



**PENSION RESERVES
INVESTMENT
MANAGEMENT BOARD**

Minutes of the PRIM Real Estate and Timberland Committee Meeting
Monday, May 8, 2017

Committee members present:

- Jill S. Hatton, CRE, Chair
- Sarah Kim, Esq., Treasurer Goldberg's designee
- Lydia Chesnick, Esq.
- Robert Gifford
- Anthony E. Hubbard, Esq.
- Jack Lutz, Ph.D.
- Garlan Morse, Jr., CRE

Committee members not present:

- William F. McCall, Jr., CRE
- Peter O'Connell
- Carly Rose

The PRIM Real Estate and Timberland Committee meeting was called to order at 9:30 a.m.

I. Approval of the Minutes (Voting Item)

The minutes of the February 1, 2017, Real Estate and Timberland Committee meeting were amended to reflect that Michael G. Trotsky, CFA summarized the NEPC asset allocation updates. The Real Estate and Timberland Committee unanimously approved the minutes of the February 1, 2017, meeting as so amended.

II. Executive Director/Chief Investment Officer Comments

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, updated the Committee on numerous matters including, but not limited to:

Market Summary

Financial markets continue to grind higher despite signals that tax reform, deregulation and infrastructure spending – essentially the Trump pro-growth agenda—may be harder to achieve than originally thought.

In the United States, we continue to see slow economic growth and mixed economic indicators, while Europe is clearly picking up and China may be slowing down. Importantly, in the first calendar quarter we saw sentiment of equity investors and bond investors begin to diverge: equities continued higher while bond yields, particularly long-duration bonds, moved lower. This may signal a change in expectations around the long-term health of the global economy. While equity investors are optimistic and stock prices have moved steadily higher since last November, bond investors have grown more cautious recently, causing long-term yields to move lower.

And while market volatility has been low while markets have moved higher, we are still mindful of the many economic and geopolitical risks that could disrupt this trend in the future. Without additional economic data to confirm a more robust global expansion, equity valuations and expectations remain elevated, and we believe it is prudent to remain cautious, therefore the asset allocation adjustments we made earlier in the year remain appropriate.

PRIT Fund Performance Summary

Mr. Trotsky reviewed PRIT Fund performance with the Committee, highlighting key points including: As of March 31, 2017, the PRIT Fund net asset value stood at \$65.1 billion.

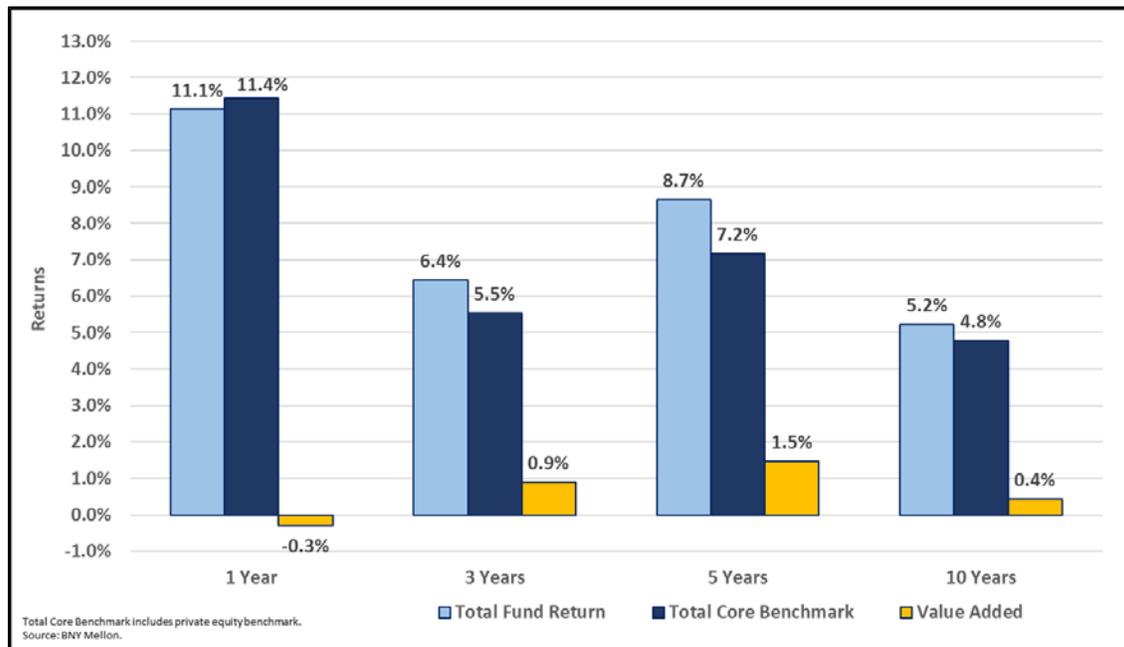
For the quarter ended March 31, 2017, the PRIT Fund was up 4.9%, outperforming the total core benchmark of 4.2% by 66 basis points.

- This performance equates to an investment gain of \$3.0 billion over the quarter.
- This outperformance equates to \$412 million of value above the benchmark return over the quarter.
- Six of the seven major asset classes outperformed their respective benchmarks over the quarter.

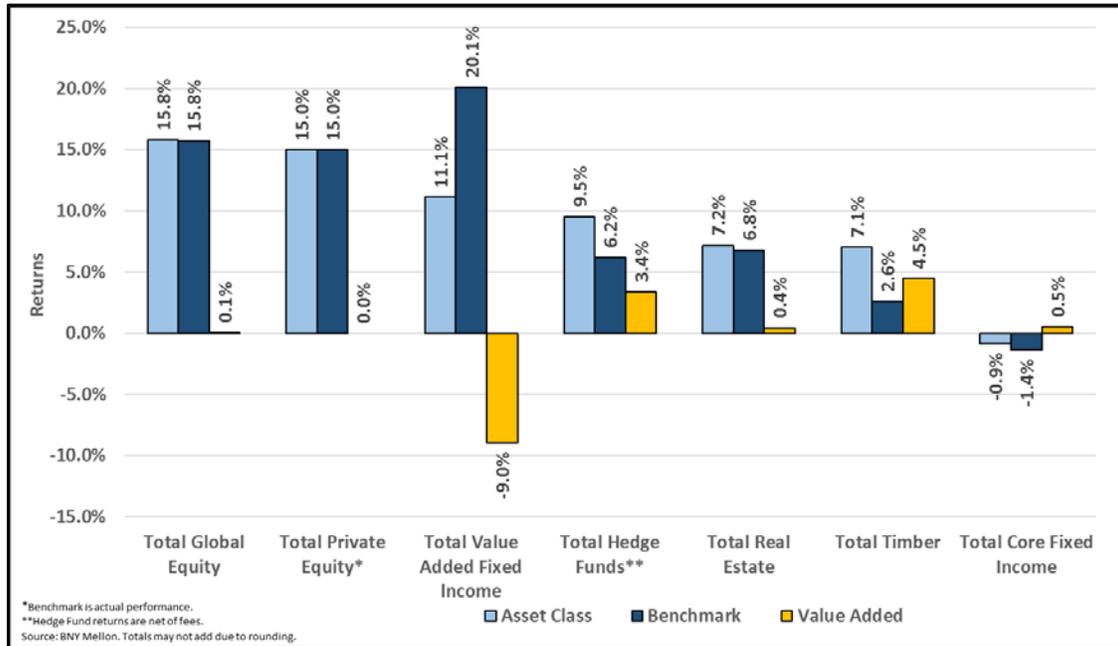
For the one-year ended March 31, 2017, the PRIT Fund was up 11.1%, underperforming the total core benchmark of 11.4% by 30 basis points.

- This performance equates to an investment gain of \$6.7 billion over the year.
- This underperformance equates to \$181 million of value below the benchmark return over the year.
- Six of the seven major asset classes outperformed their respective benchmarks over the year.
- Net total outflows to pay benefits for the one-year ended March 31, 2017, were approximately \$1.5 billion over the year.

Total PRIT Fund Returns (Gross of Fees)
Annualized Returns as of March 31, 2017



PRIT Asset Class Performance (Gross of Fees)
Trailing 1-year Performance as of March 31, 2017



PRIT Core Fund Performance Summary
Gross of Fees Performance
Trailing 1-Year Performance as of March 31, 2017

Trailing 1-Year Performance: Mar. 31, 2017	Return	Benchmark Return	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund
Total PRIT Fund	11.1%	11.4%	(30)	65,083	100%
Total Global Equity	15.8%	15.8%	5	28,996	44.6%
<i>Domestic Equity</i>	<i>17.9%</i>	<i>18.5%</i>	<i>(56)</i>	<i>12,829</i>	<i>19.7%</i>
<i>International Developed</i>	<i>11.1%</i>	<i>11.9%</i>	<i>(75)</i>	<i>11,263</i>	<i>17.3%</i>
<i>Emerging Markets</i>	<i>21.4%</i>	<i>17.0%</i>	<i>443</i>	<i>4,903</i>	<i>7.5%</i>
Private Equity	15.0%	15.0%	0	6,960	10.7%
Real Estate	7.2%	6.8%	40	6,369	9.8%
Total Timberland	7.1%	2.6%	446	2,451	3.8%
Hedge Funds	9.5%	6.2%	335	5,522	8.5%
Value Added Fixed Income	11.1%	20.1%	(899)	5,354	8.2%
Core Fixed Income	-0.9%	-1.4%	50	7,606	11.7%

PRIT Asset Class Performance (Gross of Fees)
Annualized Returns as of March 31, 2017

1 Year	3 Year	5 Year	10 Year
GLOBAL EQUITY 15.8%	PRIVATE EQUITY 15.4%	PRIVATE EQUITY 17.5%	PRIVATE EQUITY 13.7%
PRIVATE EQUITY 15.0%	REAL ESTATE 10.9%	REAL ESTATE 11.3%	TIMBER 6.6%
VALUE-ADDED FIXED INCOME 11.1%	TIMBER 5.6%	GLOBAL EQUITY 9.0%	VALUE-ADDED FIXED INCOME 6.6%
HEDGE FUNDS (NET OF FEES) 9.5%	GLOBAL EQUITY 5.3%	TIMBER 7.0%	REAL ESTATE 6.4%
REAL ESTATE 7.2%	CORE FIXED INCOME 5.3%	HEDGE FUNDS (NET OF FEES) 5.4%	CORE FIXED INCOME 5.0%
TIMBER 7.1%	VALUE-ADDED FIXED INCOME 3.2%	VALUE-ADDED FIXED INCOME 5.1%	GLOBAL EQUITY 4.4%
CORE FIXED INCOME (0.9%)	HEDGE FUNDS (NET OF FEES) 2.7%	CORE FIXED INCOME 4.0%	HEDGE FUNDS (NET OF FEES) 3.1%

Organizational Update

Mr. Trotsky informed the Committee of recent changes and awards involving PRIM staff, including:

Luis J. Roman, Ph.D. joined the PRIM team as Senior Investment Officer – Director of Risk Management on April 17. Mr. Trotsky told the Committee: Luis joins us after more than 20 years in the investment industry and academia. Prior to joining PRIM, Luis was the U.S. Head of Multi Asset Class and Alternatives Investment Risk at Columbia Threadneedle Investments, Global Head of Fixed Income Investment Risk at State Street Global Advisors and a Quantitative Analyst at Putnam Investments. He is a recognized expert in the design and implementation of risk management processes for asset management firms. Luis began his career in academia where he was a visiting assistant professor at the University of California in Irvine and the Worcester Polytechnic Institute. He earned his Master’s of Science in Applied Mathematics from the University of Chicago and his Ph.D. in Mathematics from the University of Minnesota.

Bill Li, CFA, CAIA – Investment Officer – Hedge Funds and Low Volatility Strategies, recently earned the Chartered Alternative Investment Analyst (CAIA) designation after passing the required two-part exam. The CAIA curriculum covers a broad knowledge base in alternative investments including hedge funds, private equity, real assets and structured products.

For the second consecutive year, PRIM’s PCS team (Eric R. Nierenberg, Ph.D. and Bill Li, CFA, CAIA) have been named finalists at the Institutional Investor Magazine’s 15th Annual Hedge Fund Industry Awards to be held in June in New York City. The award recognizes excellence in innovation and thought leadership in the Hedge Fund space. Our team joins four other finalists from North America in the Large Public Plan category. As a reminder, PRIM won this award last year. It is highly unusual to be nominated for the same award two years in a row, and a fitting tribute to the leadership that PRIM has demonstrated in the Hedge Fund sector.

Investment Team Personnel Moves

- We are rolling out a series of personnel moves focused on enhancing PRIM's role as a leading innovator and performance leader among public pension funds.
- Michael R. Bailey, Senior Investment Officer for Private Equity, will become the second person to take part in PRIM's Professional Development Program, which rotates asset class heads through teams other than their own. Michael joined PRIM in 2013.
- Sarah N. Samuels, CFA, CAIA, Deputy Chief Investment Officer, will add responsibility for Hedge Funds to her current responsibilities overseeing Public Markets. Sarah was the first participant in PRIM's Professional Development Program. She joined PRIM in 2011.
- Eric R. Nierenberg, Ph.D., who, since joining PRIM in 2012 has been Senior Investment Officer – Director of Hedge Funds and Low Volatility Strategies, has been named PRIM's Chief Strategy Officer. In this new role, Eric will look across the entire \$65 billion investment portfolio for innovative approaches to identify diversification strategies, enhance returns and reduce fees.

Dr. Nierenberg's designation as PRIM's Chief Strategy Officer is effective immediately. The re-aligning of responsibilities related to Hedge Funds will be a gradual process with no fixed timetable.

III. Performance Review and Market Update

Timothy Schlitzer, CRE, CFA – Director of Real Estate and Timberland, reviewed Real Estate and Timberland performance and the status of the real estate and timberland markets with the Committee.

Mr. Schlitzer told the Committee that real estate is valued at \$6.4 billion, (9.8% of the PRIT Fund) and timberland is \$2.5 billion (3.8% of the PRIT Fund). This equates to approximately \$139 million available for investment in real estate and \$152 million for timberland. Total real estate returned 7.2% over the past year, which is 40 basis points above the benchmark. The industrial market has performed well over the past year while hotel returns have lagged the broader NCREIF index. We continue to see wide dispersion of returns in the REIT space by property type. PRIM acquired two industrial properties for approximately \$40 million and disposed of four properties for \$250 million this year. Timberland returned 7.1% over the last 12 months, which equates to 446 basis points above the benchmark. Both managers have outperformed the benchmark. Lumber prices have increased significantly due to low sawmill capacity and inventory build-up in anticipation of new tariffs. Housing starts declined to 1.2 million but permits rose 3.6% last month.

Dr. Lutz gave a presentation regarding timberland markets in the North American region, including data on supply and demand and valuations. The presentation included a perspective on the implications of the softwood lumber dispute. He noted that there is a limited supply of investment grade timberland in the United States. Historically, Canada has provided the United States with 20-35% of its timber. Ontario and British Columbia have decreased the annual allowable cut due to the impact of infestation. Dr. Lutz explained that in the future, a larger share of U.S. timber sales will come from the southern United States due to increased production in the region and conditions in Canada. Dr. Lutz also said that Canada and the United States are likely to resolve a trade disagreement regarding timberland because each party has strong economic incentives to do so.

Committee members thanked Dr. Lutz for his presentation.

IV. Consulting RFP Recommendation (Voting Item)

John La Cara, Senior Investment Officer – Real Estate and Timberland, presented to the Committee the results of the Consulting RFP. Fifteen responses were received and after conducting interviews with the finalists, the Evaluation Committee recommended selection of The Townsend Group and the International Woodland Company to provide Real Estate and Timberland consulting services to PRIM. Both of these

firms demonstrated a superior level of expertise and depth of resources in their respective fields. The Evaluation Committee also recommended the following firms for project consulting services: Aberdeen Asset Management, Adelle LLC, Bard Consulting LLC, Callan Associates, Chatham Financial Group, Harvest Capital Partners LLC, Robert Charles Lesser & Co. LLC, Real Estate Fiduciary Services and Whitegate Real Estate Partners. This collective recommendation was based on the diverse set of skills and beneficial expertise that each firm has to offer to PRIM.

The Real Estate Committee voted unanimously to recommend to the PRIM Board that the Board approve the Evaluation Committee's recommendation to engage, subject to successful contract negotiations, The Townsend Group and International Woodland Company for general real estate consulting services and general timberland consulting services, respectively, for three-year terms, and to approve the following firms to be eligible to provide project real estate consulting services on an as-needed, project-specific basis to PRIM, as described at Appendix E of the Expanded Agenda: Aberdeen Asset Management; Adelle, LLC; Bard Consulting, LLC; Callan Associates, Inc.; Chatham Financial Group; Harvest Capital Partners, LLC; Legacy Appraisal Services; Robert Charles Lesser & Co. LLC; Real Estate Fiduciary Services, LLC; and Whitegate Real Estate Advisors and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

V. REIT Portfolio Update (Voting Item)

Mr. La Cara presented this agenda item to the Committee. As part of the 2017 annual plan, staff conducted a review of the REIT portfolio. As a result of the review, the Real Estate staff and The Townsend Group recommended that Invesco Realty Advisors, Inc. (IRE) be terminated from its mandate for generating performance that was below expectations during the life of the mandate. Additionally, staff and The Townsend Group recommended that the assets managed by IRE be moved to the portfolio managed by Brookfield Investment Management. Based on analysis using the MSCI BarraOne tool, staff expected that the impact of the move from Invesco Realty Advisors, Inc. to Brookfield Investment Management would result in a negligible increase to the risk of the REIT portfolio.

The Real Estate Committee voted unanimously to recommend to the PRIM Board that the Board approve the termination of the Invesco Realty Advisors REIT mandate and the transfer of approximately \$287.5 million in cash or securities (as of March 31, 2017) from Invesco Realty Advisors to Brookfield Investment Management, and further to authorize the Executive Director to take all actions necessary to effectuate this vote.

VI. Benchmark Review

Donald Payne, Risk Management Officer and Mr. Schlitzer updated the Committee on the PRIT Fund benchmark review. There were no recommended changes to the Real Estate and Timberland benchmarks. The PRIM Real Estate and Timberland Committee meeting adjourned at 11:21 a.m.

List of documents and exhibits used during the meeting:

- *Minutes of the PRIM Real Estate and Timberland Committee Meeting of February 1, 2017*
- *PRIT Fund Performance Report*
- *BNY Mellon Gross of Fees Performance Report*
- *Real Estate and Timberland Portfolio Report*
- *Consulting RFP - Evaluation Committee Recommendation*
- *REIT Portfolio - Current Manager Review Presentation*
- *REIT Portfolio – Bench Review Presentation*
- *Benchmark Review Presentation*
- *Handout – Timberland Values – Softwood Lumber Dispute*