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

Purpose

The California Public Employees' Retirement System (CalPERS or the System) Pension and Investment Beliefs adopted by the CalPERS Board of Administration (~~B~~board) set forth the pension fund's views on public pension design, funding, investment management, and administration. The ~~B~~board has also established a key strategic goal of strengthening the long-term sustainability of the pension fund. This strategic 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.

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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 strengthening the long-term sustainability of the pension fund sustainability and carrying out the fiduciary duty owed to members.

Many policies approved by the Bboard 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 strengthen the long-term pension fund 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 (ALM Cycle).

Policy

Staff shall establish and maintain an ALMP in pursuit of long-term pension fund sustainability. 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 or an authorized designee. The members are the Chief Executive Officer (CEO), CFO, Chief Investment Officer (CIO), Deputy Chief Investment Officer (DCIO), Deputy Executive Officer Communications & Stakeholder Relations (CSR), and the Chief Actuary. The General Counsel will serve as an advisory member. Members may assign and made up of additional representatives from the fFinancial oOffice ("FINO"), iInvestment oOffice ("INVO"), aActuarial oOffice ("ACTO"), lLegal oOffice ("LEGO"), and communications and stakeholder relations ("CSR") to serve in an advisory capacity. ALMAC members do not have term limits. The following activities are within the purview of the ALMAC":

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a. Coordination of the detailed ALM planning cCycle every four years as well as the Mid-Cycle Review.

b. The recommendation to the Bboard of the actuarial assumptions and employer/employee contribution rates.

c. The recommendation to the Bboard of the discount rate to be used.

d. The recommendation to the Bboard of the target portfolio, including all capital market assumptions.

e. Monitoring actual asset allocations versus the targets and ranges established by the Bboard.

f. Annual review of funding levels and risks to be reported to the Bboard.

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 Bboard committees of the ALM aspects of all ALM-related policies

i. Monitoring of the key ALM metrics and the status of ALM-related initiatives reported to the relevant Bboard committees as prescribed by Bboard policies.

j. Oversight of communications and outreach with employers and key stakeholders with respect to ALM-related 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 analyze actuarial assumptions every four years and report its results to the Bboard. 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

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target asset class allocations and ranges. These two activities together shall be overseen and coordinated by the ALMAC and shall be referred to a~~s~~ the ~~Four-Year~~ ALM Cycle.

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

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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 ~~B~~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~~ ALM ~~c~~Cycle will be conducted for the Public Employees' Retirement Fund (PERF), and then the inputs to the ALM ~~c~~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 is responsible for this Policy. The ~~Finance and Administration Committee (~~FAC~~)~~ is responsible for overseeing staff's implementation of the Policy. The FAC intends for the Policy to be a dynamic document which will be reviewed and modified

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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 to the ALMP shall include:

1. 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 Investment Committee (IC) responsibilities with respect to 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 pProcedures, to be approved by the CalPERS CEO, defining the operational roles, responsibilities, and operational processes for each unit as they relate to ALM.

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**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~~, California Employer's Pension Prefunding Trust (CEPPT), Judges' Retirement Fund, Judges' Retirement ~~System~~ Fund II (JR~~FS~~ II) ~~Fund~~, Legislators' Retirement ~~System~~ Fund (LR~~FS~~) ~~Fund~~, Public Employees' Health Care Fund (HCF), 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,

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	expressed as a percentage of total payroll cost.

Key Terms / Definitions (continued)

For 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 Bboard 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 Bboard of Administration is vested with the management and control of the Public Employees' Retirement System (System).
California Constitution, ART.XVI, § 17	The Bboard has plenary authority and fiduciary responsibility for the investment of monies and administration of the System. The Constitution also vests the Bboard with the sole and exclusive power to provide for the actuarial services in order to assure the competency of the System.

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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 their policy ranges.
Judges' Retirement Fund	Sets forth the investment policy for the Judges' Retirement Fund.
Judges' Retirement ~~System~~Fund II (JR~~FS~~ II) ~~Fund~~	Sets forth the investment policy for the Judges' Retirement ~~System~~ Fund II ~~Fund~~.
Legislators' Retirement ~~System~~ Fund (LR~~FS~~) ~~Fund~~	Sets forth the investment policy 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.

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Related Documents
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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 Policy	Provides guidance to CalPERS 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	April 19, 2017	This is the initial ALM Policy
2.0	~~July 13, 2018~~September 16, 2020	Modif~~yied~~ Policy, ~~and~~ Primary Responsibility, Role and Responsibilities Sections

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