Investment Committee
California Public Employees' Retirement System

Agenda Item 8c

February 16, 2016

ITEM NAME: Asset Allocation Target Revisions for Funding Risk Mitigation Events

PROGRAM: Asset Allocation

ITEM TYPE: Asset Allocation, Performance & Risk – Information

EXECUTIVE SUMMARY

This item outlines the proposed changes to the CalPERS asset allocation targets to effectuate a reduction in expected investment return as contemplated in the Funding Risk Mitigation Policy. Staff recommends these changes be predefined and documented within the CalPERS Total Fund Investment Policy (Total Fund Policy).

In consideration of market capacity, and the relative transactional liquidity of asset classes, the recommended asset allocation changes are limited to the Global Equity and Global Fixed Income asset classes. Staff anticipates the proposed asset allocation target weight changes outlined in this item will be available for use over the next two years until the next four-year Asset Liability Management (ALM) process is undertaken.

A summary presentation is provided as Attachment 1. A blackline of the proposed revisions to the Total Fund Policy related to this item is included as part of agenda item 9a for the February 2016 Investment Committee, *Revision of the Total Fund Investment Policy and Repeal of Legacy Policies – First Reading*. An opinion letter from Wilshire Associates is also provided as part of the Total Fund Policy agenda item.

STRATEGIC PLAN

This agenda item supports the CalPERS Strategic Plan goal to improve long-term pension and health benefit sustainability. It specifically addresses the objective to fund the system through an integrated view of pension assets and liabilities.

BACKGROUND

On November 18, 2015 the CalPERS Board of Administration adopted the Funding Risk Mitigation Policy (FRM Policy). This policy established a mechanism whereby CalPERS investment performance that significantly outperforms the discount rate triggers adjustments to the expected investment return.

Table 1 describes the changes that will be made to the expected investment return in response to a Funding Risk Mitigation Event as defined in the FRM Policy.

Table 1: Funding Risk Mitigation Event Thresholds and Impacts

Excess Investment Return	Reduction in Expected Investment Return
If the actual investment returns exceed the discount rate by:	*The expected investment return will be reduced by:*
4%	0.05%
7%	0.10%
10%	0.15%
13%	0.20%
17%	0.25%

The reductions in expected investment return outlined in Table 1 will be used to adjust the CalPERS asset allocation targets, which will result in a Total Fund Policy Benchmark (as defined in the Total Fund Policy) with reduced expected volatility.

The FRM Policy identifies several actions that must be completed by staff across multiple CalPERS Offices upon the occurrence of a Funding Risk Mitigation Event in any given fiscal year (an “Event Year”). Key items affecting the Investment Office include:

- Staff shall report the annual net investment return for the Event Year to the CalPERS Board of Administration.

- Staff shall implement new asset allocation targets based on the reduction in expected investment return indicated in Table 1, in accordance with the current schedule of asset allocation ranges and targets adopted by the Investment Committee.

- The new asset allocation targets shall take effect on October 1 of the fiscal year immediately following the Event Year.

- The Total Fund Policy Benchmark shall be adjusted consistent with the new asset allocation targets and staff shall report the new asset allocation targets, Total Fund Policy Benchmark, and expected investment return to the Investment Committee.

The FRM Policy also outlines several limitations including:

- Discount rate reductions shall be reduced in increments of five basis points (0.05%) and limited to a maximum of 25 basis points (0.25%) per year.
- The expected investment return shall not be reduced to the point where the estimated investment return volatility drops below 8% according to CalPERS capital market assumptions.

ANALYSIS

To address the requirements established in the FRM Policy, staff proposes that predefined asset allocation target weight changes be established, codified in the Total Fund Policy, and periodically reviewed and developed as part of routine ALM processes. Additional information is included in the sections below.

Establishment of Predefined Asset Allocation Targets Associated with Funding Risk Mitigation Events

In order to streamline the process to respond to a Funding Risk Mitigation Event, and to comply with the timelines set forth in the FRM Policy, staff recommends that asset class weight adjustments be pre-specified. A summary table of asset allocation target weight adjustments, focusing on the asset class allocations where change will occur, is provided below in Tables 2 and 3.

Table 2: Cumulative Risk Reduction and Asset Allocation Weight Changes in Response to Funding Risk Mitigation Events

From the starting point of the interim asset allocation targets (as of 7/1/15), to reduce expected returns by:										
Cumulative Expected Return Reduction (%)	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50
Target asset class allocations between Public Equity and Fixed Income would need to change by:										
Target Change (%) Public Equity	-2	-3	-5	-6	-7	-9	-10	-12	-13	-15
Fixed Income	+2	+3	+5	+6	+7	+9	+10	+12	+13	+15
Expected Volatility Total Fund (%)	11.64	11.50	11.22	11.07	10.93	10.66	10.52	10.25	10.11	9.85

As Funding Risk Mitigation Events occur the expected volatility of the CalPERS Total Fund Benchmark is expected to be reduced with each subsequent shift of target allocation weight from Public Equity to Fixed Income. Table 3 below outlines the total resulting target weights for both Public Equity and Fixed Income associated with the corresponding reduction in the expected investment return.

Table 3: Resulting Asset Allocation Target Weights for Public Equity and Fixed Income

Cumulative Expected Return Reduction (%)	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50
New Total Weights (%) Public Equity	49	48	46	45	44	42	41	39	38	36
Fixed Income	22	23	25	26	27	29	30	32	33	35

A hypothetical illustrative example is outlined in Table 4 below, utilizing a 7.5% discount rate, showing how the changes in asset allocation move from left to right across Tables 2 and 3.

Table 4: Hypothetical Example – for Illustrative Purposes Only

Year	CalPERS Fiscal Year Investment Return	Funding Risk Mitigation Event?	Resulting Asset Allocation Target Change	Cumulative Reduction in Expected Return
One	11.5 % (exceeded discount rate by 4%)	Yes, reduce expected investment return by 0.05%	Public Equity decreases to 49% Fixed Income increases to 22%	0.05%
Two	14.5 % (exceeded discount rate by 7%)	Yes, reduce expected investment return by additional 0.10%	Public Equity decreases to 46% Fixed Income increases to 25%	0.15%

It is anticipated that a new set of pre-defined asset allocation weight targets for use with Funding Risk Mitigation Events will be developed:

- As part of each four-year ALM process, and/or

- If there is a change to CalPERS asset allocation targets outside of the four-year ALM process.

The proposed asset allocation weight changes represent a set of portfolios most aligned with a 0.05% to a 0.50% cumulative reduction in expected investment return levels. The potential portfolios were prepared consistent with the most recent ALM process, including:

- Utilizing CalPERS' capital market assumptions, as approved by the Investment Committee
- Utilizing the same optimization constraints, with the following modifications:
    - The maximum weight constraints for Private Equity and Real Assets were adjusted to reflect the current interim target weights for those asset classes, 10% and 12% respectively.
    - The weight for the Liquidity asset class was also maintained at the interim target weight of 1%, to ensure sufficient liquidity.
- Rounding weights to the nearest whole percent.

A copy of the 2013-14 ALM capital market assumptions, along with the updated constraints used in the optimization process to develop the Funding Risk Mitigation Event asset allocation target changes, is included in the appendix to Attachment 1.

<u>Asset Allocation Target Changes and the Focus on Public Equity and Fixed Income</u>

When the Investment Committee took up a review of CalPERS' interim allocation targets in April of 2015 it was noted that market conditions and capacity issues for Private Equity and Real Assets have not changed significantly since interim asset allocation policy targets were initially set in May 2014. Those conditions remain in effect at this time:

- Private Equity continues to experience a slow pace for deployment of committed capital.
- Capital deployment remains challenging in Real Assets due to the high degree of competition for assets that meet the role of our program.

When considering which asset class allocations can be adjusted and implemented in a timely manner the market capacity and low transactional liquidity associated with the private asset classes render them impractical for this use.

This was also reflected in the results of the optimization process to develop the proposed asset allocations. The current interim allocation targets for Private Equity and Real Assets, reflecting the market capacity issues within those asset classes, were input as constraints in the optimizer. The results indicated that allocation changes were limited to the Public Equity and Fixed Income asset classes.

Although inflation assets are also a public asset class, the allocation constraint established for the inflation assets class as part of the 2013-14 ALM process prevented any additional allocation to that asset class (6% maximum already in use).

<u>Documentation and Periodic Revision of Funding Risk Mitigation Event Asset Allocation Targets</u>

To ensure cohesive documentation, staff proposes that the *Asset Allocation Targets and Ranges* appendix of the Total Fund Policy be updated with a table of the predefined asset allocation target changes to be utilized in the instance of a Funding Risk Mitigation Event.

This table will be updated during each four-year ALM cycle and the Total Fund Policy will be revised accordingly to reflect the new strategic asset allocation and the new funding risk mitigation weight adjustments.

BUDGET AND FISCAL IMPACTS

Not Applicable

BENEFITS/RISKS

The benefits and risks associated with the primary elements of staff's proposals are outlined in the sections below.

<u>Establish a predefined set of asset allocation changes to be used in the case of Funding Risk Mitigation Events</u>

Utilizing a predefined set of asset allocation changes will allow the corresponding adjustments to the expected rate of return and discount rate to be made in a streamlined and timely manner, as outlined in the FRM Policy. Additionally, staff believes that the approval of a predefined set of allocation changes represents the highest and best use of the Investment Committee's time, with the alternative being potentially multiple ad hoc presentations leading to the same allocation outcomes.

Failure to define the proposed changes in advance would increase the potential for delays in implementing changes to the expected rate of return and discount rate as required in the FRM Policy, resulting in potential policy exceptions.

Maintain the Funding Risk Mitigation Event asset allocation targets within the Total Fund Policy with regular review coincident with the four-year ALM cycle

Incorporating the asset allocation targets associated with Funding Risk Mitigation Events into the Total Fund Policy will ensure that governance documentation related to CalPERS asset allocation targets is clear and centralized. Cohesive documentation will reduce complexity and the potential for operational risks associated with disparate governance documentation. Additionally, the Total Fund Policy is reviewed and revised as part of routine ALM cycle activities. That routine body of work will be leveraged to ensure a refresh of the Funding Risk Mitigation Event allocation targets is undertaken as part of each four-year ALM cycle.

ATTACHMENTS
Attachment 1 – Presentation

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