



Date: May 27, 2016

To: Members of the Investment Committee
California Public Employees' Retirement System

From: Pension Consulting Alliance, LLC (PCA)

RE: Real Assets Investment Policy Revision

This memo summarizes PCA's review as Board Consultant for Real Estate of the proposed revisions to the Investment Policy for Real Assets (RA) Program, along with certain concerns which we believe warrant the Board's notice.

It is PCA's opinion that (a) the proposed revision is positive and consistent with Investment Beliefs 5, 9 and 10; (b) follows the Investment Committee's direction and its April approval of the updated 2016 Real Asset Strategic Plan; and (c) accomplishes multiple objectives as described below:

1. In accordance with the updated Strategic Plan, the revised policy includes the adjustments to real asset investment guidelines through the Key Policy Parameters section of Appendix 3 of the Policy.
2. The revised Policy includes material changes to, and the further simplification of, the Staff Authority Limits section of Appendix 3 of the Policy (previously known as Delegated Authority).
3. The revised Policy brings the RA Policy into alignment with the objectives of the Investment Policy Revisions Project, which was a key initiative identified in the Investment Office Roadmap for reducing compliance and operational risk levels.

Highlights/Concerns:

- Significant changes to Staff Authority Limits puts more reliance on key policy parameters to invest and manage risk in the portfolio, and provides greater leeway for Staff to make meaningful changes to the portfolio.
- Revised policy is substantially shortened. Supporting documents, including desk procedures and Investment Policy Procedures and Guidelines, which will contain much of the important narrative language removed from policy, are largely conceptual at this date.
- Considered one by one, changes appear reasonable; considered collectively, the number and type of changes make it difficult to understand potential consequences. Speaking simply, there is a lot happening behind the scenes that will require diligence and attention to detail over many months.

Additional detail is offered in the following two pages. PCA is available to discuss further or answer questions, as needed.

ADDITIONAL DISCUSSION

The following paragraphs describe in more detail some of the specific changes contained within the Real Assets Policy revisions and their potential implications on portfolio construction and management.

Conformance with updated Strategic Plan

The new RA Policy contains the specific investment limits and exposure ranges for real estate, as presented in the updated Strategic Plan. These limits and ranges are contained in clear and concise tabular and narrative formats in the Key Policy Parameters section of Appendix 3. Few substantive changes were made to the real estate investment program in the updated Strategic Plan. The biggest change in this part of the revised policy is the integration and harmonization of portfolio structure, parameters and nomenclature across the real asset sub-portfolios of real estate, infrastructure and forestland.

Changes to Staff Authority Limits

The Staff Authority Limits section of the new RA Policy has been changed and further simplified from the version most recently approved by the Investment Committee in February 2016. The new Staff Authority Limits section speaks only to dollar limits for investments and dispositions, removing the second limit based on percent of portfolio value. Also removed from the new version are specific delegations delineated between “new” and “existing” investments, and limits delineated by type of investment vehicle (e.g., commingled fund, separate account, public securities). These changes simplify the Staff Authority Limits without compromising governance of the program.

In PCA's opinion, the more meaningful changes are (i) the removal of Staff Authority Limits by sub-portfolio (i.e., base, domestic tactical and international tactical), and (ii) the removal of Staff Authority Limits around debt financing. The updated Strategic Plan eliminated the real estate sub-portfolios, as they were increasingly less relevant to portfolio management, in favor of segment classifications. Removal of these sub-portfolios from the Staff Authority Limits, while necessary to comport with the updated Strategic Plan, has the effect of removing a governor on international investments, which are intended as a small part of the portfolio, but which by policy can comprise up to 25% of the real estate portfolio.

With respect to leverage, the removal of Staff Authority Limits around debt financing effectively gives the MID full discretion to leverage the RA portfolio at any time, subject only to the loan-to-value ratio (LTV) and debt service coverage ratio (DSCR) policy limits. Deleveraging dollars are counted against the Staff Authority Limits for Investments, but the decision to add leverage to the program is not counted against Staff Authority Limits.

Taken collectively, the changes to the Staff Authority Limits give Staff more leeway to invest, divest, and leverage the portfolio. As with the previous version, any investment decisions that exceed the MID and CIO limits would be brought to the Investment Committee for its approval.

Conformance with Investment Policy Revisions Project

Real Assets is the last asset class to be addressed by the Investment Policy Revisions Project. Revisions related to this INVO-wide initiative remove language that is vague and editorial and in general attempt to make the policy more streamlined, measurable and testable for compliance purposes. These revisions make the Real Assets Policy consistent in content, format and style with those of the other asset classes.

Relative to real estate, these revisions remove entirely a significant amount of language and several important investment concepts, including, but not limited to: the definition of risk classifications (core, value add, opportunistic); allowable investment vehicles and structures; and property type concentrations. Staff is working to identify how and where to capture these concepts, along with the new RA segment definitions, in either Desktop Procedures or the Investment Policy Procedures and Guidelines (IPPGs).

Indeed, the most challenging part of this policy revision is the number of moving pieces and the “follow-on” nature of the supporting documents, which do not permit the consideration of the new investment governance framework in its entirety. Additionally, the updated RA Strategic Plan and Policy require the re-mapping of investment level risk and segment classifications in the AREIS reporting system as well as the development of segment/sector plans. Speaking simply, there is a lot happening behind the scenes that will require diligence and attention to detail over many months.

PCA will continue to monitor the process and support Staff with the development of desktop procedures and IPPGs, as appropriate.

DISCLOSURES: This document is provided for informational purposes only. It does not constitute an offer of securities of any of the issuers that may be described herein. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified. The past performance information contained in this report is not necessarily indicative of future results and there is no assurance that the investment in question will achieve comparable results or that the Firm will be able to implement its investment strategy or achieve its investment objectives. The actual realized value of currently unrealized investments (if any) will depend on a variety of factors, including future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which any current unrealized valuations are based.

Neither PCA nor PCA's officers, employees or agents, make any representation or warranty, express or implied, in relation to the accuracy or completeness of the information contained in this document or any oral information provided in connection herewith, or any data subsequently generated herefrom, and accept no responsibility, obligation or liability (whether direct or indirect, in contract, tort or otherwise) in relation to any of such information. PCA and PCA's officers, employees and agents expressly disclaim any and all liability that may be based on this document and any errors therein or omissions therefrom. Neither PCA nor any of PCA's officers, employees or agents, make any representation of warranty, express or implied, that any transaction has been or may be effected on the terms or in the manner stated in this document, or as to the achievement or reasonableness of future projections, management targets, estimates, prospects or returns, if any. Any views or terms contained herein are preliminary only, and are based on financial, economic, market and other conditions prevailing as of the date of this document and are therefore subject to change.

The information contained in this report may include forward-looking statements. Forward-looking statements include a number of risks, uncertainties and other factors beyond the control of the Firm, which may result in material differences in actual results, performance or other expectations. The opinions, estimates and analyses reflect PCA's current judgment, which may change in the future.

Any tables, graphs or charts relating to past performance included in this report are intended only to illustrate investment performance for the historical periods shown. Such tables, graphs and charts are not intended to predict future performance and should not be used as the basis for an investment decision.

All trademarks or product names mentioned herein are the property of their respective owners. Indices are unmanaged and one cannot invest directly in an index. The index data provided is on an "as is" basis. In no event shall the index providers or its affiliates have any liability of any kind in connection with the index data or the portfolio described herein. Copying or redistributing the index data is strictly prohibited.

The Russell indices are either registered trademarks or tradenames of Frank Russell Company in the U.S. and/or other countries.

The MSCI indices are trademarks and service marks of MSCI or its subsidiaries.

Standard and Poor's (S&P) is a division of The McGraw-Hill Companies, Inc. S&P indices, including the S&P 500, are a registered trademark of The McGraw-Hill Companies, Inc.

CBOE, not S&P, calculates and disseminates the BXM Index. The CBOE has a business relationship with Standard & Poor's on the BXM. CBOE and Chicago Board Options Exchange are registered trademarks of the CBOE, and SPX, and CBOE S&P 500 BuyWrite Index BXM are servicemarks of the CBOE. The methodology of the CBOE S&P 500 BuyWrite Index is owned by CBOE and may be covered by one or more patents or pending patent applications.

The Barclays Capital indices (formerly known as the Lehman indices) are trademarks of Barclays Capital, Inc.

The Citigroup indices are trademarks of Citicorp or its affiliates.

The Merrill Lynch indices are trademarks of Merrill Lynch & Co. or its affiliates.

Supplement for real estate and private equity partnerships:

While PCA has reviewed the terms of the Fund referred to in this document and other accompanying financial information on predecessor partnerships, this document does not constitute a formal legal review of the partnership terms and other legal documents pertaining to the Fund. PCA recommends that its clients retain separate legal and tax counsel to review the legal and tax aspects and risks of investing in the Fund. Information presented in this report was gathered from documents provided by third party sources, including but not limited to, the private placement memorandum and related updates, due diligence responses, marketing presentations, limited partnership agreement and other supplemental materials. Analysis of information was performed by PCA.

An investment in the Fund is speculative and involves a degree of risk and no assurance can be provided that the investment objectives of the Fund will be achieved. Investment in the Fund is suitable only for sophisticated investors who are in a position to tolerate such risk and satisfy themselves that such investment is appropriate for them. The Fund may lack diversification, thereby increasing the risk of loss, and the Fund's performance may be volatile. As a result, an investor could lose all or a substantial amount of its investment. The Fund's governing documents will contain descriptions of certain of the risks associated with an investment in the Fund. In addition, the Fund's fees and expenses may offset its profits. It is unlikely that there will be a secondary market for the shares. There are restrictions on redeeming and transferring shares of the Fund. In making an investment decision, you must rely on your own examination of the Fund and the terms of the offering.