

Infrastructure & Forestland Program Update

Real Assets

December 10, 2012

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I. INVESTMENT REVIEW INFRASTRUCTURE PROGRAM

Program Role & Scope^(a)

- The Infrastructure Program Investment Policy was initially established in August 2008. In August 2011, the policy was revised and approved by the Board.

- Strategic Role:
 - Steady returns (low downside risk)
 - Cash flow
 - Inflation protection
 - Long-term performance exceeding CPI^(b) + 400 BPS

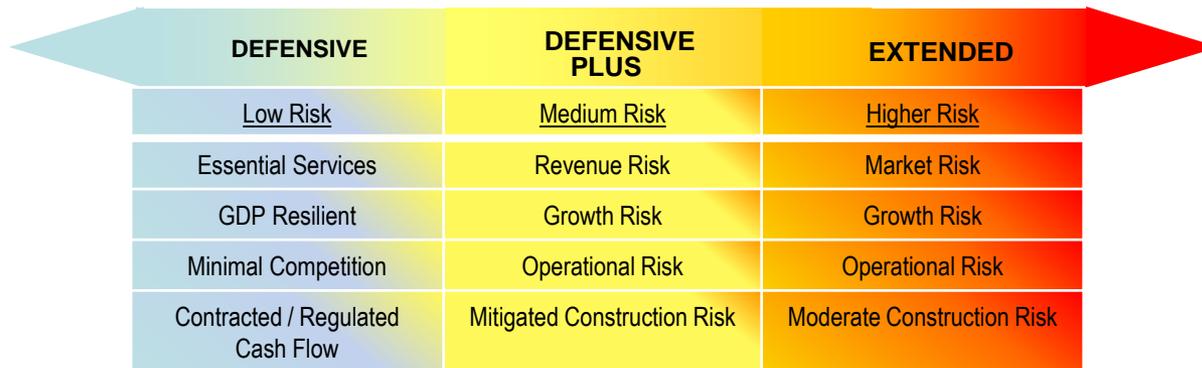
- Primary Investment Focus:
 - High-quality assets
 - Best-in-class partners
 - U.S. investment, with strong appetite for investment in California

(a) Condensed from CalPERS Statement of Investment Policy for Real Assets, Infrastructure Program, August 15, 2011.

(b) Consumer Price Index for all Urban Consumers (CPI-U) is used as the inflation factor.

Program Role & Scope

- The Infrastructure Program seeks to invest in public and private infrastructure including but not limited to the transportation, energy, power and water sectors.
- Asset types include:
 - Regulated utilities, or similarly regulated businesses (e.g. Gatwick Airport)
 - Long-term-contracted energy and power assets (e.g. Neptune Transmission)
 - Long-term concessions/ leases/ franchise agreements with public-sector agencies
- The Program invests across the infrastructure risk-return spectrum seeking appropriate return for risk



- Additional preferences / considerations:
 - Direct investments in the form of equity (common or preferred) or subordinated floating-rate debt
 - \$150 mm or greater, per transaction
 - Appropriate alignment with operating and financial partners

Program Role & Scope

- Investment Screening:
 - High-quality assets
 - Best-in-class partners, and effective alignment of interests
 - High probability of successful investment execution



Summary: Infrastructure Program

- **Holdings:** The Program consisted of six investments – four externally managed funds and two direct investments.
- **Funding Status:** Investment commitments were 75% funded, equaling \$762 million.
- **Contributions:** Contributions since inception totaled \$927 million.
- **Distributions:** Distributions since inception totaled \$165 million.
- **Portfolio Value:** Program NAV equaled \$1,035 million.
- **CA Investments:** CA investments were \$94 million or 9% of Program NAV.
- **Asset Allocation:** The Strategic Target for the quarter remained at 1%. Actual Effective Investment for the quarter remained at 0.4%.
- **Performance:** The Infrastructure Program reported Nominal Returns net of fees of -0.9% for the quarter and 3.7% for the 1-year period, underperforming the benchmark by -1.9% and -2.1%, respectively. The Program's 3-year, 5-year and since inception net of fees returns have outperformed the benchmark.
 - Direct investments have generated strong performance.
 - Commingled funds have had mixed performance.
- **Significant Events & Exceptions:** There were no significant events or exceptions during the quarter.
- **Post-Period Developments:** The Program made a commitment of \$250 million to a commingled fund, Global Infrastructure Partners Fund II (GIP II), on July 13, 2012. The fund will focus internationally on transport, water, power and energy assets.

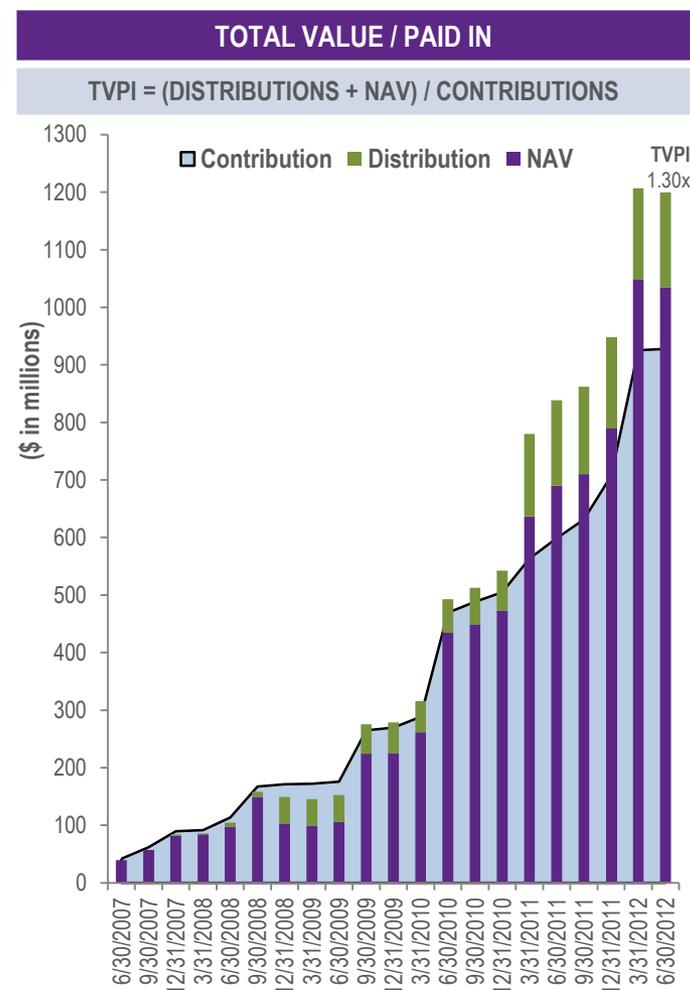
Data presented in this report reflects the financial statements of the investment partnerships for the period ending June 30, 2012.

Financial Overview

PORTFOLIO POSITION	AS OF 3/31/2012	AS OF 6/30/2012	Change over Quarter
Commitments: To Date and Outstanding^(a)	\$1,097 mil.; \$1,026 mil. o/s	\$1,097 mil.; \$1,022 mil. o/s	\$0 mil.; (\$3.6) mil. o/s
Net Funded of Commitments To Date	\$838 mil.	\$838 mil.	(\$0.3) mil.
Net Funded of Commitments Outstanding	\$766 mil.	\$762 mil.	(\$3.9) mil.
Net Unfunded^(b)	\$259 mil.	\$260 mil.	\$0.3 mil.
Cumulative Contributions	\$925 mil.	\$927 mil.	\$2.2 mil.
Cumulative Distributions	\$159 mil.	\$165 mil.	\$6.1 mil.
NAV	\$1,048 mil.	\$1,035 mil.	(\$13) mil.
Leverage	47%	48%	1%
Total Nominal Return Net of Fees^(c)	8.6%	8.0%	(0.6%)
IRR Net of Fees^(d)	19.4%	16.6%	(2.8%)

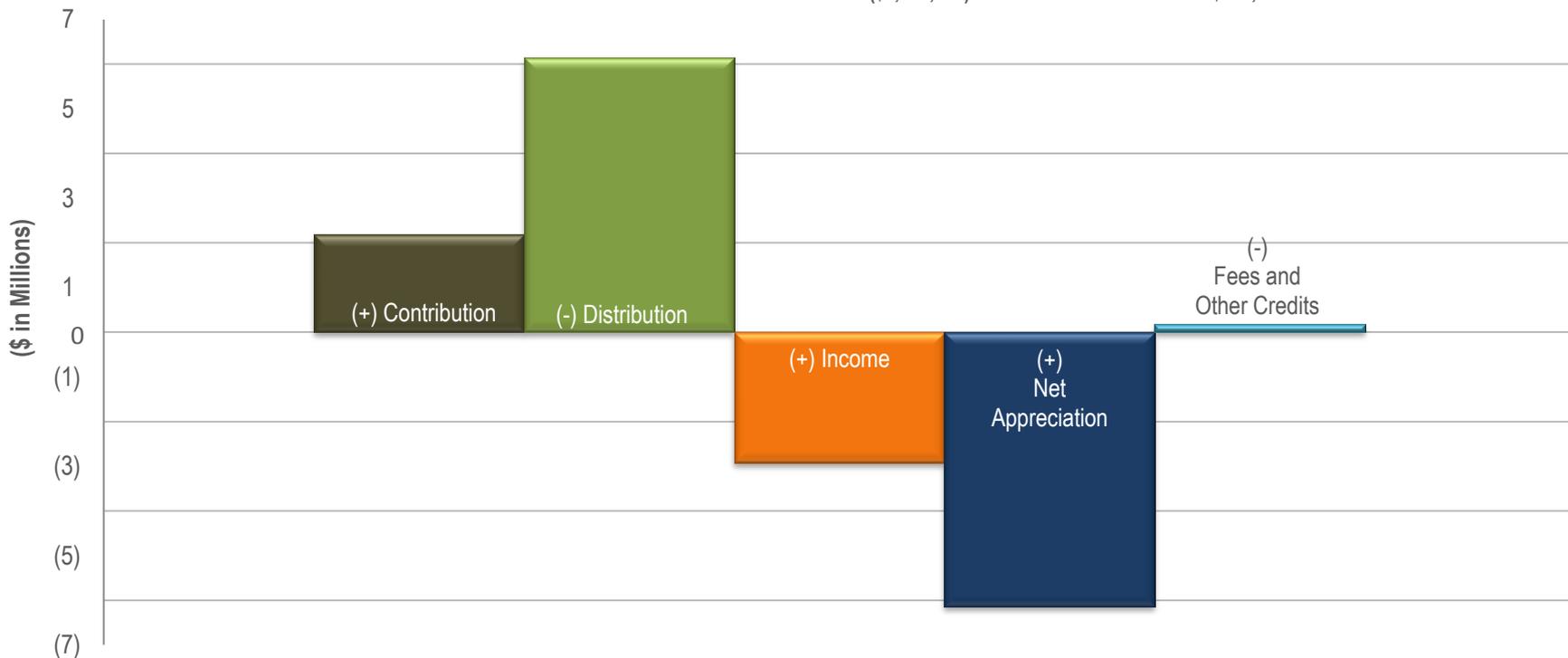
(a) Outstanding Commitments equal Commitments To Date less non-recallable distributions. Totals are rounded.

(b) Includes recallable distributions. (c) Since inception Time Weighted Return. (d) Since inception.



Continuity Schedule - Quarter Ending 6/30/12

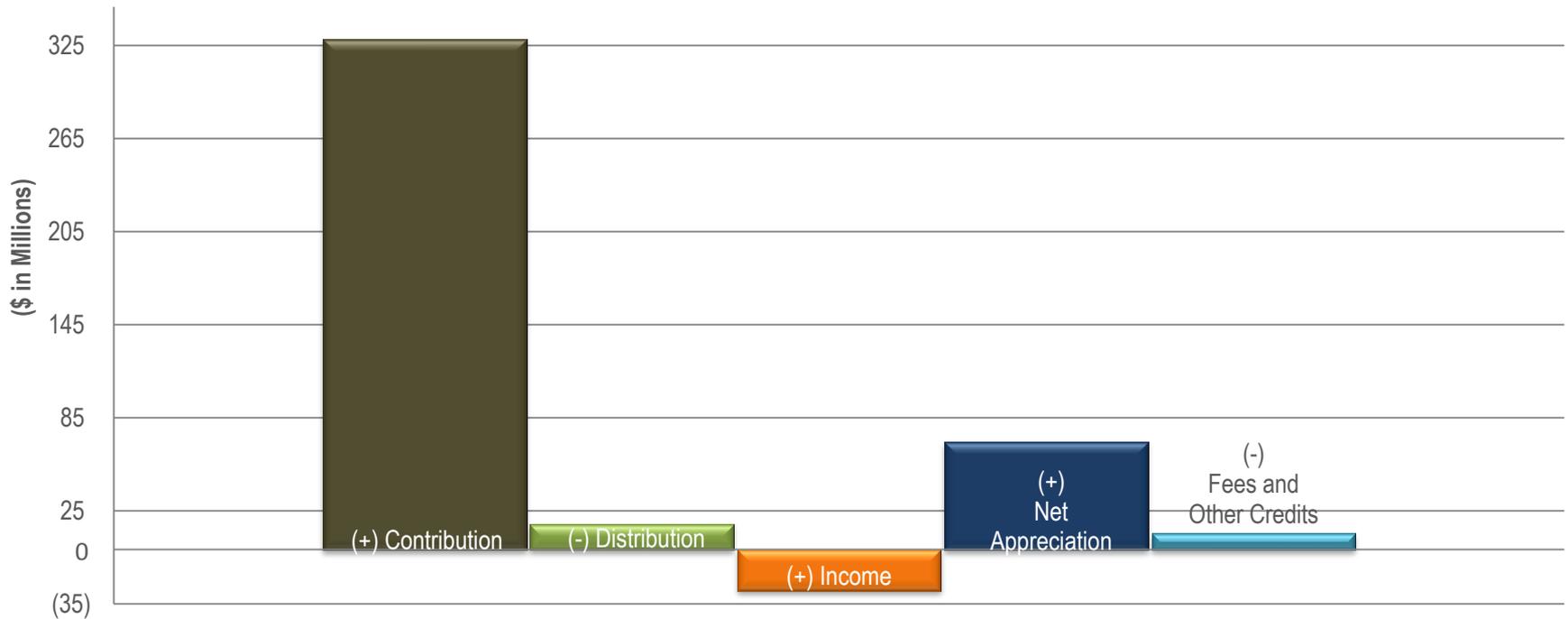
Quarter Ending 6/30/2012	Beginning NAV	(+) Contribution	(-) Distribution	(+) Income	(+) Unrealized Appreciation	(+) Realized Appreciation	(-) Fees	(-) Other Credits	(=) Ending NAV
	1,048,145,068	2,183,845	6,141,111	(2,933,033)	(118,900,760)	112,768,833	597,929	(415,212)	1,034,940,125
					(+ Net Appreciation ^(a) (\$6,131,927)		(-) Fees and Other Credits \$182,717		



(a) The Net Appreciation reflects a write down of \$6 million and realization of gain on sale recognized in prior period.

Continuity Schedule – 12 Months Ending 6/30/12

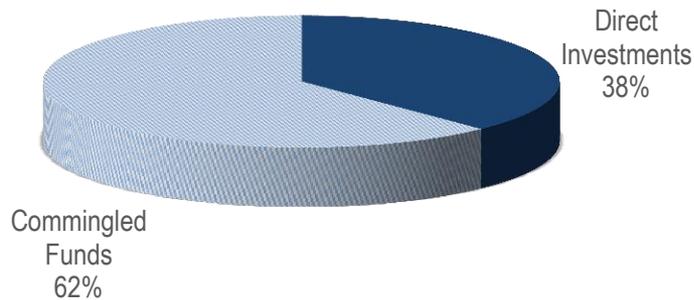
12 Months Ending 6/30/2012	Beginning NAV	(+) Contribution	(-) Distribution	(+) Income	(+) Unrealized Appreciation	(+) Realized Appreciation	(-) Fees	(-) Other Credits	(=) Ending NAV
	690,151,237	328,937,335	16,435,268	(26,406,513)	(61,394,051)	130,673,669	10,371,303	214,982	1,034,940,125
					(+ Net Appreciation ^(a) \$69,279,618		(-) Fees and Other Credits \$10,586,285		



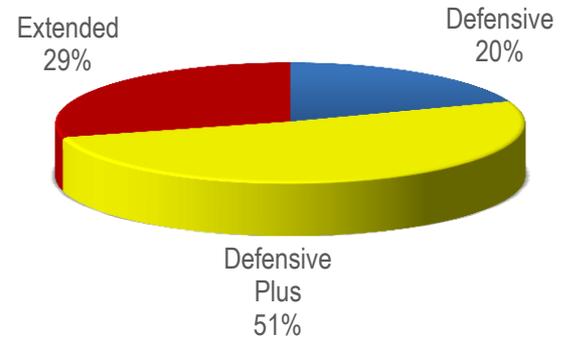
(a) The Net Appreciation reflects a realization of gain on sale recognized in prior period.

Portfolio Characteristics: Net Asset Value^(a)

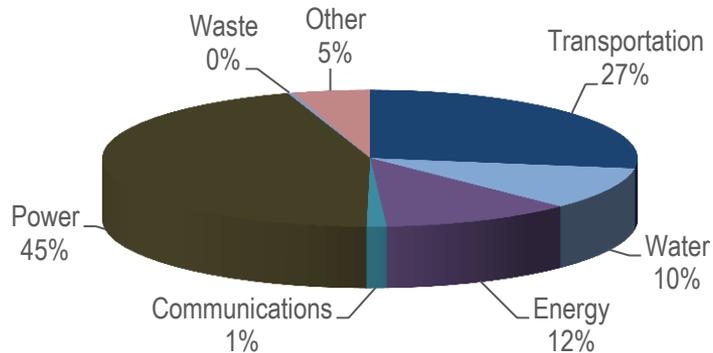
NAV by Investment Type



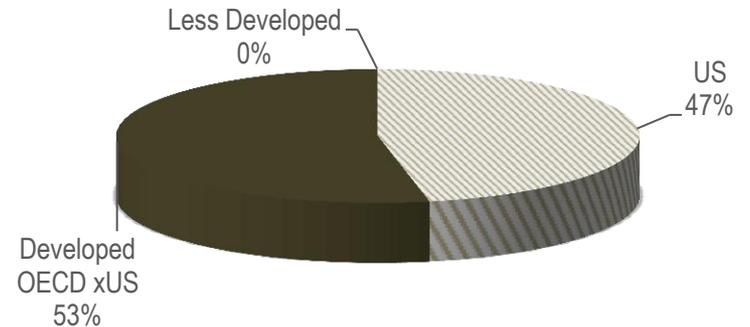
NAV by Risk Classification



NAV by Sector



NAV by Geography



(a) Data presented in this report reflect the financial statements of the investment partnerships for the period ending June 30, 2012.

Performance: Overview

TOTAL INFRASTRUCTURE PROGRAM

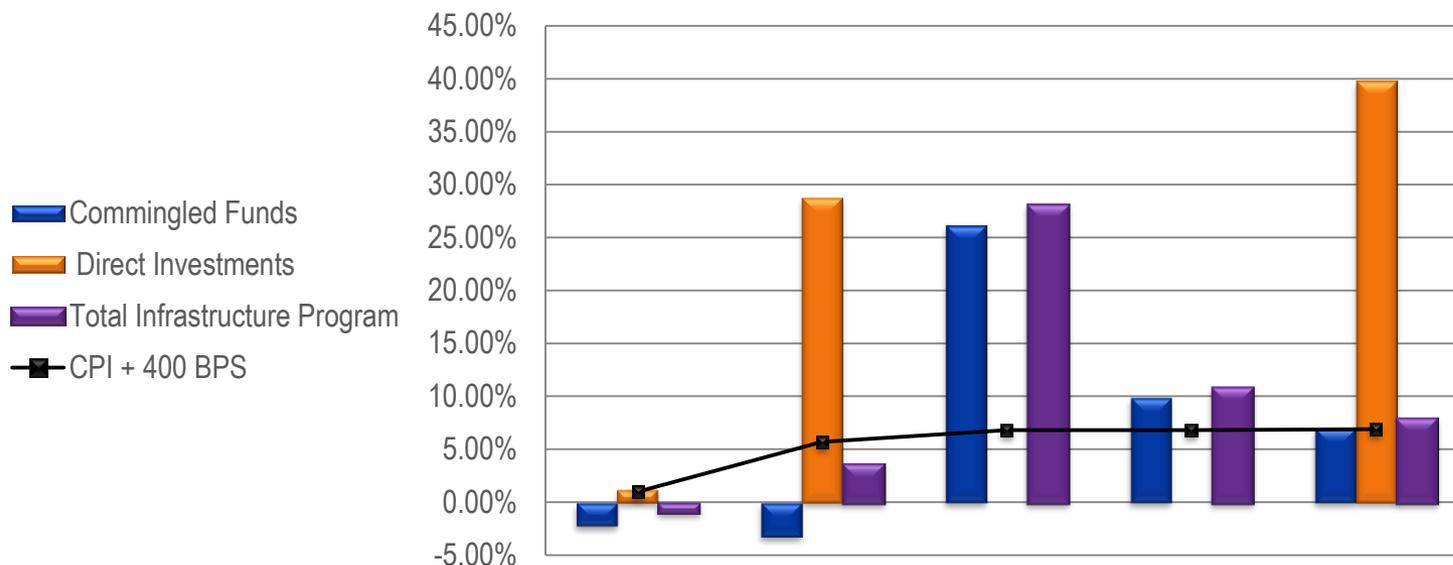
- The Program's quarter ending 6/30/2012 and 1-year net of fees returns **underperformed** the Program's benchmark, while 3-year, 5-year and since inception net of fees returns **outperformed** the Program's benchmark.
- The Infrastructure Program is at an early stage, and its composition and returns do not yet represent those of a stabilized portfolio.

PROGRAM INVESTMENTS

- There are 4 externally managed funds and two direct investments within the Infrastructure Program.
- Commingled funds represent 62% (\$644 million) of the total Infrastructure Program. The portfolio's performance for the quarter reflects negative returns across most of the commingled fund investments, partially offset by positive returns from direct investments.
- Direct Investments represent 38% (\$391 million) of the total Infrastructure Program. Direct investments have **outperformed** the Program's benchmark for all reported periods.

Performance: Commingled Funds vs. Direct

Net of Fees Returns^(a) by Investment Type



Investment Type	Net Assets at Fair Market Value	% of Portfolio	Quarter Ending 6/30/2012	1-Year	3-Year	5-Year	Since Inception ^(b)
Commingled Funds	\$ 644,042,293	62%	-2.2%	-3.3%	26.1%	9.9%	7.0%
Infrastructure Direct Investments	\$ 390,897,832	38%	1.3%	28.8%	N/A	N/A	39.8%
Total Infrastructure Program	\$ 1,034,940,125	100%	-0.9%	3.7%	28.1%	10.9%	8.0%
CPI + 400 BPS			1.0%	5.7%	6.8%	6.8%	6.9%
Difference Between Total Program and Benchmark			-1.9%	-2.1%	21.2%	4.1%	1.0%

(a) Percentage totals may not foot due to rounding. Rounding is consistent with Real Assets Quarterly Performance Report (Quarter Ending June 30, 2012). (b) Inception dates range from April 2007 to February 2012.

Policy Compliance

Policy	<ul style="list-style-type: none"> — The Program is in compliance with all “Key Policy Parameters.” Until the Program NAV exceeds \$3.0 billion, Policy requires Risk and Geographic percentages to be limited on a dollar (rather than percentage) basis. The only Risk segment close to its limit was Extended, at \$302 million versus Policy limit of \$466 million at 06/30/12. — One commingled fund acquired prior to the Program’s inception exceeds the ownership limit of 25% for a commingled fund.
Leverage	<ul style="list-style-type: none"> — The Program complies with the Policy based on Actual Leverage of 48% versus Policy Limit Leverage of 65% of Program assets.
Summary of Actions Completed Under Delegated Authority	<ul style="list-style-type: none"> — (Post-Period) New Transaction: In July 2012, the Program made a commitment of \$250 million to a commingled fund, Global Infrastructure Partners Fund II (GIP II). The fund will focus internationally on transport, water, power and energy assets. — The transaction is in compliance with policy limits.

Policy Targets

			CalPERS Total Fund 6/30/2012 EOQ Market Value: \$233 Billion		
Program Target per Policy as % of Total Fund	Long-Term Strategic Range/Limit per Policy as % of Total Fund	Program Target based on EOQ Total Fund (\$) ^(a)	Actual Investment as % of Total Fund	Actual Investment (NAV in \$ mm)	Program Outstanding Commitment (in \$ mm)
2.0%	1.0 - 3.0%	\$4.6 Billion	0.4%	\$1,035	\$1,022
Investment Parameters	Long-Term Strategic Range/Limit (in %)	Long-Term Strategic Range/Limit (in \$ mm)	NAV as % of Total Program	Total Program (NAV in \$ mm)	Compliance
Risk			Refer to footnote (b) regarding compliance for early stage program		
Defensive	25 - 75	1,165 – 3,495	20	202	✓
Defensive Plus	25 - 65	1,165 - 3,029	51	531	✓
Extended	0 - 10	0 - 466	29	302	✓
Region					
United States	40 - 80	1,864 – 3,728	47	485	✓
Developed OECD ex U.S.	20 - 50	932 - 2,330	53	550	✓
Less Developed	0 - 10	0 - 466	0	0	✓
Concentration					
Equity Investments	70 - 100	3,262 - 4,660	100	1,035	✓
Debt Investments	0 - 30	0 - 1,398	0	0	✓
Public Equity Securities	0 - 10	0 - 466	0	0	✓
Other Investment Parameters	Long-Term Strategic Range/Limit as % of Total Fund		Actual as % of Total Fund		Compliance
Leverage					
Overall Portfolio LTV	65		48		✓

Only dollar basis limitations are applicable until Program NAV exceeds \$3.0 billion.

(a) Period ending June 30, 2012. (b) Per the Infrastructure Policy effective as of August 15, 2011, as stated in Section V.F.2, investment allocations within the risk and region segments are not to exceed, on a dollar basis, the upper ends of risk and region ranges/limits. The requirement to meet the risk and region investment parameters will be applicable for the Program only when the NAV exceeds \$3 billion.

Investment Activity

- The Infrastructure Program’s capital allocation request for \$2 billion for FY 2012-13 was approved by the Investment Strategy Group in June 2012.
- In connection with the California Infrastructure Outreach Effort, as of May 31, 2012, staff completed four roundtables and one workshop. The sessions specifically focused on pension investment in infrastructure, transport, water, energy/power and port opportunities.
- In addition, staff has met privately with numerous state and local agencies to discuss potential projects and investment opportunities. Staff is continuing dialogue with a number of these agencies.
- On October 15, 2012, CalPERS released published report, *CalPERS Infrastructure Investment Outreach Review: Laying the Groundwork for Collaboration*.
- The Program closed a \$250 million commitment to a commingled fund in July 2012. Global Infrastructure Partners Fund II will focus on transport, water, power and energy assets.

I. INVESTMENT REVIEW FORESTLAND PROGRAM

Program Role

- The Role of the Forestland Program is to:
 - provide diversification for the Total Fund; and
 - generate attractive returns through a combination of cash distributions and long-term asset appreciation and inflation protection.

- Cash yields from sales of harvested timber depend on the maturity of the forestland properties and timber prices.

- Shorter-term risks associated with economic growth are mitigated over the long term by the inherent defensive qualities including the tangible nature, biological growth and limited supply of forestland resources.

Summary: Forestland Program

- **Holdings:** The Forestland assets consist of 78% U.S. investments (partnership with Lincoln Timber) and 22% international investments (partnership with Sylvanus).
- **Funding Status:** Lincoln Timber and Sylvanus have no unfunded commitments.
- **Distributions:** CalPERS received no distributions for the quarter.
- **Portfolio Value:** The NAV of \$2,115.3 million did not materially change during the quarter.
- **Asset Allocation:** Strategic Target percent for the quarter was 1%. Actual Effective Investment percent for the quarter was 0.9%.
- **Performance:** The Forestland Program Performance has continued to lag the benchmark for all periods due to the performance of Lincoln Timber managed by the Campbell Group.
 - Sylvanus, the international partnership managed by Global Forest Partners, outperformed the benchmark for 1-year, 3-year and since inception periods.
- **Reported Significant Events & Material Exceptions:** There were no significant events or material exceptions during the quarter.
- **Other Developments:**
 - Sylvanus, the international separate account is under negotiations to amend and restate the operating agreement.
 - CalPERS will engage the Meketa Investment Group to assist with the development of the Forestland Strategic Plan. The plan is expected to be completed prior to June 30, 2013.

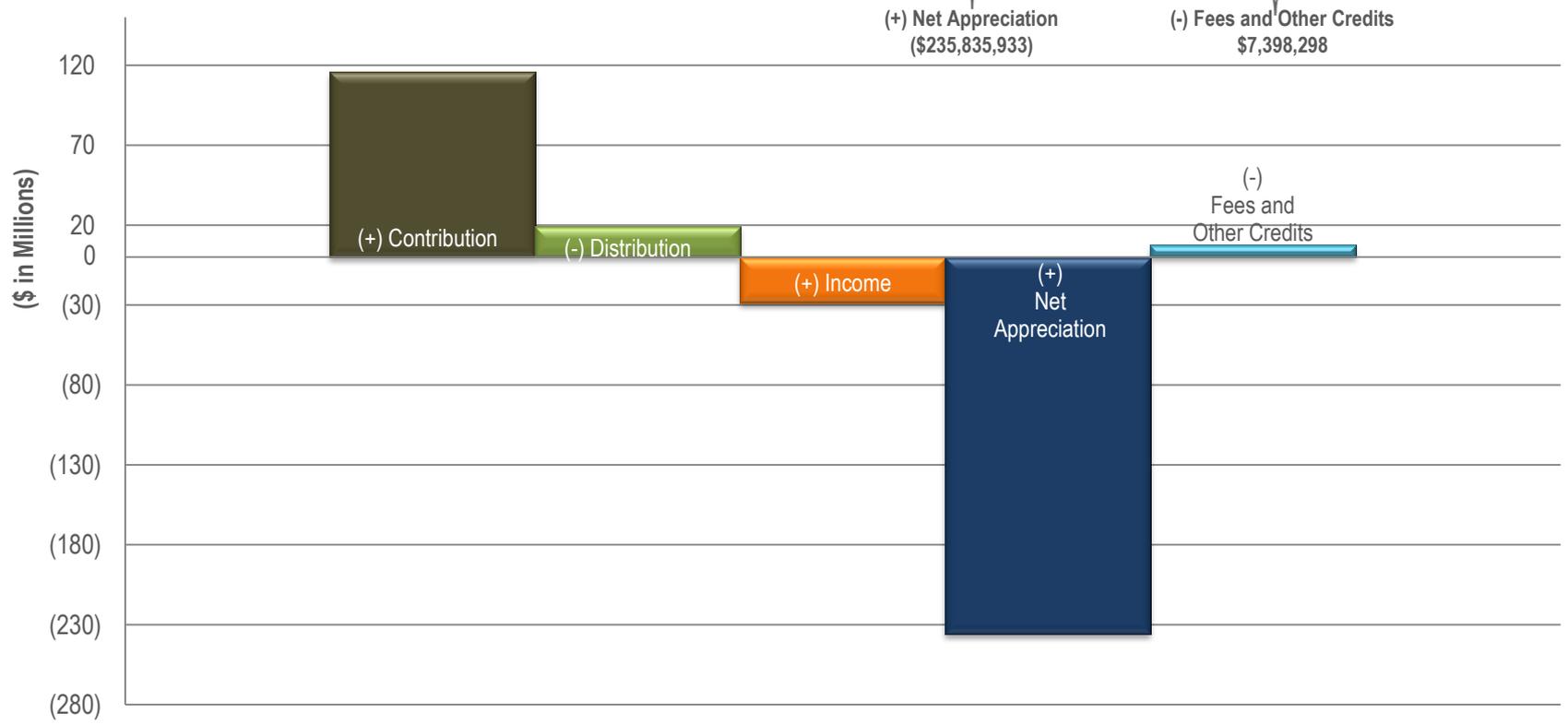
Financial Overview

- The Program is near its 1% policy investment target at \$2.1 billion.
- The existing portfolio is comprised of two externally-managed private investment vehicles:
 - Lincoln Timber Company (78% or \$1,650.8 million of Total Program NAV) – domestic portfolio, executed in 2007 and 2008.
 - Sylvanus LLC (22% or \$464.5 million of Total Program NAV) – international portfolio, executed in 2000.
- As of July 1, 2011, the Program’s benchmark is the NCREIF^(a) Timberland Index.

(a) NCREIF means “National Council of Real Estate Investment Fiduciaries.”

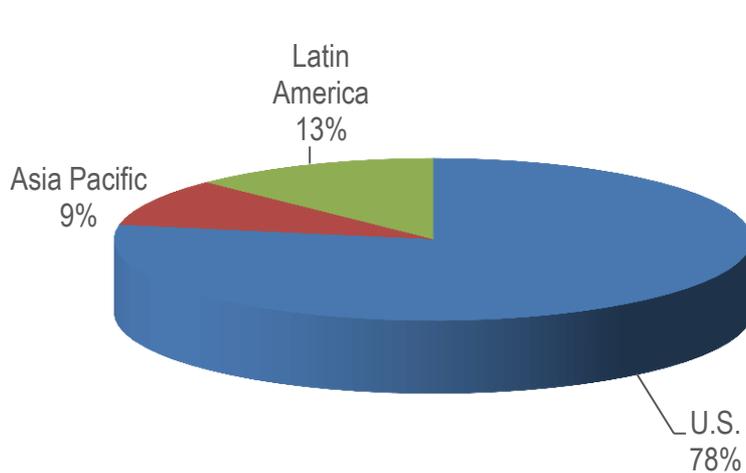
Continuity Schedule –12 Months Ending 6/30/12

12 Months Ending 6/30/2012	Beginning NAV	(+) Contribution	(-) Distribution	(+) Income	(+) Unrealized Appreciation	(+) Realized Appreciation	(-) Fees	(-) Other Credits	(=) Ending NAV
	2,290,778,922	115,745,798	19,331,750	(28,588,204)	(239,912,690)	4,076,757	7,398,297	1	2,115,370,535

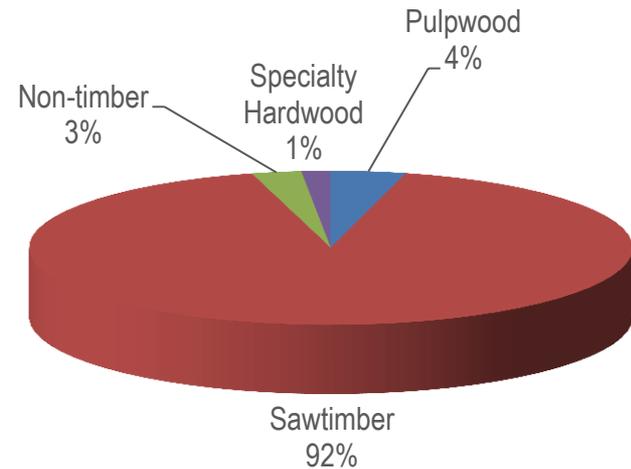


Characteristics: Geography & Primary Product

Geography



Primary Product



Characteristics: Regional Allocation vs. Benchmark

- The NCREIF Timberland Index is generally regarded as the best available timberland investment returns benchmark, although it contains only U.S. properties.
- Relative to the NCREIF Timberland Index, the Forestland portfolio is:
 - overweight in the U.S. South and international regions, and
 - underweight in all other U.S. regions.

Region	% of Total CalPERS Portfolio	NCREIF Timberland	CalPERS - NCREIF Difference
U.S. South	78%	64%	14%
Asia Pacific	9%	0%	9%
Latin America	13%	0%	13%
U.S. Pacific Northwest	0%	29%	-29%
U.S. Northeast	0%	4%	-4%
Other U.S. ^(a)	0%	2%	-2%

(a) Region labeled "Other" includes: all U.S. States outside of the South, Pacific Northwest and Northeast.

Performance: Overview

Total Forestland Portfolio

- Total Forestland portfolio returns have **underperformed** relative to the Forestland Policy Benchmark across the 1-year, 3-year and since inception periods.

Domestic Portfolio

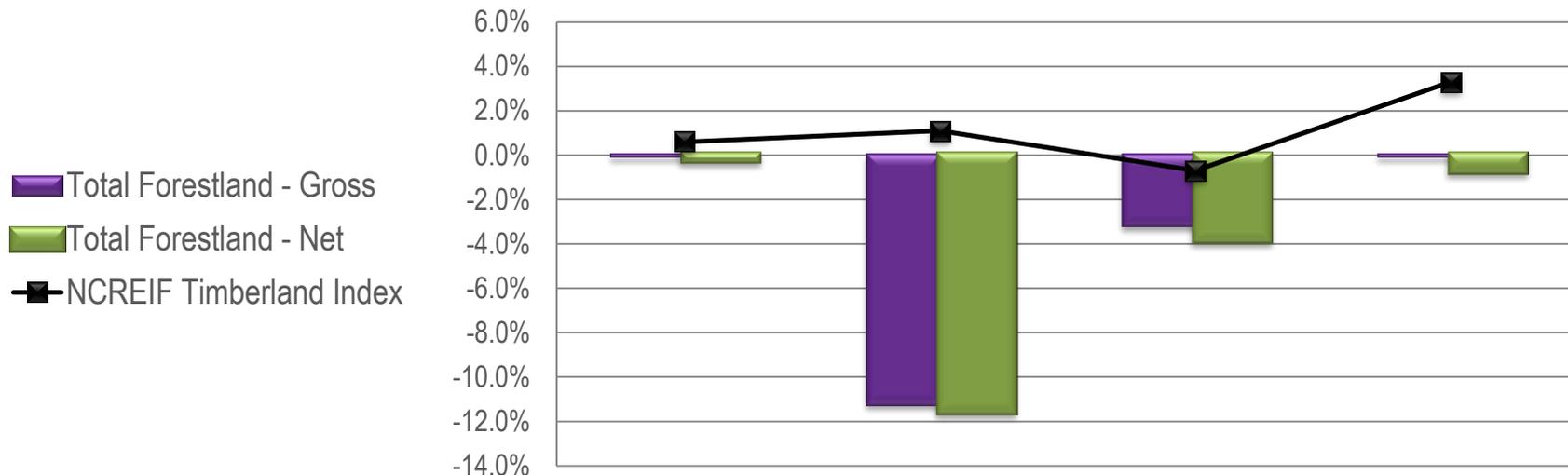
- The Domestic Portfolio, which represents 78% of the portfolio, **underperformed** the Benchmark for the 1-year, 3-year and since inception periods.

International Portfolio

- The International Portfolio, which represents 22% of the portfolio, **outperformed** the Benchmark across the 1-year, 3-year and since inception periods.

Performance: Total Portfolio vs Benchmark

Forestland – Total Returns^(a)

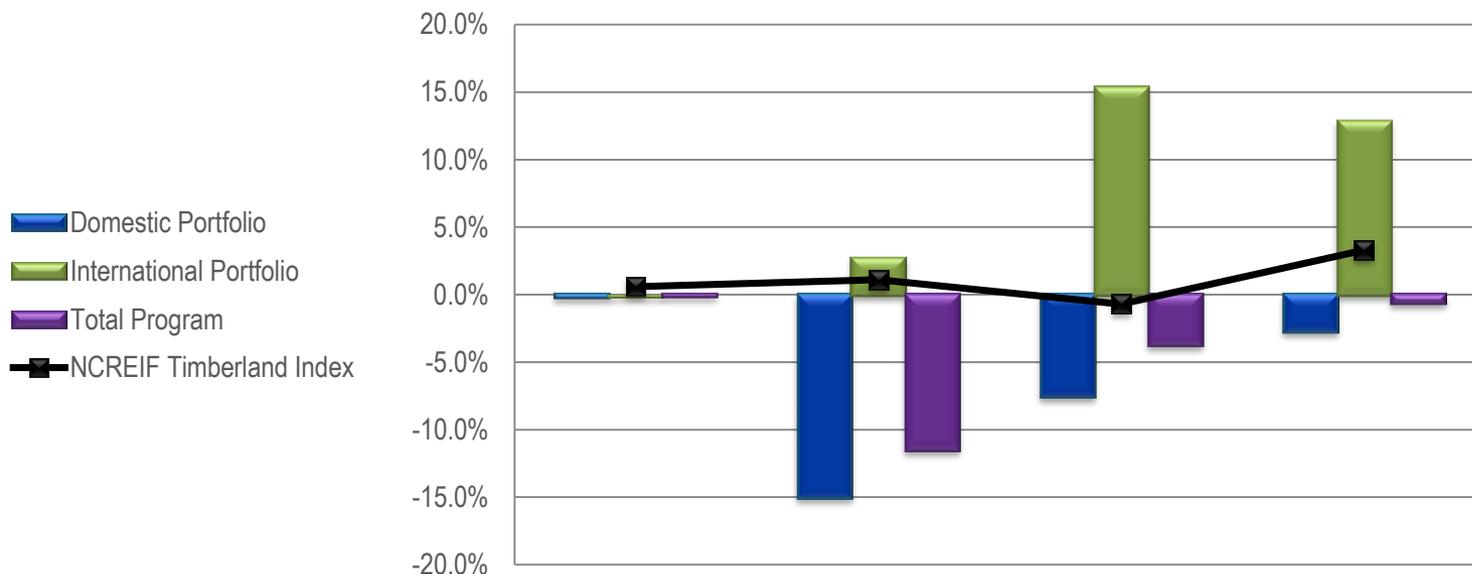


Nominal Returns	Quarter ending 6/30/2012	1-Year	3-Year	Since Inception ^(b)
Total Forestland – Net	-0.2%	-11.5%	-3.8%	-0.7%
Total Forestland – Gross	-0.1%	-11.2%	-3.2%	-0.1%
Forestland Policy Benchmark	0.6%	1.1%	-0.7%	3.3%
Excess (Gross) Returns	-0.7%	-12.3%	-2.5%	-3.5%

(a) As of June 30, 2012. (b) The Forestland partnership-level and all portfolio-level time weighted returns are calculated based on an October 1, 2007 inception date. While Forestland existed prior to 10/1/2007, these historical returns are included in the Real Estate portfolio (Legacy sub-portfolio).

Performance: Total Portfolio by Account

Returns by Account



Partnerships	Inception Date ^(b)	Net Assets at Fair Market Value ^(a)	% of Portfolio	Quarter ending 6/30/2012	1-Year	3-Year	Since Inception ^(b)
Domestic Portfolio	Oct-07	1,650,873,965	78%	-0.3%	-15.0%	-7.6%	-2.8%
International Portfolio	Oct-07	464,474,873	22%	-0.1%	2.8%	15.4%	12.9%
Total Program (Net)		\$2,115,348,838	100%	-0.2%	-11.5%	-3.8%	-0.7%
NCREIF Timberland Index				0.6%	1.1%	-0.7%	3.3%

(a) As of June 30, 2012. (b) The Forestland partnership-level and all portfolio-level time weighted returns are calculated based on an October 1, 2007 inception date. While Forestland existed prior to 10/1/2007, these historical returns are included in the Real Estate portfolio (Legacy sub-portfolio).

Policy Compliance & Performance Drivers

Geography	— The portfolio maintains an overweight to the U.S. South and International geographies relative to the NCREIF Timberland Index.
International Returns	— The International Investments increase deviation vis-à-vis the NCREIF Benchmark, but provide diversification to the portfolio and have contributed to positive performance.
Primary Product	— The portfolio has a large exposure to sawtimber produced in the U.S. which supplies the U.S. housing market.
Leverage	— Though Leverage levels of 21.7% are low relative to the Forestland Policy of 40%, the leverage contributes to an underperformance to the Policy Benchmark which is unlevered.
End Market Region	— The total portfolio returns did not meet the Forestland Program Benchmark for the quarter ending March 31, 2012 and 1-year, 5-year and since inception primarily due to the portfolio's large exposure to the southern U.S. housing market.
Capital Allocation	— At 0.9%, the portfolio is close to its policy target of 1%.
Transactions Completed Under Delegated Authority	— None.
Program Strategy	— (Post-Period) Forestland has engaged the Meketa Investment Group to assist with the development of the Forestland Strategic Plan. The plan is expected to be completed prior to June 30, 2013.

II. APPENDIX

Glossary

- **Net Asset Value (NAV)** is the value of an entity's assets less the value of its liabilities.
- **Limited Partnership (L.P.)** is a legal structure used by most venture capital and private equity funds. The partnership is usually a limited term investment vehicle. Ownership interests are held by a General Partner (the management firm which has unlimited liability) and Limited Partners (the investors, who have limited liability and are not involved with the day-to-day operations). The partnership agreement specifies governance rights, fee arrangements, allocations of cash, income, and tax benefits, and other terms as agreed between the partners.
- **Consumer Price Index for all Urban Consumers (CPI-U)** is used as the inflation factor.
- **NCREIF Timberland Index** is a property-level investment performance benchmark for private, institutionally-owned timberland properties. The benchmark is composed of an income return, an appreciation return and a total return and is calculated on a quarterly basis.

