# *Memorandum*

**Date:** April 16, 2013

**To:** CCCERA Board of Retirement

**From:** Timothy Price, Retirement CIO

**Subject:** Investment Projects Update

MEETING DATE
APR 24 2013
AGENDA ITEM
#6

**Overview**
CCCERA is currently engaged in a number of investment projects. In addition to our ongoing monitoring of the funds, we are in the midst of a build-out of private real assets, an expansion of the private equity programs, a review of real estate opportunities, a review of the fixed income program and a study of futures overlay strategies. This memo outlines the current status of these various projects and when the Board can expect to see these topics on upcoming agendas. Given that some of these projects are in their early stages, we may revise the discussion dates as the projects advance towards completion.

**Private Real Assets**
Board Presentation: April 24, 2013

The Board selected the Wellington Real Total Return and PIMCO All Asset Funds as the first real asset managers in November 2012. Both of these managers are expected to maintain liquid, publicly-traded portfolios that will serve as the real asset/inflation hedging portion of the CCCERA portfolio. The Board authorized Milliman to search for private real asset investments that would complement the publicly traded portfolios. Milliman launched this search in December 2012. Milliman has evaluated energy, agriculture, timber, water and various other strategies. If we hold a special Board meeting in May, we may be able to commit to the new strategies by July.

**Private Equity**
Expected Board Presentation: July/August 2013

In December 2012, the Board approved a roadmap to prudently increase our private equity allocation over the course of the next three years (please find a copy of that earlier memo attached for your reference). The primary projects launched as a result of that memo were increased allocations to the Adams Street and Pathway Fund of Funds anchor programs as well as the search to identify a third fund of funds program that will focus on somewhat smaller to middle market funds. The Board approved a $70 million commitment to Pathway Capital's PPEF I-7 multi-investor fund in March. Milliman will launch the search for the new fund of funds anchor manager in May 2013. We expect Milliman to present their semi-finalist report to the Board in July or August of 2013.

As outlined in the December memo, after identifying the new fund of funds manager, we will begin the research process on any other follow funds coming to market in the next several months.

**Real Estate Review**
Expected Board Presentation: May 8, 2013

The CCCERA Investment Staff has been engaged in a review of potential real estate investments for the better part of the past year. The commercial real estate market has been in a state of flux both locally and nationally as the recovery takes hold in an uneven pattern. Staff will provide our recommendation on the best sources of risk-adjusted returns at this point in time along with how best to implement any new commitments to closed-end funds. We anticipate completing our review shortly and providing our recommendations at the May 8, 2013 meeting. Based upon Board direction, staff will return to the Board with specific recommendations at a future Board meeting.

**Fixed Income Structure Review**
Expected Board Presentation: Third Quarter 2013

CCCERA last engaged in a major restructuring of the fixed income program in 2009. Much of this restructuring occurred due to a change in the core plus manager, but the post financial crisis marketplace and resulting opportunities played a role as well. Over the course of the next several months, staff will conduct in-depth reviews of each current fixed income manager to determine if we can be better utilizing their strengths to respond to future market shocks and opportunities. Some of the topics we will be exploring will include, but not be limited to, the use of shorter and negative duration strategies, long/short strategies and capital structure arbitrage strategies. We anticipate that any recommendations resulting from this study would take the form of recommended changes to the individual managers' investment guidelines and/or target allocations, but not necessarily changes to the manager lineup.

**Projected Cash Flow Study**
Expected Board Presentation: Late 2013

CCCERA currently experiences significant ($1-10 mm) cash flows in or out most weeks of the year. These cash flows include capital calls and distributions from our private partnerships, benefit payments, payroll and annual pre-payments from employers. We invest or raise cash on the most prudent and cost effective terms possible, but we have noted that the volume of these transactions has increased in recent years to the point where the transaction costs are becoming more noticeable. Staff will explore several strategies of how to mitigate the transaction costs associated with these regular payments.

**Conclusion**

This memo is intended to provide the Board with some preliminary guidance about the various projects that will be discussed over the course of remainder of the year. Other issues will undoubtedly arise over this period, but the projects discussed in this memo are our highest current priorities.

# *Memorandum*

MEETING DATE
DEC 12 2012
AGENDA ITEM
#14

**Date:** December 5, 2012

**To:** CCCERA Board of Retirement

**From:** Timothy Price, Retirement CIO; Chih-chi Chu, Investment Analyst

**Subject:** Alternative Investment Funding

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***Overview***

In June, 2011 the Board adopted the most recent asset allocation study (Mix 8) conducted by Milliman. Among other changes resulting from the study, the allocation to Alternative Investments was increased from 7% to 10%. Due to the private partnership structures of most alternative investments, assets are committed and then drawn down over the investment period, typically several years. During the course of the investment period, some early investments may be maturing, resulting in a return of capital. The net result is that in order to achieve the 10% allocation, CCCERA must over-commit by 50-100% of the intended capital amount.

CCCERA's Alternative Investment program is anchored by two private equity fund of funds (Adams Street and Pathway). CCCERA has typically committed to each firm's offerings every two years. Complementing the fund of funds anchors have been a series of niche-oriented strategies, including EIF (energy), Paladin (homeland security), Carpenter (community banking), Bay Area Equity Funds (Bay Area venture capital) and Nogales (California-centric buyout). These have been direct investments into focused strategies and have been approved by the Board on a one-off basis.

***Recommendation***

This memo outlines a number of steps to bring CCCERA's Alternative Investments up to the long-term target of 10% over the next several years. We believe the following structure would best serve to diversify and expand the alternative investment program.

Step 1 Maintain the strategic partnerships with both Adams Street and Pathway, and increase the commitment size moderately, subject to ongoing due diligence.

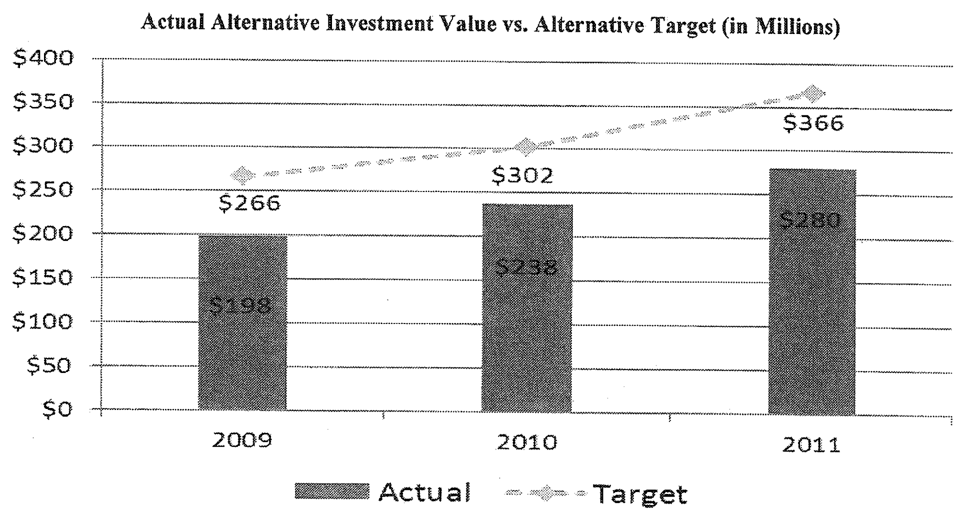
Step 2 Add a third fund-of-funds to the "anchor" portion of the program to provide further diversification. We recommend that this allocation focus on small to middle market opportunities, complementing the more blue chip nature of the Adams Street and Pathway funds. Instruct Milliman to issue an RFP for this strategy in early 2013. Maintain exposure to this offering by re-subscribing every 2-3 years.

| | |
|---|---|
| Step 3 | Monitor new fund offerings from the other existing managers in the Alternative Investment allocation. Consider committing to follow-on funds on a case-by-case basis. In 2013, Paladin will be raising a cybersecurity-focused fund and Carpenter will be raising a follow-on community banking fund. |
| Step 4 | Provide Board education on dedicated non-US strategies. This education would encompass growth opportunities in emerging and developed markets as well as turnaround opportunities which today are primarily in Europe. |
| Step 5 | Provide Board education on niche-oriented venture capital and fixed income alternatives including long/short credit funds, bank loan funds and direct lending funds. |

***Recent History of CCCERA Actual Alternative Investments (vs. Target Allocation)***

For Alternative Investments, which are mostly private partnership in nature, there is a significant lag period from when a commitment is made to private equity funds until actual dollars are invested. The majority of CCCERA's alternative investments are fund-of-funds. In this area of alternatives, when a dollar is committed by CCCERA, it can take up to six to seven years before the final committed dollar is invested. Meanwhile, partnership commitments made in the first few years begin distributing capital.

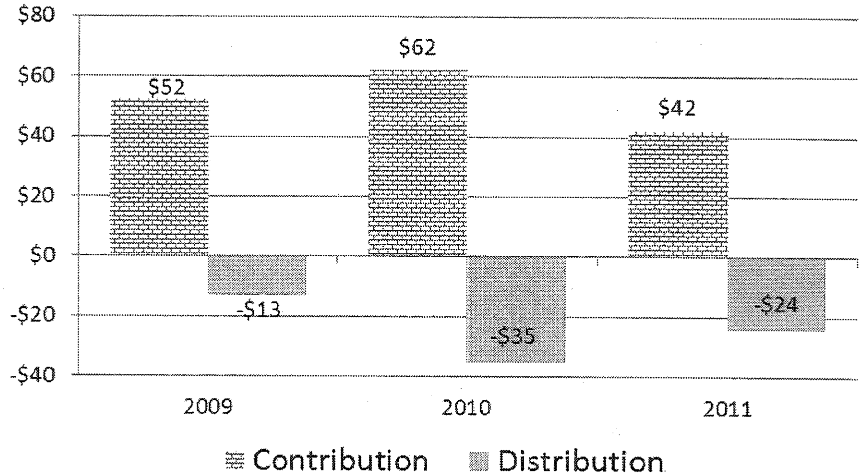
The chart below compares CCCERA's actual (dollar) value of alternative investments to the target value of 7% mandated by the previous asset allocation (2008-2011).




CCCERA's actual allocation (running on a 100% over-commitment schedule) to Alternative Investments over this period was about 5% of total assets, compared to the 7% target.

The following chart shows the contribution and distribution histories of CCCERA's alternative investments during the past three years. (In the context of determining asset values, a contribution generally increases asset valuation whereas a distribution decreases the asset valuation.)

**Recent Contribution/Distribution Summary of Alternative Investments**




CCCERA's actual allocation to the alternative investment program has been due both to the growth of Total Fund Assets and the contribution/distribution characteristics of the Alternative Investments private partnerships. The next section will review the most current spending target of CCCERA's Alternative Investments program.

***CCCERA Available Commitments to Alternative Investments***

Based on the October 31, 2012 market value of $5.6 billion and CCCERA's 10% target allocation to Alternative Investments, CCCERA has a target allocation of $563 million to alternative investments. CCCERA's alternative investments had a market value of approximately $362 million as of October 31, 2012. Outstanding commitments to alternative investments that have not yet been drawn total $242 million. The market value plus outstanding commitments total $604 million, $41 million greater than the dollar target of $563 million.

However, taking into account the lag time of deploying private equity investments and distribution characteristics of our mature private equity program, CCCERA needs to over-commit relative to the desired target of $563 million to alternative investments. Historically CCCERA has been over-committing 100% of its target allocation. Based upon this over-commitment amount threshold, the total amount available for CCCERA to commit to alternative investments is $522 million. These figures are illustrated in the table on page 6 of this memo.

### *Options to Increase Alternative Investments Allocation*

We recommend the following steps for reaching the alternative investment target allocation.

1) Increase the commitment amount to the existing fund of funds managers.

   This is the simplest component of increasing our exposure, but it does not increase the diversification of the overall alternative investment program. Also, Adams Street and/or Pathway might place limits on future CCCERA commitments based upon their internal capacity. We recommend that meaningfully larger allocations to Adams Street and Pathway going forward, but these larger allocations should not be the primary means of growing the alternative investment program invested assets.

2) Add a third anchor to the fund of funds program, with an emphasis on small to middle market funds.

   This area has traditionally generated very strong returns (IRR ranging from mid to high teens) yet has been overlooked by many institutional investors who focus mostly on the larger buyout space (IRR ranging from high single digit to low teens) where they can deploy large amounts of capital. The higher return in this space can be attributed to lower entry multiple due to less competition, broader exit opportunities (buyers from larger buyout firms), more operation and marketing levers to pull by professional managers due to less sophisticated business owners, etc. The risk/volatility in this space can also be somewhat lower due to less leverage applied in the investments and more control from the investors. A typical portfolio company in this space would have \$10~\$100 million in revenues. These small private companies represent 95% of the investment universe yet the capital raised to invest in these companies represents only 4% of the universe in the last four years.

3) Consider the Emerging Markets/Global Non-U.S. private equity strategy.

   This strategy would provide increased exposure for CCCERA to private equity firms that invest in the growing areas such as emerging markets or distress areas such as developed Europe. We are aware of US-based firms that have fund of funds based upon the US private equity model to access these markets.

4) Consider additional program enhancements.

   Look at the potential of adding niche-oriented venture capital and/or private debt funds. Specifically, look at venture capital firms with strong track records that may not be investible through Pathway or Adams Street due to strategy, size or other factors. The Bay Area is home to many boutique venture capital firms.

   Additionally, when the opportunities arise the Board may also want to consider looking into floating rate debt strategies such as bank loans, long-short fixed income strategies (potential loss on shorting fixed income is limited, unlike shorting the equities) or direct lending opportunities.

*Conclusion*

Currently, to maintain exposure to Alternative Investments, CCCERA relies mostly on re-subscribing (re-upping) with the existing alternative managers as new funds are launched. As noted in our recommendation, we would like to continue doing just that with Adams Street and Pathway, but also expand into a third fund of funds option that would focus on smaller and mid-sized opportunities. Additionally, we will provide education to the Board on dedicated non-US strategies, venture capital and/or alternative debt-oriented strategies.

The table below lays out our proposed investment calendar for the next three years. We will use this as a roadmap to identify new investment strategies and work towards deploying more capital within the alternative investment category to reach the long-term target allocation of 10%.

**Proposed Three Year Alternative Investment Roadmap**

| | **2013** | **2014** | **2015** |
|---|---|---|---|
| Adams Street | | Increase Allocation | |
| Pathway | Increase Allocation | | Increase Allocation |
| Energy Investors | | Consider | |
| Nogales | | | |
| Bay Area Equity | | | Consider |
| Paladin | Consider | | |
| Carpenter | Consider | | |
| | | | |
| *New Small/Mid FoF* | *RFP* | | *Re-commit* |
| *New Non-US Strategies* | *Board Education* | | |
| *New Venture Capital/ Alternative Debt Strategies, etc.* | *Board Education* | *Board Education* | |
| | | | |
| **Projected Annual Commitments** | **~$200 mm** | **~$200 mm** | **~$120 mm** |

## CCCERA Alternative Investment Positions as of 9/30/12

| Fund | Commitment | Called Capital | Distribution | Net Asset Value | Uncalled Capital |
|---|---|---|---|---|---|
| Adams Street Partners | 180,000,000 | 120,643,000 | 86,259,000 | 87,049,000 | 48,088,000 |
| Adams Street Secondary II | 30,000,000 | 14,142,000 | 0 | 26,319,000 | 15,112,000 |
| Adams Street Secondary V | 40,000,000 | 2,600,000 | 0 | 2,600,000 | 37,400,000 |
| Pathway | 125,000,000 | 101,341,000 | 62,107,000 | 74,841,000 | 21,395,000 |
| Pathway 2008 | 30,000,000 | 8,485,000 | 198,000 | 9,870,000 | 20,647,000 |
| Pathway 6 | 40,000,000 | 1,062,000 | 0 | 2,120,000 | 38,055,000 |
| EIF USPF I | 30,000,000 | 39,035,000 | 63,094,000 | 1,848,000 | 0 |
| EIF USPF II | 50,000,000 | 59,092,000 | 28,862,000 | 40,564,000 | 0 |
| EIF USPF III | 65,000,000 | 64,337,000 | 17,122,000 | 46,636,000 | 663,000 |
| EIF USPF IV | 50,000,000 | 10,506,000 | 573,000 | 8,929,000 | 39,494,000 |
| Nogales Investment | 15,000,000 | 18,026,000 | 7,896,000 | 3,223,000 | 1,651,000 |
| Bay Area Equity Fund | 10,000,000 | 10,000,000 | 11,187,000 | 9,215,000 | 0 |
| BAEF II | 10,000,000 | 4,916,000 | 0 | 4,773,000 | 4,732,000 |
| Paladin III | 25,000,000 | 17,058,000 | 6,016,000 | 12,391,000 | 8,343,000 |
| Carpenter | 30,000,000 | 24,054,000 | 278,000 | 31,095,000 | 7,157,000 |
| **Total** | **730,000,000** | **495,297,000** | **283,592,000** | **361,473,000** | **242,737,000** |

**Estimated Available to Commit**

| | |
|---|---|
| Target to Alternatives | $563 mm (10% total of Total Fund target) |
| Less Current Value | $362 mm |
| Less Uncalled Commitments | $243 mm |
| Available to Commit | -$41 mm |
| Plus 100% Over-Commitment | $563 mm |
| Estimated Available to Commit | $522 mm |