

Asset Allocation Target Revisions for Funding Risk Mitigation Policy

February 16, 2016

Recap| Funding Risk Mitigation Policy

In November 2015 CalPERS Board of Administration adopted CalPERS Funding Risk Mitigation Policy.

The Policy

- Governs the practices related to the establishment and oversight of risk mitigation for the funding of the pension system
- Provides a mechanism for a discount rate reduction when investment performance significantly outperforms the discount rate by set thresholds (a Funding Risk Mitigation Event)¹

Mechanism for Discount Rate Reduction

When a Funding Risk Mitigation Event occurs CalPERS will reduce the expected rate of return by adjusting the asset allocation targets for the Total Fund.

- Adjustments will follow a predefined mix of asset class weights that correspond to the reduction in the expected long-term blended rate of return
- The predefined mix of asset class weight adjustments to effect expected return reductions will be codified in the Total Fund Statement of Investment Policy

Potential Allocation Changes | Public vs. Private Asset Classes

Private asset classes pose several challenges when considered as potential avenues to deploy capital to in response to a Funding Risk Mitigation Event:

- Low transactional liquidity
- Market capacity issues

In consideration of these challenges, staff's recommended allocation weight changes focus on public asset classes.

Predefined Asset Allocation Target Changes

The predefined mix of asset class weights are predicated upon the following considerations consistent with the cyclical Asset Liability Management process:

- Capital Market Assumptions as approved by the Investment Committee
- Target Allocations rounded to the nearest 1%,
- Maximum weight constraints for private asset classes
- Utilizing interim asset allocation weights effective July 1, 2015

Funding Risk Mitigation Event | Asset Allocation Targets

Cumulative Change Over Time –

To effectuate the lower expected rate of return, Public Equity and Fixed Income target weights would change* as follows:

	Cumulative Expected Investment Rate of Return Reduction (%)									
	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50
<u>Allocation Target Change (%)</u>										
Public Equity	-2	-3	-5	-6	-7	-9	-10	-12	-13	-15
Fixed Income	+2	+3	+5	+6	+7	+9	+10	+12	+13	+15

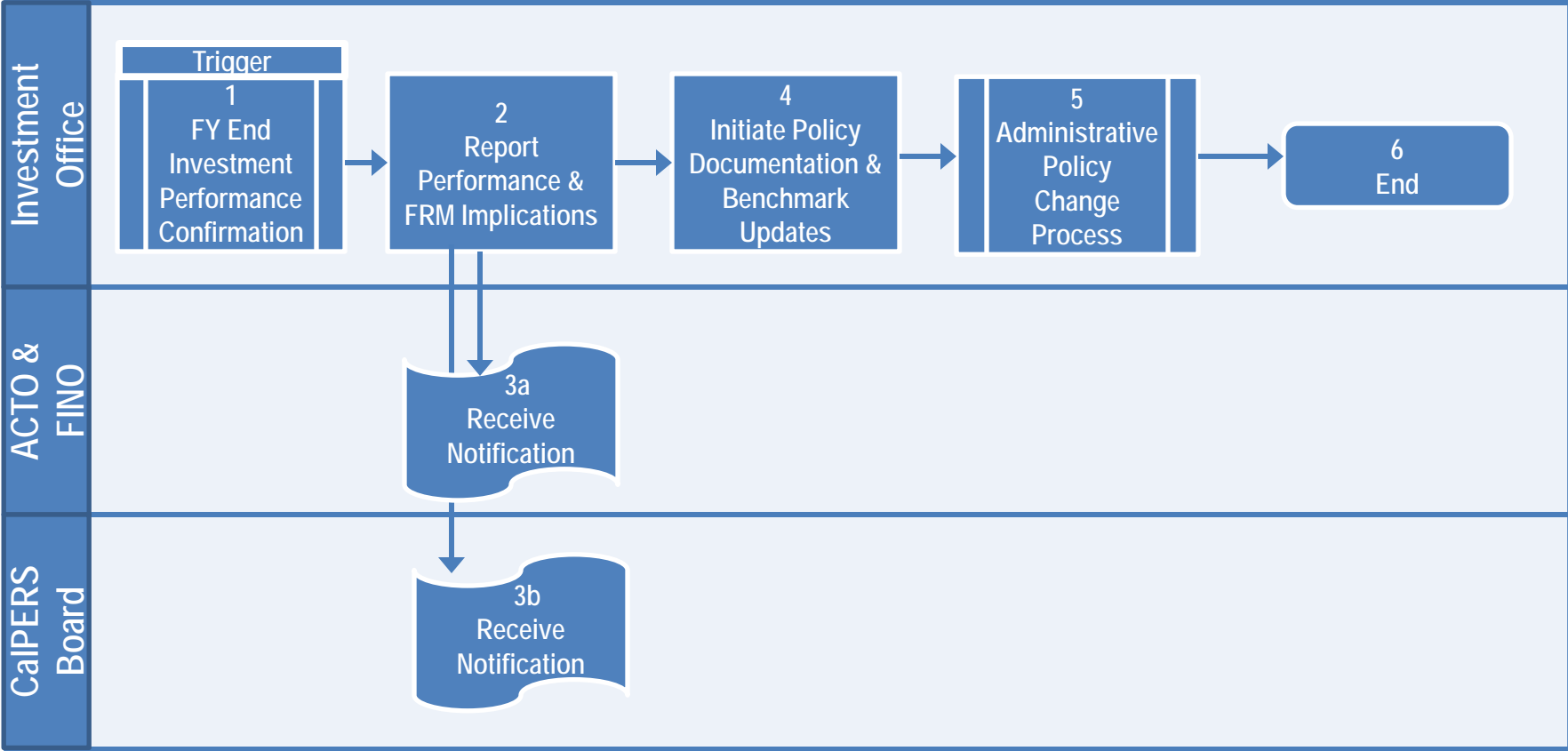
*From the current asset allocation targets as of July 1, 2015

Funding Risk Mitigation Policy | Asset Allocation Targets

Example : Funding Risk Mitigation Event(s) resulting in a 0.10% expected return reduction

Starting Point Interim Strategic Asset Allocation as of 7/1/2015	Cumulative Reduction in Expected Returns of (%):	0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50
	Asset Classes	Target Allocations with Reduced Expected Returns (%)									
51%	Public Equity	49	48	46	45	44	42	41	39	38	36
10%	Private Equity	10	10	10	10	10	10	10	10	10	10
20%	Fixed Income	22	23	25	26	27	29	30	32	33	35
10%	Real Estate	10	10	10	10	10	10	10	10	10	10
2%	Infra. & Forestland	2	2	2	2	2	2	2	2	2	2
6%	Inflation Assets	6	6	6	6	6	6	6	6	6	6
1%	Liquidity	1	1	1	1	1	1	1	1	1	1
11.93%	Expected Volatility (%)	11.64	11.50	11.22	11.07	10.93	10.66	10.52	10.25	10.11	9.85

Investment Office Activities | Implementation Following a Funding Risk Mitigation (FRM) Event



Appendix

- 2013-14 ALM Capital Market Assumptions (CMAs) and Constraints Used in Development of Funding Risk Mitigation Event Asset Allocation Targets

2013-14 ALM CMAs & Updated Constraints Used in Development of Funding Risk Mitigation Event Asset Allocation Targets

Asset Class	Arithmetic E(R)	Compound E(R)	Volatility (St. Dev.)	Cash Yield	Correlations								Constraints	
					Public Equity	Private Equity	Fixed Income	Real Estate	Infra. & Forest	Inflation Assets	Liquid	ARS	Floor	Cap
Global Equity	9.15	7.75	17.40	2.73	1.00	0.73	0.21	0.37	0.27	0.03	0.00	0.50	0%	100%
Private Equity	12.15	9.33	25.00	0.00	0.73	1.00	0.12	0.38	0.20	0.01	0.00	0.35	0%	10%*
Fixed Income	3.73	3.49	7.00	3.70	0.21	0.12	1.00	0.13	0.20	0.25	0.50	0.06	15%	100%
Real Estate	7.91	7.00	14.00	2.00	0.37	0.38	0.13	1.00	0.50	0.10	0.05	0.27	0%	10%*
Infra. & Forest.	7.56	7.00	11.00	2.50	0.27	0.20	0.20	0.50	1.00	0.20	0.20	0.20	1%	2%*
Inflation Assets	3.20	2.95	7.25	0.88	0.03	0.01	0.25	0.10	0.20	1.00	0.14	0.00	2%	6%
Liquidity	2.00	1.95	3.00	2.02	0.00	0.00	0.50	0.05	0.20	0.14	1.00	0.10	1%*	100%