California Public Employees' Retirement System Investment Policy for Real Assets Program

Effective Date	[Month, DD, YYYY] This Policy supersedes all previous Real Assets policies.
Introduction	The California Public Employees' Retirement System (CalPERS) Total Fund Investment Policy, adopted by the CalPERS Investment Committee (Committee), sets forth the CalPERS investment beliefs and overarching investment purposes and objectives with respect to its investment programs. The CalPERS Total Fund Investment Policy specifically covers key areas of investment strategy, including performance objectives, asset allocation strategies, benchmark selection, investment risk management, and derivatives, leverage, and divestment policies, among other elements that are applicable to all asset classes and programs at CalPERS.
	This document sets forth the investment policy (Policy) for the Real Assets Program (Program), which is comprised of the following three portfolios: Real Estate, Infrastructure, and Forestland. The design of this Policy ensures that staff, investors, managers, consultants, and other participants selected by CalPERS take prudent and careful action while managing the Program. Additionally, use of this Policy assures sufficient flexibility in managing investment risks and returns associated with this Program.
	This Policy should be read in conjunction with and is subject to conditions contained within the CalPERS <u>Total Fund Investment Policy</u> and any related Investment-Policy Procedures and Guidelines (IPPG) documentation. Staff shall manage this Policy in compliance with all applicable Investment Office policies.
Strategic Objective	The Program's strategic objective is to provide stable and predictable cash yield, diversification of equity risk, and inflation protection.
Benchmark	The benchmarks for the Program are specified in the Benchmarks section of the Total Fund Investment Policy.
Responsibil- ities	Details regarding various levels of responsibility for this Program are provided in Appendix 1, Reporting to the Investment Committee, and Appendix 2, Investment Responsibilities.

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Investment Approaches & Parameters	 Real Assets Program Allocations Program allocation targets and ranges are listed in the Total Fund Investment Policy. 			
	 Diversification and Limits To mitigate risk, staff shall maintain an appropriate level of diversification within the Program. Staff shall monitor the Program for adherence to the Key Policy Parameters specified in Appendix 3 to this Policy. 			
	3. Infrastructure and Forestland Parameters The Key Policy Parameters pertaining to risk classifications, geographic regions, and leverage will apply to (a) the Infrastructure portfolio only when the Net Asset Value (NAV) for that portfolio exceeds \$5.0 billion and (b) the Forestland portfolio only when the NAV for that portfolio exceeds \$3.0 billion.			
Investment Constraints/ Limitations	See Appendix 3 for program investment constraints.			
Glossary of CalPERS Specific Terms	<i>Italicized</i> terms appearing in the Policy are "CalPERS specific" in nature and are defined in the <u>CalPERS Specific Glossary of Terms</u> .			
Policy Document History	See Appendix 4 for historical details of the Committee's adoption of, and subsequent revisions to, this Policy.			

See the <u>Total Fund Investment Policy</u> appendices for overarching reporting requirements and responsibilities for the Investment Committee, staff, *General Pension Consultant, and Private Asset Class Board Investment Consultant*.

Appendix 1 Reporting to the Investment Committee

The following tables provide details regarding reporting to the Investment Committee:

- Investment Office staff
- General Pension Consultant

	Investment Office Staff					
	Report Content	Frequency				
1.	Staff shall provide an Annual Program Review that will include a program overview, investment review, and business review in general conformance with the Annual Program Review Template.	No less than annually				
2.	Staff shall report concerns, problems, material changes, and all violations of the Policy. These reports shall include explanations of any violations and appropriate recommendations for corrective action.	At the next Committee meeting, or sooner if deemed necessary				
3.	Staff shall maintain a Strategic Plan approved by the Committee setting forth CalPERS' long-term objectives for investment and management of the Program. Changes to the Strategic Plan require Committee approval.	At a minimum every five years				

General Pension Consultant				
Report Content	Frequency			
The Consultant shall monitor, evaluate, and report on the performance of the Program relative to the benchmarks and this Policy and other applicable CaIPERS policies.	No less than annually			

Appendix 2 Investment Responsibilities

The following tables provide details regarding investment related responsibilities for the:

- Investment Office staff
- General Pension Consultant
- Private Asset Class Board Investment Consultants
- Managers/Partners

As used in this Policy, the term "manager" refers to third-party managers under the Program, and the term "partner" includes managing members of Limited Liability Companies.

Investment Office Staff Responsibilities

- 1. Undertake all aspects of portfolio management including monitoring, trading, analyzing, and evaluating performance relative to the appropriate benchmark, and selecting and contracting with managers/partners consistent with all applicable policies and procedures.
- 2. Develop and maintain investment procedures, program guidelines, and portfolio guidelines.
- 3. Screen and evaluate investment proposals consistent with the Program's Strategic Plan, Appendix 3, and applicable investment policies and procedures.
- 4. Execute approved investment transactions, including negotiating investment agreements, performing initial and ongoing due diligence, and closing transactions.

General Pension Consultant Responsibilities

1. Provide independent perspective and counsel to the Committee, to include routine communication with the Investment Office staff and periodic reviews of processes and procedures.

Private Asset Class Board Investment Consultants Responsibilities

1. The responsibilities of the respective board consultants are specified in the "Private Asset Class Board Investment Consultants" section of, and the reporting and responsibility appendices to, the Total Fund Investment Policy.

Manager/Partner Responsibilities

- 1. Manage its allocated portion of the Program in accordance with (a) each manager/partner's contract or partnership/operating agreement with CalPERS and (b) applicable policies.
- 2. Communicate and cooperate with Investment Office staff and authorized third parties regarding the management of its allocated portion of the Program.

Appendix 3 Investment Constraints/Limitations

Staff Authority Limits¹

Net Asset Value (NAV) in billions

	Real Assets Program Components					
	Real Estate		Infrastructure		Forestland	
The Managing Investment Director and Chief Investment Officer limits apply per commitment.	Investments	Dispositions	Investments	Dispositions	Investments	Dispositions
Managing Investment Director	\$3	\$3	\$1	\$1	\$1	\$1
Chief Investment Officer	\$6	\$6	\$2	\$2	\$2	\$2
Fiscal Year Limit applies to cumulative commitments.						
Managing Investment Director Fiscal Year Limit	\$10	\$10	\$3	\$3	\$3	\$3

¹All limits (i) include new commitments, additional commitments made for investments in existing assets, and debt pay-downs, and (ii) apply only to the amount committed or invested, excluding any leverage or fees.

Key Policy Parameters

1. Partner Relationship Exposure

The maximum Partner Relationship Exposure for the Program is 20%. Similarly, the maximum exposure to outstanding investments with no *External Manager* is also 20%. For purposes of this Appendix 3,

- a. "Partner Relationship Exposure" means, with reference to any given Partner Relationship, the ratio of (i) the NAV of assets under management with such Partner Relationship, plus total unfunded commitments, to (ii) the total NAV of the Program plus total unfunded commitments; and
- b. "Partner Relationship" means, collectively, the total investment allocation with any one manager or partner, or, in cases where the Program has investments with multiple members of an affiliated group of managers and/or partners, the investment allocation with that affiliated group.

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2. Risk Classifications

The Program will be divided into three risk classifications: core, value add, and opportunistic. Individual assets will be assigned to the appropriate risk classification. The permitted NAV percentage ranges for each risk classification are as follows:

Risk Classification	Real Assets	Real Estate	Infrastructure	Forestland
Core	75-100%	75-100%	60–100%	75-100%
Value Add	0-25%	0-25%	0–25%	0-25%
Opportunistic*	0-25%	0-25%	0–25%	0-25%

*Development assets will have a limit of 10% of the Program and each portfolio. All Development assets will be assigned the "opportunistic" risk classification.

3. Geography

Staff will pursue a global real assets investment strategy, with emphasis in the United States. International markets are categorized as Developed, Emerging, and Frontier, based on FTSE classification of markets. The permitted NAV percentage ranges for each geographic region are as follows:

Region	Real Assets	Real Estate	Infrastructure	Forestland
United States	70-100%	75-100%	50–100%	50-100%
International Developed Markets	0-30%	0-25%	0-50%	0-50%
International Emerging Markets	0-15%	0-15%	0-15%	0-15%
International Frontier Markets	0-5%	0-5%	0-5%	0-5%

4. Public Securities

Public securities will not exceed 10% of the Program.

5. Leverage

Leverage parameters shall be measured on a loan-to-value ratio (LTV) and debt service coverage ratio (DSCR) basis. The permitted leverage parameters are as follows:

Leverage	Real Assets	Real Estate	Infrastructure	Forestland
LTV (maximum)	55%	50%	65%	40%
DSCR (minimum)				
Total	1.40	1.50	1.25	1.25
Core	N/A	2.00	N/A	N/A

Appendix 4 Real Assets Program Policy Document History

Date	Detail
2011-04-11	Approved by the Policy Subcommittee
2011-05-16	Adopted by the Investment Committee
2011-06-15	Approved by the Policy Subcommittee
2011-08-15	Adopted by the Investment Committee
2013-04-15	Approved by the Investment Committee
2013-12-16	Approved by the Investment Committee
2014-05-28	Administrative changes to (1) align this policy with the Global Derivatives and Counterparty Risk Policy, and (2) to standardize reporting frequencies to the Investment Committee to "no less than annually"
2014-05-28	Administrative changes to reflect the Policy Glossary of Terms Update Project
2016-02-16	Approved by the Investment Committee Added Attachment D, Investment Limits and Constraints, to incorporate Investment Restructuring Project revisions
2016-08-15	The Investment Policy for Real Assets was conditionally approved by the Investment Committee pending approval of the Real Assets Investment Policy Procedures and Guidelines by the Boards Investment Consultants. The Policy was reformatted to incorporate Investment Policy Revision Project revisions.
	As of November 30, 2016, the IPPGs were approved by the Board Investment Consultants. Real Assets staff requested the updated Investment Policy for Real Assets and the IPPGs be effective as of January 1, 2017.
2018-03-19	Approved by the Investment Committee Revisions to clarify fiscal year commitment limits specific to the Managing Investment Director, and establish a threshold at which the concentration limits apply to the Forestland Portfolio.
YYYY-MM- DD	[Summary of changes approved by the Committee]