CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF POLICY FOR ASSET LIABILITY MANAGEMENT

Purpose

The California Public Employees' Retirement System ("CalPERS" or the "System") Pension and Investment Beliefs adopted by the CalPERS Board of Administration ("Board") set forth the pension fund's views on public pension design, funding, investment management, and administration. The Board has also established a key strategic goal of improving strengthening the long-term pension and health benefit sustainability of the pension fund. This goal is to be pursued through funding the System with an integrated view of pension assets and liabilities and actively assessing and managing funding risk through an Asset Liability Management ("ALM") framework. This document sets forth the policy ("Policy") for the establishment and maintenance of this ALM framework.

Contents

Topic	See Page
Background	2
Strategic Objectives	2
Policy	2-4
Policy Scope	4
Primary responsibility	4
Roles and Responsibilities	5
Key Terms and Definitions	6-7
Authoritative Sources	7
Related Documents	8-9
Revision History	9



Background

An effective ALM Program ("ALMP") is important to ensuring that contributions, plus investment returns, are sufficient to pay the benefits and expenses of the System and is critical to implementing the Pension and Investment Beliefs, pursuing the key strategic goal of improving strengthening long-term pension fund sustainability and carrying out the fiduciary duty owed to members.

Many policies approved by the Board address elements of ALM (see list of ALM-related policies in Related Documents below). This Policy addresses how the various ALM activities covered by the ALM-related policies are to be coordinated and managed in concert with each other.

Strategic Objective

The strategic objective of the Policy is to ensure strengthen the long-term pension sustainability of the system. A key process supporting this objective is the ALM Review Cycle, which takes place every four years. This Policy establishes how staff is to oversee and coordinate the Four-Year ALM Review Cycle.

Policy

Staff shall establish and maintain an ALMP in pursuit of long-term pension <u>fund</u> sustainability-<u>of the System</u>. The ALMP shall have a management structure in place to effectively oversee ALM strategies and to respond to dynamic market and operational environments appropriately and effectively.

- 1. The Chief Financial Officer ("CFO") is responsible for the oversight of the ALMP.
- 2. The ALMP shall establish and maintain an Asset Liability Management Advisory Committee ("ALMAC"), chaired by the CFO and made up of representatives from the financial office ("FINO"), investment office ("INVO"), actuarial office ("ACTO"), legal office ("LEGO") and communications and stakeholder relations ("CSR"). The following activities are within the purview of the ALMAC:
 - a. Coordination of the detailed ALM planning cycle every four years as well as the mid-cycle Board update.
 - b. The recommendation to the Board of the actuarial assumptions and employer/employee contribution rates.

Page 2 of 9

Policy (continued)

- c. The recommendation to the Board of the discount rate to be used.
- d. The recommendation to the Board of the target portfolio, including all capital market assumptions.
- e. Monitoring actual asset allocations versus the targets and ranges established by the Board.
- f. Annual review of funding levels and risks to be reported to the Board.
- g. Implementation of the Funding Risk Mitigation Policy. This policy shall also be reviewed on a periodic basis with any recommended changes taken to the FAC for review and recommendation to the Board of Administration.
- h. The review and update, as necessary, for presentation to the responsible Board Committees of the ALM aspects of all ALM-related policies.
- Monitoring of the key ALM metrics and the status of ALMrelated initiatives reported to the relevant Board Committees as prescribed by Board policies.
- j. Oversight of communications and outreach with employers and key stakeholders with respect to ALMrelated issues, including, but not limited to, actuarial assumptions, funded status and the setting of contribution rates.

Four-Year ALM Review Cycle

ACTO shall conduct an investigation of actuarial assumptions every four years and report its results to the Board. INVO shall provide a comprehensive strategic asset allocation analysis coincident with the review of actuarial methods and assumptions to be presented for review and approval of policy target asset class allocations and ranges. These two activities together shall be overseen and coordinated by the ALMAC and shall be referred to as the Four-Year ALM Cycle.

The ALMAC shall develop a specific plan, including a detailed timeline and set of materials for review with the Board, as part of this process.

Page 3 of 9

Policy (continued)

Specific topics to be addressed shall include, but not be limited to, the following:

- 1. Capital market assumptions;
- 2. Economic assumptions;
- 3. Actuarial experience study; and
- 4. Analysis of current risk metrics versus targets.

Senior management shall present recommendations for approval by the Board of the following:

- 1. Permissible, or target, risk levels;
- 2. Actuarial assumptions;
- 3. Discount rate;
- 4. Permissible investment asset classes and segments; and
- 5. Target, or policy, asset allocation.

The four-year cycle will be conducted for the Public Employees' Retirement Fund ("PERF"), and then the inputs to the cycle will subsequently be applied to the Affiliate Funds, as appropriate.

Policy Scope

This Policy applies to the PERF as well as the Affiliate Funds of the System, as applicable.

Primary Responsibility

The ALMAC, under the direction of the CFO as chairperson, is responsible for this Policy. The Finance and Administration Committee ("FAC" or "Committee") is the Board committee responsible for overseeing staff's implementation of the Policy. The Committee intends for the Policy to be a dynamic document which will be reviewed and modified periodically to reflect the changing nature of CalPERS' assets and investment programs, benefit programs, and economic conditions.

Roles and Responsibilities

The FAC's responsibilities with respect the ALMP shall include:

- Oversee senior management as they take steps to manage, measure, monitor, and control (1) funding status and risks, (2) employer contribution rates and (3) implementation of risk mitigation strategies.
- 2. Review Staff recommendations for changes to the Policy and take recommendations for changes to the Policy to the Board of Administration.

The IC's responsibilities with respect the ALMP shall include:

1. Oversee senior management as they take steps to manage, measure, monitor, and control investment portfolio allocations, returns and risks.

Staff, with the oversight of the ALMAC, is responsible to implement the specific elements contained in the "Policy" section above. As indicated in that section, many organization units are involved in the ALM process, including FINO, INVO, ACTO, LEGO and CSR. Staff shall develop a set of ALM procedures, to be approved by the CalPERS Chief Executive Officer, defining the operational roles, responsibilities and operational processes for each unit as they relate to ALM.

Page 5 of 9

Key Terms / Definitions

For the purposes of this document, the following terms and definitions apply.

Key Term	Definition
Affiliate Funds	Affiliate Funds of the System include the following: California Employers' Retiree Benefits Trust (CERBT) Fund, Judges' Retirement Fund, Judges' Retirement System II (JRS II) Fund, Legislators' Retirement System (LRS) Fund, Public Employees' Health Care Fund, Public Employees' Long-Term Care (LTC) Fund, and Supplemental Income Plans (SIP).
Asset Liability Management ("ALM")	ALM is the balancing of investment assets and contributions to appropriately match the level of benefits that have been promised to employees by employers who contract with CalPERS for benefits.
Actuarial Assumptions	Actuarial Assumptions are to include future wage and price inflation, mortality, service and other experience of CalPERS' members and other persons receiving benefits.
Capital Market Assumptions	Capital Market Assumptions are to include expected return, volatility and cash yield by asset class (and segments within asset classes, if applicable).
Discount Rate	The interest rate used to measure the total liability.
Employer and Employee Contribution Rates	The contribution requirements for Employers, and Employees, expressed as a percentage of total payroll cost.

Page 6 of 9

Key Terms / Definitions (continued)

For the purposes of this document, the following terms and definitions apply.

Key Term	Definition
Funded Status	The measure of the percentage
	of accrued liabilities that are
	covered by net assets.
Target Investment Portfolio	The target investment portfolio is
	to be recommended by staff for
	Board approval. The target
	portfolio is to be expressed as
	target percentages of the total
	portfolio (and ranges) by asset
	class and, potentially, by
	segments within asset classes.
	Program roles and benchmarks
	are to be articulated for each
	asset class and segment.

Authoritative Sources

CalPERS will administer this policy in compliance with the following legal, regulatory and policy requirements:

Source	Description
Cal. Gov't. Code §20120	The CalPERS Board of Administration is vested with the management and control of the Public Employees' Retirement System (the "System").
California Constitution, ART. XVI, § 17	The Board has plenary authority and fiduciary responsibility for the investment of monies and administration of the System. The Constitution also vests the Board with the sole and exclusive power to provide for the actuarial services in order to assure the competency of the System.

Related Documents

For additional information, please refer to:

Document	Relevance
Total Fund Investment Policy	Provides a framework for the
	management of CalPERS assets
	and outlines the objectives,
	benchmarks, restrictions and
	responsibilities of the investment
	program. Sets out the process
	for establishing asset class
	allocation policy targets and
	ranges and managing those asset class allocations within
	,
Judges' Retirement Fund	their policy ranges. Sets forth the investment policy
pudges Retirement Fund	for the Judges' Retirement Fund.
Judges' Retirement System II	Sets forth the investment policy
(JRS II) Fund	for the Judges' Retirement
(orto ii) i ana	System II Fund.
Legislators' Retirement System	Sets forth the investment policy
(LRS) Fund	for the Legislators' Retirement
	System Fund.
Funding Risk Mitigation Policy	Seeks to reduce CalPERS
	funding risk over time by lowering
	the discount rate when the
	CalPERS actual investment
	performance significantly
	outperforms the assumed
	discount rate.
Actuarial Assumptions Policy	Establishes the process of
	developing actuarial assumptions
	in order to measure and manage
	the liabilities of the System.

Page 8 of 9

Related Documents (continued)

For additional information, please refer to:

Document	Relevance
Actuarial Amortization Policy	Establishes the amortization
	methods to eliminate positive or
	negative unfunded liabilities in a
	manner that maintains benefit
	security for the members of the
	System while minimizing
	substantial variations in employer
	contribution rates.
Actuarial Cost Method Policy	Establishes the cost
	methodologies CalPERS will use
	to estimate pension costs.
Actuarial Contribution Allocation	Provides guidance to CalPERS
Policy	actuaries on the timing and
	methods used in the allocation of
	employer contributions to each
	employer's plans.

Revision History

The following revisions have been made to this policy:

Version	Modification Date	Summary of Changes
1.0		This is the initial ALM Policy.