Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 13

MEETING DATE: **June 16, 2021**

SUBJECT: **Real Estate Sector Allocation**

SUBMITTED FOR: ___ **Consent** __X__ **Deliberation and Action** ___ **Receive and File**

RECOMMENDATION

Staff and SCERS' real estate consultant, Townsend, recommend the Board approve updating the Real Return Asset Category Investment Policy Statement for the Real Estate property sector diversification parameter from +/- 10% of the NFI-ODCE Index to a target maximum of 40% for any one main property type and 25% collectively to the Other property types (as defined by NFI-ODCE). Staff and Townsend are collaborating on an appropriate geographic guideline along with regional targets in conjunction with SCERS' asset-liability study. Until that time, SCERS' geographic parameter of +/- 10% of the NFI-ODCE index will remain but would apply to SCERS' U.S. portfolio.

PURPOSE

This item supports the Master Investment Policy Statement (IPS) for SCERS, which establishes broad policies that guide SCERS' investment program for the Board, Staff, Stakeholders, and third party professionals. Each asset category has its own IPS including the Real Return Asset Category IPS, which provides detailed information concerning asset class objectives, investment guidelines, ranges, permissible investments, benchmarks, and monitoring and implementation protocols specific to underlying asset classes, including that of Real Estate.

SUMMARY

Investment risk within the Real Estate asset class is mitigated through portfolio diversification achieved by region, property type, investment strategy, and leverage. Across SCERS' core and non-core strategies, the Real Estate program attempts to maintain property type and geographic diversification by target weightings within +/- 10% of the NFI-ODCE Index. The current IPS allows for exceptions, which may exist at different points in the market cycle, particularly with respect to targeted investments in the non-core real estate space.

A characteristic of the NFI-ODCE index is that it is 100% U.S. based and was appropriate when SCERS' real estate program was exclusively U.S. investments. The Real Estate program has grown along with SCERS' overall portfolio to include non-U.S. investment strategies, which have greatly benefited SCERS' real estate performance. Further, the NFI-ODCE index significantly

lags institutional investor and Staff sentiment, inadvertently limiting portfolio construction and geographic diversification. As Townsend notes, SCERS' sector allocations are the most restrictive of 14 similar U.S. public pension plan clients. Based on the current property type allocation parameter, SCERS' industrial weighting is higher than the index but is so by design and due to the strong performance of the sector, 42.5% versus the NFI-ODCE index weight of 22.6%.

SCERS reached its industrial weight limitation in the third quarter of 2018, when the industrial weighting was 28.2% versus the NFI-ODCE index of 17.4%. However, SCERS has not made any new industrial investments since 2017. The current 42.5% industrial weighting is the sole result of the strong secular change in the industrial asset class resulting from ecommerce pushing valuations higher along with the rotation of the NFI-ODCE fund managers into industrial assets and out of retail and office assets.

The values of industrial assets has increased dramatically over the last 2-3 years and been a strong contributor to real estate returns. As a result, SCERS' industrial weighting has naturally increased and it would require redeeming from its open end core funds in order to bring the weighting down, which would have hampered returns and been financially impractical.

This memo provides a recommendation to update the property type allocation parameter that will allow more flexibility to capture secular changes in the market in making strategic decisions when constructing a globally diversified real estate portfolio.

BACKGROUND

Within SCERS' asset allocation structure for Real Estate, the portfolio will range from 5%-9% of the total SCERS portfolio, with a target of 7%. As of March 31, 2021, SCERS' actual Real Estate allocation is 7.1% invested versus the 7% targeted.

Real estate investment strategies fall within two broad categories – core/core plus and non-core. Specifically, core and core plus strategies will typically possess a lower but stable risk-return profile due to attributes such as the majority of the return coming from cash yield; location in a primary metropolitan area; greater occupancy levels; long term leases; newer construction; and lower leverage (generally below 40%). The traditional property types of office, industrial, retail, apartments, and hotels represent core investments but have broadened to include data centers, senior and student housing, manufactured housing, single family rentals, self-storage, medical office, and life sciences, collectively defined as "Other" in the NFI-ODCE index. Core plus strategies will look to enhance core returns by correcting a minor physical or fiscal deficiency or take advantage of a temporary market dislocation, and may use slightly more leverage than core real estate investments and include some non-traditional property types.

Non-core real estate investments can provide a higher return but entail more risk by executing on a value-add or opportunistic strategy. Value add assets will generally have greater physical deficiencies requiring significant capital renovations or have high vacancy. Opportunistic strategies will assume more risks such as vacant or nearly vacant properties, redevelopment or repositioning of assets, or ground up development. Value add and opportunistic strategies will use higher levels of leverage (up to 65% or more) and generate a higher proportion of its return, if not all, from capital appreciation due to the significant capital expenditures needed.

DISCUSSION

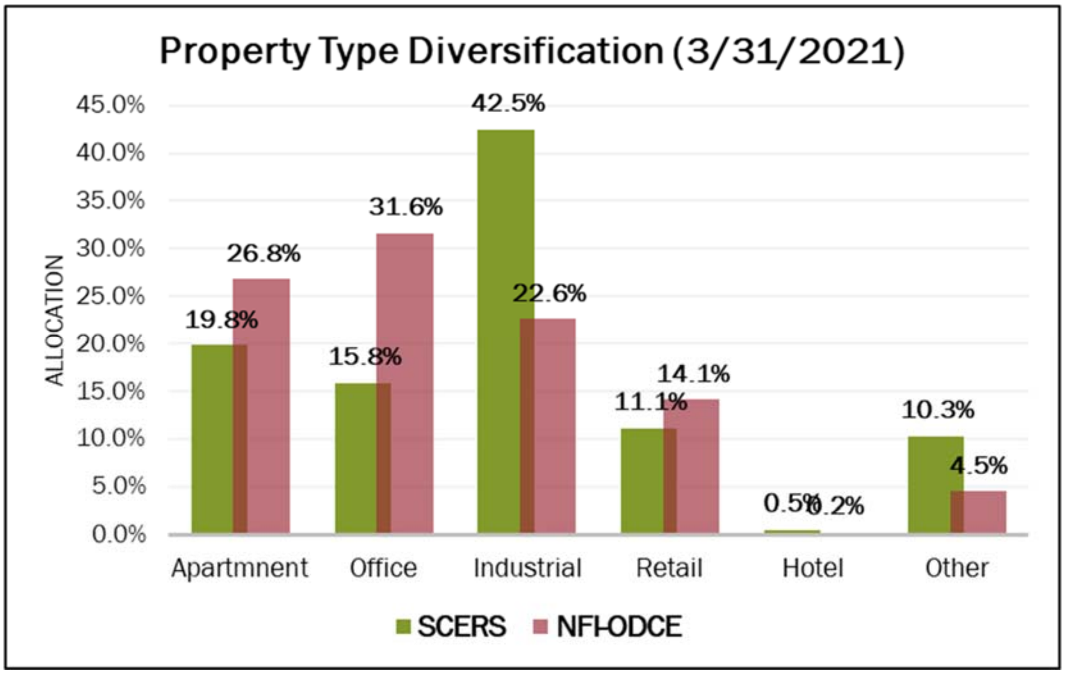
Investment risk within the Real Estate asset class is mitigated through portfolio diversification achieved by region, property type, investment strategy, and leverage. SCERS seeks to limit potential concentration risks that may negatively impact long-term returns by investing across regions globally and investment strategies. SCERS' Real Estate program currently targets weightings by property type and geography to be within +/- 10% of the NFI-ODCE Index, which permits some flexibility but constrains the ability to move exposures in one segment in favor of attractive risk-adjusted returns in another segment globally. The difficulty or limitation is that the NFI-ODCE index is 100% U.S. based and can significantly differ from institutional investor and Staff sentiment, which inadvertently limits portfolio construction flexibility. Having a NFI-ODCE based allocation limitation was appropriate when SCERS' real estate program was exclusively U.S. based and less sophisticated. However, the real estate program has grown in diversification, along with SCERS' overall portfolio, to include non-U.S. investment strategies, which have greatly benefited SCERS' real estate performance.

A more flexible approach to diversification and concentration limits is to establish property type maximums that will allow more flexibility to capture secular changes in the market and provide the ability to make strategic decisions in constructing a globally diversified portfolio, an example being SCERS' early investment in logistics across the U.S., Nordics, Europe, and China which has resulted in significant return contribution to SCERS' portfolio.

Since SCERS' real estate portfolio includes non-U.S. investments, the current geographic limitation of +/- 10% of the NFI-ODCE index would only apply to U.S. investments, which the IPS currently does not specify. As part of SCERS' asset-liability study, Staff and Townsend are collaborating on an appropriate U.S. and non-U.S. target allocation and a geographic parameter that would include U.S. and non-U.S. regions.

SCERS Real Estate Allocations – Overweight to Industrial

In implementing the Real Estate portfolio over the past several years, Staff and Townsend have actively shifted SCERS' property type weightings to capture secular changes (e-commerce, demographics, and healthcare) by targeting and overweighting industrial and specialty property types (medical), and underweighting retail and office assets as shown by SCERS' property type diversification against the NFI-ODCE index shown below as of March 31, 2021:



As shown, SCERS' industrial investments represent a larger weighting compared to the NFI-ODCE index, and is outside of the current property type guidelines. The overweight is the result of a combination of Staff specifically targeting industrial/logistics investments and the overall industrial sector's strong performance. Staff identified a secular change and an inflection in the real estate cycle for industrial assets in 2013 that it specifically targeted industrial-only investment strategies such as Prologis U.S. Logistics and Prologis Europe Logistics. In addition, Staff rebalanced the open end core portfolio by investing in those investment managers that were shifting or had a larger allocation to the industrial sector while redeeming from those managers with a high concentration in office and retail assets.

The growth in e-commerce and the change in the retail supply chain over the last few years has resulted in tenant demand for modern logistics facilities far exceeding new supply and in turn pushing net income growth to new historical highs. It is only over the past 2-4 years that institutional investors have come to embrace the secular change in consumer consumption habits driving the growth in online transactions by increasing their allocation to industrial/logistics properties while reducing their exposure to retail and office.

The pandemic accelerated the secular changes already occurring, with institutional investor demand for industrial assets exploding, driving industrial cap rates down to historical lows and pricing per square foot equaling office properties. Although investor sentiment favors industrial properties over all other property types, it will not show up immediately in the NFI-ODCE index since it will take time for investment managers to sell down unfavored property types (office and retail) and purchase favored property types (industrial, multifamily, and other).

Although SCERS' industrial weighting is larger than the NFI-ODCE index, SCERS industrial portfolio is diversified across the U.S., Europe, the Nordics, and China. In isolation, SCERS' industrial weighting may seem outsized; however, when excluding the non-U.S. industrial investments, SCERS' U.S. industrial weighting is only 26% versus 22.6% for the NFI-ODCE index, well within parameters.

As SCERS has broadened and diversified its real estate portfolio over the years, the portfolio has been able to generate significant outperformance, in particular the non-core value add strategies, against its benchmark across all reporting periods as shown below. SCERS' higher industrial exposure has been a key driver of the strong performance. As an example of the strong industrial performance, in Townsend's first quarter 2021 Portfolio Performance Report, of SCERS' 1-year return of 6.0%, the two highest contributors to the return were Prologis Europe Logistics at 1.3% and Prologis U.S. Logistics at 1.2%, providing nearly 42% of the positive return. Since inception (Q3 2015 and Q1 2016 respectively), Prologis U.S. has generated a 15.8% net return and Prologis Europe has generated a 13.5% net return in U.S. Dollars, significantly outperforming the 5-year NFI-ODCE index return of 5.3%.

SCERS REAL ESTATE PERFORMANCE SUMMARY

Quarter Reporting Period Ended March 31, 2021

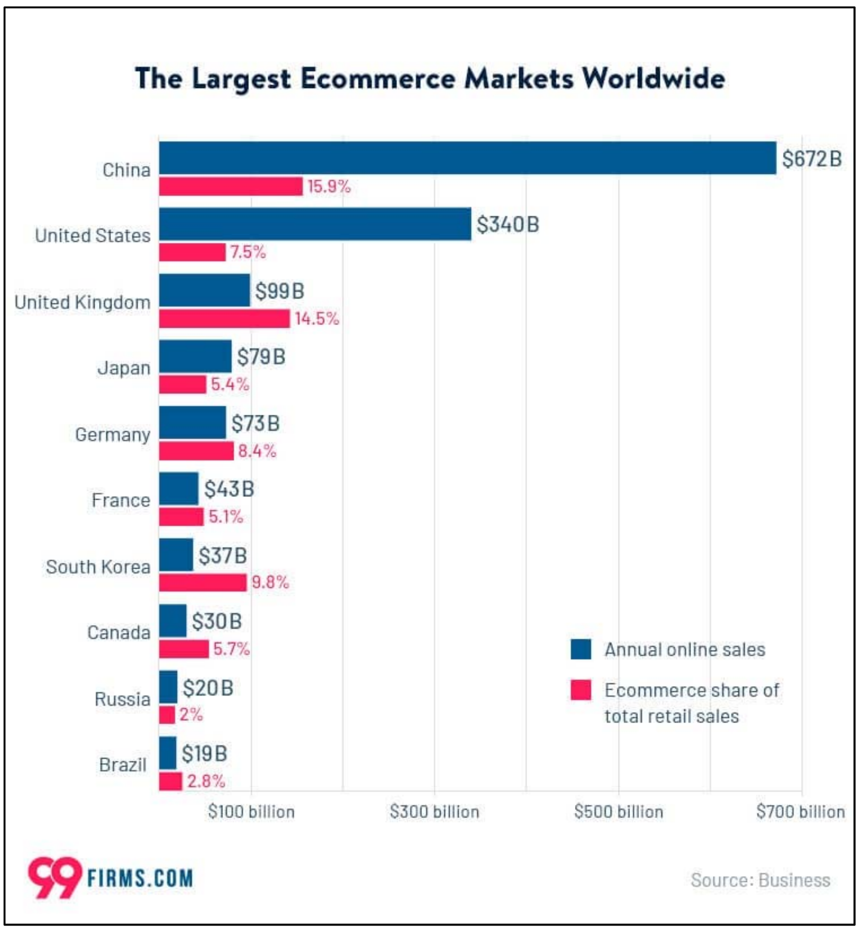
SUB-ASSET CLASS	Quarter 3/31/21	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS Real Estate Portfolio	**2.0%**	**6.0%**	**6.3%**	**8.1%**	**8.4%**	Nov-86
(65%) NFI-ODCE + (35%) NFI-ODCE + 1%	2.0%	1.9%	4.4%	5.7%	6.5%	Nov-86
Core Portfolio	**2.9%**	**5.8%**	**6.7%**	**8.4%**	**6.6%**	Nov-86
Commingled Funds	2.9%	5.8%	7.3%	8.8%	7.1%	Sep-13
NFI-ODCE Index	1.9%	1.5%	4.0%	5.3%	6.1%	
Non-Core Portfolio	**-0.3%**	**6.6%**	**5.1%**	**8.5%**	**5.7%**	Jun-06
Value Add Portfolio	-0.6%	13.9%	8.4%	10.6%	5.0%	Jun-06
Opportunistic	0.0%	-1.6%	1.1%	6.3%	6.5%	May-13
NFI-ODCE + 1% Index	2.1%	2.5%	5.0%	6.3%	7.1%	

Macro View on Industrial

In Townsend's View of the World, April 2021, the firm identified investment themes across the U.S., Europe, and Asia Pacific. In that report, Townsend emphatically stated industrial/logistics remains one of its highest conviction themes globally. Given the secular changes driven by e-commerce, pandemic acceleration of online retail purchases, and disruptions in the supply chain, industrial/logistics and cold/refrigerated logistics is expected to command robust demand not only over the near term but over the long term.

What the pandemic crisis demonstrated to retailers and grocers universally was the absolute critical need for having an online presence, the need to develop an efficient omni-channel, and the necessity to strengthen/augment supply channels. Recognizing this, logistics' demand has quickly outstripped supply while new supply has not kept up. In the U.S., according to CBRE research, the resulting tight supply of industrial space has pushed down overall U.S. industrial vacancy rates as of the first quarter of 2021 to 4.4%, a historical low. In some of the core industrial markets, vacancy rates are even lower such as Los Angeles and the Inland Empire, where the industrial vacancy rate is 1.7% and 1.5% respectively. The high demand for industrial space, particular last-mile logistics, has pushed rental rates ever higher resulting in net income across the industry to grow more than 7.1% over 2019 per CBRE. As Townsend noted, U.S. industrial remains well positioned to benefit from the shifting of consumer and business buying habits online and the current supply-demand imbalance, which will remain over the near-term as forecasted demand well exceeds new supply.

Likewise in Europe and the UK, the penetration of e-commerce accelerated due to the pandemic, driving outsized demand for industrial space. However, Europe is well behind the U.S. and UK in online sales penetration, but e-commerce growth rates are forecasted to significantly exceed the U.S. Because of the lower e-commerce penetration, the industrial/logistics market in Europe lags the U.S. by about 3 years. However, overall industrial property fundamentals across Europe are extremely strong, with tightening vacancy rates (vacancy below 4%) and rising rental rates (over 4% year-over-year) bolstered by outsized demand and muted new supply, especially compared to the U.S. Townsend forecasts the European industrial market to follow the same trajectory as the U.S and views European industrial/logistics as one of their highest conviction investment themes.



Although e-commerce has a higher penetration and acceptance across Asia Pacific, similar to Europe and the U.S., the pandemic accelerated changes in consumer consumption practices.

The Asia Pacific industrial/logistics market is forecasted among the leading investment managers to continue to benefit from the robust consumer demand coming from online transactions and in turn will push industrial rental rates upward driving net income growth further. As Townsend's report concluded, industrial/logistics remains one of its highest conviction themes not only in Asia Pacific but globally. Staff concurs.

RECOMMENDATION

Townsend surveyed its client base of similar size and sophistication as SCERS in recommending an allocation parameter of a maximum 40% to any one property type. Townsend's client's had property sector allocations that ranged from NFI-ODCE +/- 10% to a 50% maximum, with 40% maximum a common limitation. While a 40% maximum is appropriate, there are situations, such as secular changes, and different parts of the market cycles where a property type offers a better risk-return compared to other property types that may warrant an interim overweight. The perfect example of this is the industrial property sector globally, where Staff and Townsend both believe that a high allocation should be maintained, based on the secular tailwinds that the property type is experiencing. To accommodate this flexibility, Staff and Townsend concluded that SCERS' property sector allocation parameter be changed from +/- 10% of the NFI-ODCE Index to a maximum of 40% to any one main property type and 25% collectively for the Other property types (as defined by NFI-ODCE). As previously noted, since SCERS' real estate portfolio includes non-U.S. investments, the current geographic limitation of +/- 10% of the NFI-ODCE index would only apply to U.S. investments. In conjunction with SCERS' asset-liability study, Staff and Townsend will be making a recommendation on an appropriate U.S. and non-U.S. allocation and a geographic parameter that would include U.S. and non-U.S. regions.

The chart below compares SCERS' current real estate parameters to other pension plans:

Client	Property Diversification Parameters
County Pension Plan	ODCE +/- 10%, "Other" up to 20%
County Pension Plan	40% maximum any one property type
Local Pension Plan for Fire & Police	40% maximum any one property type
State Pension Plan for Police & Fire	ODCE +/- 15%
State Pension Plan	Up to 45% of the greater of RE market value or target allocation for a single traditional property type
State Pension Plan	No formal diversification parameter
State Pension Plan	ODCE +/- 15%
State Pension Plan	ODCE +/- 15%
State Pension Plan for Teachers	ODCE +/- 15%
State Pension Plan	ODCE +/- 15%
State Pension Plan	ODCE +/- 50% (no single property type to exceed 50%), "Other" up to 20%
State Pension Plan for Teachers	ODCE +/- 50% (no single property type to exceed 50%), "Other" up to 20%
State Pension Plan	Office 10-50%, Industrial 10-40%, Retail 10-40%, Multifamily (apartment) 10-40%, Lodging (hotel) 0-20%, Other 0-15%
City Pension Plan	ODCE +/- 10%
SCERS	**ODCE +/- 10%**

ATTACHMENTS

- Townsend Sector Guidelines Recommendation Memo
- Real Return Asset Category Investment Policy Statement – redline version
- Real Return Asset Category Investment Policy Statement – clean version

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/S/

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Chief Investment Officer

/S/

Eric Stern
Chief Executive Officer

Investment Proposal to Amend Policy Guidelines

Client: Sacramento County Employees' Retirement System ("SCERS" or the "Client")

Date: May 28, 2021

Recommended Action to be taken:

We recommend Townsend's Investment Committee approve new guidelines permitting SCERS' real estate portfolio to allocate up to the greater of 40% or the NFI-ODCE Index weight within any single primary property type and up to 25% cumulatively to "Other" property types. This change will also reduce the lower limit on all property type exposures to 0%.

Client Profile:

SCERS has a 7.0% target allocation to real estate ($825 million) with a permissible range of 5.0%-9.0% and was 7.1% funded ($836 million) as of March 31, 2021. In the near-term, SCERS is comfortable exceeding the 7.0% long-term target and steering the portfolio closer to 8.0%. Including all approved unfunded commitments, the SCERS total exposure to real estate is 8.5% ($1.0 billion). Planned Core rebalancing activities along with non-core liquidations will continue to decrease real estate exposure over time. SCERS's portfolio composition and target allocations as of March 31, 2021 is provided below:

SCERS Portfolio Snapshot *As of March 31, 2021*	**Market Value** (in millions of dollars)*	**% of SCERS Plan**
SCERS Total Plan Assets	***11,792***	**100.0%**
Private Portfolio Target	***825***	***7.0%***
Private Portfolio Permissible Range		***5.0-9.0%***
Private Real Estate		
Core Portfolio	*615*	*5.2%*
Non-Core Portfolio	*222*	*1.9%*
Total SCERS Private Real Estate Market Value	***836***	***7.1%***
Total SCERS Private Real Estate Unfunded Commitments	***166***	***1.4%***

Discussion

Through a combination of targeted commitments and sector performance, SCERS is out of compliance in both its industrial overweight and office underweight exposures. Both positions generally align with Townsend's views on these property types. However, this intentional, significant, and prolonged variation from benchmark weights necessitates a discussion around the Client's sector guidelines. SCERS' concentrated investment strategy and sector selection has produced strong returns to date. Policy guidelines are important to set risk management boundaries across the specified portfolio. However, these investment guidelines no longer reflect SCERs' intention to invest in high-conviction sectors that in aggregate may deviate, sometimes considerably, from benchmark weightings. In fact, SCERS current sector policy guidelines are the most restrictive of 14 similar US public pension plans guidelines we reviewed (equivalent to two of those reviewed plans).

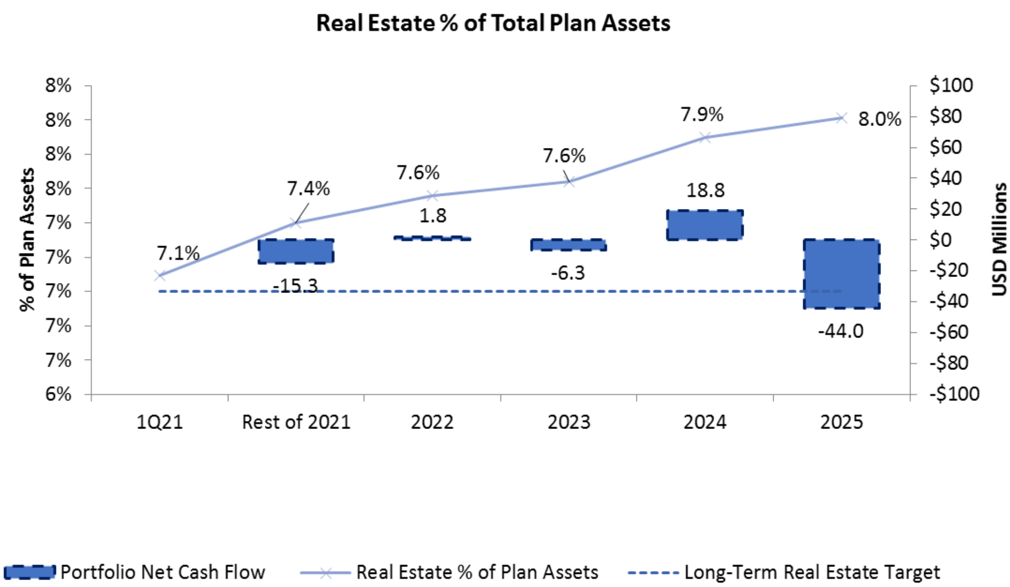
Townsend recommends new guidelines permitting SCERS' real estate portfolio to allocate up to 40% to any single primary property type and up to 25% cumulatively to "Other" property types. The newly proposed guidelines, outlined in the graphic below, will allow SCERS' investment staff further flexibility while maintaining appropriate diversification at the portfolio level. Even with these new guidelines, the real estate portfolio will be out of compliance in Industrial (overweight). A $20.1 million redemption from one of the Industrial sector specialist funds would bring SCERS' real estate portfolio back within compliance of the newly proposed guidelines. However, anticipated liquidations and potential changes from the Client's ongoing asset/liability ("ALM") study could materially impact relative exposures. We hope to avoid rebalancing only to need to recommit this capital again within the next few quarters. Together, we will evaluate necessary changes to position the portfolio for compliance by year end 2021.

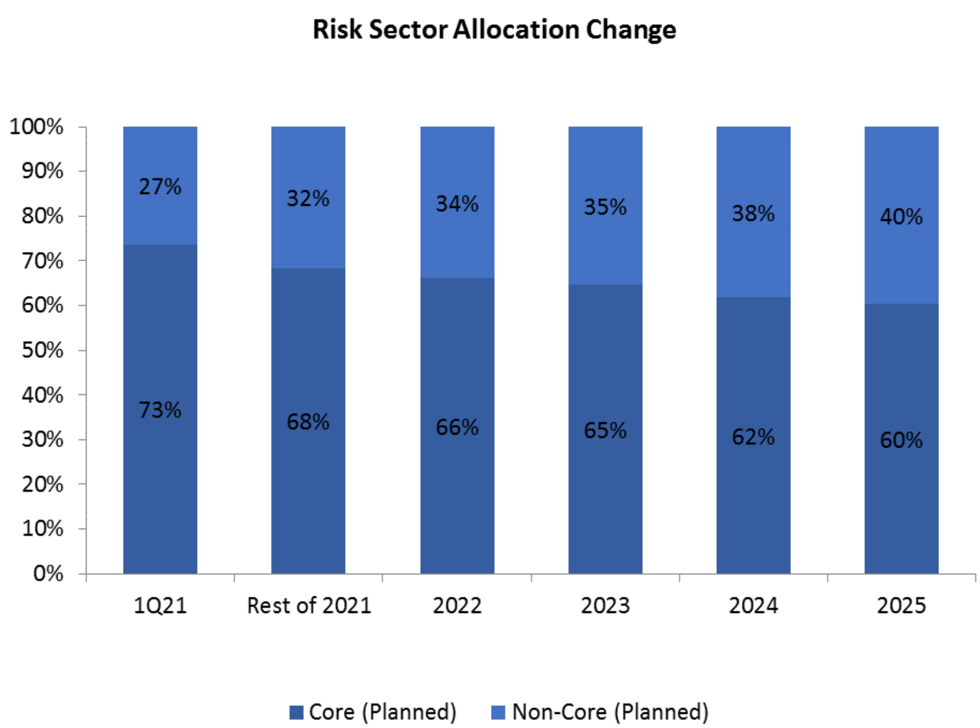
SCERS COMPLIANCE RECOMMENDED GUIDELINE CHANGES	
Private Portfolio Risk Policies	
Property Type Diversification	~~SCERS Private Portfolio will target weightings by property type to be within ± 10% of the NFI-ODCE.~~ Limit a single primary property type (Apartment, Retail, Office, Industrial) to 0-40% or NFI-ODCE weight, whichever is greater Limit 0-25% to all "Other" property types, colllectively

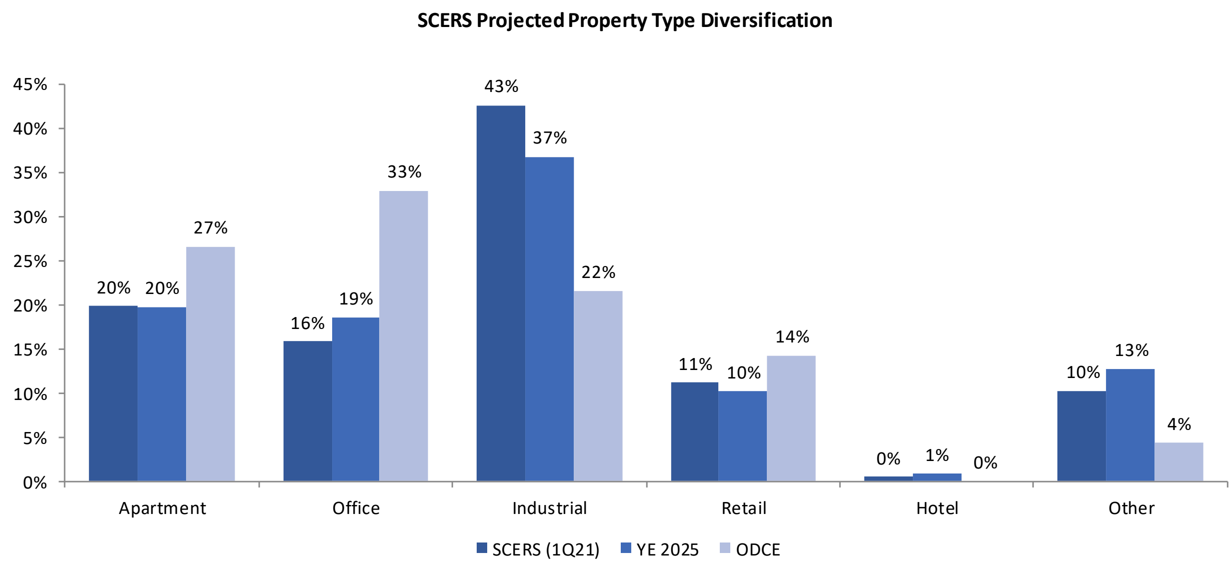
SCERS intends to continue making non-core commitments this year to further diversify vintage year exposures and remain fully invested in real estate. One or more of these commitments, coupled with anticipated liquidation of legacy investments, may temporarily continue to push the real estate portfolio further out of compliance with sector exposures. Drawdowns on non-core funds are generally staggered over a multi-year investment period and should provide ample time to rebalance exposures as necessary going forward.

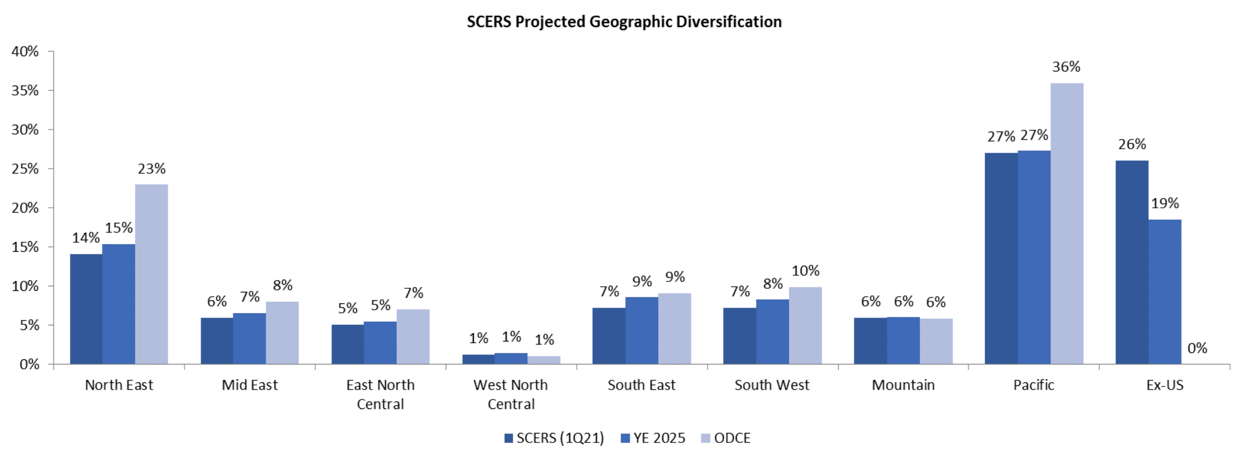
SCERS' geographic guidelines and regional targets are similarly restrictive and may also need to be revised. We will continue working with staff in parallel with the ongoing ALM study to consider appropriate changes that incorporate a global investment philosophy similar to what exists across much of the rest of SCERS' portfolio. SCERS' has informed us this ALM study is expected to conclude later this year. Until that time, we are comfortable with the current real estate geographic restrictions and regional targets.

Projected Portfolio Composition:






SCERS Projected Property Type Diversification
45%
40%
35%
30%
25%
20%
15%
10%
5%
0%
20%
20%
27%
16%
19%
33%
43%
37%
22%
11%
10%
14%
0%
1%
0%
10%
13%
4%
Apartment
Office
Industrial
Retail
Hotel
Other
SCERS (1Q21)
YE 2025
ODCE


SCERS Projected Geographic Diversification
40%
35%
30%
25%
20%
15%
10%
5%
0%
14%
15%
23%
6%
7%
8%
5%
5%
7%
1%
1%
1%
7%
9%
9%
7%
8%
10%
6%
6%
6%
27%
27%
36%
26%
19%
0%
North East
Mid East
East North Central
West North Central
South East
South West
Mountain
Pacific
Ex-US
SCERS (1Q21)
YE 2025
ODCE

Attachments:

A. Investment Compliance Matrix
B. Flash Report

ATTACHMENT A - SCERS Compliance Matrix

SCERS COMPLIANCE MATRIX			
Allocation	**Strategic Constraint / Guideline**	**As of First Quarter 2021**	**Comments**
Private Real Estate Portfolio	7% Target (5-9% Range) Core Target: 7% Non-Core Target: 0% - 5%	In Compliance (Total: 7.1%, Core: 5.2%, Non-Core: 1.9%)	Capital received from rebalancing, will continue to reduce real estate exposure
Return Targets	**Strategic Constraint / Guideline**		
Core Real Estate	NFI-ODCE, net of fees, measured over full market cycles (10 years)	In Compliance (10.4% net vs. 8.7% net)	N/A
Non-Core Real Estate	NFI-ODCE + 100bps, net of fees, measured over full market cycles (10 years)	In Compliance (11.1% net vs. 9.7% net)	N/A
Private Portfolio Risk Policies			
Property Type Diversification	SCERS Private Portfolio will target weightings by property type and geography to be within ± 10% of the NFI-ODCE. Ex-US exposure is separately limited to 30% of the Private Portfolio. *Exceptions may exist at different points in the market cycle, particularly in the Non-Core sector.*	**Out of Compliance** Industrial Overweight (42.5% vs. 22.6%), Office Underweight (15.8% vs. 31.6%)	Client is comfortable with exceeding guidelines for property type diversification. Ex-US Exposure is within acceptable ranges (26.0%)
Property Location Diversification			
Single Investment Size	No greater than 2.5% of Total Plan	In Compliance (largest holding: 1.1% of Total Plan)	N/A
Commingled Fund Exposure	No more than 20.0% of total commitments raised	In Compliance	N/A
Leverage	30% LTV ratio maximum for individual Separate Accounts 60% LTV ratio maximum for individual assets in Separate Accounts 40% LTV ratio maximum for the aggregate Core Portfolio	In Compliance (Core Portfolio LTV: 32.4%)	N/A

SCERS REAL RETURN ASSET CATEGORY INVESTMENT POLICY STATEMENT

June 16, 2021~~March 18, 2020~~

Contents

A. REAL RETURN ASSET CATEGORY INVESTMENT OBJECTIVE

The Real Return asset category and its underlying asset classes seek to achieve the following investment objectives:

- Attractive returns on a real (net of inflation) basis and a hedge against inflation risk.
- Moderate income and cash flow generation.
- Diversification for SCERS' portfolio, including low or negative correlation to equities and nominal bonds.
- Greater consistency in the return distribution and muted downside risk.

Asset classes within the Real Return asset category include:

- Real Estate, including both Core and Non-Core exposures
- Real Assets, including infrastructure, energy and natural resources
- Liquid Real Return
- TIPS and Inflation-Linked-Bonds

Asset class target weights within Real Return are as follows:

Asset Class	Minimum	Target Allocation	Maximum
Real Estate	5.0%	**7.0%**	9.0%
Real Assets	5.0%	**7.0%**	9.0%
Liquid Real Return	0.0%	**2.0%**	3.0%
TIPS	0.0%	**0.0%**	3.0%
Real Return Asset Category		***16.0%***	

B. BENCHMARKS

The Real Return asset category total performance is evaluated by applying the investment performance of the individual asset class benchmarks weighted by the strategic asset allocation targets weights. The Real Return asset class benchmarks are as follows:

Real Estate:

SCERS Real Estate Portfolio	Target Weight	Real Estate Policy Index Benchmark (custom blend of benchmarks below)
Core Real Estate	**65%**	NFI-ODCE
Non-Core Real Estate	**35%**	NFI-ODCE + 1%

- ❖ Performance of core and core plus real estate investments are expected to exceed the NCREIF Fund Index – Open-End Diversified Core Equity (NFI-ODCE), net of fees.

- ❖ Performance of non-core real estate investments are expected to exceed the NFI-ODCE by 100 basis points, net of fees.

- ❖ Performance of the Total Real Estate program is expected to exceed a blended benchmark which consists of the following components: 65% core (NFI-ODCE) and 35% non-core (NFI-ODCE + 100 basis points). This blended benchmark with serve as the Policy Index for SCERS' Real Estate asset class.

- ❖ A customized secondary benchmark will be used to measure performance of SCERS' global exposures. The secondary benchmark will include a customized blend of U.S. and non-U.S. exposure, with the non-U.S. component using the Global Real Estate Fund Index (GREFI) with SCERS' weighting to each geographic location. The secondary benchmark will be a 'floating' benchmark based on SCERS' average capital invested in each region, measured each quarter.

Real Assets:

- ❖ Over the medium-term, after the program is fully invested, performance of the Real Assets asset class is expected to exceed following the weighted benchmark return, net of fees, which will serve as SCERS' Policy Index:

SCERS Real Assets Portfolio	Target Weight	Real Assets Policy Index Benchmark (custom blend of benchmarks below)
Infrastructure	45%	Cambridge Associates Private Infrastructure Index
Energy	35%	Cambridge Associates Private Energy Index
Agriculture	10%	NCREIF Agriculture Index
Timber	10%	NCREIF Timber Index

❖ Performance of each sub-asset class will be benchmarked individually by the underlying asset:

- Performance of infrastructure investment strategies are expected to exceed the Cambridge Associates Private Infrastructure Index pooled IRR.
- Performance of energy investment strategies are expected to exceed the Cambridge Associates Energy Index pooled IRR.
- Performance of agriculture investment strategies are expected to exceed the NCREIF Agriculture Index.
- Performance of timber investment strategies are expected to exceed the NCREIF Timber Index.

❖ Over the long-term (5-10 years), performance of the Real Assets asset class is expected to exceed CPI-U (headline inflation) by 5%.

Liquid Real Return:

❖ Performance of the Liquid Real Return portfolio is expected to exceed a blended benchmark which consists of the following components:

SCERS Liquid Real Return Portfolio	Target Weight	Liquid Real Return Policy Index Benchmark (custom blend of benchmarks below)
Global Real Estate (REITs)	15%	FTSE EPRA/NAREIT Developed Liquid Index
Global Infrastructure Equity	25%	S&P Global Infrastructure Index
Global Natural Resources	10%	S&P Global Large Mid Cap Commodity and Resources Index
Commodities	10%	Bloomberg Roll Select Commodity Index
US Intermediate TIPS	30%	Bloomberg Barclays 1-10 Year US TIPS Index
Floating Rate Notes	10%	Bloomberg Barclays US Dollar Floating Rate Note < 5 Years Index

Treasury Inflation Protected Securities (TIPS):

❖ Performance of TIPS investments are expected to exceed the Barclays Capital U.S. Treasury Inflation Protected Securities Index.

C. INVESTMENT GUIDELINES

1. Investment Descriptions:

Real Estate Investments:
Investments in real estate can be made across a broad array of investment strategies:

- *Core and Core Plus Real Estate.*
  - Core and core plus real estate will typically possess a lower risk and return profile than non-core value-add or opportunistic investments due to attributes that can include a higher level of cash yield and income generation; a lower level of capital appreciation potential; location in a primary metropolitan area; greater occupancy levels; and a lower level of leverage.

  - Core and core plus real estate include investments in operating and substantially leased properties of institutional quality, consisting primarily of investments in traditional property types (office, industrial, retail, and for-rent multifamily). Core investments have moderate levels of associated leverage (generally below 40%).

  - Core plus real estate investments offer the opportunity to enhance returns by: (1) alleviating an identifiable deficiency (in an asset's capital structure, in an asset's physical structure, in an asset's operation, etc.); and/or (2) benefitting from market inefficiency. These investments may use slightly more leverage than core real estate investments to improve returns and may include some non-traditional property types.

- *Non-Core (Value-Add and Opportunistic) Real Estate.*
  - In addition to some of the characteristics of core real estate outlined above, non-core investments offer the opportunity to enhance returns through factors that can include: (1) investing in assets with greater deficiencies (such as substantial vacancy, the need for substantial renovation, etc.); (2) accepting different types of risks (such as development risk, redevelopment risk, repositioning, etc.); (3) focusing more on non-traditional property types that may have greater operating risks (such as hotels); (4) accepting greater capital market risk (for example, by acquiring assets with complex capital structures that may be difficult to unwind); and (5) seeking areas of greater market inefficiency.

  - Value-add and opportunistic real estate will typically possess a higher risk and return profile compared to core real estate due to considerations that can include a lower level of cash yield and income generation; a higher level of capital appreciation potential; location in a secondary market; lower occupancy levels; and an increased level of leverage. In many cases non-core real estate investments attempt to capitalize on an enhanced level of distress in specific properties or wider market dislocation. These characteristics can magnify the risk and return of value-add and opportunistic investments throughout the business and real estate cycles.

- *Public Real Estate Investment Trusts (REITs).*
  - Public REIT investments are non-control positions in real estate investment trusts containing real estate holdings. REIT vehicles offer investors daily liquidity and all investment property types are available. Long term historical averages suggest that REITs have a limited correlation to private real estate. Rather, because public REITs are traded on stock exchanges and raise capital via the equity markets (IPOs and secondaries), they are highly correlated to small- and mid-cap equities. REITs will comprise a small portion of SCERS' Real Estate program, if any.

- *Debt Investments with Underlying Real Estate Exposure.*
  - Debt investments may be classified by SCERS' investment staff (Staff) and consultant as falling into one of the traditional core/core plus or non-core investment strategies based on the composition of the underlying collateral.

- *Global Real Estate.*
  - Investments in global real estate (ex-U.S.) are permissible in order to improve diversification and enhance returns on an opportunistic basis. However, the Real Estate program will maintain a disproportionate weighting toward the United States due to the following factors: (1) the absence of currency risk and associated costs; (2) the absence of withholding taxes; (3) high transparency; (4) a well-developed system of property rights and a well-developed legal system; and (5) a deep and liquid market. Accordingly, the SCERS Real Estate program (core, core plus and non-core real estate) may target exposure to investments outside the United States, with a permissible range of 0% to 30%.

  - In addition to the same risks as investing in domestic real estate, investing in global real estate carries additional unique risks:

    - Macroeconomic risk will differ by country and geopolitical landscape (changes in interest rates, inflation, GDP growth, unemployment).
    - Currencies may provide a diversification to SCERS' total fund but also can pose a risk when currencies of other countries depreciate vis-à-vis the USD.
    - Transparency can become problematic in less developed countries
    - The high dispersion of returns presents opportunities for active managers to add value but can also present greater volatility.

- Careful selection of managers and countries through a thorough investment process is critical in order to benefit from global real estate opportunities while also mitigating these risks.

- While a range of 0%-30% for the global real estate component allows SCERS to take advantage of lower values and specific market opportunities abroad when they arise outside of the U.S., it is important to note that it is not a required allocation, but rather, allows the flexibility to invest in non-U.S. markets when the risk and return characteristics are superior. In addition, providing an allowable range therefore produces competition for space between U.S. and non-U.S. investments. It is anticipated that global real estate opportunities will arise that are both core and non-core (value-add and opportunistic).

Real Assets Investments:

Investments in Real Assets can be made through investments in both public and private securities and can include equity and debt investments. Private investments primarily involve the purchase of unlisted, illiquid common and preferred stock, and to a lesser degree, can include subordinated and senior debt of companies that are typically privately held. Underlying real asset investments can include infrastructure, energy, timber, agriculture, or other natural resources related investments. Investment is authorized in a broad array of sub-asset classes and strategies including:

- Infrastructure - Investments include ownership interests in physical structures, facilities, or systems that provide essential services to a community. Underlying investments can include:
  - Economic Infrastructure
    - Transportation
      - Toll Roads; bridges; tunnels; airports; parking facilities; sea ports; and freight rails.
    - Utilities
      - Gas and electricity transmission and distribution; water; and sewage.
    - Energy
      - Oil and gas pipelines; midstream energy; electricity networks; power generation; hydrocarbon storage facilities; and renewable energy.
    - Communications
      - Communications towers; satellites; and fiber-optic networks.
  - Social Infrastructure
    - Education facilities; healthcare facilities; judicial buildings (courthouses and police stations); correctional facilities; housing; and public transportation.

- ❖ Energy - Investments include ownership interests in businesses involved in the exploration, production, processing, transportation, or distribution of energy or energy-related resources, including services businesses related to such activities. Energy-related investments may be made across the energy value chain, from upstream to midstream to downstream, and energy services businesses.

- ❖ Agriculture - Investments include ownership interests in businesses involved in the acquisition and management of farmland primarily for crop production. Other agriculture investments may include agriculture-related storage, transportation, irrigation, and bio-technology businesses or facilities.

- ❖ Timber - Investments include ownership interests in properties where the majority value of the property is derived from income-producing timber.

- ❖ Other natural resources - Investments include ownership interests in businesses involved in the mining and/or processing of metals and other natural resources.

Liquid Real Return Investments:
Investments in 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.

Treasury Inflation Protected Securities (TIPS):
Investments include assets issued and backed by the U.S. government and specifically designed to protect against inflation; whereby the principal of the notes rise and fall as adjusted by changes in CPI. These investments may comprise open-end commingled funds, closed-end commingled funds, and separate direct ownership accounts.

2. Risk and Diversification:

- ❖ ***Diversification by investment strategy and geography, including target allocation and ranges.***

The construction of the Real Return portfolio is important because a well-developed portfolio can significantly reduce risk and serve as a diversifier, lowering the overall volatility of the total fund. Distinguishing characteristics of the Real Return asset category are: (1) a wide range of assets in both the public markets (liquid) and private markets (illiquid); (2) a number of differing investment strategies; and, (3) a variety of asset classes. While not all investments included in this scope will diversify SCERS' fund, it is the combination and construction of the overall portfolio that results in diversification.

The targeted and range of investment exposures within the various asset classes are shown below. It is also anticipated that SCERS will seek diversification with respect to investment strategies within the asset classes where warranted.

Real Estate and Real Assets form the largest allocations due to their capabilities to fulfill the majority of goals and overall investment objective.

Real Estate:
The Real Estate program will be diversified across investment strategies and geographies. The Real Estate program has a target allocation of 7%, with a permissible range of 5% to 9%. The Real Estate program targets an allocation of 65% to core and 35% to non-core investments, with the permissible ranges as displayed below. The non-U.S. target is 0%, with a range between 0% and 30%.

The table below highlights the target allocation and permissible ranges for core and non-core real estate, as well as for geographic exposure.

SCERS Real Estate Portfolio Construction	Minimum	Target	Maximum
Total Real Estate Portfolio	5%	**7%**	9%
Core Real Estate	50%	**65%**	80%
Non-Core Real Estate	20%	**35%**	50%

Within the core real estate portfolio, exposure will primarily be comprised of open-end commingled funds (OECF), which provide SCERS with diversified exposure to stabilized properties and an element of liquidity. The majority of non-core real estate exposure will be attained through closed-end fund vehicles.

For Real Estate, one single investment position shall be limited to 2.5% of the net asset value (NAV) of SCERS' total fund. SCERS will strive to maintain ongoing long-term relationships with an expected range of 10 to 20 investment managers. The optimum number of investment vehicles in the portfolio and the maximum exposure to any one investment vehicle varies with time and will be evaluated as part of the Real Estate Asset Allocation Structure.

Real Assets:

The targeted and range of investment exposures to the identified Real Assets investment sub-asset classes and geographies are shown in the table below. These exposures should be measured on a fair value basis, once the Real Assets asset class is fully invested. The Real Assets portfolio is expected to invest globally. While Infrastructure is expected to have a global focus, infrastructure investments are expected to be made primarily within developed market countries. Energy investments are expected to be made primarily within North America, although investments outside of North America are permitted. Agriculture investments will also be global in nature, with a particular focus on investments within developed market countries and a few emerging market countries.

SCERS' Real Assets Portfolio Construction:

	Minimum	Target	Maximum
Total Real Assets Portfolio	5%	**7%**	9%
	Minimum	**Target**	**Maximum**
Infrastructure	30%	**45%**	60%
Energy	20%	**35%**	50%
Agriculture, Timber, Other	10%	**20%**	30%

SCERS will allocate approximately 5%-20% of the total Real Assets target allocation to each fund. SCERS will strive to maintain ongoing long-term relationships with approximately 15 real assets managers with an expected range of 10-20 manager relationships. The optimum number of investment vehicles in the portfolio and the maximum exposure to any one investment vehicle varies with time and will be evaluated as part of the Real Assets Asset Allocation Structure.

Liquid Real Return:

Liquid Real Return is given a 2% target allocation with a 0% to 3% range. While the Liquid Real Return allocation is a strategic allocation, a segment of it serves as a rebalancing proxy for the Overlay Program that will rebalance the overall Real Return asset category to its target allocation.

TIPS:

TIPS are set at a 0% long-term allocation with a 0% to 3% range to reflect the expectation that investing in TIPS is opportune when the imbedded expected breakeven rates of inflation are low and real yields are high.

3. Asset Class Specific Risk Considerations:

Real Estate:
Within the Real Estate asset class, investment risk will be addressed through diversification by region, type of property, lease renewal terms, maximum leverage, and debt renewal terms

- *Diversification by region, property type, and geography*.
  - SCERS will endeavor to limit the potential for any concentration in a type of real estate property (commercial building, industrial, apartment, and retail) or geography (South, West, Midwest, and North) to negatively impact long-term returns by investing across regions and strategies. This will involve comparing SCERS' core real estate portfolio against the allocation of property types and regions in the NFI-ODCE Index.

  - SCERS' Real Estate program will maintain diversification by property type and geography. The core and non-core real estate portfolio will have a maximum weighting to any one main property type of 40% and a maximum of 25% collectively for the Other property types as defined by the NFI-ODCE index. The U.S. geography weighting will be within +/- 10% of the NFI-ODCE index.~~target weightings by property type and geography to be within +/- 10% of the NFI-ODCE Index.~~ Exceptions may exist at different points in the market cycle, particularly with respect to targeted investments in the non-core real estate space, and will be monitored by Staff and consultant and reported to the Board in the quarterly performance report for real estate. An explicit exception is the non-U.S. real estate exposure, which may range from 0%-30%. When investments are made internationally, SCERS' Real Estate portfolio will potentially deviate from its primary real estate benchmark.

- *Diversification by lease and debt renewal terms.*
  - SCERS will strive to limit the potential for investments during any given year in the business cycle to negatively impact the long-term results by investing in underlying properties that, in aggregate, spread the risk of lease renewals and debt renewals across a number of years in the business cycle.

- *Real Estate leverage.*
  - Leverage on the Real Estate program can magnify both returns and losses. However, adding a moderate level of debt to a long-term real estate strategy has shown that it can be additive to returns over the long-term. Therefore, allowing flexibility to add debt during the expansionary phase of the cycle subject to a maximum limit will help ensure that a debt strategy will be accretive to returns. With this in mind, the loan-to-value (LTV) limits for the Real Estate program are as follows:

- 40% maximum LTV for total core real estate program
- 75% maximum LTV for total non-core real estate program

These limits should provide adequate flexibility for the Real Estate program to operate through the real estate cycle, taking advantage of expansionary periods, but at the same time not increasing leverage beyond a point that will cause significant losses in a downturn in the cycle. However, if conditions warrant, Staff and consultant will approach the Board for approval of any exceptions to these debt guidelines.

Private Investments:

Private investments (e.g. real assets and real estate), like investments in most asset classes, bear an inherent risk that the actual return of capital, gains and income will vary significantly from the return and amounts expected. The expected volatility of private investments in aggregate is high among major asset classes. The investment risk associated with private investments shall be addressed in several ways:

❖ *Diversification by geography and investment strategy*. SCERS will endeavor to limit the potential for any concentration in a type of investment strategy or geography to negatively impact long-term returns in the Real Return asset category by investing across regions and strategies.

❖ *Diversification by vintage year.* SCERS will strive to limit the potential for investments during any given year in the business cycle to negatively impact the long-term results of the Real Return asset category by investing across business cycles and vintage years. It is anticipated that SCERS will commit to real assets funds over multiple years, whereby the aggregate amount will be spread across the entire business cycle. This will serve to limit the exposure or risk to investing and relying on the performance of real return funds in any given year of the business cycle. The Board will determine with Staff and consultant the funding allocation for the private segments of Real Return each year in conjunction with its annual review of the Asset Allocation Structure and Annual Investment Plan for asset classes such as Real Assets and Real Estate.

❖ *Diversification by industry or business sector.* SCERS will attempt to limit the potential for any one industry or business sector to negatively impact the long-term results by investing across a variety of industries.

❖ *Diversification by investment manager and general partner.* SCERS will endeavor to invest across a number of investment managers and limited partnerships to mitigate the potential negative impact of a concentrated portfolio of investment managers. The optimum number of investment vehicles in the portfolio and the maximum exposure to any one investment vehicle will vary with time and will be evaluated as part of the Real Return asset allocation structure.

4. Investment Vehicles:
The vehicles for investments within the Real Return asset category reflect the broad scope of investments.

Private Real Estate and Real Assets investments generally take the form of open-end commingled funds and closed-end commingled funds, including commingled vehicles such as limited partnerships, limited liability companies, or offshore corporations.

SCERS may also invest in separate account relationships established with one or more fiduciary oversight managers. These managers will make commitments to physical assets such as properties, limited partnerships, or other entities such as limited liability companies or offshore corporations, either on a discretionary or advisory basis.

SCERS may also invest directly in fund-of-funds (FoF) vehicles. In these vehicles, the FoF invests in partnerships on a discretionary basis. FoFs will own the underlying partnerships and SCERS obtains contractual rights to the FoFs' portfolio through a limited partnership. A FoF will have investors other than SCERS.

Real Estate:
Specific to Real Estate, the majority of SCERS' core real estate exposure will be attained through open-ended core funds (OECFs), while the majority of SCERS' non-core real estate exposure will be attained through closed-end commingled funds (CECFs), generally through limited partnerships.

Investments in core real estate can also be made through core separate account (CSA) relationships established with fiduciary oversight managers. These managers make commitments to physical assets such as properties, limited partnerships, or other entities such as limited liability companies or offshore corporations. SCERS does not expect to utilize CSAs within the Real Estate program.

Investments can also include publicly traded REITs in open-end commingled funds, closed-end commingled funds, and separate direct ownership accounts.

Liquid Real Return and TIPS:
Investment vehicle options for investing in the Liquid Real Return and TIPS asset classes include separate accounts, in which assets are custodied at SCERS' custodian, and/or commingled funds, including limited partnerships and institutionally investor-focused mutual funds. Determinants as to whether SCERS will invest in a separate account versus a commingled fund include availability of a separate account option, complexity of the underlying assets,

whether individual country markets require opening (i.e., emerging markets investing via a separate account), fee levels, transparency, and whether a commingled fund's investment guidelines are consistent with SCERS' investment objective.

5. **Secondary Investments and Co-investments:** Secondary investments are made when an investor purchases the limited partnership interest of another investor in an existing fund. A co-investment is a direct investment in an underlying portfolio company where a manager offers investors the opportunity to invest directly in an underlying company alongside the fund investment. Investments may be made in companies that are either U.S. or non-U.S. domiciled. Neither secondary investments nor co-investments are considered separate investment strategies within Real Return. For example, a secondary or co-investment could be in any of the strategies including real estate, infrastructure, energy, agriculture, or timber. Therefore, secondary and co-investments will be categorized according to the underlying strategy and geography and will conform to the guidelines outlined in the above section on risk and diversification. SCERS will seek to allocate to secondary investments and co-investments on an opportunistic basis. It is expected that these investments will constitute a small portion of the overall Real Return asset category, if any.

6. Investment Vehicle Concentration:

Real Estate and Real Assets:
SCERS will not typically comprise more than 20% of any one investment vehicle at the initiation of the investment that is a limited partnership, limited liability company, or offshore corporation. An exception to this guideline is an investment in a FoF or a separate account, whereby SCERS may be the sole investor. In these circumstances, SCERS will endeavor to ensure that it does not generate a majority of the firm's overall profits.

Liquid Real Return and TIPS:
SCERS shall typically not comprise more than 20% of an investment strategy's assets under management at the initiation of the investment. Post-investment, SCERS shall monitor the investment strategy asset base, and SCERS' concentration relative to the asset base. An exception to this guideline is an investment in a separate account, whereby SCERS may be the sole investor. In these circumstances, SCERS will endeavor to ensure that it does not generate a majority of the firm's overall profits.

7. **Liquidity:** Overall, the Real Return asset category will maintain varying levels of liquidity based on the underlying sub-asset classes:

Liquid Real Return and TIPS are anticipated to be very liquid; however, will offer varying degrees of liquidity depending on sector, region, and market capitalization for equities.

Investments in pooled vehicles such as fund-of-funds and open-end commingled funds (i.e., core real estate and segments of infrastructure, agriculture, and timber) are generally more liquid than closed-end funds (i.e., non-core real estate and segments of energy, infrastructure, agriculture, and timber), but less liquid in nature than publicly traded investments (i.e., stocks and REITs). Liquidity is generally based on fund specific redemption schedules, which are typically monthly and quarterly, subject to lock-up periods and investor-level gates. Real estate separate accounts properties generally have less liquidity and can require a price discount to be sold.

Investments in closed-end funds have limited liquidity. These vehicles have long expected holding periods such as 5-13 years. Investments are typically held until maturity and selling prior to maturity may result in realizing a sales price that reflects a discount to fair market value. Liquidity risk is managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation targets to private real return investments.

8. **Distributed Securities:** SCERS shall avoid the direct receipt of distributed securities from individual real return funds. However, if such receipt is unavoidable, SCERS shall ordinarily direct the sale of securities distributed by its investment vehicles as soon as practically possible and strive to not impair the value of the security.

Within Liquid Real Return and TIPS, SCERS shall typically seek receipt of distributed securities from investment managers. For separate accounts, assets are custodied at SCERS' custodian, which SCERS can liquidate at its own discretion. For commingled funds, SCERS generally prefers to receive distributed securities, which it can liquidate at its own discretion. The exception is for those funds that require that shares be redeemed from the fund, or if it is more prudent to have a fund redeem shares.

9. Performance Evaluation:

a. Performance of the Real Return asset category will be evaluated quarterly against the weighted average of the policy index benchmarks outlined in the 'Benchmarks' section above.

b. Individual investment vehicle performance will be evaluated on a quarterly basis compared to the performance of respective peer universes and vintage years (where applicable).

c. It is recognized that immature private investments within closed-end investment vehicles will ordinarily have a 'J-curve effect' whereby there are low to negative returns in the initial years due to the payment of investment management fees during a period when investments are typically carried at cost and returns have not been realized.

10. **Investment period to ramp-up**: It is recognized that it can take multiple years for segments of the Real Return asset category to be fully invested, and that there may be deviations from the previously mentioned targets during the ramp-up period. During the real assets and non-core real estate asset class ramp-up periods, exposures can be estimated using percentages of committed capital. During the ramp-up period for the Real Return asset category, and subsequent to reaching the target allocation, SCERS' Overlay Program will re-balance the Real Return asset category to the target allocation, using the designated Real Return overlay proxy within the investment guidelines for the Overlay Program.

11. **Rebalancing to guidelines:** It is anticipated that the majority of changes to rebalance the Real Return asset category will be made on a long-term basis due to: (1) the general illiquidity of the private investments, which often have investment horizons of 10-15 years; and (2) the significant discount that can be applied if and when private holdings are liquidated in the secondary market. Accordingly, when these guidelines are exceeded, it is anticipated that reducing exposures will be carried out within a long-term time-frame and over a period that is as soon as practical to reflect the illiquidity of many real return investment vehicles.

    SCERS utilizes an Overlay Program, managed by a strategic overlay manager, to equitize cash and to rebalance asset categories within SCERS' total portfolio, including the Real Return asset category. The asset categories are rebalanced to target allocations when upper or lower bands are breached. Rebalancing occurs quarterly, unless the respective bands are breached intra-quarter, in which case rebalancing occurs upon the breach of a band.

D. MONITORING

Through the monitoring process, Staff and consultant will extend the initial due diligence into a formal quarterly, semi-annual, and annual process which regularly seeks to determine whether the manager is meeting the Real Return asset category's, and its underlying asset class's, investment objectives and other requirements. In the broadest sense, the monitoring process is intended to determine whether the initial reasons for selecting the strategy and investment vehicle remain valid. The monitoring process will disclose whether there has been any material deviation from the investment philosophy and process; the personnel responsible for managing the investment vehicle are still in place; the organization continues to be stable; performance and risk meet expectations; and the investment vehicle manager adheres to its investment and other requirements. The underlying principle of the monitoring program is to determine whether all risks to which SCERS is exposed through the use of outside investment advisors have been identified, understood, and, to the extent possible, controlled. The monitoring process focuses on four areas:

- Compliance with reporting and valuation requirements;
- Continuity of investment philosophy and process;
- Stability of personnel and organization; and
- Performance and risk management.

Staff and consultant will aggregate investment vehicle data and perform analysis on the overall Real Return asset category, and its underlying asset classes, paying careful attention to individual investment vehicle allocations and strategy/sector concentrations to strive to achieve proper diversification across the Real Return asset category. Staff and consultant will also conduct due diligence with the respective investment vehicle managers to understand the underlying drivers of performance. Additionally, Staff and consultant will conduct portfolio reviews and on-site due diligence as necessary. Site visits will also be performed to confirm that appropriate infrastructure is in place to support the investment process. Staff and consultant will provide the Board with regular performance reports and advise the Board of other matters as appropriate.

If, during the monitoring process, SCERS identifies areas of the Real Return asset category that are not compliant with the objectives, guidelines, and constraints, identified in this investment policy statement, then reasonable efforts will be made to cure the deficiency. These reasonable efforts will consider the illiquidity of the asset class and transaction costs to be incurred compared to the risk of non-compliance.

E. IMPLEMENTATION PROTOCOL

The following implementation protocol describes the allocation of investment authority and responsibilities between SCERS' Board, Staff, and consultants. Overall, the Real Return implementation protocol delegates the most time intensive elements of the process to Staff and consultant, while preserving the Board's oversight of the overall Real Return asset category.

The Board will approve the long-term Asset Allocation Structure for the individual asset classes within the Real Return asset category, as developed and presented by Staff and Consultant. These include Real Estate, Real Assets, in addition to any exposure to Liquid Real Return and TIPS. The long-term Asset Allocation Structure for underlying Real Return asset classes will articulate the long-term direction and objectives of each asset class including elements such as: (1) asset allocation targets and ranges by strategy and geography, and types of investment vehicles; (2) a target range for the number of investment managers for Real Estate and Real Assets; and, (3) the role of Fund of Funds and strategic partners.

On an annual basis, the Board will approve the Annual Investment Plan for the individual assets classes within the Real Return asset category. The Annual Investment Plan will articulate the direction over the next year in taking the necessary steps to achieve the above objectives of the long-term Asset Allocation Structure of the underlying asset classes.

The execution of the long-term Asset Allocation Structure and Annual Investment Plan will vary between that of Real Estate and Real Assets, and that of Liquid Real Return and TIPS.

1. Real Estate and Real Assets:

For the Real Estate and Real Assets asset classes, the execution of the long-term Asset Allocation Structure and Annual Investment Plan including the <u>selection of investment managers will be delegated to Staff, subject to the Board's ability to review, discuss, and object to the recommendations of Staff and consultant during the investment protocol process.</u>

The key features of the proposed Real Estate and Real Assets investment protocol are as follows:

- Staff and consultant will identify the most qualified candidates for a prospective real estate or real assets investment commitment based on: (a) the Asset Allocation Structure for the underlying asset classes approved by the Board; and (b) the Annual Investment Plan for the underlying asset classes approved by the Board (which takes into account SCERS' existing real estate and real assets investments and prioritizes and targets optimal new investment opportunities expected to come to market in the next twelve months).

- When a particular manager candidate is identified, Staff and consultant will pursue extensive due diligence on the manager candidate, including conducting extended interviews with the portfolio managers and other key members of the investment team.

- The consultant will complete its investment strategy and operational due diligence reports, if they have not done so already. Legal counsel will begin reviewing the documentation for the possible commitment and preliminary negotiation of deal terms will take place.

- Staff will prepare a detailed report for the Board outlining the basis for the potential commitment, the contemplated commitment amount, the target date for closing on the commitment, and an assessment of the fit within

SCERS' portfolio. The report will include an evaluation of the organization, investment strategy, considerations and risks, and track-record, as well as an operational assessment and a review of the investment's terms.

- If/When: (a) The due diligence process is completed; (b) deal terms have been determined; (c) staff and consultant have concluded that a commitment should be made; then (d) staff will prepare a final report for the Board outlining the basis for the decision, the proposed commitment amount, and the target date for closing on the commitment. The final report will also summarize the due diligence items that have been completed in order to move forward with a commitment, as well as any considerations that have arisen since the issuance of the initial reports by Staff and the consultant.

- At any point in the process, questions or concerns by any trustee regarding a proposed investment or proposed manager will be communicated to the Chief Executive Officer (CEO). The CEO will be responsible for assuring that a prompt response is provided. The CEO will also provide the full Board with the response. If a Board member is not satisfied with the response, the Board member can request that the matter be brought to the full Board for consideration. In such a case, the CEO will refer the matter to the Board President who will determine whether the manager search process should be suspended until the matter is resolved. As a general rule, it is anticipated that the process of identifying and vetting a proposed investment will take place over a period of time sufficient to allow, if necessary, for full Board consideration of questions or concerns before a commitment is finalized.

- Absent questions or concerns by the Board, the proposed investment will be finalized and the necessary documentation executed.

- SCERS' Board President or Chief Executive Officer are authorized to execute any and all documents which may reasonably be required to complete any Real Estate or Real Assets investment on behalf of SCERS.

- Staff and consultant will confirm that the commitment has been made, and the amount allocated to SCERS, at a subsequent Board meeting.

- Specific to Real Estate, Staff and consultant also possess authority to make adjustments to the Real Estate portfolio in order to assure that the portfolio is optimally aligned to achieve the objectives of the Real Estate asset class and overall Real Return asset category. This includes, but is not limited to the authority to: (1) trim or add to existing investment mandates; (2) terminate and/or replace an existing manager; (3) submit redemption requests; (4) determine the appropriate sources for funding a new mandate or adding to an existing mandate; and, (5) determine the appropriate application of any returned capital.

- As with new investments, such decisions will be made within the framework of the Real Estate asset class plan approved by the Board. If and when Staff and consultant determine that such actions are necessary, a timely report will be prepared for the Board outlining why the action is deemed necessary and how it impacts the Real Estate portfolio.

2. Liquid Real Return and TIPS:

Overall, the Liquid Real Return and TIPS implementation protocol delegates the most time intensive elements of the process to Staff and consultant, including the screening and evaluation leading to the recommendation to engage or terminate a particular investment manager. <u>The Board provides oversight of the overall Liquid Real Return and TIPS portfolios, and makes the final decision regarding engagement or termination of investment managers.</u>

The key features of the Liquid Real Return and TIPS implementation protocol are as follows:

- ❖ If Staff and the consultant believe that a change is necessary to the manager structure in order to obtain optimal performance from the asset class, Staff and the consultant will present the Board with a report outlining the basis for their conclusion including how the change under consideration would fit within: (a) the allocation model for the asset class approved by the Board; and (b) the twelve month investment plan approved by the Board.

- ❖ Staff and the consultant will then identify the most qualified candidates to bring into the manager structure based on the full range of relevant factors regarding the manager, its investment team, and strategy. Staff will prepare a report for the Board outlining why the managers in question have been identified for closer evaluation for a possible commitment. The consultant will also provide investment strategy and operational due diligence reports.

- ❖ Staff and the consultant will pursue more extensive due diligence on the manager candidates, including conducting extended interviews with the portfolio managers and other key members of the investment team. Legal counsel will begin reviewing the documentation for the possible engagement and preliminary negotiation of deal terms will take place.

- ❖ If/When: (a) the due diligence process is completed; (b) deal terms have been determined; (c) staff and the consultant have determined which manager to recommend to the Board; then (d) staff will prepare a report to the Board outlining the basis for the decision, the proposed commitment amount, and the target date for closing on the commitment.

- ❖ At any point in the process, questions or concerns by a Board member regarding a proposed investment or proposed manager can be communicated to the Chief Executive Officer (CEO). The CEO will be responsible for assuring that a prompt response is provided. The CEO will also provide the full Board with the response. If the Board member is not satisfied with the response, the Board member can request that the matter be brought to the full Board for consideration. In such a case, the CEO will refer the matter to the Board President who will determine whether the manager search process should be suspended until the matter is resolved. As a general rule, it is anticipated that the process of identifying and vetting a proposed investment will take place over a period of time sufficient to allow, if necessary, for full Board consideration of questions or concerns before a recommendation is finalized.

- ❖ The manager being recommended for the engagement will make a presentation to the Board. At that time the Board can address any questions or concerns regarding the recommended candidate as well as any previously raised questions or concerns regarding another candidate or candidates. The Board can (a) approve engagement of the recommended manager; (b) direct that one or more alternative candidates be brought forward for consideration; (c) request further information regarding a candidate or candidates; or (d) take any other action the Board deems appropriate.

- ❖ If the new investment manager engagement also involves the recommended termination of an existing manager, Staff and the consultant will develop and report to the Board on the reasons, timeline and plan for terminating the existing engagement, and transitioning the assets from the outgoing manager to the incoming manager. The Board will take action on the recommended termination.

- ❖ If Staff and the consultant determine that it would be advisable to physically re-balance the portfolio at the same time as making the investment manager structure changes, Staff and consultant will prepare a report for the Board outlining the recommended physical re-balancing and why it is necessary and appropriate. The Board will take action on the recommended physical re-balancing.

- ❖ Upon approval by the Board: (a) the new investment engagement will be finalized and the necessary documentation executed; (b) the engagement with the outgoing manager will be terminated; and (c) the transition plan, and any necessary physical re-balancing, will be implemented.

- ❖ SCERS' Board President or Chief Executive Officer are authorized to execute any and all documents which may reasonably be required to complete a new investment engagement, to terminate an engagement with an outgoing manager, and to effectuate a transition of assets on behalf of SCERS.

- ❖ Staff and the consultant will report to the Board when the manager structure changes and any necessary re-balancing have been completed, along with an analysis of the costs associated with the transition.

F. POLICY HISTORY

Date	Description
07-19-2017	Board adopted Real Estate asset class investment policy statement
08-16-2017	Board adopted Real Assets asset class investment policy statement
11-05-2018	Board adopted reformatted and consolidated Real Return asset category investment policy statement
03-20-2019	Amended Real Return asset category investment policy statement
03-18-2020	Amended Real Return asset category investment policy statement
06-16-2021	Amended Real Return asset category investment policy statement

SCERS REAL RETURN ASSET CATEGORY INVESTMENT POLICY STATEMENT

June 16, 2021

Contents

A. REAL RETURN ASSET CATEGORY INVESTMENT OBJECTIVE

The Real Return asset category and its underlying asset classes seek to achieve the following investment objectives:

- Attractive returns on a real (net of inflation) basis and a hedge against inflation risk.
- Moderate income and cash flow generation.
- Diversification for SCERS' portfolio, including low or negative correlation to equities and nominal bonds.
- Greater consistency in the return distribution and muted downside risk.

Asset classes within the Real Return asset category include:

- Real Estate, including both Core and Non-Core exposures
- Real Assets, including infrastructure, energy and natural resources
- Liquid Real Return
- TIPS and Inflation-Linked-Bonds

Asset class target weights within Real Return are as follows:

Asset Class	Minimum	Target Allocation	Maximum
Real Estate	5.0%	**7.0%**	9.0%
Real Assets	5.0%	**7.0%**	9.0%
Liquid Real Return	0.0%	**2.0%**	3.0%
TIPS	0.0%	**0.0%**	3.0%
Real Return Asset Category		***16.0%***	

B. BENCHMARKS

The Real Return asset category total performance is evaluated by applying the investment performance of the individual asset class benchmarks weighted by the strategic asset allocation targets weights. The Real Return asset class benchmarks are as follows:

Real Estate:

SCERS Real Estate Portfolio	Target Weight	Real Estate Policy Index Benchmark (custom blend of benchmarks below)
Core Real Estate	**65%**	NFI-ODCE
Non-Core Real Estate	**35%**	NFI-ODCE + 1%

- ❖ Performance of core and core plus real estate investments are expected to exceed the NCREIF Fund Index – Open-End Diversified Core Equity (NFI-ODCE), net of fees.

- ❖ Performance of non-core real estate investments are expected to exceed the NFI-ODCE by 100 basis points, net of fees.

- ❖ Performance of the Total Real Estate program is expected to exceed a blended benchmark which consists of the following components: 65% core (NFI-ODCE) and 35% non-core (NFI-ODCE + 100 basis points). This blended benchmark with serve as the Policy Index for SCERS' Real Estate asset class.

- ❖ A customized secondary benchmark will be used to measure performance of SCERS' global exposures. The secondary benchmark will include a customized blend of U.S. and non-U.S. exposure, with the non-U.S. component using the Global Real Estate Fund Index (GREFI) with SCERS' weighting to each geographic location. The secondary benchmark will be a 'floating' benchmark based on SCERS' average capital invested in each region, measured each quarter.

Real Assets:

- ❖ Over the medium-term, after the program is fully invested, performance of the Real Assets asset class is expected to exceed following the weighted benchmark return, net of fees, which will serve as SCERS' Policy Index:

SCERS Real Assets Portfolio	Target Weight	Real Assets Policy Index Benchmark (custom blend of benchmarks below)
Infrastructure	45%	Cambridge Associates Private Infrastructure Index
Energy	35%	Cambridge Associates Private Energy Index
Agriculture	10%	NCREIF Agriculture Index
Timber	10%	NCREIF Timber Index

❖ Performance of each sub-asset class will be benchmarked individually by the underlying asset:

- ➢ Performance of infrastructure investment strategies are expected to exceed the Cambridge Associates Private Infrastructure Index pooled IRR.
- ➢ Performance of energy investment strategies are expected to exceed the Cambridge Associates Energy Index pooled IRR.
- ➢ Performance of agriculture investment strategies are expected to exceed the NCREIF Agriculture Index.
- ➢ Performance of timber investment strategies are expected to exceed the NCREIF Timber Index.

❖ Over the long-term (5-10 years), performance of the Real Assets asset class is expected to exceed CPI-U (headline inflation) by 5%.

Liquid Real Return:

❖ Performance of the Liquid Real Return portfolio is expected to exceed a blended benchmark which consists of the following components:

SCERS Liquid Real Return Portfolio	Target Weight	Liquid Real Return Policy Index Benchmark (custom blend of benchmarks below)
Global Real Estate (REITs)	15%	FTSE EPRA/NAREIT Developed Liquid Index
Global Infrastructure Equity	25%	S&P Global Infrastructure Index
Global Natural Resources	10%	S&P Global Large Mid Cap Commodity and Resources Index
Commodities	10%	Bloomberg Roll Select Commodity Index
US Intermediate TIPS	30%	Bloomberg Barclays 1-10 Year US TIPS Index
Floating Rate Notes	10%	Bloomberg Barclays US Dollar Floating Rate Note < 5 Years Index

Treasury Inflation Protected Securities (TIPS):

❖ Performance of TIPS investments are expected to exceed the Barclays Capital U.S. Treasury Inflation Protected Securities Index.

C. INVESTMENT GUIDELINES

1. Investment Descriptions:

Real Estate Investments:
Investments in real estate can be made across a broad array of investment strategies:

- *Core and Core Plus Real Estate.*
  - Core and core plus real estate will typically possess a lower risk and return profile than non-core value-add or opportunistic investments due to attributes that can include a higher level of cash yield and income generation; a lower level of capital appreciation potential; location in a primary metropolitan area; greater occupancy levels; and a lower level of leverage.

  - Core and core plus real estate include investments in operating and substantially leased properties of institutional quality, consisting primarily of investments in traditional property types (office, industrial, retail, and for-rent multifamily). Core investments have moderate levels of associated leverage (generally below 40%).

  - Core plus real estate investments offer the opportunity to enhance returns by: (1) alleviating an identifiable deficiency (in an asset's capital structure, in an asset's physical structure, in an asset's operation, etc.); and/or (2) benefitting from market inefficiency. These investments may use slightly more leverage than core real estate investments to improve returns and may include some non-traditional property types.

- *Non-Core (Value-Add and Opportunistic) Real Estate.*
  - In addition to some of the characteristics of core real estate outlined above, non-core investments offer the opportunity to enhance returns through factors that can include: (1) investing in assets with greater deficiencies (such as substantial vacancy, the need for substantial renovation, etc.); (2) accepting different types of risks (such as development risk, redevelopment risk, repositioning, etc.); (3) focusing more on non-traditional property types that may have greater operating risks (such as hotels); (4) accepting greater capital market risk (for example, by acquiring assets with complex capital structures that may be difficult to unwind); and (5) seeking areas of greater market inefficiency.

  - Value-add and opportunistic real estate will typically possess a higher risk and return profile compared to core real estate due to considerations that can include a lower level of cash yield and income generation; a higher level of capital appreciation potential; location in a secondary market; lower occupancy levels; and an increased level of leverage. In many cases non-core real estate investments attempt to capitalize on an enhanced level of distress in specific properties or wider market dislocation. These characteristics can magnify the risk and return of value-add and opportunistic investments throughout the business and real estate cycles.

- *Public Real Estate Investment Trusts (REITs).*
  - Public REIT investments are non-control positions in real estate investment trusts containing real estate holdings. REIT vehicles offer investors daily liquidity and all investment property types are available. Long term historical averages suggest that REITs have a limited correlation to private real estate. Rather, because public REITs are traded on stock exchanges and raise capital via the equity markets (IPOs and secondaries), they are highly correlated to small- and mid-cap equities. REITs will comprise a small portion of SCERS' Real Estate program, if any.

- *Debt Investments with Underlying Real Estate Exposure.*
  - Debt investments may be classified by SCERS' investment staff (Staff) and consultant as falling into one of the traditional core/core plus or non-core investment strategies based on the composition of the underlying collateral.

- *Global Real Estate.*
  - Investments in global real estate (ex-U.S.) are permissible in order to improve diversification and enhance returns on an opportunistic basis. However, the Real Estate program will maintain a disproportionate weighting toward the United States due to the following factors: (1) the absence of currency risk and associated costs; (2) the absence of withholding taxes; (3) high transparency; (4) a well-developed system of property rights and a well-developed legal system; and (5) a deep and liquid market. Accordingly, the SCERS Real Estate program (core, core plus and non-core real estate) may target exposure to investments outside the United States, with a permissible range of 0% to 30%.

  - In addition to the same risks as investing in domestic real estate, investing in global real estate carries additional unique risks:

    - Macroeconomic risk will differ by country and geopolitical landscape (changes in interest rates, inflation, GDP growth, unemployment).
    - Currencies may provide a diversification to SCERS' total fund but also can pose a risk when currencies of other countries depreciate vis-à-vis the USD.
    - Transparency can become problematic in less developed countries
    - The high dispersion of returns presents opportunities for active managers to add value but can also present greater volatility.

- Careful selection of managers and countries through a thorough investment process is critical in order to benefit from global real estate opportunities while also mitigating these risks.

- While a range of 0%-30% for the global real estate component allows SCERS to take advantage of lower values and specific market opportunities abroad when they arise outside of the U.S., it is important to note that it is not a required allocation, but rather, allows the flexibility to invest in non-U.S. markets when the risk and return characteristics are superior. In addition, providing an allowable range therefore produces competition for space between U.S. and non-U.S. investments. It is anticipated that global real estate opportunities will arise that are both core and non-core (value-add and opportunistic).

Real Assets Investments:

Investments in Real Assets can be made through investments in both public and private securities and can include equity and debt investments. Private investments primarily involve the purchase of unlisted, illiquid common and preferred stock, and to a lesser degree, can include subordinated and senior debt of companies that are typically privately held. Underlying real asset investments can include infrastructure, energy, timber, agriculture, or other natural resources related investments. Investment is authorized in a broad array of sub-asset classes and strategies including:

- Infrastructure - Investments include ownership interests in physical structures, facilities, or systems that provide essential services to a community. Underlying investments can include:
    - Economic Infrastructure
        - Transportation
            - Toll Roads; bridges; tunnels; airports; parking facilities; sea ports; and freight rails.
        - Utilities
            - Gas and electricity transmission and distribution; water; and sewage.
        - Energy
            - Oil and gas pipelines; midstream energy; electricity networks; power generation; hydrocarbon storage facilities; and renewable energy.
        - Communications
            - Communications towers; satellites; and fiber-optic networks.
    - Social Infrastructure
        - Education facilities; healthcare facilities; judicial buildings (courthouses and police stations); correctional facilities; housing; and public transportation.

- ❖ Energy - Investments include ownership interests in businesses involved in the exploration, production, processing, transportation, or distribution of energy or energy-related resources, including services businesses related to such activities. Energy-related investments may be made across the energy value chain, from upstream to midstream to downstream, and energy services businesses.

- ❖ Agriculture - Investments include ownership interests in businesses involved in the acquisition and management of farmland primarily for crop production. Other agriculture investments may include agriculture-related storage, transportation, irrigation, and bio-technology businesses or facilities.

- ❖ Timber - Investments include ownership interests in properties where the majority value of the property is derived from income-producing timber.

- ❖ Other natural resources - Investments include ownership interests in businesses involved in the mining and/or processing of metals and other natural resources.

Liquid Real Return Investments:
Investments in 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.

Treasury Inflation Protected Securities (TIPS):
Investments include assets issued and backed by the U.S. government and specifically designed to protect against inflation; whereby the principal of the notes rise and fall as adjusted by changes in CPI. These investments may comprise open-end commingled funds, closed-end commingled funds, and separate direct ownership accounts.

2. Risk and Diversification:

- ❖ ***Diversification by investment strategy and geography, including target allocation and ranges.***

The construction of the Real Return portfolio is important because a well-developed portfolio can significantly reduce risk and serve as a diversifier, lowering the overall volatility of the total fund. Distinguishing characteristics of the Real Return asset category are: (1) a wide range of assets in both the public markets (liquid) and private markets (illiquid); (2) a number of differing investment strategies; and, (3) a variety of asset classes. While not all investments included in this scope will diversify SCERS' fund, it is the combination and construction of the overall portfolio that results in diversification.

The targeted and range of investment exposures within the various asset classes are shown below. It is also anticipated that SCERS will seek diversification with respect to investment strategies within the asset classes where warranted.

Real Estate and Real Assets form the largest allocations due to their capabilities to fulfill the majority of goals and overall investment objective.

Real Estate:

The Real Estate program will be diversified across investment strategies and geographies. The Real Estate program has a target allocation of 7%, with a permissible range of 5% to 9%. The Real Estate program targets an allocation of 65% to core and 35% to non-core investments, with the permissible ranges as displayed below. The non-U.S. target is 0%, with a range between 0% and 30%.

The table below highlights the target allocation and permissible ranges for core and non-core real estate, as well as for geographic exposure.

SCERS Real Estate Portfolio Construction	Minimum	Target	Maximum
Total Real Estate Portfolio	5%	**7%**	9%
Core Real Estate	50%	**65%**	80%
Non-Core Real Estate	20%	**35%**	50%

Within the core real estate portfolio, exposure will primarily be comprised of open-end commingled funds (OECF), which provide SCERS with diversified exposure to stabilized properties and an element of liquidity. The majority of non-core real estate exposure will be attained through closed-end fund vehicles.

For Real Estate, one single investment position shall be limited to 2.5% of the net asset value (NAV) of SCERS' total fund. SCERS will strive to maintain ongoing long-term relationships with an expected range of 10 to 20 investment managers. The optimum number of investment vehicles in the portfolio and the maximum exposure to any one investment vehicle varies with time and will be evaluated as part of the Real Estate Asset Allocation Structure.

Real Assets:

The targeted and range of investment exposures to the identified Real Assets investment sub-asset classes and geographies are shown in the table below. These exposures should be measured on a fair value basis, once the Real Assets asset class is fully invested. The Real Assets portfolio is expected to invest globally. While Infrastructure is expected to have a global focus, infrastructure investments are expected to be made primarily within developed market countries. Energy investments are expected to be made primarily within North America, although investments outside of North America are permitted. Agriculture investments will also be global in nature, with a particular focus on investments within developed market countries and a few emerging market countries.

SCERS' Real Assets Portfolio Construction:

	Minimum	Target	Maximum
Total Real Assets Portfolio	5%	**7%**	9%
	Minimum	**Target**	**Maximum**
Infrastructure	30%	**45%**	60%
Energy	20%	**35%**	50%
Agriculture, Timber, Other	10%	**20%**	30%

SCERS will allocate approximately 5%-20% of the total Real Assets target allocation to each fund. SCERS will strive to maintain ongoing long-term relationships with approximately 15 real assets managers with an expected range of 10-20 manager relationships. The optimum number of investment vehicles in the portfolio and the maximum exposure to any one investment vehicle varies with time and will be evaluated as part of the Real Assets Asset Allocation Structure.

Liquid Real Return:

Liquid Real Return is given a 2% target allocation with a 0% to 3% range. While the Liquid Real Return allocation is a strategic allocation, a segment of it serves as a rebalancing proxy for the Overlay Program that will rebalance the overall Real Return asset category to its target allocation.

TIPS:

TIPS are set at a 0% long-term allocation with a 0% to 3% range to reflect the expectation that investing in TIPS is opportune when the imbedded expected breakeven rates of inflation are low and real yields are high.

3. Asset Class Specific Risk Considerations:

Real Estate:

Within the Real Estate asset class, investment risk will be addressed through diversification by region, type of property, lease renewal terms, maximum leverage, and debt renewal terms

- *Diversification by region, property type, and geography*.
  - SCERS will endeavor to limit the potential for any concentration in a type of real estate property (commercial building, industrial, apartment, and retail) or geography (South, West, Midwest, and North) to negatively impact long-term returns by investing across regions and strategies. This will involve comparing SCERS' core real estate portfolio against the allocation of property types and regions in the NFI-ODCE Index.

  - SCERS' Real Estate program will maintain diversification by property type and geography. The core and non-core real estate portfolio will have a maximum weighting to any one main property type of 40% and a maximum of 25% collectively for the Other property types as defined by the NFI-ODCE index. The U.S. geography weighting will be within +/-10% of the NFI-ODCE index. Exceptions may exist at different points in the market cycle, particularly with respect to targeted investments in the non-core real estate space, and will be monitored by Staff and consultant and reported to the Board in the quarterly performance report for real estate. An explicit exception is the non-U.S. real estate exposure, which may range from 0%-30%. When investments are made internationally, SCERS' Real Estate portfolio will potentially deviate from its primary real estate benchmark.

- *Diversification by lease and debt renewal terms.*
  - SCERS will strive to limit the potential for investments during any given year in the business cycle to negatively impact the long-term results by investing in underlying properties that, in aggregate, spread the risk of lease renewals and debt renewals across a number of years in the business cycle.

- *Real Estate leverage.*
  - Leverage on the Real Estate program can magnify both returns and losses. However, adding a moderate level of debt to a long-term real estate strategy has shown that it can be additive to returns over the long-term. Therefore, allowing flexibility to add debt during the expansionary phase of the cycle subject to a maximum limit will help ensure that a debt strategy will be accretive to returns. With this in mind, the loan-to-value (LTV) limits for the Real Estate program are as follows:

    - 40% maximum LTV for total core real estate program

- 75% maximum LTV for total non-core real estate program

These limits should provide adequate flexibility for the Real Estate program to operate through the real estate cycle, taking advantage of expansionary periods, but at the same time not increasing leverage beyond a point that will cause significant losses in a downturn in the cycle. However, if conditions warrant, Staff and consultant will approach the Board for approval of any exceptions to these debt guidelines.

Private Investments:

Private investments (e.g. real assets and real estate), like investments in most asset classes, bear an inherent risk that the actual return of capital, gains and income will vary significantly from the return and amounts expected. The expected volatility of private investments in aggregate is high among major asset classes. The investment risk associated with private investments shall be addressed in several ways:

- *Diversification by geography and investment strategy*. SCERS will endeavor to limit the potential for any concentration in a type of investment strategy or geography to negatively impact long-term returns in the Real Return asset category by investing across regions and strategies.

- *Diversification by vintage year.* SCERS will strive to limit the potential for investments during any given year in the business cycle to negatively impact the long-term results of the Real Return asset category by investing across business cycles and vintage years. It is anticipated that SCERS will commit to real assets funds over multiple years, whereby the aggregate amount will be spread across the entire business cycle. This will serve to limit the exposure or risk to investing and relying on the performance of real return funds in any given year of the business cycle. The Board will determine with Staff and consultant the funding allocation for the private segments of Real Return each year in conjunction with its annual review of the Asset Allocation Structure and Annual Investment Plan for asset classes such as Real Assets and Real Estate.

- *Diversification by industry or business sector.* SCERS will attempt to limit the potential for any one industry or business sector to negatively impact the long-term results by investing across a variety of industries.

- *Diversification by investment manager and general partner.* SCERS will endeavor to invest across a number of investment managers and limited partnerships to mitigate the potential negative impact of a concentrated portfolio of investment managers. The optimum number of investment vehicles in the portfolio and the maximum exposure to any one investment vehicle will vary with time and will be evaluated as part of the Real Return asset allocation structure.

4. Investment Vehicles: The vehicles for investments within the Real Return asset category reflect the broad scope of investments.

Private Real Estate and Real Assets investments generally take the form of open-end commingled funds and closed-end commingled funds, including commingled vehicles such as limited partnerships, limited liability companies, or offshore corporations.

SCERS may also invest in separate account relationships established with one or more fiduciary oversight managers. These managers will make commitments to physical assets such as properties, limited partnerships, or other entities such as limited liability companies or offshore corporations, either on a discretionary or advisory basis.

SCERS may also invest directly in fund-of-funds (FoF) vehicles. In these vehicles, the FoF invests in partnerships on a discretionary basis. FoFs will own the underlying partnerships and SCERS obtains contractual rights to the FoFs' portfolio through a limited partnership. A FoF will have investors other than SCERS.

Real Estate:
Specific to Real Estate, the majority of SCERS' core real estate exposure will be attained through open-ended core funds (OECFs), while the majority of SCERS' non-core real estate exposure will be attained through closed-end commingled funds (CECFs), generally through limited partnerships.

Investments in core real estate can also be made through core separate account (CSA) relationships established with fiduciary oversight managers. These managers make commitments to physical assets such as properties, limited partnerships, or other entities such as limited liability companies or offshore corporations. SCERS does not expect to utilize CSAs within the Real Estate program.

Investments can also include publicly traded REITs in open-end commingled funds, closed-end commingled funds, and separate direct ownership accounts.

Liquid Real Return and TIPS:
Investment vehicle options for investing in the Liquid Real Return and TIPS asset classes include separate accounts, in which assets are custodied at SCERS' custodian, and/or commingled funds, including limited partnerships and institutionally investor-focused mutual funds. Determinants as to whether SCERS will invest in a separate account versus a commingled fund include availability of a separate account option, complexity of the underlying assets, whether individual country markets require opening (i.e., emerging markets investing via a separate account), fee levels, transparency, and whether a

commingled fund's investment guidelines are consistent with SCERS' investment objective.

5. **Secondary Investments and Co-investments:** Secondary investments are made when an investor purchases the limited partnership interest of another investor in an existing fund. A co-investment is a direct investment in an underlying portfolio company where a manager offers investors the opportunity to invest directly in an underlying company alongside the fund investment. Investments may be made in companies that are either U.S. or non-U.S. domiciled. Neither secondary investments nor co-investments are considered separate investment strategies within Real Return. For example, a secondary or co-investment could be in any of the strategies including real estate, infrastructure, energy, agriculture, or timber. Therefore, secondary and co-investments will be categorized according to the underlying strategy and geography and will conform to the guidelines outlined in the above section on risk and diversification. SCERS will seek to allocate to secondary investments and co-investments on an opportunistic basis. It is expected that these investments will constitute a small portion of the overall Real Return asset category, if any.

6. **Investment Vehicle Concentration:**

   Real Estate and Real Assets:
   SCERS will not typically comprise more than 20% of any one investment vehicle at the initiation of the investment that is a limited partnership, limited liability company, or offshore corporation. An exception to this guideline is an investment in a FoF or a separate account, whereby SCERS may be the sole investor. In these circumstances, SCERS will endeavor to ensure that it does not generate a majority of the firm's overall profits.

   Liquid Real Return and TIPS:
   SCERS shall typically not comprise more than 20% of an investment strategy's assets under management at the initiation of the investment. Post-investment, SCERS shall monitor the investment strategy asset base, and SCERS' concentration relative to the asset base. An exception to this guideline is an investment in a separate account, whereby SCERS may be the sole investor. In these circumstances, SCERS will endeavor to ensure that it does not generate a majority of the firm's overall profits.

7. **Liquidity:** Overall, the Real Return asset category will maintain varying levels of liquidity based on the underlying sub-asset classes:

   Liquid Real Return and TIPS are anticipated to be very liquid; however, will offer varying degrees of liquidity depending on sector, region, and market capitalization for equities.

Investments in pooled vehicles such as fund-of-funds and open-end commingled funds (i.e., core real estate and segments of infrastructure, agriculture, and timber) are generally more liquid than closed-end funds (i.e., non-core real estate and segments of energy, infrastructure, agriculture, and timber), but less liquid in nature than publicly traded investments (i.e., stocks and REITs). Liquidity is generally based on fund specific redemption schedules, which are typically monthly and quarterly, subject to lock-up periods and investor-level gates. Real estate separate accounts properties generally have less liquidity and can require a price discount to be sold.

Investments in closed-end funds have limited liquidity. These vehicles have long expected holding periods such as 5-13 years. Investments are typically held until maturity and selling prior to maturity may result in realizing a sales price that reflects a discount to fair market value. Liquidity risk is managed by minimizing the possibility of forced sales that may arise from exceeding maximum exposure limits or lowering asset allocation targets to private real return investments.

8. Distributed Securities:

SCERS shall avoid the direct receipt of distributed securities from individual real return funds. However, if such receipt is unavoidable, SCERS shall ordinarily direct the sale of securities distributed by its investment vehicles as soon as practically possible and strive to not impair the value of the security.

Within Liquid Real Return and TIPS, SCERS shall typically seek receipt of distributed securities from investment managers. For separate accounts, assets are custodied at SCERS' custodian, which SCERS can liquidate at its own discretion. For commingled funds, SCERS generally prefers to receive distributed securities, which it can liquidate at its own discretion. The exception is for those funds that require that shares be redeemed from the fund, or if it is more prudent to have a fund redeem shares.

9. Performance Evaluation:

a. Performance of the Real Return asset category will be evaluated quarterly against the weighted average of the policy index benchmarks outlined in the 'Benchmarks' section above.

b. Individual investment vehicle performance will be evaluated on a quarterly basis compared to the performance of respective peer universes and vintage years (where applicable).

c. It is recognized that immature private investments within closed-end investment vehicles will ordinarily have a 'J-curve effect' whereby there are low to negative returns in the initial years due to the payment of investment management fees during a period when investments are typically carried at cost and returns have not been realized.

10. **Investment period to ramp-up:** It is recognized that it can take multiple years for segments of the Real Return asset category to be fully invested, and that there may be deviations from the previously mentioned targets during the ramp-up period. During the real assets and non-core real estate asset class ramp-up periods, exposures can be estimated using percentages of committed capital. During the ramp-up period for the Real Return asset category, and subsequent to reaching the target allocation, SCERS' Overlay Program will re-balance the Real Return asset category to the target allocation, using the designated Real Return overlay proxy within the investment guidelines for the Overlay Program.

11. **Rebalancing to guidelines:** It is anticipated that the majority of changes to rebalance the Real Return asset category will be made on a long-term basis due to: (1) the general illiquidity of the private investments, which often have investment horizons of 10-15 years; and (2) the significant discount that can be applied if and when private holdings are liquidated in the secondary market. Accordingly, when these guidelines are exceeded, it is anticipated that reducing exposures will be carried out within a long-term time-frame and over a period that is as soon as practical to reflect the illiquidity of many real return investment vehicles.

    SCERS utilizes an Overlay Program, managed by a strategic overlay manager, to equitize cash and to rebalance asset categories within SCERS' total portfolio, including the Real Return asset category. The asset categories are rebalanced to target allocations when upper or lower bands are breached. Rebalancing occurs quarterly, unless the respective bands are breached intra-quarter, in which case rebalancing occurs upon the breach of a band.

D. MONITORING

Through the monitoring process, Staff and consultant will extend the initial due diligence into a formal quarterly, semi-annual, and annual process which regularly seeks to determine whether the manager is meeting the Real Return asset category's, and its underlying asset class's, investment objectives and other requirements. In the broadest sense, the monitoring process is intended to determine whether the initial reasons for selecting the strategy and investment vehicle remain valid. The monitoring process will disclose whether there has been any material deviation from the investment philosophy and process; the personnel responsible for managing the investment vehicle are still in place; the organization continues to be stable; performance and risk meet expectations; and the investment vehicle manager adheres to its investment and other requirements. The underlying principle of the monitoring program is to determine whether all risks to which SCERS is exposed through the use of outside investment advisors have been identified, understood, and, to the extent possible, controlled. The monitoring process focuses on four areas:

- Compliance with reporting and valuation requirements;
- Continuity of investment philosophy and process;
- Stability of personnel and organization; and
- Performance and risk management.

Staff and consultant will aggregate investment vehicle data and perform analysis on the overall Real Return asset category, and its underlying asset classes, paying careful attention to individual investment vehicle allocations and strategy/sector concentrations to strive to achieve proper diversification across the Real Return asset category. Staff and consultant will also conduct due diligence with the respective investment vehicle managers to understand the underlying drivers of performance. Additionally, Staff and consultant will conduct portfolio reviews and on-site due diligence as necessary. Site visits will also be performed to confirm that appropriate infrastructure is in place to support the investment process. Staff and consultant will provide the Board with regular performance reports and advise the Board of other matters as appropriate.

If, during the monitoring process, SCERS identifies areas of the Real Return asset category that are not compliant with the objectives, guidelines, and constraints, identified in this investment policy statement, then reasonable efforts will be made to cure the deficiency. These reasonable efforts will consider the illiquidity of the asset class and transaction costs to be incurred compared to the risk of non-compliance.

E. IMPLEMENTATION PROTOCOL

The following implementation protocol describes the allocation of investment authority and responsibilities between SCERS' Board, Staff, and consultants. Overall, the Real Return implementation protocol delegates the most time intensive elements of the process to Staff and consultant, while preserving the Board's oversight of the overall Real Return asset category.

The Board will approve the long-term Asset Allocation Structure for the individual asset classes within the Real Return asset category, as developed and presented by Staff and Consultant. These include Real Estate, Real Assets, in addition to any exposure to Liquid Real Return and TIPS. The long-term Asset Allocation Structure for underlying Real Return asset classes will articulate the long-term direction and objectives of each asset class including elements such as: (1) asset allocation targets and ranges by strategy and geography, and types of investment vehicles; (2) a target range for the number of investment managers for Real Estate and Real Assets; and, (3) the role of Fund of Funds and strategic partners.

On an annual basis, the Board will approve the Annual Investment Plan for the individual assets classes within the Real Return asset category. The Annual Investment Plan will articulate the direction over the next year in taking the necessary steps to achieve the above objectives of the long-term Asset Allocation Structure of the underlying asset classes.

The execution of the long-term Asset Allocation Structure and Annual Investment Plan will vary between that of Real Estate and Real Assets, and that of Liquid Real Return and TIPS.

1. Real Estate and Real Assets:

For the Real Estate and Real Assets asset classes, the execution of the long-term Asset Allocation Structure and Annual Investment Plan including the selection of investment managers will be delegated to Staff, subject to the Board's ability to review, discuss, and object to the recommendations of Staff and consultant during the investment protocol process.

The key features of the proposed Real Estate and Real Assets investment protocol are as follows:

- Staff and consultant will identify the most qualified candidates for a prospective real estate or real assets investment commitment based on: (a) the Asset Allocation Structure for the underlying asset classes approved by the Board; and (b) the Annual Investment Plan for the underlying asset classes approved by the Board (which takes into account SCERS' existing real estate and real assets investments and prioritizes and targets optimal new investment opportunities expected to come to market in the next twelve months).

- When a particular manager candidate is identified, Staff and consultant will pursue extensive due diligence on the manager candidate, including conducting extended interviews with the portfolio managers and other key members of the investment team.

- The consultant will complete its investment strategy and operational due diligence reports, if they have not done so already. Legal counsel will begin reviewing the documentation for the possible commitment and preliminary negotiation of deal terms will take place.

- Staff will prepare a detailed report for the Board outlining the basis for the potential commitment, the contemplated commitment amount, the target date for closing on the commitment, and an assessment of the fit within SCERS' portfolio. The report will include an evaluation of the organization, investment strategy, considerations and risks, and track-record, as well as an operational assessment and a review of the investment's terms.

- If/When: (a) The due diligence process is completed; (b) deal terms have been determined; (c) staff and consultant have concluded that a commitment should be made; then (d) staff will prepare a final report for the Board outlining the basis for the decision, the proposed commitment amount, and the target date for closing on the commitment. The final report will also summarize the due diligence items that have been completed in order to move forward with a commitment, as well as any considerations that have arisen since the issuance of the initial reports by Staff and the consultant.

- At any point in the process, questions or concerns by any trustee regarding a proposed investment or proposed manager will be communicated to the Chief Executive Officer (CEO). The CEO will be responsible for assuring that a prompt response is provided. The CEO will also provide the full Board with the response. If a Board member is not satisfied with the response, the Board member can request that the matter be brought to the full Board for consideration. In such a case, the CEO will refer the matter to the Board President who will determine whether the manager search process should be suspended until the matter is resolved. As a general rule, it is anticipated that the process of identifying and vetting a proposed investment will take place over a period of time sufficient to allow, if necessary, for full Board consideration of questions or concerns before a commitment is finalized.

- Absent questions or concerns by the Board, the proposed investment will be finalized and the necessary documentation executed.

- SCERS' Board President or Chief Executive Officer are authorized to execute any and all documents which may reasonably be required to complete any Real Estate or Real Assets investment on behalf of SCERS.

- Staff and consultant will confirm that the commitment has been made, and the amount allocated to SCERS, at a subsequent Board meeting.

- Specific to Real Estate, Staff and consultant also possess authority to make adjustments to the Real Estate portfolio in order to assure that the portfolio is optimally aligned to achieve the objectives of the Real Estate asset class and overall Real Return asset category. This includes, but is not limited to the authority to: (1) trim or add to existing investment mandates; (2) terminate and/or replace an existing manager; (3) submit redemption requests; (4) determine the appropriate sources for funding a new mandate or adding to an existing mandate; and, (5) determine the appropriate application of any returned capital.

    - As with new investments, such decisions will be made within the framework of the Real Estate asset class plan approved by the Board. If and when Staff and consultant determine that such actions are necessary, a timely report will be prepared for the Board outlining why the action is deemed necessary and how it impacts the Real Estate portfolio.

2. Liquid Real Return and TIPS:

Overall, the Liquid Real Return and TIPS implementation protocol delegates the most time intensive elements of the process to Staff and consultant, including the screening and evaluation leading to the recommendation to engage or terminate a particular investment manager. The Board provides oversight of the overall Liquid Real Return and TIPS portfolios, and makes the final decision regarding engagement or termination of investment managers.

The key features of the Liquid Real Return and TIPS implementation protocol are as follows:

- If Staff and the consultant believe that a change is necessary to the manager structure in order to obtain optimal performance from the asset class, Staff and the consultant will present the Board with a report outlining the basis for their conclusion including how the change under consideration would fit within: (a) the allocation model for the asset class approved by the Board; and (b) the twelve month investment plan approved by the Board.

- Staff and the consultant will then identify the most qualified candidates to bring into the manager structure based on the full range of relevant factors regarding the manager, its investment team, and strategy. Staff will prepare a report for the Board outlining why the managers in question have been identified for closer evaluation for a possible commitment. The consultant will also provide investment strategy and operational due diligence reports.

- Staff and the consultant will pursue more extensive due diligence on the manager candidates, including conducting extended interviews with the portfolio managers and other key members of the investment team. Legal counsel will begin reviewing the documentation for the possible engagement and preliminary negotiation of deal terms will take place.

- If/When: (a) the due diligence process is completed; (b) deal terms have been determined; (c) staff and the consultant have determined which manager to recommend to the Board; then (d) staff will prepare a report to the Board outlining the basis for the decision, the proposed commitment amount, and the target date for closing on the commitment.

- At any point in the process, questions or concerns by a Board member regarding a proposed investment or proposed manager can be communicated to the Chief Executive Officer (CEO). The CEO will be responsible for assuring that a prompt response is provided. The CEO will also provide the full Board with the response. If the Board member is not satisfied with the response, the Board member can request that the matter be brought to the full Board for consideration. In such a case, the CEO will refer the matter to the Board President who will determine whether the manager search process should be suspended until the matter is resolved. As a general rule, it is anticipated that the process of identifying and vetting a proposed investment will take place over a period of time sufficient to allow, if necessary, for full Board consideration of questions or concerns before a recommendation is finalized.

- The manager being recommended for the engagement will make a presentation to the Board. At that time the Board can address any questions or concerns regarding the recommended candidate as well as any previously raised questions or concerns regarding another candidate or candidates. The Board can (a) approve engagement of the recommended manager; (b) direct that one or more alternative candidates be brought forward for consideration; (c) request further information regarding a candidate or candidates; or (d) take any other action the Board deems appropriate.

- If the new investment manager engagement also involves the recommended termination of an existing manager, Staff and the consultant will develop and report to the Board on the reasons, timeline and plan for terminating the existing engagement, and transitioning the assets from the outgoing manager to the incoming manager. The Board will take action on the recommended termination.

- If Staff and the consultant determine that it would be advisable to physically re-balance the portfolio at the same time as making the investment manager structure changes, Staff and consultant will prepare a report for the Board outlining the recommended physical re-balancing and why it is necessary and appropriate. The Board will take action on the recommended physical re-balancing.

- Upon approval by the Board: (a) the new investment engagement will be finalized and the necessary documentation executed; (b) the engagement with the outgoing manager will be terminated; and (c) the transition plan, and any necessary physical re-balancing, will be implemented.

- SCERS' Board President or Chief Executive Officer are authorized to execute any and all documents which may reasonably be required to complete a new investment engagement, to terminate an engagement with an outgoing manager, and to effectuate a transition of assets on behalf of SCERS.

- Staff and the consultant will report to the Board when the manager structure changes and any necessary re-balancing have been completed, along with an analysis of the costs associated with the transition.

F. POLICY HISTORY

Date	Description
07-19-2017	Board adopted Real Estate asset class investment policy statement
08-16-2017	Board adopted Real Assets asset class investment policy statement
11-05-2018	Board adopted reformatted and consolidated Real Return asset category investment policy statement
03-20-2019	Amended Real Return asset category investment policy statement
03-18-2020	Amended Real Return asset category investment policy statement
06-16-2021	Amended Real Return asset category investment policy statement