



November 12-13, 2013

ITEM NAME: Asset Liability Management Workshop

PROGRAM: Asset Allocation and Risk Management

ITEM TYPE: Investment Committee Workshop – Information

EXECUTIVE SUMMARY

Asset Liability Management (ALM) is the balancing of investment assets and contributions to best match the level of benefits that have been promised to employees by employers who contract with CalPERS for pension benefits.

The one and a half day ALM Workshop is designed to elicit information from the Investment Committee (IC) regarding the risk and return parameters that shall be used by the Investment Office to make a recommendation on the strategic asset class allocations. The ALM Workshop includes discussions of:

1. ALM objectives and review
2. A low volatility strategy
3. CalPERS strategic allocation to liquidity and introduction to Treasury Management
4. Flexible de-risking
5. The roles, investment constraints, and outlooks for each Program being utilized in the ALM Process
6. Investment and actuarial risk considerations of the preliminary candidate portfolios
7. Perspectives from a panel of stakeholders

The ALM Workshop will culminate with a session in which the IC will express its preference for an individual preliminary candidate portfolio. With the preference feedback from the IC, staff will conduct additional analysis and return to the IC in December 2013 with a recommendation on the strategic asset class allocation targets and ranges.

STRATEGIC PLAN

The ALM Workshop supports CalPERS Strategic Plan goal to improve long-term pension and health benefit sustainability. The CalPERS ALM Process culminates in the selection of a Policy Portfolio which is used to guide and define the strategic

asset allocation across the Public Employees' Retirement Fund, with the ultimate goal of ensuring that CalPERS is able to effectively manage assets to meet the benefit promises made to the System's participants.

BACKGROUND

The ALM Process is an important step to help ensure that contributions, plus investment returns, are sufficient to pay the benefits and expenses of the System. As part of the ALM Process, staff presents potential allocations to each asset class that are estimated to allow CalPERS to realize its long-term assumed rate of return while maintaining a prudent level of risk. Throughout 2013, staff, the Board Investment Consultants, the IC, and CalPERS Board of Administration have engaged in workshops and in-depth agenda item discussions as part of the ALM Process. The table below outlines key decision items for the 2013 ALM Process:

Timeline	Item
April 2013	✓ Board of Administration revised Actuarial Smoothing and Amortization Policies
June and October 2013	✓ IC adopted Capital Market Assumptions for CalPERS defined investable market segments ✓ IC adopted revised Capital Market Assumptions for Global Fixed Income and the low-volatility equity strategy
Scheduled December 2013	• IC will determine the target strategic asset allocation weights and ranges
Spring and Summer 2014	• Board of Administration will determine actuarial assumptions • Board of Administration will set the Discount Rate • Board of Administration will set Employer Contribution Rates

ANALYSIS

The ALM Workshop will include many topics for discussion. The key objectives and highlights of each topic are outlined in the sections below.

ALM Objectives and Review

This session will open the first day of the ALM Workshop. This session is intended to focus the group on the overall objectives of the ALM Process and key asset allocation fundamentals.

Low Volatility Strategy

This session will focus on a discussion of the low volatility strategy that was introduced for consideration as part of this year's ALM Process. The evaluation of the low volatility strategy has resulted in several wider policy topics which deserve

additional exploration in future months through in-depth workshops or agenda items. These topics include, for example, the role and purpose of benchmarks and active risk.

Staff's recommendation for the 2013 ALM Process is to implement a low volatility strategy as an "active bet", or at the tactical implementation level as opposed to at the strategic asset allocation level. This will allow the strategy to be further evaluated as staff and the IC explore the wider policy topics previously mentioned.

Liquidity Allocation Recommendation and Introduction to Treasury Management

For the 2013 ALM Process, staff will present a recommendation to lower the allocation target for CalPERS strategic Liquidity allocation from 4% to 2% in consideration of:

- Actual implementation experience with the 4% allocation
- The opportunity costs and considerations associated with the Liquidity allocation

This session will also explore the purpose and function of Treasury Management as an enterprise-wide program.

Flexible De-Risking

This session will focus on a concept staff has developed that would permit the lowering of funding risk in a way that minimizes the negative impacts on employers. The presentation will discuss:

- The mechanism for accomplishing flexible de-risking
- The effectiveness of flexible de-risking
- The impact on employers
- The challenges of flexible de-risking and a possible timeline

Program Roles, Investment Constraints, and Outlooks

This session will serve as a brief refresher on the key inputs into the ALM Process, including the program roles, investment constraints, and outlooks for the various asset segments contained within the investment portfolio.

In this session, the senior leadership of the Investment Office, along with the Board's Investment Consultants, will be available to provide insights and perspective to the information. To assist in developing a dialog with the IC, a listing of possible questions has been prepared and is provided as Attachment 7. This list of questions can be used in conjunction with other questions members of the IC may have on the ALM Workshop material.

Investment and Actuarial Risk Considerations of Preliminary Candidate Portfolios

This session will serve as the final session for Day 1 of the ALM Workshop and will introduce the preliminary policy portfolios, or “candidate portfolios” that will be further evaluated by the IC for feedback on Day 2 of the ALM Workshop. In consideration of CalPERS current Policy Portfolio, its location on the efficient frontier, and CalPERS ongoing risk and return goals, staff has prepared four preliminary candidate portfolios on the efficient frontier as well as a low-cost, public asset portfolio for consideration.

Each candidate portfolio is presented against common, inter-related risk considerations to provide the IC with a holistic risk and return “picture.” These risk considerations are:

- **Employer Contribution Rate** – At what rate will employers need to contribute to ensure benefit promises are met?
- **Employer Contribution Rate Volatility** – What is the magnitude of potential movements, up or down, of the contribution requirements for Employers to ensure benefit promises are met?
 - Rate volatility can be especially challenging given the multi-year nature of Employer budgeting.
- **Funded Level** – The measure of the percentage of accrued liabilities that are covered by net assets.

Stakeholder Perspectives

While it is the responsibility of the CalPERS Board of Administration and IC to balance plan assets to best meet liabilities, ALM spans many groups including the employers who make benefit promises, the employees whose compensation includes these long-term benefit promises, and the citizens of California. This session will include a panel representing perspectives from key stakeholder groups through a moderated discussion. This will also be an opportunity for public comments, consistent with the open opportunity provided at regular meetings of the IC and Board of Administration.

Policy Portfolio Preference Discussion

This session will consist of an interactive voting exercise and discussion in which the IC will be asked to express its preferences for a particular candidate portfolio.

Beyond the November 2013 ALM Workshop – Next Steps

Although the ALM Process has historically been on a three-year cycle, it is clear that many strategic, governance, and policy-level issues remain for further exploration and discussion by staff, the Board of Administration and its Committees. Exploration of these issues is timely as:

- CalPERS, and many public pension plans, mature and experience changing cash flow needs and diminished resilience to market “shocks”
- Markets continue to evolve and react to changing economic conditions, lessons learned from the 2009 financial crises, and ongoing regulatory changes
- Improved tools have brought funding risk into focus and allow us to explore new methods for understanding and managing risks

Obviously, many of these issues have near, medium, and long-term implications, and possible resolutions or mitigations for these issues will take months and years of collaboration between the CalPERS Board of Administration and staff. Staff plans on engaging the Board and its Committees throughout 2014 as part of this process. Key items for 2014 may include:

- Continuing to integrate and mature Treasury Management across the enterprise and all trusts
- Adoption of new actuarial assumptions
- Workshops to explore benchmarks, risk management and governance, active management, and integration of sustainability factors into investment decision making
- Further development of the flexible de-risking concept

BUDGET AND FISCAL IMPACTS

Budget and fiscal impacts will vary depending on the IC’s selected Policy Portfolio in December 2013. Additional analysis on potential impacts, such as capital and trading costs, will be available when additional information on the IC’s preferences is gathered through the November 2013 ALM Workshop.

ATTACHMENTS

Attachment 1 – ALM Objectives and Review Presentation

Attachment 2 – Low Volatility Strategy Presentation

Attachment 3 – Liquidity Allocation Recommendation and Introduction to Treasury Management Presentation

Attachment 4 – Flexible De-Risking Presentation

Attachment 5 – Program Roles, Investment Constraints, and Outlooks Presentation

Attachment 6 – Investment and Actuarial Risk Considerations of Preliminary Candidate Portfolios Presentation

Attachment 7 – Possible Discussion Questions

ERIC BAGGESEN
Senior Investment Officer
Asset Allocation and Risk Management

JOSEPH A. DEAR
Chief Investment Officer

CHERYL EASON
Chief Financial Officer

ALAN MILLIGAN
Chief Actuary