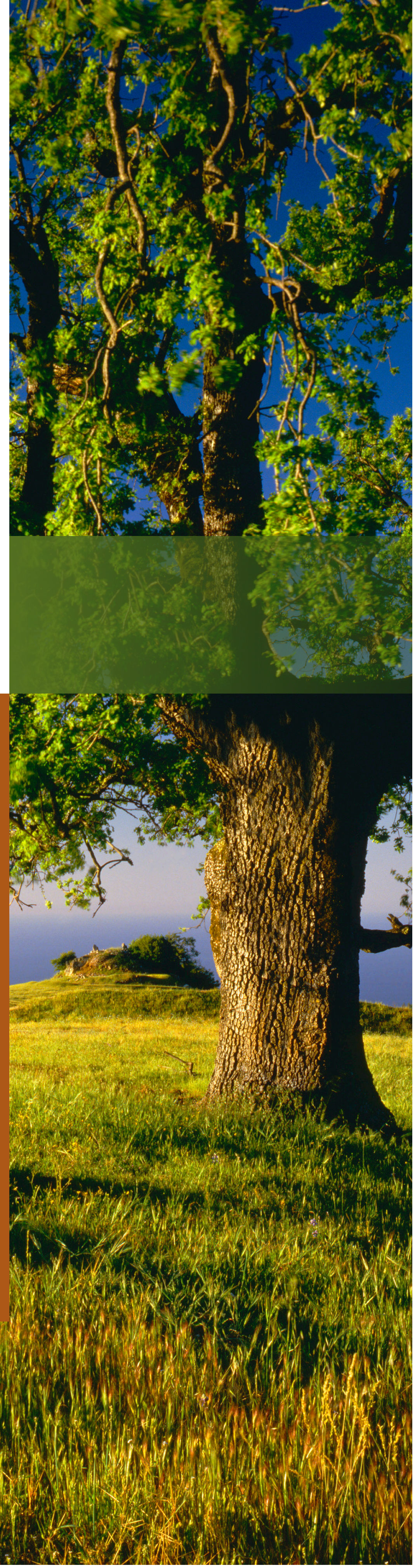
SCERS

2021
INVESTMENT YEAR IN REVIEW

2022
ANNUAL INVESTMENT PLAN



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2021 INVESTMENT YEAR IN REVIEW

2022 ANNUAL INVESTMENT PLAN

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LETTER OF INTRODUCTION

As Chief Executive Officer of the Sacramento County Employees' Retirement System (SCERS), I am pleased to present the 2021 SCERS Investment Year in Review and 2022 Annual Plan, as crafted by SCERS' Investment Staff and consultants.

The purpose of this report is to summarize the major events and developments in the investment program in the past year and preview the investment program's projects and objectives for this year.

Overall, this annual report on SCERS' investment program helps track our progress toward achieving near-term and long-term investment objectives, and in particular, meeting the fundamental goal of providing funding for the benefits paid to our members.

SCERS experienced a 17% gain in 2021, as the global economy rebounded from the COVID-19 pandemic. The market recovery boosted our funded status – our ability to meet long-term benefit obligations – to more than 94%, providing a level of comfort for the public employees and retirees who depend on a strong SCERS. However, volatility has picked up recently, capital market assumptions point toward lower returns in the future, and we know that booms can quickly become busts.

In 2021, the SCERS Board of Retirement made minor adjustments to the strategic asset allocation to mitigate this risk and ensure SCERS maintains a highly diversified investment portfolio that provides value across different economic and market environments. In 2022, SCERS will continue to work with our internal investment staff, investment consultants, and key investment partners to implement the revisions to the strategic asset allocation, including adjusting asset class exposures.

In 2021, SCERS also commemorated our 80th anniversary as a retirement system, recognizing the growth and strength of our fund since 1941. Through the inevitable ups and downs of the market, our foundation of success has provided stability for our 30,000 members, and we remain confident and excited about our future.

Respectfully Submitted,

Eric Stern
Chief Executive Officer

STAFF, CONSULTANTS & STRATEGIC PARTNERS

Under the California Constitution, the SCERS Board has the exclusive authority and fiduciary responsibility for the management of SCERS' investment program. In carrying out this duty, the SCERS Board establishes the strategic direction, asset allocation, return and risk parameters, and investment policies for the retirement system. The SCERS Board receives guidance in making these decisions from its internal staff of investment professionals (Staff) and from expert investment consultants, all of whom also serve as fiduciaries with respect to the fund. SCERS' general investment consulting services are provided by Verus Advisory. Cliffwater LLC serves as lead consultant for the alternative asset classes, and The Townsend Group serves as lead consultant for the real estate asset class.

During the year, SCERS completed the evaluation of responses to the RFP for alternative assets consulting services that was issued in 2020, and retained Cliffwater, LLC. SCERS renewed Cliffwater's contract for a three-year term. The contracts for general investment consultant Verus Advisory and real estate consultant The Townsend Group expire in 2022, and each consultant will be evaluated in 2022.

Given the complexities of managing a large, multi-asset class investment program, the SCERS Board has delegated substantial responsibility for the day-to-day oversight and management of the assets of the retirement system to the internal investment Staff, who in turn, utilize and draw upon the investment expertise and resources of SCERS' investment consultants and key investment partners. SCERS believes that a strong, collaborative partnership between Staff, consultants, and investment service providers not only assures the prudent oversight of the fund, but produces significant investment value over time in the form of higher returns, lower risk, and lower costs.

The collaborative partnership between Staff, consultants, and investment partners is grounded in the following principles:

- Staff focuses on and directly engages in those areas where it can add investment value;
- Consultants serve as an 'extension of staff' in those areas where they have greater expertise, capabilities and/or resources; however, Staff continues to be actively involved in any decisions involving such areas;
- Both Staff and consultants are responsible for monitoring and overseeing the investment portfolio;
- Both Staff and consultants are charged with developing ways to improve investment performance and manage risk;
- Strategic partnerships may be established with investment providers if they will (a) allow SCERS to develop an efficient, customized solution to an investment need; (b) allow SCERS to gain access to specialized investment knowledge or expertise; or (c) improve access to niche investment markets or strategies that will add value to the portfolio; and
- Overlapping expertise and capabilities of Staff, consultants, and strategic partners is beneficial because it brings multiple perspectives to the investment decision-making process.

Implicit in this approach is SCERS' belief that a strong internal investment Staff is central to the successful execution of the investment program, in that Staff: (1) serves as the 'hub' and coordinator of the activities of consultants and strategic partners; (2) provides a source of analysis independent from those partners; (3) allows SCERS to be a generator of investment ideas and not simply a passive recipient of investment ideas; (4) facilitates

STAFF, CONSULTANTS & STRATEGIC PARTNERS (Continued)

investment solutions specific to SCERS' needs; and (5) enables SCERS to capture and institutionalize knowledge and expertise.

The effectiveness of the collaborative partnership between SCERS' Staff, consultants, and strategic partners can be seen in the asset liability modeling study that was performed in 2021, resulting in the revised strategic asset allocation approved by the SCERS Board, as well as the asset class structuring and implementation that occurred to align with the asset allocation changes.

The investment staff reached full capacity in 2021, with the hiring and onboarding of an Investment Analyst, who started in early 2021. SCERS also promoted one of its Investment Officers to a Senior Investment Officer during the year. The current investment Staff structure and any additional investment staffing needs will be evaluated in 2022.

Commentary on the ongoing development of SCERS' investment program from consultants Verus, Cliffwater, and Townsend can be found in Appendix 1 to 3 of this Report.

PORTFOLIO OVERVIEW

SUMMARY OVERVIEW

For the calendar year ended December 31, 2021, the Sacramento County Employees' Retirement System (SCERS) generated a gross return of 17.0%. As explained in more detail below, SCERS' return was well above the Policy Index return of 14.4%. Over the 3-year and 5-year periods, SCERS has returned 15.6% and 12.3%, respectively, versus the Policy Index return of 13.2% and 10.4%, respectively. SCERS ended 2021 with $13.3 billion in assets.

MARKET OVERVIEW

The 2021 calendar year represented continued recovery from the COVID-19 pandemic; however, the recovery has varied between the virus and health crisis itself, the economy, and the financial markets. On the virus front, the world experienced reason for hope early in 2021 with the rollout of the vaccines; however, this has been tempered by waves of outbreaks, including the Delta variant, and most recently with the Omicron variant. The health impact of the pandemic continues to be devastating for families across the globe.

While the economic impact of the pandemic was severe early on, 2021 saw the economic picture improve significantly, driven by the development and deployment of COVID-19 vaccines, the extraordinary fiscal and monetary stimulus measures, and the gradual re-opening of economies. Economies around the globe are trying to find their new normal, though the path has been episodic as the world continues to fight new variants of the virus. Within the U.S., the broad economy has recovered at a robust pace, growing at quarterly annualized rates of 6.3%, 6.6%, 2.3%, and 6.9% over the past four quarters (Q1'2021 – Q4'2021), which brings U.S. GDP past pre-pandemic levels. Unemployment has fully recovered to pre-pandemic levels, and sits at 3.9% as of the end of 2021. However, inflation has also picked up significantly with the improving economic picture, with the headline CPI inflation number spiking to 7.0% to end the year, well off its lows of 1.4% in 2020. Two years into the pandemic, we have transitioned from an economy impacted by a severe deterioration in demand due to COVID-19 related restrictions early in the pandemic, to one that is seeing extraordinary pent up demand combined with unprecedented supply side constraints and upward pressure on prices.

Financial markets have experienced an extraordinary rebound from pandemic lows, starting in mid-2020 and continuing throughout 2021. Fueled and supported at first by monetary policy and central banks lowering interest rates to near-zero levels while flooding the market with trillions of dollars of liquidity, and later by vaccine rollouts and pent up consumer demand, financial markets have not looked back and sped right past pre-pandemic market highs. Equity markets have doubled off their pandemic lows. The market rally has been broad and extended across almost all markets including equities, credit, real estate, and real assets.

Most asset classes generated impressive returns in 2021, many double-digit, except for interest rate sensitive fixed income segments and emerging market equities, which were negative. Within equities, the global MSCI ACWI returned 18.5%; however, there were divergences across both geographies and styles. On the geographic front, domestic equities outperformed international equities. The Russell 3000 Index returned an impressive 25.7%, while the MSCI EAFE and MSCI Emerging Markets Indexes returned 11.3% and -2.5%, respectively. Emerging markets were impacted by China, which makes up a significant portion of the index and whose equity returns were down significantly due to a number of headwinds. Within styles, value stocks outperformed growth stocks, particularly in the small cap segment. Small cap stocks underperformed large caps stocks during the year.

Fixed income market returns varied meaningfully during the year. Interest rates rose significantly in 2021, particularly for longer-date bonds. 10-Year Treasury yields started the year at 0.91%, but rose to 1.51% by year-end, as the Federal Reserve (the Fed) recognized that inflation was higher and more persistent than expected, and telegraphed its intent to move away from accommodative policies by increasing its tapering measures and raising interest rates. With the market expecting at least three interest rate hikes in 2022, interest rate sensitive bonds struggled during the year, as the Bloomberg U.S. Treasury Index returned -2.3% in 2021. The broad-based Bloomberg Barclays Aggregate index, which contains an equal mix of Treasuries, agency mortgages, and investment grade credit, also struggled due to the rising rate environment, returning -1.5%. The spread sectors fared better, as fixed income investors gravitated toward yield. The Bloomberg Barclays U.S. Corporate High Yield Index ended the year up 5.3%. Treasury inflation protected securities were the best returning bond sector, fueled by rapidly rising inflation expectations, with the Bloomberg U.S. TIPS Index returning 6.0% in 2022.

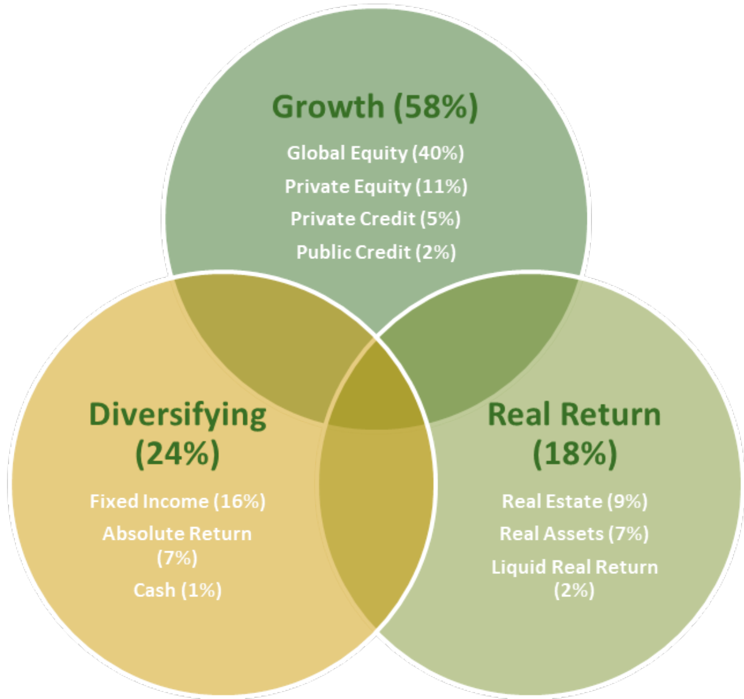
There are more risks to the economy and markets in 2022 than at this time last year. Inflation, which early on was thought to be transitory due to pandemic related supply chain bottlenecks, is a sustainable risk. As a result the Fed and other central banks are transitioning toward tighter monetary policies which could impact economic growth. We are also moving from the recovery and high growth phase of the current cycle, to a likely slower growth environment across most major economies. In addition, we are also over two years into the pandemic, with new variants proving challenging and creating more uncertainty going forward. There are also a number of political risks, including Russia and China. Financial markets have had quite a run over the past year; however, valuations are stretched across most asset classes, and the market is starting to show cracks early in 2022, with volatility having picked up significantly and with markets down to start the year.

STRATEGIC ASSET ALLOCATION

SCERS' investment program is structured around a strategic asset allocation with the objective of ensuring diversification of investments in a manner that generates a desired rate of investment return with an acceptable level of investment risk. The asset allocation targets are not tactical, but rather are long term in nature, consistent with the nature of our members' lifelong benefit obligations. Ranges are incorporated around target allocations to add flexibility around the implementation of the portfolio based on relative value considerations across asset classes.

SCERS' strategic asset allocation incorporates a functional framework that groups and classifies segments of the portfolio in order to link those segments that are exposed to similar economic environments and risk factors, and which would be expected to have similar roles and outcomes in a portfolio. The functional grouping breaks the portfolio into three asset categories: (1) Growth; (2) Diversifying; and, (3) Real Return, with asset classes that underlie these asset categories. The current allocation is shown below:

PORTFOLIO OVERVIEW (Continued)



The Growth asset category includes those segments of the portfolio that tend to perform best in a high growth and low/moderate inflationary environment, including most equity and credit investments. In contrast, they tend to perform poorly during recessionary periods, when GDP growth is contracting, or during certain periods when unexpected inflation arises. Growth assets tend to comprise the dominant allocation within most institutional investment portfolios, including that of SCERS. The Diversifying asset category includes those segments of the portfolio which are expected to protect capital and perform better than the Growth asset category during dislocated and stressed market environments, including traditional fixed income and absolute return strategies. The Real Return asset category includes those segments of the portfolio that protect against inflation, generate cash flow, and provide further portfolio diversification, including real estate, infrastructure, energy, and agriculture investments.

SCERS' strategic asset allocation takes a risk-balanced approach that emphasizes having enough return generating assets to drive performance toward the actuarial rate of return; however, it also maintains meaningful diversification, especially to investment strategies with low and negative correlations to equity markets that can reduce portfolio volatility and protect against significant market drawdowns. It is also expected to generate meaningful cash flow for SCERS' plan. The strategic asset allocation contains a meaningful allocation to less liquid private market investments, so tracking SCERS' liquidity profile in order to maintain sufficient cash flows in order to meet benefit payment obligations is a key focus of SCERS' Board, investment staff, and investment consultants.

SCERS utilizes an Overlay Program, managed by State Street Global Advisors (SSGA), to bring SCERS' portfolio in line with its target asset allocation, and to invest excess portfolio cash. The Overlay Program uses public market proxies to replicate exposures within the portfolio, making it particularly effective in rebalancing public market assets, and less so for alternative assets. Any over- and under-weights within the portfolio are rebalanced quarterly by SCERS' Overlay Program, and when any physical rebalancing activity takes place, the Overlay Program is adjusted accordingly.

During the year, SCERS underwent an asset liability modeling (ALM) study that resulted in the approval of a revised strategic asset allocation. The revisions were moderate, with the asset allocation maintaining the functional approach described above. **Table 1** below reflects the changes to the strategic asset allocation.

PORTFOLIO OVERVIEW (Continued)

Table 1 – SCERS' Strategic Asset Allocation

Asset Category/Asset Class	Prior Asset Allocation	Revised Asset Allocation	Changes
Growth	**58.0%**	**58.0%**	**0.0%**
Global Equity	40.0%	40.0%	0.0%
Private Equity	9.0%	11.0%	2.0%
Public Credit	2.0%	2.0%	0.0%
Private Credit	4.0%	5.0%	1.0%
Growth Absolute Return	3.0%	0.0%	-3.0%
Diversifying	**26.0%**	**24.0%**	**-2.0%**
Fixed Income	15.0%	16.0%	1.0%
Global Fixed Income	3.0%	0.0%	-3.0%
Diversifying Absolute Return	7.0%	7.0%	0.0%
Cash	1.0%	1.0%	0.0%
Real Return	**16.0%**	**18.0%**	**2.0%**
Real Estate	7.0%	9.0%	2.0%
Real Assets	7.0%	7.0%	0.0%
Liquid Real Return	2.0%	2.0%	0.0%
	100.0%	**100.0%**	

The key changes between the new strategic asset allocation and the prior are:

Growth:

- Overall Growth allocation remained at 58%.
  - Consolidation of separate Domestic Equity and International Equity asset classes into a Global Equity asset class
  - Private Equity increased from 9% to 11%
  - Private Credit increased from 4% to 5%
  - The 3% Growth Absolute Return allocation was removed from the asset allocation

Diversifying:

- Decreased overall Diversifying allocation from 26% to 24%
  - Fixed Income allocation decreased from 18% to 16%
    - Consolidated Fixed Income exposures across Core Plus and U.S. Treasuries
    - Removed a 3% Global Fixed Income segment from the asset allocation
  - Diversifying Absolute Return remains as SCERS' sole absolute return exposure at a 7% allocation

Real Return:

- Increased overall Real Return allocation from 16% to 18%
  - Real Estate increased from 7% to 9%

PORTFOLIO OVERVIEW (Continued)

The revised asset allocation reallocated the Growth Absolute Return and Global Fixed Income exposures to private market asset classes that have higher expected returns going forward. At the asset category level, it maintains the same weighting to Growth assets, decreased Diversifying assets slightly, and reallocated a portion of this exposure to Real Return assets. The asset allocation mix has a moderately higher expected return versus the prior portfolio, though below SCERS' actuarial rate, in a lower forecasted return environment, and a moderately higher risk profile, with a slightly higher risk-adjusted return as measured by the Sharpe Ratio. The allocation to illiquid assets increased modestly with increases to some of the private market asset classes, but the asset allocation maintains a reasonable liquidity profile as measured by a liquidity analysis conducted by Verus.

Overall, the revised strategic asset allocation continues with a risk-balanced approach that emphasizes having a prudent blend of return generating assets to drive performance, as well as meaningful diversification to less correlated assets to protect against significant market drawdowns, while also maintaining inflation sensitive and cash flow generating assets. A risk-balanced approach should prove valuable going forward with high market valuations, reduced return expectations, the outlook for less accommodative monetary policy, increased volatility, and higher inflation measures.

The process of transitioning SCERS' portfolio to the new strategic asset allocation targets began during the calendar year and into the early parts of 2022. This included making structural modifications to underlying asset classes to align with the new strategic asset allocation, adjusting policy benchmarks, rebalancing activity, and initiating a couple of investment manager searches within the public market asset classes. The majority of the public markets implementation will occur in 2022, with private market implementation occurring over the next few years, given the unique cash flow characteristics of these segments and the importance of maintaining vintage year diversification.

Table 2 below compares SCERS' actual physical allocations as of the end of 2021 to the new target allocations.

Table 2 – SCERS' Actual Allocations versus Target Allocations

Asset Category/Asset Class	Actual Allocation*	Target Allocation	Variance
Growth	**60.5%**	**58.0%**	**2.5%**
Global Equity	41.1%	40.0%	1.1%
Private Equity	13.4%	11.0%	2.4%
Public Credit	1.7%	2.0%	-0.3%
Private Credit	2.3%	5.0%	-2.7%
Growth Absolute Return	2.0%	0.0%	2.0%
Diversifying	**20.2%**	**24.0%**	**-3.8%**
Fixed Income	11.4%	16.0%	-4.6%
Global Fixed Income	2.1%	0.0%	2.1%
Diversifying Absolute Return	6.0%	7.0%	-1.0%
Cash	0.7%	1.0%	-0.3%
Real Return	**16.6%**	**18.0%**	**-1.4%**
Real Estate	7.6%	9.0%	-1.4%
Real Assets	5.8%	7.0%	-1.2%
Liquid Real Return	3.2%	2.0%	1.2%
Overlay Program	**0.8%**	**0.0%**	0.8%
Other Cash	**1.9%**	**0.0%**	1.9%
	100.0%	**100.0%**	

* Based on Verus Advisory market values

IMPLEMENTATION AND OTHER CONSIDERATIONS

Below is a summary of the implementation that took place within the SCERS portfolio in 2021. Each alternative/private market asset class had defined budgets approved by the Board that were closely met. Much of the implementation was follow-on fund investments with existing managers, in addition to several new fund series investments with existing managers and investments with new managers. The public market asset classes (public equity and fixed income) did not have budgeted plans for new mandates, and no new strategies were implemented in 2021, though there are several manager searches scheduled for the public market asset classes in 2022.

PORTFOLIO OVERVIEW (Continued)

Table 3 – SCERS' Implementation Summary

2021 Implementation Summary			
	Investment Amount (in millions)	Targeted Amount (in millions)	Total # Investments
Public Equities	-	-	-
Fixed Income	-	-	-
Absolute Return*	$45	$90	1
Private Equity	$190	$200	7
Private Credit	$125	$100	4
Real Assets	$207	$210	4
Real Estate	$70	$60	2

* Also transferred an existing investment ($67 million) from Growth to Diversifying Absolute Return

In 2022, the Overlay Program will transition to the revised strategic asset allocation, and any adjustments to the overlay proxies will be presented to the Board. In addition in 2022, the asset category investment policy statements (IPSs) and the Master IPS will be updated in 2022 to reflect the changes to the strategic asset allocation and underlying asset class structural revisions.

An ongoing consideration for SCERS is managing the complexity of the investment portfolio. As SCERS' assets have grown over time, so has the number of asset classes, investment manager relationships, and underlying investment strategies. The growth in the portfolio has moved in line with increased diversification across a wide range of asset classes that serve varying roles within the total portfolio. In constructing and implementing the investment portfolio, SCERS tries to find a balance between simplicity and complexity. This includes having a fewer number of investment managers in asset classes with greater liquidity profiles where there is reduced risk in having concentrated investment mandates, such as in public equity and fixed income. Within the private market asset classes, SCERS strives to balance ample exposure to larger, more liquid, and lower-cost open-end investment vehicles, while prudently allocating to closed-end illiquid investment structures. This approach requires making appropriately sized allocations and seeking differentiated strategies that compensate investors for the underlying liquidity risk.

During 2021, SCERS issued a portfolio analytics and risk management RFP in order to improve the analytical tools available to Staff and the Board to properly oversee and manage a growing and complex portfolio. A portfolio analytics and risk management system will provide Staff and the Board with a total portfolio view that can holistically view exposures and risk across the entire portfolio (i.e., publics and privates), as well as granularly within assets classes, including the alternative asset classes. The system will be able to dynamically view portfolio exposures, factor exposures, performance attribution, and perform stress testing and scenario analysis when considering new investments. Staff spent much of 2021 reviewing the RFP responses and holding system demonstrations. A recommendation is expected to be made to the Board in the first half of 2022, with onboarding taking place during the second half of the year.

Another consideration going forward is related to cash management. SCERS, like many public plans has negative cash flows, meaning on an annual basis more benefit payments go out than contributions come in. The difference in cash flows is made up by the returns of the investment portfolio. This dynamic, as well as taking into account a maturing private markets portfolio with meaningful cash movements highlights the importance of forecasting and managing plan cash levels. Staff plans on evaluating internal processes for better managing plan cash flows, as well as any third party solutions. Staff also plans on updating SCERS' Cash Management policy, which was created in 2019.

PORTFOLIO PERFORMANCE AND ATTRIBUTION

For 2021, SCERS generated a total gross fund return of 17.0%, which was driven by continued recovery from the COVID-19 pandemic, and fueled by low interest rates, monetary policy measures, and improving economic data. The Overlay Program was slightly detractive to the total return due to rebalancing out of equities and into underperforming fixed income during the year, as SCERS' total gross fund return ex-Overlay was 17.5%. The calendar year return meaningfully outperformed the Policy Index return of 14.4%, and was ahead of the Investment Metrics peer universe of defined benefit plans with assets greater than $1 billion, whose median return was 14.0% during 2021.

SCERS' asset categories delivered mixed results, with Growth assets and Real Return assets returning an impressive 23.7% and 21.4%, respectively, and Diversifying assets returning a muted 0.7%. The Growth asset category benefitted from impressive double-digit returns across all segments (Public Equities, Private Equity, Public Credit, Private Credit, and Absolute Return). Private Equity led the asset category, generating an extraordinary 58.4% return (private market returns are lagged a quarter). Within the Diversifying asset category, Fixed Income in aggregate generated negative returns, impacted by rising interest rates, while Diversifying Absolute Return generated positive returns. Across the Real Return asset category, Real Estate (non-core real estate is lagged a quarter), Real Assets, and Liquid Real Return generated solid double digit returns, driven by a recovery in real estate fundamentals and the dramatic rebound in energy prices.

SCERS' asset classes, which underlie each asset category, produced positive returns across the board for the year, except for Fixed Income. Asset classes that exceeded their benchmarks included Private Equity by 10.1%, Public Credit by 8.0%, Private Credit by 4.5%, Growth Absolute Return by 6.2%, Fixed Income by 1.5%, Real Estate by 3.8%, Real Assets by 6.4%, Liquid Real Return by 0.1%, and Opportunities by 4.1%. Asset classes that trailed their benchmarks included Domestic Equity by -0.4%, International Equity by -0.9%, and Diversifying Absolute Return by -0.8%.

The performance of the Private Equity, Private Credit, and Real Assets asset classes are better reflected through an internal rate of return (IRR) calculation, which accounts for asset inflows and outflows. The performance results of these segments in the asset class sections of this report utilize an IRR calculation, as calculated by Cliffwater. Townsend uses a time-weighted return for Real Estate in the Real Estate section.

Over the longer 3-year and 5-year periods, SCERS has generated gross returns of 15.6% and 12.3%, respectively. Both the 3- and 5-year figures meaningfully exceed the Policy Index return of 13.2% and 10.4%, respectively. Both the 3-year and 5-year returns also exceed SCERS' actuarial return assumption of 6.75%. Since inception (as of June 1986), SCERS' portfolio has generated a gross return of 8.8%, which is in-line with the Policy Index return of 8.8%.

SCERS' investment results (as calculated by Verus) are summarized in **Table 4**.

PORTFOLIO OVERVIEW (Continued)

Table 4 – Investment Results

	For the Period Ended December 31, 2021		
	Annualized		
	1 Year	3 Years	5 Years
GROWTH ASSET CATEGORY:*	23.7 %	21.4 %	- %
Policy Benchmark: Blended weighted average of asset class benchmarks	20.2	18.6	-
Domestic Equity	25.3 %	26.0 %	18.1
Policy Benchmark: Russell 3000 Index	25.7	25.8	18.0
InvMetrics All DB U.S. Eq Gross Median	25.8	24.8	17.1
International Equity	7.4	15.2	11.9
Policy Benchmark: MSCI ACWI ex-U.S. Index	8.3	13.7	10.1
InvMetric All DB ex-U.S. Eq Gross Median	8.6	14.3	10.3
Private Equity**	58.4	30.2	26.8
Policy Benchmark: Thomson Reuters C/A All PE 1 Quarter Lag	48.3	22.0	19.7
L/T Benchmark: Russell 3000 + 3% 1 Quarter Lag	34.9	19.0	19.9
InvMetric All DB Private Eq Net Median	34.0	20.8	17.3
Public Credit	13.4	9.0	6.5
Policy Benchmark: 50% BofA ML High Yield II / 50% Credit Suisse Leveraged Loans	5.4	7.0	5.2
Private Credit**	15.0	9.4	8.9
Policy Benchmark: Credit Suisse Leveraged Loan + 2%	10.5	6.1	6.6
Growth Absolute Return	13.2	12.4	8.2
Policy Benchmark: HFRI Fund of Funds Composite Index + 1%	7.0	9.5	6.5
DIVERSIFYING ASSET CATEGORY:*	0.7	5.5	-
Policy Benchmark: Blended weighted average of asset class benchmarks	0.0	5.0	-
Public Fixed Income	-0.3	5.9	4.7
Policy Benchmark: Custom***	-1.8	4.7	3.7
Diversifying Absolute Return	6.6	5.3	2.8
Policy Benchmark: HFRI Fund of Funds Conservative Index	7.4	6.7	4.9
	1 Year	3 Years	5 Years

PORTFOLIO OVERVIEW (Continued)

	For the Period Ended December 31, 2021		
	Annualized		
REAL RETURN ASSET CATEGORY:*	21.4	9.4	-
Policy Benchmark: Blended weighted average of asset class benchmarks	18.4	6.8	-
Real Estate****	23.3	11.6	11.0
Policy Benchmark: 65% NFI-ODCE / 35% NFI-ODCE + 1%	19.5	8.5	8.1
InvMetric All DB Real Estate Net Median	20.3	8.2	7.5
Real Assets**	24.8	7.5	10.9
Policy Benchmark: Custom*****	18.4	4.4	6.1
L/T Benchmark: CPI-U Headline + 5%	12.0	8.5	7.9
Liquid Real Return	13.8	-	-
Policy Benchmark: Custom******	13.7	-	-
OPPORTUNITIES:	18.5	8.8	7.0
Policy Benchmark: Policy Index Benchmark	14.4	13.2	10.4
CASH:	0.1	-	-
Policy Benchmark: Overnight LIBOR	0.1	-	-
TOTAL FUND:			
SCERS Total Fund - Gross	17.0	15.6	12.3
SCERS Total Fund - Net	16.7	15.3	12.1
Policy Benchmark Index*******	14.4 %	13.2 %	10.4 %
InvMetric Public DB > $1B Gross Median	14.5	14.8	11.0

Notes: Unless noted, returns were prepared by Verus Advisory, Inc., and shown on a gross of fee basis (except for absolute return, private equity, private credit, real assets, and opportunities, which are net of fees), and included the overlay effect. Return calculations were prepared using a time-weighted rate of return.

* Verus asset category composite returns did not start until March 31, 2017.
** Investment return and index return are one quarter in arrears.
*** The public fixed income benchmark consists of 55.6% Bloomberg Barclays Aggregate Bond Index, 27.8% Bloomberg Barclays US Treasury Index, 13.3% Citi WGBI Index, and 3.3% JPM GBI-EM Index.
**** Non-core real estate returns are one quarter in arrears.
***** The real assets benchmark consists of 45% Cambridge Associates Private Infrastructure Index, 35% Cambridge Associates Private Energy Index, 10% NCREIF Agriculture Index, and 10% NCREIF Timber Index.
****** The liquid real return benchmark consists of 15% FTSE EPA/NAREIT Developed Liquid Index, 25% S&P Global Infrastructure Index, 10% S&P Global Large Mid Cap Commodity and Resource Index, 10% Bloomberg Roll Select Commodity Index, 30% Bloomberg Barclays 1-10 Year US TIPS Index, 10% Bloomberg Barclays US Dollar Floating Rate Note < 5 Years Index.
******* The policy index benchmark consists of (Domestic Equity - 21% Russell 3000); (International Equity - 20% MSCI ACWI ex U.S.); (Fixed Income - 10% Barclays Aggregate, 5% Barclays US Treasury, 2.4% Citigroup WGBI ex U.S. Unhedged, 0.6% JPM GBI EM Diversified, 1% BofA ML High Yield II, 1% Credit Suisse Leveraged Loans); (Private Equity - 9% Thomson Reuters C/A All PE 1 Qrt Lag); (Private Credit - 4% Credit Suisse Leveraged Loans + 2%); (Absolute Return - Growth-Oriented 3% HRFI FoF Composite + 1%, Diversifying 7% HFRI FoF Conservative); (Real Estate - 4.5% NFI-ODCE, 2.5% NFI-ODCE +1%); (Real Return - 3.1% Cambridge Assoc Private Infrastructure 1 Qtr Lag, 2.5% Cambridge Assoc Private Energy 1 Qtr Lag, 0.7% NCREIF Farmland 1 Qtr Lag, 0.7% NCREIF Timberland Index Lagged); (Liquid Real Return - 0.3% FTSE EPA/NAREIT Developed Liquid Index, 0.5% S&P Global Infrastructure Index, 0.2% S&P Global Large Mid Cap Commodity and Resource Index, 0.2% Bloomberg Roll Select Commodity Index, 0.6% Bloomberg Barclays 1-10 Year US TIPS Index, 0.2% Bloomberg Barclays US Dollar Floating Rate Note < 5 Years Index); (cash - 1% overnight Libor).

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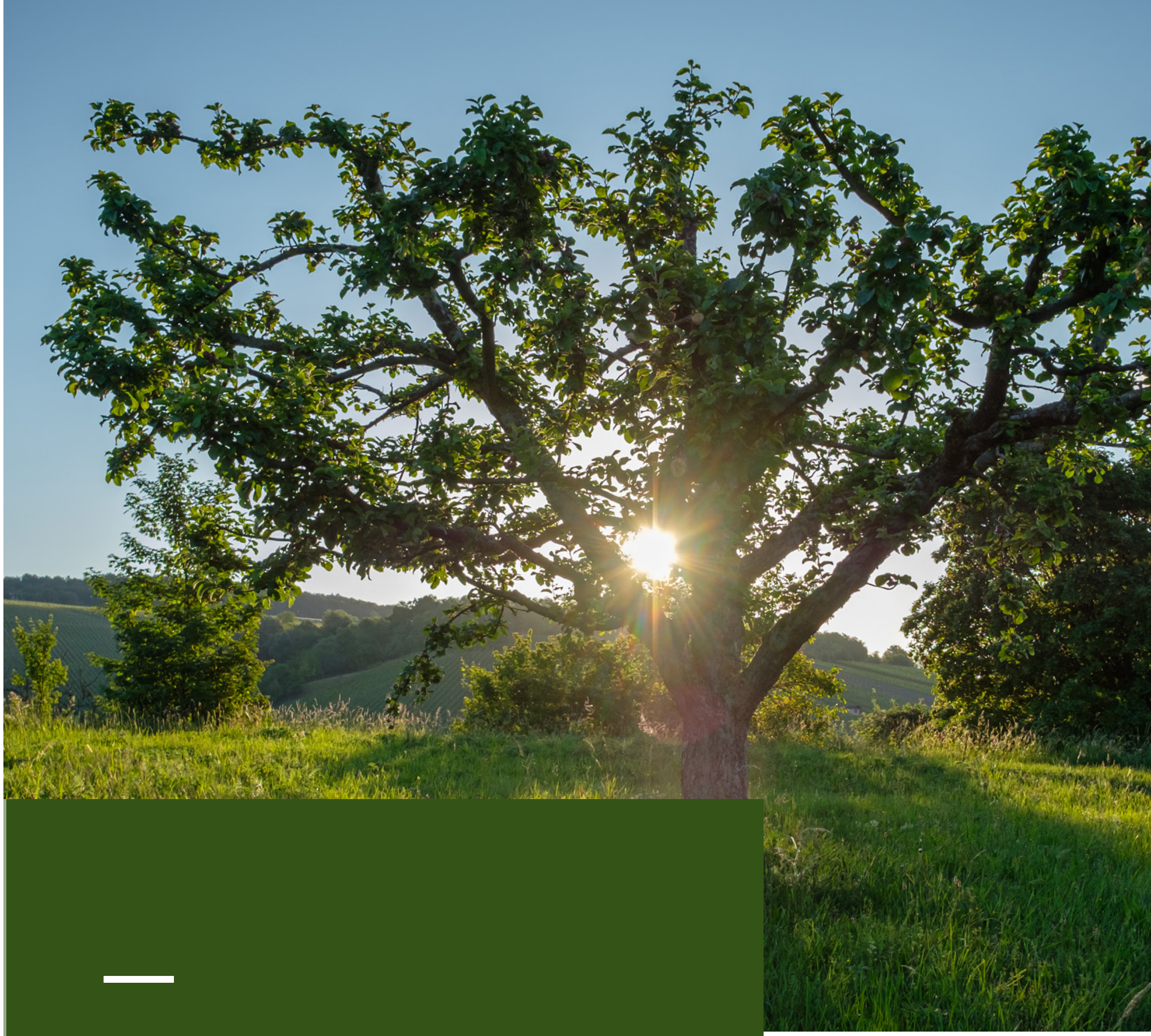

ASSET CLASSES

GLOBAL EQUITY

MARKET OVERVIEW

Global equity markets generated strong returns in 2021, continuing the recovery that began in 2020 following sharp declines experienced in the early phase of the COVID-19 pandemic. The economic recovery that has supported global equity market performance has been driven by unprecedented levels of monetary and fiscal support by central banks and developed market governments. According to the International Monetary Fund (IMF), global governments provided approximately $17 trillion in fiscal stimulus measures in response to the pandemic [1]. These accommodating measures helped equity markets look past the continued health impact from COVID-19, including the Delta and Omicron variants, and the resulting economic impacts such as supply chain disruptions and rising inflation. Despite bouts of volatility and continued uncertainty regarding COVID-19, and varied responses across the globe to limit impact and spread of the disease, which included significant restrictions to travel and business activity, the MSCI ACWI Investible Market Index (IMI) was up 18.2% for the year. On a global basis, large cap stocks outperformed small caps during the year, with the MSCI ACWI Small Cap index returning 16.1%. From a style perspective, despite distinct periods during the year where both value and growth stocks led the market, value stocks ended the year on a strong note and outperformed growth by approximately 4% during the year, reversing a multi-year trend where growth has outperformed.

From a geographic perspective, U.S. equity markets led performance across developed equity markets. Following a -3.5% annual decline in GDP in 2020, the U.S economy posted a strong rebound, increasing at an estimated 5.6% annualized rate in 2021. With the strong recovery, unemployment levels in the U.S. declined to 3.9% by the end of the year, approaching pre-pandemic employment levels. The combination of strong economic activity and supply chain disruptions contributed to inflation levels not seen since the early 1980's, with the Consumer Price Index (CPI) increasing throughout the year and reaching a 7.0% annualized rate in December 2021. Interest rates, despite improving economic activity and high levels of inflation, steadily increased throughout the year but stayed relatively low on an absolute basis, with the 10-year treasury rate ending the year at 1.51%. The low interest rates, strong economic growth, and high year-over-year increases in corporate earnings provided support for the strong U.S. equity market. The Russell 3000 index was up 25.7% for the year, with large cap stocks significantly outperforming small cap stocks by 12%, with the Russell 1000 index up 26.5% versus the Russell 2000 index up only 14.8%. While market returns were fairly broad based, with 10 out of 11 sectors of the Russell 1000 index posting double digit returns, the largest stocks within the index drove a significant portion of returns. During the year, the top five stocks contributed approximately 30% of returns for the index. Concentration of the top stocks in market indices reached the highest level in nearly 40 years, with the top ten stocks in the Russell 1000 index representing over 27% of the market cap for the index and over 30% of the market cap for the S&P 500. From a style perspective, including both large and small cap stocks, growth and value delivered nearly identical results, with the Russell 3000 Growth index up 25.9% versus the Russell 3000 Value index up 25.4%. However, within small cap stocks, growth and value stocks delivered widely different results, with the Russell 2000 Value index up 28.3% versus the Russell 2000 Growth index up only 2.8%.

Across international equity markets, developed markets also delivered strong results for the year, while

1 https://www.imf.org/en/Topics/imf-and-covid19/Fiscal-Policies-Database-in-Response-to-COVID-19

emerging market equities lagged significantly. The rise of the Omicron variant at the end of the year provided a reminder of the wide range of policy actions taken by foreign governments and central banks across the globe in response to the pandemic. However, despite the differences, developed markets have been on a similar trajectory over the past two years, providing significant amounts of fiscal and monetary support in response to COVID-19, and then beginning the process of paring back some of that accommodation as we approached the second half of 2021. Similar to the U.S., international markets also faced the prospect of higher inflation, which contributed to central banks paring back their asset purchases and in some cases, such as the U.K., starting the process of raising interest rates. For the year, the MSCI World ex-USA index, which represents all developed market countries except the U.S., was up 12.6%. European equity markets delivered strong performance, with the MSCI Europe index up 25.1%, while Japan trailed other developed market countries and was up only 1.7%. From a capitalization perspective, international small cap stocks just slightly underperformed large cap stocks, with the MSCI World ex-USA Small Cap index up 11.1%. From a currency perspective, the U.S. Dollar strengthened during 2021, with the U.S. Dollar spot index[2] up over 6% for the year. This created a relative drag on international market returns, on a U.S. dollar basis.

Across global equity markets, emerging markets stocks significantly underperformed for the year, driven lower by the significant impact of China to emerging market indices. China's public equity markets were negative on the year as they faced a number of headwinds, which included a zero-tolerance policy towards COVID-19, housing market pressure from the default of one of the country's largest property developers (Evergrande), and a shifting regulatory environment that impacted a number of industries including large cap technology companies. For the year, the MSCI China index declined -21.7% in U.S. dollar terms. With China representing over 30% of the MSCI Emerging Markets index, the negative returns presented a significant drag for the index. Overall, the MSCI Emerging Markets index was down -2.5% for the year. There were some bright spots within emerging markets, with India and Taiwan both up over 26% and Russia up over 19%.

SCERS GLOBAL EQUITY PORTFOLIO

SCERS' public equity portfolio was restructured in conjunction with the revised strategic asset allocation, consolidating the previously separate Domestic and International equity portfolios within a Global Equity asset class. While the overall target to Global Equity remained unchanged at 40% of the total portfolio, the weights to Domestic and International sub-asset classes were revised, and a new Global/Unconstrained segment was added within the Global Equity structure. The revised target weights for Domestic and International equity, as well as the target weight for Global/Unconstrained, will help align SCERS' Global Equity portfolio with its new global equity benchmark, the MSCI ACWI Investible Market Index (IMI). The addition of the Global/Unconstrained segment will allow for SCERS to allocate to managers and/or strategies that didn't previously have a natural home within the prior structure. Within the Domestic and International Equity sub-asset classes, the structure was simplified to focus on overall targets by market capitalization and active versus passive management. The simplification of the structure will allow for greater flexibility to allocate across various mandates and strategies, while maintaining diversification across sectors and investment styles (growth vs. value). While the revised structure was approved during 2021, the changes will be implemented during 2022. Therefore, as of the end of the year, the portfolio maintained the allocation to existing strategies and managers within the previously established Domestic and International Equity

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2 The U.S. dollar index is a measure of the value of the U.S. dollar relative to the value of a basket of currencies of the majority of the U.S.'s most significant trading partners. Currencies included are the Euro, Swiss Franc, Japanese Yen, Canadian dollar, British pound, and Swedish Krona.

GLOBAL EQUITY (Continued)

segments. The following charts show the approved structure for the Global Equity asset class, along with the portfolio targets and ranges for each sub-asset class.

SCERS Global Equity Portfolio Structure

	Minimum	Target Allocation	Maximum
Total Global Equity Portfolio	36%	**40%**	44%
Domestic Equity	18%	**20%**	22%
International Equity	14%	**16%**	20%
Global/Unconstrained	1%	**4%**	6%

Domestic Equity Structure

Asset Class	Target Allocation	Target Allocation
Domestic Equity	**20.0%**	
Domestic Equity Large Cap	90.0%	
Large Cap Passive		50.0%
Large Cap Active		40.0%
Domestic Small Cap	10.0%	
Small Cap Active		10.0%

International Equity Structure

Asset Class	Target Allocation	Target Allocation
International Equity	**16.0%**	
International Equity Developed Markets	70.0%	
Developed Markets Large Cap Active		60.0%
Developed Markets Small Cap Active		10.0%
International Equity Emerging Markets	30.0%	
Emerging Markets Active		30.0%

Global/Unconstrained Equity Structure

Asset Class	Target Allocation	Target Allocation
Global/Unconstrained Equity	**4.0%**	
Global Equity		>/= 50%
Sector or Country Concentrated		</= 25%
Non Beta 1 (Long/Short)		</= 25%

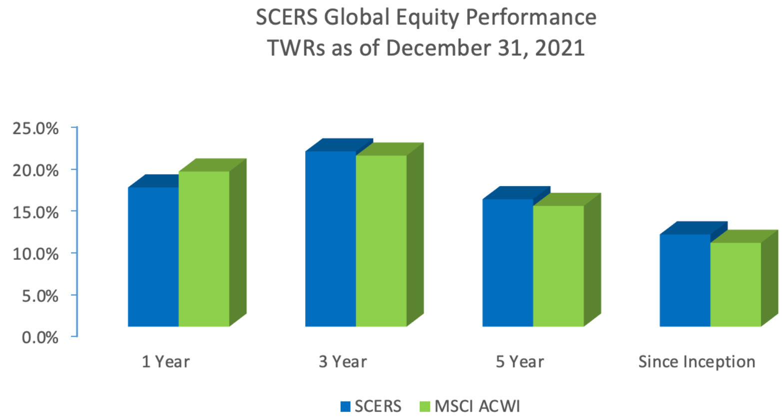
2021 ACTIVITY

- Restructured Public Equity portfolio as part of SCERS' strategic asset allocation, combining separate Domestic and International Equity Asset Classes into a Global Equity Asset Class
  - Added Global/Unconstrained sub-asset class
  - Revised targets for Domestic and International sub-asset classes
  - Simplified structure for sub-asset classes
- Physically rebalanced the Domestic and International Equity portfolios in the first quarter of 2021 to reduce the overweight position relative to the target allocation range and rebalancing exposure across investment styles (growth and value)
- Implemented the Domestic Equity small cap value active mandate with Snyder Capital, which was hired in 2020
- Approved conversion of SCERS' international small cap separately managed account with William Blair to their commingled collective investment trust (CIT) fund
- Initiated a manager search for an active global equity mandate to fill an allocation within the Global/Unconstrained sub-asset class
- Oversaw, monitored, and met with SCERS' existing Domestic and International Equity managers
  - Placed an international developed small cap manager and international emerging markets manager on SCERS' Watch List due to performance considerations

SCERS GLOBAL EQUITY PERFORMANCE

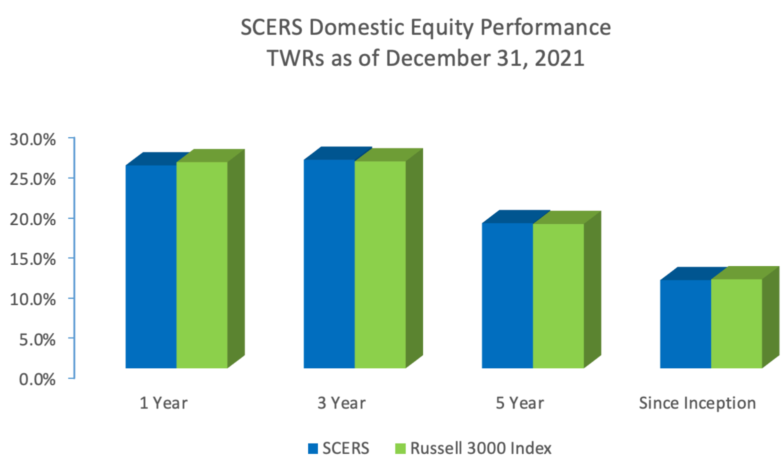
SCERS' aggregate Global Equity portfolio ended the year at 41.1% of the total SCERS investment portfolio, above the target 40% allocation. The overweight allocation was driven entirely by the allocation to Domestic Equity, which significantly outperformed International Equity during the year, and also outperformed SCERS' total portfolio returns. SCERS' aggregate Global Equity portfolio returned 16.6% in 2021, which underperformed the MSCI ACWI benchmark return of 18.5%. The underperformance versus the benchmark highlights the underweight of SCERS' portfolio to Domestic Equity versus the benchmark. SCERS' Public Equity portfolio had a target of 50% to Domestic Equity during the year versus the MSCI ACWI benchmark, which ended the year with a 61.3% allocation to U.S. equity (up from 57.3% to start the year). SCERS' exposures will transition toward the MSCI ACWI geographic weightings as the new Global Equity structure is implemented. Despite the underperformance in the current year, SCERS Global Equity portfolio has outperformed over the 3-year and 5-year periods.

GLOBAL EQUITY (Continued)

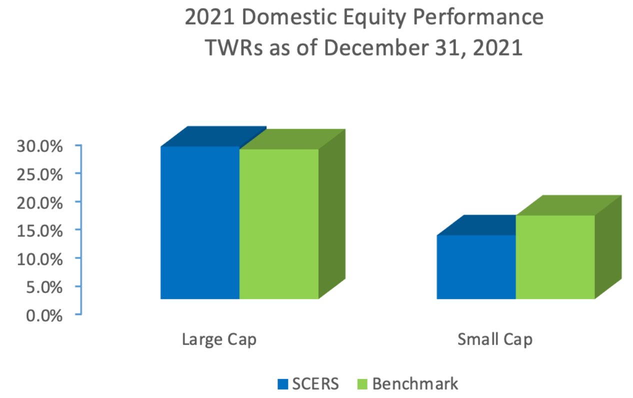


SCERS DOMESTIC EQUITY PERFORMANCE

SCERS' Domestic Equity portfolio delivered strong results for the year, up 25.3%, benefiting from overall market performance, which was driven higher by the dominance of large cap stocks. While SCERS' Domestic Equity portfolio slightly underperformed the Russell 3000 index, which was up 25.7%, the large cap segment outperformed while the small cap segment underperformed. SCERS' large cap portfolio, which is split between active and passive strategies, outperformed the Russell 1000 benchmark, 27.0% versus 26.5%, with three out of four active managers outperforming for the year. SCERS' small cap segment significantly underperformed the Russell 2000 benchmark, 11.3% versus 14.8%, as underweight exposure to small cap financial and energy sectors was a drag to relative performance. For the 3-year and 5-year periods, SCERS' Domestic Equity portfolio is just slightly outperforming its benchmark; however, SCERS' portfolio ranks in the top quartile of performance among peer public plans, reflecting the difficult nature of outperforming equity benchmarks. With the strong returns during 2021, SCERS' portfolio ended the year at 22.6% of the total portfolio, above the target allocation of 20%. The Domestic Equity portfolio was physically rebalanced in 2022 to bring the portfolio in line with the target allocation.

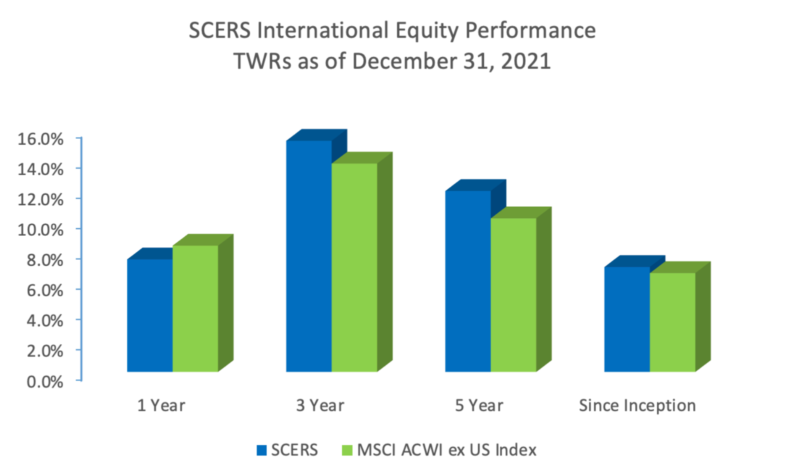


GLOBAL EQUITY (Continued)



SCERS INTERNATIONAL EQUITY PERFORMANCE

SCERS' International Equity portfolio underperformed the benchmark in 2021, with the portfolio up 7.4% versus the MSCI ACWI ex-US benchmark return of 8.3%. It was a relatively tough year for active managers across international equity markets, with only 54% of managers outperforming their respective benchmarks, versus 76% of managers outperforming over the trailing ten-year period. SCERS' International Equity performance was particularly impacted by the small cap and emerging market segments, with both underperforming their respective benchmark by over 300 basis points. SCERS' emerging markets managers were significantly impacted by exposure to China in the second half of the year, as China large cap stocks were down due to regulatory changes and an emphasis on balancing growth within the country to meet common prosperity goals. For the year, SCERS' Emerging Markets portfolio declined -6.9% versus -2.2% for the MSCI EM benchmark. Despite the negative relative performance for SCERS' International Equity portfolio in 2021, the 3- and 5-year relative performance remains solid, with annualized returns generating meaningful outperformance versus the benchmark.



GLOBAL EQUITY (Continued)

2022 ANNUAL PLAN

- Implement portfolio changes for the revised Global Equity structure including updated allocation targets and the new Global/Unconstrained sub-asset class
  - Complete the manager search for Global Equity manager(s) for the Global/Unconstrained sub-asset class
  - Evaluate Unconstrained allocations for possible inclusion in the Global/Unconstrained sub-asset class
  - Restructure the mandate with Lazard to an international developed large cap core mandate, from an international ACWI ex-USA mandate, as approved in 2021
  - Evaluate emerging markets managers, including a potential search for new managers, for the increased target weight to emerging markets within the International Equity sub-asset class
- Complete conversion of SCERS' international small cap separately managed account with William Blair to their commingled CIT fund (approved in 2021)
- Rebalance the Domestic Equity sub-asset class to bring the portfolio within the target range
- Oversee, monitor, and meet with SCERS' existing Global Equity managers

FIXED INCOME

MARKET OVERVIEW

Following the onset of COVID-19 in 2020, fixed-income markets struggled with a volatile 2021 that was characterized by a bumpy economic recovery, inflation, and the start of monetary tightening policies. Persistent inflation and policy driven volatility were the main themes in 2021 for the fixed-income market, forcing investors to navigate through a year where performance was mixed across the various fixed-income assets. The threat of inflation became more prevalent throughout the year, causing discomfort within the markets and eventually leading to the Federal Reserve's (Fed) hawkish pivot in the fourth quarter. Meanwhile, the search for higher yield that began in 2020 continued as lower-quality credit assets surged for much of 2021.

The year began with the yield curve steepening as of result of rising inflation, a changing economic outlook, and new coronavirus variants. The 10-year U.S. Treasury yield jumped over the first quarter of 2021 while short-term rates remained lower, causing the yield curve to steepen. This phenomenon, however, was brief as the economic recovery became bumpier while inflation continued to rise. The yield curve partly retraced though the year as short-term rates slightly increased while the Treasury 10-year yield fell to 1.51% to close 2021.

For much of the year, the Fed characterized inflation as transitory. However, as the threat of core price inflation continued to grow, along with an improved job market, the Fed pivoted to a more hawkish stance at the end of the fourth quarter. In response, the Fed began tapering in November but doubled the pace of the taper in December, and sped up their timeline with an expected finish in March 2022 as threats of slowing growth and rising inflation continued. In recent meetings, Fed officials also increased their expectations for rate hikes, which was last projected at three rate hikes in 2022. Overall, the Fed's transition to a tightening policy was telegraphed ahead of their decision, softening its impact on the fixed-income markets. Outside of the U.S., central banks across the globe also began to tighten monetary policy in late 2021. The Bank of England was the first G7 central bank to raise rates to 0.25% in December 2021.

The broad based Bloomberg U.S. Aggregate Bond Index, which is a combination of government bonds and corporate credit, was down for the year with a -1.5% return. As interest rates rose across the spectrum of maturities, Treasury returns for the year, measured by the Bloomberg Barclays U.S. Treasury Index, were down -2.3%. Rising rates drove bond prices down, which more than offset the amount of interest earned. Investment-grade and high-yield bonds, measured by the Bloomberg Barclays U.S. Corporate Bond Index and Bloomberg Barclay U.S. High Yield Index, outperformed Treasuries given the extra-yield provided by credit spreads. The Bloomberg U.S. Corporate Bond Index returned -1.3%, while the Bloomberg U.S. High Yield Index returned 5.2% for 2021. Corporate credit spreads traded in a tight (18bps) and stable range, with low levels of spread volatility driven by strong fundamentals, supportive monetary policy, and positive fiscal policy. Meanwhile, credit investors' hunt for yield contributed to the outperformance of high yield assets. As inflation expectations rose, U.S. Treasury Inflation-Protected Securities (TIPS) also outperformed with the Bloomberg U.S. TIPS Index returning 6.0% for the year. Within emerging markets, the JP Morgan EMBI Global Diversified index was down -1.8% for the year. The index is the benchmark for emerging market debt, which was weighed down by the strength of the U.S. dollar and weaker outlook for growth.

FIXED INCOME (Continued)

Market volatility has picked up to start 2022, and many investors expect this to continue, fueled by inflation and central bank policy tightening. The level of inflation will be critical for markets, as wells as the Fed's rate hiking cycle. Currently, the market is expecting three rate hikes for 2022; however, the actual rate hike path will be data dependent and investors will be watching closely. Taken altogether, market consensus is that fixed income assets will continue to be under pressure from rising interest rates as the economy works through its recovery from the pandemic.

SCERS FIXED INCOME PORTFOLIO

SCERS' total fixed income exposures reside within different segments of the total SCERS portfolio. The bulk of the exposure sits within the Diversifying asset category, and is called the Fixed Income asset class, which has the objective of providing lower correlation to growth assets and diversification for SCERS' total portfolio, moderate income and cash flow generation, some return enhancement, and a source of liquidity. SCERS also maintains some fixed income exposure within the Growth asset category, in the form of a Public Credit asset class, which is comprised of mostly high yield corporate credit and bank loans. This exposure has a higher risk and return profile than the Fixed Income asset class within the Diversifying asset category.

Within the revised strategic asset allocation, structural changes to the Fixed Income asset class (which resides within the Diversifying asset category), were approved by the Board in 2021. These changes include eliminating a Global Fixed Income mandate, and leaving a combination of Core Plus Fixed Income and U.S. Treasuries sub-strategies, with target weightings of 75% and 25%, respectively. The Public Credit asset class will be evaluated for any structural revisions during 2022.

Within the revised strategic asset allocation, SCERS' overall fixed income exposure reduced from a 20% to an 18% target allocation (16% in Fixed Income and 2% in Public Credit). The custom blended benchmark for the Fixed Income asset class was adjusted to reflect the revised sub-strategies and their respective target weights. The Public Credit blended benchmark remained the same. The aggregate fixed income targets and benchmarks are shown below.

SCERS Fixed Income Portfolio Structure

	Asset Category	Minimum	Target Allocation	Maximum	Policy Index Benchmark
Total Fixed Income Portfolio		13%	**18%**	23%	**Custom Blend of benchmarks below:**
Core Plus Fixed Income	Diversifying	9%	**12%***	15%	Bloomberg Barclays U.S. Aggregate Index
U.S. Treasuries	Diversifying	3%	**4%***	5%	Bloomberg Barclays U.S. Treasury Index
Public Credit (high yield/bank loans)	Growth	1%	**2%***	3%	50% ICE BofA ML High Yield + 50% Credit Suisse Leveraged Loan

* Percentage of total portfolio

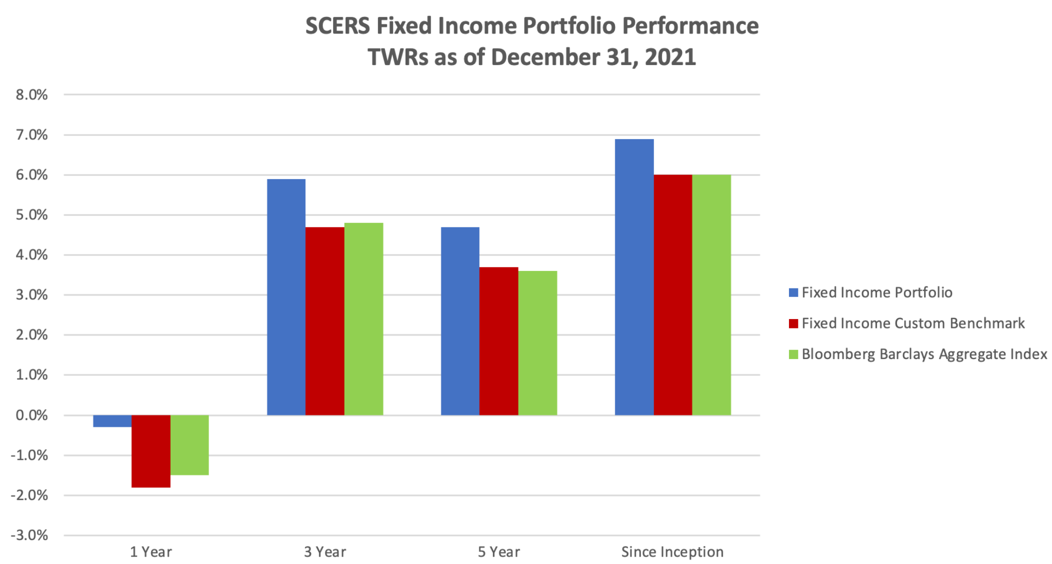
Within the revised Fixed Income asset class structure, the SCERS Board approved a manager search to add an additional Core Plus Fixed Income mandate to the existing lineup of Core Plus managers. Staff and Verus are currently conducting this search, and once this mandate is implemented, SCERS will unwind the existing Global Fixed Income mandate, which was eliminated from the revised structure. All other mandates within the overall fixed income exposure are expected to remain intact, outside of any rebalancing initiatives.

FIXED INCOME (Continued)

2021 ACTIVITY

- Revised the Fixed Income asset class structure within the Diversifying asset category:
  - Reduced target allocation from 18% to 16%, with a range of +/- 4%
  - Eliminated the Global Fixed Income Mandate, leaving Core Plus and U.S. Treasuries with target weights of 75% and 25%, respectively
- Initiated a manager search for a Core Plus Fixed Income mandate
- Oversaw, monitored, and held update calls with SCERS' Fixed Income Managers

PERFORMANCE AND ATTRIBUTION



In 2021, SCERS' Total Fixed Income portfolio was down -0.3% for the year. Despite underperforming on an absolute basis, SCERS' portfolio outperformed the policy index custom benchmark return of -1.8% and the Bloomberg Barclays Aggregate Index return of -1.5%. Within the portfolio, Public Credit (resides within the Growth asset category) returned an impressive 13.4% for the year. This strong performance was driven by the outperformance of the high yield and bank loan markets. The fixed income exposures within the Diversifying asset category fared much worse. The aggregate Core Plus Fixed Income mandates were down -0.7% for the year. The Core Plus mandates' exposure to credit markets, including small exposure to high yield bonds, helped offset some of the underperformance experienced within government bonds. With the overall treasury market underperforming, SCERS' U.S. Treasury mandate was down -2.2% for the year as interest rates drifted higher in 2021. SCERS' Global Fixed Income mandate, which will be unwound in 2022, finished the year down -4.8%. Rising rates, less monetary accommodation, and higher inflation around the world, as well as weakening emerging market currencies, contributed to the weak performance experienced in the global fixed income market.

FIXED INCOME (Continued)

2022 ANNUAL PLAN:

- Implement the revised Fixed Income asset class structure
  - Conclude the manager search for the additional Core Plus Fixed Income mandate
  - Implement the elimination of the Global Fixed Income sub-strategy by unwinding from the existing investment manager mandate
- Undertake any structural revisions to the Public Fixed Income asset class
- Monitor allocations to existing managers and rebalance the portfolio as appropriate
- Oversee, monitor, and meet with SCERS' Fixed Income managers

ABSOLUTE RETURN

MARKET OVERVIEW

Absolute Return strategies generated solid performance in 2021, with all major categories delivering positive performance for the year. Solid performance in 2021 followed the strong returns in 2020, which has resulted in all-time highs in assets under management for the asset class, exceeding $4 trillion in the fourth quarter of the year. With global equity markets generally rising throughout the year, higher beta and risk-oriented strategies generally led performance across absolute return. Alpha generation was strong over the first three quarters of the year, but was negative during the fourth quarter, as strong drivers in the first part of the year reversed course, such as changes in interest rates and factor rotation within equity markets. For the full year, the HFRI Fund Weighted Composite Index was up 10.3%, which trailed the prior year return of 11.8%, but was still the third highest calendar year performance since 2009. Fund of Funds (FoF) performance generally lagged the fund weighted indices, with the HFRI FoF Composite Index up 6.0% for the year, and the HFRI FoF Conservative Index was up 7.4%.

At the strategy level, Credit/Distressed, Event-Driven, and Equity Hedge were the top performing strategies for the year. Credit/Distressed strategies, particularly those with leveraged positions in sectors that benefited from the continued economic recovery such as energy, gaming, and transportation, did particularly well during the year. The economic recovery and improved financial conditions led to distressed investments generating strong returns, with the HFRI Distressed/Restructuring index up 15.9%. Event-Driven strategies, which include activist and special situations strategies, benefited from the strong equity markets and higher beta portfolios outperformed. The HFRI Event-Driven index was up 12.9% for the year, the best performance for the category since 2009. Equity hedge strategies also benefited from the risk-on environment and strong equity market returns, particularly long-biased and value oriented strategies with exposure to the top performing financial and energy sectors. The HFRI Equity Hedge index was up 11.8% for the year, with the Fundamental Value index up 14.8% and the Market Neutral index up only 7.2%.

Discretionary Macro and Relative Value were the bottom performing strategies for the year. Global Discretionary Macro managers struggled with shifting macro-economic expectations, particularly in the second half of the year, as inflation and the impact from COVID-19 variants resulted in changes to interest rates and growth expectations. After a strong first half (up 9%), the HFRI Discretionary Macro index ended up just slightly positive for the year, with a 3.3% return. Relative Value (RV) strategies delivered muted returns during the year, as the opportunity set within key relative value strategies such as Fixed Income Arbitrage and Volatility Arbitrage was thin. Despite some increased volatility in the later part of the year, overall fixed income volatility was relatively muted, with interest rates gradually increasing over the course of the year. The volatility index (VIX) also traded in a relatively tighter range, especially compared to prior years. Convertible Arbitrage was a bright spot within Relative Value, benefiting from strong new equity issuance. Overall, the HFRI Relative Value index was up 7.2%, but the HFRI RV Fixed Income Sovereign index was up only 1.7%, and the HFRI RV Volatility index was up 2.5%.

ABSOLUTE RETURN (Continued)

SCERS ABSOLUTE RETURN PORTFOLIO

SCERS' Absolute Return portfolio was restructured to align with SCERS' revised Strategic Asset Allocation. The updated Strategic Asset Allocation eliminated the Growth segment of Absolute Return, which previously had a 3% target allocation, and retained the 7% target for the Diversifying segment. Without separate Growth and Diversifying segments within Absolute Return, the asset class name was simplified to be 'Absolute Return', without the need to emphasize the Diversifying component. Additionally, as part of the restructuring, the Absolute Return portfolio construction parameters and guidelines were updated to better align the portfolio with the current market environment and objectives for the portfolio. This included increasing the target number of funds from 10 to 12, and increasing the maximum equity beta and equity correlation market sensitivity measures from 0.1 and 0.1, respectively, to 0.2 and 0.5, respectively. The following charts show the updated construction parameters and guidelines for the Absolute Return portfolio (previously Diversifying Absolute Return).

	Absolute Return Portfolio Structure
	Diversifying Strategies
Portfolio Objective	Positive absolute return profile over time with limited sensitivity to broad market performance
Benchmark	Policy: HFRI FoF Conservative Index Long-term objective: T-bills + 2%
Risk Target	Standard Deviation < 25% of global equities
Market Sensitivity	Target an equity beta <0.2 Target equity correlation <0.5
Market Exposure	Total notional gross exposure < 750%

	Diversifying Strategies
Target Allocation	7% of total assets
Allocation Range	5% to 9% of total assets
Number of Funds	Target 12 funds with a range of 8 to 15
Non-U.S. Exposure	Expect 20% to 50% non-U.S. exposure

The Absolute Return portfolio is allocated to a combination of direct fund investments and a diversified fund of funds program managed by Grosvenor Capital Management (GCM). The direct portfolio is allocated across multiple managers, to provide diversification and exposure across various hedge fund strategies.

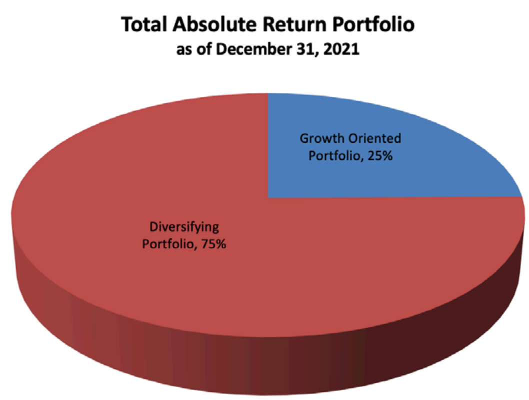
Following several years of building out the direct fund investments segment within the Absolute Return portfolio, which included significant changes in the prior year due to extreme market volatility, portfolio activity was relatively quiet during 2021. SCERS made one new direct investment and redeemed from one manager during the year. Additionally, SCERS made some rebalancing adjustments during the year, adding capital to several managers and redeeming capital where appropriate to capitalize on strong returns. As of December 31, 2021, SCERS has direct fund investments with 11 managers in the Absolute Return portfolio across a diverse range of strategies and geographies.

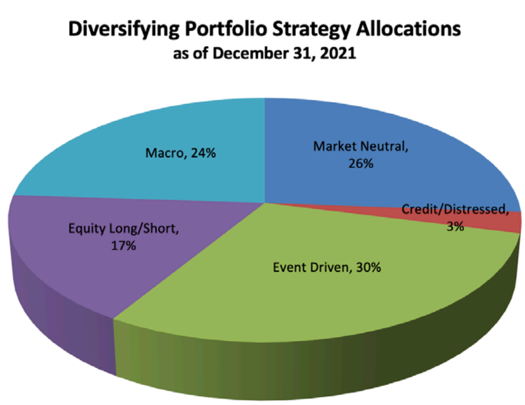
ABSOLUTE RETURN (Continued)

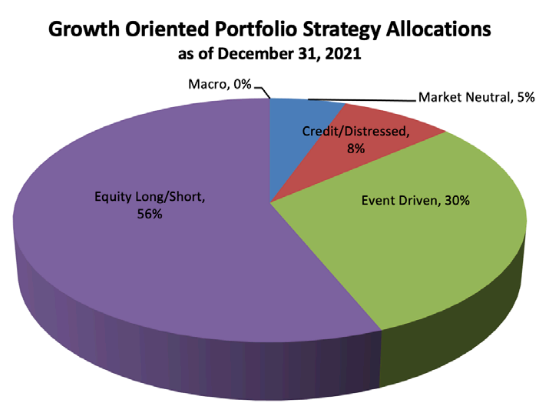
For the legacy Growth Absolute Return segment, SCERS has begun the process of winding down the portfolio. The process involves redeeming from the Fund of Funds portfolio managed by GCM and determining the appropriate action for the direct fund investments. For the direct fund investments, SCERS is determining if the investment could be an appropriate fit in another asset class within SCERS' portfolio, or if the investment should be liquidated. While most of the decisions regarding the portfolio have been made, as of the end of the year, most assets remained in place pending future liquidity and final allocation decisions. Therefore, the charts below for Growth Absolute Return will reflect final strategy allocations and performance for the year-ended December 2021.

The FOF program is managed by GCM and continues to have a meaningful role within SCERS' Absolute Return portfolio. The GCM FoF portfolio compliments SCERS' direct portfolio by allocating to managers that SCERS generally couldn't invest with on a direct basis. Performance for the GCM portfolio has historically been similar to SCERS' direct portfolio, reflecting consistent portfolio objectives, guidelines, and risk considerations. However, performance for the GCM portfolio (SCARF-D) lagged during 2021 as a few investments within the portfolio experienced significant drawdowns, resulting in an overall drag on the portfolio performance for the year. At year end, the GCM SCARF-D portfolio represented approximately 27% of the overall Absolute Return portfolio.

The charts below reflect SCERS' Absolute Return portfolio as of December 31, 2021, including the Diversifying Absolute Return portfolio (renamed Absolute Return) and legacy Growth Oriented portfolio, which is being eliminated. The strategy allocations, including the GCM FoF accounts, is shown below.





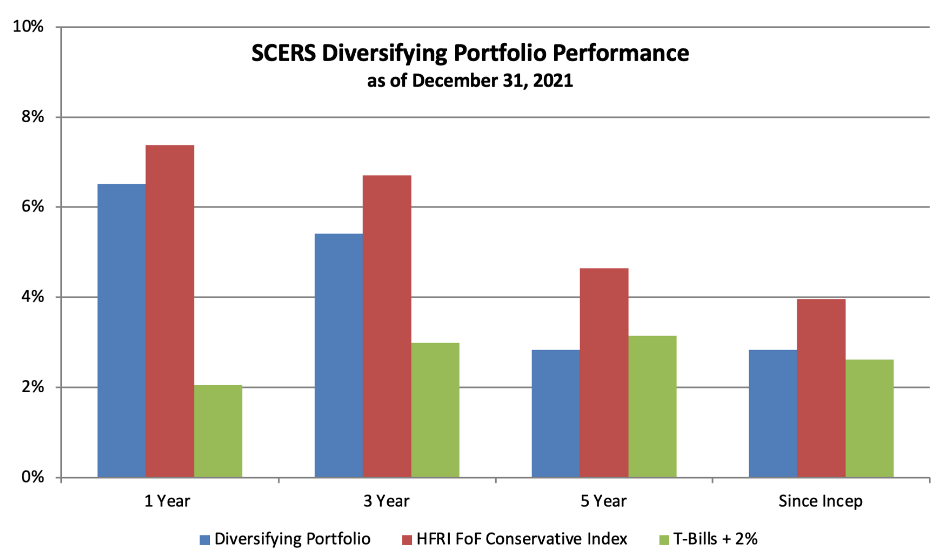


ABSOLUTE RETURN (Continued)

2021 ACTIVITY

- 2021 Absolute Return Investment Plan
  - A range of 2-5 fund commitments, with a target of 3 funds (across Growth and Diversifying portfolios)
  - An average commitment size of $45 million per fund
- One new Absolute Return investment was made during the year
  - Invested $45 million in the Eisler Capital Fund (discretionary macro, multi-strategy)
- Rebalanced Absolute Return portfolio to adjust investment levels with several direct managers
- Fully redeemed from KLS Diversified Fund due to performance and organizational concerns
- Reviewed manager allocations for Growth Absolute Return following the elimination of the asset class as part of Strategic Asset Allocation update
  - Moved an existing $67 million investment in Sculptor Domestic Partners II, L.P. from the Growth Absolute Return portfolio to the Diversifying Absolute Return portfolio
- Oversaw, monitored, and met with SCERS' existing Absolute Return managers

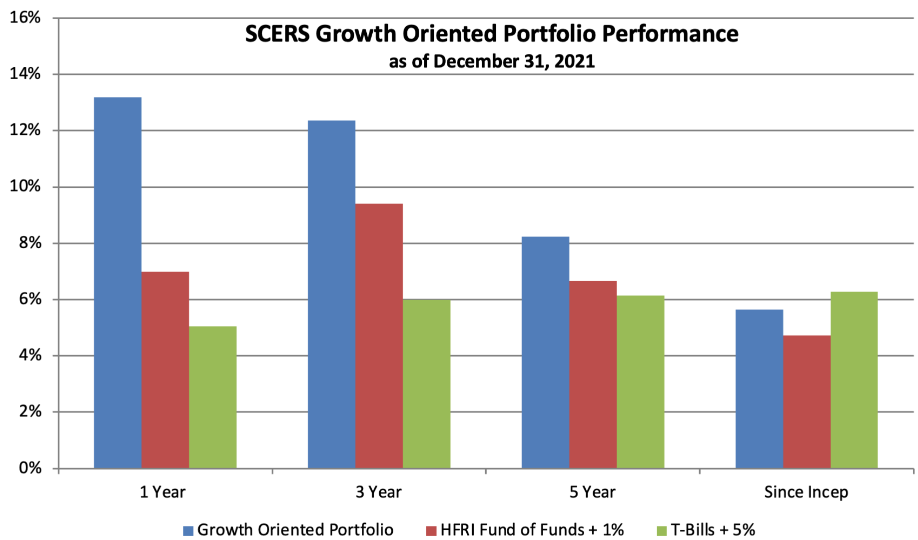
PERFORMANCE ATTRIBUTION



SCERS' Diversifying Absolute Return portfolio delivered solid overall results for the year, up 6.5%. Fund performance across managers and strategies was generally positive, with a few areas of weakness during the year. Overall, Diversifying Absolute Return strategies benefited from the favorable equity environment with SCERS'

ABSOLUTE RETURN (Continued)

event-driven and market neutral investments delivering strong performance. The top performing investment in SCERS' direct portfolio was within the Risk Premia category, which is an area that had lagged over the prior two years. Compared to benchmarks, the SCERS Diversifying portfolio lagged the policy benchmark (HFRI FoF Conservative Index), which was up 7.4% for the year, and outperformed the longer term objective (T-Bills +2%) return of 2.1%. With the strong 3-year performance versus the longer term objective, 5.4% versus 3.0%, the Absolute Return portfolio is now exceeding this benchmark since inception. The portfolio still lags the HFRI Conservative Index across time periods, as the benchmark tends to have higher beta exposure than SCERS' portfolio.



As noted previously, SCERS' Growth Absolute Return portfolio was eliminated from the Strategic Asset Allocation and is currently being wound down. However, most of the assets remained with existing managers through the end of the year, so performance is still shown within this report. The Growth Absolute Return portfolio delivered exceptionally strong results during the year, with long-biased equity managers capturing beta from the equity markets and also producing good alpha generation. For the year, the portfolio was up 13.2%, significantly outperforming the HFRI FoF Composite +1% benchmark (+7.0%) and T-Bills +5% long term objective (+5.1%). Over longer time periods, the SCERS Growth Absolute Return portfolio has outperformed the policy benchmark and long-term objective, with the exception of since inception performance versus the long-term objective (5.6% versus 6.3%).

ABSOLUTE RETURN (Continued)

2022 ANNUAL PLAN

Below is the 2022 annual plan for the Absolute Return asset class, as recommended by Cliffwater and Staff:

SCERS Absolute Return Annual Investment Plan			
		Range	
	Target	Min	Max
Number of Funds	1	0	3
Investment per Fund	$45 MM	$30 MM	$60 MM

- Complete final evaluation of remaining Growth Absolute Return managers and manage liquidation of legacy portfolio
- Add new direct investments, as necessary, within SCERS' Absolute Return direct portfolio to reach target allocation of 7%.
  - Add 0-2 net new direct fund investments in 2022
  - Average investment size of $45 million, with a range between $30 million and $60 million
- Evaluate investment levels with existing managers and rebalance direct portfolio as necessary
- Incorporate the approved Absolute Return structure changes into the Diversifying asset category Investment Policy Statement (IPS) and the Master IPS
- Oversee, monitor, and assess the existing manager lineup

PRIVATE EQUITY

MARKET OVERVIEW

While the final 2021 numbers for private equity are still being calculated, this year's figures were on track to set records. For the first time, the value of megers and acquisitions (M&A) topped $5 trillion, with volumes rising 63% globally to $5.63 trillion (as of December 16), according to Dealogic data. M&A's 2021 value easily surpasses the record of $4.42 trillion set in 2007, before the global financial crisis (GFC). Overall deal volumes in the U.S. nearly doubled to $2.61 trillion in 2021, and European deals jumped 47% to $1.26 trillion, according to Dealogic. In addition, the value of buyouts in the U.S. during the first three quarters reached $327.1 billion and is on pace to exceed 2007 buyout values.

Company-level valuations in the private markets continue to grow in line with valuations in public markets. According to the Lincoln Private Market Index, the annual growth in the enterprise value of the S&P 500 was 21.9% as of September 2021, whereas underlying companies in private market portfolios grew by 27.6%. Some underlying private market strategies grew even more. Business services were up 36.7% and technology-based business valuations were up 31.2%. Multiples in the private markets remain at record highs, and growth expectations for 2022 remain strong. EBITDA multiples in the Lincoln PMI reached 11.0x, approximately 1.0x higher than the historical three-year average.

Preqin reports that buyout firms raised $314.8 billion for North America through the end of the third quarter of 2021, pushing available capital for buyouts to a record $755.6 billion. Moreover, fundraising shows no signs of stopping. Thoma Bravo, KKR, Carlyle, and Permira are among those raising significant new funds with targets ranging from $15 billion to $22 billion. The corporate balance sheets are also flush with cash, estimated by JP Morgan at over $2 trillion.

According to Pitchbook, in the U.S., venture capital-backed firms raised $329.8 billion in 2021 compared with $166.6 billion in 2020. More than half of last year's total invested came from financing rounds of pre-money greater than $100 million, as general partners (GPs) showed a willingness to invest more into younger companies at higher valuations. Globally, private start-ups raised a total of $671 billion, an increase of more than 90% from the previous year. U.S. venture capital GPs raised a record $128 billion in 2021, of which 32% went into first-time fund managers. SCERS remains focused on investing with venture capital managers who have pricing discipline and experience across economic cycles.

Many mature institutional investor private equity portfolios face the challenge of deploying new capital while managing active distributions, capital calls, and strong valuations. Across the private equity market, firms are deploying capital faster. Over the last five years, the time between fundraising campaigns has narrowed to 18 to 24 months from the historical three to four years. As a result, institutional investors are facing challenges when allocating capital and resources to lead a fund through due diligence. An increasing number of funds have single closes, resulting in truncated due diligence timelines for limited partners (LPs).

Last year saw an increase in the number of Continuation Funds raised by GPs and Secondary Funds. Continuation Funds result from a GP selling assets from a fund to another fund it manages, allowing for extended holding periods and potentially earning additional carried interest. GPs argue that there is value in potentially capturing additional

PRIVATE EQUITY (Continued)

asset value without selling prematurely, and that their knowledge of the portfolio gives themselves an advantage. Although there is typically a third-party valuation in the process, most assets are sold at a discount. These processes force LPs to either sell their position to a new fund or enter into another long-term fund relationship. SCERS has seen several Continuation Funds transactions in the last year. In each case, SCERS, and many other LPs, decided to take liquidity.

By the end of 2021, SCERS had committed to 74 active partnerships, which is up 15% from 2020. Private equity continues to deliver exceptional returns to SCERS across buyouts, venture capital, growth equity, and distressed debt. Like many mature private equity programs, SCERS is evaluating the private equity secondary markets to potentially generate liquidity to assist in managing exposures relative to target allocations, and to lock in returns.

SCERS PRIVATE EQUITY PORTFOLIO

As part of the revised strategic asset allocation, the Private Equity target allocation increased from 9% to 11%, with a +/- 3% range around the target. Among the approved structural revisions to Private Equity, the Board approved a dedicated Growth Equity sub-strategy allocation. Growth equity has emerged over the past decade as a distinctive private equity segment with properties and features of both buyouts and venture capital, and falls between each on the risk-return spectrum. Growth equity investors typically make minority investments in more mature and profitable companies looking to accelerate growth by expanding operations or funding an acquisition. With the sub-strategy addition, ten existing funds categorized as venture capital or buyout were moved into Growth Equity.

SCERS' overall Private Equity portfolio is broken out by sub-strategies, including Buyouts, Venture Capital, Growth Equity, Distressed Debt, and other less-defined strategies. They are further organized by region. The policy index benchmark that SCERS uses is the Cambridge Associates LLC Global Private Equity & Venture Capital Pooled Index to assess the performance of the Private Equity asset class. The long-term objective of the Private Equity portfolio is to earn equity-like returns with an additional premium (Russell 3000 Index + 3%) to compensate for the liquidity risk undertaken by investing in the asset class. The revised target allocations and ranges within Private Equity are shown below:

SCERS Private Equity Portfolio Structure

	Minimum	Target Allocation	Maximum	Policy Index Benchmark
Total Private Equity Portfolio	8%	**11%**	14%	**Cambridge Associates PE/VC Index**
Buyout	35%	**55%**	75%	
Venture Capital	10%	**20%**	40%	
Growth Equity	10%	**15%**	35%	
Distressed Debt	5%	**10%**	30%	
Other	0%	**0%**	15%	
U.S. Private Equity	70%	**80%**	90%	
Non-U.S. Private Equity	10%	**20%**	30%	

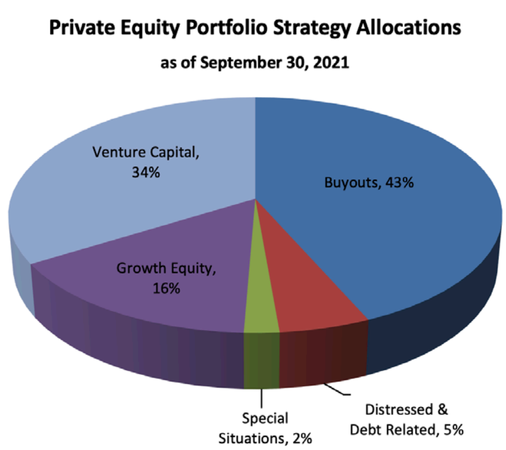
SCERS has been building a direct private equity program since 2011 by making commitments directly with private

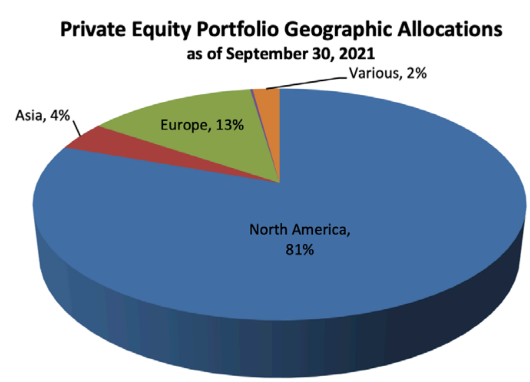
PRIVATE EQUITY (Continued)

equity managers. The actual allocation to Private Equity is 12.9% as of September 30, 2021 (based on June 2021 NAVs), and is overweight to the target allocation as a result of strong performance of the portfolio relative to other asset classes. Given private equity's unique cash flow characteristics, SCERS will need to continue to commit to private equity funds across vintage years to maintain its target allocation to the asset class. However, Staff and Cliffwater are exploring the ability to use the secondary market to more efficiently manage SCERS' Private Equity portfolio, which is a common tool among institutional investors.

In 2021, Staff and Cliffwater had an active year committing capital to private equity funds. SCERS committed to seven funds. Four investments were follow-on fund investments to existing managers/ strategies, two were investments to a current manager in a different strategy, and one was a fund investment to a new investment manager. The follow-on investments comprised a range of funds that included a specialist healthcare fund, a specialist distressed debt fund, and several IT-focused venture capital funds. With a maturing private equity portfolio that includes many existing managers relationships and general partners quickly coming to market with follow-on funds, there are more investment opportunities in private equity than capital available in the SCERS budget. Therefore, Staff and Cliffwater are prudently managing the Private Equity portfolio's investment pace and the absolute number of manager relationships. Each follow-on investment under consideration is fully underwritten as if it is a new relationship. Staff is comfortable with not committing capital to a follow-on fund if the opportunity is not warranted or a new manager or fund is better suited for the portfolio.

SCERS' current Private Equity strategy and geographic breakdowns are shown in the following charts:





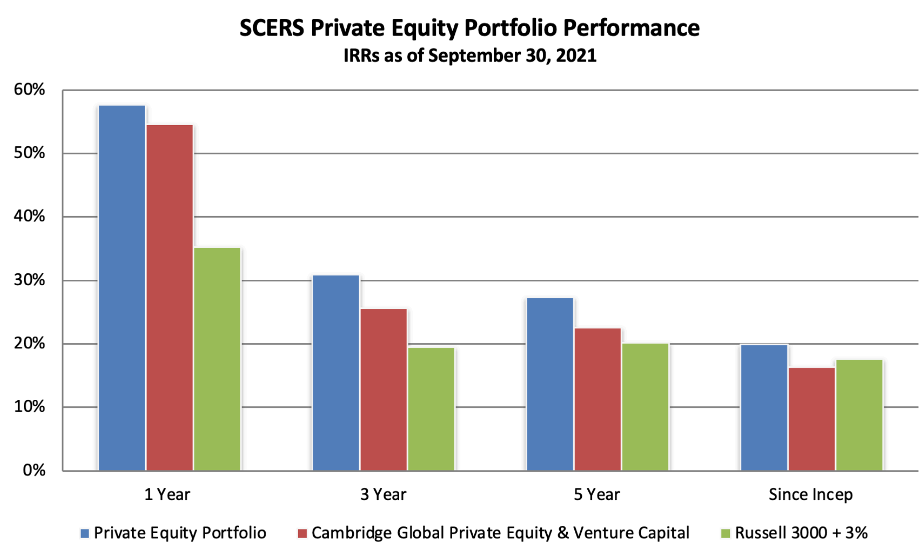
PRIVATE EQUITY (Continued)

2021 ACTIVITY

- 2021 Private Equity annual investment plan
  - A range of 5-9 fund commitments, with a target of 7 funds
  - A total of $200 million in commitments, with a range of $160–$240 million
  - An average commitment size of $30 million per fund
- 7 fund commitments were made during the year totaling $190 million
  - $30 million follow-on investment to Linden Capital Partners V, LP (Buyout)
  - $20 million to CRV Select Fund, LP (Venture)
  - $20 million to Shamrock Growth Fund V, LP (Buyout)
  - $30 million follow-on investment to Sixth Street Opportunity Fund V, LP (Distressed Debt)
  - $30 million follow-on investment to Marlin Heritage II, LP (Buyout)
  - $30 million follow-on investment to TSG 9, LP (Buyout), completed in 2022
  - $30 million to Strategic Value Special Situations V, LP Partners V (Distressed Debt)
- Oversaw, monitored, and met with SCERS' existing Private Equity managers

PERFORMANCE AND ATTRIBUTION

SCERS' Private Equity portfolio continues to progress through the J-curve and is generating increasing levels of positive performance. As of September 30, 2021, SCERS' Private Equity portfolio generated a one-year net IRR of 57.7% and outperformed the policy index Cambridge Global Private Equity & Venture Capital benchmark return of 54.6%. In addition, the Private Equity portfolio outperformed SCERS' long-term public market benchmark of the Russell 3000 plus 3%, which retured 35.3% over this period. The exceptionally strong performance of the Private Equity portfolio has led to some challenges with the growth in the portfolio's value outpacing returns across other asset classes, leading to a higher weight relative to the target allocation.



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2022 ANNUAL PLAN

Below is the 2022 capital commitment plan for the Private Equity asset class, as recommended by Cliffwater and Staff:

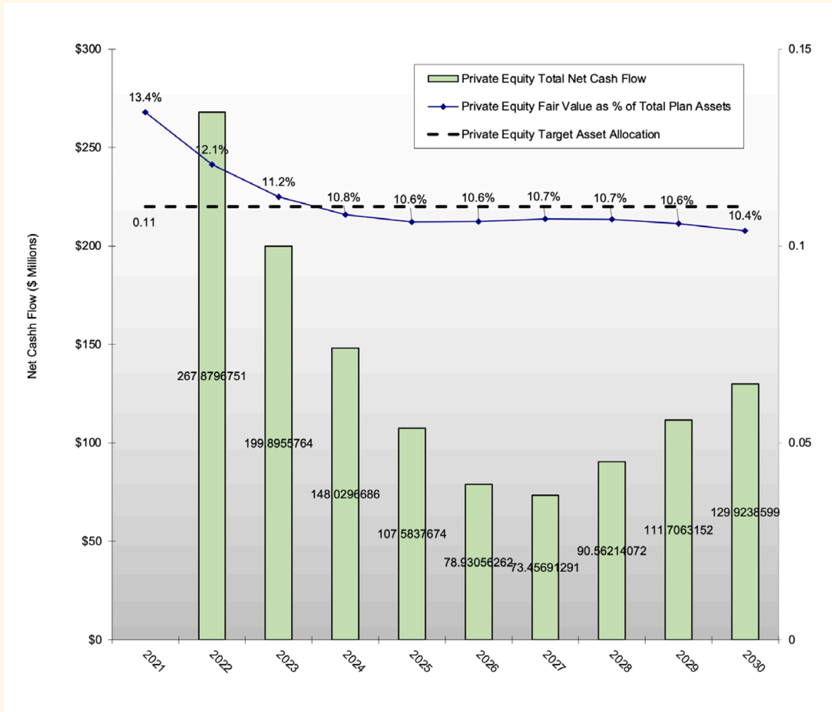
SCERS Private Equity Annual Investment Plan			
		Range	
	Target	Min	Max
Commitment Level	$365 MM	$250 MM	$400 MM
Number of Funds	10	7	12
Buyout fund(s)	5	3	6
Distressed fund(s)	1	0	2
VC fund(s)	3	1	4
Growth Equity fund(s)	1	0	2
Other fund(s)	0	0	1
Non-U.S. fund(s)	2	0	3
Commitment per Fund	$35 MM	$25 MM	$100 MM
Non-U.S. funds are already reflected in the strategy categories above			

Recommend a $365 million commitment budget for 2022, with a range of $250 million to $400 million

- Target 10 fund commitments at an average commitment size of $35 million, with a range of $25-$100 million per fund
- $130 million has been committed, or is in the process of being committed, to several investments during the first quarter of 2022
- Budgeting a $100 million commitment to a co-investment fund of one structure
- The 2022 budget does not include any funds in which a commitment was made in 2021 but capital has not been called

PRIVATE EQUITY (Continued)

Below is the projected Private Equity capital-pacing plan:



- The overweight to the asset class is expected to reduce toward the 11% target allocation over the next year based on commitment, drawdown, and distribution assumptions
  - Staff and Cliffwater will also explore the secondary market as a tool to potentially sell certain mature funds to assist in managing the Private Equity allocation
- Areas of focus in 2022:
  - Investment opportunities across buyout, venture capital, growth equity, and distressed debt
  - There is little capacity for new manager relationships in 2022
    - Follow on investments with existing managers are likely to make up the bulk of commitments
  - Mindful of risks later in the cycle, such as increasing valuations and fund sizes, while maintaining vintage year and sector diversification
  - Sector-specific funds with fund managers who have differentiated expertise, experience managing multiple cycles, and access to proprietary deal flow
- Recommendation and implementation of the co-investment plan outlined to the Board in 2021
  - Capitalizing on potential co-investment deal flow from SCERS' existing private equity relationships and participating in deal flow from a strategic partner
- Incorporate the approved Private Equity structure changes into the Growth asset category Investment Policy Statement (IPS) and the Master IPS
- Oversee, monitor, and assess the existing managerial lineup

PRIVATE CREDIT

MARKET OVERVIEW

Global economies have made a dramatic rebound from the COVID-induced recession. Against the backdrop of the economic recovery, the corporate merger and acquisition (M&A) activity has accelerated, driven by private equity (PE) sponsors. Per JP Morgan, in 2021, private equity-backed M&A activity was up 38% compared to its historical 27% average since 2007. PE-led initial public offerings were up 44.8% during 2021, significantly higher than the 19.4% historical average since 2006. With a record volume of corporate activity, the demand for private and public lending has been outsized.

Investors have been looking for yield in a low interest rate environment, and private credit has been increasingly seen as an alternative to fixed income. Given investors' rising allocation to private credit, private credit managers are raising ever-increasing amounts of capital in response, as well as feeding a growing appetite by PE-sponsored companies. According to Preqin's 2021 data, the private equity industry raised a record amount of capital and funds, and there currently stands $2.5 trillion of private equity dry powder, or available funding. The record levels of dry powder, low interest rates, and high corporate valuations have spurred significant private credit deal flow, which are lenders to PE firms.

Most industry participants agree that there is an abundance of private credit capital in the marketplace, to the point of being over saturated. With increasing supply and competition, risks have picked up, including tighter lending spreads, increasing leverage levels, limited loan covenants, and weakening of credit underwriting. Due to competitive pressures, quick execution and the willingness to provide higher leverage levels is becoming common in order for lenders to secure deals and meet borrower expectations. Time will tell if this is a troubling indicator, but it certainly bears watching and points to the importance of identifying managers who exercise disciple and have expertise in loan workouts.

Fundraising for private direct lending continues unabated, with a record $112.5 billion raised in 2021, which is almost double the $65.3 billion raised in 2020. Not only was 2021 a record year for capital raised, but the average private credit fund sizes have increased to $1.3 billion, double the average size in 2020 of $646 million and the 10-year average of $550 million. According to Preqin, there are currently 375 direct lending funds in the market seeking to raise an aggregate $171 billion at an average fund size of $734 million. Add this new capital to the existing $194 billion in dry powder, and the market is expected to remain highly competitive.

Within this competitive landscape, Staff and Cliffwater continue a measured approach to making new private credit commitments and are cautious of the abundance of capital in the market. The focus stays with selecting top tier middle-market direct lending managers, who due to their competitive advantage or sector focused specialty, are able to access differentiated deal flow garnering higher yields and returns, and better lending terms. In addition, identifying managers that have workout expertise, and experience navigating a default cycle is essential. Given the prevalence of increasing fund sizes that target large loans to large companies, there may be a growing demand from small-to-midsized firms.

PRIVATE CREDIT (Continued)

SCERS PRIVATE CREDIT PORTFOLIO

Initiated in 2017, the Private Credit asset class sits within SCERS' Growth asset category. Private credit represents loans to primarily performing, non-public small-mid-sized companies. An attractive feature of private credit investments is the majority of the return is generated from contracted loan payments (interest and principal), which tend to be more predictable and less volatile. To compensate for the illiquidity of the asset class, SCERS' Private Credit investments must generate a total return exceeding publicly traded bank loan returns by 2%, the benchmark of which is the Credit Suisse Leveraged Loan Index, an index of over 1,600 publicly traded bank loans.

SCERS' Board approved a revised strategic asset allocation in August 2021, which resulted in the Private Credit target allocation increasing from 4% to 5%, with a +/- 2% range around the target. The actual allocation to Private Credit is 2.4% invested and 4.5% committed, as of September 30, 2021. Among the approved revisions, the Opportunistic Credit sub-strategy was renamed to a more appropriate Opportunistic Lending descriptor. Not to be confused with distressed credit, Opportunistic Lending represents a broader range of direct lending structures, generally senior secured, but can also include subordinated debt structures, convertible debt, and structured equity.

The Board also approved revising the target sub-strategy mix between Direct Lending and Opportunistic Lending from 70%/30% to 65%/35%, and the geographic mix between U.S. and non-U.S. from 85%/15% to 75%/25%. Shown below are the revised Private Credit investment targets and ranges:

SCERS Private Credit Portfolio Structure

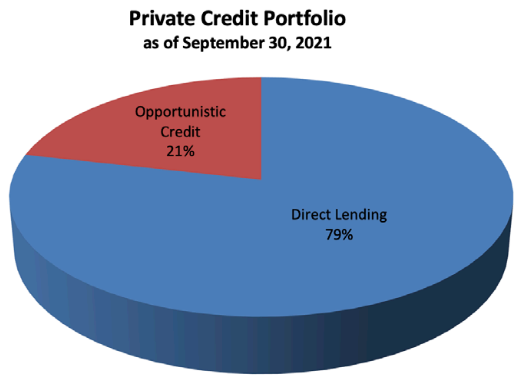
	Minimum	Target	Maximum	Policy Index Benchmark
Total Private Credit Portfolio	**3%**	**5%**	**7%**	**Credit Suisse Leveraged Loan + 2%**
Direct Lending	50%	**65%**	90%	
Opportunistic Lending	10%	**35%**	50%	
U.S. Private Credit	65%	**75%**	100%	
Non-U.S. Private Credit	0%	**25%**	35%	

SCERS continues to make progress in reaching the new 5% Private Credit target allocation, which is projected by year-end 2025, and made four commitments totaling $125 million during the year. This exceeded the budget of three commitments totaling $100 million, but was within range. Included in the commitments during the year was a $25 million additional investment in SCERS' separate account with BlackRock/Tennenbaum Capital Partners Direct Lending Fund VIII-S, LLC, bringing this total separate account commitment to $125 million.

Private Credit commitments made during the year also included a $40 million follow-on investment with an existing direct lending manager and two new direct lending relationships totaling $60 million. The market continues to exhibit competitive pressures, leading Staff and Cliffwater to remain focused on investment managers with long tenured track records, experience through cycles, and workout expertise. Since the inception of the Private Credit mandate, Staff and Cliffwater have sought out differentiated strategies and top tier managers globally. As the private credit market has grown, Staff and Cliffwater will continue to identify top performing managers, as well as specialist strategies and sectors where there are fewer competitors.

PRIVATE CREDIT (Continued)

Below is SCERS' Private Credit diversification by investment strategy, as of September 30, 2021:

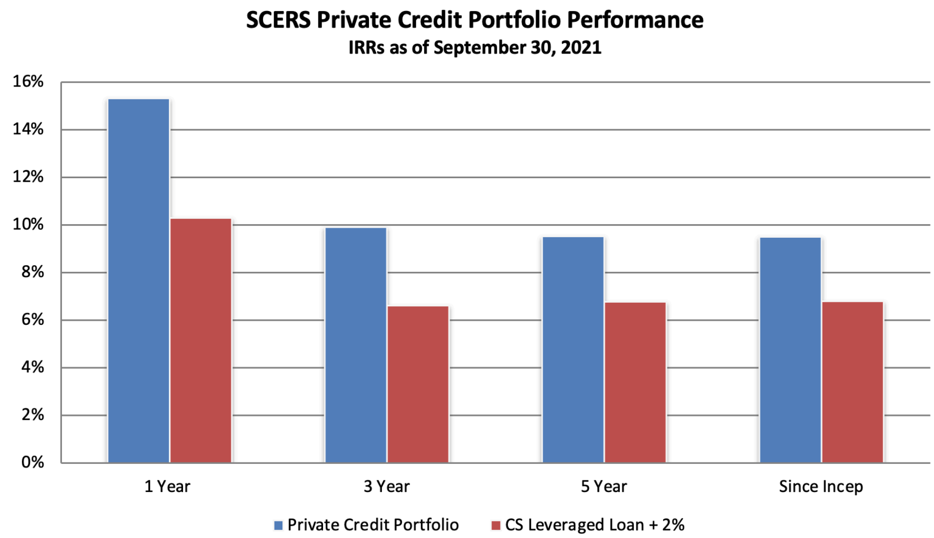


2021 ACTIVITY

- 2021 Private Credit Investment Plan
  - A range of 2-5 fund commitments, with a target of 3 funds
  - $100 million in total commitments, with a range of $50-$150 million
  - An average commitment size of $35 million per fund
- 4 commitments were made during the year totaling $125 million:
  - $40 million to Ares Capital Europe V, LP (Non-U.S. direct lending)
  - $20 million to Shamrock Capital Debt Opportunities Fund I, LP (U.S. opportunistic lending)
  - $40 million follow-on to Summit Partners Credit Fund IV, LP (U.S. direct lending)
  - $25 million additional investment in BlackRock/Tennenbaum Capital Partners Direct Lending Fund VIII-S, LLC (U.S. direct lending separate account)
- Revised the Private Credit asset class structure:
  - Increased the target allocation from 4% to 5%, with a +/- 2% range around the target
  - Renamed the Opportunistic Credit sub-strategy to Opportunistic Lending
  - Adjusted the sub-strategy mix between Direct Lending and Opportunistic Lending from 70%/30% to 65%/35%
  - Adjusted the geographic mix between the U.S. and Non-U.S. from 85%/15% to 75%/25%
- Oversaw, monitored, and assessed the existing manager lineup

PRIVATE CREDIT (Continued)

PERFORMANCE AND ATTRIBUTION



Private credit loans typically have terms ranging from 3-7 years but tend to be repaid prior to expiration, which means invested capital is returned much sooner when compared to other private market investments, such as private equity, real assets, or real estate. Because an investor's capital is returned quicker, the J-curve effect in private credit is muted, giving it a distinguishing and appealing characteristic. Established in 2017, the Private Credit mandate included four credit funds previously held in SCERS' Private Equity portfolio, which explains the longer time period returns shown above.

As shown in the chart above, SCERS' Private Credit portfolio returns have exceeded the benchmark across all reporting periods. For the one year period ending September 30, 2021, SCERS' Private Credit portfolio generated a net IRR of 15.3%, which significantly outperformed the policy index Credit Suisse Leveraged Loan Index + 2% benchmark return of 10.3%. Since inception (October 2011) through September 30, 2021, SCERS' Private Credit portfolio has earned a 9.5% net IRR, outperforming the benchmark return of 6.8%.

2022 ANNUAL PLAN

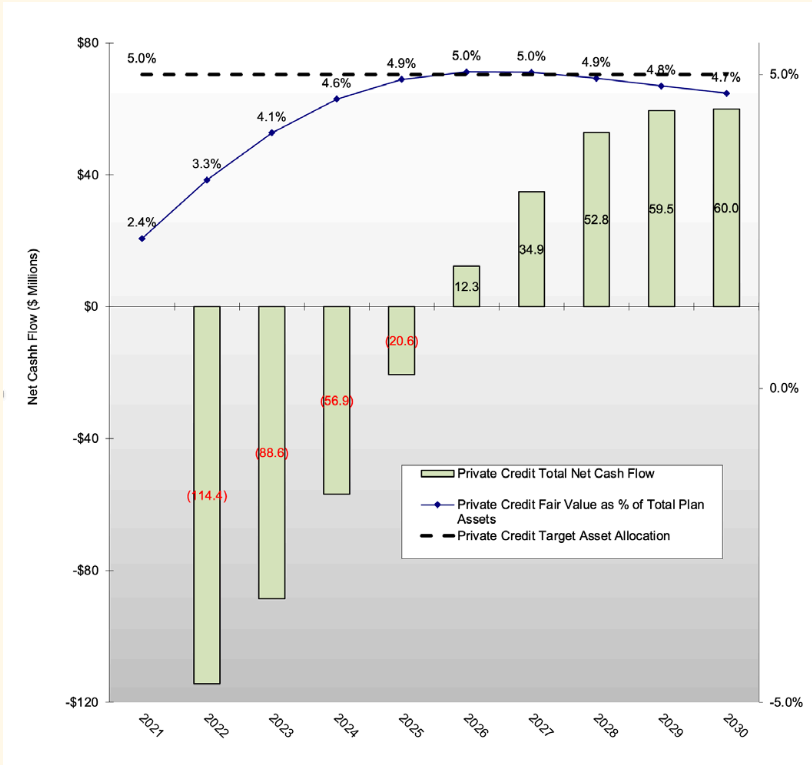
Below is the 2022 capital commitment plan for the Private Credit asset class, as recommended by Cliffwater and Staff:

SCERS Private Credit Annual Investment Plan		Range	
	Target	Min	Max
Commitment Level	$155 MM	$105 MM	$205 MM
Number of Funds	4	2	6
Direct Lending fund(s)	2	1	3
Opportunistic Lending fund(s)	2	1	3
Commitment per Fund	$40 MM	$30 MM	$50 MM

- Recommend a $155 million commitment budget for 2022, with a range of $105 million to $205 million
  - Target 4 fund commitments at an average commitment size of $40 million, with a range of $30-$50 million per fund
  - The 2022 budget does not include any funds in which a commitment was made in 2021 but capital has not been called

PRIVATE CREDIT (Continued)

Below is the projected Private Credit capital-pacing plan:



- Staff and Cliffwater continue to make progress, though measured, towards reaching the new 5% target allocation to Private Credit, which is expected to be reached by year end 2025
  - Given the abundance of capital in the private credit markets, Staff and Cliffwater will remain prudent and thoughtful in making new commitments
- 2022 investment strategies and themes include:
  - Follow-on investments to existing managers/strategies
  - Asia direct lending
  - Venture Capital direct lending
  - Niche and specialty lending strategies, globally
  - Real assets or hard collateral-based direct lending, globally
- Incorporate the approved Private Credit structure changes into the Growth asset category Investment Policy Statement (IPS) and the Master IPS
- Oversee, monitor, and assess the existing manager lineup

REAL ASSETS

MARKET OVERVIEW

The dramatic rebound in global economies that occurred in 2021 laid bare the critical everyday importance energy and infrastructure plays in our society. During the early stages of the pandemic in 2020, every transportation node was virtually shut down, from airports to toll roads to marine terminals. A year later, marine terminals are now congested, supply channels are backlogged, inventory remains sparse, and commodities and labor are in short supply.

ENERGY

In response to the quick economic recovery, most transportation systems have experienced outsized demand. This is particularly reflected in the price of oil and gas. Prior to the pandemic, oil pricing remained in a band of $55-$60 per barrel, reaching a peak of $63 at the end of 2019. Then the pandemic hit and demand dropped (from 101 million barrels per day to 92 million barrels per day) as quarantine measures kept people off roads and out of airports. Oil hit a low of $17 per barrel in April 2020 and has since been on an upward trajectory as global economies began to recover, thanks to unprecedented central bank monetary easing, pandemic related subsidies, and monetary assistance. Entering 2021, oil had risen to $53 per barrel and fluctuated throughout the year with the ebb-and-flow of coronavirus cases, ending the year at $78 per barrel, up 47%. The hefty increase in oil and gas pricing is partially attributed to the jump in demand (from 92 to 100 million barrels per day) but also to the limited supply coming out of the U.S. and OPEC's continued restraint on exports.

The U.S. oil and gas industry is going through a secular change emanating from the over exuberance period after the GFC, when an oversupply of capital flowed into the sector driving negative cash flow throughout. Over the last 5 years, the capital markets have emphasized the need for the energy sector to generate positive cash flow and exercise better discipline in capital investment. Capital discipline is showing up in the change in rig counts. At its peak in 2014, the total number of oil rigs was over 1,400. Today that number is 521 rigs, up from the low of 325 rigs at the height of the economic impact from the pandemic in April 2020.

Contributing to the industry's reconstitution is the global mandate to decarbonize our economies and move to more sustainable resources for energy, such as renewables and the technology to support it. While there is universal belief in the need to reduce carbon emissions, economies will still be dependent on oil and gas for the foreseeable future. As an example, per JP Morgan, in the U.S. fossil fuels represent 80% of power generation across industrial, transportation, residential, and commercial uses. Getting to the de-carbonization goals will take time, just from the shear cost and technology needed. Fossil fuels, particularly natural gas used in gas-fired power plants, is and will be necessary as we transition to alternative energy sources.

INFRASTRUCTURE

Infrastructure's performance during 2021 highlighted its positive characteristics, as well as its risks, and why investors have favored the asset class. Infrastructure is considered a cash generative asset with low correlations to the macro environment, and provides a level of downside protection. While infrastructure's overall performance was resilient during the pandemic, not every sub-sector enjoyed positive results. Airports, toll roads,

REAL ASSETS (Continued)

midstream energy, and any demand-based asset suffered during the pandemic. Conversely, data infrastructure, telecommunications, fiber, cell towers, trucking, and logistics blossomed. Based on Bloomberg 2021 data, toll road usage is up and tracking to its 2019 level, while the hardest hit sectors, airports and airlines, are still 20% below their 2019 levels. It may be sometime before the airline industry recovers, with JP Morgan reporting that more than 70 airlines filed for bankruptcy during the pandemic.

The unforeseen quick snap back in global economies, while very positive, has demonstrated stresses in the global infrastructure network. Supply chains across the globe have been critically disrupted, from shipping to commodities to labor. The disruption stems from robust consumer demand driven by central bank accommodation, tight production capacity, labor shortages (partially COVID-19 driven, but more so due to a lack of labor), and logistical challenges from a just-in-time inventory system prevalent throughout the world.

Examples of these stresses include computer chip shortages leading to a limited supply of automobiles from car manufactures, and the undersupply of lumber leading to heightened home values. The disruptions are expected to get better, but the unknown and most troublesome, will be the labor situation. An example of this dilemma is in the trucking industry where JP Morgan noted more than 70,000 truck drivers have left the profession during the pandemic. This lack of labor directly affects the supply chain. The choke point in goods has and continues to be the backup in seaborne transportation and container ships, which carry 90% of global trade. The unprecedented number of anchored ships outside the main U.S. ports of Long Beach and Los Angeles are a direct result of the lack of labor, in particular truck drivers who offload products from ships and deliver to destinations across the U.S. Even with 24/7 operations, ports are clogged with goods. This choke point has increased freight rates and transportation costs to record highs, not only the U.S. but globally.

As always, lessons are learned and actions are made only when there is a crisis, and that is no different now. The pandemic highlighted how inadequate our infrastructure networks were from roads to ports to digital to childcare to manufacturing to energy distribution. Worldwide governments have come to action to address these weaknesses; a recent example is the U.S. recent passage of a $1.7 trillion infrastructure spending bill. Included in this bill is a $17 billion allocation to upgrading and improving the port and waterway infrastructure. Certainly 2020 and 2021 have been impactful on real assets but it points to the opportunity before us.

A new buzzword within the real assets segment is "3Ds" – de-carbonization, digitalization, and demographics. 3Ds is meant to capture the secular changes brought on by the pandemic – the growth of data usage and the internet of things, the need for alternative energy sources due to climate change, the aging of worldwide populations, and the changes in where people work and live. These secular trends are driving how infrastructure will perform and where the future lies for new investment opportunities.

The need for infrastructure and the resiliency of the asset class continues to foster record levels of fund raising. According to Preqin, a record $123 billion was raised in 2021 across 115 funds, although the number of funds were down from the 140 raised in 2020. The average fund size increased significantly, from $876 million to over $1.2 billion. Infrastructure has become increasingly competitive and currently sits on $323 billion in dry powder, with 375 funds currently in the market seeking to raise $171 billion, another record year.

SCERS REAL ASSETS PORTFOLIO

The investment objective of Real Assets is to generate attractive returns that adjust with inflation, provide portfolio diversification through low correlations, generate moderate income and cash flow, and lower return volatility.

REAL ASSETS (Continued)

Real asset investments include a broad array of sub-asset classes and investment strategies primarily across infrastructure, energy and power, agriculture, timber, and other natural resources.

Portfolio construction for the Real Assets portfolio allows flexibility within investment ranges, to move exposures from one sector in favor of attractive risk-adjusted returns in another sector. In addition, a range of permitted investment structures may include closed and open-end commingled funds, customized separate accounts, and secondary investments.

The Real Assets asset class resides within the Real Return asset category, in addition to Real Estate and Liquid Real Return. The revised strategic asset allocation approved in August left the Real Assets target allocation at 7%, with a +/- 2% range around the target, as shown below. The actual Real Assets allocation is 6.1% invested and 8.5% committed, as of September 30, 2021. Approved revisions to the Real Assets asset class include renaming of the 'Energy' sub-strategy to 'Energy and Power', which was more suitable given the energy industry has been transitioning from oil and gas power generation to renewable energy generation and de-carbonization. The sub-strategy targets and ranges were also revised, with Infrastructure, Energy and Power, and Agriculture, Timber and Other target mixes changing from 45%/35%/20%, respectively to 60%/30%/10%, with ranges around the targets. Shown below are the revised Real Assets investment targets and ranges:

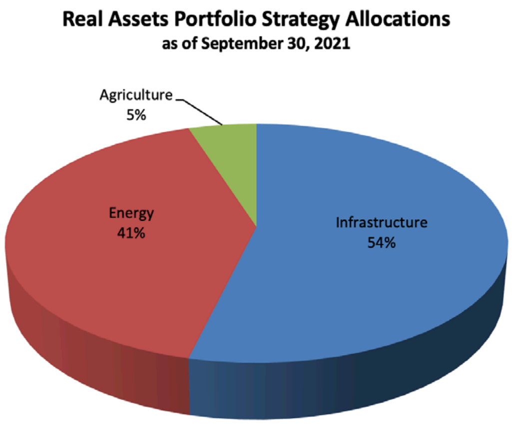
SCERS Real Assets Portfolio Structure				
	Minimum	**Target**	**Maximum**	**Policy Index Benchmark**
Total Real Assets Portfolio	**5%**	**7%**	**9%**	**Custom blend of benchmarks below:**
Infrastructure	45%	60%	75%	60% Cambridge Associates Private Infrastructure
Energy	15%	30%	45%	30% Cambridge Associates Private Energy
Agriculture, Timber, Other	0%	10%	20%	10% NCREIF Farmland

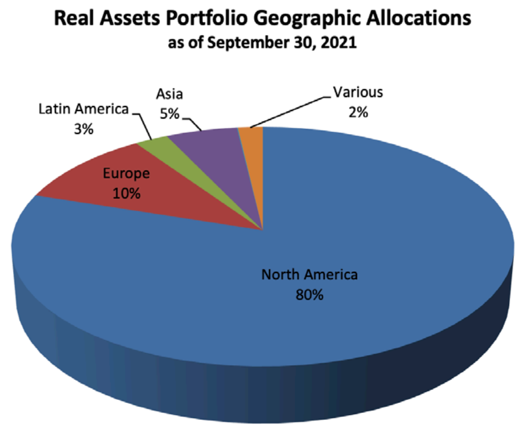
SCERS continues to make progress in reaching the 7% Real Assets target allocation, which is projected to be reached by 2026, and made 4 commitments totaling $207 million during the 2021, in-line with the budget of 5 commitments totaling $210 million. Commitments made during the year include $100 million to Brookfield Super Core Infrastructure Fund, an open-ended (perpetual) commingled fund. For portfolio construction, SCERS has taken a Core-and-Satellite, or Hub-and-Spoke approach, where the core or asset class beta-like exposure represents the Hub or foundational investment, with non-core (value add/opportunistic) strategies representing the Spoke investments. Similar to the approach taken in Real Estate, foundational investments are preferred in open-ended core or core plus fund structures, particularly for infrastructure investments, with non-core investments made in closed end fund structures.

Real Assets commitments made during the year also include a $25 million follow-on investment with an existing open-end infrastructure manager and two new closed end infrastructure relationships totaling $82 million. Staff and Cliffwater continue to favor unique and differentiated real assets investment strategies that provide attractive risk adjusted returns, are less sensitive to the broader economy, offer attractive current yield, and/or have the potential to adjust with inflation. With the worldwide economic disruption caused by the pandemic and competitive pressures in the real assets marketplace, Staff and Cliffwater are comfortable taking a measured approach to allocating capital within the asset class, even if it means extending the timeframe to reach the 7% target allocation.

REAL ASSETS (Continued)

Below is SCERS' Real Assets diversification by investment strategy and geogrphic region, as of September 30, 2021:



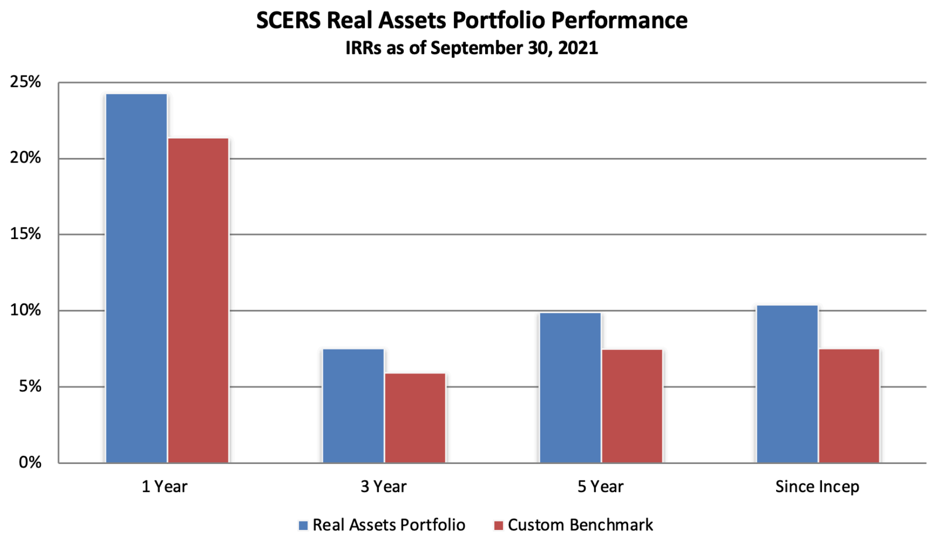


2021 ACTIVITY

- 2021 Real Assets Investment Plan
  - A range of 3-7 fund commitments, with a target of 5 funds
  - A total of $210 million in commitments, with a range of $160-$260 million
  - An average commitment size of $40 million per fund
- 4 commitments were made during the year totaling $207 million:
  - $25 million up-size to Harrison Street Social Infrastructure Fund, LP (infrastructure: open-ended core plus)
  - $35 million to Digital Colony Partners II, LP (infrastructure: value add)
  - €50 million ($47 million equivalent) to Meridiam Sustainable Infrastructure Europe IV, SLP (infrastructure: core plus)
  - $100 million to Brookfield Super Core Infrastructure Fund (infrastructure: open-ended core)
- Revised the Real Assets asset class structure:
  - Maintained the target allocation of 7%, with a range of +/- 2% around the target
  - Renamed the Energy sub-strategy to Energy and Power, with energy transition strategies included in the sub-strategy
  - Adjusted the sub-strategy mix:
    - Increased Infrastructure target from 45% to 60%, with +/- 15% ranges
    - Reduced Energy and Power target from 35% to 30%, with +/- 15% ranges
    - Reduced Agriculture, Timber and Other from 20% to 10%, with +/- 10% ranges
  - Updated the Real Assets policy index benchmark, which is a custom blend of private market indexes matching SCERS' sub-strategy target mixes
- Oversaw, monitored, and assessed the existing manager lineup

REAL ASSETS (Continued)

PERFORMANCE AND ATTRIBUTION



As shown in the chart above, SCERS' Real Assets portfolio returns have exceeded the benchmark across all reporting periods. For the one year period ending September 30, 2021, SCERS' Real Assets portfolio benefited from exposure to upstream energy and the rebound in energy prices, and generated a 24.3% net IRR, outperforming the policy index custom benchmark (45% Cambridge Private Infrastructure + 35% Cambridge Private Energy + 20% NCREIF Agriculture/Timber) return of 21.4%. Since inception (January 2013) through September 30, 2021, SCERS' Real Assets portfolio has generated a 10.4% net IRR, meaningfully outperforming SCERS' custom benchmark 7.5% net return.

REAL ASSETS (Continued)

2022 ANNUAL PLAN

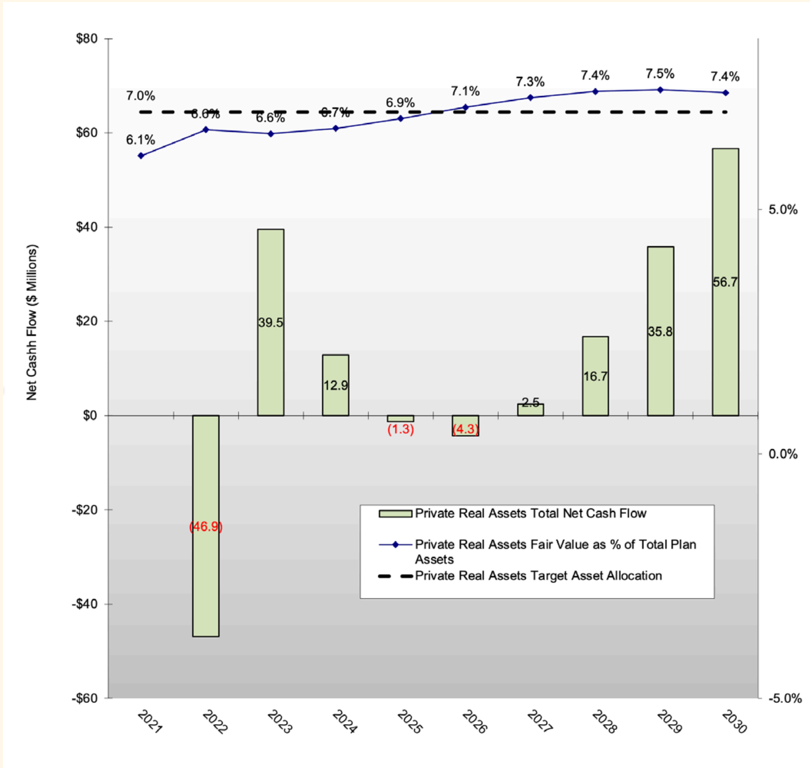
Below is the 2022 capital commitment plan for the Real Assets asset class, as recommended by Cliffwater and Staff:

SCERS Private Real Assets Annual Investment Plan			
		Range	
	Target	Min	Max
Commitment Level	$250 MM	$200 MM	$300 MM
Number of Funds	5	3	7
Energy Related	1	0	2
Infrastructure	3	1	5
Ag, Minerals, Timber	1	0	2
Other	0	0	1
Commitment per Fund	$50 MM	$35 MM	$100 MM

- Recommend a $250 million commitment budget for 2022, with a range of $200 million to $300 million
    - Target 5 fund commitments at an average commitment size of $50 million, with a range of $35-$100 million per fund
    - The 2022 budget does not include any funds in which a commitment was made in 2021 but capital has not been called

REAL ASSETS (Continued)

Below is the projected Real Assets capital-pacing plan:



- Staff and Cliffwater continue to make progress, though measured, towards reaching the 7% target allocation to Real Assets, and is expected to be reached by 2026
  - Capital commitments will remain prudent and thoughtful, with pacing predicated on market changes and the opportunity set of differentiated strategies/managers
  - Capital deployment may be lumpy given the limited number of investment opportunities
- 2022 investment strategies and themes include:
  - Follow-on investments with existing managers/strategies
  - Pan-Asia infrastructure
  - Agriculture (permanent crops) and opportunities across the food value chain globally
  - Specialty and sector focused real assets strategies
  - Environmentally driven strategies (de-carbonization and energy transition)
- Incorporate the approved Real Assets structure changes into the Real Return asset category Investment Policy Statement (IPS) and the Master IPS
- Oversee, monitor, and assess the existing manager lineup

REAL ESTATE

MARKET OVERVIEW

Globally, the real estate markets have recovered from the downturn in 2020, with some property sectors, specifically industrial and residential, exceeding their pre-pandemic levels. Since the onset of the pandemic, rapid secular changes are occurring in economies worldwide such as e-commerce, digitalization, demographics, and housing formation. With the changes, real estate investors have shifted away from the traditional property sectors of office and retail, and into the sectors that were resilient throughout the pandemic. The real estate industry investment community calls it beds (residential), sheds (industrial/logistics), and meds (life sciences and medical). Some would venture that digits (data centers and cell towers) would probably be included. Investors have herded into these sectors with exuberance. Consequently, industrial and residential asset values are at historical highs, with investment yields well below 4% and nearing 3%. The low investment yields are a consequence of incredibly accommodative fiscal policy of central banks around the world in response to COVID-19. With the low interest rate environment, coupled with the secular changes, the industrial and residential markets are incredibly frothy.

Real estate markets across the regions continued an upward recovery in the third quarter of 2021, with some regions posting record year-to-date investment activity. Globally, according to JLL data, transaction volumes totaled US$292 billion during the quarter, up 77% year-on-year. Transaction activity was particularly robust in North America, mainly in the U.S. where volumes were up over 33% from their pre-pandemic levels. The Asia-Pacific region also experienced a healthy recovery in investment activity, with volumes 14% above pre-crisis levels. By contrast, investment activity in Europe remained 9% below pre-crisis levels, reflecting the resurgence in COVID-19 infections. Unsurprisingly, the heightened investment activity is primarily in the industrial and residential sectors, the top property sectors across all regions. Overall, the global real estate markets have been very strong, with CBRE projecting 2021 global all property total returns of 11%, with industrial returns forecast near 30% and multifamily returns at around 14%. Comparatively, although positive, CBRE expects office and retail total returns to be more muted at 5%.

Across the main property sectors, in general, investor sentiment on the office sector remains restrained. Although the office markets in major city centers are improving, investors are taking a wait-and-see approach. Investors are focused only on the best-in-class office properties in the best locations, and only those that appeal to today's new economy companies. According to JLL, third quarter global office leasing activity was 39% higher than a year ago; however, it remains 25% below pre-pandemic levels. As noted by JLL, all regions are below their 2019 leasing levels, with the U.S. lagging the most (-31%), followed by Europe (-26%), and Asia Pacific (-4%).

Globally, retail markets are in varying rates of recovery, depending on a particular country's COVID conditions, travel restrictions, and economic activity. Prime retail space in the main city centers, particularly in Europe and Asia, remain sought after by both retailers and investors. The more exposure a market has to tourism, the more difficult the retail market conditions. In the U.S., the mall property types and big-box centers continue to feel the effects of e-commerce and COVID-19, with a trailing 1-year return for the NFI-ODCE of 0.7%.

Investor activity in the logistics sector was extremely robust across all three regions during the year, with tenant demand well exceeding the tight supply, resulting in aggregate vacancy rates below 5% in the main industrial corridors in both the U.S. and Europe. The supply-demand imbalance throughout regions is pressing rental rates aggressively, upwards of 15%. The outsized demand from supply-chain logistics, retail distribution, and third party logistics (3PL) operators is directly related to the pandemic-induced explosion in e-commerce, with these users accounting for over 28% of total global leasing volumes in the third quarter according to JLL. In Europe, logistics assets are experiencing record leasing activity, with supply not able to keep up, resulting in historic low vacancy rates of 3.8% across the main industrial markets in Europe. The same dynamic is happening across Asia Pacific, with robust demand from e-commerce firms and 3PL operators being the key demand drivers.

What is interesting is how the secular changes of e-commerce, digitalization, demographics, and housing formation is universal, not just in the U.S., but all across Europe, Asia, and Emerging Markets. As we look at how we live, we all need a roof over our head, food to eat, and medications to fix what ails us, so beds, sheds, and meds will most likely be the investment banner for some time to come.

SCERS REAL ESTATE PORTFOLIO

The Real Estate asset class, along with Real Assets, resides within the Real Return asset category. Similar to Real Assets, SCERS' Real Estate asset class seeks to generate current income with moderate return volatility, income indexed to inflation, and a diversifier to SCERS' overall portfolio. Portfolio construction for the Real Estate portfolio, also similar to Real Assets, allows flexibility within investment ranges, to move exposures where there are favorable and more attractive risk-adjusted returns. In addition, a range of permitted investment structures include closed and open-end commingled funds, customized separate accounts, and secondary investments.

Real estate investment strategies fall within two broad categories – core/core plus and non-core. Investments in core/core plus strategies will typically possess a lower but stable risk-return profile, and serves as the hub/foundation of the Real Estate asset class. Non-core investments represent the spoke/alpha component of the Real Estate asset class, and can serve as a compliment and return enhancer to the overall portfolio, but entail more risk. Core/core plus investments are typically made in open-ended fund structures, while non-core investments are made in closed-end fund structures.

With the revised strategic asset allocation approved in 2021, the Real Estate target allocation increased from 7% to 9%, with a +/- 2% range around the target. The actual allocation to real Estate is 7.2% invested as of September 30, 2021. Among the revisions to the structure of the Real Estate asset class, the Board approved adjusting the sub-strategy mix between core and non-core from 65%/35% to 60%/40%, with flexible ranges around the targets. The slight increase in non-core is due to the larger opportunity set of compelling risk-adjusted returns within the segment, and an increased allocation allows flexibility to pursue thematic opportunities globally, with the potential to enhance overall portfolio returns.

In addition to the revision to the sub-strategy mix, the Board also approved increasing the non-U.S. allocation from a maximum policy limit of 30% to 35%, with a range of 0%-35%. SCERS' current allocation to non-U.S. real estate is approximately 27%. This adjustment better reflects the greater number of interesting and better relative value opportunities outside of the U.S., and a more global portfolio offers greater diversification benefits than one concentrated only in the U.S. Along with the increased allocation to non-core, an increase in the non-U.S. policy maximum will provide greater flexibility to take advantage of thematic opportunities from a wider range of compelling risk-adjusted return strategies and managers globally. Shown below are the revised Real Estate investment targets and ranges:

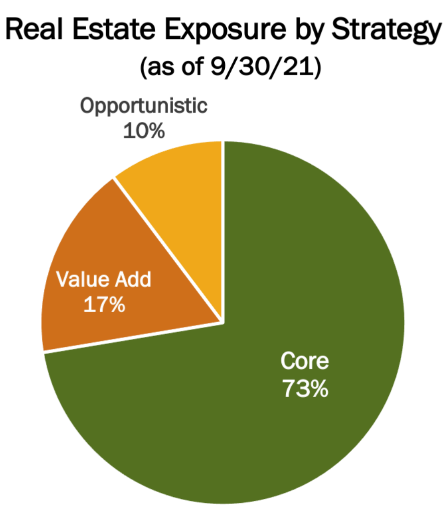
REAL ESTATE (Continued)

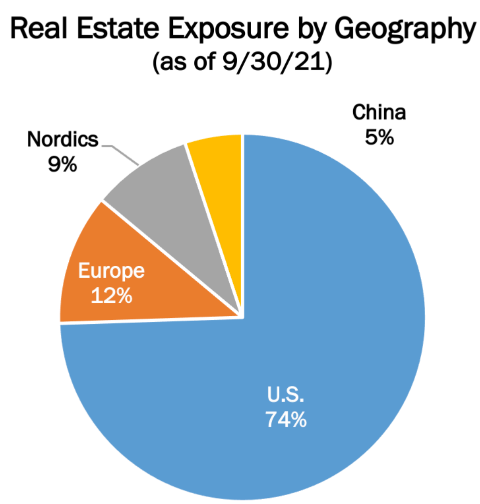
SCERS Real Estate Portfolio Structure				
	Minimum	**Target**	**Maximum**	**Policy Index Benchmark**
Total Real Estate Portfolio	**7%**	**9%**	**11%**	**Custom blend of benchmarks below:**
Core Real Estate	50%	**60%**	70%	60% NFI-ODCE
Non-Core Real Estate	30%	**40%**	50%	40% NFI-ODCE + 1%
Non-U.S. Real Estate	0%	**N/A**	35%	

SCERS' Real Estate portfolio has been performing exceptionally well over all reporting periods as a result of taking advantage of some global thematic strategies, including logistics and the Nordics. Because the real estate portfolio had reached its target allocation of a then 7%, the 2021 budget only called for a target allocation of $60 million. During the year, SCERS made two commitments totaling $70 million, which was within the budgeted range of 1-3 commitments and $30-$90 million in total. The two commitments made during the year included a $40 million follow-on investment to an existing U.S. non-core manager and a new relationship outside of the U.S. for $30 million.

Real estate offers a wide range of sector and geographic investment strategies and an attractive risk-return profile, which served as the justification for increasing the target allocation to Real Estate, along with the strong performance that SCERS has generated historically. SCERS' Real Estate portfolio is currently underweight non-core and non-U.S. strategies, so Staff and Townsend expect these to be focus areas of due diligence in 2022.

Below is SCRES' Real Estate diversification by investment strategy and geographic region, as of September 30, 2021:

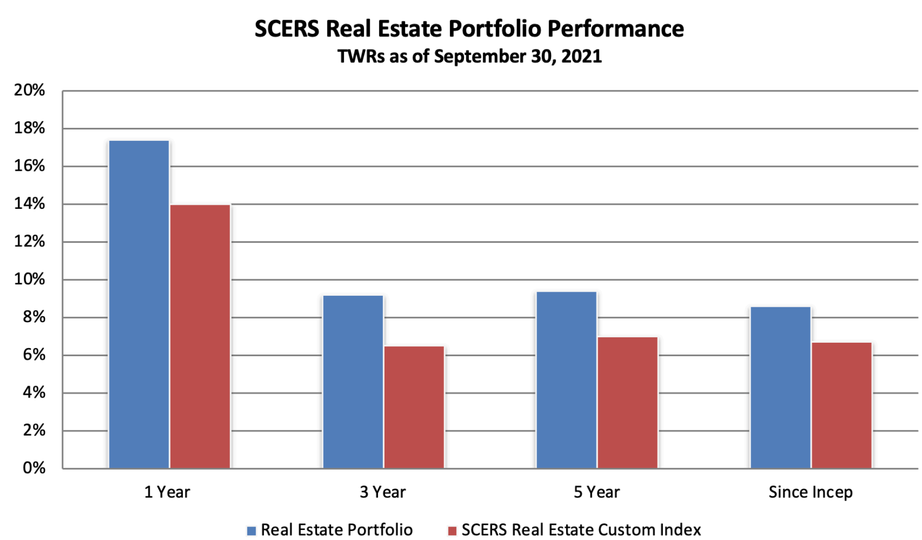




2021 ACTIVITY

- 2021 Real Estate Investment Plan:
  - A range of 1-3 fund commitments, with a target of 2 funds
  - A total of $60 million in commitments, with a range of $30-$90 million
  - An average commitment size of $30 million per fund
- 2 commitments were made during the year totaling $70 million:
  - $40 million follow-on investment to Asana Partners Fund III, LP (U.S. non-core: value add)
  - $30 million to LaSalle China Logistics Venture, LP (Non-U.S. non-core: opportunistic)
- Revised the Real Estate strategic allocation plan:
  - Increased the target allocation from 7% to 9%, with a +/- 2% range around the target
  - Adjusted the sub-strategy mix between Core and Non-Core from 65%/35% to 60%/40%
  - Increased the Non-U.S. maximum policy limit from 30% to 35%
  - Updated the Real Estate policy index, which is a blend of the NFI-ODCE and NFI-ODCE + 1% to match SCERS' sub-strategy mix, as revised
- Oversaw, monitored, and met with SCERS' existing Real Estate managers

PERFORMANCE AND ATTRIBUTION



As shown in the chart above, SCERS' Real Estate portfolio returns have exceeded the benchmark across all reporting periods. For the one year period ending September 30, 2021, SCERS' Real Estate portfolio generated a net TWR (time-weighted return) of 17.4%, which meaningfully outperformed the policy index NFI-ODCE blended benchmark return of 14%. Since inception (1986) through September 30, 2021, SCERS' Real Estate portfolio has earned an 8.6% net TWR, outperforming the blended benchmark net return of 6.7%.

REAL ESTATE (Continued)

2022 ANNUAL PLAN

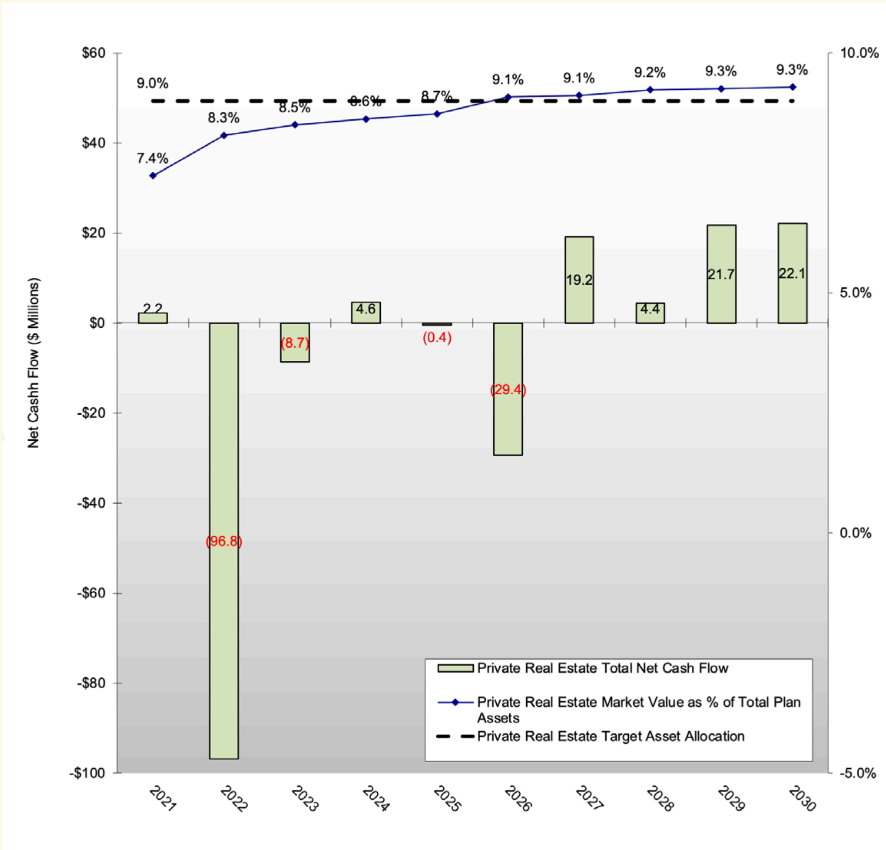
Below is the 2022 capital commitment plan for the Real Estate asset class, as recommended by Townsend and Staff:

SCERS Real Estate Annual Investment Plan			
		Range	
	Target	Min	Max
Commitment Level	$270 MM	$220 MM	$320 MM
Number of Funds	6	4	8
Core Fund(s)	2	1	2
Non-Core Fund(s)	4	3	6
Commitment per Non-Core Fund	$30 MM	$20 MM	$50 MM
Commitment per Core Fund	$75 MM	$50 MM	$100 MM

- Recommend a $270 million commitment budget for 2022, with a range of $220 million to $320 million
    - Target two core/core plus open-ended fund totaling $120 million
    - Target four non-core funds totaling $150 million
    - The 2022 budget does not include any funds in which a commitment was made in 2021 but capital has not been called

REAL ESTATE (Continued)

Below is the projected Real Estate capital-pacing plan:



- Staff and Townsend expect to make meaningful progress toward the increased 9% Real Estate target in 2022
  - Expect to reach the target allocation in 2026
- Rebalance the U.S. core open-end portfolio to bring the strategy and geographic mixes within targeted ranges
- 2022 investment strategies and themes include:
  - Europe and Asia open end core/core plus
  - Europe and Asia student housing
  - Southeast Asia value add
  - Japan residential and hospitality
  - Refrigerated logistics and cold storage globally
- Incorporate the approved Real Estate structure changes into the Real Return asset category Investment Policy Statement (IPS) and the Master IPS
- Oversee, monitor, and assess the existing manager lineup

LIQUID REAL RETURN

SCERS LIQUID REAL RETURN PORTFOLIO

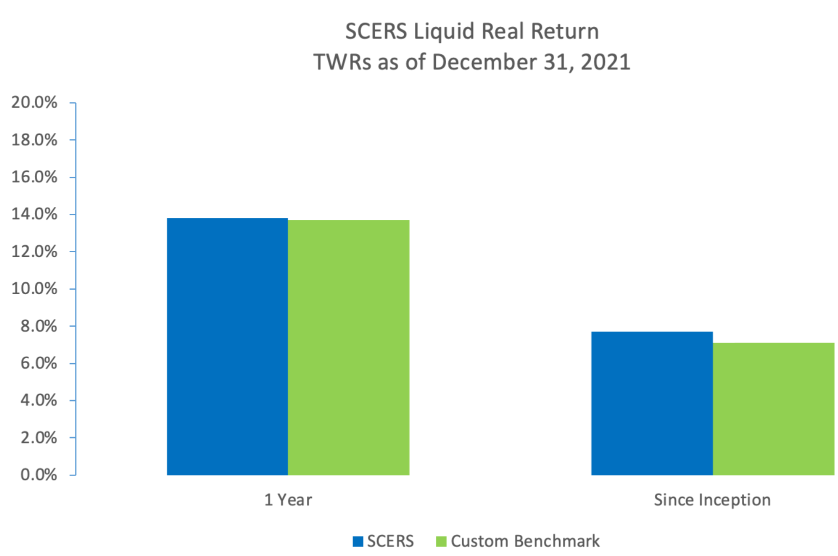
SCERS' Liquid Real Return asset class has a 2% strategic target allocation; however, it is also used as part of SCERS' Overlay Program to rebalance the overall Real Return asset category to its target allocation. As of December 31, 2021, the actual Liquid Real Return allocation stood at 3.3%. The target allocation of Liquid Real Return did not change within the revised strategic asset allocation. Liquid Real Return consists of a diversified series of liquid publicly traded real return exposures that complement the broader objectives of the Real Return asset category, to (1) protect against inflation; (2) generate cash flow; and (3) provide further portfolio diversification. Underlying investments include global real estate investment trusts (global REITS), global infrastructure equities, real asset debt, commodities, Treasury inflation protected securities (TIPS), global natural resource equities, REIT preferreds, master limited partnerships (MLPs), and floating rate notes. The asset class was created in 2019, when it replaced a legacy Commodities asset class.

The asset class is currently implemented with two separate account mandates, one managed by Brookfield Asset Management and the other by State Street Global Advisors (SSGA). SSGA also manages SCERS' Overlay Program so its mandate serves a dual purpose, half of the 2% Liquid Real Return strategic allocation and as an overlay proxy that rebalances the overall Real Return allocation to its target allocation.

2021 ACTIVITY

- Oversaw and monitored the existing manager lineup

PERFORMANCE AND ATTRIBUTION



LIQUID REAL RETURN (Continued)

SCERS' Liquid Real Return portfolio generated a return of 13.8% during 2021, fueled by a combination of the recovery in energy prices, and strong equity and TIPS returns. TIPS benefitted from rising inflation over 2021. The custom policy index benchmark return was 13.7%. The Liquid Real Return portfolio was created in 2019, so the returns do not extend over longer measurement periods. The since inception return for the portfolio is 7.7%, compared to the policy index benchmark return of 7.1%.

2022 ANNUAL PLAN

- Perform any rebalancing activity as necessary
- Oversee, monitor, and meet with SCERS' existing Liquid Real Return managers

OPPORTUNITIES

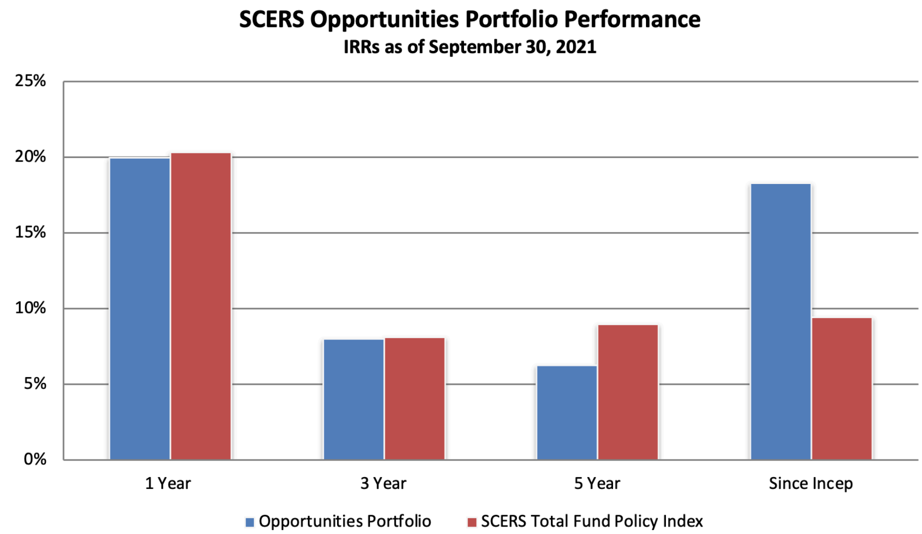
SCERS' Opportunities portfolio was eliminated from the revised strategic asset allocation, as approved by the Board in 2021. As a reminder, the Opportunities portfolio did not have a fixed allocation, but instead had a permissible range of 0% to 5%. As of September 30, 2021, the actual allocation stood at less than 0.1%, comprised of one distressed debt fund (vintage year 2013) with a NAV of $4.8 million. Investments in the Opportunities portfolio consisted of tactical strategies offering attractive risk-return attributes. Potential opportunities were considered short term, niche, non-traditional, or opportunistic in nature, that could exist across the range of asset classes. Opportunities investments drew their capital allocation from the asset class that was most comparable to the risk-return characteristic of the investment. Given the tactical approach of the Opportunities portfolio, it was likely that no investments would be made in any given year, which occurred over the past several years.

The reason for eliminating the Opportunities portfolio was that SCERS' asset allocation changed significantly since the Opportunities segment was created in 2007. Over the past number of years, many opportunistic-like investments were allocated directly within SCERS asset classes such as Private Equity (distressed), Private Credit, and non-core Real Estate, and several of SCERS' absolute return managers are structured to invest in tactical opportunities when they present themselves. With the elimination of the Opportunities portfolio, any future tactical and opportunistic investment opportunities will be considered directly within the asset class with the closest risk-return characteristics of any opportunity under consideration. In 2022, Staff will move the one remaining fund that resides in the Opportunities portfolio into the Private Equity asset class, to complete the wind down of this segment of SCERS' portfolio.

2021 ACTIVITY

- The Opportunities portfolio was eliminated within the revised strategic asset allocation

PERFORMANCE AND ATTRIBUTION



As of September 30, 2021, SCERS' Opportunities portfolio generated a since inception (2007) 18.3% net IRR, significantly outperforming SCERS' policy index benchmark return of 9.34%. The strong since inception performance was driven primarily by several distressed debt funds SCERS invested in the aftermath of the GFC that have since been liquidated.

2022 ANNUAL PLAN

- Move the one remaining fund that resides in the Opportunities portfolio into the Private Equity asset class, to complete the wind down of this segment of SCERS' portfolio

OTHER INVESTMENT ACTIVITIES

2021 ACTIVITIES

Other Projects, activities, and enhancements within the investment program in 2021 included:

- Conducted an asset liability modeling (ALM) study with general consultant, Verus Advisory, resulting in the Board approving a revised strategic asset allocation
- Made structural modifications to several asset classes and initiated implementation of the revised strategic asset allocation
- Verus Advisory ran an updated liquidity analysis of SCERS' plan (within the ALM study), as called for in SCERS' Cash Management Policy
- Renewed and extended the contract with Cliffwater, LLC for alternative assets consulting services, for a three-year term
- Issued a request for proposal (RFP) for portfolio analytics and risk management systems, and evaluated several candidate systems during the year
- Re-affirmed and/or updated Board policies on Board Staff Trading, Transaction Cost Analysis, Placement Agent, Representation on Advisory Committees, and Alternative Asset Investment Standard of Care
- To comply with California Government Code Section §7514.7, provided public disclosure of calendar year 2020 information regarding fees, expenses, and returns for alternative investment funds in which SCERS invests
- Oversaw, monitored, and met with existing investment managers

OTHER INVESTMENT ACTIVITIES (Continued)

2022 OBJECTIVES

- Complete structural modifications to any remaining asset classes and continue implementation of the revised strategic asset allocation
- Transition the Overlay Program to the revised strategic asset allocation, and recommend any adjustments to the overlay proxies
- Update the asset category investment policy statements (IPS) and the Master IPS to reflect the changes to the strategic asset allocation and underlying asset class structural revisions
- Recommend and onboard the portfolio analytics and risk management system for which an RFP was issued in 2021
- Conduct annual liquidity analysis as called for in SCERS' Cash Management Policy
- Evaluate systems for managing SCERS' plan cash flows and update Cash Management Policy
- To comply with California Government Code Section §7514.7, provide public disclosure of calendar year 2021 information regarding fees, expenses, and returns for alternative investment funds in which SCERS invests
- Evaluate contracts of general investment consultant Verus Advisory, and real estate consultant The Townsend Group
- Establish process and protocols for implementing private market secondary sales
- Finalize plans to conduct fiduciary "health check" of SCERS' alternative assets investment contracts
- Continue discussions with the Board regarding SCERS' governance structure and implementation protocols for making investment decisions
- Enhance documentation of internal investment operating procedures and processes
- Oversee, monitor, and conduct calls with investment managers, in addition to attending manager meetings where feasible
- Attend and participate in industry conferences virtually, and in person where feasible

BOARD EDUCATION

2021 BOARD EDUCATION

- Education on real assets
- Education on global markets outlook
- Education on transaction costs
- Education on a private equity co-investment structure
- Education on investment opportunities in China

2022 BOARD EDUCATION

- Education on delegated authority/governance protocols for selecting investment managers
- Education on private markets secondary sales
- Education on portfolio activity and compliance report
- Education on performance attribution and analytics
- Education on incorporating ESG considerations into the portfolio
- Education on the Overlay Program
- Strategy update presentations by SCERS' investment managers
- Other educational presentations by Consultants and Staff

APPENDIX

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APPENDIX 1 — VERUS 2021 REVIEW AND OUTLOOK

Verus

Memorandum

To:	Sacramento County Employees' Retirement System Board (SCERS)
From:	John Nicolini; Verus
Date:	February 16th, 2022
RE:	2021 Review and Outlook

Executive Summary

SCERS' portfolio ended 2021 up +17.0% (+16.7% net), with growth and real return classes showing positive results, while fixed income was mixed. The results were well in excess of the Policy Index and ranked in the top quartile against SCERS' peers. The market environment in 2021 proved to be an exceedingly accommodative one for financial assets. Fiscal stimulus early in the year was significant, monetary policy was loose throughout most of the year, vaccine-related optimism lifted sentiment, and tight majorities in Congress limited the scope of the regulatory agenda in Washington. The result was an incredibly buoyant market – over the course of the year, the S&P 500 never closed more than 5.2% below its previous record high, and it closed at a record high on 70 different days. Only in 1995 (77 times) did the S&P 500 close at a record more frequently. Credit spreads moved to their tightest levels since prior to the Global Financial Crisis, and interest rates moved higher. Volatility, both realized and implied, remained on the low side of average levels for most of the year across asset classes.

In this memo, we will review the investment environment in 2021 for major asset classes, detail 2021's initiatives, and outline the work plan for 2022.

U.S. EQUITY

Coming into the year, one of the big questions investors faced was whether large-cap U.S. stocks were going to be able to earn their way into the steep valuations they had built up through the latter half of 2020. The answer to that question was a resounding "YES!", with the S&P 500 Index returning +28.7%, powered by blockbuster corporate earnings which grew even faster than prices, keeping valuations in check. Strong earnings growth was enabled by healthy consumer balance sheets and spending, which led to steady revenue growth. Cost-cutting initiatives implemented throughout the pandemic also helped to improve the bottom line. The S&P 500 Index managed to record a fresh record net profit margin of 13.1% in the second quarter, before moderating slightly to end the year. Of course, earnings were not the only support for equities in 2021. Real interest rates fell to record lows as inflation outpaced rising rates, which was supportive for risk asset prices. The low interest rate environment also incentivized chief financial officers to issue debt and use the proceeds to buy back shares.

In terms of performance, large-cap equities (Russell 1000 +26.5%) outperformed small-cap equities (Russell 2000 +14.8%), and size was the general determinant of the attractiveness of growth versus value. Large-cap growth stocks (Russell 1000 Growth +27.6%) narrowly outpaced large-cap value (Russell 1000 Value +25.2%), but small-cap value (Russell 2000 Value +28.3%) clearly outpaced small-cap growth (Russell 2000 Growth +2.8%). Several periods of rising interest rates helped support the periodic outperformance of value-orientated sectors which

APPENDIX 1 — VERUS 2021 REVIEW AND OUTLOOK (Continued)

tend to feature companies less dependent on cashflows further out into the future, such as Energy (+46.0%) and Financials (+33.1%).

INTERNATIONAL EQUITIES

It was a tougher year for non-U.S. equities. International developed equities (MSCI EAFE +11.3%) delivered unhedged returns which were strong on an absolute basis but materially lagged the U.S. (S&P 500 +28.7%). The strength of the U.S. dollar was a tremendous headwind for unhedged investors in international developed equities – on a dollar hedged basis, the MSCI EAFE returned +19.4%, meaning that the embedded currency portfolio of the MSCI EAFE Index fell -8.2% over the course of the year. Much of this decline could be attributed to weakness in the Japanese yen, which depreciated more than 10% relative to the U.S. dollar and ended the year at a five-year low. The yen was likely impacted by an unwinding of safe-haven positions and the growing divergence in policy trajectories between the Federal Reserve and the Bank of Japan. However, the yen was not the only developed currency which came under pressure – the euro and British pound fell -6.9% and -1.0% relative to the U.S. dollar, respectively.

Emerging market equities also faced difficulties. The MSCI Emerging Markets Index declined -2.5% on an unhedged basis over the year, with currency exposure contributing approximately half of the decline. Most of the underperformance of EM equity relative to the global opportunity set was attributed to China (MSCI China -21.7%). Excluding China, the MSCI EM Index returned +10.0% on an unhedged basis. Weakness in Chinese equity markets was fueled by several factors, including the People's Bank of China shifting focus towards reducing leverage in the property development sector and tightening financial conditions, the Communist Party of China's crackdown on specific sectors of the economy, and intermittent struggles with virus containment. While there were some bright spots elsewhere in EM (Indian and Taiwanese equities both returned roughly +26%) China unfortunately continues to drive emerging market underperformance.

FIXED INCOME

Market participants have expressed disparate views regarding the fixed income outlook. Much of the difference in viewpoint has been driven by beliefs around high levels of inflation and whether price rises will in fact be more transitory, or more persistent, in nature. Those in the "persistent" camp took a short victory lap in Q1 when the Bloomberg Long Treasury Index recorded its worst quarterly loss (-13.5%) since 1980 and the 10-year Treasury yield nearly doubled to end the quarter at 1.74%. However, the "persistent" narrative seemed to weaken towards the middle of the year as rates fell back down. Finally, persistence once again appeared likely in Q4 as rates moved back toward their Q1 highs, and year-over-year headline inflation reached 7.0% (the highest level since 1982). In late November, Federal Reserve Chairman Powell officially retired the word "transitory" from the Fed's lexicon with regard to inflation rates. Many investors remain of the view that 7.0% inflation is not sustainable, and that inflation will likely begin to fall later in 2022 as the outsized impact of energy prices and automobiles fade from the year-over-year inflation calculation, supply chain issues continue to be resolved, and spending patterns generally move back towards normalcy. Regardless, there is no doubt that the inflationary pressures caused by pandemic-related dislocations earlier in the year have broadened considerably, are impacting food prices and labor costs, and are likely to lead to continued above-average increases in shelter costs.

APPENDIX 1 — VERUS 2021 REVIEW AND OUTLOOK (Continued)

The shifting inflation environment appears to be changing the mindset of central bankers in important ways. In January, the Federal Reserve was more focused on reducing unemployment than on containing inflation. This was clearly no longer the case in December. The Federal Reserve is now expected to conclude its asset purchase program by March 2022, hike interest rates four times over the year beginning in March, and potentially start “normalizing” its balance sheet (i.e. selling assets) around mid-year. This significant pivot from Fed officials suggests that one of the strongest supports for equity prices might be on more shaky ground in 2022, and it also sets up some potential future policy divergences between global central banks. While many emerging market central banks have already begun hiking policy rates in response to higher inflation, developed central banks have taken a wider range of approaches. The Bank of Japan, European Central Bank, and Swiss National Bank are expected to keep policy unchanged for the foreseeable future. The Bank of England, the Bank of Canada, the Fed, and the Reserve Banks of Australia and New Zealand are expected to hike several times in 2022.The People’s Bank of China is expected to cut rates in 2022. These divergences will no doubt impact the fixed income environment over the next year.

With regard to performance, the Bloomberg Global Treasuries Index declined -6.6% in U.S. dollar terms as global interest rates picked up from historic lows. In the U.S., the Bloomberg U.S. TIPS Index (+6.0%) outperformed as priced inflation rates hit multi-year highs, and high-yield credit (Bloomberg US Corporate High Yield +5.3%) and bank loans (S&P/LSTA Leveraged Loans +5.2%) outperformed safer credit (Bloomberg US Aggregate -1.5%) as spreads compressed, investors shortened duration, and rates increased. Local-currency denominated emerging market debt (J.P. Morgan GBI-EM GD -8.7%) underperformed hard-currency emerging market debt (JPM EMBI GD -1.5%).

OUTLOOK

Many investors retrospectively viewed the 2021 market environment as a relatively easy one to navigate. Optimism around the vaccine distribution effort and the economic resurgence it would unlock, as well as the tremendous amount of fiscal and monetary support being provided, cultivated a benign environment which allowed some of the riskiest and most speculative financial assets (from SPACs, to meme stocks, to crypto assets) to prosper. As interest rates begin to rise and the sugar high from last year’s stimulus fades, investors may find it more difficult to generate an acceptable total return level. Conditions remain relatively attractive for risk asset performance, though the current environment seems to suggest more moderate returns, as much of the good news may already be priced in.

PORTFOLIO INITIATIVES

Completed an asset/liability study
SCERS completed an asset/liability study in the Summer of 2021 which resulted in some modest changes to the Plan’s target allocation. Discussion of those changes are highlighted below within each asset category, as well as other projects we completed during the year.

Growth Portfolio
In growth-oriented asset classes, we made the following changes to the target allocation:

APPENDIX 1 — VERUS 2021 REVIEW AND OUTLOOK (Continued)

- Public equity was converted to a global equity approach and adoption of a new global benchmark
- Eliminated Growth Absolute Return as a target allocation
- Private Equity allocation was increased from 9% to 11%
- Private Credit allocation was increased from 4% to 5%

Diversifying Portfolio

In diversifying asset classes, we made the following changes to the target allocation:

- Fixed income allocation was increased from 15% to 16%
- Eliminated the global fixed income allocation

Received approval to begin a new manager search to hire 1 or more Core Plus Fixed Income strategies

Real Return Portfolio

In real return asset classes, we made the following changes to the target allocation:

- Real Estate allocation was increased from 7% to 9%

Overlay

The overlay will shift to adopt the new allocation.

PROJECTS FOR 2022

With the completion of the ALM Study last year, SCERS Staff and consultants continue to implement the new allocation. We expect to present to the Board a couple manager searches within fixed income and global equity in the first half of the year. In the second half of 2022, we will revisit the cash management policy and system and provide some Board education on a few topics.

APPENDIX 2 — CLIFFWATER REVIEW OF SCERS' ALTERNATIVE ASSETS

CLIFFWATER

To: Sacramento County Employees' Retirement System
From: Cliffwater LLC
Date: February 2022
Regarding: **Alternative Assets 2021 Year in Review**

Global economies continued to recover and rebound through the year, following the pandemic-driven downturns experienced during the first half of 2020. Central banks also generally maintained their supportive measures, providing further comfort for investors in risk assets, although continued higher inflation readings began to impact the expected timeline for more restrictive policies. Equity markets responded by extending their gains throughout the year in a continuation of the market rally that began in the second quarter of 2020. The U.S. stock market once again led performance across major asset classes, gaining 26% on the year. Small cap stocks lagged large cap stocks and growth once again outpaced value. Non-U.S. developed equity markets gained 8%, while emerging market equities declined 2%, driven mostly by concerns related to Chinese regulatory restrictions and a distressed real estate sector in China.

Volatility returned to the U.S. rates market, with the 10-year Treasury yield moving sharply higher and lower throughout the year, ultimately ending the year higher than its sub-1% yield at the beginning of 2021. As a result, traditional duration-sensitive fixed income saw declines in 2021. U.S. core fixed income declined 1.5% while longer-dated 30-year Treasuries declined nearly 5%. High yield bonds returned 5% during the year as credit spreads continued to tighten, more than offsetting the negative impact of rising interest rates. Publicly traded "liquid alternatives" performed very strongly during the year; publicly traded BDCs returned 35%, while MLPs and REITs each returned just over 40%.

The alternative assets in the Sacramento County Employees' Retirement System ("SCERS") portfolio, which include private equity, private credit, real assets, and absolute return-oriented asset classes, performed very well on both an absolute and relative basis in 2021. Although most of SCERS' efforts within the alternative asset classes during 2021 focused on continuing to execute the SCERS long-term implementation plans for these assets, SCERS also reviewed its asset allocation targets, portfolio structure, and desired role of each of the alternative asset classes in connection with an asset liability modeling study that SCERS completed during the year. The most significant changes for the alternative asset classes included modestly raising the strategic allocation targets for private equity and private credit and moving to consolidate the dedicated allocation to absolute return-oriented strategies to focus on the diversification and risk reduction attributes of these strategies.

Absolute Return Portfolio

Hedge funds generated solid performance in 2021, where hedge funds as a whole were up approximately 8%. Gains were strong in the first half of 2021 but trailed off in the fourth quarter on increased interest rate volatility and equity market factor rotation. For the full year, all strategies were positive, led by equity, event driven, and distressed credit strategies. Hedge fund alpha (returns above the risk-free rate in excess of returns generated from broad market exposure) was also significant in 2021 despite a decline in the fourth quarter. Market neutral, event driven, and multi-strategy funds posted some of the highest alpha, while macro strategies struggled in the second half of 2021 and ended with slight negative alpha.

Los Angeles • New York

APPENDIX 2 — CLIFFWATER REVIEW OF SCERS' ALTERNATIVE ASSETS (Continued)

Event driven funds generated strong returns for the year of roughly 13%, led by outsized gains from long-biased special situation holdings. Equity oriented managers generally benefitted from positive market momentum, monetization of private investments at robust valuations through IPOs and SPACs, and from numerous successful activist equity campaigns. Credit fund performance was particularly good for 2021, with several funds returning between 10% and 30%. Funds with distressed investments or levered long positions in high yield led performance. Hedges generally detracted from performance and low net long/short funds underperformed.

Equity long/short managers generated broad gains for the year, which was largely attributed to upside beta capture as equity markets rallied throughout the year. These gains were partly offset by relative underperformance of some crowded positions which sharply lagged. Managers with greater exposure to international markets also lagged as they were more impacted by renewed pandemic lockdowns and by sharp declines in Chinese e-commerce stocks. Equity/long short strategies in the aggregate returned 12% for 2021.

Despite a challenging macro environment, particularly in the second half of the year, both discretionary and systematic macro strategies posted a third consecutive year of gains. Systematic macro strategies generally outperformed discretionary macro strategies, generating returns of 7% as compared to roughly 3% returns for discretionary macro strategies. Commodities was the largest contributor to performance of systematic strategies, particularly among energy, base metals, and agricultural commodities. Equities also contributed as managers maintained long exposure for most of the year. Discretionary managers saw the largest gains from short global fixed income trades, primarily during the first quarter. Market neutral strategies returned roughly 7% in the aggregate, led by convertible arbitrage and equity market neutral strategies. Fixed income arbitrage and volatility arbitrage strategies lagged for the year, generating small positive returns around 2%.

The SCERS Absolute Return portfolio once again saw solid gains across most of its investments. The Growth Oriented Absolute Return portfolio's 13.2% net return for the year was driven by strong double-digit gains in the event driven and equity long/short funds. The remaining funds in the portfolio generated smaller single-digit gains on the year. The Diversifying Absolute Return portfolio produced a one-year net return of 6.5%. Although that portfolio's lower targeted beta (market sensitivity) effectively limits the portfolio's returns, as compared to more growth-oriented strategies, the portfolio did experience a meaningful dispersion of returns across funds. Lagging performance from the portfolio's global macro and low-beta equity long/short funds muted the impact of the double-digit returns generated by several of the other funds in the portfolio.

SCERS added two new absolute return funds during the year, with both funds being categorized within the Diversifying Absolute Return portfolio. The first new fund, which was added at the beginning of 2021, is a market neutral fund that takes a relative value approach to investing in convertible bonds and other credit instruments. The second fund is a global macro fund that was added to the portfolio in the middle of the year. This fund pursues a discretionary global macro strategy focused on directional and relative value trading across a wide range of asset classes globally.

Private Equity

Private equity markets accelerated their momentum coming out of 2020 to generate record levels of activity and impressive performance in 2021. Private equity's strong performance, particularly within buyout, growth equity, and venture capital, was fueled by the continued global economic recovery, technological advancements with rapid adoption of new technologies, a robust exit environment, and rising valuations. Distributions also remained high throughout the year as deal activity reached record levels in 2021 with elevated cash balances and available inexpensive financing driving acquisitions of private equity portfolio companies by other financial sponsors and strategic acquirers. Public listings and dividend recapitalizations of portfolio companies provided additional opportunities to increase distributions to private equity investors. Fundraising activity also remained elevated, with continued strong demand and competition for fund allocations, short fundraising periods, and funds returning to market with new fundraises more quickly than in typical cycles.

APPENDIX 2 — CLIFFWATER REVIEW OF SCERS' ALTERNATIVE ASSETS (Continued)

Venture capital strategies also set record levels for capital invested, fundraising, and exit activity. While venture capital saw increases in both the number of new deals completed and the total value of these deals during the year, the market certainly featured increasingly large deal sizes for venture capital transactions in 2021. Arguably the most notable metric within venture capital in 2021 was the record level of exits during the year, particularly via public offerings, with large and increasingly noteworthy IPOs and direct listings. Several of these companies were taken public with valuations greater than $10 billion. The venture capital markets continue to benefit from the digital transformation of nearly all sectors and industries and a growth mindset of companies at all stages of their evolution. Nontraditional venture capital investors are also becoming increasingly active across the venture landscape, including at earlier stages of investment, helping to drive valuations higher.

The SCERS Private Equity portfolio continued to produce very strong results on an absolute basis and relative to its benchmarks through 2021. The Private Equity portfolio generated a net return, as measured on an IRR basis, of 57.7% for the trailing 12-month period ended September 30, 2021. Trailing three- and five-year returns were 30.9% and 27.3%, respectively. These results have significantly exceeded those of the peer universes and the SCERS long term performance objective of earning a 3% illiquidity premium above public equities. The Private Equity portfolio's strong performance continues to be broadly generated across its underlying funds rather than being driven by a few vintage years, strategies, or managers.

SCERS continued to allocate to new private equity fund opportunities throughout the year, accessing new funds of high conviction private equity general partners by committing to funds managed by new general partner relationships and by committing to new funds of its well-known general partners already managing capital for SCERS. Despite the crowded fundraising environment, SCERS maintained a good balance of continuing existing relationships and adding new managers during the year. New commitments in 2021 were diversified across private equity strategies and included specialty buyout funds, venture capital funds, and a fund focused on distressed investing. Although these strategies will be primarily focused on investment opportunities within the U.S., the funds will provide some non-U.S. exposure in-line with the SCERS global approach to private equity investing.

Private Credit

The private credit markets also experienced records for fundraising and new loan originations amidst an extremely robust environment of demand for new loans. The continued strong pace of private equity acquisitions, particularly add-on acquisitions by larger platform companies, provided a significant source of demand for new private loans. Private lenders have also continued to take market share from the syndicated loan market, including providing increasingly larger loan sizes, as the private lending market has continued to grow and mature. As a result of the strong demand for new loan originations, yields in private credit remained mostly steady during 2021. Investor demand for private credit also remained high given interest in yield generative investments with limited risk from rising interest rates. These balanced market dynamics have produced a highly active and robust deal environment where lenders were generally able to remain disciplined and somewhat selective in the type of deals they pursued and structures utilized for these loans. The fundamentals of existing loans remain healthy and defaults ended 2021 at historical lows.

The SCERS Private Credit portfolio is intended to produce attractive risk-adjusted returns and generate current cash flow. As such, the portfolio is designed to be a performing credit portfolio, comprised of Direct Lending investments and Opportunistic Lending investments. The latter category of Private Credit may include royalty-based investments, other asset-based lending, or additional specialized lending strategies. The Private Credit portfolio produced strong returns during the year, generating a 15.3% net return for the 12-month period ending September 30, 2021. This performance further bolstered the portfolio's ongoing steady return generation as annualized net returns for the three and five-year periods increased to 9.9% and 9.5%, respectively. The returns over each of these time periods have materially exceeded the returns earned in the broadly syndicated loan market plus a desired 2% illiquidity premium. The portfolio's 9.5% annualized net return since inception also exceeds the leveraged loan + 2% return target.

APPENDIX 2 — CLIFFWATER REVIEW OF SCERS' ALTERNATIVE ASSETS (Continued)

SCERS continued to augment and further diversify its Private Credit portfolio through new exposures it added to the portfolio in 2021. SCERS made new commitments to a large Direct Lending fund focused on European middle market lending, and to a small, specialized Opportunistic Lending fund originating private loans secured by entertainment intellectual property. The remainder of new activity included a re-up into a new fund pursuing a strategy currently in the SCERS portfolio being managed by an existing general partner relationship of SCERS, and increasing a commitment to an existing separately managed account. Both of these investments are included in the Direct Lending allocation of the Private Credit portfolio.

Real Assets

The SCERS Real Assets portfolio rebounded strongly from the downturn in performance during 2020 resulting from the pandemic's material impact on travel and transportation. The global recovery in the energy sector and continued strong performance of the portfolio's infrastructure investments drove a net return of 24.3% for the Real Assets portfolio over the 12-month period ending September 30, 2021. Longer-term annualized performance of the portfolio ranged between 7.5% and 10% over multi-year periods, with a since inception net IRR of 10.4% as of September 30, 2021. The portfolio's returns over each of these time periods have exceeded the returns of the portfolio's benchmark. The portfolio's returns have also considerably exceeded inflation rates over these time periods.

Infrastructure continues to lead other real assets sectors in terms of fundraising and new investment activity. Several of the largest managers continued to raise increasingly larger infrastructure funds and expand their product offerings to cover a broader range of infrastructure strategies. Investor demand for infrastructure assets remained strong given expected cash flow generation of these assets, increasing inflation expectations, and expectations of government support and investment in infrastructure assets.

The energy sector continued to shift its focus away from conventional oil and gas-based strategies to those focused on the increased electrification of the global energy market and the decarbonization of energy production. These energy transition strategies are being pursued by longstanding energy managers, newer entrants to the energy sector, and infrastructure funds that had a renewable energy component to their strategies. These energy transition strategies can include a wide range of sub-sectors, with characteristics that can range from steady income-generative returns to more speculative performance outcomes that have greater technology risk.

SCERS further added to its Real Assets portfolio during the year with three new commitments and through adding additional capital to an existing commitment. Each of these commitments were to infrastructure funds and the new commitment activity during the year typified the SCERS "hub and spoke" approach to portfolio construction for Real Assets. Through this approach, SCERS looks to make larger allocations to funds that are intended to broadly deliver on the portfolio's objectives, complemented by smaller commitments to more specialized, often niche, funds that are intended to generate higher returns and further diversify the portfolio's exposures. The larger commitment SCERS made during the year is to a private open-end fund that invests in core infrastructure assets globally. The second new commitment is to a fund that pursues a global value-added infrastructure strategy focused on digital infrastructure investments such as cellular towers, data warehouses, and fiber optic networks. The third new commitment is to a European infrastructure fund where investments will include assets targeting energy transition and other electrification-related infrastructure assets. The add-on commitment was made to a specialized core infrastructure strategy that targets social infrastructure needs.

Keeping Things Moving

While many of the SCERS alternative assets portfolios are reaching a state of relative maturity, and have been producing very strong performance results, SCERS continues to adjust and refine these portfolios through their ongoing implementation. SCERS also made strategic changes regarding the alternative assets portfolios in connection with the 2021 asset liability modeling study. The highest-level

APPENDIX 2 — CLIFFWATER REVIEW OF SCERS' ALTERNATIVE ASSETS (Continued)

strategic changes included increasing the target allocation for Private Equity from 9% to 11% and increasing the target for Private Credit from 4% to 5%. SCERS also formally reviewed the portfolio structure and desired role of each of the alternative asset classes in connection with the asset liability study. These portfolio structure changes included adding or refining sub-sector categories, adjusting the targeted long-term sector allocations, and consolidating the dedicated allocation to absolute return-oriented strategies. SCERS will continue to refine and adjust its implementation approaches and options for managing these portfolios given their maturity and proximity to the targeted allocations.

The SCERS alternative asset portfolios feature a deep roster of top tier investment managers. The portfolios are also well-diversified across strategies, geographies, sub-sectors, and time. As these portfolios continue to mature, SCERS will look to maintain its portfolio quality and manage to its target allocations while continuing to generate strong performance that is broadly distributed across each of the alternative asset portfolios. The implementation focus should remain executing on long-term investment pacing plans, supplementing existing allocations with high quality new opportunities, and providing differentiated sources of return for the total SCERS portfolio. SCERS has maintained a well-structured and thoughtful approach to investing in alternative investments, which should continue to position SCERS to meet its investment objectives through a variety of market environments.

APPENDIX 3 — TOWNSEND REVIEW OF SCERS' REAL ESTATE INVESTMENTS

TOWNSEND® GROUP
an Aon company

MEMORANDUM

TO: **Sacramento County Employees' Retirement System**

DATE: February 16, 2022

SUBJECT: Real Estate Investment Year in Review (Data as of September 30, 2021)

FROM: **The Townsend Group**

In 2021, U.S. private real estate continued its steady recovery from the COVID-19 crisis as a result of the vaccine rollout and nationwide re-openings. Concurrently, SCERS generated significant positive returns and continued its outperformance over the benchmark. On a trailing twelve-month basis, the SCERS real estate portfolio (the "Portfolio") outperformed its benchmark by 338 basis points, achieving a net time-weighted return of 17.4%. Additionally, the Portfolio outperformed the benchmark by nearly 200 basis points since inception. Relative outperformance has been substantially influenced by an overweight to the industrial sector and successful tactical, thematic investments with specialist managers in the non-core portfolio. Recently, SCERS increased the target real estate allocation from 7% to 9%, at the same time increasing the Portfolio's permissible exposure to range between 7.0% and 11.0%. As of 3Q2021, real estate represented 7.3% of total plan assets, which is below the target limit of 9.0%.

Real Estate Return and Risk Forecasts

Long-term return expectations for real estate haven't changed since last year. The following are Townsend's private real estate and real asset return forecasts as of January 2022:

Risk & Return	Core	Value	Opportunistic	REITs	Timber	Row Crop	Perm Crop	Private Infrastructure
Expected Net Return	**6.0%**	**6.5%**	**9.0%**	**6.0%**	**5.8%**	**6.0%**	**11.0%**	**7.0%**
Standard Deviation	**6.4%**	**9.1%**	**10.3%**	**20.9%**	**5.0%**	**4.3%**	**10.7%**	**7.3%**

Core Real Estate

SCERS' core portfolio represents 5.3% of the total plan, which is well within the established permissible range of 4.0% to 9.0%. Current core weighting within the Portfolio reflects changes to the IPS approved in July 2017 that shifted this portion of the SCERS real estate program to focus on open-end commingled funds going forward.

In 2021, the core portfolio was comprised exclusively of open-end funds, with the negligible separate account balance liquidating during the second quarter. As the previous target allocation for real estate was 7%, last year's Investment Year in Review outlined a main objective to further re-balance the core portfolio through

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APPENDIX 3 — TOWNSEND REVIEW OF SCERS' REAL ESTATE INVESTMENTS (Continued)

TOWNSEND® GROUP
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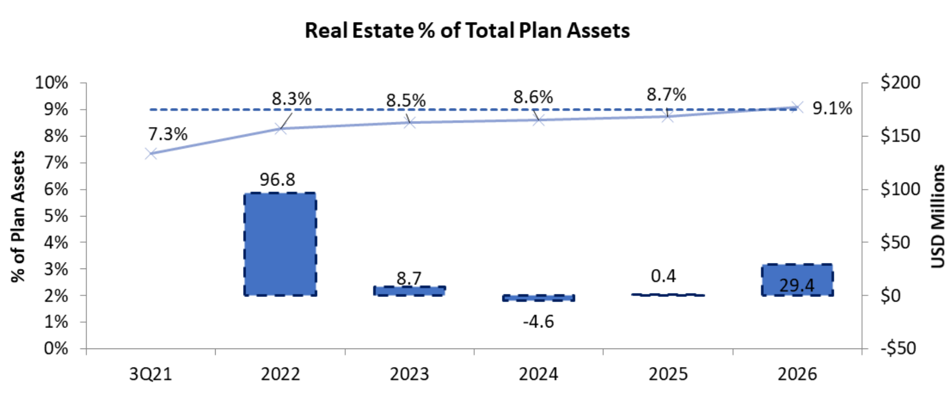
redemptions in order to reduce core exposure and steer total real estate exposure towards the 7% target. As a result, the full redemption ($64.4 million) from Morgan Stanley Prime Property Fund and a partial redemption ($20 million) from Clarion Lion Properties Fund were maintained and SCERS received the requested redemption amounts for both funds during the year. We considered rescinding these redemptions but ultimately decided to pursue other opportunities.

Non-Core Real Estate

Non-core real estate represents 2.0% of the total plan, within the established range of 0.0%-5.0%. Townsend and Staff continued to focus on high conviction thematic opportunities for this portion of the portfolio in 2021. SCERS made three non-core investments during the year, including a $45 million re-up to Asana Partners Fund III, a $35 million commitment to LaSalle China Logistics Venture, and a $20 million commitment to Seven Seas Japan Opportunity Fund. The ex-US commitments were driven by continued confidence in the Chinese logistics sector and tactical macro-economic opportunities in Japan, while the investment in Asana Partners Fund III further pursues attractive US urban retail exposure with a specialist operator. Townsend and Staff also started due diligence on a data center opportunity in the Japanese non-core space, as well as a re-up in a US healthcare strategy's latest fundraise.

SCERS Private Real Estate Forecasts

With the new 9% target real estate allocation, SCERS private real estate portfolio is currently below target at 7.3%. SCERS and Townsend are modeling new commitments to reach the 9% target allocation at a measured pace over the next several years. SCERS board also approved a slight increase to the maximum allowable non-core exposure (now up to 40%). New targets for core/non-core exposures were also revised from 65%/35% to 60%/40%. SCERS remains below its long-term target for non-core investments both on a funded and funded + committed basis (27.6% today). Hence, SCERS and Townsend are considering additional non-core capital commitments during 2022 in order to achieve a 40% target in the coming years. The pacing forecast below assumes $120 million of new core commitments in 2022 and an average of $150 million of non-core commitment per annum between 2022 and 2024.



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APPENDIX 3 — TOWNSEND REVIEW OF SCERS' REAL ESTATE INVESTMENTS (Continued)

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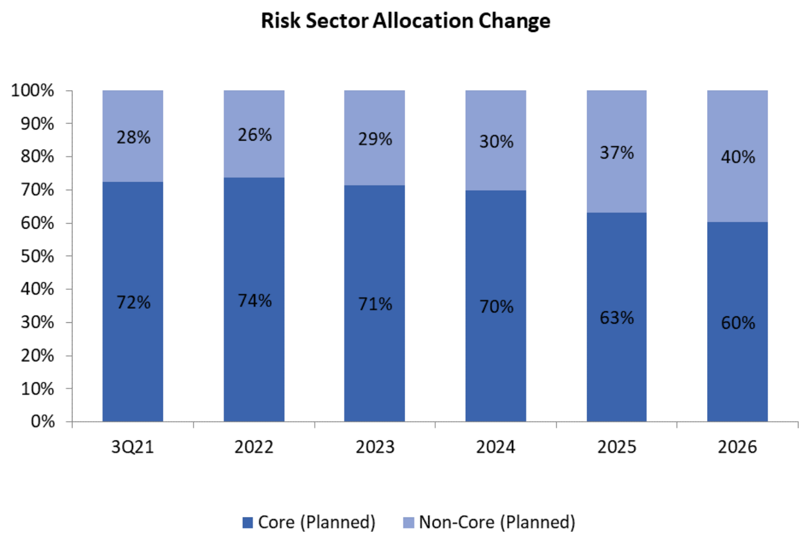

Global Diversification

SCERS' international exposure has grown steadily since 2013. As of 3Q 2021, 74.5% of the SCERS private real estate portfolio is invested in the United States. Of the remaining 25.5% invested in ex-US markets, approximately 79.8% is in Europe and 20.2% is in Asia. The majority of SCERS' international exposure is invested within the non-core portfolio, which was 67.0% ex-US as of 3Q 2021.

The current benchmarks for the SCERS private real estate portfolio are US-based and include:

- NFI-ODCE (core), and
- NFI-ODCE + 100 basis points (non-core).

Due to the increasing importance of ex-US to the SCERS real estate portfolio, the board adopted an ancillary benchmark in July 2017. The ancillary custom global benchmark is made-up of the NFI-ODCE (core), NFI-ODCE + 100bps (non-core), GREFI core and GREFI non-core for Europe and Asia to create a global blended benchmark based on weighted average invested capital for each global region and strategy.

SCERS board recently approved the increase in ex-US maximum exposure from 30% to 35% based on the approximate size of the global investable universe and the corresponding growth in the opportunity set. International investments offer SCERS broad portfolio diversification and opportunities created by different demographics, investment fundamentals, and market cycles than holdings in the US. This will also allow SCERS to take advantage of unique and interesting opportunities that domestically may not be present or not present currently.

APPENDIX 3 — TOWNSEND REVIEW OF SCERS' REAL ESTATE INVESTMENTS (Continued)

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Private Real Estate Considerations for 2022

Townsend proposes the follow considerations to SCERS for its Real Estate Portfolio:

1. Examine the core open-end space and commit up to $120 million in 2022 to 1-2 core plus funds to increase desired sector/regional exposures.

2. Consider using a dividend reinvestment plan (DRIP) for all open-end positions.

3. Target 3-4 new commitments at an average amount of $50 million per fund to attractive opportunities that are (i) Townsend Best Ideas, (ii) add complementary exposures, and (iii) thematic investments arising from the current economic impact on the real estate sector.

4. Further diversify ex-US exposure. Staff and Townsend are currently evaluating additional real estate opportunities in both Asia and Europe.

5. Further explore niche investment opportunities that are expected to generate outsized risk-adjusted returns, and/or provide a level of diversification to the portfolio (downside protection, sector exposure, etc).

    - Townsend continues to conduct manager research in niche opportunities such as US cold storage, life sciences, data centers, single family residential, and ex-US industrial (Europe and Asia). European student housing also remains an area of interest.

APPENDIX 3 — TOWNSEND REVIEW OF SCERS' REAL ESTATE INVESTMENTS (Continued)

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Recap and Vision for 2022

With the recent changes in guidelines for SCERS, Staff and Townsend are focused on reaching the new target real estate allocation of 9%, increasing non-core exposure to achieve new target weightings (60/40 core/non-core), pursing additional ex-US opportunities to further diversify geographic exposure, while maintaining vintage year diversification in the non-core portfolio and pursuing attractive thematic investment opportunities. In 2021, investment activity in the core space was limited and focused primarily on completing previously requested redemptions from open-end core funds to improve sector weightings and enhance risk-adjusted returns within the core portfolio. All payments from the redeemed funds were received during 2021. SCERS focused non-core efforts on thematic opportunities in the China logistics and select Japanese markets. Additionally, SCERS committed to the next fund in the series of an existing retail specialist to take advantage of attractive opportunities in experiential and/or necessity retail.

For 2022, we continue to see tactical non-core opportunities as the real estate market remains in a period of growth, but we expect returns to moderate compared to the outsized market returns of 2021. We also anticipate attractive opportunities in core adding complementary exposure to SCERS existing core real estate portfolio. Although there are various uncertainties that may impact the global real estate returns, the fundamentals remain strong. The past year has delivered historically high positive returns and SCERS has certainly benefited.

Townsend and Staff will continue to pursue the Portfolio's strategic objectives, as approved by SCERS' board. We will consider additional open-end core fund redemptions to satisfy liquidity needs and trim the portfolio in the short-term. We will continue to identify select non-core opportunities accretive to SCERS' Portfolio, with a focus on sector or regional specialists in thematically interesting offerings likely to take advantage of current market opportunities.

APPENDIX 4 — 2021/2022 ROAD MAP

Topic	2021 Preview	2021 Actual	2022 Preview
Consultants	• Conclude the alternative assets consulting evaluation process, and approve a consultant	• Renewed and extended the contract with Cliffwater, LLC for alternative assets consulting services, for a three-year term	• Evaluate contracts of general investment consultant Verus Advisory, and real estate consultant The Townsend Group
Asset Allocation	• Conduct the ALM study, and approve a revised strategic asset allocation	• Conducted ALM study, and the Board approved a revised strategic asset allocation	
	• Review asset class portfolio construction and initiate implementation of the revised strategic asset allocation	• Made structural revisions to several asset classes, and initiated implementation of asset allocation revisions via manager searches and portfolio rebalancing	• Complete structural revisions to remaining asset classes, and continue implementation of asset allocation revisions. Also conclude manager searches and execute any necessary portfolio rebalancing
	• Revise investment policy statements as needed	• Updated the asset category investment policy statements (IPS) and the Master IPS to reflect the changes to the strategic asset allocation and underlying asset class structural revisions	
	• Continue implementation of the strategic asset allocation to bring physical exposures toward their respective target allocations	• Allocated to multiple funds within the Absolute Return, Private Equity, Private Credit, Real Assets, and Real Estate asset classes	• Continue implementation of the strategic asset allocation to bring physical exposures toward their respective target allocations
Equities	• Evaluate potential new strategies and managers that would be additive to the Domestic and International Equity portfolios		
	• Evaluate the target size and portfolio structure of Domestic and International Equity portfolios in conjunction with the ALM study	• Consolidated the Domestic Equity and International Equity asset classes into a Global Equity asset class as part of the ALM study	• Conduct a global equity manager search to initiate implementation of the Global Equity asset class, and any other necessary searches
	• Perform a physical rebalance of SCERS' Domestic Equity portfolio, which is again overweight to its target allocation. Review mix between growth and value in the International Equity portfolio, and consider a rebalance as appropriate.	• Physically rebalanced the Domestic Equity portfolio to reduce the overweight position relative to the target allocation range	• Perform physical rebalancing to bring equity exposures in line with target weights

APPENDIX 4 — 2021/2022 ROAD MAP (Continued)

Topic	2021 Preview	2021 Actual	2022 Preview
Fixed Income	• Review Fixed Income targets and portfolio structure as part of the broader ALM Study	• Revised Fixed Income structure to eliminate dedicated global fixed Income allocation, and added an additional core plus fixed income mandate	
		• Initiated a core plus fixed income manager search to implement the revised Fixed Income structure	• Conclude the core plus fixed income manager search as part of the revised Fixed Income structure
	• Perform a physical rebalance of SCERS' Fixed Income portfolio, which is underweight to its target allocation	• Performed a physical rebalance of SCERS' Fixed Income portfolio by adding capital to existing core plus managers	• Perform physical rebalancing to bring the Fixed Income exposures to the revised target weights
Absolute Return	• Identify and invest in 2-5 potential absolute return funds with an average investment size of $45 million per fund	• Made one diversifying absolute return investment totaling $45 million, and transferred an existing growth absolute return fund to the diversifying absolute return segment	• Identify and invest in 0-3 potential absolute return funds with an average investment size of $45 million per fund
	• Evaluate role of the Growth Absolute Return portfolio and sizing of the Diversifying Absolute Return portfolio, within the context of the upcoming ALM study and SCERS' strategic asset allocation	• Eliminated the Growth Absolute Return segment from the strategic asset allocation, while maintaining the 7% target allocation to the Diversifying Absolute Return segment, and renamed Diversifying Absolute Return to Absolute Return	
		• Redeemed capital from one Diversifying Absolute Return manager	
Private Equity	• Identify and commit to 5-9 potential private equity investments with an average commitment size of $30 million per fund; $200 million in total with a range of $160 to $240 million	• Committed to 7 private equity funds totaling $190 million in aggregate	• Identify and commit to 7-12 potential private equity investments with an average commitment size of $35 million per fund; $365 million in total with a range of $250 to $400 million
	• Continue to evaluate methods to rationalize the Private Equity portfolio through the secondary market		• Explore the secondary market as a tool to potentially sell certain mature funds to assist in managing the Private Equity allocation
	• Recommend a co-investment manager partnership, that will capitalize on potential co-investment deal flow from SCERS' existing private equity relationships, while also participating in deal flow from the investment manager	• Identified a potential investment manager to manage a co-investment mandate for SCERS	• Recommend an investment manager to manage a co-investment mandate for SCERS
	• Evaluate the sizing of Private Equity in conjunction with the ALM study	• Increased the target allocation to Private Equity from 9% to 11%, as part of the revised strategic asset allocation	• Evaluate methods to decrease SCERS' overweight allocation to Private Equity

APPENDIX 4 — 2021/2022 ROAD MAP (Continued)

Topic	2021 Preview	2021 Actual	2022 Preview
Private Credit	• Identify and commit to 2-5 potential private credit investments with an average commitment size of $35 million per fund; $100 million in total with a range of $50 to $150 million	• Committed capital to 4 private credit funds totaling $125 million in aggregate	• Identify and commit to 2-6 potential private credit investments with an average commitment size of $40 million per fund; $155 million in total with a range of $30 to $50 million
	• Evaluate the sizing of Private Credit in conjunction with the ALM study	• Increased the target allocation to Private Credit from 4% to 5%, as part of the revised strategic asset allocation	
Real Assets	• Identify and commit to 3-7 potential real assets investments with an average commitment size of $40 million per fund; $210 million in total with a range of $160 to $260 million	• Committed capital to 4 real assets funds totaling $207 million in aggregate	• Identify and commit to 3-7 potential real assets investments with an average commitment size of $50 million per fund; $250 million in total with a range of $200 to $300 million
	• Evaluate the role of energy within the Real Assets and the total portfolio in conjunction with the upcoming asset-liability asset liability modeling study and SCERS' strategic asset allocation	• Maintained the target allocation to Private Credit at 7%, as part of the revised strategic asset allocation	
Real Estate	• Identify and commit to 1-3 potential real estate investments with an average commitment size of $30 million per fund; $60 million in total with a range of $30 to $90 million	• Committed capital to 2 real estate fund totaling $70 million in aggregate	• Identify and commit to 3-6 potential real estate investments; $270 million in aggregate. $120 million target to 1-2 Core funds, and $150 million target to 2-4 Non-Core funds
	• Evaluate the sizing of Real Estate in conjunction with the ALM study	• Increased the target allocation to Real Estate from 7% to 9%, as part of the revised strategic asset allocation	
	• Rebalance the Real Estate portfolio strategy, sector, and geographic weights within targeted ranges		• Rebalance the U.S. core open-end portfolio to bring the strategy and geographic mixes within targeted ranges
Opportunities	• Evaluate the role of the Opportunities portfolio in conjunction with the ALM study	• The Opportunities portfolio was eliminated within the revised strategic asset allocation	

APPENDIX 4 — 2021/2022 ROAD MAP (Continued)

Topic	2021 Preview	2021 Actual	2022 Preview
Other Investment Activity	• Evaluate portfolio analytic and risk management and systems for SCERS' total portfolio and asset categories/ classes	• Issued a request for proposal (RFP) for portfolio analytics and risk management systems, and evaluated several candidate systems during the year	• Recommend and onboard the portfolio analytics and risk management system for which an RFP was issued in 2021
	• Evaluate SCERS' Overlay Program, including underlying proxies and approaches to incorporate tactical positioning to the SCERS portfolio		• Transition the Overlay Program to the revised strategic asset allocation, and recommend any adjustments to the overlay proxies
	• Update SCERS fiduciary standard of care policy	• Board approved an updated Alternative Asset Investment Standard of Care policy	• Finalize plans to conduct fiduciary health check" of SCERS' alternative assets investment contracts
			• Conduct annual liquidity analysis as called for in SCERS' Cash Management Policy
			• Evaluate internal processes for better managing plan cash flows, as well as any third party solutions
	• Evaluate the current investment Staff structure and any additional investment staffing needs in 2021	• On boarded SCERS' new Investment Analyst and promoted one of SCERS' Investment Officers to a Senior Investment Officer	• Evaluate the current investment Staff structure and any additional investment staffing needs in 2022
	• Oversee and monitor existing investment managers, including on-site due diligence where appropriate	• Oversaw and monitored existing managers including several manager on-site meetings	• Oversee and monitor existing investment managers, including on-site due diligence where appropriate

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SCERS

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