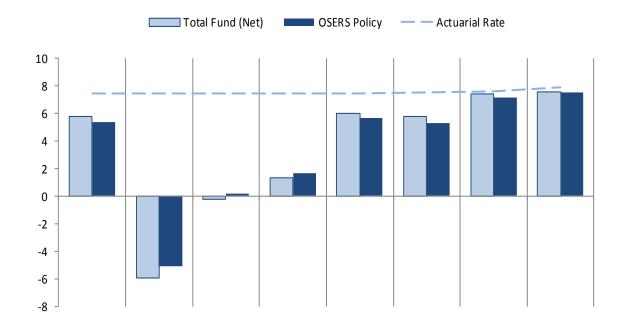
Composite plus 1%

1% Citigroup 30 Day US T-Bill

0% Opportunistic & Tactical (OSERS Policy-Benchmark)

Actuarial Rate

(7.5% adopted 4/21/16)

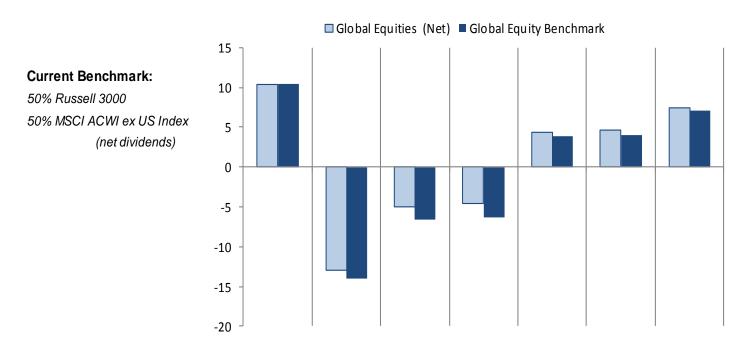


	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year	ITD*
Total Fund (Gross)	5.87	(5.78)	0.32	1.95	6.67	6.51	8.18	7.92
Total Fund (Net)	5.82	(5.98)	(0.21)	1.31	5.99	5.83	7.45	7.41
OSERS Policy	5.39	(5.11)	0.17	1.70	5.65	5.31	7.18	7.58
Value Added (Net of Fee)	0.44	(0.86)	(0.38)	(0.38)	0.34	0.52	0.27	(0.17)

^{*}ITD is Inception date 10/1/1994 (25 years and 7 months)

Month Ending: 04/30/2020

Global Equities Performance

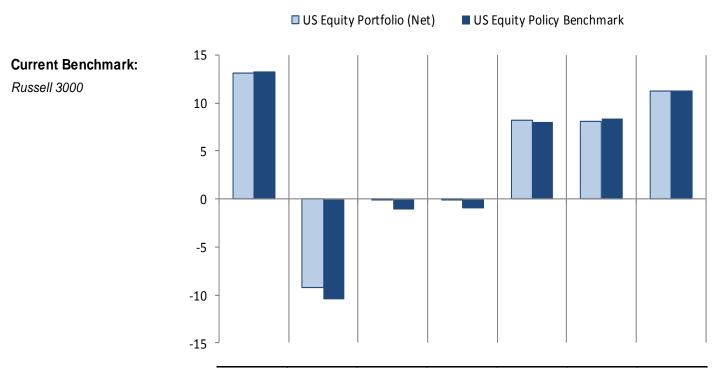


	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Global Equities (Gross)	10.41	(12.92)	(4.74)	(4.27)	4.74	4.95	7.87
Global Equities (Net)	10.39	(13.01)	(4.97)	(4.55)	4.42	4.62	7.50
Global Equity Benchmark	10.41	(14.02)	(6.56)	(6.36)	3.88	4.07	7.16
MSCI ACWI	10.76	(12.78)	(4.78)	(4.43)	5.03	4.94	7.52
Value Added (Net of Fee)	(0.02)	1.01	1.59	1.81	0.54	0.55	0.34



Month Ending: 04/30/2020

US Equity Performance

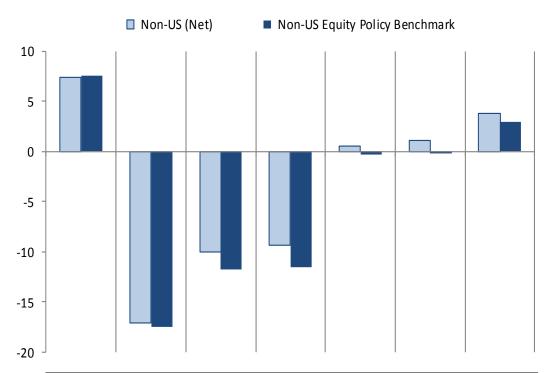


	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
US Equity Portfolio (Gross)	13.09	(9.13)	0.02	0.15	8.39	8.37	11.50
US Equity Portfolio (Net)	13.08	(9.17)	(0.13)	(0.03)	8.17	8.12	11.18
US Equity Policy Benchmark	13.24	(10.42)	(1.14)	(1.04)	8.02	8.33	11.29
Value Added (Net of Fee)	(0.17)	1.25	1.01	1.01	0.14	(0.22)	(0.11)

Month Ending: 04/30/2020

Non-US Equity Performance





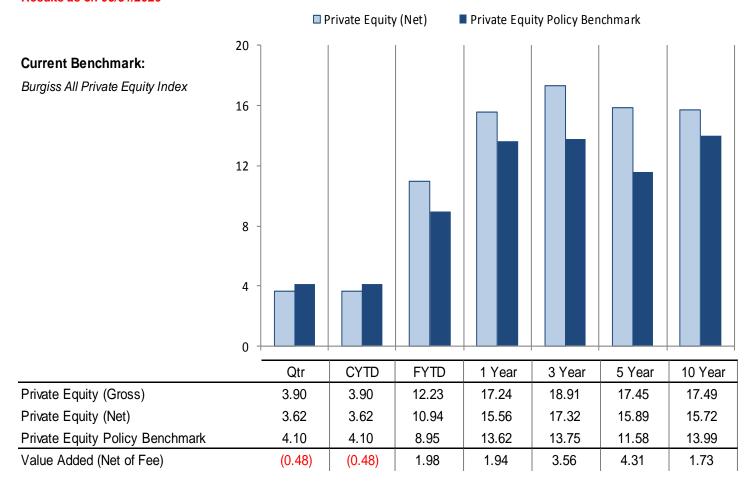
	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Non-US (Gross)	7.45	(16.94)	(9.74)	(8.91)	1.00	1.53	4.23
Non-US (Net)	7.42	(17.07)	(10.06)	(9.29)	0.57	1.13	3.80
Non-US Equity Policy Benchmark	7.58	(17.55)	(11.80)	(11.51)	(0.25)	(0.17)	3.00
Value Added (Net of Fee)	(0.15)	0.47	1.75	2.22	0.82	1.30	0.79



Month Ending: 04/30/2020

Global Private Equity Performance

Results as of: 03/31/2020

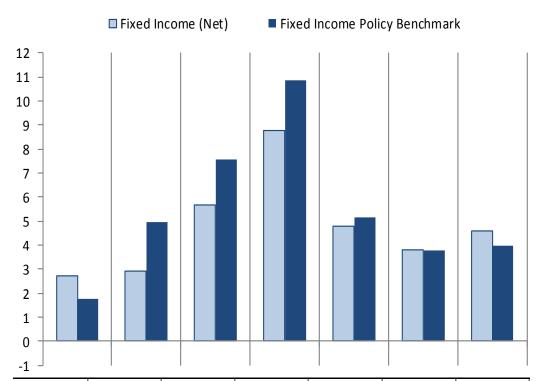




Month Ending: 04/30/2020

Global Fixed Income Performance

Current Benchmark: Bloomberg Barclays Aggregate Bond Index



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Fixed Income (Gross)	2.75	2.96	5.86	9.00	5.03	4.03	4.81
Fixed Income (Net)	2.73	2.90	5.68	8.79	4.81	3.81	4.58
Fixed Income Policy Benchmark	1.78	4.98	7.56	10.84	5.17	3.80	3.96
Value Added (Net of Fee)	0.95	(2.09)	(1.87)	(2.05)	(0.36)	0.02	0.62

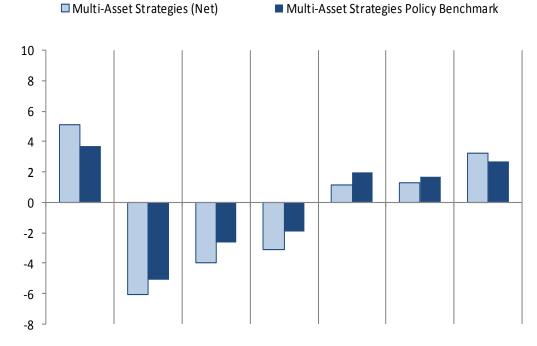


Month Ending: 04/30/2020

Multi-Asset Strategies Performance

Current Benchmark:

HFRI Fund of Funds Composite plus 1%



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Multi-Asset Strategies (Gross)	5.24	(5.67)	(2.96)	(1.93)	2.47	2.65	4.78
Multi-Asset Strategies (Net)	5.14	(6.06)	(3.94)	(3.12)	1.13	1.27	3.22
Multi-Asset Strategies Policy Benchmark	3.67	(5.10)	(2.63)	(1.92)	1.99	1.67	2.66
Value Added (Net of Fee)	1.46	(0.95)	(1.30)	(1.20)	(0.86)	(0.40)	0.56



Month Ending: 04/30/2020

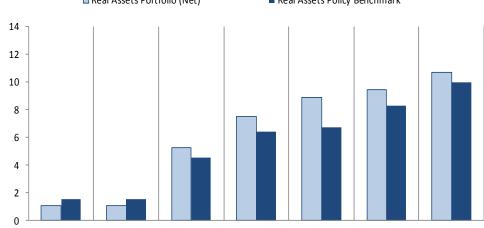
Global Real Assets Performance

Results as of: 03/31/2020

■ Real Assets Portfolio (Net)

■ Real Assets Policy Benchmark

Current Benchmark: NCREIF Property Index (1q lag)

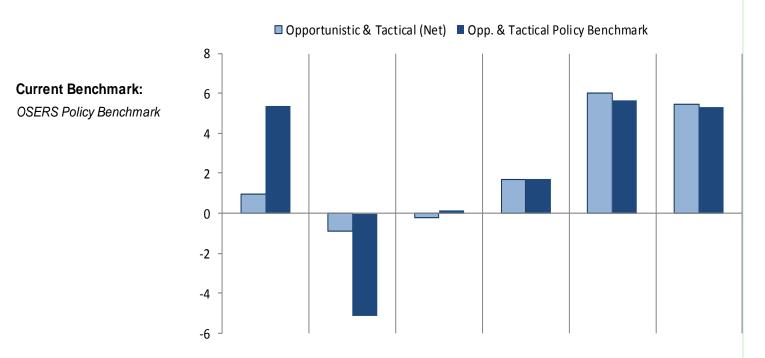


	Qtr	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Real Assets Portfolio (Gross)	1.28	1.28	5.95	8.47	9.96	10.56	11.87
Real Assets Portfolio (Net)	1.06	1.06	5.24	7.49	8.85	9.43	10.66
Real Assets Policy Benchmark	1.55	1.55	4.54	6.42	6.70	8.25	9.99
Real Assets Value Added (NOF)	(0.49)	(0.49)	0.70	1.07	2.16	1.18	0.67
Real Assets Core (Net)	1.70	1.70	5.03	7.19	8.07	9.09	11.36
Real Assets Policy Benchmark	1.55	1.55	4.54	6.42	6.70	8.25	9.99
Real Assets Core Value Added (NOF)	0.15	0.15	0.49	0.77	1.37	0.84	1.37
Real Assets Non-Core (Net)	(1.60)	(1.60)	6.31	9.05	9.16	9.62	9.84
Real Assets Policy Benchmark	1.55	1.55	4.54	6.42	6.70	8.25	9.99
Real Assets Non-Core Value Added (NOF)	(3.15)	(3.15)	1.77	2.63	2.46	1.37	(0.15)
Real Assets Infrastructure (Net)	4.48	4.48	10.16	12.87	14.62	n/a	n/a
Real Assets Policy Benchmark	1.55	1.55	4.54	6.42	6.70	n/a	n/a
Real Assets Infrastructure Value Added (NOF)	2.93	2.93	5.62	6.45	7.92	n/a	n/a



Month Ending: 04/30/2020

Opportunistic & Tactical Performance

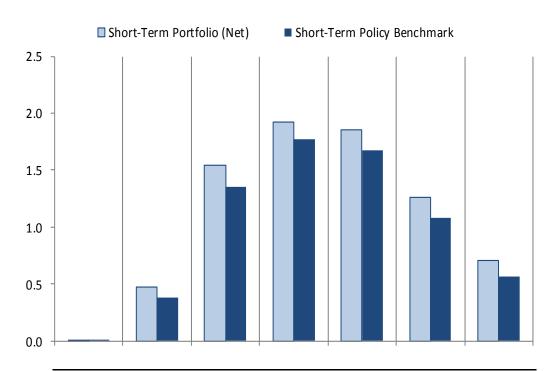


	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year
Opportunistic & Tactical (Gross)	1.12	(0.31)	1.14	3.29	7.63	6.88
Opportunistic & Tactical (Net)	0.98	(0.88)	(0.24)	1.66	6.04	5.44
Opp. & Tactical Policy Benchmark	5.39	(5.11)	0.17	1.70	5.65	5.31
Value Added (Net of Fee)	(4.41)	4.24	(0.40)	(0.03)	0.39	0.12

Month Ending: 04/30/2020

Short-Term Performance

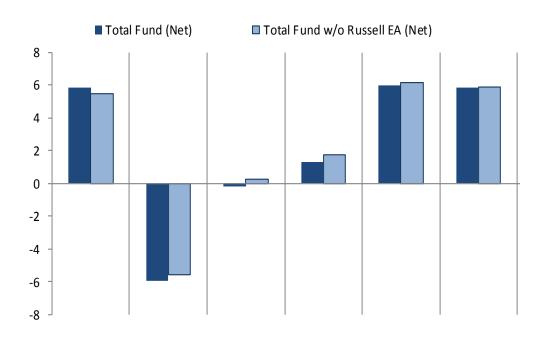
Current Benchmark: FTSE 30 Day Treasury Bill



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year	10 Year
Short-Term Portfolio (Gross)	0.01	0.47	1.54	1.92	1.86	1.27	0.71
Short-Term Portfolio (Net)	0.01	0.47	1.54	1.92	1.86	1.27	0.71
Short-Term Policy Benchmark	0.00	0.38	1.36	1.77	1.68	1.08	0.57
Value Added (Net of Fee)	0.01	0.09	0.19	0.15	0.18	0.18	0.15

Month Ending: 04/30/2020

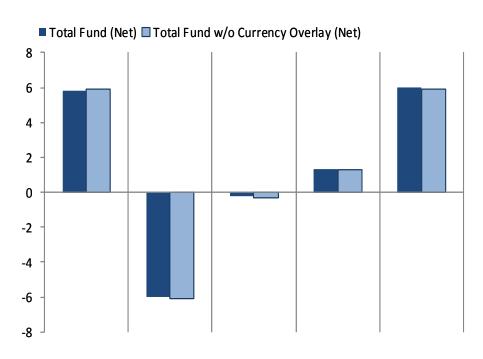
Russell EA Overlay Performance



	1 Month	CYTD	FYTD	1 Year	3 Year	5 Year
Total Fund (Gross)	5.87	(5.78)	0.32	1.95	6.67	6.51
Total Fund w/o Russell EA (Gross)	5.48	(5.37)	0.76	2.39	6.79	6.55
Total Fund (Net)	5.82	(5.98)	(0.21)	1.31	5.99	5.83
Total Fund w/o Russell EA (Net)	5.44	(5.56)	0.24	1.75	6.12	5.88
Russell EA Overlay Impact (Net of Fee)	0.39	(0.41)	(0.44)	(0.44)	(0.12)	(0.05)

Month Ending: 04/30/2020

Currency Overlay Performance



	1 Month	CYTD	FYTD	1 Year	3 Year
Total Fund (Gross)	5.87	(5.78)	0.32	1.95	6.67
Total Fund w/o Currency Overlay (Gross)	5.95	(5.92)	0.18	1.84	6.60
Total Fund (Net)	5.82	(5.98)	(0.21)	1.31	5.99
Total Fund w/o Currency Overlay (Net)	5.90	(6.09)	(0.30)	1.31	5.94
Currency Overlay Impact (Net of Fee)	(0.07)	0.11	0.09	0.00	0.05

34



<u>Proposed Investment Agenda – Next Meeting</u>

Review of Overlay Program

Monthly Investment Report (May 31, 2020)

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
April 1, 2020 through April 30, 2020 hereby be	e approved. A detailed list of these transactions is found
in the Board Agenda posted prior to the June 2	020 Retirement Board Meeting.

A. PURCHASES

Asset Class	Approximate Cost (in millions)
US Equities	\$ 22.9
Non-US Equities	129.3
Fixed Income	486.4
Multi-Asset Strategies	11.6
Private Equity Capital Calls	36.0
Real Asset Capital Calls	36.8
Opportunistic	30.6
Cash Equivalents	491.7

B. SALES

Asset Class	Approximate Net Proceeds (in millions)	Approximate Gain/(Loss) (in millions)
US Equities	\$ 27.8	\$.2
Non-US Equities	207.61	(4.3)
Fixed Income	409.9	6.8
Multi-Asset Strategies	28.2	3.3
Private Equity distributions	6.96	n/a
Real Asset distributions	11.6	n/a
Opportunistic	1.7	(0.9)
Cash Equivalents	448.0	n/a

EXECUTIVE DIRECTOR'S UPDATE

• Executive Director's Discussion Item

LEGISLATIVE REPORT

STATE LEGISLATION BOARD REPORT 133rd General Assembly (Prepared by Chris Collins as of June 5, 2020)

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 June 5, 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: June 3, 2020

Re: Federal Legislative and Regulatory Report

OVERVIEW

Highlights for May and early June include: the passage of the next piece of legislation to address the economic impact for citizens and businesses from the global pandemic; the ensuing dialogue in Congress how to best address the civil unrest across the country after the death of George Floyd in Minneapolis; the passage in the House of rules to provide remote voting by proxy capabilities during the pandemic emergency and the continued discussion in the Senate; advocacy to seek a revision to the regulations relating to HRA Excepted Benefit Plans with three regulatory agencies; discussion on upcoming Appropriations bills in the House and Senate to seek inclusion of reauthorization language for Wraparound Plans; and following state and local funding issues that may cause Congress to enact legislation to restrict the use of coronavirus stimulus dollars destined for states and local communities, not public pension plans.

The House of Representatives scheduled in-district committee work from Monday, June 1 through Monday, June 29, with voting days set for Tuesday, June 30, Wednesday and Thursday, July 1-2. The House has scheduled two weeks of session in July and is expected to be out the full month of August. In September, upon their return, they will need to move appropriations bills to fund the federal government after October 30. The November elections will not be far from the members' minds. House leadership has left open a schedule change as they convene hearings in June to address issues including the use of force by police officers, improved policing techniques and combatting racial discrimination.

The House voted on May 15 to allow the Speaker of the House to call for remote voting under specific circumstances. House Resolution 965 was passed 217-189, with three Democrats joining Republicans to vote against it. The Ohio delegation votes were split among party lines. The Resolution:

[A]uthorizes and otherwise sets forth procedures for remote voting by proxy in the House of Representatives and provides for official remote committee proceedings during a public health emergency due to a novel coronavirus (e.g., the virus that causes COVID-19) for a 45-day period. Based on the status of the public health emergency, the 45-day period may be extended for an additional 45 days or terminated earlier. The chair of the Committee on House Administration shall study the feasibility of using technology to conduct remote voting and certify to the House that operable and secure technology exists to conduct such activity.

On Wednesday, May 27, the House utilized remote voting by proxy under the terms of the Resolution. The designation of proxy voting was made by 72 Democrats, all of whom requested colleagues vote on their behalf. There were no Republicans that requested colleagues exercise proxy voting for them.

The night before the scheduled vote, House Republicans filed suit to block the use of remote proxy voting. In the case, *McCarthy v. Pelosi*, 20-cv-01395 (2020), filed in the U.S. District Court, District of Columbia (Washington), House Minority Leader Kevin McCarthy (R-CA) as lead plaintiff, joined by Reps. Steve Scalise (R-LA), Jim Jordan (R-OH), Liz Cheney (R-WY), Tom Cole (R-OK) and 16 other plaintiffs, including four constituents, sued Speaker Nancy Pelosi (D-CA) and other named defendants. The suit alleges that the adopted remote proxy voting process is unconstitutional. The case is pending and the court has not issued an order as of this date to stay remote proxy voting.

The Senate returned to session on Monday, June 1 and will be in session the rest of the month. In July, the Senate has scheduled a two week state work period over the July 4 holiday. In August, the Senate is scheduled to be out from August 10 through September 7. Senate President Mitch McConnell (R-KY) has indicated that he would like to pass a stimulus package that provides aid to businesses and schools, limits coronavirus-related liability for businesses, however, without another round of \$1,200 rebate checks. As reported in The Hill, "Senate Republicans on Tuesday (June 2) said they are more focused on reforming the Small Business Administration's Paycheck Protection Program, providing more money for cash-strapped state and local governments, boosting benefits for Social Security recipients and fixing other elements of COVID-19 relief bills passed earlier this year." Senator Lindsay Graham, Chairman of the Senate Committee on the Judiciary was quoted in the New York Times, saying that he would convene a hearing on "proposals to improve policing, combat racial discrimination regarding the use of force and improve relations between police departments and the communities they serve."

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, has 16 cosponsors, however, Senator Sherrod Brown (D-OH) is not one. 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 been approved.

CORONAVIRUS STIMULUS LEGISLATION

On May 12, Rep. Nita Lowey (D-NY) introduced H.R. 6800, the "Health and Economic Recovery Omnibus Emergency Solutions Act," or "HEROES Act," to address lingering COVID-19 issues. The appropriations within the bill totaled \$3 trillion and covered a large number of subject areas. The bill passed the House on May 15 by a vote of 208-199, along party lines within the Ohio delegation. The bill included funding for Child Nutrition Programs, the Decennial Census, State and Local Relief, a repeal of the State and Local Tax Deduction (SALT), Election Reform, Broadband Access, the U.S. Postal Service, Health Care Services, Education, Paid Sick and Family Leave, the HERO Act to assist renters and others impacted, Medicaid/Medicare, Multi-and Single Employer Pension Funds, Retirement Provisions, Coverage for Essential Workers and Additional Recovery Rebates. The Senate is not expected to pass the bill with all the provisions intact.

On Thursday, May 28, the House passed legislation to give small businesses more assistance using the loans provided through the Paycheck Protection Program (PPP), established in a previous coronavirus bill passed in March. The bill was a welcome piece of bipartisan legislation and passed with a vote of 417-1. The bill would provide up to 24 weeks for small businesses to extend the deadline for rehiring workers to the end of 2020. The bill also allows businesses to lower the percentage of the loans going to payroll costs, from at least 75% to at least 60%, which would leave up to 40% to be used for rent, overhead costs or other expenditures. The bill contains a provision that would identify businesses that receive loans of \$2 million or more. Several Republicans objected and Rep. Steve Chabot (R-OH) said, "I do not believe that those businesses should put on public display for potential shaming."

The Senate voted on the bill today by unanimous consent, however, the media has reported that at least one or two Senators initially objected. The bill is on its way to the President for his signature.

The Congressional Budget Office (CBO) released a report on May 19 that said, "CBO estimates that real gross domestic product will contract by 11 percent in the second quarter of this year, which is equivalent to a decline of 38 percent at an annual rate, and that the number of people employed will be almost 26 million lower than the number in the fourth quarter of 2019." The estimate also included an economic forecast from years 2020 to 2030 due to the coronavirus, which showed that it could take ten years to recover. For the full analysis, please see the publication: https://www.cbo.gov/publication/56351

On May 27, Reps. Anthony Gonzalez (R-OH) and Marcia Fudge (D-OH) introduced H.R. 7029, a bill to facilitate the re-opening of schools through study of children's role in transmitting SARS-CoV-

2, and for other purposes. Rep. Joyce Beatty (D-OH) is also a cosponsor. The bill is entitled, "Protect our Children from COVID-19 Act," and is "aimed at helping schools to reopen safely in the fall by providing much needed research on the role children play in transmitting the COVID-19 virus," according to a press release from Rep. Gonzalez. Rep. Gonzalez said:

Children and families across the country are facing significant challenges and disadvantages because of school closures, many of which have the potential to cause profound and lasting impacts on an entire generation of Americans. Reopening our schools this fall should be a top priority as we move forward in combatting the COVID-19 pandemic, and the information gathered from this study will allow us to do so in the safest manner possible. https://anthonygonzalez.house.gov/news/documentsingle.aspx?DocumentID=232

In her press release, Rep. Fudge said:

While school closures are necessary to address the current public health crisis, many students are at risk of falling through the cracks after losing access to in-person learning and other critical services like school meals. Getting students back to the classroom is critical to making up for lost time, but it must be done in a way that protects the safety of students and teachers alike. By requiring research into how children contract and transmit COVID-19, this bill will help school districts make informed decisions on how to safely reopen. https://fudge.house.gov/press-statements/fudge-gonzalez-introduce-legislation-to-support-safe-school-reopening/

STIMULUS PAYMENTS

The Internal Revenue Service, listening to the concerns expressed by several members of the Ohio Congressional delegation, announced a new telephone hotline (1-800-919-9835) to assist Ohioans who may be seeking information about their stimulus payments. I reported that many Americans do not have access to the internet, including Ohioans. According to a news release from Rep. Troy Balderson (R-OH) on May 19, he asked the IRS to "develop alternatives for Americans with 'slow or no' internet to access the IRS online portal for tracking COVID-19 Economic Impact Payments (EIPs)."

On May 27, the IRS announced a reminder that some taxpayers are receiving their stimulus payments as a prepaid debit card. The debit cards arrive in a plain envelope from "Money Network Cardholder Services," and provide consumer protections including protection against fraud, loss and other errors. The IRS said:

Nearly 4 million people are being sent their Economic Impact Payment by prepaid debit card, instead of paper check. The determination of which taxpayers received a debit card was made by the Bureau of the Fiscal Service, a part of the Treasury Department that works with the IRS to handle distribution of the payments. Those who receive their Economic Impact Payment by prepaid debit card can do the following without any fees.

- Make purchases online and at any retail location where Visa is accepted
- Get cash from in-network ATMs
- Transfer funds to their personal bank account
- Check their card balance online, by mobile app or by phone.

PANDEMIC BILLS

Several bills have been introduced in May and early June to address a variety of pandemic issues. A few of the noteworthy ones include:

H.R. 7070, a bill to observe the lives lost in the United States due to the COVID-19 pandemic.
The sponsor is Rep. Anna Eshoo (D-CA). The bill was introduced on June 1 and referred to the
Committee on Energy and Commerce.

- H.R. 7058, a bill to provide a payroll tax credit for certain bonuses paid to employees who worked continuously during the COVID-19 pandemic. Rep. Tom Reed (R-NY) is the sponsor. The bill was referred to the Committee on Ways and Means.
- H.R. 7031, a bill to extend public safety officer death benefits to public safety officers whose death is caused by COVID-19, and for other purposes. The sponsor is Rep. David Joyce (R-OH), cosponsored by Reps. Anthony Gonzalez (R-OH) and Marcia Fudge (D-OH). The bill was introduced on May 27 and referred to the Committee on the Judiciary.
- H.R. 7015, a bill to provide financial stability to the United States Postal Service during the
 coronavirus pandemic, and for other purposes. The sponsor is Rep. Carolyn Maloney (D-NY). It
 was introduced on May 26 and referred to the Committee on Oversight and Reform and the
 Committee on the Budget.
- <u>H.R. 6699</u>, a bill to provide essential workers with \$25,000 credit for student loans or future education. The bill is sponsored Rep. Ann Kuster (D-NH) and cosponsored by Rep. Joyce Beatty (D-OH). It was referred to the Committee on Education and Labor, and the Committees on Financial Services, and Ways and Means.

SERS ADVOCACY ON HRA EXCEPTED BENEFIT PLAN / WRAPAROUND PLAN

SERS and I have reached out to the Ohio delegation, asking if the members would sign and send a joint letter to the Secretaries of Labor, Treasury, and Health and Human Services, to request a revision to the rules that created HRA Excepted Benefit (HRA EB) Plans. The rules were finalized on June 20, 2019 and enacted 60 days later, on August 19, 2019. The regulations set a cap of \$1,800 per family over the course of one year. Seeking a regulatory change could be less challenging than seeking a legislative change, particularly now that Congress is focused on passing bills to address the economic fall-out and helping Americans and businesses through the pandemic.

The change would include language setting the cap with an annual per-person HRA actuarial value of \$1,800, calculated across the enrolled HRA population. This change would be in line with previous excepted benefit plan rules that required the annual cost of coverage per employee and any covered dependents occur on an aggregate basis relying on sound actuarial principles. This change would allow enrollees with higher out of pocket costs than \$1,800 per family to obtain reimbursement of those costs under the terms of the SERS HRA EB Plan. The proposed change to the HRA rules would then be effective with the plan year commencing January 1, 2021.

We pointed out that the Trump administration supported the use of HRAs, as included in the President's Executive Order 13813, issued on October 12, 2017, which said, "Expanding the flexibility and use of HRAs would provide many Americans, including employees who work at small businesses, with more options for financing their healthcare." The Order directed that the "Secretaries of the Treasury, Labor, and Health and Human Services shall consider proposing regulations or revising guidance, to the extent permitted by law and supported by sound policy, to increase the usability of HRAs, to expand employers' ability to offer HRAs to their employees, and to allow HRAs to be used in conjunction with nongroup coverage."

We are continuing our discussions with the delegation offices. Reps. Kaptur and Ryan circulated a draft delegation letter that we hope will garner bipartisan support. The soft deadline to sign on to the letter is Friday, June 5.

The advocacy on the Wraparound Plan legislation, H.R. 4763, has continued. The House Committee on Appropriations will be meeting in July, according to a legislative aide in Rep. Joyce's office. Ohio has three members who serve on the House Committee on Appropriations, namely Reps. Kaptur (D-OH), Ryan (D-OH) and Joyce (R-OH). SERS submitted a request to each of the offices for reauthorization of Wraparound Plans. Last year, SERS was successful in gaining language in the final appropriations bill that recommended CMS extend the program and issue a report to the Committee. CMS declined to issue a report or extend the program last year and the Committee is aware of their response. SERS and I will continue this path as we pursue legislative authority for Wraparound Plans under H.R. 4763.

WINDFALL ELIMINATION PROVISION (WEP)

The Texas Retired Teachers Association's (TRTA) Executive Director Tim Lee announced that the Association held a Facebook Live session with Rep. Kevin Brady (R-TX) on June 3 to discuss efforts to reform the Windfall Elimination Provision (WEP). During the session, Rep. Brady said that he would like to advance WEP reform this year. He said, "We've really got to build full support within our states. I am absolutely convinced we can get this done." He mentioned that while groups continue to press for full repeal, that issue has been discussed for 37 years and not gained traction. As reported previously, Rep. Brady has been trying to pass legislation to replace the current WEP formula with a fairer formula. His bill, H.R. 3934, the "Equal Treatment of Public Servants Act of 2019," has 45 cosponsors and has not moved out of the House Committee on Ways and Means. Rep. Brady is the ranking member of the Committee. Three members from Ohio, Reps. Bob Latta (R-OH), Michael Turner (R-OH) and Anthony Gonzalez (R-OH) are cosponsors.

Chairman of the House Committee on Ways and Means, Rep. Richard Neal (D-MA), introduced a slightly different WEP reform bill, H.R. 4540, the "Public Servants Protection and Fairness Act" last September. The bill has held steady with 141 cosponsors, including Reps. Marcy Kaptur (D-OH), Tim Ryan (D-OH), Joyce Beatty (D-OH) and Marcia Fudge (D-OH). At this date, neither bill has progressed, however, the subject of WEP reform continues to be discussed.

H.R. 141, the "Social Security Fairness Act of 2019," which addresses the full repeal of WEP and GPO, has not been scheduled for a hearing during the pandemic emergency. As of this report, it is a bipartisan bill with 186 Democrats and 59 Republicans cosponsoring the bill, including nine Ohio Representatives, 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), Marcia Fudge (D-OH), Joyce Beatty (D-OH) and Troy Balderson (R-OH).

Senator Sherrod Brown (D-OH) introduced the Senate companion bill, S. 521, the "Social Security Fairness Act," last February. The bill would repeal the WEP and GPO. There are 38 cosponsors, including 31 Democrats, 5 Republicans and 2 Independents. Senator Rob Portman (R-OH) is not one of the cosponsors. There has been no action in the Senate.

SOCIAL SECURITY ADMINISTRATION (SSA)

The SSA released the Annual Report of the Supplemental Security Income (SSI) Program on May 29. The report "provides comprehensive information on the SSI program in accordance with the mandate in section 231 of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996." Highlights from the report included:

- In January 2020, 7.9 million individuals received monthly Federal SSI payments averaging \$559, a decrease of 80 thousand recipients from the 8.0 million recipients with an average payment of \$549 in January 2019.
- By 2044, the end of the 25-year projection period, the Federal SSI recipient population will reach 8.4 million. The projected growth over the 25-year period is largely due to the overall growth in the Social Security area population, though the growth in the SSI recipient population is projected to be somewhat slower than the growth in the Social Security area population.
- SSI Federal Payments, Calendar Year 2019, \$56.2 billion- Disabled under 18 16.8%; Disabled 18-64 62.2%; Disabled 65 or older 11.0%; Aged 10.0%.

You may read the 197 page report with this link: https://www.ssa.gov/oact/ssir/SSI20/ssi2020.pdf

As a comparison, the 2020 Social Security Trustees Report, which was released in April, showed an increase in the 75-year deficit from 2.78% to 3.21% of taxable payroll. The estimated date for the trust fund to be exhausted is 2035.

On May 14, SSA updated the guide, "<u>Economic Impact Payments for Social Security and SSI Recipients – Steps to Take and Schedule of Payments.</u>" The guide may be used to determine whether a recipient needs to take any action to receive his or her economic impact payment, or a

payment for a qualifying child. The document also explains when the Internal Revenue Service, not the Social Security Administration, will issue the payment. https://www.ssa.gov/coronavirus/

On June 1, SSA announced that Ohio was one of the new states, along with Connecticut and Utah, that recipients can "go online to replace your Social Security card." Recipients can apply for a replacement card online if they:

- Are a U. S. citizen age 18 or older with a U.S. mailing address (this includes APO, FPO, and DPO addresses):
- Are not requesting any changes to your card (including a name change); and
- Have a valid driver's license or state-issued identification card.

H.R. 860, the "Social Security 2100 Act," was introduced by Rep. John Larson (D-CT) in January 2019. The bill has 208 cosponsors, who are all Democrats. All the 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. Neither bill has advanced.

H.R. 2302, the "Protecting and Preserving Social Security Act," introduced by Rep. Theodore Deutsch (D-FL) still has only eight cosponsors, including Rep. Marcy Kaptur (D-OH). This bill, like 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 either.

MEDICARE AND MEDICAID

With the arrival of coronavirus in the country, the U.S. Centers for Medicare and Medicaid created a webpage dedicated to coronavirus information. According to the site, Medicare covers several coronavirus-related expenses, including:

- Medicare covers the <u>lab tests for COVID-19</u>. You pay no out-of-pocket costs.
- Medicare covers <u>FDA-authorized COVID-19 antibody</u> (or "serology") tests if you were diagnosed with a known current or known prior COVID-19 infection or suspected current or suspected past COVID-19 infection.
- Medicare covers all <u>medically necessary hospitalizations</u>. This includes if you're diagnosed with COVID-19 and might otherwise have been discharged from the hospital after an inpatient stay, but instead you need to stay in the hospital under quarantine.
- At this time, there's no vaccine for COVID-19. However, it will be covered if one becomes available.
- If you have a Medicare Advantage Plan, you have access to these same benefits. Medicare allows these plans to waive cost-sharing for COVID-19 lab tests. Many plans offer additional telehealth benefits and expanded benefits, like meal delivery or medical transport services. Check with your plan about your coverage and costs.
- Scammers may use the coronavirus national emergency to take advantage of people while they're distracted. As always, guard your Medicare card like a credit card, check Medicare claims summary forms for errors, and if someone calls asking for your Medicare Number, hang up!

For more information, please see the site: https://www.medicare.gov/medicare-coronavirus

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

According to the Public Sector HealthCare Roundtable, legislation to address surprise medical billing may be ready to move quickly as the Trump administration seeks to ban surprise billing completely.

As reported, S. 3333, the "Human Trafficking and Exploitation Prevention Training Act of 2020," 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

The Centers for Medicare & Medicaid Services (CMS) announced that over 1,750 standalone Medicare Part D prescription drug plans and Medicare Advantage plans with prescription drug coverage have applied to offer lower insulin costs through the Part D Senior Savings Model for the 2021 plan year. Across the nation, participating enhanced Part D prescription drug plans will provide Medicare beneficiaries access to a broad set of insulins at a maximum \$35 copay for a month's supply, from the beginning of the year through the Part D coverage gap. The model follows the Administration's announced 13.5 percent decline in the average monthly basic Part D premium since 2017 to the lowest level in seven years. The release may be read here: https://www.cms.gov/newsroom/press-releases/president-trump-announces-lower-out-pocket-insulin-costs-medicares-seniors

The bill introduced last year by Rep. Dave Joyce (R-OH), H.R. 5239, the "Prescription Drug Price Reporting Act," cosponsored by Rep. Anthony Gonzalez (R-OH), would 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 forward.

SECURITIES AND EXCHANGE COMMISSION (SEC)

On May 14, the Investor Advisory Committee (IAC) issued its recommendation to the SEC relating to ESG disclosures. In its report, it said:

As the SEC contemplates an ESG disclosure framework, there are many useful standards such as GRI, SASB and TCFD, to name a few, that may help shape its thinking. This Committee is not recommending or endorsing any particular standard, simply pointing out that some thoughtful work has already been done in mapping out what investors consider to be material, decision-useful information.

The full recommendation may be read here: https://www.sec.gov/spotlight/investor-advisory-committee-2012/recommendation-of-the-investor-as-owner-subcommittee-on-esg-disclosure.pdf

<u>REPORTS</u>

On May 12, the Center for State and Local Government Excellence (SLGE) and the Center for Retirement Research, Boston College issued a new analysis of state and local public pension plans. It indicates that "these retirement plans will end fiscal year 2020 with negative annual investment returns, reduced asset values, lower funded ratios and higher actuarial costs." Additionally, the research indicates that plan finances will continue to decline in the wake of the economic downturn." https://www.slge.org/assets/uploads/2020/05/market-decline-public-plans.pdf

SLGE held a webinar on May 14 to cover the findings from the State and Local Government Workforce: 2020 Survey. In its release, SLGE noted that the "Survey data shows a steady increase in telework among state and local government employees (27 percent), the highest share since 2016 (22 percent). This practice is more common in state agencies (64 percent) than local jurisdictions (19 percent). The increase may relate to the onset of the COVID-19 pandemic that overlapped with this research. This telework trend, and others, may change dramatically given the ongoing pandemic, social distancing guidelines, and unprecedented pressures on state and local government budgets." The results of the Survey may be read here: https://slge.org/news-posts/new-research-finds-continued-increase-in-telework-for-state-local-government-employees-even-prior-to-covid-19

U.S. SUPREME COURT

The Supreme Court issued its decision in *Thole et al. v. U. S. Bank N. A., et al.* The central issue was whether a defined-benefit pension plan participant has standing to sue for certain fiduciary breaches, seek injunctive relief or restoration of plan losses without demonstrating any personal financial loss? The Court held that the participants lacked standing to bring the suit. The syllabus stated, "The plaintiffs rely on a trust analogy in arguing that an ERISA participant has an equitable or property interest in the plan and that injuries to the plan are therefore injuries to the participants. But participants in a defined benefit plan are not similarly situated to the beneficiaries of a private trust or to participants in a defined contribution plan, and they possess no equitable or property interest in the plan."

The Supreme Court upheld the authority of the Puerto Rico Financial Management and Oversight Board, appointed several years ago to address the country's debt crisis. The Court unanimously ruled that the board members were not federal officers whose appointments required Senate confirmation because their duties were locally focused. "The Board's statutory responsibilities consist of primarily local duties, namely, representing Puerto Rico in bankruptcy proceedings and supervising aspects of Puerto Rico's fiscal and budgetary policies," Justice Stephen Breyer wrote in the Court's opinion.

OTHER NEWS

The U.S. Department of Labor issued an information letter to Groom Law Group on June 3, in which Louis J. Campagna, Chief, Division of Fiduciary Interpretations, said, "In conclusion, a plan fiduciary would not, in the view of the Department, violate the fiduciary's duties under section 403 and 404 of ERISA solely because the fiduciary offers a professionally managed asset allocation fund with a private equity component as a designated investment alternative for an ERISA covered individual account plan in the manner described in this letter." A full copy of the letter may be read here:

https://www.dol.gov/agencies/ebsa/about-ebsa/our-activities/resource-center/information-letters/06-03-2020

NCTR reported that the Trump administration pressured the Federal Retirement Thrift Investment Board (FRTIB) to halt switching its international index fund to a broader one that includes companies in China and other emerging-market countries.

ACTIVITIES:

- 1. Set up and participated in calls between SERS and the Offices of Reps. Kaptur, Ryan, Wenstrup, Johnson, Stivers, Latta, Joyce, Gonzalez, and Fudge. Other calls are pending.
- 2. Set up a call with the Office of Senator Portman to discuss the proposed HRA Excepted Benefit Plan rule change. Sent an email to the office of Senator Brown to request a conversation.
- 3. Sent out reminder emails to delegation offices to request calls by June 5.
- 4. Drafted a letter on the proposed rule change for Excepted Benefit HRAs and circulated it.
- 5. Set up and participated in a call with SERS and the Offices of Reps. Marcy Kaptur and Tim Ryan to discuss the idea of a rule change for HRA Excepted Benefit Plans and to discuss appropriations.
- 6. Participated in several calls with representatives from SERS to discuss HRA Excepted Benefit Plans and advocacy.
- 7. Provided a Memorandum on the provisions of the HEROES Act, which was passed in the House in mid-May, including provisions that would be of interest to SERS.
- 8. 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.
- 9. 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.
- 10. Reviewed public notices or proposed rules from the SEC, HHS/CMS and regulatory agencies.
- 11. 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.
- 12. Reviewed reports and newsletters from CII, ICGN, NASRA, NCTR, NCPERS, and the Public Sector HealthCare Roundtable, Social Security, retirement issues and prepared the Federal Legislative Report.

School Employees Retirement System of Ohio REVIEW OF ADMINISTRATIVE EXPENSES May 2020

The following are administrative operation expenses of the School Employees Retirement System of Ohio during the period **May 1, 2020 - May 31, 2020.**

Account	Vendor		Amount
Computer Hardware>\$5,000	Dell Marketing LP	Account Totals:	410,173.00 410,173.00
Computer Software>\$25,000	Sigital, LLC	Account Totals:	28,000.00 28,000.00
Salaries & Wages	ADP, LLC ADP, LLC	Account Totals:	548,630.60 545,669.85 1,094,300.45
Salaries & Wages - Overtime	ADP, LLC ADP, LLC	Account Totals:	499.35 334.33 833.68
Vacation Leave Expense	ADP, LLC	Account Totals:	200,311.97 200,311.97
Sick Leave Expense	ADP, LLC	Account Totals:	41,460.28 41,460.28
Unemployment Compensation	ADP, LLC ADP, LLC	Account Totals:	360.55 360.55 721.10
Employer Contributions - PERS	Ohio Public Emp. Retirement System Ohio Public Emp. Retirement System	Account Totals:	79,127.54 78,886.23 158,013.77
Group Life	American United Life Insurance Company	Account Totals:	8,161.37 8,161.37
Long Term Disability	American United Life Insurance Company	Account Totals:	2,332.25 2,332.25
Short Term Disability	American United Life Insurance Company American United Life Insurance Company	Account Totals:	1,250.49 1,254.75 2,505.24

Group Health Claims			
Group riealth Claims	Aetna Daily Wires - ESERS		97,353.33
	SaveonSP, LLC		1,094.75
		Account Totals:	98,448.08
Group Health - Admin Fees			
	Aetna Admin - ESERS		7,225.18
		Account Totals:	7,225.18
Prescription Claims			
1 Tooshpach Claims	Express Scripts - ESERS		655.01
	Express Scripts - ESERS		2,296.31
	Express Scripts - ESERS		8,359.54
	Express Scripts - ESERS		9,737.09
	Express Scripts - ESERS		13,611.33
	Express Scripts - ESERS		20,967.70
		Account Totals:	55,626.98
Group Health - Stop Loss			
	Sunlife Financial		13,278.70
		Account Totals:	13,278.70
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Vision Claims	VSP - (OH)		166.32
	VSP - (OH)		1,728.60
	V3F - (OH)	Account Totals:	1,894.92
		Account Totals.	1,094.92
Vision Admin Fees			
	VSP - (OH)		1.98
		Account Totals:	1.98
Group Health - Employee Cost			
	Employee Premiums		(772.36)
	Employee Premiums		(12,800.04)
	Employee Premiums	A	(12,826.46)
		Account Totals:	(26,398.86)
Group Health - Wellness Incentive			
Group froduit Weimedo moentive	ADP, LLC		1,574.05
	ADP, LLC		1,650.18
	, -	Account Totals:	3,224.23
Group Health - Tobacco Premiums			
	ADP, LLC		(420.00)
	ADP, LLC		(420.00)
		Account Totals:	(840.00)
Madiana Danium Familia			
Medicare Premium - Employer	ADP, LLC		5,779.74
	ADP, LLC		7,865.75
	ADF, LLC	Account Totals:	13,645.49
		Account Totals.	10,010.10
Deferred Compensation Match			
·	ADP, LLC		2,355.00
	ADP, LLC		2,370.00
		Account Totals:	4,725.00

Actuarial Services	Cavanaugh MacDonald Consulting, LLC Cavanaugh MacDonald Consulting, LLC	Account Totals:	12,000.00 20,190.00 32,190.00
Audit	Clark Schaefer RSM US LLP Treasurer of State of Ohio	Account Totals:	2,895.00 7,000.00 456.00 10,351.00
Custodial Fees - Investment Accounting	Huntington National Bank BNY Mellon Asset Servicing	Account Totals:	24,173.66 57,000.00 81,173.66
Custodial Banking	Huntington National Bank Huntington National Bank	Account Totals:	200.72 11,606.14 11,806.86
Master Recordkeeper Fees	BNY Mellon Asset Servicing	Account Totals:	82,458.67 82,458.67
Investment Advisory Fees	Aksia Wilshire	Account Totals:	31,250.00 37,500.00 68,750.00
Performance/Analytics Fee	BNY Mellon Asset Servicing Wilshire Associates Incorporated	Account Totals:	34,401.66 3,000.00 37,401.66
Bloomberg Terminal Rentals	Bloomberg Finance LP	Account Totals:	13,305.00 13,305.00
Medical Consultant	Borchers, M.D., Glen G.	Account Totals:	3,333.34 3,333.34
Special Counsel	Frost Brown Todd, LLC Ice Miller LLP Newhouse,Prophater,Kolman&Hogan LLC	Account Totals:	7,800.00 3,074.34 560.00 11,434.34
Technical	Berry, Dunn, McNeil & Parker LLC ForeFront Web Sagitec Solutions, LLC Velosio	Account Totals:	10,335.00 47.85 57,317.92 161.25 67,862.02

Other Professional Services			
	Cobalt Community Research, LLC		4,900.00
	Contoural, Inc.		4,739.25
	Cristo Rey Columbus High School		1,700.00
	Cristo Rey Columbus High School		1,700.00
	Impact Training and Development, Inc		918.00
	Lincoln Crow Strategies		3,075.00
	Performance Leadership Group, LLC		2,250.00
	Vorys Advisors LLC		3,333.33
	Wickert, Kimberly		229.50
		Account Totals:	22,845.08
Postage			
3	Columbus Courier & Freight LLC		193.40
	Pitney Bowes Inc.		48.14
	Pitney Bowes Inc.		92.07
	Pitney Bowes Inc.		155.98
	Quadient		683.52
	Unishippers Association		31.00
	Unishippers Association		31.00
	Unishippers Association		31.00
	Unishippers Association		73.66
	Unishippers Association		386.92
		Account Totals:	1,726.69
Talaanaanii aatinaa Oomiaa			
Telecommunications Services	Contund ink		2,858.95
	CenturyLink Nextel Communications		78.53
	TBG Conferencing		946.17
	TBG Conferencing TBG Conferencing		2,741.08
	XO Communications		1,718.58
	AO COMMUNICATIONS	Account Totals:	8,343.31
		Account rotals.	0,343.31
Communications & Publications			
	Baise Quality Printing		3,291.52
		Account Totals:	3,291.52
Hardware Maintenance			
	Park Place Technologies		4,600.56
		Account Totals:	4,600.56
Software Maintenance			
Software maintenance	Optiv Security, Inc.		4,314.27
	Sagitec Solutions, LLC		48,328.00
	Sagitos Solutions, LLO	Account Totals:	52,642.27
		Account rotals.	32,042.21

Software Subscriptions			
Command Casson places	ADP, LLC		2,754.61
	Citrix Systems Inc		2,006.40
	Duo Security		4,536.00
	KLDiscovery		1,275.00
	Melissa Data Corporation		395.00
	Nasdaq BoardVantage, Inc.		21,657.17
	OARnet		23,293.44
	SAS Institute Inc		3,960.00
	Wellness IQ		828.77
		Account Totals:	60,706.39
Equipment Repairs & Maintenance			
4.1	Canon Financial Services, Inc		1,647.27
	Digital Print Solutions		387.65
	HMB, Inc.		2,149.00
	Ricoh USA, Inc		193.26
	Ricoh USA, Inc		160.85
	Ricoh USA, Inc		389.58
		Account Totals:	4,927.61
Records Storage			
Nocords otorage	Fireproof Records Center		493.29
	Fireproof Records Center		790.93
	Thoproof Records Conton	Account Totals:	1,284.22
Seminar & Conferences	0.10% 7.1.1.0		0.005.00
	CarahSoft Technology Corp		3,885.00
	Ohio Society of CPAs	A (T)	289.00
		Account Totals:	4,174.00
Subscriptions			
	Kiplinger Letter		108.00
	Thomson Reuters		5,023.98
	Thomson Reuters - West Publishing Corp		201.25
		Account Totals:	5,333.23
Memberships			
•	Masri, Judi		370.00
	Ohio Society of CPAs		370.00
	•	Account Totals:	740.00
Operations Maintananas			
Operations Maintenance	Amtrec, LLC		2 202 00
	Affiliec, LLC	Account Totals:	2,383.00
		Account Totals:	2,383.00
Staff Support			
	Matrix Integrated Psychological Services		587.40
	ThrivePass		576.00
	Unisan, LLC		144.60
	Employee Reimbursement		1,655.00
	Employee Reimbursement	A account Totales	1,655.00

Account Totals:

4,618.00

Interior Landscaping

Ambius Inc. (05) 1,356.37

Account Totals: 1,356.37

Reimbursement of Leased Svcs

OSERS Broad St. LLC (24,710.00)

Account Totals: (24,710.00)

Total Administrative Expenses 2,691,973.61

School Employees Retirement System of Ohio

Summary of preliminary administrative operation expenses during the period May 1, 2020 - May 31, 2020.

Account Computer Hardware >\$5,000	Amount 410,173.00
Computer Software >\$25,000	28,000.00
Salaries & Wages	1,094,300.45
Salaries & Wages - Overtime	833.68
Vacation Leave Expense	200,311.97
Sick Leave Expense	41,460.28
Unemployment Compensation	721.10
Employer Contributions - PERS	158,013.77
Group Life	8,161.37
Long Term Disability	2,332.25
Short Term Disability	2,505.24
Group Health Claims	98,448.08
Group Health - Admin Fees	7,225.18
Prescription Claims	55,626.98
Group Health - Stop Loss	13,278.70
Vision Claims	1,894.92
Vision Admin Fees	1.98
Group Health - Employee Cost	(26,398.86)
Group Health - Wellness Incentive	3,224.23
Group Health - Tobacco Premiums	(840.00)
Medicare Premium - Employer	13,645.49
Deferred Compensation Match	4,725.00
Actuarial Services	32,190.00
Audit	10,351.00

Custodial Fees - Investment Accounting	81,173.66
Custodial Banking	11,806.86
Master Recordkeeper Fees	82,458.67
Investment Advisory Fees	68,750.00
Performance/Analytics Fee	37,401.66
Bloomberg Terminal Rentals	13,305.00
Medical Consultant	3,333.34
Special Counsel	11,434.34
Technical	67,862.02
Other Professional Services	22,845.08
Postage	1,726.69
Telecommunications Services	8,343.31
Communications & Publications	3,291.52
Hardware Maintenance	4,600.56
Software Maintenance	52,642.27
Software Subscriptions	60,706.39
Equipment Repairs & Maintenance	4,927.61
Records Storage	1,284.22
Seminars & Conferences	4,174.00
Subscriptions	5,333.23
Memberships	740.00
Operations Maintenance	2,383.00
Staff Support	4,618.00
Interior Landscaping	1,356.37
Reimbursement of Leased Svcs	(24,710.00)
Total Administrative Expenses	2,691,973.61

School Employees Retirement System

Memo

To: Retirement Board

From: Richard Stensrud, Executive Director

CC: Karen Roggenkamp, Deputy Executive Director

Date: June 5, 2020

Re: FY2021 Budget Review

At the meeting in May, you received the FY2021 Administrative Budgets for SERS and OSERS Holdings, LLC. At the June meeting, we are requesting 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 FY2021 budget presented reflects a 1.00% decrease over the FY2020 budget. Also, the FY2021 budget reflects a 2.6% increase over the FY2020 projected expenses resulting from the underspending in FY2020 due to COVID-19.

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

BUDGET RESOLUTION - FY 2021 SERS ADMINISTRATIVE BUDGET

moved and	seconded that the following budget of \$33,783,735 for th
fiscal year beginning July 1, 2020 and ending	June 30, 2021 be approved, with such approval effective
June 18, 2020.	

Expense Classification	<u>Budget</u>
Personnel	\$ 21,753,598 6,764,785 1,105,880 3,004,049
SERS Administrative Expenses	\$ 32,628,312
Administrative Capital	305,351
Administrative Budget	\$ 32,933,663

Be it further provided that the Board has reviewed the estimated fees and expenses for operation of the investment program, and authorizes the payment of actual fees to such service providers and in such amounts as is set by the contract with the individual service providers.

OPERATING TRANSFER RESOLUTION – FY 2021

	moved and	seconded that SERS transfer to OSERS Holdings, LLC up to
\$1,668,534 for pa	yment of building operat	ions and LLC expenses of OSERS Holdings for the fiscal year
beginning July 1, 2	2020 and ending June 3	0, 2021. OSERS Holdings, LLC shall report quarterly to the SERS
Board of Trustees	on the expenditure of a	Il funds and receipt of all revenues.

EXECUTIVE SESSION

moved and seconded the moved and		seconded the motion that the Board go into Executive Session applications for Disability Retirement Benefits.
IN EXECUTIVE	SESSION AT	A.M. / P.M.
RETURNED TO	OPEN SESSION AT	A.M. / P.M.

School Employees Retirement System

Memo

To: SERS Board

From: Christi Pepe

cc: Richard Stensrud, Executive Director, Karen Roggenkamp, Deputy Director,

Joe Marotta, General Counsel

Date: June 5, 2020

Re: 2021 Health Care Program: Premium and Benefit Changes

This memorandum summarizes the proposed changes to the health care program for 2021.

There are no proposed benefit changes for the 2021 plan year.

Primetime Medicare

During the May Board meeting, in order to maximize cost savings, Board members recommended that PrimeTime enrollees be transitioned to the Aetna Medicare Advantage plan for 2021.

Medicare Premiums

No changes to the Aetna Medicare Advantage rate are proposed.

Non-Medicare Premiums

- 1. The Aetna premium will increase consistent with the actuary's recommendation.
- 2. The AultCare rate will decrease by 2.5%.

Dental Plan

The SERS dental benefit is offered by Delta Dental. The program is fully supported by member premium and currently, as of June 2020, has 39,303 enrollees. The benefits are not changing for 2021. Dental premiums will remain:

- \$28.53 per month for a single benefit recipient
- \$57.06 per month for a benefit recipient and one dependent
- \$85.54 per month for a benefit recipient and two or more dependents

Vision Plan

SERS vision coverage is offered by VSP. The program is also fully supported by member premium and as of June 2020 has 28,705 enrollees. Vision premiums will remain:

- \$7.11 for a single benefit recipient
- \$14.22 for a benefit recipient and one dependent
- \$16.70 for a benefit recipient and two or more dependents

2021 HEALTH CARE PREMIUMS AND PLAN DESIGN CHANGES

• 2021 HC Premiums and Plan Design Changes

2021 Health Care Premiums and Plan Design

June 18, 2020

Christi Pepe

Director Health Care Services



Today's Topics

- Plan and Benefit Changes
- Premiums
- Dental and Vision
- Premium Discount Program



Medicare Plan Changes

PrimeTime enrollment transition to Aetna

- Current enrollment is 1,016 enrollees
- Member premium savings \$380,000 annually
- Health Care Program savings \$1.2 million



Medicare Plan Transition Cost Sharing

Negative impact

- Diagnostic, lab and imaging, X-ray copays (from \$0 to \$25)
- Therapies (from \$5 to \$20 with no max)
- Skilled Nursing Facility days 31-100 (from \$0 to \$50)

Positive impact

- Outpatient/ambulatory surgery center (15% coinsurance with \$200 max. from \$200 copay)
- Eye glasses after cataract surgery (\$0 from 20%)
- Diabetic supplies (\$0 from 20%)



Medicare Plan Transition Cost Sharing

Negative impact

- Generics 90-day retail supply up to \$22.50 (from flat \$15)
- Preferred Brands 90-day retail supply up to \$300 (from \$200)
- No coverage on non-preferred drugs

Positive impact

- Generic copays are maximum rather than flat
- Preferred insulin is \$25 per month supply retail (from \$30)
- Specialty drugs via Accredo is \$67 copay (from \$100)

Unknown impact

SERS formulary is different but KY Rx will assist plan enrollees

Medicare Premiums

- No benefit changes and no change to Aetna Medicare premium
 - Full premium remains \$198
 - Most common premium remains \$68

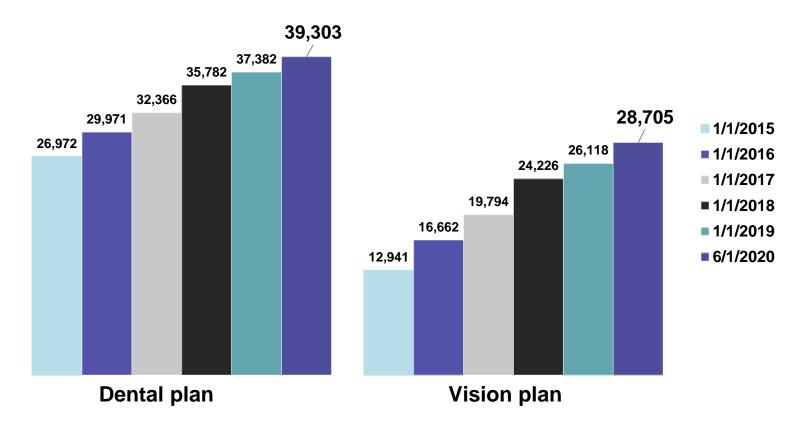


Non-Medicare Premium Changes

- No proposed benefit changes
- Aetna premium increase to \$1,433
 - o most common premium \$284 to \$315
- AultCare premium reduction to \$1,086
 - o most common premium \$251 to \$245



Dental and Vision Enrollment





Delta Dental Premiums

	2020 Premiums	2021 Premiums
Benefit Recipient	\$27.81	unchanged
Benefit Recipient and one dependent	\$55.62	unchanged
Benefit Recipient and two or more dependents	\$83.70	unchanged



VSP Vision Premiums

	2019 Premiums	2021 Premiums
Benefit Recipient	\$7.11	unchanged
Benefit Recipient and one dependent	\$14.22	unchanged
Benefit Recipient and two or more dependents	\$16.70	unchanged



Premium Discount Program

Household Size	2020 Income Level*	2021 Income Level*
1	\$15,613	\$15,950
2	\$21,138	\$21,550
3	\$26,663	\$27,150
4	\$32,188	\$32,750
5	\$37,713	\$38,350
6	\$42,238	\$43,950
7	\$48,763	\$49,550
8	\$54,288	\$55,150

^{* 125%} of Federal Poverty Level



APPROVAL OF 2021 HEALTH CARE PREMIUMS AND PLAN DESIGN CHANGES

moved and	seconded to approve the 2021 health care premiums in
Appendix A and the plan design changes in	Appendix B. The premiums and plan design changes are
effective January 1, 2021.	

APPENDIX A SERS HEALTH CARE 2021 PREMIUMS

Fully Insured Plans		2020	2021		2020	2021		2020	2021
	17.5%	\$64	\$64	Spouse			Children		
	20%	\$68	\$68						
Aetna Medicare PPO Plan	25%	\$76	\$76	80%	\$166	\$166	70%	\$149	\$149
	50%	\$117	\$117	90%	\$182	\$182			
	100%	\$198	\$198	100%	\$198	\$198			
	17.5%	\$127	\$127	Spouse			Children		
	20%	\$140	\$140						
Aetna Medicare Part B Only	25%	\$166	\$166	80%	\$454	\$454	70%	N/A	N/A
	50%	\$297	\$297	90%	\$506	\$506			
	100%	\$558	\$558	100%	\$558	\$558			
	17.5%	\$224	\$219	Spouse			Children		
	20%	\$251	\$245						
Aultcare PPO	25%	\$304	\$298	80%	\$724	\$706	70%	\$168	\$165
	50%	\$574	\$560	90%	\$810	\$790			
	100%	\$1,113	\$1,086	100%	\$896	\$874			

Self-Insured Plans		2020	2021		2020	2021		2020	2021
	17.5%	\$253	\$280	Spouse			Children		
Aetna Choice POS II	20%	\$284	\$315						
(non-Medicare)	25%	\$347	\$385	80%	\$833	\$930	70%	\$253	\$280
(non-iviedicare)	50%	\$659	\$734	90%	\$932	\$1,042			
	100%	\$1,282	\$1,433	100%	\$1,032	\$1,153			
	17.5%	\$173	\$166	Spouse			Children		
A sture Tue ditioned Chaice	20%	\$192	\$184						
Aetna Traditional Choice (Medicare)	25%	\$232	\$222	80%	\$664	\$632	70%	\$585	\$557
(ivicalcale)	50%	\$428	\$408	90%	\$742	\$706			
	100%	\$821	\$781	100%	\$821	\$781			

	2020	2021
Aetna Choice POS II Administrative Fee	\$25.02	\$25.39
Healthscope (Wrap HRA)	\$14.00	\$14.00

APPENDIX B 2021 PLAN DESIGN CHANGES

Plan Design Changes - Medicare

The Health Care Department is recommending the following plan design changes to the **Medicare** program:

1. Transition all PrimeTime enrollees to the Aetna Medicare Advantage plan.

ITEM 16.

APPROVAL OF 2021 DENTAL AND VISION PREMIUMS

moved and	seconded to ap	prove the 2021	dental and	vision premiums	sas
described in Appendix A. The premiums	are effective Jan	nuary 1, 2021.		•	

APPENDIX A

2021 Delta Dental Premium	
Benefit Recipient	\$28.53
Benefit Recipient and one dependent	\$57.06
Benefit Recipient and two or more dependents	\$85.54

2021 VSP Vision Premium	
Benefit Recipient	\$ 7.11
Benefit Recipient and one dependent	\$14.22
Benefit Recipient and two or more dependents	\$16.70

PREMIUM DISCOUNT PROGRAM

School Employee Retirement System

Memo

To: Retirement Board

From: Christi Pepe

cc: Richard Stensrud, Karen Roggenkamp, Joe Marotta

Date: June 5, 2020

Re: Health Care Premium Discount Program (Safety Net) for 2021

Summary

During the Health Care presentation, you will have before you a resolution to approve the 2021 Health Care Premium Discount Program (Safety Net).

Background

SERS introduced the Safety Net in 2004 as a means of providing health care premium relief to lower income benefit recipients. The premium discount is based on household size and income. A 25% reduction of the health care premium is granted to benefit recipients with household incomes at or less than 125% of the federal poverty level. The Safety Net Program is brought before the Board for approval annually.

The Health Care Premium Discount Program is offered only to applicants enrolled in a SERS Medicare plan and to "split families" in which only one spouse is enrolled in a SERS Medicare plan.

Eligibility for the Health Care Premium Discount Program during the 2021 calendar year will be based upon the applicant's qualifying household income for calendar year 2019. Medicare Part B reimbursement is excluded from the definition of qualifying household income.

If the applicant's qualifying household income, less the total annual SERS medical premium for the applicant and covered dependents, is *less* than or equal to 125% of the 2020 federal (U.S. Department of Health and Human Services) poverty level for the household size, the applicant will be eligible to have 25% of his/her share of the SERS premium subsidized by SERS. In 2021, a family of two will qualify for a premium discount if their income is less than \$21,550.

SERS will again automatically enroll SERS health care participants into the Premium Discount Program who have been approved by Medicare for the non-institutionalized full Part D low- income subsidy.

2021 HEALTH CARE PREMIUM DISCOUNT PROGRAM (SAFETY NET)

The 2021 Health Care Premium Discount Program is offered only to applicants enrolled a SERS Medicare Advantage plan and to "split families" in which only one spouse is enrolled in a SERS Medicare Advantage plan.

Eligibility for the Health Care Premium Discount Program during the 2021 calendar year will be based upon the applicant's qualifying household income for calendar year 2019. Medicare Part B reimbursement is excluded from the definition of qualifying household income.

If the applicant's qualifying household income, less the total annual SERS medical premium for the applicant and covered dependents, is *less* than or equal to 125% of the 2020 federal (U.S. Department of Health and Human Services) poverty level for the household size, the applicant will be eligible to have 25% of his/her share of the SERS premium subsidized by SERS.

If the applicant's qualifying household income, less the total annual SERS medical premium for the applicant and covered dependents, is *more* than 125% of the 2020 federal poverty level for the household size, the applicant may request special consideration. Special consideration will be given to applicants providing written evidence satisfactory to SERS' staff that a material change in the applicant's financial circumstance subsequent to calendar year 2019 has caused the applicant's qualifying household income, less the total annual SERS medical premium for the applicant and covered dependents, to become *less* than or equal to 125% of the 2020 federal poverty level for the household size.

institutionali	zed full Part D low inc	health care participants approved by Medicare for the non- ome subsidy program, which has similar household income eligibility count Program, will be automatically enrolled into the Premium Discount
Program.	_ moved and	seconded to approve the 2021 Health Care Premium Discount

FY 2020 INTERNAL AUDIT PLAN AND AUDIT COMMITTEE UPDATE

School Employees Retirement System

Memo

To: Retirement Board

Cc: Richard Stensrud, Executive Director

Karen Roggenkamp, Deputy Executive Director

From: David Mather, Chief Audit Officer

Date: June 5, 2020

Subject: Audit Committee Charter Review and FY 2021 Internal Audit (IA) Plan

Annually, the Audit Committee (Committee) reviews and assesses the adequacy of their charter. Attached to this memo is a redlined draft of the proposed revisions to the charter that the Committee will meet to discuss on June 17.

All changes to the charter require Board approval. In the event that the Committee votes on June 17 to recommend these changes to the Board for review and approval, I have included a resolution for the Board to use if you decide to accept the revised charter.

On June 17, the Committee will also review and approve, as presented or as amended, the proposed FY 2021 IA plan. Attached to this memo is an overview of the plan that I will present to the Board at the June 18 meeting.

If you have any questions or need additional information, please contact me at dmather@ohsers.org. I look forward to meeting with you via video conference call on June 18.



SERS Audit Committee Charter

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Effective Date:	03/21/2013	Revision Date:	[<u>Date</u>] 06/21/2 018	Audience:	Everyone
Owner:	Board	Certifier:	Richard Stensrud	Co-Owner (s):	Executive
Document Links:	Purpose, Policy, Procedure, Definitions, Related Documents, Policy History				

Purpose

The purpose of this Audit Committee Charter is to assist the SERS Board in fulfilling its oversight responsibilities for:

- Financial and non-financial operational reporting [DMI] processes;
- The system of internal control and risk management [DM2];
- Internal and external audit processes of SERS; and
- Compliance with laws and regulations and the applicable policies governing ethical code of conductiom31.

Policy

Authority

The Audit Committee has authority to conduct or authorize investigations into any matters within its scope of responsibility. It is empowered to:

- Oversee the operations of the internal audit activity.
- · Oversee the work of any registered public accounting firm employed by the organization.
- Resolve any disagreements between management and the external auditors regarding financial reporting [DM4].
- Seek any information it requires from employees all of whom are directed to cooperate with the Committee's requests – or external parties.
- Meet with SERS' management, internal auditors, external auditors, or outside counsel, as necessary.

Composition

The Audit Committee consists of three members of the SERS Board. The Board Chair will appoint the Committee Chair on a biennial basis. Following the appointment of the Committee Chair, the Board Chair will ask for other Board members to fill the remaining spots on the Committee, with such commitments being for a two-year term.

Each committee member will be both independent and familiar with the finances of SERS. One committee member will be a retirant member and one committee member will be an employee member. One member shall be an "investment expert" or an "investment designee" as defined in Ohio Revised Code Section 3309.05.

Meetings and Communications

The Committee will hold regular meetings each quarter. Notice for all meetings shall be given in accordance with Rule 3309-1-25. The Committee may also convene additional meetings as circumstances require.

All committee members are expected to attend each meeting. The Committee will invite members of management, internal and external auditors, or others to attend meetings and provide pertinent information as necessary. Meeting agendas will be prepared and provided in advance to members, along with appropriate briefing materials. Minutes will be prepared and approved by the Committee at the subsequent meeting. Meetings will be arranged and conducted in accordance with Ohio's open meeting laws. Subject to open meeting laws, the Committee may hold executive sessions.

Responsibilities

Certain committee responsibilities will be carried out by the SERS Board at regular Board meetings (external audit results, enterprise risk management, management operational reporting, etc.). The Committee will ensure the following responsibilities are performed:

1. Financial Statements

- **1.1** Obtain information and training to enhance the Audit Committee members' expertise in financial reporting standards and processes to reasonably oversee financial reporting.
- 1.2 Review significant accounting and reporting issues, including complex or unusual transactions and highly judgmental areas, and recent professional and regulatory pronouncements, and understand their impact on the financial statements.
- **1.3** Review with the external auditors the results of the audit, including any difficulties or disagreements encountered.
- **1.4** Review the <u>Comprehensive Annual Financial Report and related regulatory filings before release annual financial statements and consider whether they are complete, consistent with information known to committee members, and reflect appropriate accounting principles.</u>
- **1.5** Review operational data and other sections of the annual report (e.g. CAFR) and related regulatory filings before release and consider the accuracy and

completeness of the information[DM5].

- 1.61.5 Review with the external auditors all matters required to be communicated to the Committee under generally accepted auditing standards.
- 1.71.6 Review all significant adjustments proposed by the external auditor.
- **1.81.7** Review all significant external auditor recommendations and management responses.
- 4.91.8 Review with General Counsel the status of legal matters that may have an effect on the financial statements.
- <u>1.9</u> Review the statement of management's responsibility for and the assessment of the internal controls structure and organizational financial reporting effectiveness [DM6].

2. Internal Control

- **2.1** Review and discuss the organization's risk management and internal control system, including information technology security and control.
- 2.2 Obtain information and training to enhance the Audit Committee members' awareness of Review and discuss—the organization's internal/disclosure controls and procedures to limit material control weaknesses and fraud[DM7].

2.2

- 2.3 Understand the scope of Internal Audit's review of risk management and internal control over financial and operational reporting [DM8], and obtain reports on significant findings and recommendations, together with management's responses.
- **2.4** Understand the scope of the external auditors' review of internal control over financial reporting, and obtain reports on significant findings and recommendations, together with management's responses.
- 2.5 DiscussReview with the external auditors their respective assessmentreviews and attestation of the effectiveness of the organization's internal controls and procedures ovefor financial reporting [DM9].

3. Internal Auditing

- **3.1** Review and approve the Internal Audit Charter, plans, activities, staffing, and organizational structure of the internal audit activity, including succession planning.
- **3.2** As needed, ensure there are no unjustified scope restrictions or resource limitations placed on the internal audit activity.
- 3.3 Annually approve the goals and objectives of the Chief Audit Officer (CAO).
- 3.4 At least quarterly, review the goals of the CAO.
- **3.5** Annually evaluate the performance of the CAO and deliver an annual written evaluation report to the Board.

- **3.6** Recommend to the Board salary and benefit changes for the CAO.
- **3.7** As needed, recommend to the Board the CAO's appointment and/or discharge.
- **3.8** As needed, meet separately with the CAO to discuss any matters that the Committee or CAO believes should be discussed in executive session.
- **3.9** Receive and review internal audit reports and management responses as appropriate.
- **3.10** Review the responsiveness and timeliness of management's follow-up activities pertaining to any reported recommendations.
- **3.11** Review periodic updates of advisory and consulting activities by the internal audit activity.
- **3.12** Review the effectiveness of the internal audit function, including compliance with the Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing.*

4. External Auditing

- **4.1** Review the external auditors' proposed audit scope and approach, including coordination of audit effort with internal auditing.
- **4.2** Review and confirm the independence of the external auditors by obtaining statements from the auditors on relationships between the auditors and the organization, including non-audit services and compensation practices, and discussing the relationships with the auditors.
- **4.3** As needed, meet separately with the external auditors to discuss any matters that the Committee or auditors believe should be discussed in executive session.

5. Compliance

- **5.1** Review the effectiveness of the system for monitoring compliance with laws and regulations and the results of management's investigation and follow-up (including disciplinary action) of any instances of noncompliance.
- **5.2** Review the findings of any examinations by regulatory agencies, and any auditor observations.
- **5.3** Review the process for communicating the <u>applicable policies governing ethical</u> code conduct to <u>companySERS</u> personnel, and for monitoring compliance therewith.
- **5.4** Obtain regular updates from management and legal counsel regarding compliance matters.

6. Reporting Responsibilities

- **6.1** Regularly report to the SERS Board about committee activities, issues, and related recommendations.
- **6.2** Provide an open avenue of communication between internal auditors, external

- auditors, management, and the SERS Board.
- **6.3** As needed, review any other reports the organization issues that relate to committee responsibilities.
- **6.4** In accordance with Ohio Revised Code Section 3309.044, the Committee shall annually prepare and submit to the Ohio Retirement Study Council a report of its actions during the preceding year.

7. Other Responsibilities

- **7.1** Perform other activities related to this charter as requested by the SERS
- **7.2** Institute and oversee special investigations as needed.
- **7.3** Review and assess the adequacy of the Committee charter annually, requesting SERS Board approval for proposed changes, and ensure appropriate disclosure as may be required by law or regulation.
- **7.4** Review annually that all responsibilities outlined in this charter have been carried out.
- **7.5** Evaluate the Committee's and individual members' performance on a regular basis.
- **7.6** In accordance with the SERS Reporting of Suspected Misconduct Policy, review results of any suspected misconduct reported to or discovered by the internal audit activity during an audit.

Effective Date

This Audit Committee Charter was adopted by the SERS Board on March 21, 2013, and amended by the Board on February 14, 2014, June 19, 2014, September 17, 2015, June 16, 2016, and June 15, 2017, June 21, 2018, and [date].

Procedures None

Definitions

None

Related Documents and Information

Statutes: 3309.044

Rules: N/A

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

Forms:

Policy History

Version1 - March 21, 2013- Created - Approved by Board

Version 2 – February 14, 2014 – Edited – Approved by Board

Version 3 – June 19, 2014 – Edited – Approved by Board

Version 4 – September 17, 2015 – Edited – Approved by Board

Version 5 - June 16, 2016 - Edited - Approved by Board

Version 6 - June 15, 2017 - Edited - Approved by Board

Version 7 – June 21, 2018 – Edited – Approved by Board

Version 8 – [Date] – Edited – Approved by Board

AUDIT COMMITTEE CHARTER

The SERS Audit Commit	tee recommends that the amended SERS Audit Committee Charter be approved
effective June 18, 2020.	moved that the Board adopt the Committee's recommendation.

FY2021 ANNUAL INTERNAL AUDIT PLAN

• Annual Internal Audit Plan

Board of Trustees Meeting

Risk Assessment and FY 2021 Internal Audit (IA) Plan

David Mather, Chief Audit Officer

June 18, 2020



Contents

- Objectives/Purpose
- Why a Risk Assessment?
- Risk Assessment Process
- Caveats
- ➤ IA Plan Development Cycle
- Criteria for Inclusion in IA Plan
- > Types of IA Engagements
- > FY 2021 IA Plan



Objectives/Purpose

- Develop an IA plan, based on inherent risk*, for the following fiscal year
- ➤ Focus IA's resources on entities in the audit universe** of higher inherent risk and/or criticality to SERS

^{**}The audit universe consists of the processes, projects, and technologies within the organization, i.e., potential auditable entities



^{*} Inherent risk is risk in the absence of any actions management might take to alter the risk's likelihood and/or impact

Why a Risk Assessment?

- ➤ Required by the International Standards for the Professional Practice of Internal Auditing from the Institute of Internal Auditors (IIA):
 - Standard 2010 Planning: "The chief audit executive must establish a risk-based plan to determine the priorities of the internal audit activity, consistent with the organization's goals."
 - Standard 2010.A1: "The internal audit activity's plan of engagements must be based on a documented risk assessment, undertaken at least annually. The input of senior management and the board must be considered in this process."

Why a Risk Assessment (continued)

- > Responsibility under the Audit Committee Charter:
 - "The committee will...review and approve the internal audit plans..."
- > Responsibility under the IA Charter:
 - "The CAO will conduct an annual risk assessment and produce a flexible risk-based audit plan that will accomplish the missions, objectives and scope of this charter."
 - "The Audit Committee retains the right to approve the annual audit plan presented by the CAO."



Risk Assessment Process – Inputs



^{* 13} meetings with 26 individuals, including the Audit Committee Chair, senior leadership, and SERS' independent financial statement audit firm



Risk Assessment Process – Inherent Risk Factors

- Factors selected to risk-rate each entity in the audit universe:
 - Known issues/concerns (changed from last year's "control design and effectiveness" factor)*
 - Impact on external stakeholders/reputation**
 - Extent and pace of changes, such as those caused by COVID-19*
 - Process and/or system complexity*
 - Materiality/operational impact**
 - Exposure to fraud or data loss**



^{*} Risk likelihood factor

^{**} Risk impact factor

Risk Assessment Process – Changes from FY 2020

- SharePoint-based surveys for process owners to self-assess their risks
- Five-point (rather than three-point) scale for assessing risk to allow for more differentiation in ratings
- Risk assessment now based on inherent (rather than residual*) risk
 - Internal controls have not been tested for all entities in the audit universe, or have not been tested recently enough, to be able to consistently opine on residual risk
 - Inherent risk allows for an "apples to apples" comparison, e.g., "Is payment of management fees inherently more risky than payment of survivor benefits?"



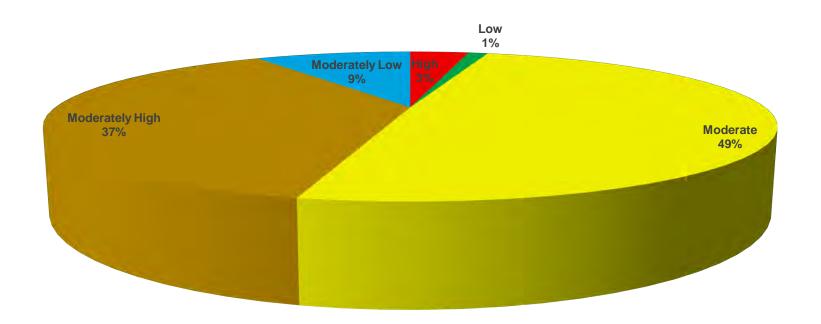
^{*} Residual risk is the risk remaining after management's response to the risk

Caveats

- ➤ Risk assessment is inherently **subjective**; as such, quantitative analysis is supplemented with IA judgment and management input
- ➤ IA's risk assessment process is **solely** for the purpose of developing the IA plan
 - The IA assessment focuses on the audit universe, not the entire universe of risks facing SERS*
 - The IA assessment does **not** seek to determine or evaluate management's risk tolerance or risk appetite

^{*} Going forward, the more comprehensive risk universe will be reflected in the risk assessments conducted by the Enterprise Risk Management (ERM) function, which IA will leverage to develop the risk-based IA plan

Audit Universe by Inherent Risk Rating*



^{*} Percentage of the audit universe assessed as inherently high risk, moderately high risk, etc. Percentages may not add to 100 percent due to rounding

IA Plan Development Cycle*



^{*} Source: Institute of Internal Auditors International Professional Practices Framework – Supplemental Guidance, Practice Guide: Developing the Risk-based Internal Audit Plan

Criteria for Inclusion in IA Plan

- > Inherent risk rating of moderate or higher
- > Input from management and the Audit Committee
- ➤ The last time the entity was audited and the audit results
- Anticipated coverage through other control monitoring/compliance functions and external audits/reviews
- Significant projects/initiatives at SERS
- Available resources



Types of IA Engagements

Identified processes, systems, and initiatives receive differing types and levels of review based on their importance, perceived risk, and most efficient approach.

I evels of review include:

Assurance

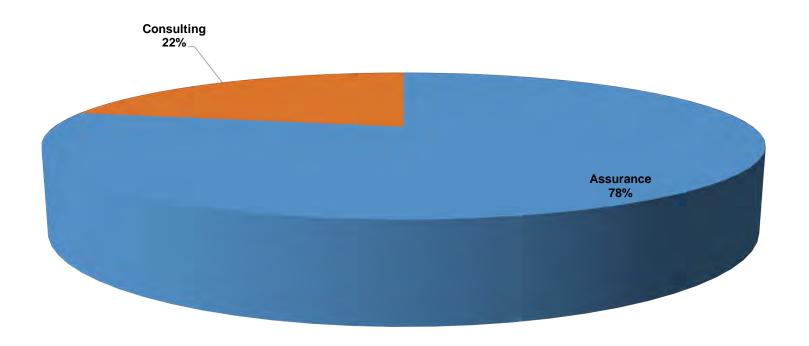
 Objective assessment of evidence to provide opinions or conclusions regarding an entity (process or system) – includes audits and compliance reviews, some of which may be cosourced

Consulting

- Advisory in nature and generally conducted at the specific request of management; no assurance provided
- Can occur throughout the year (e.g., training provided by IA to employees, review of policies) and may not always be planned



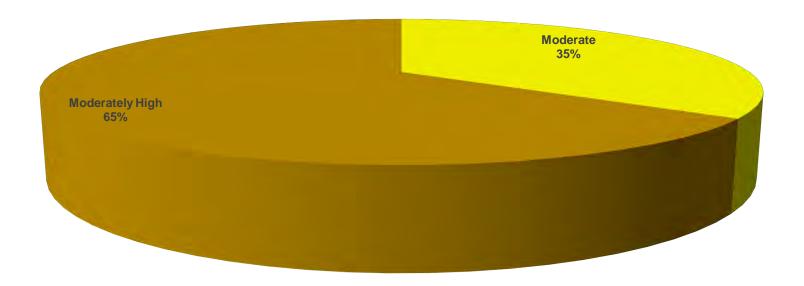
FY 2021 IA Plan by Type of Engagement





^{*} Percentages of IA plan estimated hours allocated to assurance and consulting activities

FY 2021 IA Plan by Inherent Risk Rating*



^{*} Percentage of IA plan estimated hours allocated to audit universe entities assessed as inherently high risk and moderate risk



Audit Coordination*

The Three Lines of Defense Model

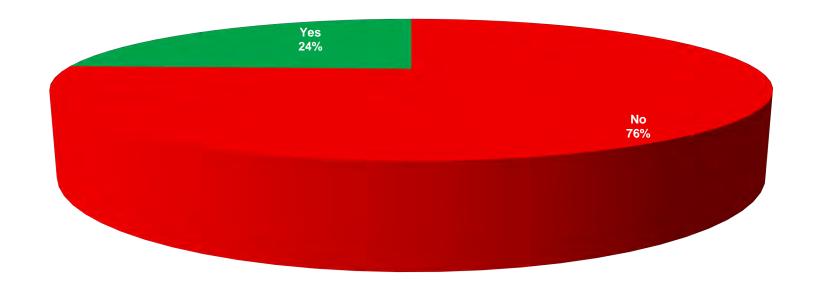


Adapted from ECIIA/FERMA Guidance on the 8th EU Company Law Directive, article 41

* The IA plan takes into account coverage by the independent financial statement audit firm, other external audits or reviews (e.g., claim administration audits in Health Care), and 2nd Line of Defense functions such as Investment Compliance, Information Security, Legal, and Investment Accounting. **Note:** IA is not "relying" on the work of the independent financial statement audit firm, but is attempting to avoid duplication of audit efforts.



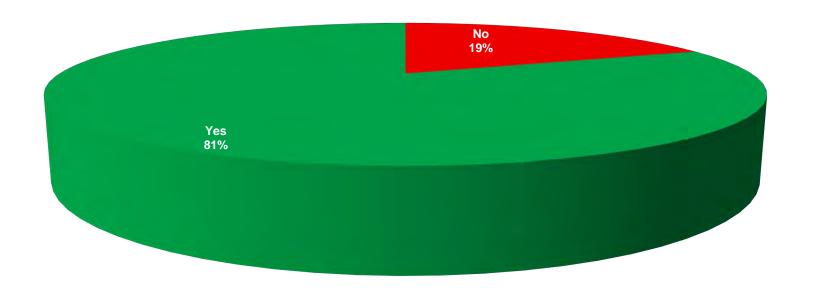
Coverage of Inherently High and Moderately High Risk Audit Universe from FY 2021 IA Plan*



^{*} Percentage of audit universe assessed as inherently high and moderately high risk that has coverage from the FY 2021 IA plan



Combined Coverage of Inherently High and Moderately High Risk Audit Universe*



^{*} Percentage of audit universe assessed as inherently high and moderately high risk that has coverage from IA, 2nd Line of Defense functions, the independent financial statement audit firm, and/or other external audits/reviews



Next Steps

- Implement approved plan
- Provide quarterly updates to Audit Committee
- Update plan, if necessary, based on:
 - New or emerging risks
 - Changes to laws, regulations, or industry standards
 - Changes to the SERS Strategic Plan
 - Changes to key processes, policies, or systems



FY 2021 IA Plan

Process, Project, or Technology	Department(s)	Inherent Risk Rating of Process, Project, or Technology	Type of IA Coverage	Description of Planned IA Activity
Processing of Service Retirement Benefits	Member Services, Finance, IT	Moderately High	Assurance	Monitoring Review, for appropriateness, of benefits sent to same bank account or physical address
Retiree Accounting	Finance, IT	Moderately High	Assurance	Audit (deferred from FY 2020 IA plan)
Database Management	IT	Moderately High	Assurance	Audit of SQL database management
Identity and Access Management	IT	Moderately High	Assurance	Relevant IT controls to be tested as part of every audit of a business process that is supported by a system (e.g., member refunds)
Processing and Payment of Refunds	Member Services, Finance, IT	Moderately High	Assurance	1. Audit (deferred from FY 2020 IA plan) 2. Monitoring a. Review, for appropriateness, of refunds sent to same physical address b. Review, for appropriateness, of refunds of inactive/dormant accounts
Capital Calls and Distributions Investments, Finance, Inv. Compliance, IT		Moderately High	Assurance	Audit
Financial Reporting Finance		Moderately High	Assurance	Relevant internal controls over financial reporting to be tested as part of every audit of a transactional business process (e.g., member refunds)

FY 2021 IA Plan

Process, Project, or Technology	Department(s)	Inherent Risk Rating of Process, Project, or Technology	Type of IA Coverage	Description of Planned IA Activity	
Investment Incentive Compensation	Executive	Moderately High	Assurance	Compliance review of payment accuracy against policy requirements for investment incentive compensation program	
Health Care Fund Revenue - Premiums, Rebates, and Funding Allocation	Health Care, Finance	Moderately High	Consulting	Consult with management on Direct Pay project	
Accounts Payable Finance, IT		Moderate Assurance		Monitoring Comparison of data between ADP (HR payroll), Great Plains (accounts payable), and SMART systems to identify any indicators of fraud	
Payroll	HR, Finance	Moderate	Assurance	Audit	
Required Minimum Member Services, Distributions (RMD) Finance, IT		Moderate Assurance		Part of refunds audit	
Imaging and Enterprise Content Management HR		Moderate	Consulting	Consult with management on information governance and enterprise content management project	
Conflicts of Interest and Undue Influence - Investment Managers (external), Investment Officers (internal), and SERS Leadership Inv. Compliance, Investments, Executive		Moderate	Assurance	1. Compliance review of disclosure filings by external investment managers and ethics filings by Investment Department personnel to ensure any potential conflicts are properly identified, evaluated and managed to avoid a conflict of interest 2. Compliance review of filings of key SERS leadership to ensure any undue influence is properly reviewed and reported to the Board	

FY 2021 IA Plan

Process, Project, or Technology		Inherent Risk Rating of Process, Project, or Technology	Type of IA Coverage	Description of Planned IA Activity	
Board Governance Executive, Legal		Moderate	Consulting	Review Audit Committee's annual activities prior to reporting them to the Ohio Retirement Study Council by March 31st	
Enterprise Risk Management Executive		Moderate	Consulting	Provide input into the development and implementation of SERS' risk management program and practices, as identified in the FY 2020-2024 Strategic Plan	

BOARD OFFICER ELECTION/APPOINT COMMITTEE CHAIRS

OFFICERS FOR SERS BOARD 2020-2021:

As Chairperson of the SERS Board, I open the floor for nominations for Chair:

Nominated	Ву:
Other Nominations	Ву:
Other Nominations	Ву:
As Chairperson of the SERS Board, I declare2020-2021 fiscal year.	CHAIRPERSON for the
I open the floor for nominations for Vice Chair:	
Nominated	Ву:
Other Nominations	Ву:
Other Nominations	Ву:
As Chairperson of the SERS Board, I declare2020-2021 fiscal year.	VICE-CHAIRPERSON for the

ITEM 21.

FUTURE CALENDAR DATES FOR 2020

AUDIT COMMITTEE MEETINGS

September 16 - 2:30 p.m. (Weds.) December 16 - 2:30 p.m. (Weds.)

COMPENSATION COMMITTEE MEETINGS

September 17 - 7:30 a.m. (Thurs.) December 17 - 7:30 a.m. (Thurs.)

BOARD MEETINGS

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 BUSINESSBoard Information Requested

BOARD INFORMATION REQUESTS AND FOLLOW-UP ITEMS

ADJOURNMENT

moved that the Board adjour	n to meet on Thursday, July 16, 2020 for their
regularly scheduled meeting.	•
The meeting adjourned at p.	m.
	Catherine Moss, Chair
Richard Stensrud, Secretary	