Infrastructure & Forestland Program Review

Real Assets

May 14, 2012

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I. INVESTMENT REVIEW
INFRASTRUCTURE PROGRAM

Program Role & Scope

— 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 + 400

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

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

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

DEFENSIVE	DEFENSIVE PLUS	EXTENDED
Low Risk	Medium Risk	Higher Risk
Essential Services	Revenue Risk	Market Risk
GDP Resilient	Growth Risk	Growth Risk
Minimal Competition	Operational Risk	Operational Risk
Contracted / Regulated Cash Flow	Mitigated Construction Risk	Moderate Construction Risk

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

Program Role & Scope

- High-quality assets
- Best-in-class partners, and effective alignment of interests
- Seek up to 50% equity ownership
- Seek inflation-linked sub-debt where applicable or appropriate
- Bi-lateral discussions, rather than competitive bids

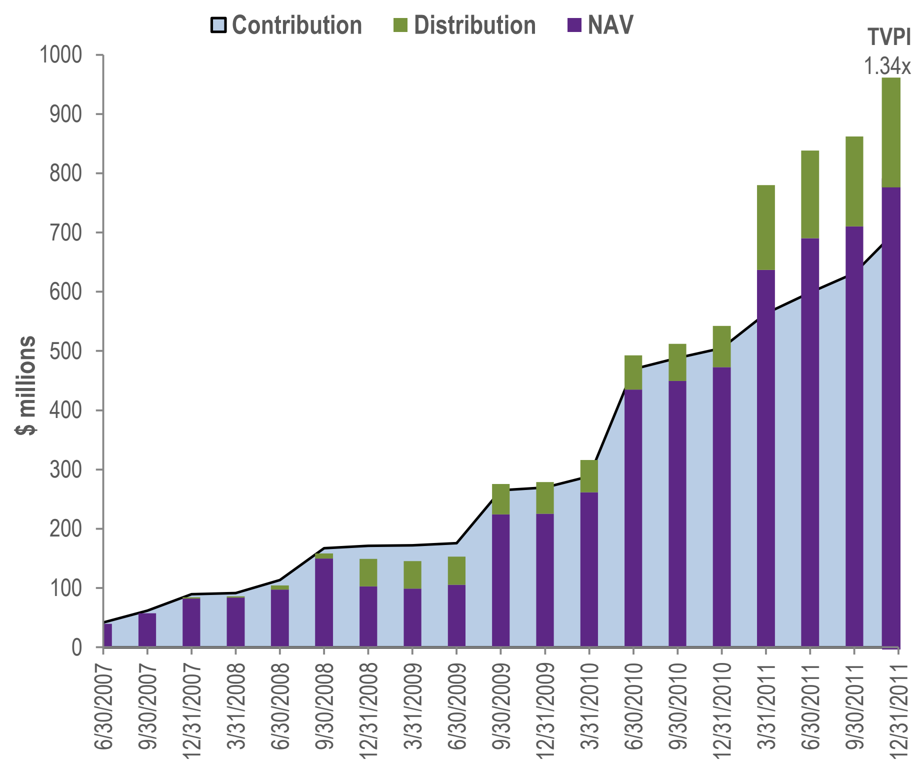
Financial Overview

PORTFOLIO POSITION[a]	
Commitments: To Date and Outstanding	$870 mil.; $800 mil o/s[b]
Net Funded of Total Commitments	$619 mil.
Net Funded of Outstanding Commitments[b]	$549 mil.
Net Unfunded[c]	$251 mil.
Contributions	$707 mil.
Distributions	$158 mil.
NAV	$790 mil.
Leverage	41%
Total Nominal Return Net of Fees[d]	8% (since inception)
IRR Net of Fees[e]	19% (since inception)

CHANGES IN PORTFOLIO VALUE FOR YEAR ENDING 12/31/2011	
Beginning of Year NAV	$473 mil.
+ Contributions	$202 mil.
- Distributions	$89 mil.
+ Appreciation[f]	$286 mil.
+ Income[g]	($24 mil.)
- Fees[h]	$58 mil.
End of Year NAV	$790 mil.

TOTAL VALUE / PAID IN

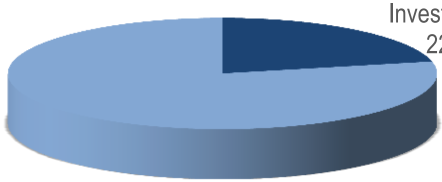
TVPI = (DISTRIBUTIONS + NAV) / CONTRIBUTIONS



(a) As of December 31, 2011. (b) Excludes non-recallable capital returned. (c) Includes recallable distributions. (d) Time Weighted Return. (e) After Fee Internal Rate of Return (IRR). (f) Includes realized and unrealized. (g) Income & other credits; loss is primarily due to timing of expenses by the partnerships. (h) Includes paid and accrued fees.

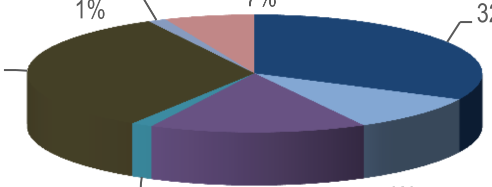
Portfolio Characteristics: Net Asset Value[a]

NAV by Investment Type

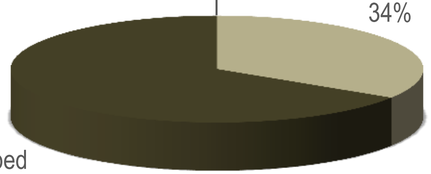


NAV by Risk Classification

NAV by Sector



NAV by Geography



(a) Period ending December 31, 2011.

Performance: Overview

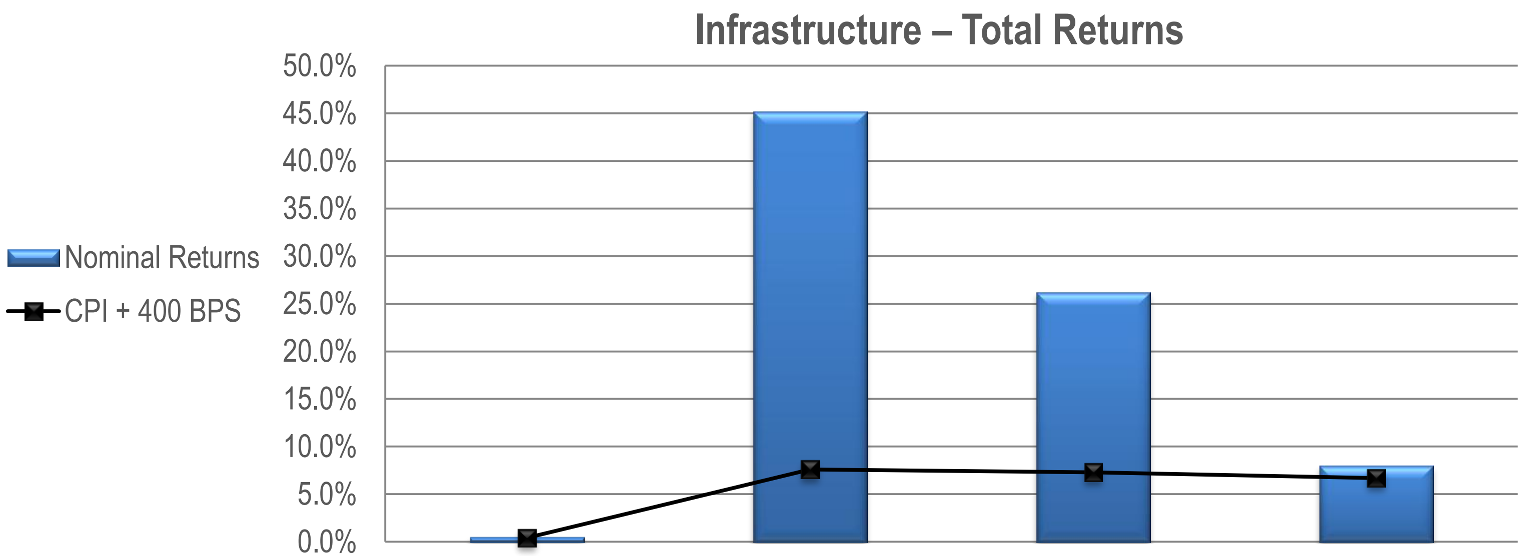
TOTAL INFRASTRUCTURE PROGRAM

- The Program's 4th-quarter, 1-year, 3-year and since inception net of fee returns have significantly **outperformed** the Program's benchmark due to one extended risk fund.
- This level of returns is not expected to be typical over the long term.

PROGRAM INVESTMENTS

- There are 4 externally managed funds within the Infrastructure Program representing 78% of the total portfolio NAV. Commingled Funds have **outperformed** the Program's benchmark, although performance is driven by a single fund.
- Direct Investments represent 22% of the total Infrastructure Program. Direct Investments have **outperformed** the Program's benchmark for all reported periods.

Performance: Total Portfolio vs. Benchmark



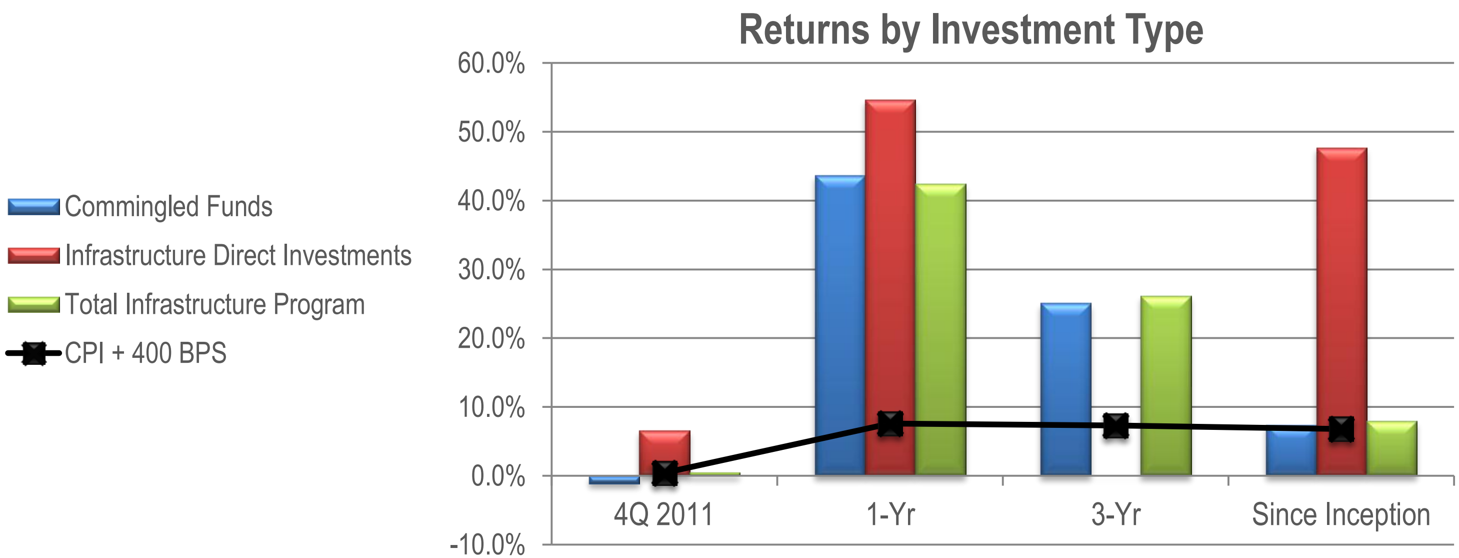
INFRASTRUCTURE PROGRAM	Q4 2011	1-Yr	3-Yr	Since Inception
Nominal Returns (Net of Fees)	0.5%	42.5%	26.2%	8.0%
CPI + 400 BPS	0.4%	7.6%	7.3%	6.8%
Excess (Net) Returns	**0.1%**	**34.9%**	**18.9%**	**1.2%**

Performance: Risk Classification vs. Benchmark

INFRASTRUCTURE PROGRAM	Net Assets at Fair Market Value	% of Portfolio	4Q 2011	1-Yr	3-Yr	Since Inception[a]
Defensive	-	0%	N/A	N/A	N/A	N/M
Defensive Plus	$ 494,377,534	63%	3.1%	22.2%	11.9%	N/M
Extended	$ 295,460,869	37%	-3.5%	105.4%	64.4%	N/M
Total Infrastructure Program	**$ 789,838,403**	**100%**	**0.5%**	**42.5%**	**26.2%**	**8.0%**
CPI + 400 BPS			**0.4%**	**7.6%**	**7.3%**	**6.8%**

(a) Inception dates range from April 2007 to June 2010. Since Inception returns by risk classification are not meaningful (N/M).

Performance: Commingled Funds vs. Direct



INFRASTRUCTURE PROGRAM	Net Assets at Fair Market Value	% of Portfolio	4Q 2011	1-Yr[a]	3-Yr	Since Inception[b]
Commingled Funds	$ 619,630,844	78%	-1.1%	43.7%	25.1%	7.4%
Infrastructure Direct Investments	$ 170,207,559	22%	6.6%	54.7%	N/A	47.7%
Total Infrastructure Program	**$ 789,838,403**	**100%**	**0.5%**	**42.5%**	**26.2%**	**8.0%**
CPI + 400 BPS			**0.4%**	**7.6%**	**7.3%**	**6.8%**

(a) Lower Program return reflects changes in time-weighted capital in components. (b) Inception dates range from April 2007 to June 2010.

Policy Compliance

Policy	— The Program is in compliance with all "Key Policy Parameters." Until the Program NAV exceeds $3.0 bil., 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 $295 mil. versus Policy limit of $440 million at 12/31/11.
Leverage	— The Program complies with Policy based on Actual Leverage of 41% versus Policy Limit Leverage of 65% of Program assets.
Transactions Completed Under Delegated Authority	— In 4Q 2011, CalPERS committed to acquire 75% of Class C interests in Neptune Regional Transmission System, LLC (NRTS). NRTS is a 65-mile submarine electric power transmission line that runs from Sayreville, New Jersey, to Hicksville, Long Island, New York. — The NRTS transaction closed in 1Q 2012.

Policy Targets

			CalPERS Total Fund 12/31/2011 End Market Value: $225 Billion		
Program Target per Policy as % of Total Fund	Long-Term Strategic Range/Limit per Policy as % of Total Fund	Program Target based on EOY Total Fund ($)(a)	Actual Investment as % of Total Fund	Actual Investment (NAV in $ Millions)	Program Commitment (in $ Millions)
2.0%	1.0 - 3.0%	$4.4 Billion	0.4%	$790	$870

Investment Parameters	Long-Term Strategic Range/Limit	Long-Term Strategic Range/Limit (in $ Millions)	Total Program NAV	Total Program (NAV in $ Millions)	Compliance
Risk			Refer to footnote (b) regarding compliance for early stage program		
Defensive	25 - 75%	1,100 - $3,300	0%	$0	✓
Defensive Plus	25 - 65%	1,100 - $2,860	63%	$494	✓
Extended	0 - 10%	0 - $440	38%	$296	✓
Public	0 - 10%	0 - $440	0%	$0	✓
Region					
United States	40 - 80%	1,760 - $3,520	29%	$269	✓
Developed OECD ex US	20 - 50%	880 - $2,200	71%	$523	✓
Less Developed	0 - 10%	0 - $440	0%	$0	✓
Concentration					
Equity Investments	70 -100%	3,080 - $4,400	100%	$790	✓
Public Equity Securities	0 -10%	0 - $440	0%	$0	✓
Debt Investments	0 - 30%	0 - $1,320	0%	$0	✓
Aggregate commitment to a single general partner, Commingled Fund or Custom Account	30%	$1,320	Evaluated at time of initial investment		N/A
Any single Direct Investment(c)	10%	$440			✓
Any single investment in a Commingled Fund(d)	25%	N/A			(d)

Other Investment Parameters	Long-Term Strategic Range/Limit as % of Total Fund	Actual as $ of Total Fund (NAV in Millions)
Leverage		
Overall Portfolio LTV	65%	41%

(a) Period ending December 31, 2011. (b) Per the new Infrastructure Policy effective as of August 15, 2011, as stated in Section V.F.2, the requirement to meet the risk and region investment parameters will be applicable for the Infrastructure Program only when the NAV exceeds $3 billion. (c) Staff approved one transaction. Investment closed 1Q 2012. (d) One commingled fund acquired prior to program inception exceeds the concentration limits for new investments.

CalPERS Investment Office Real Assets

Market Update - US Infrastructure

Public Infrastructure

— Public-Private Partnerships (PPP) are a means of financing public infrastructure by investors that require market rates of return.

— Potential Drivers of PPP Investment

- FY 2011 state budget deficits totaled $160 billion[(a)] and the federal funding environment remains constrained
- The American Society of Civil Engineers gave a "D" grade to US Infrastructure, estimating a 5-year investment need of $2.2 trillion
- Substantial capital from infrastructure funds, sovereign wealth funds, insurance funds and pension funds is available for investment in U.S. public infrastructure
- 28 states with PPP enabling legislation with certain states particularly active (Texas, Virginia and Florida)

— Focus on transportation:

- Toll road transactions, greenfield/expansionary with volume/demand risk
- Managed lanes, expansion in congested corridors (i.e., I-595 in Florida, IH-635 in Virginia)

— Few deals completed in 2011/2012:

- Virginia Midtown Tunnel: $1.4Bn greenfield transaction closed in April 2012
- Puerto Rico PR-22/PR-5 toll roads: $1.1Bn privatization of brownfield toll roads closed in Sept 2011

(a) Source: Center on Budget and Policy Priorities, June 17, 2011.

Market Update - US Infrastructure

Private Infrastructure

- Mixture of energy, power and water
  - Strong amount of activity in energy transmission & distribution, power generation and energy storage
  - Sale of interests in privately-owned water utilities and water distribution companies (i.e., British Columbia Investment Management Corporation (bcIMC) purchase of Aquarion, Corix purchase of Utilities Inc)
  - Continued interest in midstream energy assets with development of unconventional oil and gas production in the U.S.
  - Increasing direct participation by global pensions and sovereign wealth funds
  - Financing of renewable energy generation by US utilities/developers. Generally need ‘taxpayer’ status in the U.S.
- Notable transactions
  - CalPERS acquisition of 75% Class C interest in Neptune Regional Transmission System in Feb 2012
  - Alinda’s $1.3Bn acquisition of Houston Fuel Oil Terminal in Feb 2011
  - Caisse de dépôt et placement du Québec (CDPQ) acquisition of 16.6% interest of Colonial Pipeline from ConocoPhillips for estimated $850m
  - TIAA-CREF acquisition of 50% interest in I-595 concession from ACS Group for proportionate EV of c. $800m

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(a) Source: Center on Budget and Policy Priorities, June 17, 2011. (b) Source: 2012 Preqin Global Infrastructure Report

California Infrastructure Investment

— In September 2011, CalPERS Board approved a plan to target up to $800 million for investments in California infrastructure over three years.

— The Board approved staff's outreach plan to facilitate investment opportunities, including conducting four roundtables with the participation of state and local agencies, the investment community and the other stakeholders.

— Staff has completed three roundtables, including sessions specifically focused on transport and water opportunities. A fourth roundtable is scheduled in May.

— Staff has been actively working to identify and facilitate investment opportunities through a calling effort and by meeting with state and local officials involved with infrastructure projects.

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.

Investment Allocation[a]

— The Program is essentially fully invested at its 1% policy target of $2.1 Billion.

— The existing portfolio is comprised of two externally-managed private investment vehicles:

- *Lincoln Timber Company (78% or $1.6 billion of Total Program NAV)* – domestic portfolio, acquired in 2007; and
- *Sylvanus LLC (22% or $458 million of Total Program NAV)* – international portfolio, acquired in 2007.

— The Program's benchmark is the NCREIF Timberland Index.

(a) Period ending December 31, 2011.

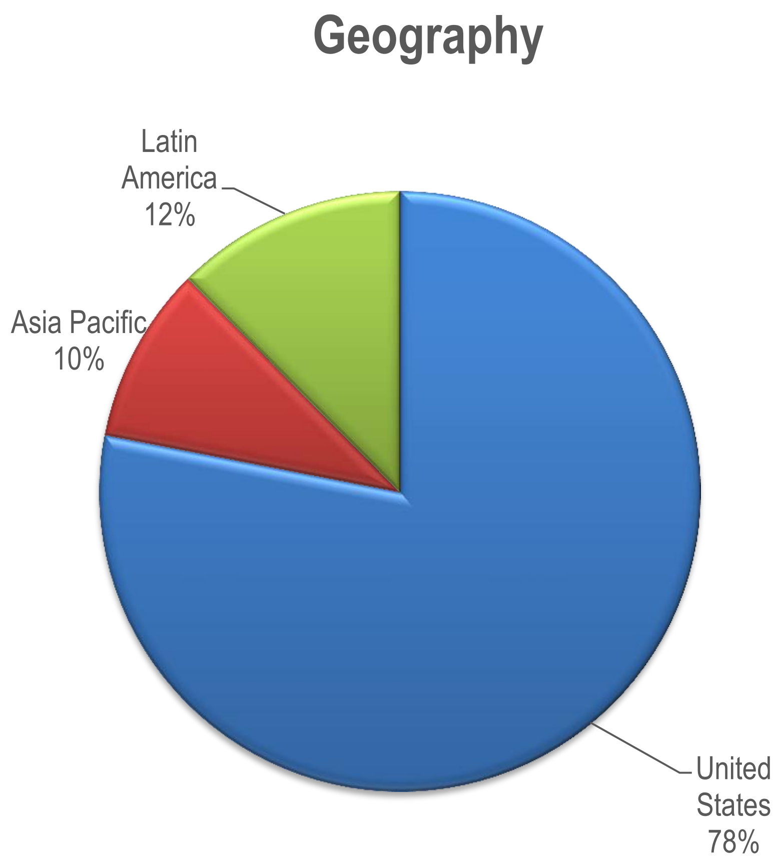
Characteristics: Regional Allocation vs. Benchmark

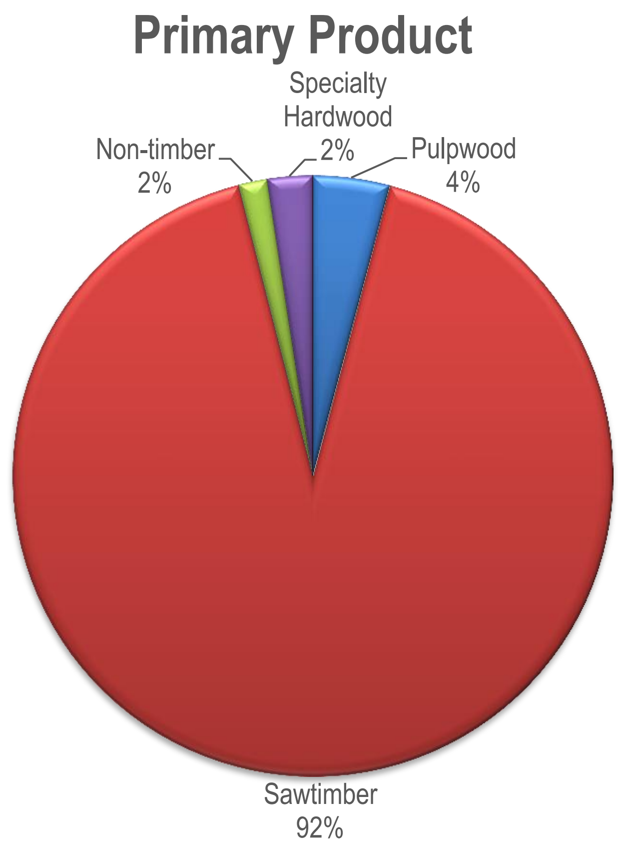
- The NCREIF Timberland Index is generally regarded as the best available timberland investment returns benchmark, although it contains only US properties.
- Relative to the NCREIF Timberland Index, the Forestland portfolio is:
  - overweight in the US South and international regions, and
  - underweight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

Region	% of Total CalPERS Portfolio	NCREIF Timberland	CalPERS - NCREIF Difference
US South	78.0%	59.0%	19.0%
Asia Pacific	9.5%	0.0%	9.5%
Latin America	12.4%	0.0%	12.4%
US Pacific Northwest	0.0%	31.4%	-31.4%
US Northeast	0.0%	9.2%	-9.2%
Other US[(a)]	0.0%	0.3%	-0.3%

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

Characteristics: Geography & Primary Product





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

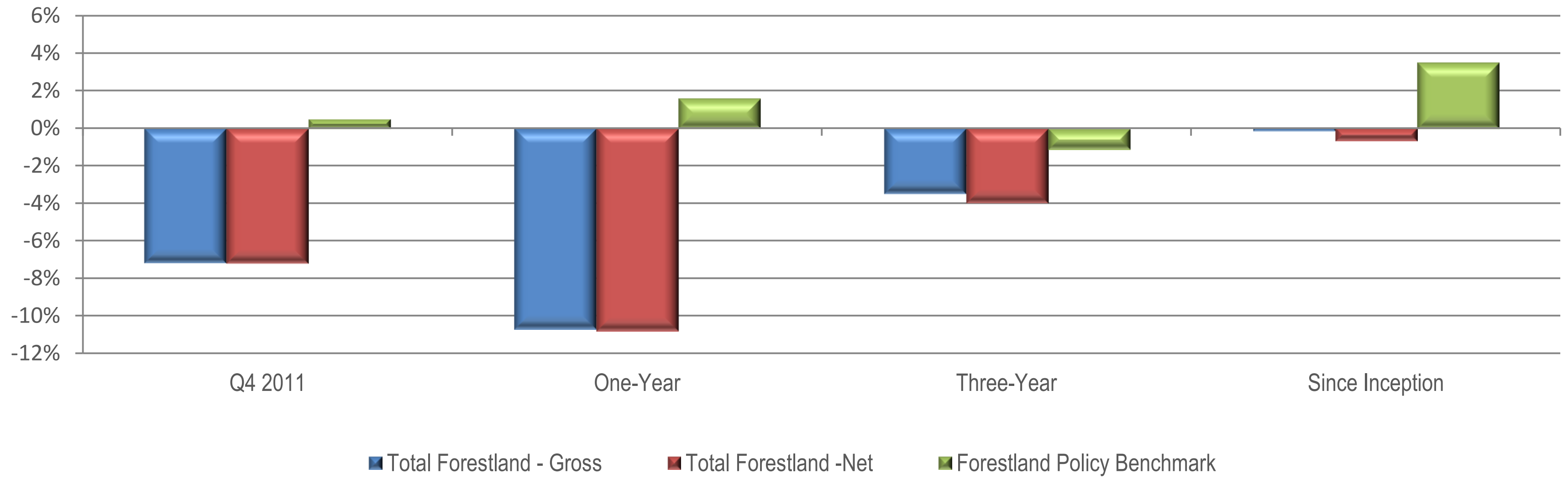
- The Domestic Portfolio, which represents 78% of the portfolio, **underperformed** the Benchmark for the 1-year, 3-year and since inception periods.

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: Portfolio Returns

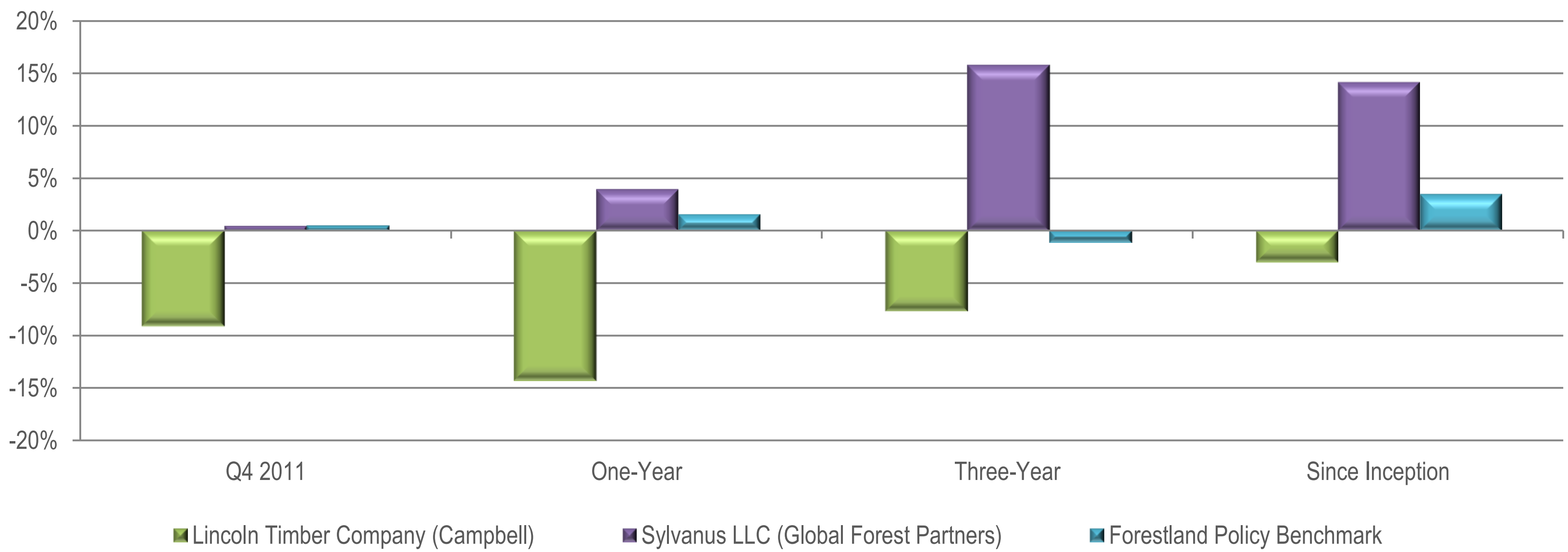
Nominal Returns	Q4 2011	1-Yr	3-Yr	Since Inception[(a)]
Total Forestland – Gross	-7.2%	-10.7%	-3.5%	-0.2%
Total Forestland – Net	-7.2%	-10.8%	-4.0%	-0.7%
Forestland Policy Benchmark	0.5%	1.6%	-1.1%	3.5%
Excess (Gross) Returns	**-7.7%**	**-12.2%**	**-2.3%**	**-3.6%**



(a)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 10/1/07, these historical returns are included in the Real Estate portfolio (Legacy sub-portfolio).

Performance: Net Returns by Account

Partnerships	Inception Date[b]	Net Assets at Fair Market Value[a]	Q4 2011	1-Yr	3-Yr	Since Inception[b]
Lincoln Timber Company (The Campbell Group)	Oct-07	1,661,985,307	-9.1%	-14.3%	-7.7%	-3.0%
Sylvanus LLC (Global Forest Partners)	Oct-07	458,111,129	0.5%	4.0%	15.8%	14.2%
Total Forestland Portfolio (Net)		**$2,120,096,436**	**-7.2%**	**-10.8%**	**-4.0%**	**-0.7%**
Forestland Policy Benchmark			**0.5%**	**1.6%**	**-1.1%**	**3.5%**



(a) As of December 31, 2011. (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 10/1/07, 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 US South and International geographies relative to the NCREIF Timberland Index.
International Returns	— The International Investments provide diversification to the portfolio and contribute a positive performance.
Primary Product	— The portfolio has a large exposure to Sawtimber produced in the US which supplies the US Housing market.
Leverage	— Though Leverage levels of 22% 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 September 30, 2011 and 1-year, 5-year and since inception primarily due to the portfolio's large exposure to the US Housing Market.
Capital Allocation	— The portfolio is nearly fully invested at its 1% policy target.
Transactions Completed Under Delegated Authority	— In 3Q 2011, CalPERS completed a debt restructure of $107.2 million with an existing partner, The Campbell Group. — Per the Program's Delegated Authority Policy, the limit of debt financing management is 50%. The actual for CY 2011 was 5%.

Market Update

Domestic

- Southern markets experienced continued weakness driven by the US housing market where prices may be at or near bottom.
- Weak US housing starts and sales and the lack of an alternative market has caused pine sawlog prices in the US South to decline to 20% to 30% below the 5- and 10- year averages, respectively.
- West Coast markets continued to benefit from China's expanding demand for lumber.

International

- Asia Pacific
  - A combination of the impact of the general economy and the devastating earthquake have affected woodchip demand in Japan in 2011.
  - China is a key driver of demand growth in Asia Pacific region.
- Latin America
  - Log markets remained strong in South America due to limited supply and healthy local markets.

Program Strategy

- The May 2012 Investment Committee Agenda includes a request for Board approval of the engagement of Meketa Investment Group to assist with the development of the Forestland Strategic Plan. If approved, the plan is expected to be completed prior to June 30, 2013.

II. BUSINESS REVIEW
INFRASTRUCTURE & FORESTLAND PROGRAM

Costs: Program Management Fees

Program	Fund Type	2011 Average NAV	Recurring Management Fees Paid in 2011	Management Fees as % Average NAV	Performance Fees Accrued in 2011 but not yet payable	Total 2011 Fees (Paid and Accrued)	Paid and Accrued Fees as % of Avg. NAV	Total Fees Paid and Accrued since Program Inception
Infrastructure			(a)		(b)			
	Commingled Funds	$ 557,577,602	$ 8,230,957	1.48%	$ 38,305,509	$ 46,536,467	8.35%	$ 77,497,634
	Direct Investments	$ 154,525,749	$ -	N/A	$ 12,218,190	$ 12,218,190	7.91%	$ 12,218,190
	Sub-Total:	**$ 712,103,351**	**$ 8,230,957**		**$ 50,523,700**	**$ 58,754,657**	**8.25%**	**$ 89,715,824**
Forestland								
	Separate Accounts	$ 2,247,665,672	$ 10,928,851	0.49%	$ 9,929,898	$ 20,858,749	0.93%	$ 53,368,323
	Sub-Total:	**$ 2,247,665,672**	**$ 10,928,851**		**$ 9,929,898**	**$ 20,858,749**	**0.93%**	**$ 53,368,323**
IFG Program	**Total**	**$ 2,959,769,023**	**$ 19,159,808**	**N/M**	**$ 60,453,598**	**$ 79,613,406**	**2.69%**	**$ 143,084,147**

Notes:

(a) Management Fees paid in 2011. Excludes accrued fees and carried interest.

(b) Accrued Fees are primarily carried interest related to unrealized appreciation. Reported fees were accrued in 2011 but will be payable at a future date upon realization of gains.

Staffing

- **REAL ASSETS**
  Ted Eliopoulos
  SIO
  - **INFRASTRUCTURE & FORESTLAND GROUP**
    Randall Mullan
    SPM
    - **INFRASTRUCTURE PROGRAM**
      - **Transactions**
        PM –Todd LaPenna
        PM – Farhad Billimoria
        2 IO III (Vacant)
      - **Asset Management**
        PM – Christine Yokan
        1 PM (Vacant)
        IO II – LaShae Howell
        1 OT (Vacant)
    - **FORESTLAND PROGRAM**
      - PM – Judy Alexander
        IO III – Angela Lyons

— The Infrastructure and Forestland Programs joined Real Assets as of 7/1/2011.

— The Infrastructure Program has 4 vacant positions which are in recruitment.

(a) As of May 1, 2012

2011-2012 INVO Roadmap Objectives: Status Report

Objective	Milestone	Progress to Date	Upcoming Activity
Modify Infrastructure Program Policy Delegations to align with Infrastructure Strategic Plan	— Completed. Approved by Board August 2011.	— Completed.	— N/A
Establish FY 2011-12 Functional Roles & Work Plans for the new functional units (Transactions; Asset Management; and Operations (PARO))	— Organizational structure has been put into place.	— Completed PARO IFG integration; completed outline for Functional Roles.	— Finalize Functional Roles and associated Work Plans.
Execute first year of investment under and in accordance with the three-year Infrastructure Strategic Plan	— Successfully closed the Portfolio's second direct investment in February 2012.	— Conducting review/negotiation of three other investments.	— Initiate due diligence on two investments.
Engage in IESG review for the Infrastructure and Forestland Programs	— Participated in CalPERS ESG Workshop, a cross asset class roundtable discussion with the Investment Committee in August 2011.	— Collection of data from existing investments has been initiated; Forestland is surveying investments for certification status.	— Continue collection of data from existing investments, including discussions with all existing external managers.
Undertake an 'industry best practice' assessment to identify required analytical and informational tools and systems	— Completion of assessment of current system and of industry best practices/ standards for tools and systems.	— Phase I assessment of business needs has been substantially completed by IFG consultant. Next phases will occur in coordination with CalPERS private asset class platform evaluation.	— IFG is participating in CalPERS effort to assess target platforms for private asset classes, including supporting AIM's review of AREIS utilization.