

Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

| MEETING DATE: | November 7, 201 | 17 | Agenda Item 6 |
|----------------|------------------|----------------------------|---------------------|
| SUBJECT: | Portfolio Rebala | ncing Report – Third Q | uarter 2017 |
| SUBMITTED FOR: | <u>X</u> Consent | Deliberation and Action | Receive and File |

RECOMMENDATION

Staff recommends that the Board receive and file the quarterly asset allocation and rebalancing report, including any physical rebalancing recommendations made therein.

PURPOSE

To provide the Board with a review of SCERS' current asset allocation as it compares to established targets and ranges, in addition to any recommended physical rebalancing adjustments.

BACKGROUND

SCERS employs an Overlay Program, which is managed by State Street Global Advisors ('SSGA'), to rebalance the asset allocation to policy targets and minimize the risk that SCERS falls short of achieving its targeted return due to the asset allocation straying from policy target ranges. SCERS' overlay proxies and rebalancing ranges are attached in **Appendix 1**. The rebalancing methodology utilized by SSGA is quarterly rebalancing with 10% bands on traditional asset classes (equities and fixed income), and 20% bands on alternative asset classes (absolute return, private equity and real assets). With this method, rebalancing occurs on a quarterly basis, unless the bands are breached on an intra-quarter basis, in which case rebalancing occurs upon the breach of a band.

While SCERS' Overlay Program reduces the need for physical rebalancing, it does not eliminate it, as there are circumstances whereby physical rebalancing would be a better solution compared to the Overlay Program, including: (1) When there is low correlation between the overlay proxies designed to replicate the underlying asset classes and managers, as is the case with many alternative assets; (2) When there are strong benefits to active management; and (3) When there is a persistently large difference between physical assets and the target allocation.

While physical rebalancing typically costs more to execute compared to the Overlay Program, it remains important to assess whether SCERS' portfolio is at a point where physical rebalancing warrants greater consideration.

It should be noted that this rebalancing report is based on SCERS' prior asset allocation. The Board approved a new strategic asset allocation during the first quarter of 2017; however, the rebalancing report will not be converted to the new asset allocation until the Overlay Program is switched to the new asset allocation, which is anticipated to occur during the fourth quarter of 2017 or the first quarter of 2018. The Overlay Program is currently being reviewed to make modifications to the program in accordance with SCERS' new asset allocation. Once modifications to the Overlay Program are proposed and approved by the Board, then the Overlay Program and this rebalancing report will be adjusted in-line with the new asset allocation.

DISCUSSION

Since SCERS' Overlay Program rebalances SCERS' total fund, it is important to bear in mind that **Tables 1-7** reported below refer only to physical holdings compared to policy targets, and not the exposures provided through the Overlay Program, except for Table 6 (Real Assets), which includes the SSGA Real Assets Strategy, which is the proxy for this asset class.

As noted, SCERS rebalances the fund via both the Overlay Program and physically purchasing or selling assets. The Overlay Program is particularly effective in rebalancing public market assets due to the low tracking error of the underlying proxies compared to public market managers and the higher expenses of purchasing and liquidating interests held by investment managers. On the other hand, the Overlay Program is not as effective in tracking alternative assets because it is limited to the use of public market proxies. Public market proxies will not, for example, be able to replicate the 'illiquidity premium' or higher returns achieved historically by private equity and private real assets, or the 'absolute' return characteristics of SCERS' Absolute Return portfolio, including their historic ability to outperform equity markets in times of distress. Accordingly, it is beneficial for SCERS to continue to physically purchase alternative assets in achieving its asset allocation targets rather than to heavily rely on the Overlay Program to rebalance these assets to the target allocations.

SCERS' investment staff ('Staff') and general investment consultant Verus Advisory ('Verus') monitor the asset allocation on a quarterly basis and update the Board if the asset allocation moves outside of policy ranges and conditions warrant physical rebalancing.

Domestic Equities:

As depicted in **Table 1** below, SCERS' Domestic Equity asset class actual weighting of 24.3% is above SCERS' prior policy target of 22.5%, but within range *(as you will recall, the new SCERS asset allocation has a Domestic Equity target of 21.0%)*. SCERS last physically rebalanced this asset class during the fourth quarter of 2016 by reducing exposure to SCERS' U.S. large cap investment managers and U.S. REIT manager. As a reminder SCERS' Domestic Equity exposure had become significantly overweight due to continuing

outperformance of U.S. equities over international equities and fixed income. Since the rebalance, U.S. equities have continued to perform well, which is the reason for the overweight within the asset class.

At the sub-asset class level, domestic large cap, at a 19.3% allocation is above the target allocation of 18.2%, but within range. Domestic small cap, at a 3.9% allocation is above the target allocation of 3.2%, and slightly out of range. Domestic REITs, at a 1.1% allocation is inline with the target allocation of 1.1%.

SCERS' overlay manager, State Street, at the direction of Staff, buys and sells Russell 1000 and 2000 Index futures to rebalance the Domestic Equity asset class to the policy target allocation, when physical rebalancing is not required. As mentioned previously, these proxies are very effective in rebalancing domestic equities due to the low tracking error of the underlying proxies compared to public market investment managers. Staff does not recommend physical rebalancing of this asset class at this time.

| Domestic Equity | | Market Value | Actual | Target | Delta % | Target Low | Target High |
|---------------------------------------|---|-----------------|--------|--------|------------|---------------|----------------|
| | a log barren and | \$2,123,628,182 | 24.3% | 22.5% | 1.8% | 20.3% | 24.8% |
| AllianceBernstein | Equity Core Index | \$1,104,585,404 | 12.7% | 12.2% | 0.5% | | |
| JP Morgan 130/30 | Equity Core Active Short Extension (130/30) | \$111,171,269 | 1.3% | 1.1% | 0.1% | | |
| Eagle Capital Management | Equity Large Cap Core | \$233,943,994 | 2.7% | 2.5% | 0.2% | | |
| Brown Advisory | Equity Large Cap Growth | \$117,019,878 | 1.3% | 1.2% | 0.1% | | |
| Huber Capital Management | Equity Large Cap Value | \$116,020,245 | 1.3% | 1.2% | 0.1% | | |
| | Equity Large Cap | 100 Mar 100 M | 19.3% | 18.2% | 1.1% | 14.6% | 21.8% |
| Dalton, Greiner, Hartman, Maher & Co. | Equity Small Cap Value | \$80,657,535 | 0.9% | 0.8% | 0.1% | | |
| Wedge Capital Management | Equity Small Cap Value | \$89,968,827 | 1.0% | 0.8% | 0.2% | | |
| Weatherbie & Co. | Equity Small Cap Growth | \$105,559,573 | 1.2% | 0.8% | 0.4% | | |
| UBS Global Asset Management | Equity Small Cap Growth | \$68,320,061 | 0.8% | 0.8% | 0.0% | | |
| | Equity Small Cap | | 3.9% | 3.2% | 0.8% | 2.6% | 3.8% |
| CenterSquare Investments | Domestic REIT | \$96,381,397 | 1.1% | 1.1% | 0.0% | 0.9% | 1.4% |

Table 1: Domestic Equity Asset Allocation (as of September 30, 2017)

International Equities:

As depicted in **Table 2** below, SCERS' International Equity allocation is 23.4%, which is above SCERS' prior policy target of 22.5%, but within range **(as you will recall, the new SCERS) asset allocation has an International Equity target of 20.0%)**. The overweight is due to the strong performance of international equities over the past couple of quarters.

At the sub-asset class level, international large cap, at a 16.0% allocation is above the target allocation of 14.9%, but within range. International small cap, at a 2.6% allocation is above the target allocation of 2.3%, but within range. Emerging markets equity, at a 3.8% allocation is under the policy target allocation of 4.3%, but within range. International REITs, at a 1.0% allocation is slightly below its target allocation of 1.1%, but within range. Staff does not recommend physical rebalancing of this asset class at this time.

SSGA, at the direction of Staff, buys and sells MSCI World Ex-US and MSCI Emerging Markets Index futures to rebalance this asset class to the policy target allocation, when

physical rebalancing is not required. As mentioned previously, these proxies are very effective in rebalancing international equities due to the low tracking error of the underlying proxies compared to public market investment managers. Staff does not recommend physical rebalancing of this asset class at this time.

Table 2: International Equity Asset Allocation (as of September 30, 2017)

| International Equity | Asset Class / Sub Asset Class | Market Value | Actual | Target | Delta % | Target Low | Target High |
|--|---------------------------------------|-----------------|--------|--------|------------|---------------|----------------|
| | | \$2,045,083,670 | 23.4% | 22.5% | 0.9% | 20.3% | 24.8% |
| Lazard Asset Management | ACWI Ex-US | \$468,582,681 | 5.4% | 4.5% | 0.9% | | |
| LSV Large Cap International Value | International Equity Large Cap Value | \$526,742,666 | 6.0% | 5.2% | 0.9% | | |
| Walter Scott | International Equity Large Cap Growth | \$404,454,902 | 4.6% | 5.2% | -0.5% | | |
| | International Equity Large Cap | | 16.0% | 14.9% | 1.2% | 11.9% | 17.9% |
| William Blair & Co. | International Equity Small Cap Growth | \$126,120,658 | 1.4% | 1.1% | 0.3% | | |
| Mondrian Investment Partners | International Equity Small Cap Value | \$104,481,460 | 1.2% | 1.1% | 0.1% | | |
| | International Equity Small Cap | | 2.6% | 2.3% | 0.4% | 1.8% | 2.7% |
| Baillie Gifford | Emerging Markets Equity - All Cap | \$132,454,798 | 1.5% | 1.8% | -0.3% | | |
| Mondrian Emerging Markets Equity Fund, LP | Emerging Markets Equity - All Cap | \$141,528,824 | 1.6% | 1.8% | -0.2% | | |
| William Blair Emerging Markets Small Cap Growth Fund | Emerging Markets Small Cap | \$29,978,386 | 0.3% | 0.3% | 0.0% | | |
| Mondrian Emerging Markets Small Cap Equity Fund, LP | Emerging Markets Small Cap | \$25,686,435 | 0.3% | 0.3% | 0.0% | | |
| | Emerging Markets | | 3.8% | 4.3% | -0.5% | 3.4% | 5.2% |
| CBRE Clarion | International REIT | \$85,052,860 | 1.0% | 1.1% | -0.2% | 0.9% | 1.3% |

Fixed Income:

As depicted in **Table 3** below, SCERS' Fixed Income allocation is 17.7%, which is below SCERS' prior policy target of 20.0%, but within range (as you will recall, the new SCERS asset allocation also has an aggregate Fixed Income target of 20.0%). SCERS' overlay manager, State Street, at the direction of Staff, utilizes a combination of U.S. Treasury futures, Mortgage TBAs, investment grade credit ETFs and Barclays Capital Aggregate total return swaps (when appropriate) to rebalance this asset class to its policy target allocation. Staff does not recommend physical rebalancing for this asset class at this time.

Table 3: Fixed Income Asset Allocation (as of September 30, 2017)

| Fixed Income | Asset Class / Sub Asset Class | Market Value | Actual | Target | Delta % | Target Low | Target High |
|--|-----------------------------------|-----------------|--------|--------|------------|---------------|----------------|
| | | \$1,548,221,032 | 17.7% | 20.0% | -2.3% | 18.0% | 22.0% |
| Neuberger Berman | Fixed Inc Enhanced Index | \$354,436,699 | 4.1% | 5.0% | -0.9% | | - |
| Prudential Investment Management | Fixed Inc Active Core Plus | \$416,720,482 | 4.8% | 5.0% | -0.2% | | |
| TCW/MetWest | Fixed Inc Active Core Plus | \$374,575,109 | 4.3% | 5.0% | -0.7% | | |
| | Core/Core Plus | | 13.1% | 15.0% | -1.9% | | |
| Brandywine Global | Global Opportunistic Fixed Income | \$230,191,165 | 2.6% | 3.0% | -0.4% | | |
| Brigade Capital SC Opportunities Mandate | Strategic Credit | \$172,297,577 | 2.0% | 2.0% | 0.0% | | |

Absolute Return:

As shown in **Table 4** below, SCERS' Absolute Return allocation is 8.9%, which is below SCERS' prior policy target of 10.0%, but within range (as you will recall, the new SCERS asset allocation also has an aggregate Absolute Return target of 10.0%, broken out between growth oriented and diversifying absolute return strategies). As you will recall, SCERS fills in a portion of its Absolute Return allocation through its investment with the Grosvenor SC Absolute Return Fund, Series B ('SCARF B'), a more liquid version of the Grosvenor SC Absolute Return Fund, Series A ('SCARF') SCERS is invested in. SCARF B serves as an interim absolute return component for SCERS as the direct absolute return portfolio is built out. During the first quarter, SCERS did not make any direct absolute return investments. SSGA, at the direction of Staff, utilizes a custom basket of equity and fixed income futures to fill in any gap between the target and actual allocation within the Absolute Return portfolio.

 Table 4: Absolute Return (as of September 30, 2017)

| Absolute Return | Asset Class / Sub Asset Class | Market Value | Actual | Target | Delta % | Target Low | Target High |
|---|-------------------------------|---------------|--------|--------|------------|---------------|----------------|
| | | \$778,459,846 | 8.9% | 10.0% | -1.1% | 8.0% | 12.0% |
| Grosvenor | Equity Long/Short | \$410,243 | 0.0% | - | | - | |
| Grosvenor SC Absolute Return Fund, Series A | Diversified Separate Account | \$260,950,859 | 3.0% | | | | |
| Grosvenor SC Absolute Return Fund, Series B | Diversified Separate Account | \$70,375,990 | 0.8% | | | | |
| OZ Domestic Partners II, LP | Multi Strategy | \$45,716,520 | 0.5% | | | | |
| Elliott Associates LP | Event Driven | \$50,533,755 | 0.6% | | | | |
| Third Point Partners Qualified, LP | Event Driven | \$46,753,720 | 0.5% | | | | |
| Claren Road Credit Partners, LP | Credit | \$1,853,059 | 0.0% | | | | |
| AQR Delta Fund II, LP | Bottom Up Replication | \$70,651,140 | 0.8% | | | | |
| Lakewood Capital Partners, LP | Equity Long/Short | \$44,653,851 | 0.5% | | | | |
| Jana Partners Qualified, LP | Equity Activist & Long/Short | \$41,172,425 | 0.5% | | | | |
| Laurion Capital Management, LP | Volatility Arbitrage | \$40,898,024 | 0.5% | | | | |
| Brevan Howard Master Fund, LP | Discretionary Global Macro | \$34,490,260 | 0.4% | | | | |
| Winton Diversified Futures Fund, L.P. | Systematic Global Macro | \$35,000,000 | 0.4% | | | | |
| Graham Tactical Trend Fund , L.P. | Systematic Global Macro | \$35,000,000 | 0.4% | | | | _ |
| | | | | | | | |

Private Equity:

As outlined in **Table 5** below, SCERS' Private Equity allocation is 7.4%, which is 2.6% below the policy target of SCERS' prior asset allocation of 10%, and slightly below the lower bound of 8.0% (as you will recall, the new SCERS asset allocation has a Private Equity target of 9.0%). SSGA, at the direction of Staff, utilizes Russell 2000 index futures to rebalance SCERS' Private Equity allocation. As previously mentioned, this proxy is less than optimal in replicating private equity, and it would be better to invest capital into physical private equity holdings. As you will recall; however, the commitment schedule and cash flow forecast of Private Equity investments do not project SCERS achieving and maintaining the policy target until 2019 (both for the prior 10% target and the new 9% target). During the quarter, SCERS made a \$35 million commitment to Davidson Kempner Long-Term Distressed Opportunities Fund IV, L.P. and a \$25 million commitment to Spectrum Equity Fund VIII, L.P.

Please note that there is one investment within the Opportunities portfolio (Atalaya Special Opportunities Fund V, LP) which draws capital from the Private Equity asset class, as this is the asset class with the closest risk and return profile of the opportunity being invested in by this fund. The market value of this investment is \$10.5 million, which equates to a 0.1% allocation, and brings SCERS' total allocation in Private Equity to 7.5%.

Table 5: Private Equity (as of September 30, 2017)

| Private Equity | Asset Class / Sub Asset Class | Market Value | Actual | Target | Delta % | Target Low | Target High |
|---|---|---------------|--------|--------|------------|---------------|----------------|
| | | \$646,654,217 | 7.4% | 10.0% | -2.6% | 8.0% | 12.0% |
| HarbourVest Partners VIII | Private Equity - FoF | \$24,042,795 | 0.3% | | | | |
| Abbott Capital ACE VI | Private Equity - FoF | \$58,675,492 | 0.7% | | | | |
| Goldman Sachs PEP X | Private Equity - FoF | \$36,386,704 | 0.4% | | | | |
| Harbourvest Partners Intl VI | Private Equity - FoF | \$36,321,120 | 0.4% | | | | |
| Khosla Ventures IV, LP | Private Equity - Venture Capital | \$12,522,025 | 0.1% | | | | |
| Waterland Private Equity Fund V, CV | Private Equity - European Buyout | \$12,853,136 | 0.1% | | | | |
| Summit Partners VC Fund II, LP | Private Equity - Growth Equity | \$18,833,508 | 0.2% | | | | |
| Summit Partners Credit Fund, LP | Private Equity - Credit | \$6,106,956 | 0.1% | | | | |
| Garrison Opportunity Fund III, LP | Private Equity - Distressed | \$13,798,508 | 0.2% | | | | |
| Accel-KKR Capital Partners IV, LP | Private Equity - Buyout | \$8,394,064 | 0.1% | | | | |
| New Enterprise Associates 14, LP | Private Equity - Venture Capital | \$35,680,865 | 0.4% | | | | |
| H.I.G. Bayside Loan Opportnity III (Europe), LP | Private Equity - Distressed | \$21,626,877 | 0.2% | | | | |
| Trinity Ventures XI, LP | Private Equity - Venture Capital | \$23,460,491 | 0.3% | | | | |
| Wayzata Opportunities Fund III, LP | Private Equity - Distressed | \$8,080,726 | 0.1% | | | | |
| H.I.G. Capital Partners V, LP | Private Equity - Buyout | \$2,825,914 | 0.0% | | | | |
| RRJ Capital Master Fund II, LP | Private Equity - Asian Buyout/Special Situations | \$19,542,037 | 0.2% | | | | |
| Marlin Equity Partners IV, LP | Private Equity - Buyout | \$14,296,366 | 0.2% | | | | |
| H.I.G. Europe Capital Partners II, LP | Private Equity - European Buyout | \$4,017,707 | 0.0% | | | | |
| Dyal Capital Partners II, LP | Private Equity - Other | \$8,576,569 | 0.1% | | | | |
| Summit Partners Credit Fund II, LP | Private Equity - Credit | \$21,595,539 | 0.2% | | | | |
| TPG Opportunities Partners II, LP | Private Equity - Distressed | \$18,279,177 | 0.2% | | | | |
| Marlin Heritage, LP | Private Equity - Buyout | \$5,599,695 | 0.1% | | | | |
| Accel-KKR Structure Capital II, LP | Private Equity - Buyout | \$4,377,369 | 0.1% | | | | |
| Thoma Bravo Fund XI. LP | Private Equity - Buyout | \$32,473,621 | 0.4% | | | | |
| Spectrum Equity Investors VII, LP | Private Equity - Venture Capital | \$16,093,306 | 0.4% | | | | |
| Khosla Ventures V, L.P. | Private Equity - Venture Capital | \$13,137,798 | 0.2% | | | | |
| Linden Capital Partners III, LP | Private Equity - Venture Capital Private Equity - Buyout | \$21,166,573 | 0.2% | | | | |
| New Enterprise Associates 15, LP | Private Equity - Venture Capital | \$28,791,190 | 0.2% | | | | |
| | | | | | | | |
| Waterland Private Equity Fund VI, CV | Private Equity - European Buyout | \$12,532,414 | 0.1% | | | | |
| Waterland Private Equity Fund VI Overflow, CV | Private Equity - European Buyout | \$785 | 0.0% | | | | |
| Athyrium Opportunities Fund II, LP | Private Equity - Healthcare Direct Lending | \$22,076,865 | 0.3% | | | | |
| RRJ Capital Master Fund III, LP | Private Equity - Asian Buyout/Special Situations | \$13,325,568 | 0.2% | | | | |
| Accel-KKR Capital Partners V, LP | Private Equity - Buyout | \$4,480,698 | 0.1% | | | | |
| Summit Partners Venture Capital Fund IV, LP | Private Equity - Growth Equity | \$9,194,939 | 0.1% | | | | |
| Trinity Ventures XII, LP | Private Equity - Venture Capital | \$7,478,567 | 0.1% | | | | |
| TSG7 A, LP | Private Equity - Buyout | \$5,063,846 | 0.1% | | | | |
| TSG7 B, LP | Private Equity - Buyout | \$294,004 | 0.0% | | | | |
| Atalaya Special Opportunities Fund VI, LP | Private Equity - Distressed | \$15,404,281 | 0.2% | | | | |
| Thoma Bravo Fund XII, LP | Private Equity - Buyout | \$11,668,682 | 0.1% | | | | |
| Marlin Heritage Europe, LP | Private Equity - Buyout | \$3,033,530 | 0.0% | | | | |
| Dyal Capital Partners III, LP | Private Equity - Other | \$8,593,041 | 0.1% | | | | |
| Marlin Equity Partners V, LP | Private Equity - Buyout | \$0 | 0.0% | | | | |
| Marlin Heritage II, LP | Private Equity - Buyout | \$0 | 0.0% | | | | |
| New Enterprise Associates 16, LP | Private Equity - Venture Capital | \$2,450,000 | 0.0% | | | | |
| Athyrium Opportunities Fund III, LP | Private Equity - Healthcare Direct Lending | \$3,500,868 | 0.0% | | | | |
| Summit Partners Europe Growth Equity Fund II, LP | Private Equity - Venture Capital | \$0 | 0.0% | | | | |
| Davidson Kempner Long-Term Distressed Opportunities Fund IV, LP | Private Equity - Distressed | \$0 | 0.0% | | | | |
| Spectrum Equity Fund VIII, LP | Private Equity - Venture Capital | 50 | 0.0% | | | | |

Real Assets:

As depicted in **Table 6** below, SCERS' Real Assets allocation is 13.1%, which is 1.9% below the policy target of SCERS' prior asset allocation of 15%, but within the allowable range.

As you will recall, the Real Assets <u>asset class</u> has been reclassified as the Real Return <u>asset category</u>, which includes the underlying Real Estate, Private Real Assets, Commodities and TIPS asset classes. The new Real Return asset category has a target allocation of 16.0%.

The Real Assets allocation of 13.1% referenced above, includes a 2.5% allocation to the SSGA Real Assets Strategy, which is the overlay proxy used by SSGA. SCERS' actual Real

Assets allocation (not including the overlay proxy) is 10.6%, which is farther below the prior 15.0% target allocation (as well as the new Real Return 16.0% target allocation), and is primarily due to the allocation gap in the private real assets segment.

SSGA utilizes the SSGA Real Assets Strategy within the Overlay Program to rebalance SCERS' Real Assets allocation close to the target. This is a series of commingled funds and separate accounts that provides diversified exposure to a blend of global listed infrastructure stocks, commodities, global natural resource equities, REITs, TIPS (Treasury Inflation Protected Securities) and midstream energy companies. While not a perfect proxy, this blend does provide SCERS with inflation protection, diversified returns and moderate levels of yield. Given that this proxy represents physical exposure through a mix of commingled funds and separate accounts rather than derivatives exposure (like the rest of the Overlay Program uses), it is represented within the asset allocation for SCERS. This fund will be drawn down as SCERS continues to build exposure to the Real Return asset category, particularly Private Real Assets. It should be noted that the composition of the SSGA Real Assets Strategy is being reviewed for potential modifications to better align with SCERS' new asset allocation.

Among the Real Assets sub asset classes, the core real estate allocation is at 6.6%, which is slightly below the 7.0% target allocation, but within the allowable range. The private real assets allocation is at 3.2%, which is well below the 6.0% target, and similar to the Private Equity asset class, will continue to be built out over the next few years. SCERS' commodities allocation is 0.7%, which is below the target allocation of 2.0%, but within the range of 0.0% to 3.0%. During the quarter, SCERS made a \$50 million commitment to Meridiam Infrastructure North America III, L.P. and a \$40 million commitment to Quantum Energy Partners VII, L.P.

| Real Assets | Asset Class / Sub Asset Class | Market Value | Actual | Target | Delta % | Target Low | Target High |
|---|-------------------------------|-----------------|--------|--------|------------|---------------|----------------|
| | | \$1,146,511,089 | 13.1% | 15.0% | -1.9% | 12.0% | 18.0% |
| Blackrock Realty Advisors Portfolio I | Core Real Estate | \$163,073,325 | 1.9% | | | _ | |
| Blackrock Realty Advisors, Portfolio II | Core Real Estate | \$1,593,425 | 0.0% | | | | |
| Cornerstone Realty Advisors | Core Real Estate | \$66,009,037 | 0.8% | | | | |
| Morgan Stanley Prime Property Fund | Core Real Estate | \$52,320,561 | 0.6% | | | | |
| MetLife Core Property Fund, LP | Core Real Estate | \$52,543,370 | 0.6% | | | | |
| Jamestown Premier Property Fund LP | Core Real Estate | \$19,250,478 | 0.2% | | | | |
| Prologis Targeted Europe Logistics Fund, LP | Core Real Estate | \$33,087,622 | 0.4% | | | | |
| Prologis Targeted US Logistics Fund, LP | Core Real Estate | \$54,695,886 | 0.6% | | | | |
| Principal US Property Account | Core Real Estate | \$41,424,075 | 0.5% | | | | |
| Townsend Real Estate Fund, LP | Core Real Estate | \$95,467,126 | 1.1% | | | | |
| | Core Real Estate | | 6.6% | 7.0% | -0.4% | 4.0% | 9.0% |
| EnCap Energy Capital Fund IX, LP | Private Real Assets | \$24,640,056 | 0.3% | | | | |
| First Reserve Energy Infrastructure Fund II, LP | Private Real Assets | \$17,896,186 | 0.2% | | | | |
| EnCap Flatrock Midstream Fund III, LP | Private Real Assets | \$8,839,736 | 0.1% | | | | |
| Quantum Energy Partners VI, LP | Private Real Assets | \$15,404,809 | 0.2% | | | | |
| Pantheon SCERS SIRF, LLC | Private Real Assets | \$52,369,128 | 0.6% | | | | |
| Atalaya SCERS SMA, LLC | Private Real Assets | \$12,944,903 | 0.1% | | | | |
| EnCap Energy Capital Fund X, LP | Private Real Assets | \$21,583,859 | 0.2% | | | | |
| ArcLight Energy Partners Fund VI, LP | Private Real Assets | \$24,360.072 | 0.3% | | | | |
| Carlyle Power Partners II, LP | Private Real Assets | \$11,487,612 | 0.1% | | | | |
| IFM Global Infrastructure Fund | Private Real Assets | \$72,070,504 | 0.8% | | | | |
| Wastewater Opportunity Fund, LLC | Private Real Assets | \$5,081,023 | 0.1% | | | | |
| ACM Fund II, LP | Private Real Assets | \$3,060,744 | 0.0% | | | | |
| Brookfield Infrastructure Fund III, LP | Private Real Assets | \$9,525,960 | 0.1% | | | | |
| Meridiam Infrastructure North America III, LP | Private Real Assets | \$1,294,498 | 0.0% | | | | |
| Quantum Energy Partners VII, LP | Private Real Assets | \$2,536,450 | 0.0% | | | | |
| | Private Real Assets | | 3.2% | 6.0% | -2.8% | 3.0% | 8.0% |
| Blackstone Resources Select | Commodities | \$39,589,976 | 0.5% | | | | |
| Gresham Strategic Commodities Fund | Commodities | \$25,434,959 | 0.3% | | | | |
| | Commodities | | 0.7% | 2.0% | -1.3% | 0.0% | 3.0% |
| SSGA Real Asset Strategy | Real Assets Proxy | \$218,925,710 | 2.5% | | | | |

Table 6: Real Assets (as of September 30, 2017)

Please note that there are several non-core and non-U.S. real estate investments within the Opportunities portfolio which have historically drawn capital from the former Real Assets asset class. These include the following funds:

| Non-Core/Non-U.S. Real Estate Funds | Asset Class / Sub Asset Class | Market Value | Allocation |
|---|-------------------------------|---------------|------------|
| | All Property and Annual | \$157,695,792 | 1.8% |
| KKR Real Estate Partners Americas, LP | Opportunistic Real Estate | \$15,847,372 | 0.2% |
| Och-Ziff Real Estate Fund III, LP | Opportunistic Real Estate | \$11,839,656 | 0.1% |
| Carlyle China Realty, L.P. | Opportunistic Real Estate | \$3,977,692 | 0.0% |
| Carlyle China Rome Logistics, L.P. | Opportunistic Real Estate | \$11,032,508 | 0.1% |
| UBS (Allegis Value Trust) | Value-Added Real Estate | \$16,004,315 | 0.2% |
| A.E.W Value Investors II, LP | Value-Added Real Estate | \$337,612 | 0.0% |
| Hines US Office Value Added Fund II, LP | Value-Added Real Estate | \$647,611 | 0.0% |
| DRC European Real Estate Debt Fund II, LP | Value-Added Real Estate | \$22,355,498 | 0.3% |
| NREP Nordic Strategies Fund, FCP-FIS | Value-Added Real Estate | \$12,384,442 | 0.1% |
| CIM Opportunity Fund VIII, LP | Value-Added Real Estate | \$27,827,152 | 0.3% |
| ECE European Prime Shopping Centre Fund II, SCS-SIF | Value-Added Real Estate | \$9,037,066 | 0.1% |
| Hammes Partners II, LP | Value-Added Real Estate | \$13,231,900 | 0.2% |
| NREP Nordic Strategies Fund II, FCP-FIS | Value-Added Real Estate | \$13,172,968 | 0.2% |

The aggregate market value of these investments is \$158 million, which equates to a 1.8% allocation, and brings SCERS' total allocation in Real Assets (not including the overlay proxy) to 12.4%.

It should also be noted that as a result of the recent restructuring of the Real Estate asset class, non-core and non-U.S. real estate have been moved from the Opportunities portfolio into the Real Estate asset class, so future rebalancing reports will reflect this reclassification.

Opportunities:

The allocation for SCERS' Opportunities portfolio, outlined in **Table 7** below, is 1.9% compared to the 0% target allocation, and within the policy range of 0% to 5%. During the quarter, SCERS did not make any new Opportunities commitments. As you will recall, any investments made within the Opportunities portfolio draw capital from the asset class with the closest risk and return profile as the opportunity being invested in. The asset class where capital is drawn from is listed in the chart below for each investment. *As referenced earlier, the non-core and non-U.S. real estate funds currently within Opportunities will be reclassified to the Real Estate asset class, which will be reflected in future rebalancing reports.* Since the target allocation for Opportunities is 0%, the Overlay Program does not utilize a proxy allocation for the Opportunities portfolio, like it does for the other major asset classes.

Table 7: Opportunities (as of September 30, 2017)

| Opportunities | Asset Class / Sub Asset Class | Market Value | Actual | Target | Delta % | Target Low | Target High | Asset Class Where Capital Is Drawn From |
|---|--------------------------------------|---------------|--------|--------|------------|---------------|----------------|--|
| | | \$168,209,757 | 1.9% | 0.0% | 1.9% | 0.0% | 5.0% | |
| Atalaya Special Opportunities Fund V, LP | Opportunities - Credit | \$10,513,965 | 0.1% | - | | - | | Private Equity |
| KKR Real Estate Partners Americas, LP | Non-Core Real Estate - Opportunistic | \$15,847,372 | 0.2% | | | | | Real Assets |
| Och-Ziff Real Estate Fund III, LP | Non-Core Real Estate - Opportunistic | \$11,839,656 | 0.1% | | | | | Real Assets |
| Carlyle China Realty, L.P. | Non-Core Real Estate - Opportunistic | \$3,977,692 | 0.0% | | | | | Real Assets |
| Carlyle China Rome Logistics, L.P. | Non-Core Real Estate - Opportunistic | \$11,032,508 | 0.1% | | | | | Real Assets |
| UBS (Allegis Value Trust) | Non-Core Real Estate - Value-Added | \$16,004,315 | 0.2% | | | | | Real Assets |
| A.E.W Value Investors II, LP | Non-Core Real Estate - Value-Added | \$337,612 | 0.0% | | | | | Real Assets |
| Hines US Office Value Added Fund II, LP | Non-Core Real Estate - Value-Added | \$647,611 | 0.0% | | | | | Real Assets |
| DRC European Real Estate Debt Fund II, LP | Non-Core Real Estate - Value-Added | \$22,355,498 | 0.3% | | | | | Real Assets |
| NREP Nordic Strategies Fund, FCP-FIS | Non-Core Real Estate - Value-Added | \$12,384,442 | 0.1% | | | | | Real Assets |
| CIM Opportunity Fund VIII, LP | Non-Core Real Estate - Value-Added | \$27,827,152 | 0.3% | | | | | Real Assets |
| ECE European Prime Shopping Centre Fund II, SCS-SIF | Non-Core Real Estate - Value-Added | \$9,037,066 | 0.1% | | | | | Real Assets |
| Hammes Partners II, LP | Non-Core Real Estate - Value-Added | \$13,231,900 | 0.2% | | | | | Real Assets |
| NREP Nordic Strategies Fund II, FCP-FIS | Non-Core Real Estate - Value-Addec | \$13,172,968 | 0.2% | | | | | Real Assets |

<u>Cash:</u>

SCERS' cash balance is approximately 2.1% (as of October 30, 2017), which is above SCERS' policy target of 0%. This balance also includes the County's recently distributed (July 2017) annual prepayment to SCERS, which gets invested within the Overlay Program, and drawn down over the year. An excess cash balance is necessary to fund future drawdowns within the private markets segments of the portfolio. SCERS' Overlay Program will rebalance the portfolio by eliminating any 'cash drag' and investing the cash into positions that replicate SCERS' target portfolio according to the allocation policy and proxies in **Appendix 1** below.

In sum, Staff does not recommend any physical rebalancing of any components of SCERS' portfolio at this time.

ATTACHMENTS

None

Prepared by:

Reviewed by:

/S/

Steve Davis Chief Investment Officer /S/

Annette St. Urbain Interim Chief Executive Officer

| Asset Class | Benchmark for Overlay | Target Allocation | Minimum Allocation | Maximum Allocation |
|---|--|----------------------|-----------------------|-----------------------|
| Domestic Equity & Proxies | | 22.5% | 20.3% | 24.8% |
| US Large Cap Equity | Russell 1000 Index | 18.2% | 14.6% | 21.8% |
| US Small Cap Equity | Russeli 2000 Index | 3.2% | 2.6% | 3.8% |
| REITs US | Russell 1000 Index | 1.1% | 0.9% | 1.4% |
| International Equity & Proxies | | 22.5% | 20.3% | 24.8% |
| Non-US Developed Markets Large/ Mid | MSCI World ex US | 13.8% | 11.0% | 16.5% |
| Non-US Developed Markets Small Cap Equity | MSCI World ex US | 2.25% | 1.8% | 2.7% |
| Non-US Emerging Markets Equity | MSCI Emerging Markets Index | 5.35% | 4.3% | 6.4% |
| REITs International | MSCI World ex US | 1.1% | 0.9% | 1.3% |
| Fixed Income | Barclays Capital U.S. Aggregate Bond Index | 20.0% | 18.0% | 22.0% |
| Private Equity | Russell 2000 Index | 10.0% | 8.0% | 12.0% |
| Hedge Funds | 35% R3000, 35% MSCI ACWI ex US, 30% Barclays Capital US Aggregate Index | 10.0% | 8.0% | 12.0% |
| Real Assets | Custom Real Assets Blend (INT TIPS /TIPS/REIT/GNR/COMM/MLPS/INFR)* | 15.0% | 12.0% | 18.0% |
| Cash | 90 Day T-Bill Rate | 0.0% | | 2.0% |

Appendix 1: Overlay Proxies and Rebalancing Ranges