CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM STATEMENT OF FINANCIAL POLICY FOR TREASURY MANAGEMENT

March 15, 2016

This policy is effective immediately upon adoption.

I. PURPOSE

The California Public Employees' Retirement System ("CalPERS") Pension Beliefs adopted by the CalPERS Board ("Board") sets forth the pension fund's views on public pension design, funding, and administration.

CalPERS' staff are assigned responsibilities which may require activities, such as the management of cash, monitoring of liquidity, and the management of liquidity risk in order to fulfill those responsibilities. These activities, in their entirety, constitute the treasury management practices of the enterprise which enable the payment of member benefits and other CalPERS' obligations.

This document sets forth the financial policy ("Policy") for the Treasury Management Program ("TMP"). The purpose of the Policy is to ensure that the treasury management practices of the enterprise recognize the fiduciary duty owed to members as stated in the CalPERS' Pension Beliefs.

The Finance and Administration Committee ("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 and structural changes, and economic conditions.

II. STRATEGIC OBJECTIVES

The TMP will be managed to accomplish the following:

- A. Ensure the payment of member benefits and enterprise obligations without interruption regardless of financial markets and environmental conditions;
- B. Provide an integrated process for the oversight and management of enterprise cash and liquidity during normal, stressed, and crisis events;
- Maintain appropriate coverage levels for programs and the enterprise; and,
- D. Oversee enterprise liquidity risk.

III. POLICY

- A. The Committee's responsibilities with respect to the TMP shall include, but are not limited to:
 - Oversight of senior management as they take steps to manage, measure, monitor and control liquidity risk with respect to funding ("Funding") which is the payment of member benefits and all other CalPERS' obligations;
 - 2. Annually review the Policy and significant strategies related to CalPERS' treasury management; and,
 - 3. Review for approval Staff recommendations for changes to the Policy.
- B. The TMP shall have a management structure in place to effectively execute Funding strategies to achieve or maintain coverage 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 TMP.
 - 2. The TMP will establish and maintain an Enterprise Treasury Team ("ETT") chaired by the CFO and made up of representatives from the Financial Office, Investment Office, Benefits Programs Policy & Planning, and Customer Services and Support. The ETT will:
 - a. Ensure payments of CalPERS' member benefits and other obligations are made in the most cost effective manner available;
 - b. Establish Funding coverage targets and ranges that align with the strategic objectives of the TMP;
 - c. Monitor enterprise cash flows and ensure Funding coverage is maintained within established ranges;
 - d. Develop and maintain Funding contingency plans;
 - e. Ensure the strategies of the TMP are coordinated with the strategies of the Asset Liability Management process.
 - f. Ensure appropriate operational practices and procedures are established and maintained across the enterprise to limit and control material sources of liquidity risk; and,
 - g. Report to the Board regularly on the Funding coverage of the enterprise and immediately report any material changes in

Treasury Management

Funding coverage that put the strategic objectives of the TMP at risk.

- 3. The TMP will establish and maintain the Enterprise Treasury Management Office (ETMO) which will be responsible for the measurement, analysis, and reporting of enterprise cash flows, coverage levels and key performance indicators.
- C. The TMP shall follow a risk based approach to the optimization of fund assets in the payment of CalPERS' obligations to ensure the most cost effective method of Funding is achieved during normal, stressed, and crisis environments.
 - 1. The TMP's available options for paying member benefits and other CalPERS' obligations will be established and managed by the ETT.
 - 2. As necessary, the TMP will establish and oversee cash reserves for programs that serve as an option for payment of CalPERS' obligations if a market or external environment event results in the depletion of cash. The ETMO will follow a risk based approach to determine the appropriate levels of cash reserves for each program based on the program's purpose, strategic objectives, and the consideration of market-related risks and external environment events.
 - 3. Options established and maintained for Funding, listed in Table 1 below, will comply with all CalPERS' policies which govern investment activities.

Table 1

Option	Description
Cash at Bank	CalPERS' cash or cash equivalent investments in the
	custody of the State Treasurer's Office.
Cash Reserves	Liquid assets dedicated to the payment of member
	benefits and other obligations during a stressed or crisis
	event.
Investment	Cash or cash equivalent investments allocated to an
Cash	investment strategy and not pledged for other purposes.
Borrowed	Cash generated from leveraged investments on a short
<u>Liquidity</u>	term basis as directed by the Investment Office.
Cash from	Cash generated from the sale of investment holdings as
asset sale	directed by the Investment Office.

D. The TMP shall utilize a structured approach to measure and report current and future enterprise liquidity based on a detailed understanding of the amount of current liquid assets, projected enterprise cash flows, the accuracy of those projections and a consideration of both market-related liquidity risks and external environment events.

- 1. Key performance indicators will be developed and maintained which measure the program's liquidity in relation to its near term obligations and will be expressed in terms of coverage.
- Funding coverage targets and ranges will be established based on each program's purpose, strategic objectives, and the consideration of marketrelated and external environmental risks.
- Measurement and reporting of Funding coverage for the enterprise will
 occur on a routine basis and will identify report to the ETT where
 coverage levels exceed predetermined ranges. Immediate notification to
 the ETT will occur when Funding coverage requires utilization of
 borrowed liquidity. Escalation to the FAC by the ETT will occur in the
 event that Funding coverage utilizing borrowed liquidity exceeds the
 timeframe in the Operating Guidelines for Implementing Borrowed
 Liquidity.
- Funding coverage will be managed to be within established ranges but may temporarily deviate from established ranges due to market volatility or other events.
- E. The TMP shall be responsible for cash flow forecasting but the preparation of the cash flow forecasts may be delegated to line-of-business managers who are responsible for activities that underlie the cash flow information.
 - Cash flow forecasts will be prepared on a regular and timely basis and subject to variance analysis and effective governance to ensure accuracy from input providers.
 - 2. Cash flow forecasts will be prepared for all areas of the enterprise where business activity can result in a material impact to the Funding coverage of the enterprise.
- F. A Funding contingency plan ("Plan") shall be established and maintained which describes the enterprise response and protocols to be followed during market and external environment events impacting Funding coverage.
 - 1. The Plan will be established, approved, and maintained by the ETT but its execution may be delegated to line-of-business managers who are responsible for activities that underlie the payment of obligations from program assets.
 - 2. The Plan will include the asset based and financial options available to the enterprise, their usage criteria, and the management protocols to be followed during a stressed or crisis event.
 - 3. The Plan will be reviewed on an annual basis to ensure alignment

Treasury Management

with the market-related and external operating environment.

- 4. A report on the status of the Plan will be communicated to the Committee on an annual basis.
- G. The TMP shall maintain appropriate processes, skilled staff, and adequate information systems required for measuring, monitoring, controlling and reporting liquidity positions with respect to Funding.

IV. GLOSSARY OF TMP SPECIFIC TERMS

Cash	Cash or cash equivalent instrument(s) which can be available for payment of member benefits or other CalPERS' obligations by the next business day with little or no impairment.
Coverage	A measure of the enterprise's ability to continue to pay over a fixed period of time member benefits and other near term obligations from available Funding options.
Crisis Event	A severe, unanticipated market or non-market event for which the Funding contingency plans require the options for the payment of CalPERS' obligations to be identified and evaluated based on the nature of the event.
Enterprise	The entirety of the CalPERS' organization including all divisions and offices.
Liquidity	Availability of assets that can be converted to cash quickly and efficiently in order to pay member benefits or other obligations.
Reserve	Liquid assets dedicated to the payment of member benefits and other obligations during a stressed or crisis event.
Stressed Event	A severe market or non-market event for which Funding contingency plans have been made and options are identified and available to meet CalPERS' obligations.