



PENSION RESERVES  
**INVESTMENT**  
MANAGEMENT BOARD

*Board Meeting*  
**Tuesday, December 1, 2015**  
**9:30 a.m.**

- I. MINUTES. (Voting Item)**
- II. EXECUTIVE DIRECTOR/CHIEF INVESTMENT OFFICER REPORT.**
- III. COMPENSATION COMMITTEE REPORT - Recommendations (Voting Item)**
- IV. INVESTMENT REPORT.**
  - A. Public Markets - Portfolio Update.
  - B. Hedge Funds and Portfolio Completion Strategies.
    - 1. Portfolio Update.
    - 2. Portfolio Completion Strategies: Real Assets Primer.
  - C. Private Equity.
    - 1. Performance Summary and Cash Flows.
    - 2. Commitment Summary.
    - 3. Buyouts Research and Co-investment Update. **(Voting Item)**
    - 4. New Investment Opportunity: Advent International Global Private Equity VIII Limited Partnership. **(Voting Item)**
    - 5. New Investment Opportunity: Thoma Bravo Discover Fund, L.P. **(Voting Item)**
  - D. Real Estate and Timberland.
    - 1. Performance Review and Market Update.
    - 2. Global REIT Investment Management Services – Request for Proposals (RFP). **(Voting Item)**
    - 3. Real Estate Appraisal Services – Request for Proposals (RFP). **(Voting Item)**
- V. FINANCE AND ADMINISTRATION REPORT.**
  - A. Information Technology Support Services – Request for Proposals (RFP). **(Voting Item)**
  - B. Fiscal Year 2015 Comprehensive Annual Financial Report (CAFR). **(Voting Item)**
  - C. 2016 PRIM Board and Committee Meeting Schedule. **(Voting Item)**
  - D. Request for Legal Services RFQ. **(Voting Item)**
  - E. Legal / Legislative Update.
  - F. Other Matters:
    - 1. September 2015 PRIM Budget.
    - 2. Travel and Staff Development.



3. Client Services.

**VI. EXECUTIVE SESSION - Real Property Transactions.**

**Appendices**

- A. Minutes of the PRIM Board meeting of October 13, 2015.
- B. Callan *PRIT Fund Performance Report Color Charts* (September 30, 2015).
- C. BNY Mellon Gross of Fees Performance Report (October 31, 2015).
- D. Callan *Investment Measurement Service Monthly Review* (September 30, 2015).
- E. PRIM 2012 Board Approved Compensation Philosophy.
- F. PRIM 2012 Board Approved Incentive Compensation Plan.
- G. McLagan's Comparator Data Salary Range Update – 2015.
- H. Portfolio Completion Strategies: Real Assets Primer.
- I. Real Estate and Timberland Portfolio Report (October 31, 2015).
- J. Global REIT Investment Management Services RFP – Evaluation Committee Recommendation.
- K. Global REIT Investment Management Services RFP – Recommendation Handout.
- L. Global REIT Investment Management Services RFP – Townsend Group Recommendation.
- M. Real Estate Appraisal Services RFP – Evaluation Committee Recommendation.
- N. Real Estate Appraisal Services RFP – Townsend Group Recommendation.
- O. Fiscal Year 2015 Comprehensive Annual Report (CAFR).
- P. 2016 Proposed PRIM Board and Committee Schedule.
- Q. September 2015 Operating Budget.
- R. Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development.

## **I. Minutes. (Voting Item)**

The minutes of the PRIM Board meeting on October 13, 2015 are contained at **Appendix A**.

## **II. Executive Director/Chief Investment Officer Report.**

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer.

### **Market Analysis.**

We have long anticipated a transition to a lower return environment after the strong returns posted since the world financial crisis of 2008 and 2009. As a reminder, the PRIT Fund returned 3.9% in fiscal year 2015, 113 basis points above benchmark, and in the top one-third of our peer group. It is noteworthy that this performance followed two exceptionally strong years in fiscal 2013 and fiscal 2014, in which the PRIT fund was up 12.7% (183 basis points above benchmark) and 17.6% (268 basis points above benchmark), respectively.

The summer quarter ended September 2015 was weak for the markets as the slowdown in China and a surprise devaluation in their currency led to concerns of slowing global growth. For the quarter, U.S. equities were down 6.6%, developed international equities were down 10.2% and emerging markets equities were down 17.9%. Fixed income securities were stronger in the quarter with long duration Treasuries up 7.6% and diversified bonds up 1.2%.

The month of October reversed most of the summer selloff as U.S. equities were up 8.4%, developed international equities were up 7.8%, and emerging markets equities were up 7.1%. Fixed income securities were stable in the month with long duration Treasuries and diversified bonds essentially flat.

We are pleased with the recent performance of the PRIT Fund during this recent market volatility. The asset allocation changes made over the past five years designed to reduce the Fund's volatility prepared us well for these turbulent markets. These changes included reducing the Global Equity target allocation from 49% to 40%, adding long-duration Treasury bonds (#1 performing public markets asset class in FY 2015), and adding low volatility Portfolio Completion Strategies. Given the volatility in the markets since the end of June, these changes have proven to be very well-timed.

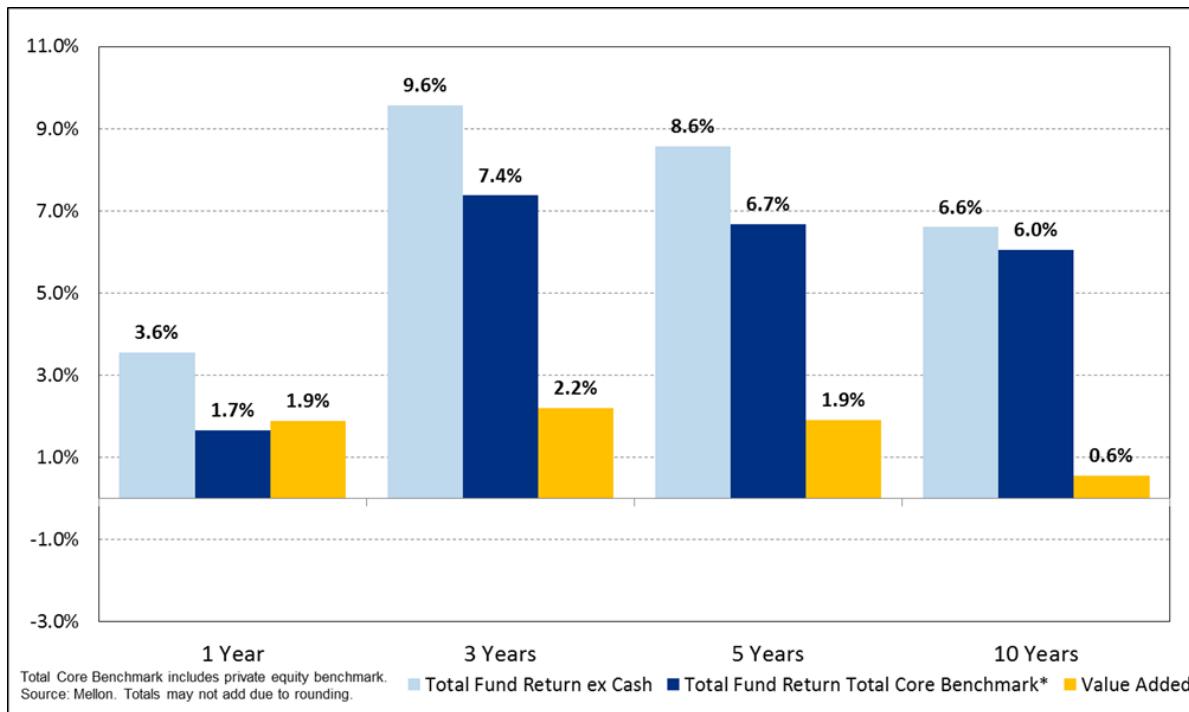
The investment team has kicked off our annual asset allocation review. We look forward to sharing our research findings and recommendations at the next Committee/Board cycle in late January and early February.

### **PRIT Fund Performance.**

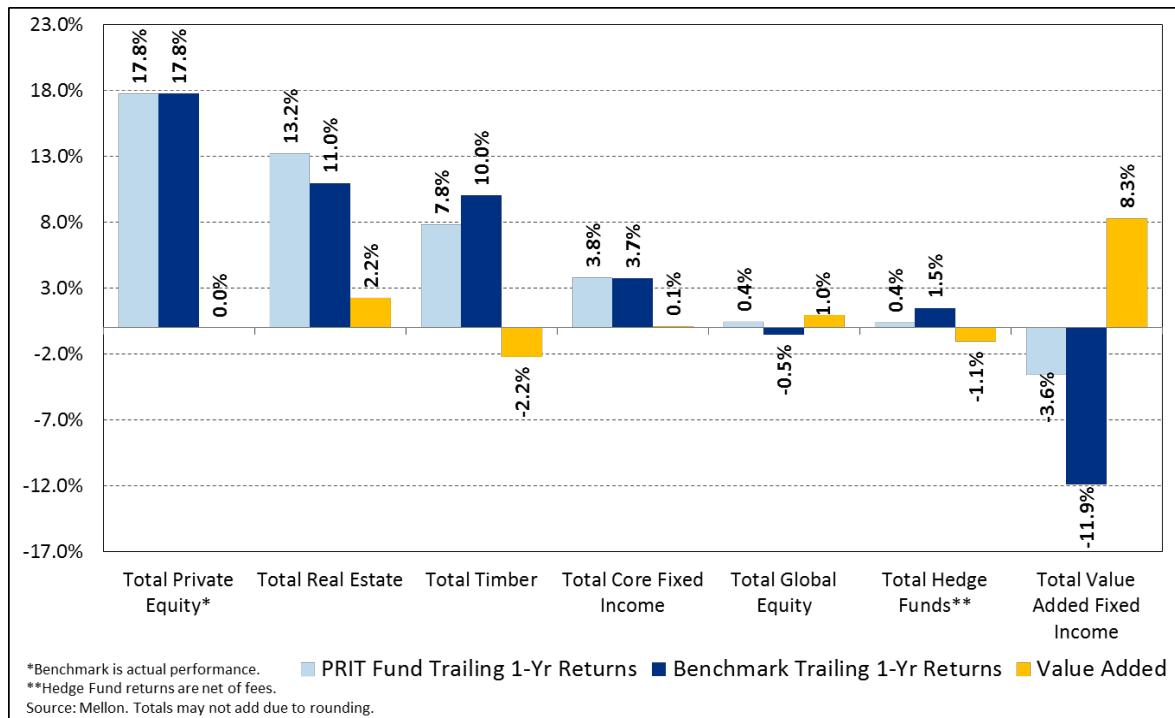
The PRIT Fund was up 3.6% in the month of October, erasing nearly all of the September quarter's decline of 3.8%. For the one-year period ended October 2015, the PRIT Fund's performance was solidly positive and above benchmark as detailed below.

- For the one-year ended October 31, 2015, the PRIT Fund was up 3.6%, outperforming the total core benchmark of 1.7% by 189 basis points.
- This performance equates to an investment gain of \$2.1 billion.
- This outperformance equates to \$1.1 billion of value above the benchmark return.
- Net total outflows to pay benefits for the one-year ended October 31, 2015 were approximately \$1.4 billion.
- Five of the seven major asset classes outperformed their respective benchmarks.

**Total PRIT Fund Returns (Gross of Fees)**  
Annualized Returns as of October 31, 2015



**PRIT Asset Class Performance (Gross of Fees)**  
Annualized Returns as of October 31, 2015



### **PRIT Core Fund Performance Summary**

Gross of Fees Performance

Trailing 1-Year Performance as of October 31, 2015

Trailing 1-Year Performance: Oct. 31, 2015	Return	Benchmark Return	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund
<b>Total PRIT Fund</b>	<b>3.6%</b>	<b>1.7%</b>	<b>189</b>	<b>60,706</b>	<b>100%</b>
<b>Total Global Equity</b>	<b>0.4%</b>	<b>-0.5%</b>	<b>95</b>	<b>26,332</b>	<b>43.4%</b>
<i>Domestic Equity</i>	<i>4.2%</i>	<i>4.3%</i>	<i>(19)</i>	<i>11,800</i>	<i>19.4%</i>
<i>International Developed</i>	<i>2.0%</i>	<i>-0.7%</i>	<i>269</i>	<i>10,282</i>	<i>16.9%</i>
<i>Emerging Markets</i>	<i>-12.8%</i>	<i>-13.4%</i>	<i>53</i>	<i>4,250</i>	<i>7.0%</i>
<b>Private Equity</b>	<b>17.8%</b>	<b>17.8%</b>	<b>0</b>	<b>6,822</b>	<b>11.2%</b>
<b>Real Estate</b>	<b>13.2%</b>	<b>11.0%</b>	<b>224</b>	<b>6,376</b>	<b>10.5%</b>
<b>Timberland</b>	<b>7.8%</b>	<b>10.0%</b>	<b>(220)</b>	<b>1,661</b>	<b>2.7%</b>
<b>Hedge Funds</b>	<b>0.4%</b>	<b>1.5%</b>	<b>(106)</b>	<b>5,164</b>	<b>8.5%</b>
<b>Value Added Fixed Income</b>	<b>-3.6%</b>	<b>-11.9%</b>	<b>828</b>	<b>5,063</b>	<b>8.3%</b>
<b>Core Fixed Income</b>	<b>3.8%</b>	<b>3.7%</b>	<b>9</b>	<b>7,766</b>	<b>12.8%</b>

### **PRIT Asset Class Performance (Gross of Fees)**

Annualized Returns as of October 31, 2015

1 Year	3 Year	5 Year	10 Year
Private Equity 17.8%	Private Equity 20.3%	Private Equity 18.7%	Private Equity 16.3%
Real Estate 13.2%	Real Estate 12.9%	Real Estate 12.9%	Timber 8.7%
Timber 7.8%	Global Equity 10.3%	Global Equity 8.3%	Real Estate 8.3%
Core Fixed Income 3.8%	Timber 9.2%	Timber 6.5%	Value-Added Fixed Income 7.4%
Global Equity 0.4%	Hedge Funds 6.1%	Value-Added Fixed Income 5.5%	Global Equity 6.0%
Hedge Funds 0.4%	Core Fixed Income 3.6%	Hedge Funds 4.6%	Core Fixed Income 5.2%
Value-Added Fixed Income (3.6%)	Value-Added Fixed Income 2.9%	Core Fixed Income 4.5%	Hedge Funds 4.2%

The following detailed performance reports on the PRIT Fund are available in the Board package:

- Callan *PRIT Fund Performance Report* Color Charts. (September 30, 2015) (**Appendix B**)
- BNY Mellon Gross of Fees Performance Report. ( October 31, 2015) (**Appendix C**)
- Callan *Investment Measurement Service Monthly Review*. (September 30, 2015) (**Appendix D**)

### **Organizational Updates.**

PRIM held its Client Conference on November 5, 2015 at the College of the Holy Cross in Worcester. With approximately 200 guests, the event was well-attended and well-received. Also, on November 12, 2015, PRIM continued its *Brown Bag Series Luncheon* with featured guest Howard Marks, Co-Founder and Co-Chairman of Oaktree Capital, one of PRIM's private equity managers specializing in distressed debt. As you may recall, the initiative of the *Brown Bag Series* is to further the development and education of PRIM staff, Board and committee members, by hosting "talks" with guest speakers in an interactive and intimate setting that allows for ideas to be exchanged. The next *Brown Bag Series Luncheon* is scheduled for December 16, 2015 at 12:30 PM featuring PRIM Investment Committee member Glenn Strehle, Treasurer Emeritus of M.I.T., delivering his talk entitled "Ten Nobel Laureates in Economics".

### **III. Compensation Report - Compensation Committee Recommendations. (Voting Item)**

The PRIM governance documents in regard to compensation (statutes, Governance Manual, Compensation Philosophy (attached as **Appendix E**), and Incentive Compensation Plan (attached as **Appendix F**), indicate that the Board shall set the Executive Director's compensation, including incentive compensation, after receiving the recommendation of the Compensation Committee. The Compensation Committee met on November 19 and voted unanimously to recommend that the Board approve: 1.00 as the Executive Director's Performance Multiplier for FY 2015; the 2015 Compensation Range Update proposed by McLagan and attached at page 5 of **Appendix G**; and the Executive Director's FY 2016 compensation increase to \$395,000.

#### **A. Executive Director's FY 2015 Incentive Compensation.**

PRIM's Incentive Compensation awards are comprised of two components: 1) *The PRIT Fund Investment Performance Component* (80% weight) is determined on the basis of the PRIT Fund's trailing three-year Policy Return Performance versus the PRIT Fund's benchmark; and 2) *The Individual Performance Component* (20% weight) is determined as part of each employee's annual performance review. The Compensation Committee is charged with the responsibility of recommending to the Board the Executive Director's Individual Performance Multiplier for FY 2015 Incentive Compensation, based upon the Board's October 13, 2015 evaluation of the Executive Director's FY 2015 performance. Assessments of individual performance are defined using the following scale and the accompanying individual performance multipliers as described in PRIM's Incentive Compensation Plan.

Individual Performance	
Performance vs. Individual Goals & Objectives	Performance Multiplier
Far Exceeds High Expectations	1.00
:	:
Meets High Expectations	0.60
:	:
Does Not Meet High Expectations	0.00

*Intermediate points may be interpolated.*

The Compensation Committee voted (unanimously 4-0) on November 19 to recommend to the PRIM Board that the Executive Director receive a 1.00 Performance Multiplier for FY 2015. 1.00 was also the Performance Multiplier the Board voted in December 2014 for the Executive Director for FY 2014.

**B. Compensation Range Update.**

The 2012 Board-approved Compensation Philosophy states that, “*the Compensation Committee has determined that for purposes of identifying PRIM’s compensation ranges (i.e., salary range minimum, midpoint, and maximum), PRIM’s comparator group is defined as other public pension funds of roughly comparable size and/or complexity (i.e., a peer group of at least 15 other public pension funds with roughly half the funds larger than PRIM and the other half smaller than PRIM, as measured by assets under management (AUM)). To ensure that PRIM remains competitive with market trends, PRIM will conduct a comprehensive market compensation level analysis at least every four years.*

PRIM’s current salary ranges were approved in December 2012, based upon peer public pension fund comparator data that McLagan assembled in 2012. McLagan has updated this 2012 data and ranges to reflect current 2015 data. McLagan’s 2015 Compensation Range Update is attached as Appendix G.

The Compensation Committee voted (unanimously 4-0) on November 19 to recommend to the PRIM Board that McLagan’s 2015 Compensation Range Update (attached at page 5 of Appendix G) be approved.

**C. Executive Director’s FY 2016 Compensation.**

The PRIM governance documents in regard to compensation (statutes, Governance Manual, Compensation Philosophy, and Incentive Compensation Plan) indicate that the Board shall set the Executive Director’s compensation after receiving the recommendation of the Compensation Committee. Relevant considerations regarding the Executive Director’s employment and compensation at PRIM include the following:

- The Executive Director was hired in August 2010 at a salary that was \$77,000 less than that of his predecessor Executive Director. The Executive Director is presently 5.25 years into his tenure at PRIM.
- In October 2012 the PRIM Board added the title and duties of Chief Investment Officer to the Executive Director’s responsibilities, and increased his salary accordingly by \$50,000. Combining these two roles has saved PRIM over \$300,000 per year.
- The Executive Director has received one merit-based salary increase during his 5.25 year tenure at PRIM. In December 2014, the Executive Director/Chief Investment Officer’s salary was adjusted to be “not lower than the midpoint” of the Executive Director/Chief Investment Officer’s December 2012 Board-approved salary range.
- The Compensation Committee’s November 19, 2015 discussion of the Executive Director’s compensation noted that the Executive Director continues to deserve a salary not lower than the midpoint of the salary range, as updated in 2015; however, the Committee determined the most prudent course would be to recommend that the Board adjust the Executive Director’s salary gradually, not all in one increase this year, but rather incrementally in two increases, to \$395,000 this year and the remainder next year.

In summary, the Compensation Committee voted (unanimously 4-0) on November 19 to recommend to the PRIM Board that: the Executive Director receive a 1.00 Performance Multiplier for FY 2015; the McLagan 2015 Compensation Range Update attached at page 5 of Appendix G be approved; and the Executive Director's compensation increase to \$395,000 effective December 1, 2015.

## IV. Investment Report.

### A. Public Markets - Portfolio Update.

Sarah N. Samuels, CFA, Deputy Chief Investment Officer – Director of Public Markets and Investment Research. Mrs. Samuels' presentation will be accompanied by a handout at the meeting.

### B. Hedge Funds and Portfolio Completion Strategies.

#### 1. Portfolio Update.

Eric R. Nierenberg, Ph.D., Senior Investment Officer – Director of Hedge Funds and Low Volatility Strategies.

#### 2. Portfolio Completion Strategies: Real Assets Primer.

Eric R. Nierenberg, Ph.D., Senior Investment Officer – Director of Hedge Funds and Low Volatility Strategies. The presentation is attached at **Appendix H**.

### C. Private Equity.

Michael R. Bailey, Senior Investment Officer – Director of Private Equity.

#### 1. Performance Summary and Cash Flows.

PRIM Board Private Equity Portfolio Performance as of October 31, 2015 <sup>1</sup>					
Committed	Contributed <sup>2</sup>	Distributed	Market Value	Total Value	Net IRR <sup>3</sup>
17,052,673,628	14,002,940,013	15,724,258,981	6,674,269,189	22,398,528,170	13.24%

1. Excludes Alternative Fixed Income and Private Natural Resources partnerships.

2. Contributions include fees.

3. Net IRR since inception, as calculated by Hamilton Lane's Portfolio Reporting System.

#### 2015 Cash flows <sup>1</sup>

Quarter	Contributions <sup>2</sup>	Distributions	Net Cash Flow
31-Mar-15	283,670,913	395,789,514	112,118,601
30-Jun-15	327,467,876	615,659,051	288,191,175
30-Sep-15	302,830,311	597,241,672	294,411,360
31-Dec-15	-	-	-
<b>TOTAL</b>	<b>\$ 913,969,100</b>	<b>\$ 1,608,690,237</b>	<b>\$ 694,721,137</b>

1. Excludes Alternative Fixed Income and Private Natural Resources partnerships.

2. Contributions include fees.

## 2. Commitment Summary.

Private Equity 2015 Investment Summary (\$ in Millions)				Total PRIT
<u>Partnership</u>	<u>Investment Focus</u>	<u>Special Equity</u>	<u>Venture Capital</u>	<u>Commitment</u>
<b><u>Approved as Interim Recommendations January 20th</u></b>				
Catalyst Investors IV, L.P. *		\$	65	
Insight Venture Partners IX, L.P. *		\$	120	
Insight Growth-Buyout Coinvestment Fund, L.P. *		\$	40	
<b><u>Approved at the February 11th Board Meeting</u></b>				
Flagship Ventures Fund V, L.P. *		\$	25	
Rhône Partners V, L.P.		\$ 106		
<b><u>Approved as Interim Recommendation March 2nd</u></b>				
Index Ventures Growth III, L.P. *		\$	32	
<b><u>Approved at the April 7th Board Meeting</u></b>				
Blackstone Capital Partners VII, L.P. *		\$ 225		
TA XII, L.P. *			\$	200
Thoma Bravo Special Opportunities Fund II, L.P. *		\$ 50		
<b><u>Approved at the June 4th Board Meeting</u></b>				
Charterhouse Capital Partners X, L.P. *		\$ 112		
Quantum Parallel Partners VI-C, L.P. *		\$ 45		
<b><u>Approved as Interim Recommendation September 8th</u></b>				
Index Ventures Life VII, L.P. *		\$	13	
<b><u>Approved at the October 13th Board Meeting</u></b>				
Lovell Minnick Equity Partners IV, L.P.		\$ 100		
<b>Total</b>		\$ 637	\$ 495	\$ 1,132
<b>2015 Investment Plan</b>				\$1,700
<b>Remaining To Be Committed</b>				\$568
 <b>PRIM</b> Alternative Fixed Income 2015 Investment Summary (\$ in Millions)				
*Denotes existing PRIM relationship				
<u>Partnership</u>				<u>Total PRIT</u>
<b><u>Approved as Interim Recommendations March 2nd</u></b>				
Oaktree Opportunities Fund X, L.P. *		\$	75	
Oaktree Opportunities Fund Xb, L.P. *		\$	150	
<b><u>Approved at the April 7th Board Meeting</u></b>				
CVI Credit Value Fund III, L.P.		\$	150	
<b>Total</b>		\$	375	
<b>2015 Investment Plan</b>				\$700
<b>Remaining To Be Committed</b>				\$325

### **3. Buyouts Research and Co-investment Update. (Voting Item)**

Michael R. Bailey, Senior Investment Officer – Director of Private Equity, and Michael McGirr, Senior Investment Officer – Private Equity, provided the Investment Committee with a presentation on private equity buyouts research and co-investments update.

PRIM staff and the Investment Committee (unanimously) are recommending that the PRIM Board approve the following seventeen managers for co-investment: American Securities, Berkshire Partners, Centerbridge Partners, Charlesbank Capital Partners, Charterhouse Capital Partners, GTCR, Insight Venture Management, Lovell Minnick Partners, Nordic Capital, Quad-C Management, Quantum Energy Partners, Rhone Group, TA Associates, Thoma Bravo, TowerBrook Financial, Vista Equity Partners, and WestView Capital Partners.

### **4. New Investment Opportunity: Advent International Global Private Equity VIII Limited Partnership. (Voting Item)**

Advent International (Advent) is establishing Advent International GPE VIII (Fund VIII) which will make private equity investments primarily through traditional and growth oriented buyout transactions. Fund VIII will be \$12 billion in aggregate commitments. Advent is one of the world's most experienced global private equity firms. Advent has eleven offices located across ten countries and employs 173 investment professionals.

The PRIM Private Equity team believes that Advent International GPE VIII, L.P. provides the PRIT Fund with an attractive risk/return profile. Advent has a large and highly experienced team. Advent also has a strong and consistent track record.

PRIM staff and the Investment Committee (unanimously) recommend that the PRIM Board approve a capital commitment of up to \$300 million, or its equivalent value in Euros, to Advent International GPE VIII, L.P.

### **5. New Investment Opportunity: Thoma Bravo Discover Fund. (Voting Item)**

Thoma Bravo is establishing the Thoma Bravo Discover Fund, L.P. ("Discover Fund") to target investment opportunities in software and technology-enabled services companies located in the United States that are smaller than their most recent "flagship" funds, Thoma Bravo Fund XI, L.P. ("Fund XI") and Thoma Bravo Special Opportunities Fund II, L.P. (SOF II). The Discover Fund is expected to be \$1.0 billion in aggregate commitments. Thoma Bravo has extensive knowledge of and experience investing in the software services and technology-enabled service sectors. Thoma Bravo has offices in San Francisco and Chicago.

The PRIM Private Equity team believes that Thoma Bravo Discover Fund, L.P. provides the PRIT Fund with an attractive risk/return profile. Thoma Bravo is a sector- focused firm with an experienced and motivated team and a strong and consistent track record.

PRIM staff and the Investment Committee (unanimously) recommend that the PRIM Board approve a capital commitment of up to \$60 million to Thoma Bravo Discover Fund, L.P.

## D. Real Estate and Timberland.

Timothy V. Schlitzer, CRE, Senior Investment Officer – Director of Real Estate and Timberland.

### 1. Performance Review and Market Update.

#### Real Estate.

##### Total Real Estate Performance

Through October 31, 2015, returns for real estate over periods of one, three, five and ten years are as follows:

	PRIM Real Estate	Combined Benchmark*	Out/Under Performance
1 Year	13.2%	11.0%	2.2%
3 Year	12.9%	11.2%	1.7%
5 Year	12.8%	12.2%	0.7%
10 Year	8.3%	7.8%	0.5%

\*Includes NCREIF Property Index as of June 30, 2015 (One Quarter Lag). September returns not available in time for month-end performance calculation.

##### Private Real Estate Performance

Through October 31, 2015, returns for private real estate over periods of one, three, five and ten years are as follows:

	PRIM Private Real Estate	Benchmark*	Out/Under Performance
1 Year	15.8%	13.0%	2.8%
3 Year	14.4%	11.6%	2.7%
5 Year	14.4%	12.7%	1.6%
10 Year	8.9%	8.2%	0.7%

\*NCREIF Property Index as of June 30, 2015 (One Quarter Lag). September returns not available in time for month-end performance calculation.

##### Real Estate Securities Performance

Through October 31, 2015, returns for REITs year-to-date and over periods of one, three, five and ten years are as follows:

	PRIM REITs	Benchmark*	Out/Under Performance
YTD	2.3%	1.2%	1.1%
1 Year	3.6%	2.5%	1.1%
3 Year	8.9%	8.6%	0.3%
5 Year	9.0%	8.9%	0.1%
10 Year	5.6%	5.2%	0.4%

\*FTSE EPRA NAREIT Developed Net Total Return as of October 31, 2015.

### *Commentary - Real Estate*

As of October 31, 2015, the real estate portfolio was valued at \$6.4 billion, or 10.5% of the PRIT Fund, which is above the target allocation of 10%. Core real estate assets represent 73.6% of the total real estate portfolio, 5.9% is invested in non-core assets, and 19.1% of the portfolio is invested in REITs. The remainder is in short term cash pending investment.

The private real estate portfolio returned 15.8% for the one-year period ended October 31, 2015, 283 basis points above benchmark. PRIM outperformed on both a levered and unlevered basis. One year NCREIF returns, as of September 30, 2015, are now led by the industrial sector at 15.6%. Apartments continue to lag at 12.0%. Year to date, PRIM's advisors have acquired eight new properties for \$694.7 million in equity. Three dispositions have been completed for \$145.9 million.

### **NCREIF Property Returns.**

**September 30, 2015**

<u>Property Type</u>	<u>% of Index</u>	<u>Total One Year Return</u>
Apartments	24.1%	12.0%
Hotels	1.3%	14.6%
Industrial	13.1%	15.6%
Office	38.3%	13.1%
Retail	<u>23.2%</u>	<u>14.4%</u>
Total	100%	13.5%

PRIM's Global REIT portfolio returned 3.6% for the one-year period ended October 31, 2015, outperforming the benchmark by 110 basis points. Global REIT markets fell 3.2% in the third quarter with Asia leading on the downside, returning -12.3%. After a difficult August, markets rebounded in September and October, up 0.9% and 6.0%, respectively. Green Street Advisors estimates that the US discount to asset NAV is 3.1% while Continental Europe trades at a premium of 3.7%. Asia varies widely with Japan trading above a 30% premium while Hong Kong trades at a discount approaching 50% (SNL, Centersquare).

### **Timberland.**

#### *Timberland Performance*

Through October 31, 2015, returns for timberland over periods of one, three, five and ten years are as follows:

	PRIM Timberland	Benchmark*	Out/Under Performance
1 Year	7.8%	10.0%	-2.3%
3 Year	9.2%	9.8%	-0.6%
5 Year	6.5%	6.1%	0.4%
10 Year	8.7%	8.3%	0.4%

\* NCREIF Timberland Index as of June 30, 2015. September Index returns not available in time for month-end performance calculation.

### *Total Timberland and Natural Resources Performance*

Through October 31, 2015, returns for total natural resources over periods of one, three, five and ten years are as follows:

	PRIM Total Natural Resources	Benchmark*	Out/Under Performance
1 Year	-1.5%	-0.2%	-1.3%
3 Year	4.9%	5.6%	-0.7%
5 Year	3.9%	4.0%	-0.1%
10 Year	6.1%	5.4%	0.7%

\* Includes NCREIF Timberland Index as of June 30, 2015. September Index returns not available in time for month-end performance calculation. Benchmark also includes the Lipper NR Global Fund Index (peer group data). Weightings are adjusted quarterly.

### *Commentary – Timberland*

As of October 31, 2015, the timberland and natural resources portfolio was valued at \$2.2 billion, 3.7% of the PRIT Fund, which is 0.3% below the target allocation. Timberland investments comprise \$1.7 billion, or 73.8%, of the portfolio while public and private natural resource investments comprise the remaining \$590 million, or 26.2% of the portfolio.

The timberland portfolio returned 7.8% over the one-year period ended October 31, 2015, 220 basis points below the timberland benchmark. Underperformance continues to be driven by international currency weakness. Housing starts continued to trend upward in September, achieving an annualized 1.2 million units, 6.5% over August. Regional NCREIF returns were 9.4% in the Pacific Northwest and 9.3% in the South year over year.

### **NCREIF Timberland Returns.**

#### **September 30, 2015**

<u>Property Type</u>	<u>% of Index</u>	<u>Total One Year Return</u>
South	68.9%	9.3%
Northwest	22.6%	9.4%
Northeast	5.0%	9.0%
Lake	<u>2.3%</u>	<u>12.4%</u>
Total	100%	9.3%

The public natural resources portfolio returned -23.4% over the one-year period ended October 31, 2015, 21 basis points above benchmark. Negative absolute performance has been driven primarily by the steep decline in energy prices beginning in June 2014 as well as volatility in one of PRIM's two portfolios, driven by a more active, small cap strategy.

Performance data for real estate and timberland are contained at **Appendices C and I**.

## **2. Recommendation – Global REIT Investment Management Services. (Voting Item)**

### **Summary Information**

#### **Background.**

On June 15, 2015, PRIM issued a Request for Proposals (RFP) for Global REIT Investment Management Services. The purpose of the RFP is to select one or more investment management firms to manage a portfolio(s) of public global REIT securities benchmarked against the FTSE EPRA NAREIT Developed Index. The RFP was advertised in *Pension and Investments* and in the Commonwealth's *Goods and Services Bulletin*, and was posted on PRIM's website. Twenty-six responses were received by the July 7, 2015 proposal deadline.

#### **Evaluation Committee.**

The evaluation committee (the "Evaluation Committee") consisted of Jill S. Hatton, CRE, Garlan Morse, CRE, Timothy V. Schlitzer, CRE, John F. La Cara, Eric R. Nierenberg, Ph.D., Matthew H. Liposky, Donald R. Payne, and Dan R. Stenger (The Townsend Group).

#### **Search Process.**

Responses were evaluated according to the Selection Criteria established in the RFP. After review of the RFP responses, eight firms were selected for further consideration. The Evaluation Committee conducted interviews with all eight firms on September 16, 2015 and September 18, 2015 at PRIM. Four firms were selected as finalists and additional due diligence meetings were conducted at each firm's office location.

#### **Summary Recommendation.**

The Evaluation Committee and the Real Estate and Timberland Committee (unanimously) recommend that the PRIM Board award Brookfield Investment Management and Presima, Inc. an allocation of up to \$200 million each. Additionally, the Evaluation Committee and the Real Estate and Timberland Committee (unanimously) recommend that BlackRock, Inc. and Timbercreek Asset Management are placed on the PRIM Manager Bench ("Manager Bench") and are each eligible for a future allocation of up to \$200 million in capital.

As a reminder, the PRIM Board approved the Manager Bench Program on February 5, 2013 in order to create a more nimble approach to manager procurement and monitoring. Investment managers may be placed on the Manager Bench to allow for continued monitoring of investment performance, expected organizational changes or other factors. Placement on the Manager Bench does not guarantee an investment manager will be funded in the future.

The RFP evaluation reports can be found at **Appendices J, K, and L**.

## **3. Recommendation – Real Estate Appraisal Services – Request for Proposals (RFP). (Voting Item)**

### **Summary Information**

#### **Background.**

PRIM issued a Request for Proposals ("RFP") for real estate appraisal services on July 27, 2015. The purpose of the RFP is to select a firm to annually value each of PRIM's private real estate assets over the next three years. PRIM advertised the RFP in *Pension & Investments* and the Commonwealth's *Goods & Services Bulletin*. The RFP proposal deadline was September 1, 2015.

### **Evaluation Committee.**

The evaluation committee (the “Evaluation Committee”) consisted of Timothy V. Schlitzer, CRE, John F. La Cara, Catherine M. Hodges, and Dan R. Stenger (Townsend Group).

### **Search Process.**

Responses were evaluated according to the Selection Criteria established in the RFP. After review of the RFP responses, three firms were selected for further consideration. The Evaluation Committee conducted interviews with all three firms on October 14, 2015 at PRIM.

### **Summary Recommendation.**

The Evaluation Committee and the Real Estate and Timberland Committee (unanimously) recommend that the PRIM Board engage Altus Group to provide private real estate appraisals over the next three years (2016 to 2018).

The RFP evaluation reports can be found at **Appendix M and N**.

## **V. Finance and Administration Report.**

### **A. Information Technology Support Services – Request for Proposals (RFP). (Voting Item)**

Edgewater Technology (Edgewater) has been providing network, desktop and application support services to PRIM via remote access and weekly on-site visits since January 2008. Edgewater also assists PRIM, as needed, on implementing new hardware and software solutions and evaluating PRIM's future technical needs. (Edgewater's contract is set to expire on June 30, 2016 and accordingly), PRIM staff and the Administration and Audit committee (unanimously) recommend that the PRIM Board authorize the issuance of a RFP for Information Technology Support Services.

### **B. FY 2015 Comprehensive Annual Financial Report (CAFR). (Voting Item)**

PRIM staff has completed its 11<sup>th</sup> PRIT Fund Comprehensive Annual Financial Report (“CAFR”), contained at **Appendix O**. The primary purpose of this document is to provide a thorough, detailed, and transparent presentation of PRIT’s financial position and results of operations.

The report has four sections – Introductory, Financial, Investment, and Statistical. PRIM submits its CAFR to a comprehensive review by the Government Finance Officers Association (GFOA) representatives each year, and the GFOA determines if the report continues to qualify for the organization’s prestigious Certificate of Achievement for Excellence in Financial Reporting, which is designed to recognize and encourage excellence in financial reporting by state and local governments. PRIM staff, with KPMG’s assistance, prepared the CAFR based upon the GFOA’s checklist, and is optimistic that its submission will result in an 11<sup>th</sup> certificate. PRIM expects to be notified as to its acceptance in the spring of 2016.

PRIM staff and the Administration and Audit Committee (unanimously) recommend that the PRIM Board approve the FY 2015 PRIT Fund CAFR.

### **C. 2016 Proposed PRIM Board and Committee Meeting Schedule. (Voting Item)**

Based on feedback from Board and Committee members propose the following changes to the Draft 2016 PRIM Board and Committee meeting schedule since it was proposed at the October 1, 2015 PRIM Board meeting:

1. The June 2016 Board meeting date moved from Tuesday, June 7 to **Wednesday, June 8<sup>th</sup>** to avoid conflict with the June MACRS conference date.

2. The July 2016 Investment, Real Estate, and Administration & Audit Committee meeting dates moved from July 26, 27, 28 to **August 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup>**, respectively.

PRIM staff and the Administration and Audit Committee (unanimously) recommend that the PRIM Board adopt the proposed 2016 Board and Committee Meeting Schedule as contained at **Appendix P**.

**D. Request for Legal Services RFQ. (Voting Item)**

In April 2011, the Board authorized staff to engage a panel of law firms for a 5-year period based upon the results of a Request for Qualifications (RFQ) for legal services. That 5-year period will expire in mid-2016, and accordingly another RFQ process should be initiated. Incumbent providers will be invited to respond.

PRIM staff and the Administration and Audit Committee (unanimously) recommend that the PRIM Board authorize the issuance of a RFQ for legal services.

**E. Legal/Legislative Update.**

PRIM's Deputy Executive Director and General Counsel will provide an update on legal and legislative matters.

**F. Other Matters.**

**1. September 2015 PRIM Operating Budget. Attached as Appendix Q.**

PENSION RESERVES INVESTMENT MANAGEMENT BOARD Budget as of September 30, 2015					
<i>FY 2016</i>	<i>Investment Management Fees</i>	<i>YTD Actual</i>	<i>YTD Budget</i>	<i>Variance Under (Over)</i>	<i>%</i>
15,048,014	Domestic Equity	3,595,333	3,761,992	166,659	4%
16,912,003	International Equity	4,047,580	4,227,993	180,413	4%
19,402,865	Emerging Markets Equity	4,053,032	4,850,707	797,675	16%
4,758,798	Core Fixed Income	1,128,388	1,189,691	61,303	5%
10,743,249	Value Added Fixed Income	2,484,554	2,685,806	201,252	7%
4,905,660	Real Estate - REIT's	1,075,211	1,226,415	151,204	12%
0	Real Estate - Core Strategy	(54,894)	-	54,894	0%
3,050,037	Timber/Natural Resources	(2,702,926)	762,506	3,465,432	454%
2,424,000	Private Equity	152,483	606,858	454,375	75%
50,000	Hedge Funds	12,603	12,501	(102)	-1%
416,553	Overlay/Foreign Currency	257,231	104,141	(153,090)	-147%
<b>77,711,179</b>	<b>Subtotal</b>	<b>14,048,595</b>	<b>19,428,610</b>	<b>5,380,015</b>	<b>28%</b>
<b>PRIM Operations:</b>					
<i>Custody &amp; Outside Advisors</i>					
790,000	Custodian	121,161	197,499	76,338	39%
786,375	Consultant - General	180,291	196,586	16,295	8%
1,500,000	Consultant - Private Equity	403,536	375,000	(28,536)	-8%
585,000	Consultant - Real Estate	123,619	146,247	22,628	15%
3,617,784	Consultant - Hedge Funds	596,372	904,446	308,074	34%
444,000	Audit & Tax	86,000	110,997	24,997	23%
375,000	Legal	17,117	93,765	76,648	82%
259,184	Governance	50,888	64,794	13,906	21%
1,231,226	Risk Management	260,837	307,803	46,966	15%
<b>9,588,569</b>	<b>Subtotal</b>	<b>1,839,821</b>	<b>2,397,137</b>	<b>557,316</b>	<b>23%</b>
<i>Operations:</i>					
6,822,823	Salaries	1,400,177	1,705,702	305,525	18%
855,464	Occupancy	181,841	213,860	32,019	15%
303,336	Insurance	45,873	75,829	29,956	40%
167,500	Employee Benefits	29,226	41,871	12,645	30%
246,072	General Office Expenses	55,827	60,588	4,761	8%
866,980	Computer & MIS	175,759	216,741	40,982	19%
215,000	Due Diligence Travel	12,755	53,748	40,993	76%
100,000	Professional Development	11,915	24,999	13,084	52%
86,787	Client Service	1,305	18,695	17,390	93%
80,000	Dues & Subscriptions	18,874	19,998	1,124	6%
65,000	Temporary Labor	13,380	16,248	2,868	18%
<b>9,808,962</b>	<b>Subtotal</b>	<b>1,946,932</b>	<b>2,448,279</b>	<b>501,347</b>	<b>20%</b>
<b>19,397,531</b>	<b>Total Operations &amp; Advisors</b>	<b>3,786,753</b>	<b>4,845,416</b>	<b>1,058,663</b>	<b>22%</b>
<b>97,108,710</b>	<b>Total PRIM Direct Operating Budget</b>	<b>17,835,348</b>	<b>24,274,026</b>	<b>6,438,678</b>	<b>27%</b>
<i>Indirect Fees</i>					
24,445,573	Real Estate	5,893,942	6,111,391	217,449	4%
3,699,268	Timber	833,813	924,817	91,004	10%
108,873,088	Private Equity	24,197,124	27,218,271	3,021,147	11%
23,700,811	Distressed Debt	6,115,122	5,925,203	(189,919)	-3%
79,835,832	Hedge Funds	19,015,420	19,958,958	943,538	5%
10,000	Portable Alpha Wind Down	1,321	2,500	1,179	47%
7,758,000	Commingled Funds	1,936,408	1,939,497	3,089	0%
2787377	Portfolio Completion Strategie	315,413	696,845	381,432	55%
<b>251,109,949</b>	<b>Total PRIM Indirect Budget</b>	<b>58,308,563</b>	<b>62,777,482</b>	<b>4,468,919</b>	<b>7%</b>
<b>348,218,659</b>	<b>Total PRIM Direct &amp; Indirect Fees</b>	<b>76,143,911</b>	<b>87,051,508</b>	<b>10,907,597</b>	<b>13%</b>

YTD Budget

1

## 2. Travel and Staff Development.

A detailed schedule of expenses associated with due diligence travel and fiduciary education or professional development that have been reimbursed to employees since our prior report is attached at **Appendix R**.

Additional due diligence travel and fiduciary education or professional development that has either been approved or has occurred since our prior report, but has not yet been reimbursed is outlined below:

Date:	Name:	Location:	Organization:	Purpose:
9/30/2015	Sarah N. Samuels	Concord, MA	Invest in Girls Speaker	FE/PD
10/1/2015	Sarah N. Samuels & Chuck LaPosta	New York, NY	Alliance Bernstein	DD
10/1/2015-10/2/2015	Eric R. Nierenberg	New York, NY	Arden, Alliance Bernstein, PDT	DD
10/2/2015	Timothy V. Schlitzer, Matthew Liposky, Donald R. Payne, & John F. LaCara	Montreal, Canada	Presima	DD
10/6/2015-10/8/2015	Michael R. Bailey	New York, NY	Catalyst Investors, KKR Americas Fund, GSO Providence Equity Partners Annual Meeting	DD
10/6/2015-10/7/2015	Eric R. Nierenberg	New York, NY	Sector, Serenitas, New World, JEN	DD
10/13/2015	Michael R. Bailey	Boston, MA	Hamilton Lane	DD
10/14/2015	Michael R. Bailey	Boston, MA	SV Life Advisory Board	DD
10/19/2015	Michael R. Bailey & Sarah N. Samuels	Boston, MA	Battery Ventures	DD
10/21/2015	Matthew Liposky, Donald R. Payne, & John F. LaCara	New York, NY	BlackRock	DD
10/28/2015	John F. LaCara, Donald R. Payne, & Matthew Liposky	Chicago, IL	Brookfield Investment Management	DD
11/2/2015-11/3/2015	Sarah N. Samuels	New York, NY	Union Square Venture	DD
11/9/2015	Sarah N. Samuels	Boston, MA	Federal Reserve Bank of Boston	FE/PD
11/10/2015	John F. LaCara, Donald R. Payne, & Matthew Liposky	Toronto, Canada	Timbercreek	DD
11/18/2015-11/19/2015	Anthony J. Falzone	Chicago, IL	Financial Technology Forum/Fall Workshop	FE/PD

**Key: DD=Due Diligence; FE/PD=Fiduciary Education and/or Professional Development; SL=Securities Litigation.**

### **3. Client Service.**

There are 94 retirement systems that currently invest in the PRIT Fund: 55 systems are fully invested (“Participating Systems”), including the State Employees/MA Turnpike, State Teachers, the State-Boston Retirement System - Teachers (“SBRS/Teachers”), and the Massachusetts State College Building Authority (“MSCBA”); 39 systems are partial investors that participate in the Segmentation Program. PRIM serves as an investment manager for approximately 90% of all state and local retirement systems. There are currently 12 unaffiliated retirement systems that do not invest through PRIM. PRIM also manages the assets of the State Retiree Benefits Trust Fund (“SRBTF”), the Commonwealth’s Other Post-Employment Benefits (“OPEB”) liability fund.

#### *Client and Other Meetings.*

The client service team continues to meet with many of PRIM’s member retirement systems and other jurisdictions. The Senior Client Services Officer also meets with professional organizations and government entities interested in learning more about the SRBTF. Some recent and upcoming meetings are as follows: MACRS, Springfield, MA (10/4 – 10/7/2015); Falmouth (10/8/2015); Meeting with Essex Regional Executive Director and Dahab consultant regarding Asset Allocation (10/14/2015); SRBTF Board (10/15/2015); Chicopee (10/15/2015); Winchester (10/20/2015); Holliston-OPEB (10/20/2015); Watertown (10/21/2015); Westfield (10/26/2015); Wellesley (10/27/2015); Easthampton (10/27/2015); Salem (10/28/2015); Natick (10/28/2015); Methuen (10/29/2015); PRIM Investors’ Conference (11/5/2015); Peabody (11/10/2015); Manchester-Essex Regional School District – OPEB (11/12/2015); Concord (11/20/2015); Worcester Regional, Auburn, MA (11/24/2015); Barnstable County, Hyannis, MA (11/24/2015); Clinton (11/24/2015); SRBTF Board (12/3/2015); Hampshire County, Northampton, MA (12/9/2015); Norfolk County, Canton, MA (12/16/2015); Chicopee (12/17/2015); Plymouth (12/18/2015); and Hull (12/22/2015).

#### *SRBTF Update.*

The SRBTF Board approved three new local submissions for investment in the SRBTF at its October 15, 2015 meeting: the Town of Braintree, the City of Fitchburg, the Town of Lincoln, and the Lower Pioneer Valley Educational Collaborative. In addition to the Massachusetts State Retirees OPEB assets, the SRBTF now has 45 government entity clients that have opted to invest in the SRBTF. As of October 31, 2015, the total market value of the SRBTF assets was \$957.5 million.

## **VI. Executive Session - Real Property Transaction.**

Timothy V. Schlitzer, CRE, Senior Investment Officer – Director of Real Estate and Timberland will update the Board on a real property transaction, the public disclosure of which would have a detrimental effect on the negotiating position of PRIM.

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix A

Minutes from October 13, 2015 Board Meeting

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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1                   **COMMONWEALTH OF MASSACHUSETTS**  
2                   **PENSION RESERVES INVESTMENT MANAGEMENT BOARD**  
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12                  *Minutes of the October 13, 2015 Board Meeting*  
13                  *commencing at 9:30 a.m.*  
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16  
17  
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19  
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21  
22

23                  in the  
24                  **PRIM Board Offices**  
25                  at 84 State Street  
                      Boston, Massachusetts

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1                   D O C U M E N T S\*

- 2                   A Minutes of the PRIM Board meeting on  
3                   August 11, 2015.  
4                   B Callan *PRIT Fund Performance Report Color*  
5                   *Charts* (August 31, 2015).  
6                   C BNY Mellon Gross of Fees Performance Report  
7                   (August 31, 2015).  
8                   D Callan *Investment Measurement Service*  
9                   *Monthly Review* (August 31, 2015).  
10                  E PRIT Fund Performance & Public Markets  
11                  Performance Detail (August 31, 2015).  
12                  F PRIM Progress Memorandum.  
13                  G Callan Progress Memorandum.  
14                  H Real Estate and Timberland Portfolio Report  
15                  (August 31, 2015).  
16                  I KPMG Report on 2015 Audit.  
17                  J PRIT Audited Financials.  
18                  K PRIM Audited Financials.  
19                  L 2015 Proxy Voting Update.  
20                  M 2016 Proposed PRIM Board and Committee  
21                  Schedule.  
22                  N Due Diligence Travel, Trustee and Staff  
23                  Fiduciary Education, and Professional  
24                  Development.

25                  \*Referred to and/or used at the meeting and  
                        retained at the PRIM Board office.

1                   **A T T E N D E E S**

2                   **Board Members**

- 3                   · Treasurer Deborah B. Goldberg, Chair  
4                   · Robert L. Brousseau  
5                   · Ruth Ellen Fitch  
6                   · Michael J. Heffernan  
7                   · Anthony Hubbard, Esq.  
8                   · Theresa F. McGoldrick, Esq.  
9                   · Dana Pullman  
10                  · Paul E. Shanley, Esq.

11                  Other Attendees:

- 12                  · Kevin Blanchette, Worcester Retirement Board  
13                  · Richard Bowers, Baystate Financial  
14                  · Patrick Brock, Administration & Audit Committee  
15                  · Shawn Collins, Treasury  
16                  · Virginia Dodge, Eppley Court Reporting  
17                  · Cori English, Hamilton Lane  
18                  · Nick Favorito, State Retirement Board  
19                  · Thomas Gibson, Middlesex Retirement County  
20                  · McKenzie Jones, BNY Mellon  
21                  · Sarah Kim, Treasury  
22                  · Chuck Kostico, Essex Regional  
23                  · David Lynch, COM  
24                  · Jim MacDonald, First Deputy Treasurer  
25                  · Cosmo Macero, O'Neill and Associates  
· Robert Moynihan, Springfield Retirement Board  
· Phillip Nelson, NEPC  
· Bud Pellechia, Callan  
· Susan Redlich 350 MAOrg  
· Justin Rico Oyola, SEIU  
· Laura Rooney, COM  
· Elizabeth Saltonstall, BNY Mellon  
· Glenn Strehle, Committee Member  
· Chris Vassiloputis, Wellesley Investment  
    Advisors  
· Millie Viqueira, Callan  
· Darren Wolf, Arden

1                   P R O C E E D I N G S  
2

2                   A meeting of the Pension Reserves  
3                   Investment Management Board (PRIM Board) was held  
4                   on October 13, 2015, at the PRIM Board office  
5                   located at 84 State Street, Boston, Massachusetts.

6                   **Call to Order:**

7                   The meeting convened at 9:39 a.m. James  
8                   MacDonald called the meeting to order. Treasurer  
9                   and Receiver-General Deborah Goldberg chaired the  
10                  meeting.

11                  MR. MacDONALD: Good morning. We know that  
12                  traffic is a little heavy, and the Treasurer and a  
13                  few others are delayed. So we'll start the  
14                  meeting, and I'm sure they'll be joining us in a  
15                  few minutes.

16                  So I'll call the meeting to order. The  
17                  PRIM Board meeting -- the Mass. Open Meeting Law  
18                  permits meetings to be recorded and states that  
19                  the chair shall inform attendees at the beginning  
20                  of the meeting of any such recording.

21                  So accordingly, I am informing you all  
22                  that Virginia Dodge, seated to my left, is  
23                  transcribing and recording this meeting. And if  
24                  anyone else in attendance today is recording the  
25                  meeting, I would like them to identify themselves.

1               Okay. Seeing none.

2               Also for the benefit of our stenographer  
3 and for all those that are listening, please  
4 identify yourself by name and speak clearly and  
5 audibly.

6               I believe -- Dennis, are you on the  
7 phone?

8               One of the members will be joining  
9 remotely. And because there is a quorum, he will  
10 be allowed to participate and to vote in the  
11 meeting.

12              So the first item on the agenda is the  
13 minutes. And I'll entertain -- I'm looking for a  
14 motion to approve the minutes of August 11.

15              MR. HEFFERNAN: So moved.

16              MR. PULLMAN: Second.

17              MR. MacDONALD: Motion made and seconded.

18              Any discussion?

19              All those in favor?

20              BOARD MEMBERS: Aye.

21              **(VOTED: To approve the August 11, 2015**  
22              **minutes.)**

23              MR. MacDONALD: Thank you.

24              Next item on the agenda is the executive  
25 director's report. Michael.

1                   MR. TROTSKY: Thank you.

2                   And good morning, everybody. Thanks for  
3 coming in.

4                   I'd like to acknowledge a few committee  
5 members that are here. To my left, Tim Vaill on  
6 the investment committee is here.

7                   In the back, Patrick Brock on the admin  
8 and audit and comp committee.

9                   And I know Glenn Strehle -- there he  
10 is -- is on his way. So there's Glenn right  
11 there, right on cue. Glenn's on our investment  
12 committee as well.

13                  It's been a busy summer for us. We'll  
14 recap that in a bit. But first I'd like to give  
15 you a brief organizational update beginning with  
16 the babies.

17                  Last night, we were pleased to learn  
18 that Erin McCafferty on our private equity team  
19 had a baby girl, something like 9 pounds,  
20 11 ounces. So a nice, big, healthy baby girl.  
21 Her name is Caroline.

22                  And then many of you may know that Jill  
23 Luci is out on maternity leave since the last time  
24 we met. She announced the birth of a baby girl,  
25 whose name I can't pronounce. It's a Croatian

1 name, so excuse me. I'll learn.

2 She's at home with her husband and her  
3 two small young boys.

4 And then Mike McGirr on the private  
5 equity team is anxiously awaiting the birth of his  
6 first girl, any week now or any day even.

7 MR. BROUSSEAU: We're running with girls.

8 MR. TROTSKY: Be careful with the water  
9 you're drinking around here.

10 So that's on the baby front.

11 Many of you have already met Steffanny  
12 Rosario. She's outside, going to help the  
13 Treasurer, who unfortunately broke her foot,  
14 arrive.

15 But Steffanny Rosario joined us last  
16 month to fill the vacant executive assistant slot.  
17 She will be supporting the finance team and the  
18 investment team.

19 Steffanny joins us from the City of  
20 Boston Transportation Department, where she  
21 supported both the commissioner and the deputy  
22 commissioner. She's off to a wonderful start.  
23 She'll be in shortly. So please introduce  
24 yourself to her.

25 And most important, PRIM and our people

1 continue to receive recognition around the country  
2 for our innovative investment program and our  
3 innovative transparent finance and operations  
4 team. We continue to get accolades around the  
5 nation. I'll mention a few right now.

6 First, Michael Bailey on our private  
7 equity team was nominated for the Investor  
8 Intelligence Award for Excellence in Private  
9 Equity by the Investor Intelligence Network. The  
10 award recognizes the most outstanding and  
11 innovative public plan sponsors in North America.

12 We all know that the private equity  
13 portfolio is ranked either number 1 or number 2  
14 perennially. We'll go into some of the  
15 performance, but very strong performance and  
16 innovation out of that group.

17 Sarah Samuels, our deputy chief  
18 investment officer, was named to the 40 Under 40  
19 list by *Chief Investment Officer* magazine. This  
20 is a worldwide award which recognizes up-and-  
21 coming asset owners who have made meaningful  
22 contributions to their organizations.

23 We know that you have made several  
24 meaningful contributions to our organization.

25 On the finance team, Morgan Burns passed

1 level 2 of the CFA exam. That's no small feat. A  
2 lot of studying goes into that.

3                   And then Chris Supple, our deputy  
4 director and general counsel, was awarded the  
5 Commonwealth Citation for Outstanding Performance  
6 on September 24 in a ceremony at the State House.  
7 This was awarded for Chris's hard work on class  
8 action lawsuits in which PRIM was lead plaintiff.

9                   You may recall that Chris helped secure  
10 several huge victories for the class. First,  
11 \$473 million from Schering-Plough. That's one of  
12 the 25 largest settlements ever and the largest  
13 ever settlement from a pharmaceutical company.  
14 265 million from Massey Energy. 170 million from  
15 Fannie Mae.

16                   And as a result of his persistence and  
17 hard negotiating, Chris was also reappointed to  
18 another term as co-chair of the Securities  
19 Litigation Committee at NAPPA, the National  
20 Association of Public Pension Attorneys, so that  
21 he can share his knowledge and experience with the  
22 rest of the country. And I know you're doing  
23 that. So thank you.

24                   Last, you may remember that last year at  
25 this time, I was nominated as one of five

1           finalists for *Chief Investment Officer* magazine  
2           CIO Innovation Award last year. And I will admit  
3           that last year, I did not win it.

4           But the good news is that we're back on  
5           the slate for this year. And we're back with our  
6           counterparts from New Jersey, Oregon, Pennsylvania  
7           and Nevada. Again, this is *Chief Investment*  
8           *Officer* magazine's CIO Innovation Award.

9           Hopefully the second time is the charm  
10          on this award. And of course, I wouldn't be up  
11          for this award if it were not for the hard work  
12          and innovation of my colleagues. Let me just  
13          mention a few of our accomplishments.

14          First, Sarah in asset allocation by  
15          implementing a STRIPS portfolio at a very timely  
16          time to insulate us from a downturn in equities.

17          Manager selection process, especially in  
18          emerging markets where Andre Clapp really did a  
19          fantastic job revamping our whole emerging markets  
20          equity lineup. Foreign exchange hedging research,  
21          which is worthy of a white paper that hopefully  
22          will soon be published.

23          In hedge funds, Eric Nierenberg with  
24          managed accounts work. All our new hedge funds  
25          were implemented in separate accounts, what we

1 call managed accounts in the hedge fund space.  
2 It's very, very unique to PRIM.  
3                   Alternative risk premia strategies.  
4 We're foremost in the nation on implementing  
5 alternative risk premia strategies. And our  
6 internally developed replication strategy, which  
7 I'll talk to you a little bit more about later, is  
8 off to a wonderful start, really with very high  
9 performance and essentially zero fees.

10                  Tim, in real estate, Tim Schlitzer, on  
11 non-core real estate, really knocking it out of  
12 the park with some of the things we're doing in  
13 non-core real estate.

14                  Direct deals, you may recall that we bid  
15 on a garage building in the Seaport District. We  
16 didn't win that garage because we lost to a buyer  
17 that was accumulating other properties in the area  
18 so there were synergies, but it was still an  
19 excellent exercise.

20                  International timber, \$1 billion  
21 leverage program.

22                  And then Mike Bailey, of course, I've  
23 already mentioned it, in private equity, second to  
24 none in the nation.

25                  Bottom line is this award, which will be

1 awarded on December 3, is in large part due to the  
2 work of the team, which is the best it's ever  
3 been, and I thank everybody for your hard work and  
4 innovation.

5 So moving on to the markets. As you  
6 know, the markets were weak and volatile during  
7 Q3, the summer time frame, as a Chinese slowdown  
8 and a surprise devaluation in their currency  
9 increased concerns about global growth.

10 We've been spending a lot of time  
11 recently, especially at the investment committee  
12 meeting, discussing the markets. Connie Everson  
13 discussed several reasons to remain cautious about  
14 the markets. And also Dave Gurtz reviewed  
15 volatility from a historical perspective.

16 As I will outline momentarily, the PRIT  
17 fund has held up well in the recent market  
18 sell-off, and the asset allocation changes we've  
19 made appear to be quite timely. That is the  
20 silver lining to an otherwise daunting market.

21 As a reminder, and you may recall many  
22 conversations in this regard, we've been concerned  
23 for a long time about the strength of the U.S.  
24 economic recovery. Connie Everson on the  
25 investment committee and we have been saying

1 consistently that conditions were not supportive  
2 of an interest rate hike, and we've positioned the  
3 fund accordingly.

4 Remember, the long duration STRIPS  
5 portfolio was really flying in the face of  
6 conventional wisdom at the time, and it was our  
7 number 1 performing asset class for the first year  
8 it was put in place.

9 And while for the past five years we've  
10 been very strong regarding performance for the  
11 PRIT fund, the past five years have been very  
12 strong, we systematically reduced our exposure to  
13 volatile asset classes over that five years.

14 We changed our global equity allocation  
15 from 49 to a target of 40 percent during the last  
16 five years. We added the STRIPS portfolio. And  
17 then Eric and his group, through portfolio  
18 completion strategies, is trying to identify asset  
19 classes that are diversifying in nature and will  
20 be low volatility to the otherwise high equity  
21 exposure the fund has.

22 Now, on to the markets. Let me briefly  
23 recap Q3.

24 (Treasurer Goldberg joined the meeting.)

25 Welcome. And I'm sorry for your broken

1 foot.

2 TREASURER GOLDBERG: Thank you.

3 MR. TROTSKY: Hope you're feeling better.

4 We're just going through a recap that  
5 you've heard a few times already.

6 TREASURER GOLDBERG: Yes. I know.

7 Thank you, Jim.

8 (Off-record discussion.)

9 MR. TROTSKY: So we're just about to recap  
10 the markets for Q3, and we wish you a speedy  
11 recovery.

12 TREASURER GOLDBERG: From your lips to God's  
13 ears.

14 MR. TROTSKY: Through September, the S&P was  
15 down 6.4 percent. International markets,  
16 international developed markets -- this is for the  
17 quarter -- were down 10 percent. Emerging markets  
18 were down 17.9 percent for the quarter ending  
19 September.

20 China, we know it's been volatile, down  
21 22.7 percent. STRIPS, our STRIPS portfolio was  
22 actually up 7.6 percent, doing what it should do,  
23 providing some insurance against a down equity  
24 market. And the Barclays Agg, a broader measure  
25 of bonds, was up 1.2 percent.

1                   Other noteworthy geographies, Brazil was  
2 down 33.6 percent. Argentina down 26.6 percent.  
3 Japan down 11.7 percent. Germany down  
4 10.9 percent.

5                   So a very, very challenging Q3. The  
6 calendar year looks a little better. The S&P down  
7 only 5 percent. International markets also down  
8 5 percent. Emerging markets challenging, down  
9 15.5 percent. And bonds flat.

10                  Now, the good news is -- and I'm sorry  
11 to say we don't have October performance yet or  
12 September performance at this point, but October  
13 has been very, very strong to date. So why not  
14 expect more volatility?

15                  The S&P for October through yesterday is  
16 up 5 percent. International markets are up  
17 7 percent through yesterday. This is for the  
18 month of October. Emerging markets up 9 percent.  
19 And China was up 10 percent.

20                  So we're seeing some rebound. Let's  
21 hope it sticks. We're not counting on it to  
22 stick, but we're thankful for a bit of a rebound.

23                  Now, turning to the performance slides  
24 in front of you, I'll talk to page 1 which shows  
25 the PRIT fund returns for the year ending

1       August 31. That's the -- we don't have September  
2       yet.

3                 But remember, this performance comes off  
4       of two very strong years. In fiscal 2013, the  
5       fund was up 12.7 percent, and then last year, the  
6       fund was up 17.6 percent.

7                 And we've been warning that we're going  
8       to enter a time frame of lower returns, and in  
9       fact, the last year has been a lower return. You  
10      can see the one-year number slightly negative, but  
11      well in excess, 132 basis points above benchmark,  
12      down only 0.1 percent.

13                 PRIT performance equates to a loss of  
14      \$43 million for the one-year period, but the  
15      outperformance, thankfully, equates to  
16      \$806 million of value above benchmark, if we were  
17      passively indexed.

18                 The fund ended with \$59.5 billion, and  
19      net outflows to pay benefits for the year were  
20      \$1.4 billion.

21                 Turning to the next page, page 2 shows  
22      you asset class performance, and you can see that  
23      alternatives lead the way. And you can also see  
24      that five of seven asset classes outperformed  
25      their indices.

1                   Total private equity up 16.3 percent.

2                   Real estate very, very strong, up almost

3                   11 percent. Timber up 9 percent.

4                   And what's unique about this is you can

5                   also see that total core fixed income really

6                   helped during this time frame. Again, it's

7                   because of our STRIPS portfolio being up 6 percent

8                   in that time frame compared to a broader index of

9                   Barclays Agg up only one and a half percent. So

10                  that's very good total core fixed income

11                  performance. Very unique to us.

12                  You can also see that hedge funds were

13                  positive and up, doing what they should, being low

14                  volatility in a volatile market.

15                  And then last, you can see that total

16                  global equity was down. That's primarily a result

17                  of emerging markets. And total value-added fixed

18                  income also was down as a result of emerging

19                  markets. We're going to talk a little bit more

20                  about that during some of the next presentations.

21                  And then I'll end with a recap of our

22                  performance color chart on page 3. This is a new

23                  chart. It's one with private equity leading

24                  across all time periods. You can see that for all

25                  time periods, 1, 3, 5 and 10 years, our private

1 equity really drives the bus here at PRIM. Up  
2 strong double digits in all time periods.

3 What's also interesting is that real  
4 estate appears at the top in all time periods.  
5 And timber surprisingly also at the top.

6 So our performance is really driven by  
7 alternatives here at PRIM. In some years, global  
8 equity's helped, and in some years, global equity  
9 doesn't help so much, as you can see, some time  
10 periods. Global equity is very volatile.

11 And so I thought that was an interesting  
12 perspective on what really drives the bus here.

13 I'll leave it there. We can move into  
14 the program or take any questions that you might  
15 have.

16 TREASURER GOLDBERG: Since you're done with  
17 your presentation, we are going to move on to the  
18 public markets.

19 MR. BROUSSEAU: I think the evaluation.  
20 That's item 3.

21 TREASURER GOLDBERG: Oh, item 3. Okay.  
22 Sorry. When I saw "executive director," I skipped  
23 right down. All right.

24 Okay. Item number 3, executive director  
25 fiscal year 2015 performance evaluation and fiscal

1 year 2016 goals and objectives.

2 Bob, do you want to run this?

3 MR. BROUSSEAU: Yes, I'll start.

4 Good morning, everyone.

5 I just want to run through with you  
6 because there are new board people who have never  
7 gone through this process before, and for us old-  
8 timers who have been here for a while, this is  
9 only the second year of the new evaluation  
10 process.

11 Prior to that, of course, we did a  
12 standard evaluation where you received a form in  
13 the mail, and it was several pages long. And you  
14 had to check off. It was a scoring issue. You  
15 could write also, like a standard evaluation.  
16 They sent them back to me, and I sat down and  
17 wrote a summary of the evaluation, which I  
18 presented here. It went into the ED's file.

19 Well, two years ago, Cortex recommended  
20 that we review the process that we are using now  
21 where the admin and audit committee, we oversee  
22 the process, make the materials available to you.  
23 For example, you all received some talking points,  
24 if -- and you're encouraged after today's date, or  
25 before or after today's date, to sit down with

1 Michael and discuss his goals and objectives.

2           What we're going to do today -- we have  
3 a two-part process. We're going to first of all  
4 go into Michael's self-evaluation, and then I have  
5 notes based upon the evaluations that I received  
6 or the comments that I received from you. I know  
7 some of you received emails last week saying if  
8 you have any comments you would like me to include  
9 in my comments on Michael's evaluation, forward  
10 them to me.

11           And I got some up until yesterday  
12 afternoon when I began going to work to compile  
13 these and get some notes done for my presentation  
14 today.

15           So having said that, the next process  
16 after this is that once we have -- and board  
17 people weren't required to send me comments, only  
18 if they wanted to. I assume when we finish the  
19 evaluation, some of you may want to make comments  
20 of your own here in open session, and that is of  
21 course your prerogative. And we encourage it.

22           Following that, we'll go into Michael's  
23 goals and objectives, which will be open for  
24 discussion. And you'll probably see that the  
25 administration and audit committee recommended

1 some amendments to his goals and objectives, which  
2 were approved, and you have them before you.

3                   Once this process is finished today, on  
4 November the 19th, and I believe that's the date,  
5 Madam Treasurer, the compensation committee then  
6 gets into the act. And the compensation committee  
7 will -- I will have to do a presentation. I will  
8 have to give them the summary of Michael's  
9 evaluation today that I do with you.

10                  And they've also seen his goals and  
11 objectives. And they've already approved them.  
12 And they are recommending them to us today.

13                  But at that compensation committee  
14 meeting, we will have to decide on a multiplier  
15 for his incentive compensation, plus a  
16 recommendation on a salary level, which will come  
17 back to this board on December 1 because the  
18 salary of the executive director must be voted by  
19 the trustees in open session. And that will be at  
20 the December meeting.

21                  So that is basically the process that we  
22 follow. And the admin and audit committee has  
23 overseen this throughout this process.

24                  At this point, I'm going to stop and ask  
25 Michael since this is his self-evaluation to make

1 comments. Then after that, I will make some also.

2 Michael.

3 MR. TROTSKY: Thank you, Bob. And thank you,  
4 everyone.

5 This is my least favorite day of the  
6 year. I still, even after five years, have not  
7 gotten used to having my review in an open  
8 session. It's weird, embarrassing and personal.

9 So I'm just going to say a few words  
10 about what I think we've accomplished here. And  
11 then I'd like to just hear what everyone has to  
12 say, and then move on with the agenda as quickly  
13 as possible.

14 2015 was a transition year. It was a  
15 transition year in two ways. One, the markets  
16 transitioned into a lower return environment. I  
17 feel that we were very well-positioned for that.

18 And secondly, it was a transition year  
19 because we welcomed a new chair, her staff, two  
20 new board members, Ruth Ellen and Mike, and seven  
21 new committee members.

22 And I have to say that that transition  
23 went smoother than I could ever imagine. Everyone  
24 involved with PRIM really took the time and effort  
25 to learn about us, to meet us, to really dive deep

1 into what we do here.

2                   And I think the team and the extended  
3 team together with the Treasurer and her staff has  
4 never operated more smoothly, more collaboratively  
5 and with as much respect as we have now.

6                   So thank you for that. You have a  
7 wonderful staff. I think we're firing on all  
8 cylinders, and I look forward to many more years  
9 of it. It's been really a great transition.

10                  TREASURER GOLDBERG: Thank you.

11                  MR. TROTSKY: Performance. The 3.9 percent  
12 performance followed an exceptionally strong two  
13 years that I've outlined before. In 2014, we were  
14 up 17.6 percent. 2013, we were up 12.7 percent.  
15 The 3.9 percent, yes, was weaker, but  
16 competitively, it looks pretty good, and it was  
17 113 basis points above benchmark.

18                  More importantly, the five-year  
19 performance number, since the world financial  
20 crisis, was very strong, 11 percent over that time  
21 frame, which says that we've done a very good job,  
22 earning well in excess of the actuarial rate of  
23 return since the world financial crisis.

24                  I'm proud of the fact that our asset  
25 allocation changes have been timely. They appear

1 to be ahead of the curve.

2                   And I've already talked about moving  
3 global equities from 49 to 40 percent. I've  
4 talked about a long duration Treasury STRIPS move,  
5 which was very timely. And I've talked about our  
6 low volatility strategies that Eric and his team  
7 have been pursuing to round out the portfolio  
8 completion strategies bucket. I'll talk more  
9 about that in a minute.

10                  But perhaps what I'm most proud of is  
11 the organizational stability that we've achieved  
12 here at PRIM. We had only one key departure last  
13 year. And it was Tom Hanna, our CFO. Tom left  
14 for personal reasons that I have described, and he  
15 still is traveling the globe. I tried to have  
16 lunch with him a week or so ago. He was in  
17 Europe.

18                  But looking forward, retention of key  
19 employees is my number 1 concern here at PRIM,  
20 mostly because there is a stronger regional and  
21 national employment picture. And I know that many  
22 of our key employees will have opportunities  
23 outside of PRIM.

24                  So we all must remain vigilant to keep  
25 this great team in place because it is a great

1 team, and I think we all know that.

2 Other organizational accomplishments  
3 include Project SAVE, which really we concluded  
4 phase I of Project SAVE, in which we thought we  
5 would recognize over \$100 million in annualized  
6 savings.

7 Tim Vaill on the investment committee  
8 really was influential in driving that project  
9 home, and I thank you very much for your hard work  
10 there.

11 At the end of June, Project SAVE  
12 actually identified \$122 million in annual cost  
13 savings. That's really fantastic.

14 And in my goals, you'll notice that our  
15 next part of Project SAVE is to pursue other  
16 options, which may include direct fund management  
17 here at PRIM. It's a research project that will  
18 be the next step of Project SAVE.

19 I'm also pleased that we announced  
20 PRIM's Professional Development Program, in which  
21 our high-performing employees are allowed to  
22 rotate among other asset classes or other  
23 functional groups here at PRIM. It's a great way  
24 to grow talent here at PRIM. And it's a great  
25 retention tool for our really high-performing

1 employees here at PRIM.

2                   And then I mentioned several legal  
3 victories, which I don't have to go into again,  
4 but that was a very strong year in terms of legal  
5 victories on behalf of PRIM.

6                   On the investment program, we're  
7 particularly proud of asset allocation, which I've  
8 described a couple of times.

9                   Something that I haven't described is  
10 our new securities lending program, which is part  
11 of Project SAVE and identifies between 10 and  
12 \$12 million a year in additional return  
13 enhancement strategies.

14                  Securities lending is something we did  
15 for a while and discontinued, and recently with  
16 Dave Gurtz leading the way, we researched safe  
17 ways to do securities lending, and we're  
18 implementing that. We've implemented that.

19                  Emerging markets equity, you know, had  
20 seen a lot of trouble lately, but I'm proud that  
21 our team was ahead of that curve, and we totally  
22 revamped our emerging markets equity manager  
23 lineup earlier in the year with a slate of  
24 managers that is doing actually pretty well  
25 compared to our old slate of managers. So

1 congratulations on that.

2                   In private equity, our co-investment  
3 program is launched, under way. That gives us  
4 private equity exposure with near zero fees, which  
5 is fantastic.

6                   Enhanced stock distribution process will  
7 lower the cost of stock distributions, another  
8 Project SAVE element.

9                   And then extensive research by Mike  
10 McGirr in particular on research on buyouts, which  
11 space to play in in private equity. And we've  
12 concluded that middle market buyouts is probably  
13 the best place to play in. Very groundbreaking  
14 work there.

15                  Hedge funds, I've mentioned. I can't  
16 say enough about it. All new hedge fund  
17 investments are in managed accounts. That gives  
18 us complete control, often lower fees, total  
19 transparency to hedge funds. We're really leading  
20 the nation there.

21                  And I know Eric and we have been invited  
22 to speak at numerous places around the country on  
23 the work we've done in achieving success in  
24 managed accounts. I can't say enough about that.

25                  Also hedge fund replication strategies

1           launched about a year ago. This is the first  
2           internally designed investment strategy product at  
3           PRIM.

4           We designed it. We have algorithms, and  
5           State Street implements it for us, but incredible  
6           success in the first year. 12.3 percent return  
7           versus 6.3 for the S&P 500. Just recently in our  
8           investment committee, we decided to put more money  
9           into that.

10          And what's interesting about the  
11         replication strategy is it actually outperforms  
12         the underlying managers. So we're replicating  
13         them, but doing better than the underlying  
14         managers we're replicating. That's mainly because  
15         of fees, but also because the timing of our  
16         replication strategies, when we get in and out of  
17         the securities, actually adds some value.

18          In real estate, a billion dollars in  
19         real estate acquired around the country.  
20         81 million in timberland. I know Tim is working  
21         on some large deals now that we'll talk about  
22         later.

23          And then all of those results -- and  
24         that's just a quick top ten list of  
25         accomplishments. I've already mentioned legal.

1           All of those accomplishments, the great  
2       work the team has done, has again led to a lot of  
3       national and international recognition for PRIM.  
4       And I think that's been great.

5           So it's been a great year. I've enjoyed  
6       every minute of it. It's been a challenging year,  
7       but with this team, I think we'll do very well in  
8       the future. And I look forward to hearing your  
9       feedback and any concerns you might have.

10          MR. BROUSSEAU: Okay. Thank you, Michael.

11          I've already given you the overview of  
12       how the process works, what we're going to do.  
13       And I think this is the 15th year that I've done  
14       this as chair, the administration audit committee,  
15       only the second with the new process.

16          And having said that, this is of course  
17       the second year of the new process, but I feel  
18       like I'm doing -- I could quote, I guess, the  
19       recently deceased Yogi Berra to say, "It's déjà vu  
20       all over again," when I looked at the comments  
21       that came to me in the last 10 days that you  
22       people sent to me.

23          I received a total of 14 email comments  
24       and/or phone calls or both. And seven from the  
25       board side and seven from the committee side, to

1 give a flavor for what is going -- committee  
2 members might see things on that committee basis  
3 that probably the full board should know about, so  
4 I've included that in my comments.

5 I can say Michael has received probably  
6 the highest marks that I would even begin to talk  
7 about from everyone regarding performance here at  
8 PRIM and for as being the leader of this  
9 organization. There was not one dissenting voice  
10 on any of these comments that came to me.

11 I'm going to quote some of the people.  
12 I said this is totally anonymous so I do not use  
13 your names, but "performance was truly amazing.  
14 Outstanding performance. Producing alpha when  
15 needed."

16 They mentioned it on several of them,  
17 quite a few of them, you mentioned "assembling a  
18 staff that is one, if not the best in the  
19 industry. He has accomplished" -- as one person  
20 said, the proverbial comment that "hire staff  
21 smarter than you are." And I guess this person  
22 lauded Michael for being able to have that ability  
23 and to do that.

24 Mentioned that Michael is very open-  
25 minded to new ideas and research. Especially

1 research decision-making; the example, of course,  
2 we've already mentioned, of course: the white  
3 paper that Andre did on currency hedging that was  
4 presented at the last meeting here.

5 Also people mentioned the high quality  
6 thinking that occurs here at PRIM, saying that  
7 "PRIM is an A-plus player and A-plus results.  
8 This is the best multi-disciplinary team in Boston  
9 by far. They have a deep bench of skilled  
10 individuals, especially interactive teams working  
11 together," we've seen with hedge funds and special  
12 equities and the interplay that has gone on  
13 between these teams, which is what makes this  
14 organization so much stronger.

15 One said, "In spite of the compensation  
16 levels, he is able to attract and retain some of  
17 the very best in the business. The communication  
18 with the board, the committees, the clients and  
19 the staff is professional at all times. There's  
20 professional relationship with the staff, and he  
21 encourages them to be thoughtful, smart and  
22 independent players."

23 Another person mentions especially "The  
24 strong culture here at PRIM is evident in the  
25 professionalism and the respect Michael has for

1 everyone." And especially two words came out:  
2 innovation and creativity.

3 Michael's commitment to diversity,  
4 especially in the -- as he put it, in the hiring  
5 of staff, hiring of our vendors, consultants and  
6 how we've been -- we've moved this year in  
7 changing our proxy voting guidelines, commitment  
8 to that.

9 "Michael also maintains an open-door  
10 policy. The relationship that he has with  
11 everybody here is exceptional."

12 I will say that personally, this is one  
13 of the first EDs -- the first ED I know who has  
14 called me, just to call me to let me know what is  
15 going on. I didn't have to wait between committee  
16 meetings or board meetings. Michael calls me  
17 quite often to let me know what is going on. And  
18 I know he does that with the other board members  
19 also.

20 Also it was mentioned there was a very  
21 seamless transition this year in the transition to  
22 our new Treasurer. And that went both ways, not  
23 only here at PRIM, but also at the Treasury. I  
24 think that was mentioned, a very seamless  
25 transition.

1                    "He does a tremendous job of promoting  
2 the image of PRIM to the general public and our  
3 clients." And in terms of media, PRIM is out  
4 front. And I'm sure we can all agree that we  
5 always want positive PR, and I think that PRIM has  
6 received positive PR over the last year. Now,  
7 this is an evaluation of this past year.

8                    Now, were there some concerns? I  
9 wouldn't say that they were negatives or concerns,  
10 but probably these belong more in the goals and  
11 objectives and the plans we will vote next year.

12                  But one comment came regarding that they  
13 felt there had to be more contact with local  
14 boards, not necessarily Michael, but PRIM itself,  
15 more contact with local boards. Needed to build  
16 more client relationships and the fact that -- I  
17 think we mentioned this at the A&A meeting on  
18 October 1 -- that Paul's team is rather thin right  
19 now in terms of all they have to do, and some of  
20 the systems probably can only see him once a year,  
21 sometimes twice. And they'd like to see more of  
22 him.

23                  And one also mentioned perhaps a second  
24 client conference during the year would not be a  
25 bad idea. That was one comment that came.

1                   Another concern was again our global  
2 equities, how we've gone from 49 to 40, but we  
3 seem to have been stuck in that 43 percent area.  
4 And the wonder as to how come, you know, that has  
5 occurred?

6                   I know today we'll see it's at  
7 41 percent, but I think the holding of asset  
8 allocation in global equities and the role of  
9 emerging markets, and I know Michael mentioned  
10 that in his comments earlier, and working on that  
11 could be an issue for this person.

12                  But other than that, I think this is the  
13 most glowing report that I've had. And  
14 personally -- and I've been on the teams, chaired  
15 the teams that have hired I think the last four  
16 executive directors here.

17                  And I will say that Michael, his  
18 performance up here -- they all had strengths,  
19 different strengths. Michael has a combination of  
20 all of the strengths that the other EDs had.

21                  And I would say that as far as I'm  
22 concerned, he is probably the best -- I know he is  
23 the best ED that I've worked with in the 29 years  
24 that I've been here. Although many of the others  
25 were very, very good. Don't get me wrong.

1                   But he's a combination of these skills  
2 and character that is able to take this  
3 organization and really move us into the 21st  
4 century with new thinking and creativity. And I  
5 think we as a board have seen the results.

6                   At this point, I'll open it up to  
7 members of the board, if there are comments they  
8 would like to make or questions to ask Mike.

9                   Theresa.

10                  MS. McGOLDRICK: I just want to add a few  
11 comments, that in this volatile, low return  
12 market, I feel very confident that we're well-  
13 positioned and that we have Michael at the helm as  
14 ED. His experience, his ability to build a strong  
15 staff and his strong vision will help us to  
16 continue to succeed in this tough environment.

17                  While we're keeping risk at a low, we're  
18 improving efficiencies, capturing savings, we're  
19 improving our stability, and through all of that,  
20 creating a long-term growth strategy that has  
21 proven to be successful.

22                  The few things that I'd like to say that  
23 I'm really proud of is the hedge fund replication  
24 strategies. We're a leader in the country as a  
25 fund. And I see other funds trying to do what

1           we're doing.

2                 The legal accomplishments of this year,  
3 another way that we show that we're a leader. We  
4 get involved. We take lead plaintiff. We do the  
5 best of really a lot of the funds in the country.  
6 And I think that that shows that we're not afraid  
7 and we're going to get back what's been taken from  
8 us.

9                 Project SAVE is also another one. And  
10 then also the expertise that Michael has in asset  
11 allocation and timing has shown us that we're  
12 proven and long-term achievers.

13                 So thank you for all you do.

14                 MR. TROTSKY: Thank you.

15                 MS. McGOLDRICK: Thank you to the staff.

16                 MR. BROUSSEAU: Anybody else want to add  
17 anything?

18                 MR. HEFFERNAN: I'm just going to very  
19 quickly -- I don't want to repeat what was said  
20 because it's embarrassingly good for Michael.

21                 I have to say I've worked in finance and  
22 investments for 30 years, and I've had the good  
23 fortune to work with some of the largest and most  
24 sophisticated investors both here in Boston and  
25 across the country and actually some outside the

1           U.S.

2                 And I would put Michael and his team  
3                 against almost any of the firms that I've worked  
4                 with.

5                 MR. SHANLEY: I agree.

6                 MR. HEFFERNAN: So not only is he good  
7                 relative to our benchmark as a pension fund, you  
8                 guys are awesome as money managers put against  
9                 anyone anywhere. And it's a real pleasure to sit  
10                 on this board.

11                 MR. TROTSKY: Thank you.

12                 MR. BROUSSEAU: Anything else?

13                 MS. FITCH: I want to just say that coming in  
14                 without the financial experience, but as a lawyer  
15                 working in the public markets, my transition onto  
16                 the board was really well-done.

17                 And I felt welcomed, which I think is  
18                 important. And I've learned a lot. And I'm  
19                 impressed. And I really appreciate that kind of  
20                 support as a newbie. Thanks.

21                 MR. TROTSKY: Thank you.

22                 TREASURER GOLDBERG: Okay. We can't have a  
23                 complete lovefest, guys. In my family, you do a  
24                 good job, and then you have to then do a better  
25                 job next year.

1                   MR. BROUSSEAU: Madam Treasurer, you're next.

2                   TREASURER GOLDBERG: I am not going to  
3                   disagree with anything that has been said  
4                   whatsoever.

5                   And this is my first year working with  
6                   Michael, and we have built a relationship where  
7                   not only we meet monthly, but we speak all the  
8                   time. And he knows some of my goals, and they are  
9                   included in the goals for 2016, which will help us  
10                  continue being innovative and creative and  
11                  leaders.

12                  What I want to share with all of you is  
13                  when I went down to Washington to an international  
14                  conference, it turns out that we really are  
15                  leaders and in particular on areas where as we're  
16                  beginning to trend towards doing more about  
17                  diversity and pushing -- and corporate governance,  
18                  which is based upon business fundamentals, because  
19                  everything we do here is based upon business  
20                  fundamentals.

21                  And so I look forward to us continuing  
22                  on that level of creativity because that is even  
23                  more critical in challenging markets. That's  
24                  where you attain your competitive edge is as  
25                  things get tougher, as you stay on the creative

1 side and innovative side, it positions you so that  
2 when things do improve, you explode even more so.

3 I am extraordinarily impressed with the  
4 staff here. And I think that Michael and I  
5 working on the professional development piece is  
6 the next step, but also the kind of HR policies,  
7 and you'll notice that in the goals for this  
8 coming year. Developing even more HR policies.

9 We've had Sarah Samuels from PRIM  
10 working with our Office of Economic Empowerment,  
11 looking at ways to engage more women, more people  
12 from diverse backgrounds in the financial services  
13 field, which are good-paying careers. And they  
14 bring another dynamic.

15 And so working on all those things  
16 together, we can leverage off of what has been a  
17 challenging year in terms of returns, but vis-à-  
18 vis a lot of other people, they're under water.  
19 And we're holding our own.

20 So that needs to be our strategy because  
21 of that bucket. So we've learned to share our  
22 analogies too. And we will continue to do so.

23 So whenever I have had a good year in my  
24 life, my family always challenges me as to what's  
25 coming next. You know, hello. Okay. Let's go.

1                   And I enjoy working with you, Michael.  
2        You know that. We even worked together on  
3        discussing the goals for the coming year, and not  
4        everyone can do that.

5                   So onward and upward in a good  
6        partnership, and I appreciate the accolades on the  
7        transition. I came into this job very excited  
8        about the work we were doing and have nothing but  
9        good feelings about it. So let's keep on going.

10          MR. BROUSSEAU: And I want to just thank all  
11        the committee members who also -- you know, even  
12        though they're not board members -- it's our  
13        responsibility to do the evaluation -- they gave a  
14        lot of insight working with Michael on a one-on-  
15        one basis in the committee, which is very good.

16          But I'm going to close by saying, you  
17        know, I think last year after I did this, Michael,  
18        your wife, Amy, had some fairly -- she had an  
19        observation of the evaluation. And I'm wondering  
20        what her observation is going to be this year.

21          MR. TROTSKY: I don't remember what it was.

22          MR. BROUSSEAU: I forgot also. Because you  
23        told me about it with a grin on your face.

24          So anyway, that completes the  
25        evaluation. There are no more comments or

1           questions.

2                 And we're going to move into the goals  
3                 and objectives that you received also. And about  
4                 a week or 10 days ago, you received the revised  
5                 goals that were redlined and a final copy that you  
6                 had there.

7                 Michael, do you want to talk about your  
8                 goals and objectives?

9                 MR. TROTSKY: I think it's self-explanatory.  
10                We did add some goals around diversity --

11                MR. BROUSSEAU: Yes.

12                MR. TROTSKY: -- as a result.

13                MR. BROUSSEAU: If you brought yours with  
14                you, numbers 15, 16 and 17, there was some  
15                redlining that took place.

16                16 and 17 are the amendments and the  
17                additions, right?

18                MR. TROTSKY: Yes.

19                So 15, sponsor PRIM's women leadership  
20                and diversity initiatives.

21                Well, I should start with 13. Develop  
22                strategies to ensure a diverse pool of applicants  
23                for all job openings.

24                14, develop strategies to ensure diverse  
25                pool of applicants for all procurements.

1                   15, sponsor PRIM's women leadership and  
2 diversity initiatives.

3                   16, develop strategies to encourage and  
4 ensure that PRIM vendors are pursuing diversity  
5 staff recruitment and retention efforts.

6                   And then 17 was a new one, develop  
7 strategies to ensure that PRIM is effectively  
8 communicating to its stakeholders and to the  
9 companies in which PRIM retains a proxy voting  
10 right corporate governance policies of interest as  
11 outlined in PRIM's custom proxy voting guidelines.

12                  I think everything else -- those were  
13 the only additions since the admin committee.

14                  MR. BROUSSEAU: Two, wasn't it? To complete  
15 portfolio rebalancing research project? That's  
16 redlined here.

17                  MR. TROTSKY: Yes. That was inadvertently  
18 left off.

19                  MR. BROUSSEAU: That was inadvertently left  
20 off. It was in the original document.

21                  And also on the third page, 8, finance  
22 and administration was in addition, was that left  
23 off? Evaluate investment operational  
24 organizational changes?

25                  MR. TROTSKY: Yes. That was something that

1           wasn't completed last year.

2                 And basically we have one asset  
3                 allocation here, and we offer it to our clients,  
4                 either take it or leave it. We thought it might  
5                 be a good idea to investigate whether offering  
6                 several asset allocation policies depending on  
7                 risk appetites would be more beneficial.

8                 For example, a town that is near fully  
9                 funded may not want an aggressive asset allocation  
10                 policy like a town that isn't nearly fully funded.  
11                 So they have different requirements. One asset  
12                 allocation may not fit all requirements.

13                 We want to investigate what we can do to  
14                 offer multiple asset allocation policies to  
15                 different clients. It might be complex. There's  
16                 a lot of reporting challenges, but it's something  
17                 we want to research.

18                 MR. BROUSSEAU: Are there any questions for  
19                 Michael? Anthony?

20                 MR. HUBBARD: So I don't want to pile on, but  
21                 if you have room to write my self-evaluation, I  
22                 would love for you to do that because it just was  
23                 really well-done and thoughtful and thorough.

24                 My question is about staffing levels, in  
25                 terms of these are ambitious goals. Do you have a

1 sense of the staffing is adequate to meet all  
2 these? Or --

3 I'm not familiar with the plans for  
4 adding staff, so I was a little out of context,  
5 but I wanted to ask that.

6 MR. TROTSKY: Thank you for mentioning that.

7 We discussed this at some length at the  
8 admin and audit committee meeting so I'll update  
9 you here.

10 First, and there was a comment regarding  
11 client services, we do have an opening there.  
12 Paul does a fantastic job supporting nearly  
13 100 clients, but he's a one-man show with the help  
14 of Jennifer Cole inside. He needs more help  
15 outside.

16 And I do as much as I can. I try to get  
17 on the road once a week to visit a client. But  
18 with 100 clients, that's not enough face time.

19 So we do have an open slot there. We  
20 need to fill it to address that concern. That was  
21 mentioned earlier.

22 I'd say overall, and this was mentioned  
23 at the admin and audit committee, we're a little  
24 light on the accounting and finance team. We need  
25 to carefully think about how to expand our

1 functionality there. And so when we come back for  
2 our annual plans, we'll probably be adding a  
3 couple of positions there. Details to follow.

4 The investment staff, we're lean. We're  
5 highly functional. And I can envision a couple  
6 more staff members there. I know Sarah has one  
7 open position on the investment staff. So does  
8 real estate. So that's two that haven't been  
9 filled yet. There might be one more requirement  
10 on the investment staff, but basically three new  
11 people will probably do the trick there.

12 So nothing huge and major. Of course,  
13 if we decide ever to go to direct fund management  
14 that's a whole nother can of worms that we need to  
15 investigate. And if we were to go that way and  
16 determine that it's the right path for us and for  
17 the Commonwealth, then that would require some  
18 building.

19 MR. SHANLEY: Michael, in here, you talk  
20 about doing wage gap analysis relative to --

21 MR. TROTSKY: Yes. We've already begun work  
22 on this. This is to ensure that there is no  
23 gender bias in our pay scales. We don't believe  
24 that's the case, but we want a third party to  
25 determine whether that's the case. And so that's

1       a goal for this year, to make sure that we don't  
2       have any biases with regard to race or gender.

3            MR. SHANLEY: Okay. Thanks.

4            TREASURER GOLDBERG: You guys don't have a  
5       lot of --

6            MR. TROTSKY: We haven't. We're using our  
7       compensation consultant to do that.

8            TREASURER GOLDBERG: Anything that we can  
9       contribute to that, because we've done that. We  
10      created RFPs. It's not as easy to find someone  
11      who can do a full audit and also evaluate job  
12      descriptions and tracking. So we can help you  
13      with that.

14           MR. BROUSSEAU: Also on September 30, talking  
15      about client relations, the teachers are the  
16      largest client that we have here at PRIM. And  
17      Paul and Michael, they had their annual  
18      constituent services workshop on the 30th. And I  
19      went, and of course Dennis is on the board, but  
20      they did a fantastic job.

21           Michael did a thorough, good 20-minute  
22      presentation on PRIM and what we have  
23      accomplished, and followed by Paul also.

24           So he does get out to the clients. And  
25      I say that every year, he's very well-received.

1 Both of them are. And a lot of questions, but  
2 that's what PERAC also does, their actuarial  
3 report to the teachers retirement board.

4                   Madam Chair, would you entertain a  
5 motion --

6                   TREASURER GOLDBERG: Oh, is this a motion?

7                   MR. BROUSSEAU: -- that the board approve  
8 Michael's goals and objectives for 2016?

9                   TREASURER GOLDBERG: All right. I would  
10 entertain a motion that the board approve the  
11 administration and audit committee's  
12 recommendation to approve the executive director's  
13 fiscal year 2016 goals and objectives.

14                   Is there a motion?

15                   MR. BROUSSEAU: So moved.

16                   TREASURER GOLDBERG: Second?

17                   MR. PULLMAN: Second.

18                   TREASURER GOLDBERG: All those in favor?

19                   BOARD MEMBERS: Aye.

20                   **(VOTED: To approve the Administration  
21 and Audit Committee's recommendation to  
22 approve the Executive Director's fiscal  
23 year 2016 goals and objectives.)**

24                   TREASURER GOLDBERG: My slower body is making  
25 for a slower brain. Sorry about that, guys. I'm  
usually pretty zippy.

1               Okay. Very good. So next, Sarah  
2 Samuels. Public markets.

3               Thank you, Michael. Good work.

4               MS. SAMUELS: Good morning, everyone.

5               TREASURER GOLDBERG: And who do you have with  
6 you?

7               MS. SAMUELS: I am joined by Chuck LaPosta,  
8 senior investment officer of fixed income, and  
9 Andre Clapp, senior investment officer for global  
10 equities.

11               And they're up here today because  
12 they're going to give performance updates for  
13 their portfolios. As I spend more time through  
14 this rotation program, you're going to see more of  
15 them going forward.

16               So I'd like to start at the same  
17 performance handout that Michael was speaking to,  
18 page 4, please. Give you a moment to get there.

19               TREASURER GOLDBERG: This is our bubble  
20 group.

21               MS. SAMUELS: The bubble chart.

22               So at this point, you've probably seen  
23 this chart for a couple of meeting cycles now.  
24 This page is sort of a heat map that tells us a  
25 lot about the fund very quickly at a very high

1 level.

2 As a reminder, the majority of our  
3 investments are above the horizontal line here,  
4 meaning that they're going to tend to do well when  
5 economic growth is strong.

6 So that's when the PRIT fund will do  
7 well as well, when growth is strong and inflation  
8 is low but positive, in the top left quadrant.

9 So when we construct our portfolio, we  
10 go through our asset allocation exercise every  
11 year and on an ongoing basis. It's really  
12 important to us to be balanced and diversified by  
13 economic regime. We want an asset class in each  
14 of these different environments that's going to do  
15 well.

16 Looking at performance over the last  
17 year and particularly over the third quarter, it  
18 was quite volatile. Global equities were down  
19 9 percent during the third quarter, and Andre is  
20 going to talk more about why we had that selloff  
21 in a moment.

22 But I do think it's important to note  
23 that, as Michael also noted, during this volatile  
24 quarter, STRIPS were up 7.6 percent. And they  
25 serve the important role of offsetting other

1 equity risk exposure.

2 We have been preparing for this selloff.

3 As Michael mentioned, we launched portfolio  
4 completion strategies, we introduced an allocation  
5 to long treasuries as an equity hedge. And we've  
6 been systematically reducing our equity exposure  
7 over the last several years.

8 Our proprietary internal asset  
9 allocation models have been flashing a negative  
10 signal for U.S. large cap equities because of high  
11 valuations and sentiments.

12 And we also over the past couple of  
13 meeting cycles have been talking about some  
14 classic characteristics of the mid- to later  
15 stages of an economic cycle that we think we're  
16 seeing today. Growth momentum and large cap  
17 stocks have outperformed value and small cap  
18 stocks.

19 And we've seen some classic signs of a  
20 later cycle like unemployment at cycle lows,  
21 profit margins at peak levels, and credit spreads  
22 beginning to widen.

23 The one thing we don't have that you  
24 typically see when you're shifting from mid- to  
25 late cycle is rising inflation.

1           We also know that later in the cycle  
2       when growth is slowing and when valuations are  
3       high, we're going to see more frequent drawdowns  
4       like we saw this summer in the month of August.

5           Which bringing us back to our asset  
6       allocation is why we have a balanced portfolio  
7       with dedicated assets that have a low correlation  
8       to equities like STRIPS and portfolio completion  
9       strategies.

10          So turning to performance, I'm pleased  
11       to share that our three broad public markets areas  
12       outperformed over the last year. So global  
13       equities, core fixed income and value-added all  
14       outperformed.

15          Now I'd like to turn it over to Chuck  
16       and Andre. And I promise I'm not just turning it  
17       over to them now because the markets have become  
18       more volatile. It's a coincidence, the timing.

19          MR. LaPOSTA: Thank you very much for the  
20       turnover. Always happy to talk about fixed  
21       income.

22          I will be addressing the chart on page 5  
23       of the handout, which details the performance of  
24       our public markets fixed income portfolios over  
25       the last 12 months.

1                   And as we've mentioned many times  
2 already today and over the last many cycles,  
3 STRIPS is the largest and most significant portion  
4 of our fixed income portfolio, as it is meant to  
5 diversify the risk from other portions of the  
6 portfolio.

7                   And as demonstrated here, it's doing its  
8 job. Returning 6.3 percent over the last  
9 12 months, 7.6 over the last quarter, which Sarah  
10 and Michael have alluded to, while equity markets  
11 have their averages.

12                  And we see no signs for this performance  
13 to kind of decouple from what it's expected to do.  
14 Unemployment is the largest sign of positive in  
15 the economic regime with the 5.1 percent  
16 employment rate, but there are still signs of slow  
17 growth and low inflation to support long interest  
18 rates, keep them kind of at low levels and still  
19 have room for reaction, should that continue.

20                  I'll next turn your attention to the  
21 emerging markets performance, which are the last  
22 two items on the page. And those have come under  
23 a fair amount of pressure as the China growth  
24 story has played itself out and also the dollar  
25 strength story that has led to the negative

1           21 percent return in our EMD local currency.

2           In fact, if you were to look at this,  
3           the currency impact for this portfolio, it would  
4           be negative 24 percent, and then you get some  
5           positive performance from the bond returns within  
6           that.

7           And importantly, our managers have  
8           provided a bit of alpha. They have 70 basis  
9           points above performance versus the benchmark. So  
10          they have been able to take advantage of these  
11          volatile times to provide some return above the  
12          benchmark in what is a difficult environment for  
13          the asset classes.

14          Speaking in kind of emerging markets and  
15          currency impacts, we also have similar exposures  
16          in our equity activities.

17          If you don't have any questions about  
18          fixed income, I will turn it over to Dr. Andre to  
19          talk about equity.

20          TREASURER GOLDBERG: Dr. Andre did a great  
21          analysis for us.

22          DR. CLAPP: Hi. Good morning.

23          If you turn to page 6, you'll see the  
24          relevant performance of public equities.

25          As you can see, international equities

1 have outperformed significantly while U.S.'s mid  
2 cap has underperformed. However, the  
3 international equity portfolio is four times  
4 larger than the U.S.'s mid cap portfolio.

5 Today, I'm going to focus on the right  
6 side of this chart, international and emerging.

7 Our international managers are quite  
8 strong, and I would highlight Marathon, who's  
9 outperforming by 6 percent-plus over the trailing  
10 year. In general, positive stock picking has  
11 driven our active managers' performance.

12 Two important themes that help to  
13 explain performance are currencies and China.  
14 Over the last year, the EAFE and emerging market  
15 baskets have depreciated 13 percent versus the  
16 U.S. dollar. So in local terms, our international  
17 equity portfolio was actually up 8 percent.

18 China had been pegging its currency to  
19 the U.S. dollar. The Chinese currency had  
20 appreciated quite a lot, along with the U.S.  
21 dollar. And China's trade-weighted real exchange  
22 rate was up 13 percent in the 12 months. This was  
23 a problem for an export-driven economy like China.

24 In mid-August, in a surprise move, China  
25 devalued its currency. The four trading days of

1       August 19 through the 24th saw a rout in the  
2       global equity markets, which fell roughly  
3       10 percent. The Chinese market has been  
4       especially weak since its peak in June.

5                  Our five new emerging market managers as  
6       a group are 3 percent underweight China. Now, if  
7       you remember our FX hedging research from the last  
8       board meeting, the August selloff further  
9       validates our concerns that a developed market  
10      currency hedge has the potential to make things  
11      worse in a down-equity market.

12                 The U.S. dollar actually depreciated  
13      4 percent versus the euro and yen during this  
14      sharp selloff, illustrating that the U.S. dollar  
15      does not necessarily strengthen during global  
16      equity downturns.

17                 In a down market, it's possible to also  
18      lose significant money on a currency hedge,  
19      increasing the total loss. This would have been  
20      the case in the August selloff.

21                 Now, as you recall, we made the  
22      transition to our new EM managers at the beginning  
23      of this year, following in-depth quantitative and  
24      qualitative analysis of our RFP respondents.

25                 Alpha has improved in the emerging

1 markets, and since our five core EM managers were  
2 fully funded on March 1, they are outperforming by  
3 162 basis points.

4 Our two new frontier managers have also  
5 been doing very well. As you can see from this  
6 chart, our trailing year value-added is only  
7 slightly positive at 0.1 percent, but that's  
8 2 percent better than at the last meeting, and  
9 that's due to the outperformance of our new  
10 managers.

11 This positive value-added number still  
12 includes negative performance from our previous  
13 managers and 90-basis-point transition cost. So  
14 overcoming that in six months is pretty  
15 encouraging.

16 And lastly, I'll just mention that these  
17 numbers are through the end of August, but in  
18 September, our EM managers have had an excellent  
19 month and have outperformed by 100 basis points.

20 So I'd be happy to answer any questions.

21 TREASURER GOLDBERG: Are there questions from  
22 folks?

23 MR. BROUSSEAU: Just one I raised last month.  
24 Does China still scare you as much as it scares  
25 me?

1 DR. CLAPP: China is certainly very important  
2 to emerging markets. It has an impact on  
3 international markets and on the U.S. market as  
4 well.

5 I think that there's real reason to be  
6 concerned about China. I think that a lot of that  
7 concern is baked into the markets right now. I  
8 don't know if it's fully discounted, but the level  
9 of concern in the global equity market is pretty  
10 high about China. There's a lot of scrutiny  
11 there.

12 MS. SAMUELS: And our active managers will  
13 reflect that in their positioning, which should  
14 help.

15 DR. CLAPP: We're significantly underweight  
16 China. And in terms of our EM manager, 3 percent  
17 underweight.

18 MR. LaPOSTA: And even the Fed is concerned  
19 that China is impacting the global economy and has  
20 cited as one of the reasons why they elected not  
21 to raise interest rates in what otherwise looks  
22 like a pretty, you know, healthy U.S. stand-alone  
23 economy.

24 MR. BROUSSEAU: Because the [inaudible] don't  
25 dictate things over there, you're dealing with a

1 command(?) where the government calls the shots,  
2 and you don't know what's going to come next.

3 They were overflowing with high-rises  
4 and buildings that were unoccupied because the  
5 government said you had to build these things.  
6 And they're talking about billions of dollars in  
7 debt for empty real estate over there. That's  
8 going to have an impact sooner or later.

9 MS. SAMUELS: They are taking steps to become  
10 more market-driven and less driven by the state.

11 MR. LaPOSTA: And the real problem in the  
12 market, I guess, is how quickly those steps are  
13 taken and how disruptive they are. If it's a  
14 gradual managed process, then perhaps the markets  
15 are overdone. If it becomes a problem and you  
16 can't manage it, then there could be more market  
17 volatility.

18 DR. CLAPP: I would say even the currency  
19 devaluation, despite the negative impact it had on  
20 the global equity markets coming as a surprise, is  
21 actually seen as a move towards more market-driven  
22 economy, moving towards a more flowing exchange  
23 rate and less control of currency exchange rate.

24 MR. HUBBARD: Are our managers looking at  
25 this as an opportunity to rebalance these markets,

1 or what is our status like?

2 DR. CLAPP: I think there are certainly  
3 opportunities being created with this kind of  
4 volatility. On Monday, August 24, Black Monday, I  
5 mean, there was incredible mispricing of  
6 securities here in the U.S. and around the world.

7 So I do think that this is an  
8 opportunity for our active managers to pick up  
9 some real bargains and misunderstood securities.

10 MR. TROTSKY: On a similar vein, we rebalance  
11 monthly also, Anthony, and once we got the very  
12 large selloff in global equities, we ran our asset  
13 allocation model and our rebalancing model, and we  
14 actually ended up in the last two months moving  
15 550 million back into global equities.

16 So we are long-term investors. We  
17 rebalance monthly. When you get a big correction  
18 like that, it causes the rebalancing to trigger in  
19 a way that you may not expect. But look at it as  
20 buying the dips.

21 TREASURER GOLDBERG: Yes. That's why I was  
22 saying I would prefer to be looking at September  
23 and October numbers than August. August was a  
24 wild ride. Not to say we won't have other wild  
25 rides, but our next meeting will look hopefully a

1           little more interesting.

2           MR. TROTSKY: Yes. We don't want to buy too  
3         many dips.

4           TREASURER GOLDBERG: No. Dips are not fun.  
5         You get a little queasy on dip days.

6           Any other questions?

7           Thank you, all.

8           Okay. Next topic up for discussion.

9           MR. LaPOSTA: So the next topic. It's not a  
10         voting item. It's just an update on the Progress  
11         Investment Management Company, and the memo can be  
12         found in Appendix F.

13           And it's interesting that Andre alluded  
14         to Black Monday, August 24, because that was the  
15         day Sarah and I were on a plane to San Francisco  
16         to visit with Progress. And we were both kind of  
17         logged on to wifi that they have on planes,  
18         watching these volatile markets, but we were on a  
19         stable plane ride, so that was -- but it was  
20         certainly an interesting day for sure.

21           So getting back to the matter at hand  
22         with Progress, to give you an update, on August 8,  
23         2013, as part of our analysis of an RFP for  
24         emerging manager of managers services, the board  
25         approved Progress Investment Management's core

1 fixed income strategy as a strategy that was  
2 appropriate for PRIM's asset allocation.

3                 However, we were endeavoring to revisit  
4 our fixed income allocation and therefore didn't  
5 feel funding that strategy at the time was  
6 appropriate, so we put them on the bench after our  
7 August 2013 meeting.

8                 Subsequently, we have made changes to  
9 our asset allocation that have now created a more  
10 permanent core fixed income strategy which was  
11 that 5 percent allocation to our portfolio.

12                 So we revisited Progress's capabilities,  
13 Sarah, myself and Millie Viqueira and Nate Wong  
14 from Callan. Reevaluated and reanalyzed  
15 Progress's core fixed income strategy since the  
16 decision was made in August to put them on the  
17 bench.

18                 And we found that their performance  
19 continued to be quite strong. They have 1 percent  
20 alpha over the benchmark over the last three- and  
21 five-year numbers.

22                 And looking at PRIM's custom manager  
23 monitoring process, we found they rank in the 8th  
24 percentile, which is quite strong, over the last  
25 three years.

1                   As a reminder, our analysis looks more  
2 at downside and upside capture information, Sharpe  
3 ratio and batting average, so more efficiency and  
4 risk mitigation than actual returns.

5                   So the combination of their positive  
6 returns and their positive rank in our custom  
7 screening are both positive. So again, we found  
8 that their results continued to be strong.

9                   And just by way of background for  
10 Progress Investment Management Company, they are a  
11 minority- and women-business-owned entity;  
12 100 percent employee-owned. They are the leader  
13 in emerging manager of managers services within  
14 fixed income. They have about 2 billion in fixed  
15 income assets under management; 8.8 million in  
16 assets under management in total.

17                   They have worked with over 150 different  
18 minority- and women-business-owned firms. And  
19 given the fact that our allocation changes have a  
20 place for them, their performance warrants  
21 consideration, they were approved in August 2013,  
22 PRIM staff is recommending that we move them from  
23 the bench and fund them with up to \$100 million.  
24 That was approved in the August '13 meeting.

25                   TREASURER GOLDBERG: This is informational.

1                   MR. LaPOSTA: This is informational. It's  
2 not a voting item, but we thought given the  
3 passage of time, it warranted an update.

4                   We made the same update to the  
5 investment committee, again, just for  
6 informational purposes.

7                   Should you have any questions, happy to  
8 answer them at this time.

9                   MR. BROUSSEAU: Hopefully bring this forward  
10 in the near future as a voting item for  
11 100 million.

12                  MR. LaPOSTA: It was voted on and approved in  
13 August. It was put on the bench. So it was voted  
14 on over two years ago, preapproved, but just  
15 because it's been two years, we thought it was  
16 appropriate to at least tell you that we've  
17 revisited, watched them over the two-year period  
18 and kind of reevaluated them over that time and  
19 found them to be consistently as described two  
20 years ago.

21                  TREASURER GOLDBERG: Very good. Very pleased  
22 about that.

23                  And do you want to let us know anything  
24 about the Callan Progress memorandum, or that's  
25 for information?

1                   MR. LaPOSTA: No. That's just additional  
2 information. Callan did their own analysis as  
3 well, kind of in tandem, as is the case with all  
4 of our manager selections. PRIM has their own  
5 process. Callan does theirs.

6                   TREASURER GOLDBERG: I just wanted to call  
7 attention in case anybody was curious about  
8 Appendix G.

9                   All right. Very good. Okay. Next up.  
10 Eric? Hedge funds?

11                  Thank you.

12                  That is an example of the team that we  
13 were referring to now coming in, more of the kind  
14 of quality individuals that we have working here  
15 that Michael has recruited and retained. And we  
16 will continue to work on making sure nobody can  
17 steal anybody. I actually take out my boxing  
18 gloves when I'm traveling around.

19                  And again, Eric.

20                  MR. NIERENBERG: Good morning.

21                  MR. TROTSKY: Eric, before you begin, there  
22 was a comment during my review which mentioned the  
23 43 percent equity allocation being stuck at 43. I  
24 wanted to remind everyone that when we made that  
25 asset allocation change, it was contingent.

1       Moving to 40 percent was contingent on filling out  
2       the portfolio completion strategies bucket, which  
3       you're involved in.

4                   We've made three investments,  
5       500 million. We're moving as quickly as we can  
6       and as quickly as we feel is responsible to fund  
7       that bucket to get to the 40 percent.

8                   Maybe during your comments, you can  
9       speak briefly about some of the other items in the  
10      pipeline to fill out that PCS bucket.

11          MR. NIERENBERG: Certainly. Sure. Happy to  
12      do that.

13                   So good morning, everyone.

14                   Before I begin, I just want to introduce  
15      from Arden today, we have a new person that's  
16      joining us for the day. Darren Wolf is the  
17      director of research at Arden.

18                   I work with Darren very, very closely,  
19      and we evaluate and meet with different hedge fund  
20      managers. Darren is often the one joining me on  
21      many of the meetings. His knowledge of hedge  
22      funds is pretty close to encyclopedic. So you  
23      name pretty much --

24          MR. BROUSSEAU: I thought yours was.

25          MR. NIERENBERG: I try to get there, but it's

1 his brain that I pick. I encourage you, if you  
2 have the chance, to talk to Darren afterwards.

3 Just real briefly on performance. I'm  
4 going to speak to August numbers, but a quick word  
5 on September. September was probably, as you  
6 might have guessed, not a very good month for  
7 hedge funds.

8 We saw a turn in momentum investing in  
9 September, which did affect a number of hedge  
10 funds, including some prominent ones across the  
11 spectrum.

12 We'll wait to see when the final results  
13 come out, but it looks like October has turned a  
14 little bit so far.

15 Through August, our direct hedge fund  
16 portfolio was about flat, quarter to date, after a  
17 difficult August, where only relative value  
18 strategies managed to register positive returns.

19 This is important because relative value  
20 strategies, including equity market neutral, are  
21 some of the areas that we're continuing to  
22 emphasize as we transition the portfolio. These  
23 are lower beta, lower correlation strategies, and  
24 the fact that they've held up well in this  
25 volatility from August and September, I think

1 speaks to the way we review these hedge funds.

2                   A number of our recent allocations fit  
3 into this category, and I think to the extent that  
4 we can find additional funds that are uncorrelated  
5 not just with the overall pension portfolio but  
6 also uncorrelated with each other, we'll continue  
7 to add selectively there.

8                   Portfolio completion strategies, and  
9 I'll talk more about that in a second as Michael  
10 suggested, which at the moment is alternative risk  
11 premia, has held up quite well and registered  
12 through August nearly a 2 percent return through  
13 the quarter.

14                  Again, those are market neutral, not  
15 designed to have any market correlation. That's  
16 really what we're trying to get at with portfolio  
17 completion strategies.

18                  Now, more generally, PCS is not designed  
19 to be just risk premia. We really want it to have  
20 a variety of strategies that cover the entire  
21 asset class spectrum. Some of the things that  
22 we've been looking at are on the real asset side,  
23 working very closely with some of my counterparts,  
24 particularly Michael McGirr of the private equity  
25 team and Tim Schlitzer from the real estate team,

1 looking at a number of real asset opportunities,  
2 including agriculture, land banking, environmental  
3 mitigation. There are a lot of potential  
4 opportunities there.

5 As Michael mentioned, we're trying to be  
6 very judicious in the way that we approach this,  
7 and it's important for us to underwrite these  
8 things to a very high degree of confidence.

9 But we feel that we're getting very  
10 close on several of these investments, which we  
11 will be bringing to you hopefully in the very near  
12 future, and that will continue to build out the  
13 portfolio completion strategies allocation.

14 MR. TROTSKY: And when Eric mentions "we," he  
15 really means "we." He's working collaboratively  
16 with Tim and his team on real estate, Mike McGirr  
17 and his team, and Mike Bailey in private equity.

18 When we designed PCS, we thought it  
19 would be a good area to cross-collaborate, and in  
20 fact, that is happening. And also with the public  
21 markets.

22 MR. NIERENBERG: And I should also mention  
23 that there are unconstrained strategies that we've  
24 been looking at in detail with Sarah and Chuck as  
25 well.

1                   MR. TROTSKY: So I mean, it's fun for me as a  
2 manager to watch this group work. It's fun not  
3 only to see the collaboration, but to hear the  
4 ideas come forward.

5                   I remember Eric and I spoke very  
6 recently about pecans. Pecan plantations, I guess  
7 you call them. All sorts of interesting things  
8 like that. So every week, I hear about ideas for  
9 this bucket.

10                  But again, we're being very judicious in  
11 filling them.

12                  MR. NIERENBERG: So with that -- unless there  
13 are other questions on hedge funds or PCS  
14 performance. I'm happy to take those now.

15                  TREASURER GOLDBERG: Any questions for Eric?

16                  MR. NIERENBERG: I'm going to ask Darren to  
17 join me.

18                  So the next item on the agenda is a  
19 voting item. We are asking for your approval for  
20 an allocation to Davidson Kempner Special  
21 Opportunities Fund III.

22                  This is an interesting opportunity for  
23 PRIM. Davidson Kempner is one of our existing  
24 hedge fund relationships.

25                  And what we're looking to do here is

1 effectively move some of our investment from the  
2 master flagship fund, which is a commingled fund,  
3 and put some of the money to work in the special  
4 opportunities fund, which is a concentrated  
5 distressed-focused fund that sizes up a lot of  
6 these same opportunities.

7                 For risk reasons, Davidson Kempner  
8 doesn't want to make any of these investments too  
9 large in the flagship fund, which they've tried to  
10 make more of a steady Eddie, very low volatility  
11 type fund.

12                 What we did in our underwriting, we felt  
13 very comfortable with the fact that we see that  
14 Davidson Kempner has a lot of value added in the  
15 distressed sector, and we think that given the  
16 profile of these funds, this is something that  
17 looked attractive, very attractive, to us.

18                 So that's kind of the overview of the  
19 fund. I'm happy to go into a little bit more  
20 detail about the fund strategy.

21                 TREASURER GOLDBERG: I do have a question.

22                 MR. NIERENBERG: Yes.

23                 TREASURER GOLDBERG: I thought that we  
24 were -- is this also because we do not want to be  
25 in commingled funds, that part of our strategy is

1 to not commingle?

2 MR. NIERENBERG: Yes. So this one is still a  
3 commingled fund. It's a different type of fund.  
4 This is a drawdown fund. This is different than  
5 what we normally find with hedge funds which we  
6 would consider evergreen funds where you put the  
7 money in and then the manager -- if they don't see  
8 any opportunities, they just hold it in cash.

9 The idea of a drawdown fund is much like  
10 with private equity funds, in that you commit the  
11 capital. And as they find good investment  
12 opportunities, they then draw that money down.

13 Now, in the particular case of this  
14 fund, there are no fees paid until that money is  
15 drawn down, which is an attractive feature.

16 TREASURER GOLDBERG: Okay.

17 MS. McGOLDRICK: So it's different than the  
18 flagship fund in that there's not a correlation.  
19 It's very special opportunities.

20 MR. NIERENBERG: So there will be overlap in  
21 the sense that the special opportunities fund is  
22 only going to, say, a total of probably 10 to 20  
23 investments when it's fully funded.

24 It's not that those investments won't  
25 appear at all in the flagship fund, but they're

1 sized at a much smaller level. In the flagship  
2 fund, those 10 to 20 investments might at most  
3 represent 10 to 20 percent of the portfolio,  
4 whereas it funds 100 percent of the special  
5 opportunities fund.

6 For the most part, they are uncorrelated  
7 or relatively low correlated. I wouldn't go so  
8 far as to say they are completely separate.

9 MR. HEFFERNAN: Is this another borderline  
10 between a private alternative and a --

11 MR. NIERENBERG: Yes, it absolutely is. When  
12 we started the underwriting -- this was done in  
13 conjunction with Michael Bailey. We sat around  
14 and looked at the opportunity, and we discussed  
15 whether or not this fit more into the private debt  
16 component of the private equity portfolio or in  
17 hedge funds.

18 Initially we both thought it was  
19 actually more on the private debt side. And the  
20 more we learned about the investment, we decided  
21 it was a better fit for hedge funds. That was an  
22 ongoing discussion.

23 Any further questions on the strategy?

24 What the main opportunity that they're  
25 looking at is continuing to bid on pieces from the

1 European bank deleveraging. There are a lot of --  
2 and it's not just European assets. It's European  
3 banks.

4 So as these European banks continue to  
5 delever as part of the Basel III initiative, they  
6 have got these large portfolios of loans.  
7 Sometimes it's commercial real estate, sometimes  
8 asset-backed securities, that they're looking to  
9 disgorge.

10 Davidson Kempner, like a number of other  
11 firms out there, are opportunistically trying to  
12 bid on different pieces of these. They have a  
13 track record of being very price-sensitive, so  
14 they don't overbid.

15 They'll say that most of these auctions  
16 they participate in, they don't win. That's okay.  
17 They try to have a unique sourcing advantage with  
18 some of these banks. And where they can  
19 underwrite these assets to give an acceptable rate  
20 of return, that's the things that they pull the  
21 trigger on.

22 It's an eclectic group of assets. There  
23 might be an aircraft leasing portfolio on one  
24 hand, as well as commercial real estate in  
25 Germany. It's an interesting mix of assets that

1       we think itself has nice correlation. Combine  
2       that into a fund, and then our analysis, indicates  
3       that it diversifies the rest of the hedge fund  
4       portfolio and I think complements nicely with what  
5       we have already.

6                   TREASURER GOLDBERG: Okay. Very good.

7                   MR. BROUSSEAU: Eric, are we unique as a  
8       public pension fund in these types of investments?

9                   MR. NIERENBERG: No. So in some ways, you  
10       can almost think of these opportunity funds as a  
11       co-investment-type opportunity. Typically these  
12       special opportunity funds tend to attract large  
13       pension funds such as ourselves who have the  
14       capacity and who have the interest in kind of  
15       sizing up some of the best ideas that the manager  
16       has.

17                  If you look at the investor base that's  
18       going into the special opportunity fund, it tends  
19       to be large public funds. It's not so much the  
20       smaller investors that are interested in these  
21       funds.

22                  TREASURER GOLDBERG: Great. Any other  
23       questions? For either --

24                  This is a vote. I'd like to entertain a  
25       motion of the approval of the capital commitment

1       of up to \$75 million to Davidson Kempner Special  
2       Opportunities Fund III, LP; that the board approve  
3       the investment committee's recommendation of an  
4       initial capital commitment of up to 75 million to  
5       Davidson Kempner Specialty Opportunities Fund III,  
6       LP; and further to authorize the executive  
7       director to take all actions necessary to  
8       effectuate this vote.

9                   Is there a motion?

10          MR. SHANLEY: So moved.

11          TREASURER GOLDBERG: Second?

12          MR. PULLMAN: Second.

13          TREASURER GOLDBERG: All those in favor?

14          BOARD MEMBERS: Aye.

15                   (VOTED: To approve the Investment  
16                   Committee's recommendation of an initial  
17                   capital commitment of up to \$75 million  
18                   to Davidson Kempner Specialty  
19                   Opportunities Fund III, LP; and further  
20                   to authorize the Executive Director to  
21                   take all actions necessary to effectuate  
22                   this vote.)

23          TREASURER GOLDBERG: Thank you.

24          MR. NIERENBERG: Thank you very much.

25          TREASURER GOLDBERG: So I think, Michael  
26                   Bailey, that you are next up. And Sarah is  
27                   working with you right now.

28          MR. BAILEY: She is. She's working with me.

1           She's going to sit next to me.

2           TREASURER GOLDBERG: Very good. I consider  
3 you fortunate to have that.

4           MR. BAILEY: I am a lucky person in many  
5 regards. Thank you.

6           Good morning, Treasurer Goldberg, and  
7 good morning, members of the board.

8           I wanted to just give you a quick update  
9 on the private equity performance. You'll hear  
10 from Michael McGirr and Sarah Samuels about an  
11 investment opportunity, which is a voting item.

12           Before we turn to that, I wanted to just  
13 highlight a couple of things about performance.  
14 As Michael and Sarah mentioned, the portfolio has  
15 performed very well.

16           I would call out two trends that we've  
17 talked about before, one of which is that we're  
18 seeing still the results of being involved in  
19 pretty much smaller U.S. companies that have  
20 continued to deliver pretty strong earnings growth  
21 in this market environment.

22           As Sarah mentioned, we're sort of maybe  
23 mid- to late stages here of economic recovery, and  
24 these small companies continue to benefit from  
25 that.

1                   If you look at the research that Michael  
2 and others here have driven, we're seeing a factor  
3 of maybe 5 percent of additional earnings growth  
4 compared to a similar basket of public equities.  
5                   So when you add 5 percent earnings growth on a  
6 levered balance sheet, you're going to see this  
7 type of performance. I think that's going to  
8 continue.

9                   The second factor that I would call out  
10 is that the opportunity for these private firms to  
11 sell companies has been extraordinary. And I  
12 don't see that as a gift that's going to keep  
13 giving. We've talked about this at this table  
14 before.

15                  But M&A activity and the ability to sell  
16 companies into a frothy, pretty liquid market  
17 including an IPO market that's willing to accept  
18 kind of these smaller businesses with growth  
19 potential, you know, that has continued to deliver  
20 a lot of return.

21                  So for example, more than half of the  
22 capital we've gotten back the last quarter has  
23 been from firms that started investing in 2006 to  
24 2008.

25                  So you're seeing those older firms, you

1 know, again, the theme we've talked about, get  
2 sold into this liquid market. If you've got an  
3 asset that is even close to being ready to sell,  
4 you're going to try to sell it.

5 So that sort of turns to where we head  
6 in the future. Just a couple of comments on what  
7 we're seeing in the future.

8 In the June quarter, I told you last  
9 time we were able to put a new set of evaluations  
10 on the PRIM P&L statement. We had a very strong  
11 quarter, the strongest we've had in more than a  
12 year, that June quarter.

13 I think this September quarter, we'll  
14 get to add that shortly, we'll add another very  
15 strong quarter, probably not quite as strong as  
16 the June quarter, but consistently up in that  
17 annualized 16 percent trend rate, which is very,  
18 very good, right at our 10-year, you know,  
19 average. So again, very strong.

20 But there are some signs, and Sarah  
21 alluded to it, that some of that, I would call it  
22 some storm clouds that we need to pay attention  
23 to. The storm may not hit us, but it might.

24 And the things that I worry about  
25 include the credit markets are starting to show

1 some signs of backing up, especially on the highly  
2 levered credit. Sarah mentioned and Chuck  
3 mentioned high yield starting to back up. We're  
4 seeing signs of weakness.

5 As you guys know, that's really the gear  
6 that drives a lot of private equity, that levered  
7 end of the credit market. And if that backs up in  
8 a significant way, you'll see these companies that  
9 were for sale suddenly not be for sale because the  
10 pricing will probably back up.

11 And the second thing I'd say is that the  
12 inventory that we have of those older companies,  
13 we're starting to see signs that we're going to  
14 run out of some of that inventory. So that gift  
15 that we have sort of as a pension may stop giving  
16 because we're just at the end of our -- we've sold  
17 all the inventory that we have.

18 So with those two sort of cautionary  
19 notes, I would say that we'll have our strongest  
20 quarter. We already know how much cash we got  
21 this quarter because the checking account can  
22 reflect that. We had a very strong amount of  
23 distributions this quarter again, similar to  
24 second quarter.

25 So all signs are very positive, but I

1 would say that we need to watch for a potentially  
2 developing trend of some signs of this cooling  
3 off.

4 And then last, I'd say that, as you  
5 know, on page 12 of your handouts, 11 and 12, the  
6 long-term performance stays up at about that  
7 13 percent range. Exposures drifted up into about  
8 11.3 percent range. When the denominator shrinks,  
9 the numerator stays pretty constant, so we saw a  
10 little backup there, but nothing to worry about.

11 And with your approvals, we added about  
12 a billion dollars in new commitments this year.  
13 With this new voting item, with your approval,  
14 that number would go up to 1.1 billion.

15 And I would say we have a pretty solid  
16 pipeline of investments for that December meeting  
17 with you all that would push us up to about  
18 1.5 billion, a little shy of the 1.7 billion that  
19 we had planned for in 2015.

20 But again, the team's working really  
21 hard to build on Eric's point. We're screening  
22 these opportunities very carefully. Diligencing  
23 them very carefully.

24 One statistic I think about is of the  
25 30 firms who came back to us from the portfolio

1 over the last one-year period, we said yes to  
2 15 firms. So I think that's a sign that we're  
3 being very disciplined and careful, keeping the  
4 bar high and trying to drive this portfolio  
5 performance forward in what I think is going to be  
6 a trickier market environment than we've had the  
7 last three or four years.

8                   So happy to take any questions on the  
9 performance of the portfolio.

10                  TREASURER GOLDBERG: So private equity has  
11 been really critical to us, to our gains. And  
12 that puts added pressure on you obviously.

13                  On the other hand, the fact that you  
14 chose only 15 of the firms that came to you shows  
15 that you're continuing to stay diligent in terms  
16 of your assessment of those firms.

17                  That could continue to get even more  
18 challenging, moving forward. And the allocation  
19 to private equity is kind of important to the  
20 success of our formula. I mean, alternative  
21 investments overall have been very critical and  
22 particularly in a challenging global equities  
23 market.

24                  As you lie awake late at night, thinking  
25 about this, and obviously I'm not asking you to

1 sign anything in blood, how do you see yourself  
2 thinking about it for the next three-year window?

3 MR. BAILEY: Yes. We're just beginning that  
4 work, and Sarah has been great at spearheading the  
5 work here on asset allocation, and we're starting  
6 to have that conversation.

7 TREASURER GOLDBERG: Because really some of  
8 the signs are out there.

9 MR. BAILEY: Yes. I'd say two things. One  
10 thing I think we can all be very proud of is the  
11 team, Michael and Erin and Sarah, and our  
12 reputation has been so great, and the work we've  
13 done is so good that firms really do want us to  
14 invest with them.

15 So I think in terms of the access to  
16 high quality firms, I feel even better about that  
17 than I did when I got here three years ago.

18 And I think the tricky part, Treasurer  
19 Goldberg, is the point you made. We've got to  
20 sort of separate the wheat from the chaff. And it  
21 gets more difficult when there's such a strong  
22 tailwind from these firms' track records. Very,  
23 very strong performance.

24 TREASURER GOLDBERG: You almost have to take  
25 a new snapshot of them.

1                   MR. BAILEY: Well, we have to do some of the  
2 work that we talked to you at the investment  
3 committee a few weeks ago, that we have to really  
4 get underneath -- under the hood, I call it, and  
5 understand what the fundamental drivers of these  
6 performance numbers are and then really evaluate  
7 whether we have a lot of confidence that that was  
8 skill and not luck.

9                   And rising tides, as Warren Buffett  
10 likes to say, or whatever the opposite of that is.  
11 Rising tides lift all boats. And we're in a bit  
12 of that kind of market. So I do worry about that  
13 a bit.

14                   I think, as Michael likes to say, I  
15 think we need to find firms that are careful and  
16 disciplined in these frothy markets. And a lot of  
17 the work we've been doing, and Michael alluded to  
18 it, is to shift this portfolio a bit to smaller  
19 types of firms, smaller buyout firms, that focus  
20 on smaller type companies, where I think they can  
21 avoid some of the really intense competition up at  
22 the higher end of the market.

23                   And candidly, that's where a lot of  
24 performances come from, so we're probably taking a  
25 little bit of a contrarian view there. I know one

1 pretty large firm like us has decided to go big,  
2 go up market, to the larger firms. We're really  
3 shifting what I call down market or the smaller  
4 firms.

5 And so our thoughts are we're going to  
6 map this out in a way that we can slightly tilt  
7 the portfolio towards the smaller end of the  
8 buyout market. And one of the benefits of that is  
9 I think that if the capital markets do slow down,  
10 those smaller companies still have great  
11 opportunities to thrive and drive the portfolio  
12 forward because their performance, if you think  
13 about it, is just less linked to the global  
14 economy.

15 Small companies generally aren't big  
16 exporters. They're generally more focused on the  
17 local markets, whether they're in Europe or the  
18 U.S., and therefore just aren't as subject to some  
19 of these kind of macro frothiness or late-cycle  
20 trends that Sarah has talked so much about.

21 So we have a lot of work to do, and it's  
22 challenging. But I think our access is very good.  
23 The dialogue we're having with these smaller  
24 buyout funds is very good.

25 We've got a toolkit now that Michael

1           McGirr helped build that really will I think give  
2           us a great chance to succeed in what's going to be  
3           a tougher market.

4           MR. TROTSKY: The other thing that you have  
5           going for you in this regard, you know, we have a  
6           target of 1.7 billion in new private equity  
7           commitments, and I always remind staff that that's  
8           just a target. And I don't really mind if you  
9           come short of that target if you can't identify a  
10          good manager.

11          TREASURER GOLDBERG: Yes. We all believe  
12          that.

13          MR. BAILEY: I appreciate that. I really  
14          think that's one of the benefits --

15          MR. TROTSKY: And the other thing that you  
16          have going for you is you've outlined before that  
17          you have a lot of redemptions in cash flowing back  
18          to the fund. And you're overallocated currently  
19          at 11.3 percent.

20          MR. BAILEY: Right.

21          MR. TROTSKY: So there's a bit of a cushion  
22          in terms of not having to chase bad deals, which  
23          is the worst possible thing you want to do.

24          MR. BAILEY: Well, we have a new tool in the  
25          toolkit that you-all approved, which is this

1 co-investment program. That will give us some  
2 more flexibility to add capital to our best  
3 managers.

4 Managers we've talked to, we've been  
5 talking to a bunch of them the last few weeks,  
6 love this concept. They just love this idea that  
7 they can partner up with us more closely on these  
8 individual investments.

9 So that's giving us another great  
10 calling card out in the market and differentiating  
11 us from some of the other participants out there  
12 in a lot of good ways.

13 So we're excited, but we are a bit  
14 concerned where we're going. Thanks for that  
15 question.

16 TREASURER GOLDBERG: Okay. Very good.

17 MR. HUBBARD: One question. Maybe it's a  
18 two-part question.

19 One is to what extent is this portion of  
20 the portfolio leveraged by the companies that are  
21 in this league?

22 And then second, are there opportunities  
23 for further diversification in it, maybe  
24 geographic, maybe industry, but my sense is -- I  
25 focused on a number of European investments, but

1           that seems to be the focus --

2           MR. BAILEY: So two-part question. On the  
3       leverage question, just so I understand the  
4       question, is the question are the individual fund  
5       managers levering up or --

6           MR. HUBBARD: Yes. I'm asking that because I  
7       know in real estate, we have a leverage program,  
8       and I just don't have a sense to what extent these  
9       companies are utilizing debt.

10          MR. BAILEY: Right. So we've looked pretty  
11       hard at that, and Michael can comment on this.  
12       Michael and Sarah can comment on this.

13          But yes. The companies do in the  
14       buyouts part of the portfolio, which is 80 percent  
15       exposure, generally do use financial leverage at  
16       the time of the acquisition. And they're very  
17       clear about that, very transparent about it.

18          And as I mentioned a few minutes ago,  
19       that's kind of a big driver of their success, so  
20       we can talk about that. So they generally are  
21       levered.

22          Depending on which equity market you  
23       look at, we sort of think of that as being -- as  
24       levered to one and a half times levered as the  
25       broad public equities market. So another 50 cents

1       of debt for every dollar of capital we're  
2       deploying. So we're deploying \$1.50 here in total  
3       capital versus a dollar equivalent in the public  
4       market.

5                 It's interesting. In the smaller  
6       markets, generally some of those companies do have  
7       some leverage in the global market. So it varies  
8       between 1 to 1.5 times.

9                 Your question on diversity is something  
10      we think a lot about. I just spent a week in  
11      China, for example, looking at some private  
12      investments there.

13                 You know, I think that we are going to  
14      need to look at this -- my opinion about this is  
15      less important to understand than the core  
16      portfolio which is in North America and western  
17      Europe.

18                 If you're thinking about geographic  
19      diversity, I think it makes a lot of sense for us  
20      to think about some other markets as being maybe  
21      less efficient or maybe with more capabilities for  
22      a manager to add alpha. That makes perfect sense  
23      to me.

24                 Unfortunately, the evidence, at least  
25      for emerging markets, hasn't been that compelling

1 looking backwards. It doesn't mean it's going to  
2 be true looking forwards, but so far, it hasn't  
3 been that good a driver for alpha, looking  
4 backwards.

5 So we're going to keep looking at that.  
6 We are going to need to keep on tracking that.  
7 But we've got to be conscious that 80 percent of  
8 it's in the U.S. and western Europe.

9 And I want to make sure we're very good  
10 at that. And that's going to continue to be the  
11 largest part of the market. And we're a dollar-  
12 based investor, so we've got to get the money back  
13 in dollars.

14 MR. HUBBARD: Thank you.

15 TREASURER GOLDBERG: Any other questions?

16 In general, we do have a voting item.  
17 Do you want to talk a little about the level --

18 MR. BAILEY: Yes. Michael and Sarah are  
19 going to lead.

20 TREASURER GOLDBERG: Very good.

21 MR. McGIRR: We're making the recommendation  
22 today for a hundred million dollar commitment for  
23 Lovell Minnick Equity Partners IV, which will be  
24 managed by Lovell Minnick Partners. This write-up  
25 is on page 12 of your open materials.

1                    Lovell Minnick would be a new manager  
2                    for us. They're raising between \$550 and  
3                    \$750 million in commitments for their latest  
4                    private equity fund offering, Fund IV.

5                    Lovell Minnick is a sector specialist  
6                    private equity firm focusing on financial and  
7                    related business services. And as Mike had  
8                    mentioned, Lovell Minnick is really investing in  
9                    smaller companies. So this would be in the  
10                  smaller end of our buyout portfolio, where really  
11                  they're targeting companies with enterprise values  
12                  of between 50 and 200 million.

13                  We're recommending the investment in  
14                  Fund IV because we believe that the fund provides  
15                  an attractive risk return profile. The firm and  
16                  the team have a very strong and consistent track  
17                  record.

18                  I would also note they've been one of  
19                  the top performers in some of our independent  
20                  research that we've been conducting over the  
21                  spring and summer. And I think it would be a nice  
22                  compliment to our existing portfolio.

23                  The other comment that I would just make  
24                  is that to Mike's point about assessing skill and  
25                  luck, we have a high level of confidence that

1 Lovell Minnick has demonstrated a considerable  
2 amount of value-add.

3 TREASURER GOLDBERG: Skill. Skill.

4 MS. SAMUELS: Great.

5 And so the reason that I'm at the table  
6 with the private equity team today is that as part  
7 of my role in the rotation program across asset  
8 classes, I worked closely with Michael McGirr on  
9 this investment in underwriting it and really had  
10 the opportunity to get my hands dirty.

11 As Michael noted, Lovell Minnick is  
12 focused on middle market financials. They have  
13 delivered strong results in their previous funds  
14 both in absolute terms and relative to peers.

15 I think one of the interesting things  
16 about working with Michael and Mike on this is  
17 that we brought our different private and public  
18 market perspectives to the same problem that we  
19 were analyzing, which is Lovell Minnick a good  
20 fund for us to invest in? This really led to some  
21 great discussions. This is a very talented team,  
22 and I hope to contribute as much to their team as  
23 I learned from them through this process.

24 So we did incorporate some public market  
25 perspectives into our analysis of Lovell Minnick.

1 Two things that we really focused on. One is we  
2 refined our adjustment for beta, and two is we  
3 looked at performance through economic cycles,  
4 through our economic cycle work that we do in  
5 public markets.

6 So adjusting for beta, we evaluated  
7 public market equivalent returns relative to the  
8 relevant beta in this case, small cap financials.  
9 And we did find value-add, even after adjusting  
10 for this beta, which I think is really encouraging  
11 and supportive of this fund.

12 We also thought about our economic cycle  
13 work, and they have been able to consistently  
14 generate strong results regardless of when they  
15 raised funds and regardless of economic cycle. So  
16 another positive.

17 So based on these attributes and  
18 everything that Michael has discussed, we're  
19 recommending an investment in Lovell Minnick of up  
20 to \$100 million.

21 TREASURER GOLDBERG: Any questions of either  
22 Sarah or Michael? Or Michael?

23 I would like to entertain a motion of an  
24 approval of a capital commitment of 100 million to  
25 Lovell Minnick Equity Partners IV, LP; that the

1 board approve the investment committee's  
2 recommendation of an initial capital commitment of  
3 up to 100 million to Lovell Minnick Equity  
4 Partners IV, LP; and further, to authorize the  
5 executive director to take all actions necessary  
6 to effectuate this vote.

7                  Do I see a motion?

8                  MR. BROUSSEAU: So moved.

9                  TREASURER GOLDBERG: Second?

10                MS. FITCH: Second.

11                TREASURER GOLDBERG: All those in favor?

12                BOARD MEMBERS: Aye.

13                (VOTED: To approve the Investment  
14 Committee's recommendation of an initial  
15 capital commitment of up to \$100 million  
16 to Lovell Minnick Equity Partners IV,  
17 LP; and further, to authorize the  
18 Executive Director to take all actions  
19 necessary to effectuate this vote.)

20                TREASURER GOLDBERG: Thank you very much.

21                MR. BAILEY: Thank you.

22                TREASURER GOLDBERG: Now go make us some  
23 money --

24                MR. BAILEY: Will do.

25                TREASURER GOLDBERG: -- with that.

26                Okay. My favorite conversation. Where  
27 is my field trip this week? People don't believe  
28 it when I tell them.

1                   MR. BROUSSEAU: Where do you want to go?

2                   TREASURER GOLDBERG: Well, I really wanted to  
3                   go to Australia, but you can't get there and back  
4                   in a day. It's a 22-hour flight so it's a little  
5                   bit not easy, Tim, right?

6                   MR. SCHLITZER: It's a long, long trip.  
7                   That's for sure.

8                   TREASURER GOLDBERG: Real estate and  
9                   timberland.

10                  MR. SCHLITZER: Thank you. Good morning.

11                  Real estate starts on page 13 of the  
12                  agenda. I have some comments on markets and  
13                  performance and a brief update, and I'll move on.

14                  I do have a couple of voting items for  
15                  the next meeting, both projects that John is  
16                  leading so I'm looking forward to having him come  
17                  and present those to you.

18                  I'll just note there's additional data  
19                  in Appendix H. I'll speak verbally, but a lot of  
20                  the data that I'll present is in those slides.

21                  Just starting with the commercial real  
22                  estate markets, the markets continue to be pretty  
23                  resilient. I would say that the quality bias that  
24                  has been existing continues in this market, and  
25                  that is certainly driving PRIM's returns, given

1 our high weighting to core real estate.

2 Non-core continues to perform very well,  
3 and I'll touch on that again in a minute.

4 We are seeing strong foreign flows, very  
5 strong equity capital flows in general. Foreign  
6 flows were 10 percent higher -- this is notable --  
7 in the first half of the year than all of last  
8 year.

9 So I think that gives you a good feel  
10 for just how strong that foreign money is coming  
11 into the U.S. There are certainly some reasons to  
12 think that that might slow, but we haven't seen it  
13 yet.

14 I've talked about new supply. New  
15 supply, as of the most recent data point, is  
16 running at 1.3 percent of the stock in the U.S.

17 It's still below the one and a half to  
18 two percent long-term run rate. So that's an  
19 important theme, I think, in this market and a  
20 positive one.

21 Most of the growth is in senior housing,  
22 storage and lodging, where PRIM has a lot less  
23 exposure. We do have exposure to those areas  
24 through REITs, but not on the direct side.

25 I'll note that slow economic growth in

1       the U.S., and this is sort of related, I think, to  
2       the regime work that is being done and how we  
3       think about the world.

4                 The slow economic growth in the U.S. has  
5       actually been pretty good for keeping new supply  
6       down, which has been good for returns.

7                 So high occupancy and low supply are  
8       leading rent growth well above inflation at 3 to  
9       4 percent, driving returns.

10               Lastly, I'll just say that volatility  
11       continues in the REIT market, and given the  
12       generally positive market characteristics that  
13       I've just described, the volatility does seem to  
14       continue to be driven by expected REIT prices.

15               So just on to the portfolio performance,  
16       we are currently overallocated to real estate by  
17       about \$340 million. There's some denominator  
18       effect in there, just given what's been happening  
19       in the public markets and also the fact that we  
20       continue to write up our direct properties through  
21       appraisals.

22               I'll also note that we have about  
23       \$900 million potentially coming back to the fund  
24       through sales through the end of the year. That's  
25       a fairly conservative number, but we are not

1 resting on our laurels, given the overallocation,  
2 but continuing to look for opportunities to  
3 allocate capital.

4 On our performance, total real estate  
5 was up 10.7 percent over the past year. That's  
6 130 basis points above benchmark. Private real  
7 estate really drove this return at 14.7 percent.  
8 That's 200 basis points above benchmark.

9 We've had very strong performance in  
10 non-core. The funds which we invested in over the  
11 last couple of years, really starting in 2011,  
12 with value-added strategies have had great  
13 performance. The number there is 14.4 percent.

14 I'll note that we still have four  
15 direct-invested development projects that are  
16 still in value creation, which are in those  
17 numbers but not really positively impacting  
18 performance at this point.

19 REITs were down 3.1 percent over the  
20 last year, so obviously negative performance. And  
21 that sort of factors in the volatility, but our  
22 managers did outperform by 107 basis points.

23 So let me move on to timber briefly, if  
24 there aren't any real estate questions.

25 On to the markets, housing continues to

1 improve, starts were at 1.1 million for August.  
2 That's down 3 percent month over month, but up  
3 11 percent year to date. Permits are at  
4 1.2 million, up 10 percent year to date.

5 So fairly strong housing growth that  
6 we're starting to continue to see. And you know,  
7 I think it's positive sentiment that's kind of  
8 behind that as we move toward that 1.5 million  
9 that really is the long-term rate.

10 We are seeing a little bit of I guess  
11 shorter term disruption, I'll call it, which is  
12 baked into the relative performance, I'll note.  
13 And Michael said this, that the absolute  
14 performance has been very good, especially versus  
15 other asset classes.

16 China is obviously an important theme  
17 that we've talked about today. Given where  
18 exchange rates are, we've also had very dry  
19 logging conditions which has created sort of a  
20 short-term supply issue in the Pacific northwest.  
21 And then just general slowing and China have  
22 certainly impacted the export business on our  
23 western properties.

24 And I've mentioned this before, but  
25 we're actually starting to see it flow through to

1       the budgets which are reported to us every  
2       quarter. So we're watching that pretty closely.

3               I will say that longer term, I think we  
4       generally feel positive about China from a  
5       timberland perspective. China's demand has really  
6       come primarily from Russia and Canada. And we  
7       think, and I won't get too into the details, but  
8       we think there are some good reasons to believe  
9       that that supply is probably going away over the  
10      next three to five years.

11              I mean, I've mentioned in Canada, the  
12       western pine beetle that has really destroyed a  
13       lot of the supply in that part of the country.  
14       And that demand from Asia going forward and  
15       certainly U.S. housing demand should help  
16       domestically is our expectation.

17              TREASURER GOLDBERG: Did you visit that  
18       Florida -- did you go down to that Florida  
19       meeting?

20              MR. SCHLITZER: We were in Florida for a  
21       timber conference last week.

22              TREASURER GOLDBERG: Right. How did that go?

23              MR. SCHLITZER: It was good. I mean, I think  
24       everybody's trying to be as intellectually honest  
25       about where the markets are right now as possible.

1 There's a lot of tension regarding China and a lot  
2 of nervousness there. And I don't think anybody's  
3 denying that. A lot of bullishness around U.S.  
4 housing as I just said.

5 And there are some outlying issues. I  
6 think that there are some expectations that Indian  
7 demand could increase significantly. You've got a  
8 huge population there. You have almost no timber  
9 whatsoever. So that could be an opportunity for  
10 European forest landowners as well as our current  
11 Australian investment.

12 Brazil, as we've discussed, has a lot of  
13 issues. I think we gained some positive feelings  
14 about the depth of the timber markets, but I think  
15 consensus at least is there are certainly some  
16 issues.

17 TREASURER GOLDBERG: Yes. Right.

18 I think for me the issue with that  
19 presentation that included Brazil was -- the group  
20 that we met with, was its overreliance on Brazil.  
21 I think that Brazil could be part of a portfolio,  
22 but has to be looked at as part of sort of the  
23 risk part of the portfolio.

24 MR. SCHLITZER: Yes. That's a very good  
25 point. I think our assessment of the timberland

1 opportunity is that just based on kind of  
2 valuation and the amount of acreage that's in  
3 Brazil --

4 TREASURER GOLDBERG: Right.

5 MR. SCHLITZER: -- it probably does represent  
6 about a third of the global market opportunity.  
7 We do feel that there is very deep forest  
8 technology there. We think that there are fairly  
9 deep markets in terms of the population.

10 But clearly, they have significant  
11 economic challenges right now. And there are also  
12 some challenges in terms of property rights.

13 TREASURER GOLDBERG: Interesting.

14 MR. SCHLITZER: So I think we've had some  
15 productive conversations about that on the  
16 committee. And we're probably going to steer away  
17 from South America for now but continue to watch  
18 it, as we always do.

19 TREASURER GOLDBERG: Great.

20 Are there any questions for Tim?

21 There are no voting items on this. This  
22 is why I'm asking if you have any other questions.

23 MR. SCHLITZER: I can provide a very brief  
24 update on our transition to AEW if --

25 TREASURER GOLDBERG: Oh, okay. Very good.

1                   MR. SCHLITZER: -- that's appropriate.

2                   So just a reminder that we did approve  
3                   the transfer of about \$1.1 billion in 25 real  
4                   estate assets to AEW at the last meeting. That  
5                   transfer has been completed as of the end of  
6                   September.

7                   Everything went very smoothly. As I had  
8                   mentioned, it's sort of a significant legal and  
9                   operational exercise that we went through and  
10                  didn't have any significant hiccups.

11                  The plan going forward, AEW will manage  
12                  this as a separate account for the next probably  
13                  six to 12 months while we work with them to get  
14                  our arms around the hold/sell decisions. So I'll  
15                  be back to you as that proceeds.

16                  I did want to mention our anticipated  
17                  fee savings on this move. We expect to save about  
18                  \$550,000 a year in fees, an additional \$325,000 in  
19                  insurance. And we're still putting the numbers  
20                  together, but some additional property management  
21                  savings.

22                  So close to a million dollars, which is  
23                  all relative in your budget, but it's something as  
24                  we move forward.

25                  TREASURER GOLDBERG: Every penny counts.

1                   MR. SCHLITZER: So that's all I have. Happy  
2 to answer any additional questions.

3                   Thank you.

4                   TREASURER GOLDBERG: Thank you very much,  
5 Tim.

6                   Finance and administration.

7                   MR. GURTZ: Now on to the exciting part of  
8 the afternoon. Talk about audits.

9                   Good morning, everybody.

10                  We work with KPMG nearly year-round at  
11 this point in time. We've got a good working  
12 relationship with them. We're just about to  
13 embark upon our third quarter real estate  
14 quarterly project with them. They do every  
15 quarter with us.

16                  We're also just kicking off I think  
17 later this week or early next week our hedge fund  
18 audits with them which are going to be done at  
19 year-end this year. That's a new audit for KPMG  
20 with our new managed accounts program. We own  
21 those entities so we're going to be coordinating  
22 and running the audits for those new entities.

23                  But today, I'm here for the June 30,  
24 2015 PRIT/PRIM audits as well as a couple of the  
25 agreed-upon procedures that we do. KPMG joined us

1 at the admin and audit committee meeting two weeks  
2 ago. Dave Gagnon is our partner; Sandy Bakaysa is  
3 our senior manager. And they presented the report  
4 that is attached at Appendix I.

5 I'm certainly not going to go through  
6 that for you. I'm just going to give you the high  
7 level. The bottom line is we have clean opinions,  
8 which quite honestly, knock on wood, that goes to  
9 the strength of our accounting team upstairs that  
10 makes the audits relatively routine for us.  
11 Audits take a lot of time and effort by KPMG as  
12 well as our staff, but because of our internal  
13 controls, our staff, our documentation, audits  
14 here are very routine.

15 And I want to make sure that that comes  
16 across strongly today, that if audits don't go  
17 routinely, that's a huge problem for a board, but  
18 they are very routine here at PRIM.

19 Like I said, no audit findings. Clean  
20 opinions. So Appendix J and K are the PRIM/PRIT  
21 audits.

22 KPMG also gave clean opinions, if you  
23 will, for our agreed-upon procedures. We do two  
24 agreed-upon procedures. One is on our procurement  
25 of services, and the other is on our benchmarks.

1                   So the procurement one is more  
2 important, quite honestly, and that is to ensure  
3 that we have good controls in place to make sure  
4 that our procurements of investment services,  
5 investment managers, consultants, auditors,  
6 custodians, pretty much all of our main service  
7 providers that we procure, are done in an open,  
8 fair and competitive process.

9                   And the controls that are in place are  
10 reviewed by KPMG to make sure that what we say we  
11 do, is done. And again, no findings by KPMG.

12                  The nice thing about KPMG is we work  
13 with them year-round so we have constant dialogue  
14 year-round about upcoming and emerging issues.  
15 One of the upcoming emerging issues this year is  
16 going to be a new GASB standard that increases the  
17 disclosure around the fair value of investments.

18                  So the financial report in Attachment J  
19 is the PRIT financials. There will be probably  
20 three or four more pages of footnotes next year  
21 relating to fair value disclosures. We're  
22 currently doing some of those disclosures on our  
23 real estate and hedge fund portfolios, but the  
24 complexity and depth of that for the entire PRIT  
25 fund will be for next year's purposes.

1                   KPMG does bring best practices to us as  
2 they do their audits throughout the year. They  
3 made one observation that is noted in Attachment I  
4 regarding a SOC 1 report by our custodian bank.  
5 We have internalized their observation.

6                   We have daily contact with BNY Mellon,  
7 but we have a formal monthly meeting with BNY  
8 Mellon here in this boardroom. And during those  
9 board meetings, we talk about upcoming changes to  
10 the portfolio, any changes that we're going to be  
11 implementing, changes to the benchmark, personnel  
12 changes, et cetera.

13                  And so one of the things that came about  
14 as part of the observation was these SOC 1  
15 reports, which is the internal control documents  
16 of BNY Mellon Bank, should be regularly reviewed  
17 at these monthly meetings. And so that's  
18 something we're going to be doing to ensure that  
19 the controls at BNY Mellon are sufficient for our  
20 purposes.

21                  So again, that's the type of  
22 relationship we have with KPMG is to make sure  
23 that the feedback they provide to us is relevant  
24 and good and that we implement it.

25                  So happy to answer questions, but I just

1        wanted to give you a high-level overview of the  
2        process.

3                 And specifically I wanted to say thank  
4        you to Qingmei, who I think is sitting in the back  
5        there. She is the one that puts the financial  
6        statements together. She is the point person with  
7        KPMG, and she does a fantastic job of working with  
8        them.

9                 MS. FITCH: I just want to confirm that  
10      Mellon has agreed to that.

11                MR. GURTZ: Absolutely.

12                MS. FITCH: I know we requested it, but I  
13      didn't see that they agreed.

14                MR. GURTZ: Yes. They are happy to talk  
15      about it. They are happy to talk through their  
16      SOC 1 report at these meetings.

17                And quite honestly, I think it's best  
18      practices. I think we're -- it's the best way to  
19      ensure that their local team is on top of what the  
20      SOC 1 reports, as well as PRIM staff knows what's  
21      in the SOC 1 reports.

22                MS. McGOLDRICK: Is this finding more a  
23      reflection of BNY Mellon?

24                MR. GURTZ: All custodians and large service  
25      providers provide these SOC 1 reports. A lot of

1 payroll firms do this. So they are routine in  
2 nature. What's not routine is, I think, the level  
3 of documentation and review of them at a local  
4 level.

5 MR. BROUSSEAU: Two points. I think they  
6 told us with the new GASB regulations with fair  
7 value coming, probably going to need the addition  
8 of another staff person, at least one, in the  
9 administration of this, that we will need.

10 And as for the board's knowledge also,  
11 at the end of the meeting, it is traditional that  
12 we ask the staff, everybody on staff, to leave the  
13 room. And the committee sits down with the  
14 auditor at KPMG, and maybe we have 15 or  
15 20 minutes. And it's to discuss any issues.

16 And I can tell you there were no issues.  
17 The big thing in terms of the GASB regs is the big  
18 F word, fraud. And they like to bring up those  
19 issues. If anybody's aware of anything.

20 But especially of things that we have to  
21 look forward to. But it's a meeting that I think  
22 is a very -- it's a good meeting without staff  
23 present. And there's nothing -- staff could have  
24 sat in on it, actually. It's customary that we do  
25 that. And I think it's good so we can get -- as

1           an audit committee, we are really --

2           TREASURER GOLDBERG: But we did talk about,  
3 because I raised it, both in the portion of the  
4 meeting with staff and then again, was the issue  
5 of being pretty lean.

6           And they did feel that we needed to be  
7 considering expanding our staffing levels in that  
8 area. And it's another thing that Michael and I  
9 have talked about, and David, I think that you  
10 would probably nod your head also.

11          MR. GURTZ: Yes. Clearly.

12          TREASURER GOLDBERG: So I think that's  
13 something that's a goal for this coming year.

14          Now, the acceptance of the PRIM and PRIT  
15 financial statements and agreed-upon procedures is  
16 a voting item.

17          And so before I seek a motion, is there  
18 any other question about that for David?

19          Okay. Then I would seek a motion for  
20 the acceptance of the fiscal year 2015 PRIM and  
21 PRIT financial statements and the agreed-upon  
22 procedures report on PRIM's procurement process  
23 for investment management and other professional  
24 services and the PRIT fund benchmark calculations,  
25 that the board approve the administration and

1 audit committee's recommendation to accept the  
2 fiscal year 2015 PRIM and PRIT financial  
3 statements and the agreed-upon procedures reports  
4 on PRIM's procurement process for investment  
5 management and other professional services and the  
6 PRIT fund benchmark calculations; and further, to  
7 authorize the executive director to take all  
8 actions necessary to effectuate this vote.

9                   Do I hear a motion?

10                  MR. HEFFERNAN: So moved.

11                  TREASURER GOLDBERG: And a second?

12                  MR. HUBBARD: Second.

13                  TREASURER GOLDBERG: All those in favor?

14                  BOARD MEMBERS: Aye.

15                  (VOTED: To approve the Administration  
16                  and Audit Committee's recommendation to  
17                  accept the fiscal year 2015 PRIM and  
18                  PRIT financial statements and the  
19                  agreed-upon procedures reports on PRIM's  
20                  procurement process for investment  
21                  management and other professional  
22                  services and the PRIT Fund benchmark  
23                  calculations; and further, to authorize  
24                  the Executive Director to take all  
25                  actions necessary to effectuate this  
vote.)

22                  TREASURER GOLDBERG: Okay. Very good.

23                  And now we have the proxy voting update  
24                  and the ISS contract extension.

25                  MR. GURTZ: That's right. So we're going to

1       be looking at Appendix L, and I'm going to invite  
2       up Ellen Hennessy, who's going to join me. She is  
3       PRIM's compliance analyst.

4                  And she's going to update the board on  
5       PRIM's proxy voting results. Ellen is going to  
6       provide an overview of how PRIM voted and how the  
7       votes have changed this year because of the new  
8       proxy voting guidelines that we implemented  
9       earlier this year back in March -- or back in  
10      April, I should say.

11                 So with that, looking at again  
12      Appendix L. Ellen.

13                 MS. HENNESSY: I just wanted to highlight the  
14      key takeaways from the 2015 proxy season.

15                 There were four key takeaways, including  
16      proxy access, which gained momentum amid increased  
17      security of the boards, but opposition to director  
18      nominees remains low.

19                 Secondly, company investor engagement is  
20      now mainstream and continuing to evolve. And with  
21      this, the focus is on quality over quantity.

22                 Activist hedge fund utilization of proxy  
23      ballot persists, and shareholder proposal  
24      submissions remains high. And that's driven  
25      largely by environmental and social topics.

1                   And if you go to the next -- your page,  
2 this is just really a reminder of the changes that  
3 we made to the 2015 policy, specifically with  
4 regards to more diversity and [inaudible] a number  
5 of environmental and social issues. So I won't go  
6 through all of those for you.

7                   And then just to highlight the impact of  
8 the changes that we made and specifically with the  
9 May to June proxy votes. That was the bulk of the  
10 time.

11                  MR. TROTSKY: Page 3?

12                  MS. HENNESSY: Yes.

13                  With regards to board diversity, we  
14 voted against management 67.4 percent of the time  
15 within the new policy. And that was over a  
16 50 percent increase of how we hypothetically would  
17 have voted, had we not made the changes.

18                  And then linking executive compensation  
19 to nonfinancial factors. That resulted in  
20 100 percent change in the way PRIM voted.

21                  So those are the ones that I'm going to  
22 highlight for you.

23                  MR. GURTZ: So clearly meaningful changes  
24 this year that have played out as part of our  
25 proxy voting.

1                   TREASURER GOLDBERG: And I've said it to some  
2 individuals, but I haven't said it at a full board  
3 meeting, that again, when I was attending the  
4 corporate governance think tank international  
5 event, the data and the research was incredibly  
6 supportive of all of these efforts having a basis  
7 in business principles on greater profitability  
8 for the companies and being better investments.

9                   In particular, the data on board  
10 diversity was really outstanding. And McKinsey is  
11 updating that data quarterly.

12                  And the -- when I tell you that the  
13 chairman of Bloomberg, the chairman of MasterCard  
14 International and others were at that table  
15 supporting all the concepts around corporate  
16 governance, which include all of these issues that  
17 we are voting on here, our being at the forefront  
18 of these kind of proxy voting guidelines is seen  
19 as commendable and based on business principles.

20                  So the data is clear. We're going to  
21 continue looking at these. And that leads me into  
22 your recommendation.

23                  MS. McGOLDRICK: Can I just add one quick  
24 comment? [inaudible] activist forum, and the  
25 president of SEIU actually spoke, and I was able

1 to attend. And it was all about the data that you  
2 speak of.

3 TREASURER GOLDBERG: Right.

4 MS. McGOLDRICK: They had the treasurer of  
5 North Carolina on a panel along with the president  
6 of SEIU. And she spoke about how the numbers are  
7 backing up all the moves that we've made.

8 And I'm just really proud that PRIM is a  
9 leader in that movement, and it's paying off in  
10 these returns, as well as being the right thing to  
11 do.

12 TREASURER GOLDBERG: So --

13 MR. BROUSSEAU: David, I'd like to ask Ellen  
14 about an issue that has come up in the top of my  
15 head. It's not here at all. You get into energy.

16 Has there been any moves by some of  
17 these [inaudible] to push divestment in the proxy  
18 voting issues and policies?

19 MR. GURTZ: Not --

20 MR. BROUSSEAU: Not yet.

21 MR. GURTZ: Not in proxy voting. That's sort  
22 of two different viewpoints -- if you divest, you  
23 can't vote proxies. So I think most people that  
24 support proxy voting are supporting engagement of  
25 management. You want to retain your votes in

1           order to engage.

2           MS. HENNESSY: And increasing reporting as  
3           well.

4           MR. GURTZ: That's right.

5           TREASURER GOLDBERG: Well, and we added  
6           things to our proxy voting guidelines in regard to  
7           that. And part of corporate governance is -- and  
8           even Ceres, who is on the leading edge of  
9           acceptance of climate change and how you go about  
10          impacting it in a positive sense, really looks for  
11          engagement at the annual meetings.

12           They had Beth Pearce attend them last  
13          year. They've talked to me about us going to  
14          annual meetings and getting companies to write  
15          down their declining assets off their books and  
16          have a more realistic approach.

17           Initially when I looked at proxy voting  
18          guidelines, I was concerned that they wouldn't  
19          necessarily have the impact that you would want  
20          them to. But they actually are.

21           And that's what I'm finding exciting is  
22          that if you can collaborate, if you take our  
23          \$60 billion fund and you collaborate, and one of  
24          the people that I've met with to talk to is  
25          CalSTRS, and you start adding -- those are very

1       big customers. Those are your customers. That's  
2       a lot of money, billions and billions of dollars  
3       that can vote on your funds, on your company. And  
4       so there is value to all of that.

5                 Of course I encourage individuals in  
6       their own personal lives to do things that they  
7       would want to do, but we're a fiduciary too, so we  
8       have to strike a balance.

9                 MR. BROUSSEAU: That's the key. Fiduciary  
10      duty.

11                MR. GURTZ: So the voting today, the voting  
12      item, is to extend ISS's contract.

13                But before I do that, I want to jump to  
14      page 5 of this presentation. It really explains  
15      one of the reasons why I wanted to extend ISS's  
16      contract for one additional year. And that's the  
17      timeline of events when it comes to defining and  
18      updating our proxy voting guidelines.

19                Currently and historically, I should  
20      say, we've looked at guidelines at the March admin  
21      committee cycle, and then the April board would  
22      vote them.

23                Proxy voting seasons typically start in  
24      March and go through June. So we're missing a  
25      good chunk of votes that take place in March and

1           early April with this historical timeline.

2           What I'd like to do is move that cycle  
3        up one cycle so at the January admin and audit  
4        committee meeting, we talk about updating our  
5        proxy voting guidelines.

6           And then the February board would then  
7        approve that and make any adjustments and  
8        implement that change. And therefore, those  
9        guidelines are then ready to go as soon as the  
10      March season takes place.

11         So that's the improved timeline I'd like  
12      to start implementing.

13         Now, with that said, in order to do  
14      that, we need to retain ISS or at least extend  
15      them for one additional year.

16         I think we've had a terrific working  
17      relationship with ISS. There's very few global  
18      proxy service providers out in the market. ISS is  
19      clearly one of the leaders, if not the leader, in  
20      the industry in this space.

21         And given this updated timeline where we  
22      need to do this sooner than later, I'd like to  
23      extend ISS's contract by one additional year  
24      through the calendar year of 2016.

25         TREASURER GOLDBERG: I'd like to make a

1 comment about working with ISS. Incredibly good  
2 data. Very responsive, cutting edge and highly  
3 regarded throughout the whole country.

4 Again, when I was in DC, people felt  
5 that ISS is really the people who know the most  
6 about this. And they are giving a lot of advice  
7 to endowments, pension funds, private investors.  
8 They have it all right at their fingertips.

9 When you're saying, well, if we did  
10 this, what would that mean? How many people? How  
11 many of our investments would that impact? What's  
12 CalSTRS doing? What's this one doing? How do we  
13 compare with other like pension funds?

14 They know it. And so with that in  
15 mind -- and there's no cost. It's at the same  
16 cost.

17 MR. GURTZ: Same cost.

18 TREASURER GOLDBERG: Same contract cost. No  
19 increase. I want to make sure we mention that.  
20 Project SAVE, Tim.

21 MR. TROTSKY: He wants a discount.

22 TREASURER GOLDBERG: And next year, when we  
23 re-sign them, we want them to discount because I'm  
24 such good word of mouth for them. I'm doing their  
25 marketing for them.

1                   I just find -- my staff and the staff  
2 here find them extremely good to work with them  
3 and high quality and highly regarded, which is  
4 also important. If we're going to take positions  
5 that are noticed and get others to work with us,  
6 we need to have a lot of third-party people who  
7 are validating that what we are doing is based on  
8 business fundamentals, which it is, but we want to  
9 make sure there are third parties, consultants and  
10 outside people.

11                  So this is a voting item.

12                  MR. TROTSKY: The last one too, right?

13                  TREASURER GOLDBERG: Are there any additional  
14 questions on this?

15                  Given that, I will entertain a motion  
16 for approval of the Institutional Shareholder  
17 Services contract extension, that the board  
18 approve a one- year contract extension for  
19 Institutional Shareholder Services under the  
20 current contract terms, and further to authorize  
21 the executive director to take all actions  
22 necessary to effectuate this vote.

23                  Is there a motion?

24                  MR. BROUSSEAU: So moved.

25                  TREASURER GOLDBERG: Second?

1 MS. McGOLDRICK: Second.

2 TREASURER GOLDBERG: All those in favor?

3 BOARD MEMBERS: Aye.

4 MR. GURTZ: Great. So my next topic is the  
5 proposed PRIM Board and committee meeting dates.  
6 It's at Appendix M.

7 This is the proposed dates, and we know  
8 of a few already that are challenges. The June  
9 board meeting conflicts with MACRS. So that is  
10 probably going to be moved. But this is a  
11 starting point.

12 If you have any conflicts, please let  
13 Amaran know. And we're going to work with  
14 everyone's schedules. We'll try to make sure  
15 everybody can attend everything.

16 And at the next admin committee and then  
17 the December 4 meeting, we'll bring back the  
18 calendar for your approval.

19 So this is just informational purposes.  
20 If you have any conflicts, please let Amaran know  
21 by November 6, please.

22 TREASURER GOLDBERG: Yes. And we're working  
23 on that.

24 MR. GURTZ: Yes. That's all I have.

25 MR. SHANLEY: Thank you.

1 TREASURER GOLDBERG: Very good.

2 MR. BROUSSEAU: Just a reminder for Paul,  
3 hope everybody has November 5 in their calendar  
4 for the client conference at Holy Cross.

5 MR. TODISCO: And many board members have  
6 already signed up, registered for the conference,  
7 and committee members. And the more, the merrier,  
8 please. Please attend.

9 TREASURER GOLDBERG: I would seek a motion to  
10 adjourn the meeting.

11 MR. BROUSSEAU: So moved.

12 TREASURER GOLDBERG: Second?

13 MS. FITCH: Second.

14 TREASURER GOLDBERG: All those in favor?

15 BOARD MEMBERS: Aye.

16 TREASURER GOLDBERG: Thank you, everybody.

17 (VOTED: That the PRIM Board approve the  
18 adjournment of the October 13, 2015  
board meeting at 11:59 a.m.)

19

20

21

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25



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix B

Callan PRIT Fund Performance Report Color Charts

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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# Callan

Commonwealth of Massachusetts Pension  
Reserves Investment Management Board

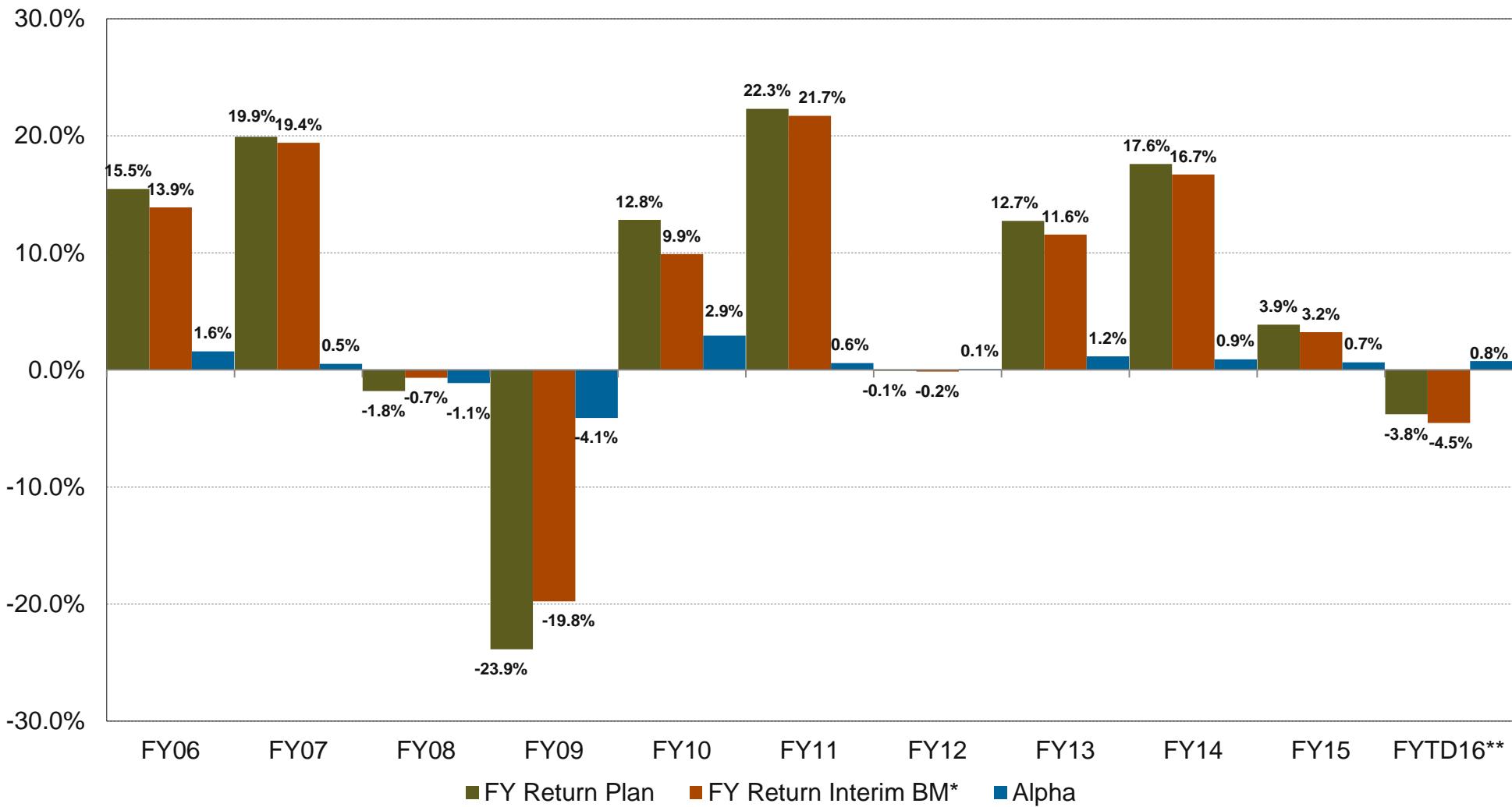


## **PRIT Fund Performance Report**

Gross of Fees for Period ending  
September 30, 2015

# Total PRIT Fund Fiscal Year Performance

## Gross of Fees

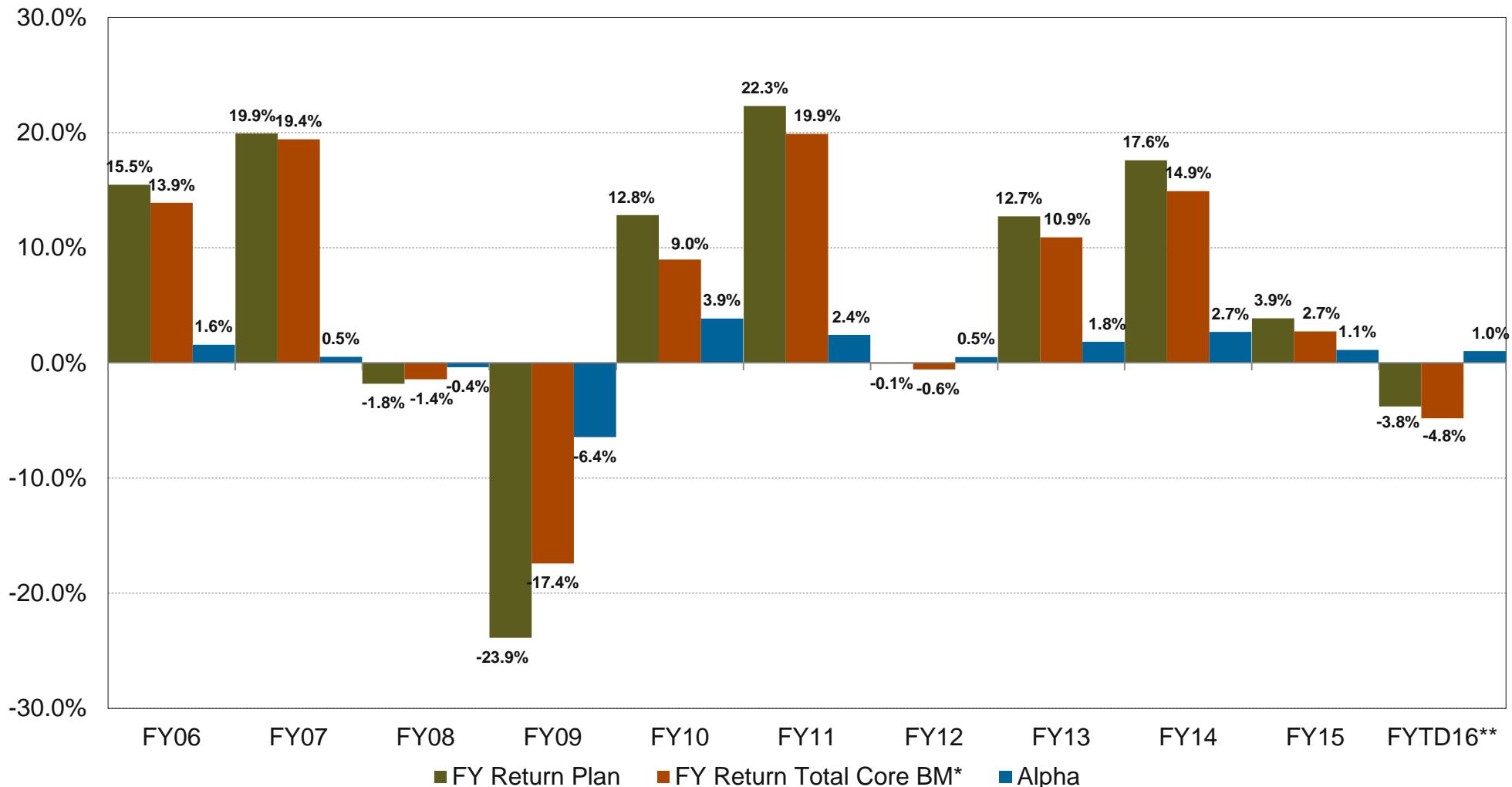


\*Excludes Private Equity Benchmark

\*\*As of September 30, 2015

# Total PRIT Fund Fiscal Year Performance

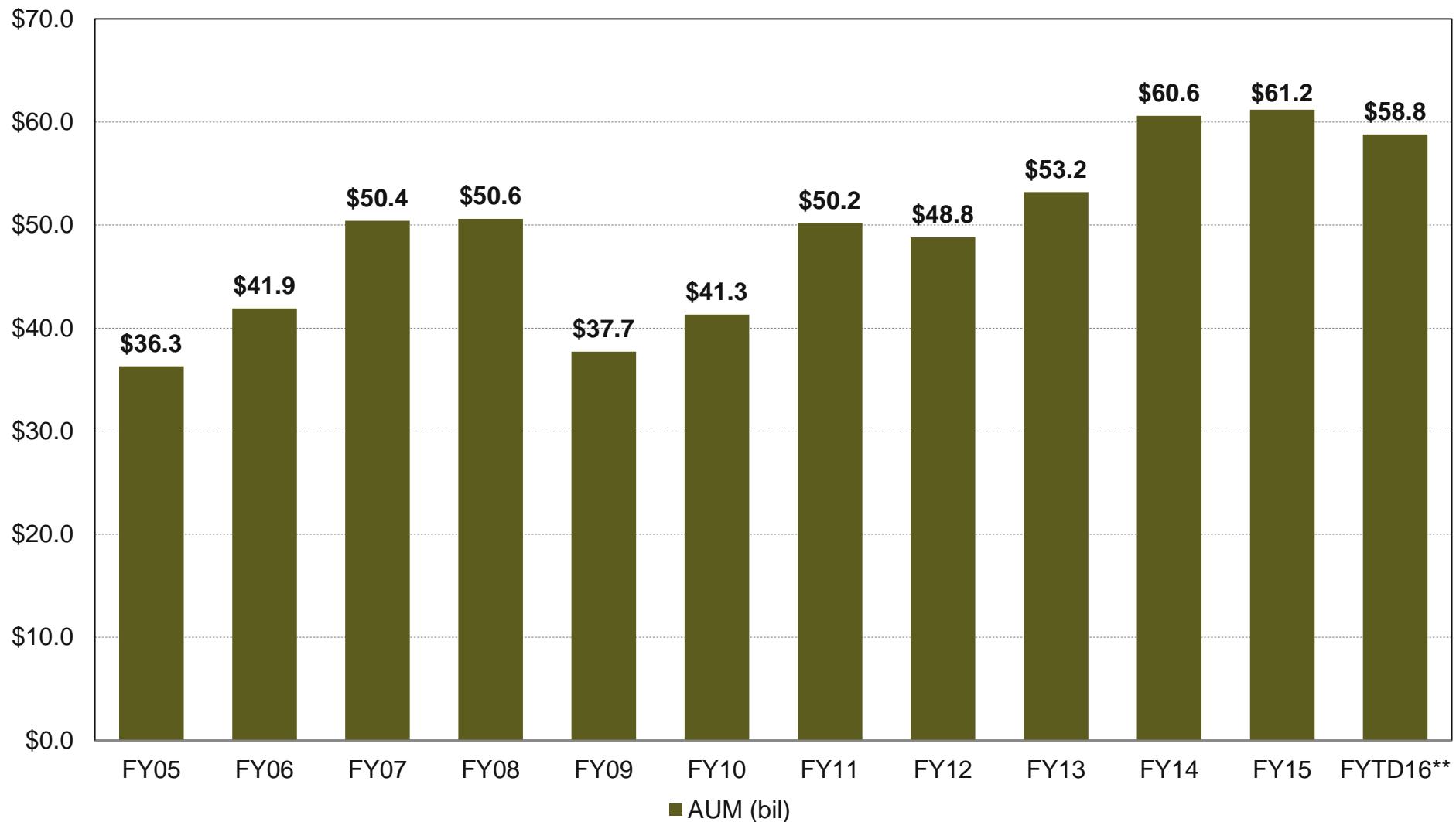
## Gross of Fees



\*Includes Private Equity Benchmark

\*\*As of September 30, 2015

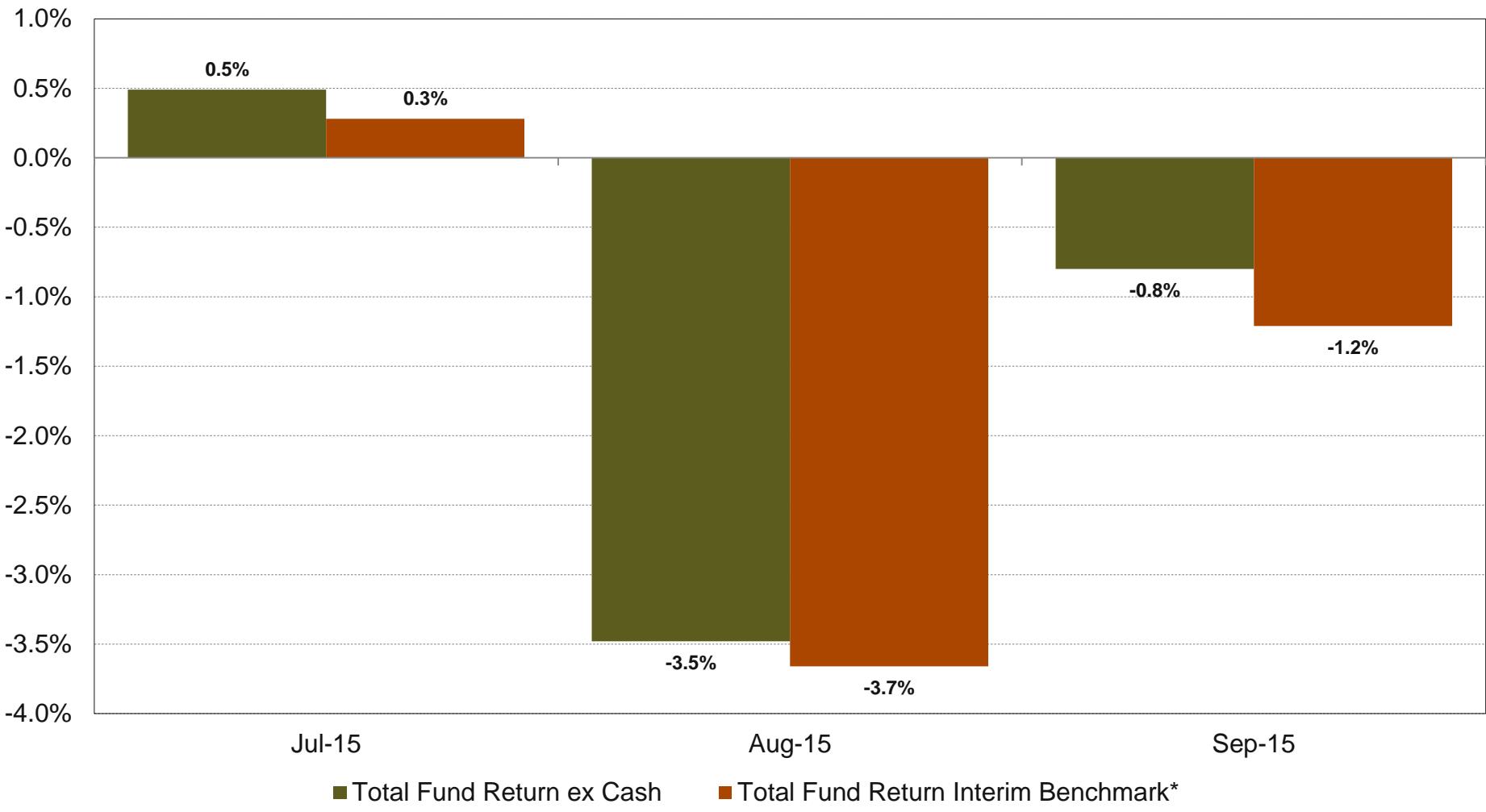
# Total PRIT Fund Fiscal Year Market Value (\$Billions)



*\*\*As of September 30, 2015*

# Total PRIT Fund Monthly Performance FYTD16

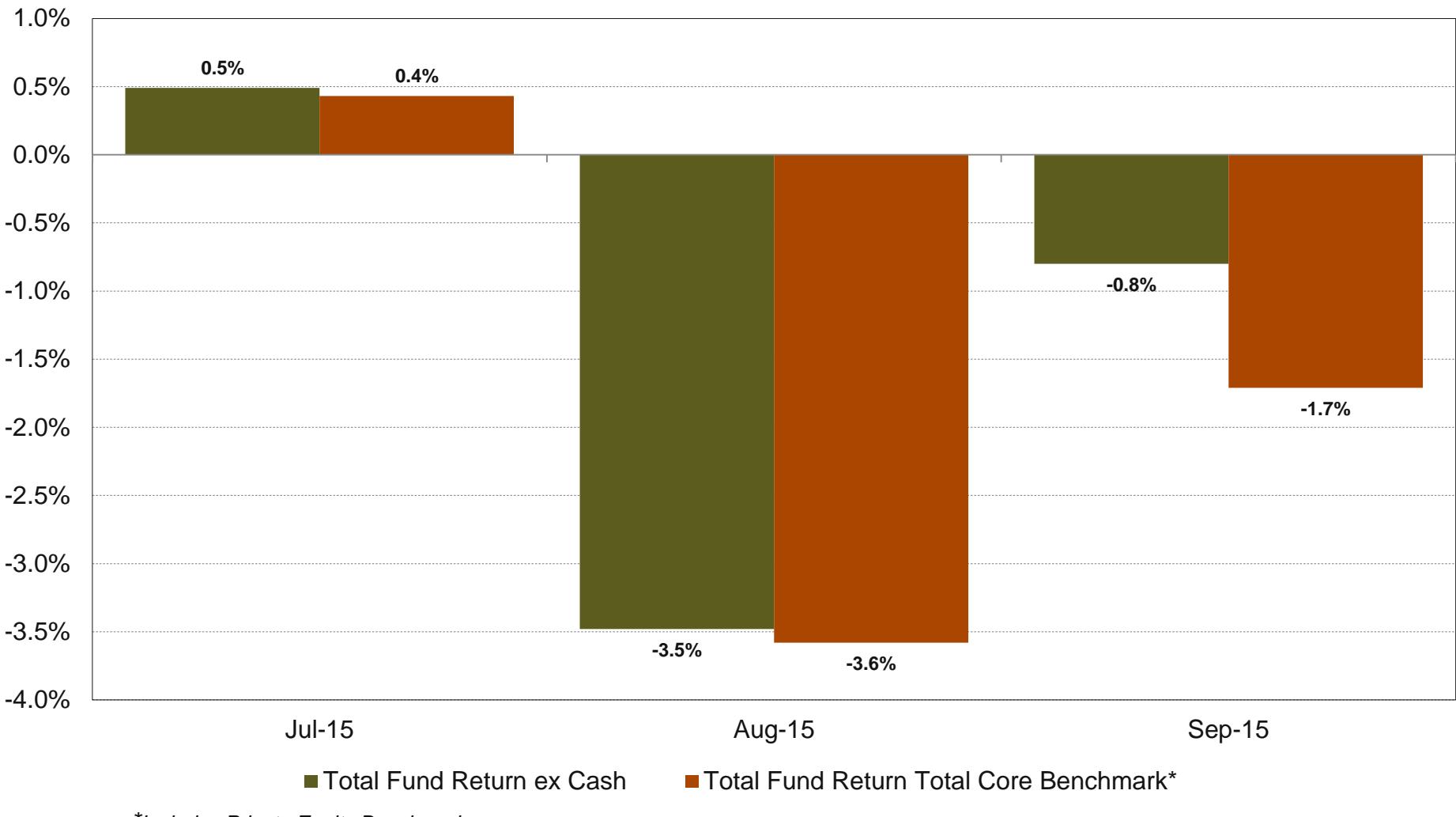
Gross of Fees



\*Excludes Private Equity Benchmark

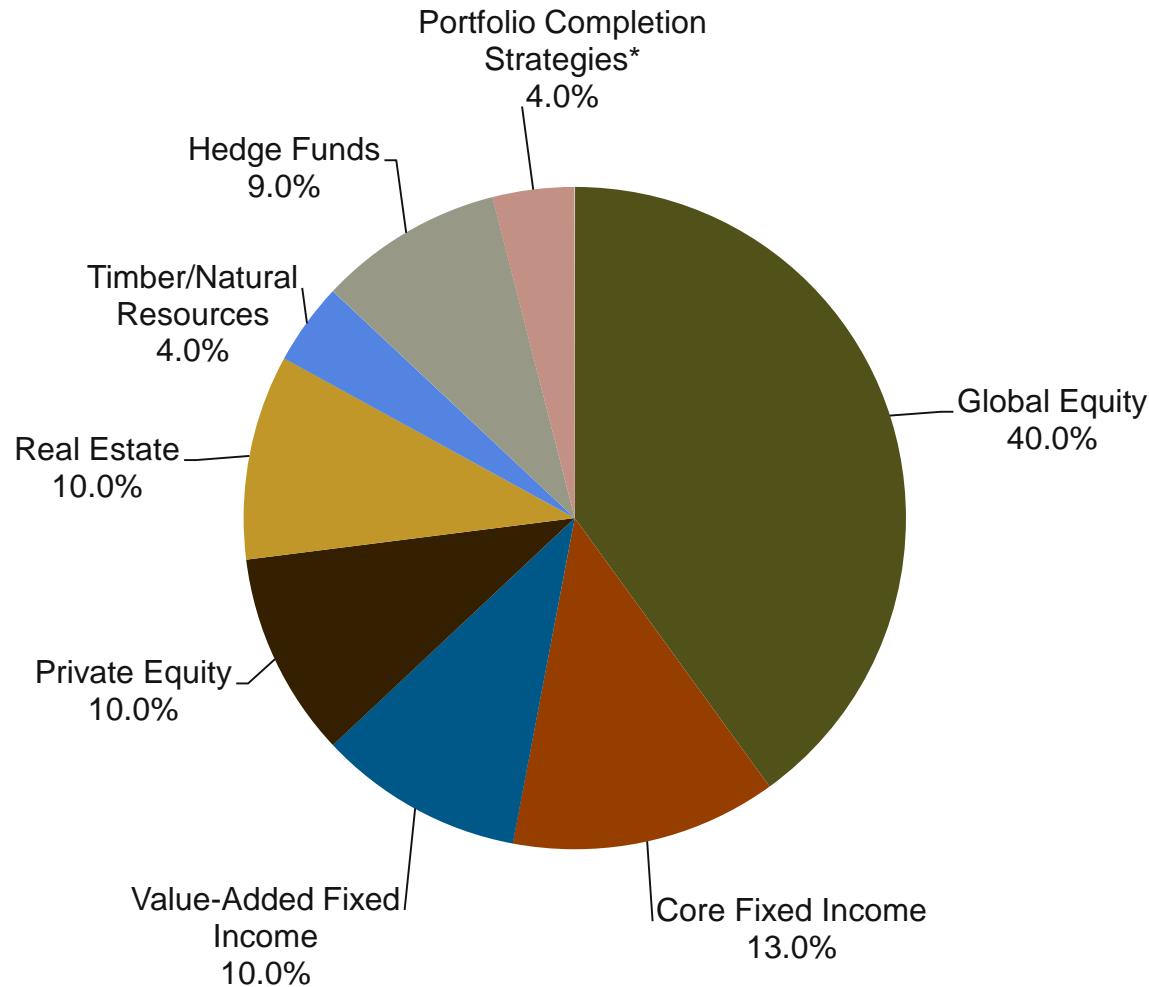
# Total PRIT Fund Monthly Performance FYTD16

Gross of Fees



# PRIT Fund Asset Allocation

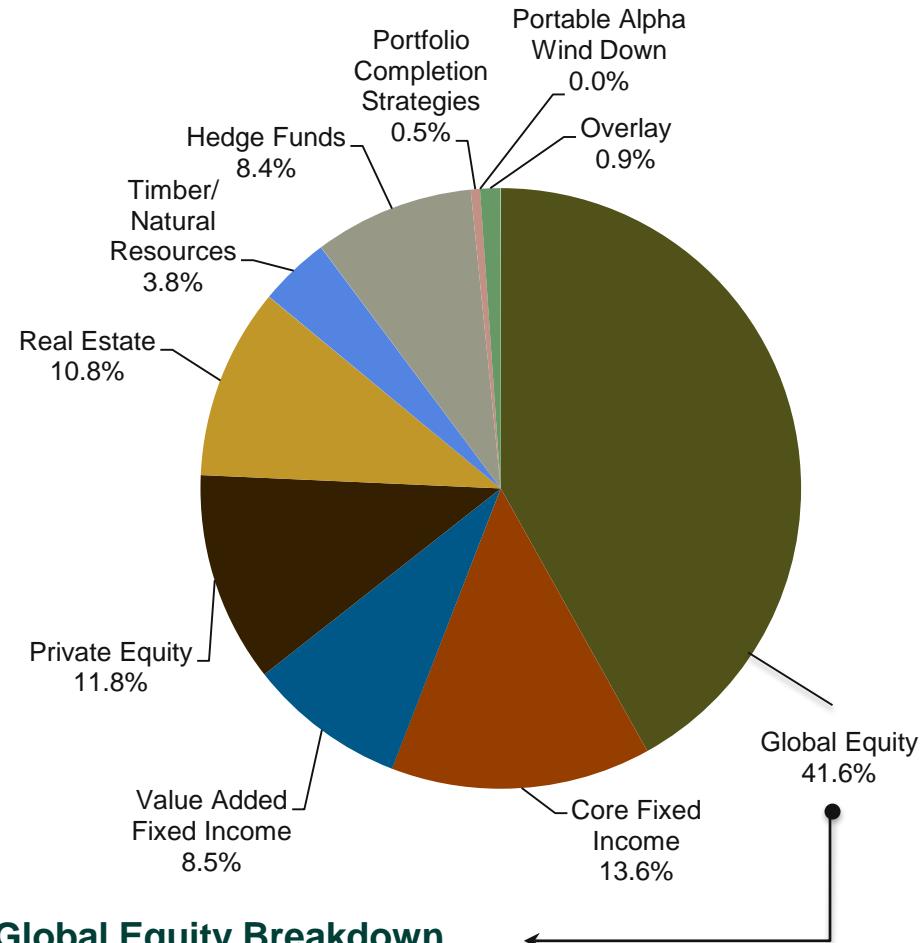
## Long-Term Asset Allocation Targets



\*Portfolio Completion Strategies (PCS) to be funded from Global Equities and Hedge Funds as new PCS investment strategies are recommended by PRIM Staff and approved by the Board.

# PRIT Fund Asset Allocation

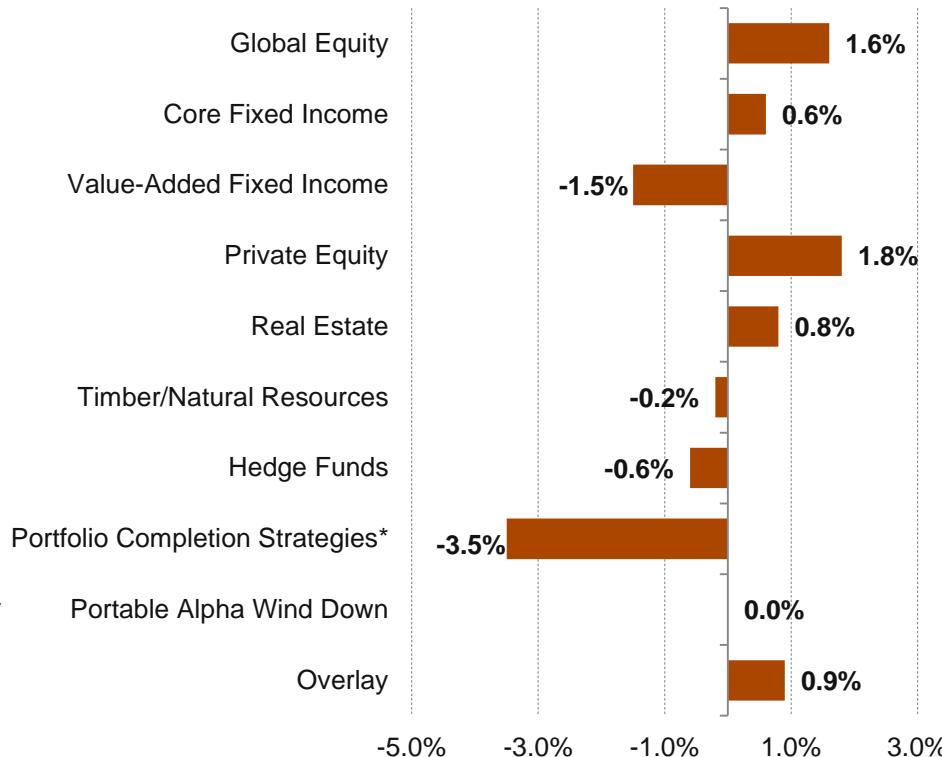
Actual Allocation as of September 30, 2015



## Global Equity Breakdown

Domestic Equity	18.6%
International Equity	16.2%
Emerging Markets Equity	6.8%

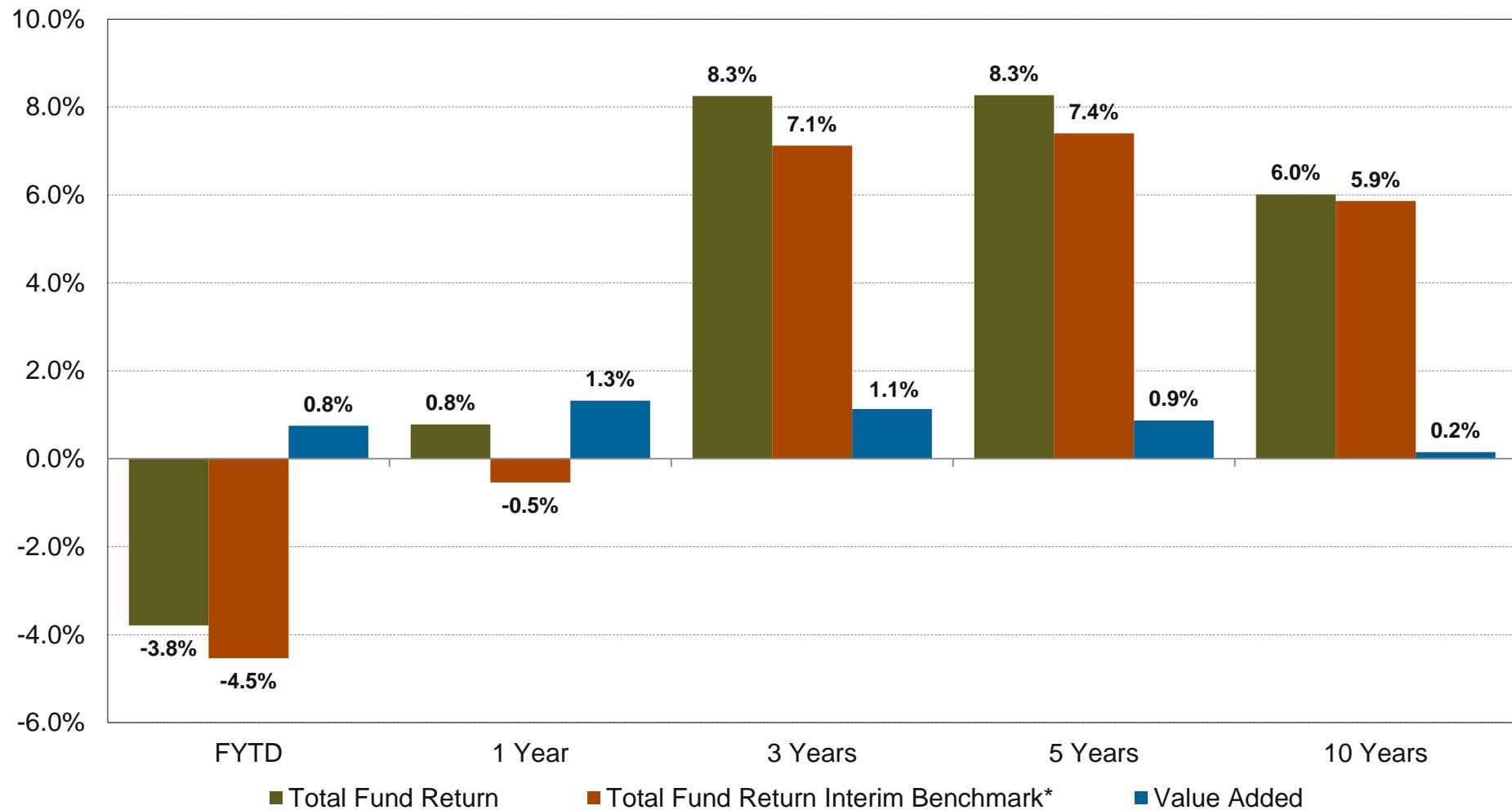
## Actual Allocation vs. Target Allocation



\*Portfolio Completion Strategies (PCS) to be funded from Global Equities and Hedge Funds as new PCS investment strategies are recommended by PRIM Staff and approved by the Board.

# Total PRIT Fund Performance (\$58.8 Billion in Assets)

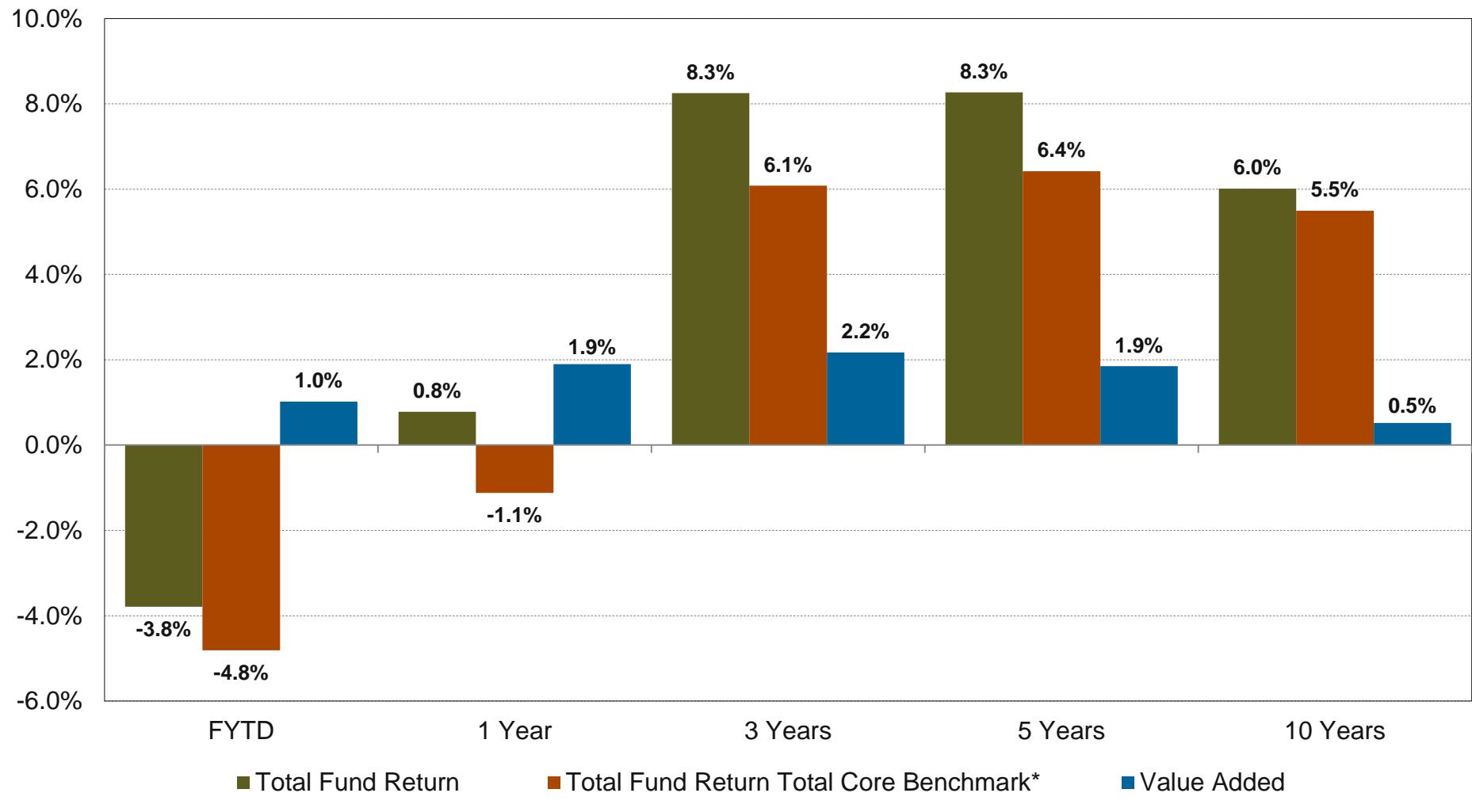
Gross of Fees as of September 30, 2015



\*Excludes Private Equity Benchmark

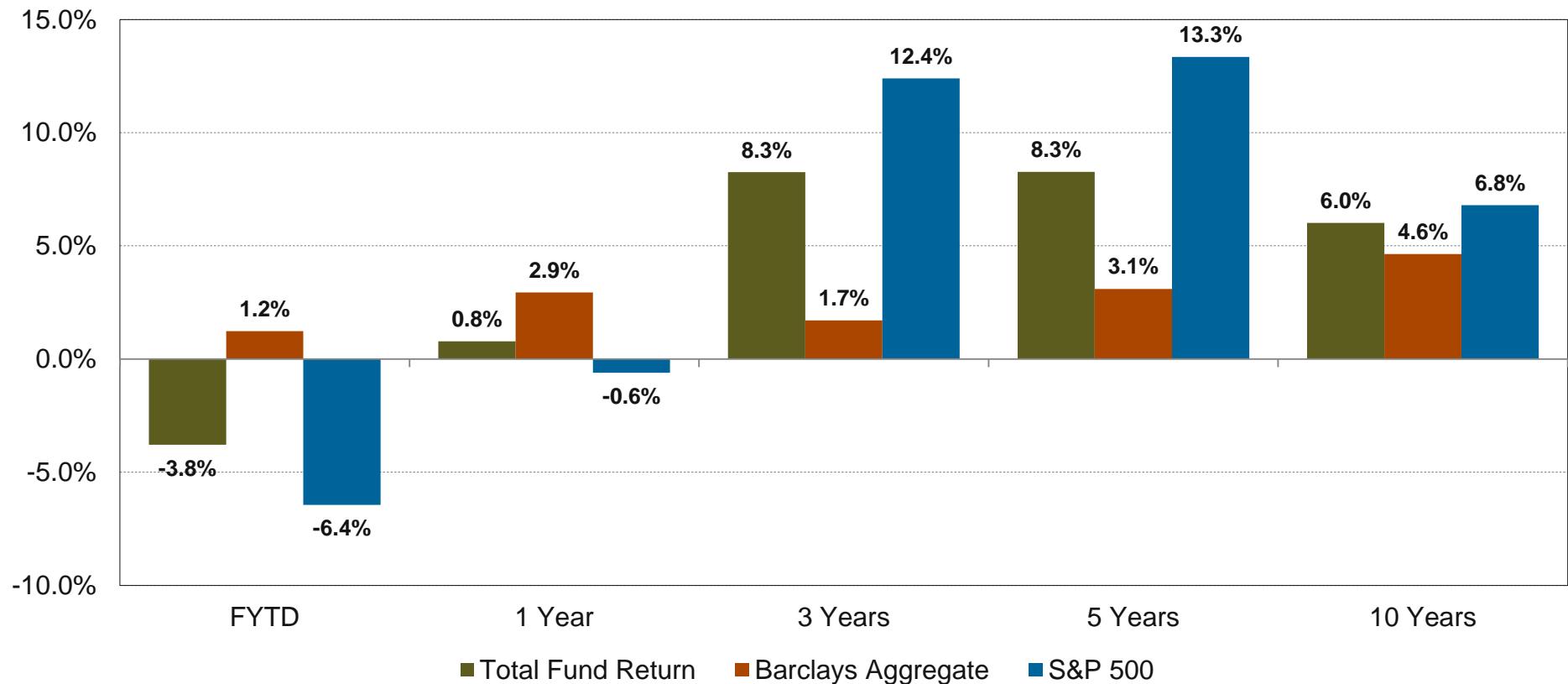
# Total PRIT Fund Performance (\$58.8 Billion in Assets)

Gross of Fees as of September 30, 2015



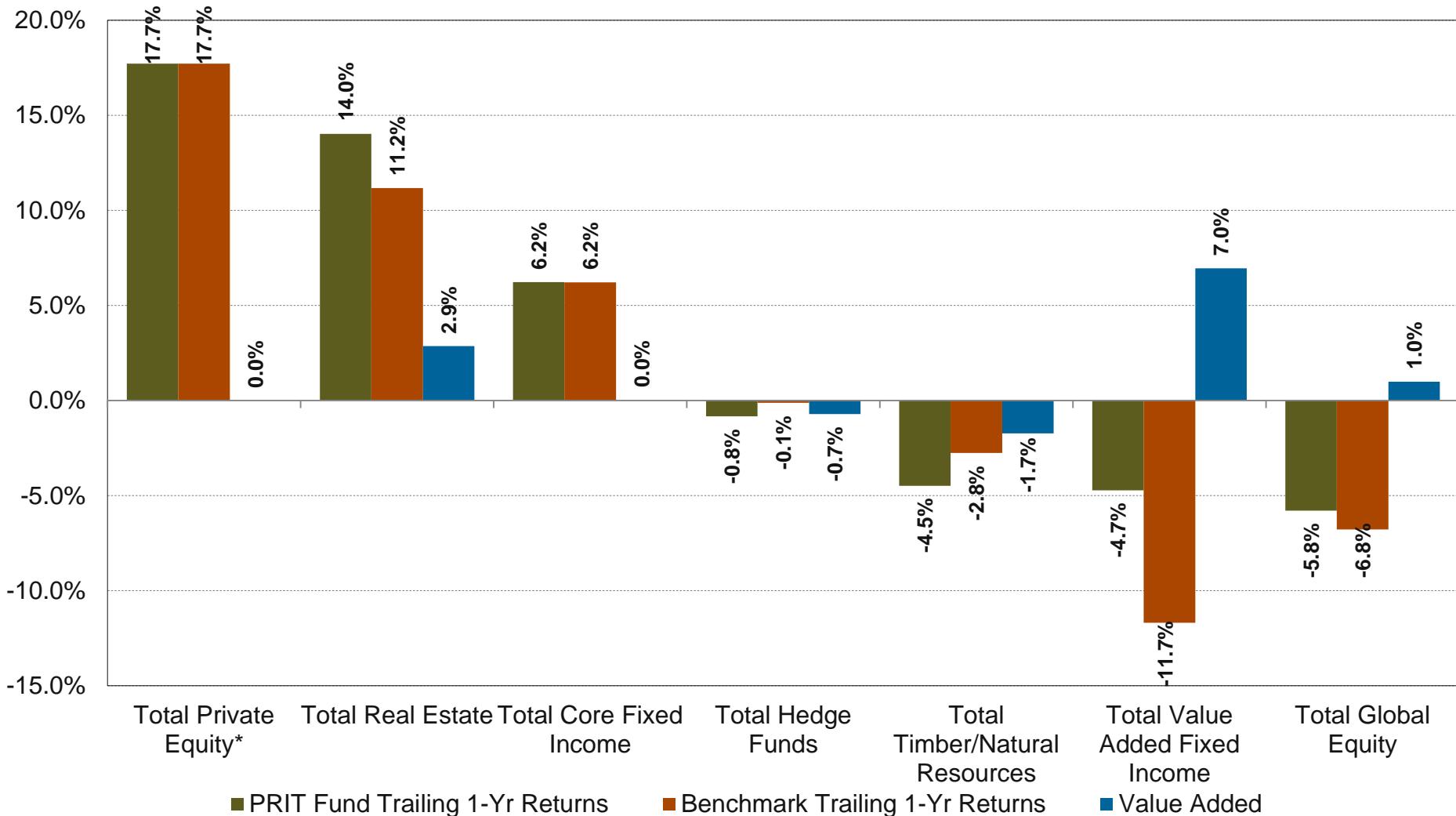
# Total PRIT Fund Performance

Gross of Fees compared to Bonds and Stocks as of September 30, 2015



# PRIT Asset Class Gross Performance – Trailing 1-Year

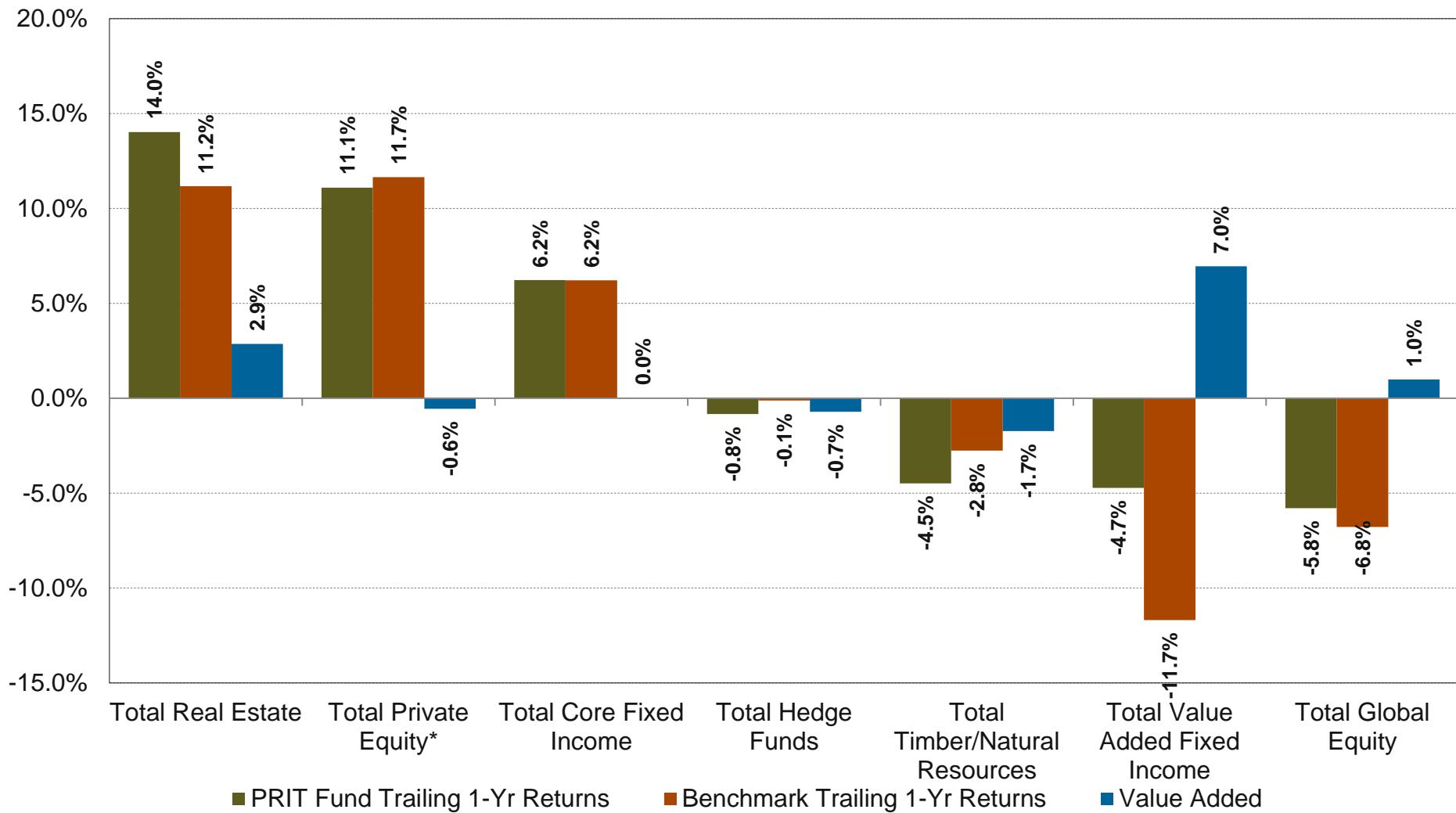
as of September 30, 2015



\*Benchmark is actual performance

# PRIT Asset Class Gross Performance – Trailing 1-Year

as of September 30, 2015



\*PE Performance is 7yr Annualized Return. Benchmark is 7yr Annualized Russell 3000 +3%

# Total PRIT Fund Performance Attribution

Gross of Fees as of September 30, 2015

## September Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	0.67%	0.78%	(0.01%)	0.01%	(0.00%)
Value Added Fixed Inc	9%	10%	(1.24%)	(3.71%)	0.21%	0.02%	0.23%
Real Estate	10%	10%	2.50%	2.76%	(0.03%)	0.01%	(0.02%)
Timber/Natural Resources	4%	4%	(0.90%)	(1.36%)	0.02%	(0.00%)	0.02%
Private Equity	11%	10%	5.98%	1.02%	0.55%	0.02%	0.58%
Overlay	1%	0%	(1.58%)	(1.58%)	0.00%	0.00%	0.00%
Portable Alpha	0%	0%	(1.67%)	(1.67%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	1.46%	0.26%	0.01%	0.00%	0.01%
Global Equity	42%	43%	(3.39%)	(3.69%)	0.13%	0.00%	0.13%
Hedge Funds	9%	10%	(2.42%)	(1.91%)	(0.04%)	0.00%	(0.04%)
<b>Total</b>			<b>(0.80%)</b>	<b>= (1.71%) + 0.83% + 0.07%</b>			<b>0.90%</b>

## Fiscal Year to Date Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	3.22%	3.42%	(0.03%)	0.04%	0.02%
Value Added Fixed Income	8%	10%	(3.52%)	(8.59%)	0.43%	0.06%	0.49%
Real Estate	10%	10%	2.59%	2.25%	0.03%	0.01%	0.04%
Timber/Natural Resources	4%	4%	(3.45%)	(3.55%)	0.00%	(0.01%)	(0.00%)
Private Equity	11%	10%	5.66%	3.01%	0.29%	0.06%	0.35%
Overlay	1%	0%	(3.92%)	(3.92%)	0.00%	0.01%	0.01%
Portable Alpha	0%	0%	(3.59%)	(3.59%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	3.30%	0.79%	0.00%	(0.01%)	(0.00%)
Global Equity	43%	43%	(9.63%)	(10.16%)	0.24%	(0.02%)	0.21%
Hedge Funds	9%	10%	(4.45%)	(3.66%)	(0.07%)	(0.03%)	(0.09%)
<b>Total</b>			<b>(3.79%)</b>	<b>= (4.81%) + 0.91% + 0.12%</b>			<b>1.02%</b>

## One Year Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	15%	13%	6.23%	6.21%	0.00%	(0.02%)	(0.02%)
Value Added Fixed Income	8%	10%	(4.72%)	(11.68%)	0.63%	0.17%	0.80%
Real Estate	10%	10%	14.03%	11.17%	0.24%	(0.02%)	0.22%
Timber/Natural Resources	4%	4%	(4.48%)	(2.76%)	(0.07%)	(0.01%)	(0.08%)
Private Equity	11%	10%	17.72%	11.65%	0.62%	0.09%	0.70%
Overlay	1%	0%	(0.79%)	(0.79%)	0.00%	0.00%	0.00%
Portable Alpha	0%	0%	(8.66%)	(8.66%)	0.00%	(0.01%)	(0.01%)
Portfolio Completion Stra	0%	0%	-	-	(0.01%)	(0.01%)	(0.01%)
Global Equity	42%	43%	(5.79%)	(6.78%)	0.44%	(0.07%)	0.37%
Hedge Funds	9%	10%	(0.83%)	(0.12%)	(0.06%)	(0.03%)	(0.09%)
<b>Total</b>			<b>0.78%</b>	<b>= (1.12%) + 1.80% + 0.10%</b>			<b>1.90%</b>

# Total Global Equity Performance Attribution

Gross of Fees as of September 30, 2015

## September Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(2.51%)	(2.47%)	(0.01%)	0.01%	(0.01%)
Small/SMID Equity	10%	9%	(4.26%)	(4.47%)	0.02%	(0.00%)	0.02%
International Equity	40%	40%	(4.52%)	(5.01%)	0.19%	0.01%	0.20%
Emerging Equity	16%	16%	(1.98%)	(2.60%)	0.10%	(0.00%)	0.10%
<b>Total</b>			<b>(3.39%) = (3.69%) + 0.30% + 0.01%</b>				<b>0.31%</b>

## Fiscal Year to Date Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(6.51%)	(6.44%)	(0.02%)	0.01%	(0.02%)
Small/SMID Equity	10%	9%	(10.36%)	(10.59%)	0.02%	(0.01%)	0.02%
International Equity	40%	40%	(9.66%)	(10.33%)	0.26%	(0.00%)	0.26%
Emerging Equity	16%	16%	(15.79%)	(17.46%)	0.27%	0.00%	0.28%
<b>Total</b>			<b>(9.63%) = (10.16%) + 0.53% + (0.00%)</b>				<b>0.53%</b>

## One Year Attribution

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	36%	35%	(0.48%)	(0.61%)	0.05%	0.01%	0.06%
Small/SMID Equity	10%	9%	(1.44%)	0.45%	(0.17%)	(0.02%)	(0.19%)
International Equity	39%	40%	(6.46%)	(9.13%)	1.05%	0.01%	1.06%
Emerging Equity	16%	16%	(17.66%)	(18.19%)	0.08%	(0.03%)	0.05%
<b>Total</b>			<b>(5.79%) = (6.78%) + 1.01% + (0.02%)</b>				<b>0.99%</b>



## Appendix

Gross of Fees Asset Class &  
Manager Specific Performance

# Major Contributors Gross Performance – Trailing 1-Year

as of September 30, 2015

	% of PRIT Fund	1-Year Relative Performance (BPS)	One Year	3 Years	5 Years	10 Years	Since Inception	Inception
<b>DISTRESSED DEBT</b>	2.3%	57.31	1.25	12.10	11.67	11.34	14.16	07/31/2001
Altman NYU Saloman Center Combined Defaulted Public Bond & Bank Loan Index			-23.53	-1.25	0.51	4.87	9.46	
Value Added (bps)			2479	1335	1116	647	470	
<b>MARATHON ASSET MANAGEMENT</b>	3.9%	28.52	-1.46	9.62	7.48	6.89	8.40	10/31/1996
Custom MSCI EAFE Standard Index Net Divs			-8.81	5.65	3.89	2.95	4.16	
Value Added (bps)			734	397	359	394	424	
<b>AEW</b>	1.9%	9.33	17.81	14.58			14.41	01/31/2011
NCREIF Property One Qtr Lag			12.98	11.63	-	-	12.53	
Value Added (bps)			484	295	-	-	188	
<b>BAILLIE GIFFORD</b>	2.8%	7.32	-6.22	5.71	5.45	5.20	7.09	08/31/2004
Custom MSCI EAFE Standard Index Net Divs			-8.81	5.65	3.89	2.95	5.05	
Value Added (bps)			259	6	156	225	204	
<b>INTECH</b>	1.4%	5.70	3.35	13.90	14.43		7.40	01/31/2006
S&P 500			-0.61	12.40	13.34	-	6.75	
Value Added (bps)			397	150	109	-	65	
<b>SSGA WORLD EX-US</b>	8.1%	5.47	-8.79	5.63	4.24	3.60	5.74	03/31/1992
Custom MSCI World Ex-US IMI Net Divs			-9.46	4.96	3.63	2.96	5.26	
Value Added (bps)			67	67	61	64	48	
<b>JP MORGAN</b>	1.3%	3.16	15.38	9.84	12.54	7.33	10.52	09/30/2000
NCREIF Property One Qtr Lag			12.98	11.63	-	-	9.14	
Value Added (bps)			240	-180	-	-	138	
<b>CENTERSQUARE GLOBAL REIT</b>	1.3%	2.46	5.36	7.66			8.33	05/31/2012
FTSE EPRA NAREIT Developed Net Total Return			3.43	6.92	-	-	7.63	
Value Added (bps)			194	74	-	-	70	
<b>LOOMIS SAYLES CORE</b>	1.9%	1.72	3.83	2.93	4.45	5.46	7.48	05/31/1990
Barclays Capital Aggregate			2.94	1.71	3.10	4.64	6.50	
Value Added (bps)			89	122	136	82	97	
<b>ING</b>	0.8%	1.57	2.92	4.53	5.57		5.79	07/31/2008
S&P LSTA Leveraged Loan			0.92	3.25	4.51	-	5.22	
Value Added (bps)			199	128	106	-	57	

\*The relative outperformance is calculated by multiplying the outperformance versus the benchmark times the allocation to the overall PRIT fund.

# Major Detractors Gross Performance – Trailing 1-Year

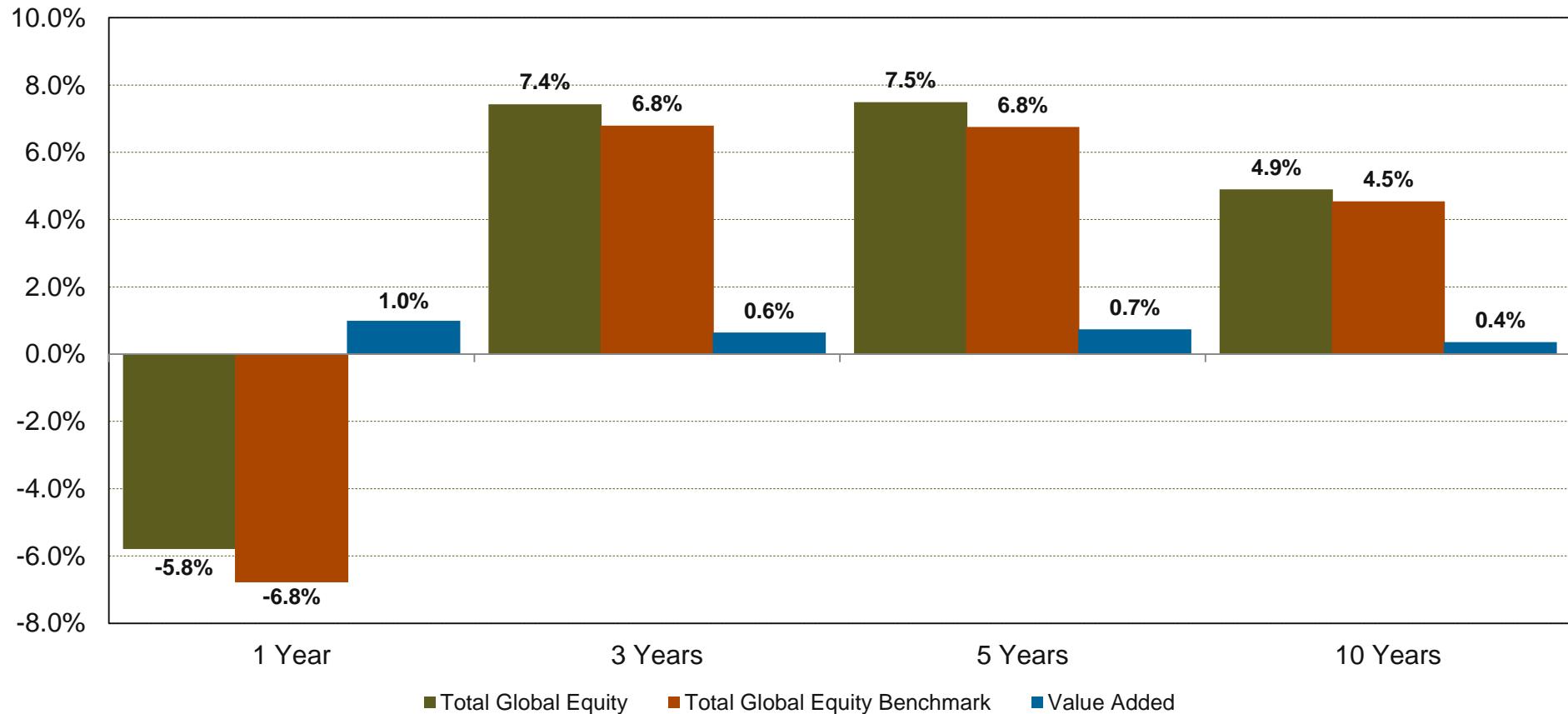
as of September 30, 2015

	% of PRIT Fund	1-Year Relative Performance (BPS)	One Year	3 Years	5 Years	10 Years	Since Inception	Inception
<b>THE CAMPBELL GROUP</b>	0.9%	-5.56	3.90	7.61			6.18	11/30/2011
NCREIF Timber Index One Qtr Lag			10.02	9.77	-	-	7.71	
Value Added (bps)			-612	-	-	-	-153	
<b>HUBER</b>	0.4%	-5.09	-15.03				-2.64	05/31/2013
Russell 2000 Value			-1.60	-	-	-	5.21	
Value Added (bps)			-1342	-	-	-	-785	
<b>PAAMCO</b>	1.5%	-3.20	-2.22	6.71	4.86	4.66	4.77	08/31/2004
100% HFRI Fund of Funds Composite Index			-0.12	4.13	2.74	4.51	4.71	
Value Added (bps)			-210	258	212	15	5	
<b>INVESCO CORE</b>	1.9%	-3.10	11.31	13.33	13.52	8.87	9.90	05/31/1995
NCREIF Property One Qtr Lag			12.98	11.63	12.72	8.16	9.77	
Value Added (bps)			-166	-	-	-	13	
<b>SOUTHERNSUN</b>	0.2%	-3.06	-13.19				6.59	05/31/2013
Russell 2500			0.38	-	-	-	8.45	
Value Added (bps)			-1357	-	-	-	-186	
<b>TA ASSOCIATES</b>	2.0%	-2.85	11.52	10.58	11.60	7.69	8.99	09/30/2000
NCREIF Property One Qtr Lag			12.98	11.63	12.72	8.16	9.14	
Value Added (bps)			-146	-105	-112	-48	-16	
<b>DIRECT HEDGE FUNDS</b>	6.8%	-2.21	-0.44	6.18			5.77	11/30/2011
HFRI Fund of Funds Composite Index			-0.12	4.13	-	-	3.76	
Value Added (bps)			-32	205	-	-	200	
<b>SSGA S&amp;P 500</b>	11.8%	-2.00	-0.78	12.46			14.40	12/31/2011
S&P 500			-0.61	12.40	-	-	14.32	
Value Added (bps)			-17	6	-	-	8	
<b>PIMCO DOMESTIC</b>	1.5%	-1.79	-1.84	12.16	13.96		7.07	02/28/2006
S&P 500			-0.61	12.40	13.34	-	6.52	
Value Added (bps)			-123	-	-	-	54	
<b>PIMCO EMD</b>	0.5%	-1.76	-5.49	-0.63	3.49	6.30	7.24	02/29/2004
JPM EMBI Global			-1.96	0.51	4.40	6.76	7.49	
Value Added (bps)			-353	-114	-91	-46	-25	

\*The relative underperformance is calculated by multiplying the underperformance versus the benchmark times the allocation to the overall PRIT fund.

# PRIT Global Equity (\$24.5 Billion)

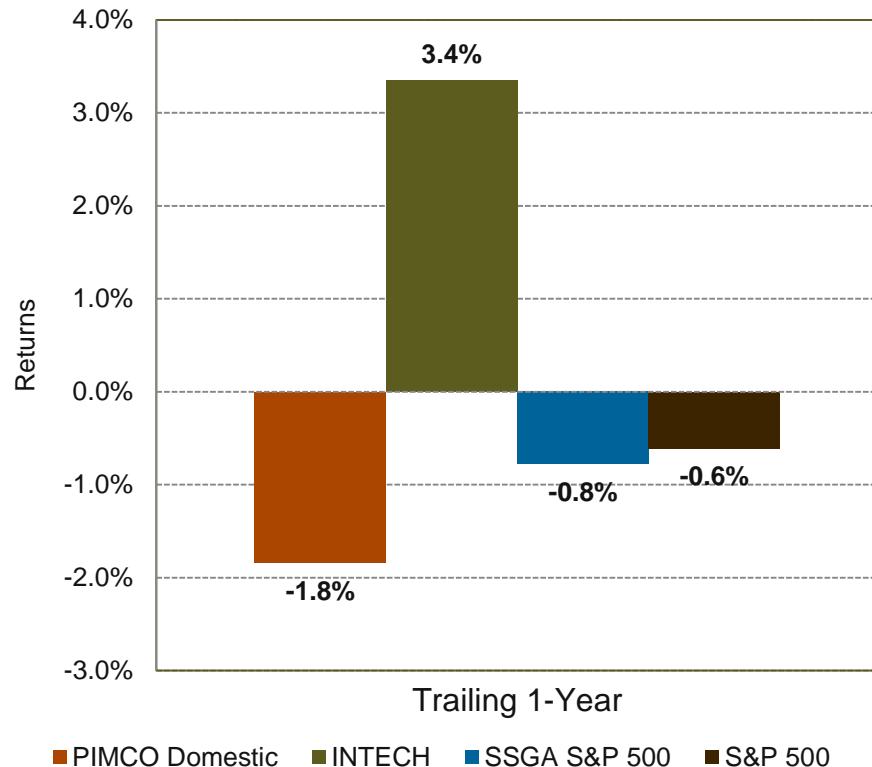
Gross of Fees Performance as of September 30, 2015



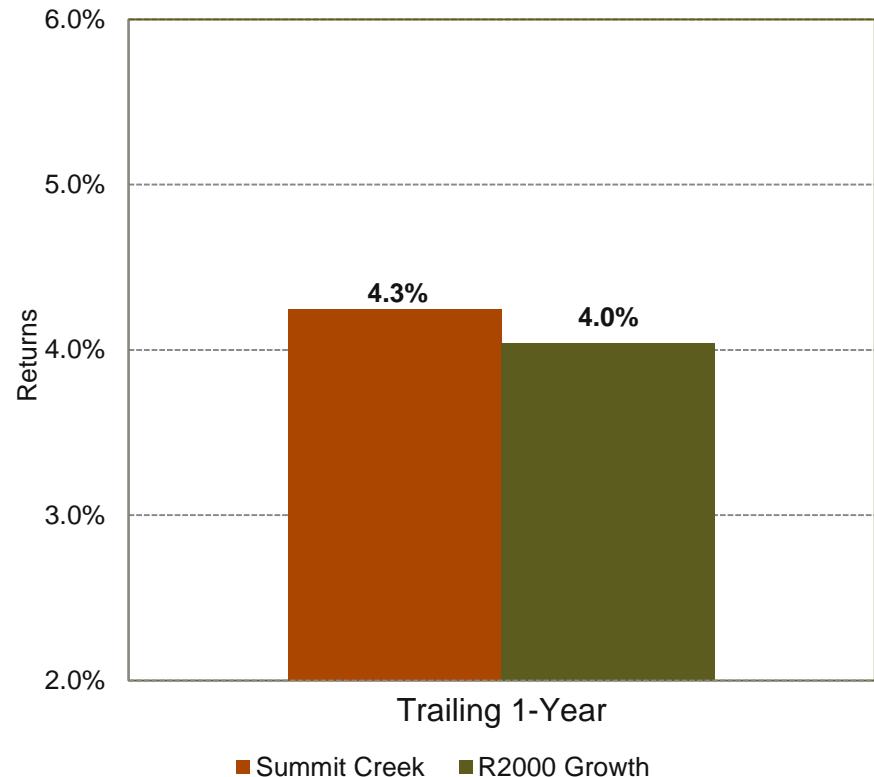
# Domestic Equity Managers

as of September 30, 2015

## Large Cap Managers vs. S&P 500



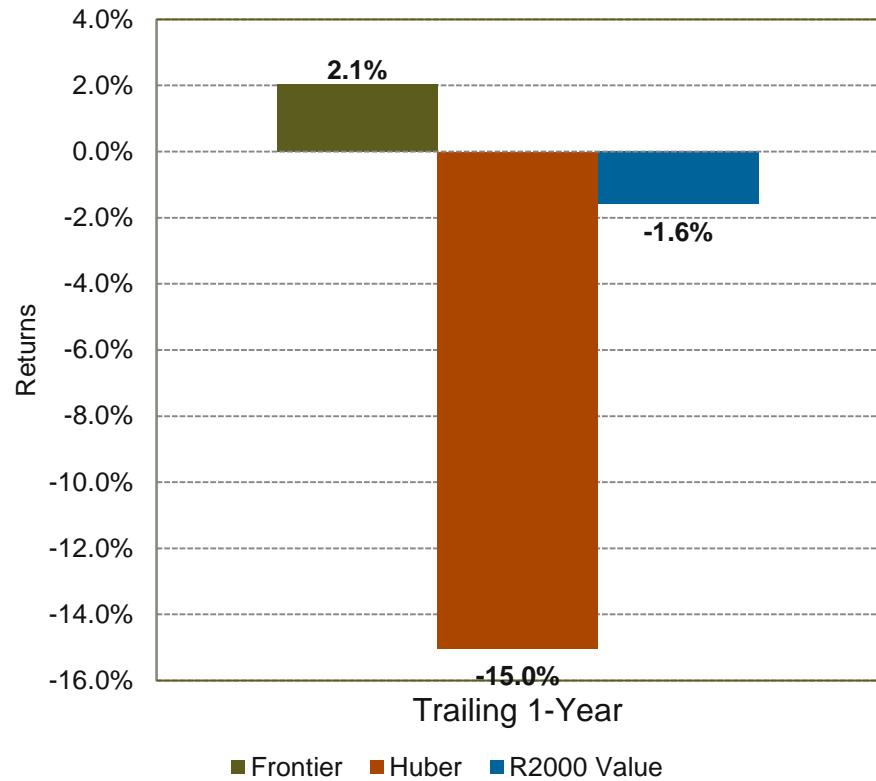
## Small Cap Growth Manager vs. R2000 Growth



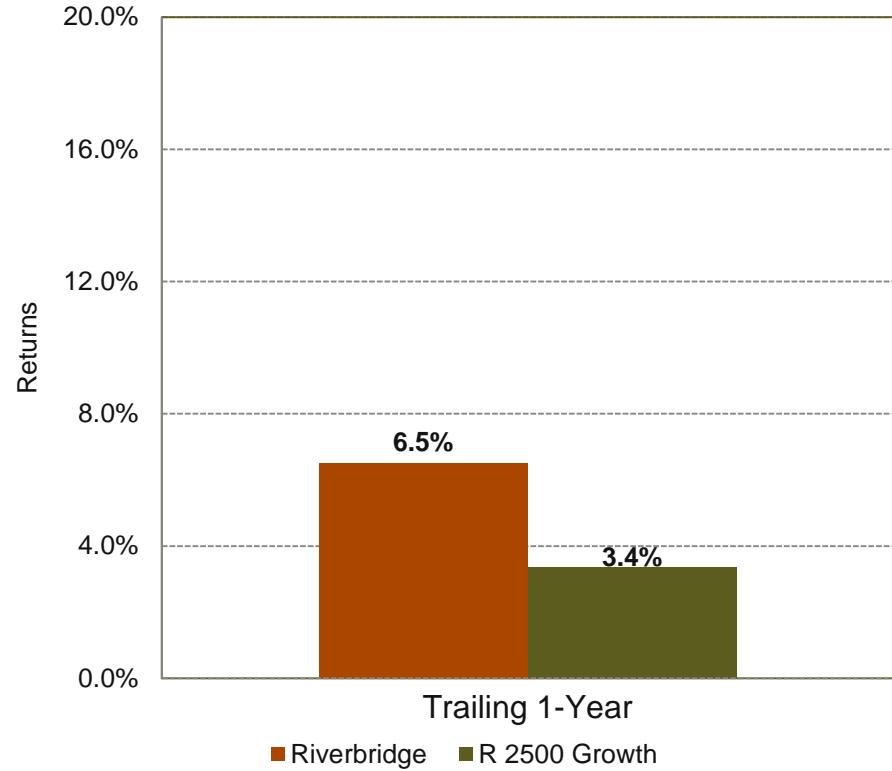
# Domestic Equity Managers

as of September 30, 2015

## Small Cap Value Managers vs. Russell 2000 Value



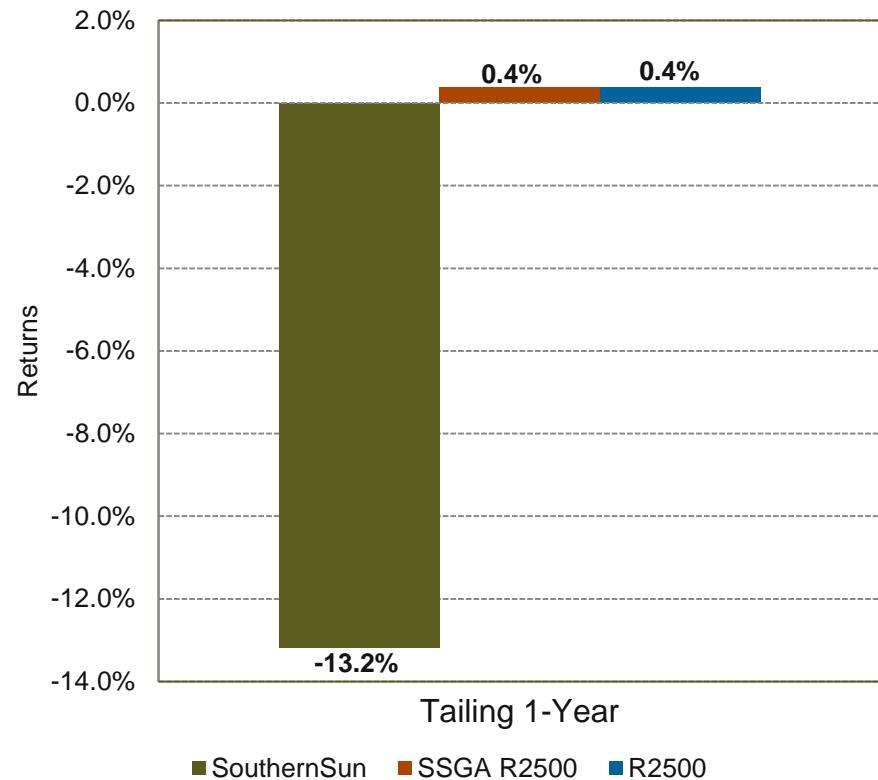
## Smid Cap Growth Manager vs. Russell 2500



# Domestic Equity Managers

as of September 30, 2015

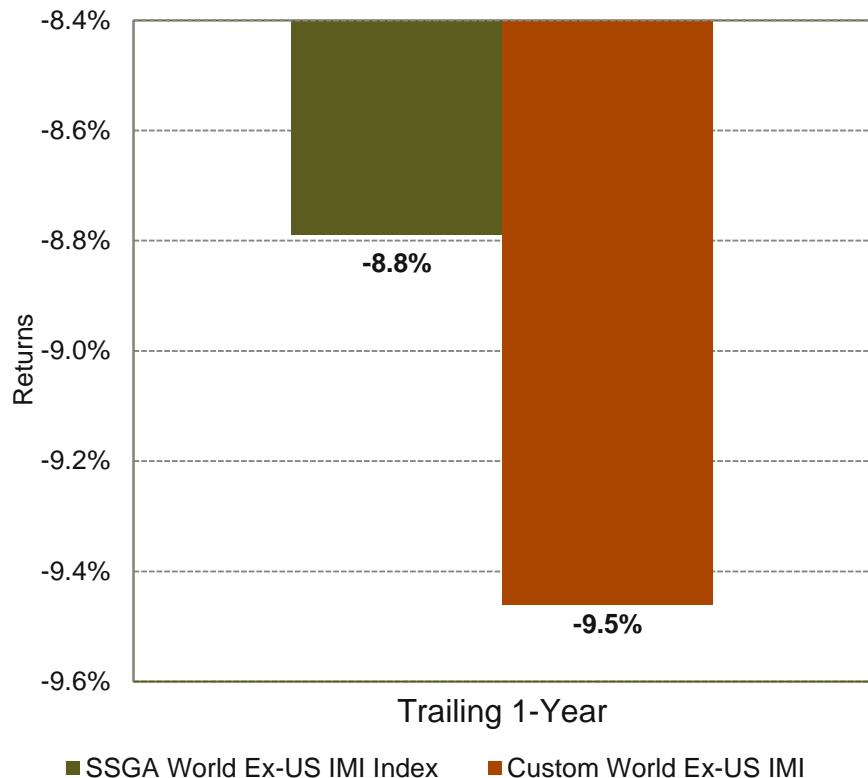
## Smid Cap Core Managers vs. Russell 2500



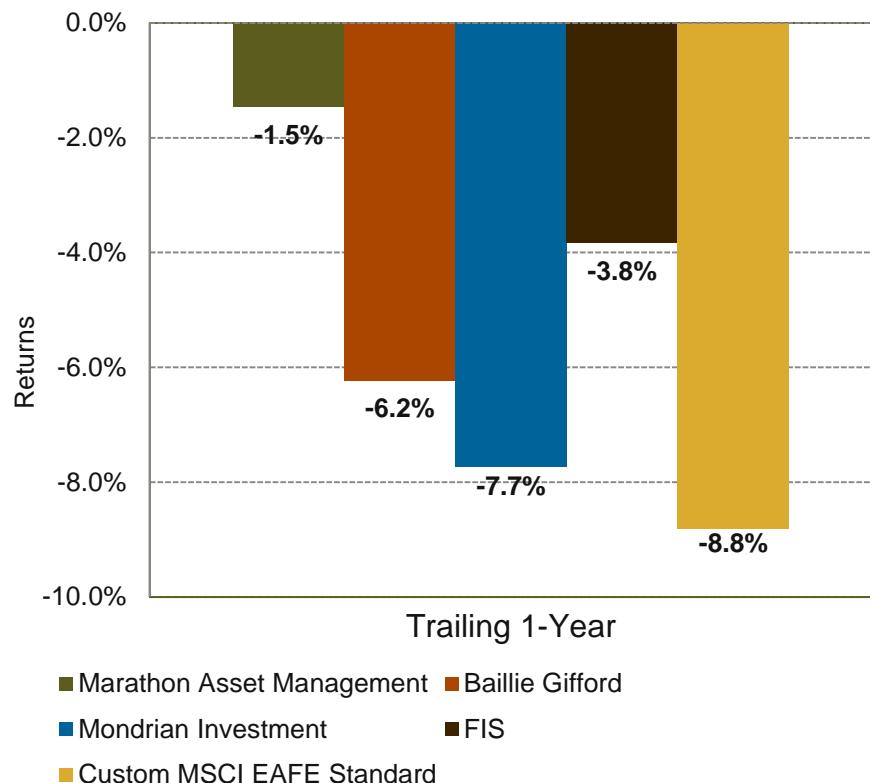
# PRIT International Equity Managers

as of September 30, 2015

## Versus World Ex-US IMI Index



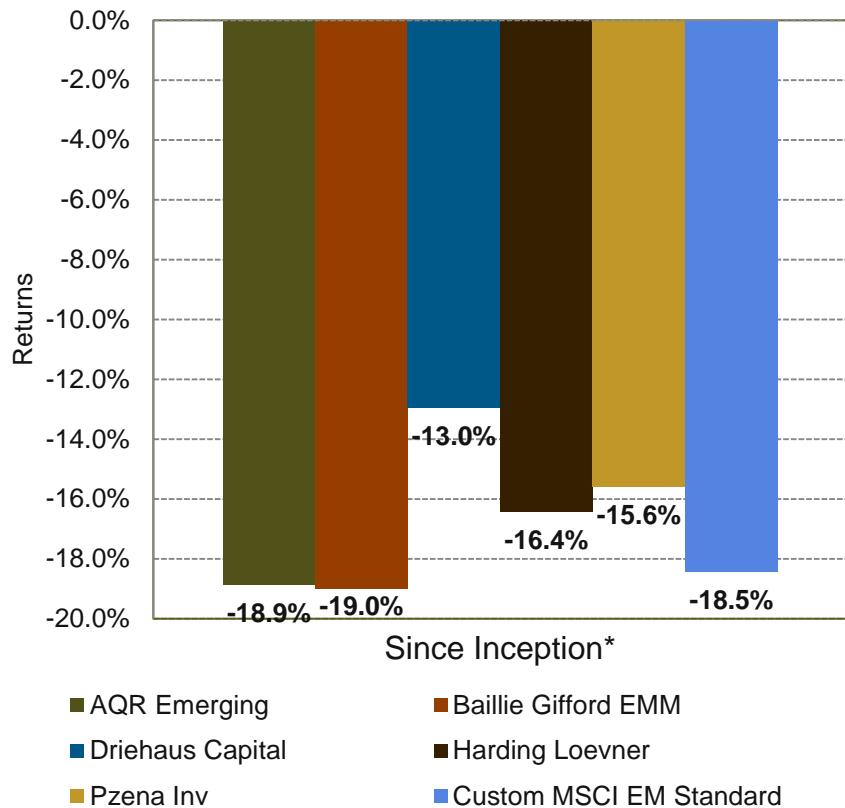
## Versus MSCI EAFE Standard Index



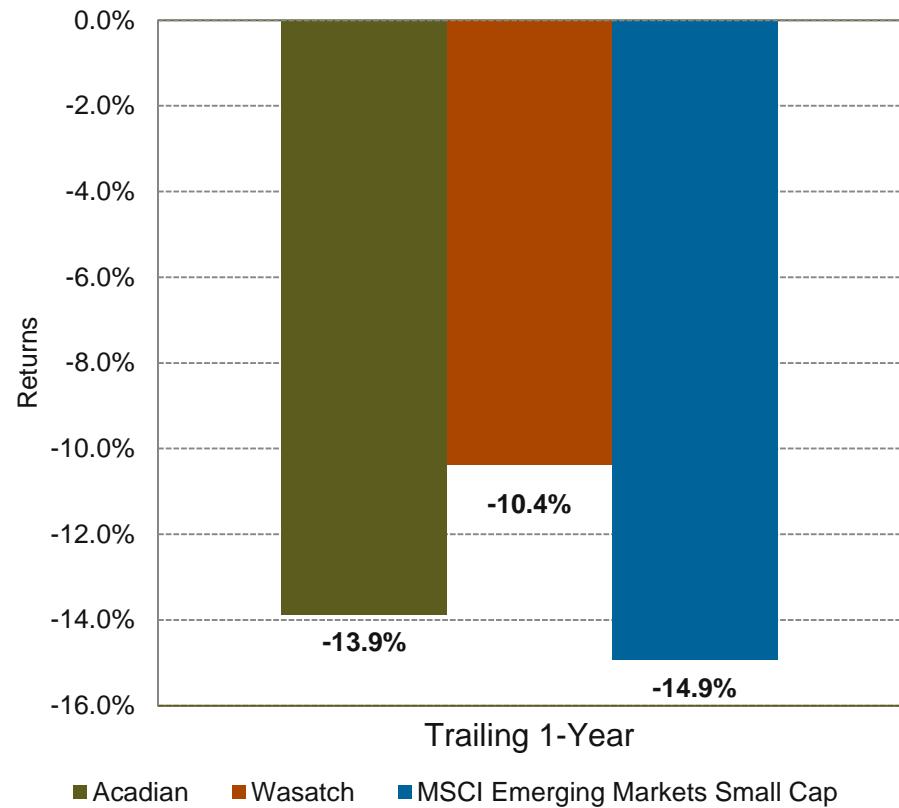
# PRIT Emerging Markets Equity Managers

as of September 30, 2015

## Versus MSCI Emerging Markets Standard Index



## Versus MSCI Emerging Markets Small Cap Index

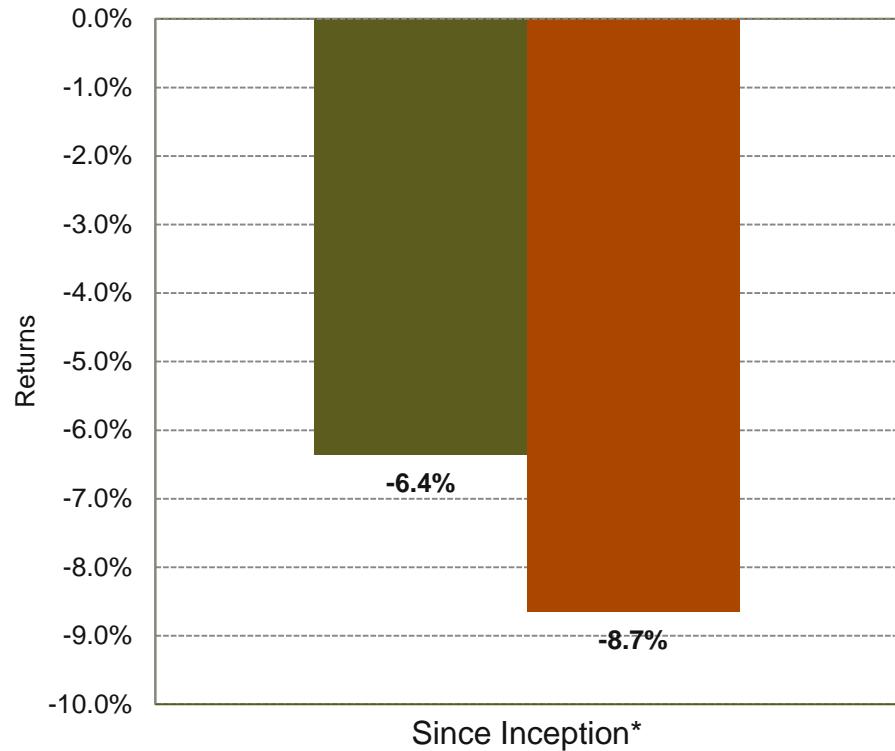


\* "Since Inception" figure used due to lack of trailing 1-year returns.  
Inception date of 3/31/2015 for AQR Emerging, Baillie Gifford EMM, Driehaus Capital, Harding Loevner and Pzena Inv.

# PRIT Emerging Markets Equity Managers

as of September 30, 2015

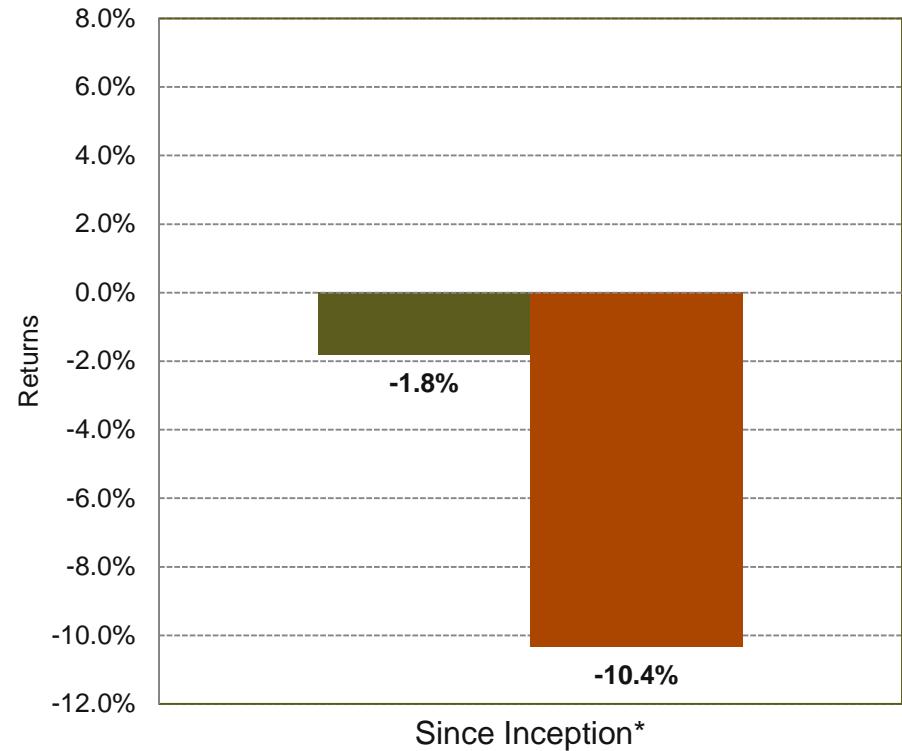
## Versus MSCI Frontier Markets Country Capped Index



■ City of London ■ MSCI Frontier Markets Country Capped Net Divs

\* "Since Inception" figure used due to lack of trailing 1-year returns. Inception date of 2/28/2015 for City of London.

## Versus MSCI Frontier Markets Country Capped Index

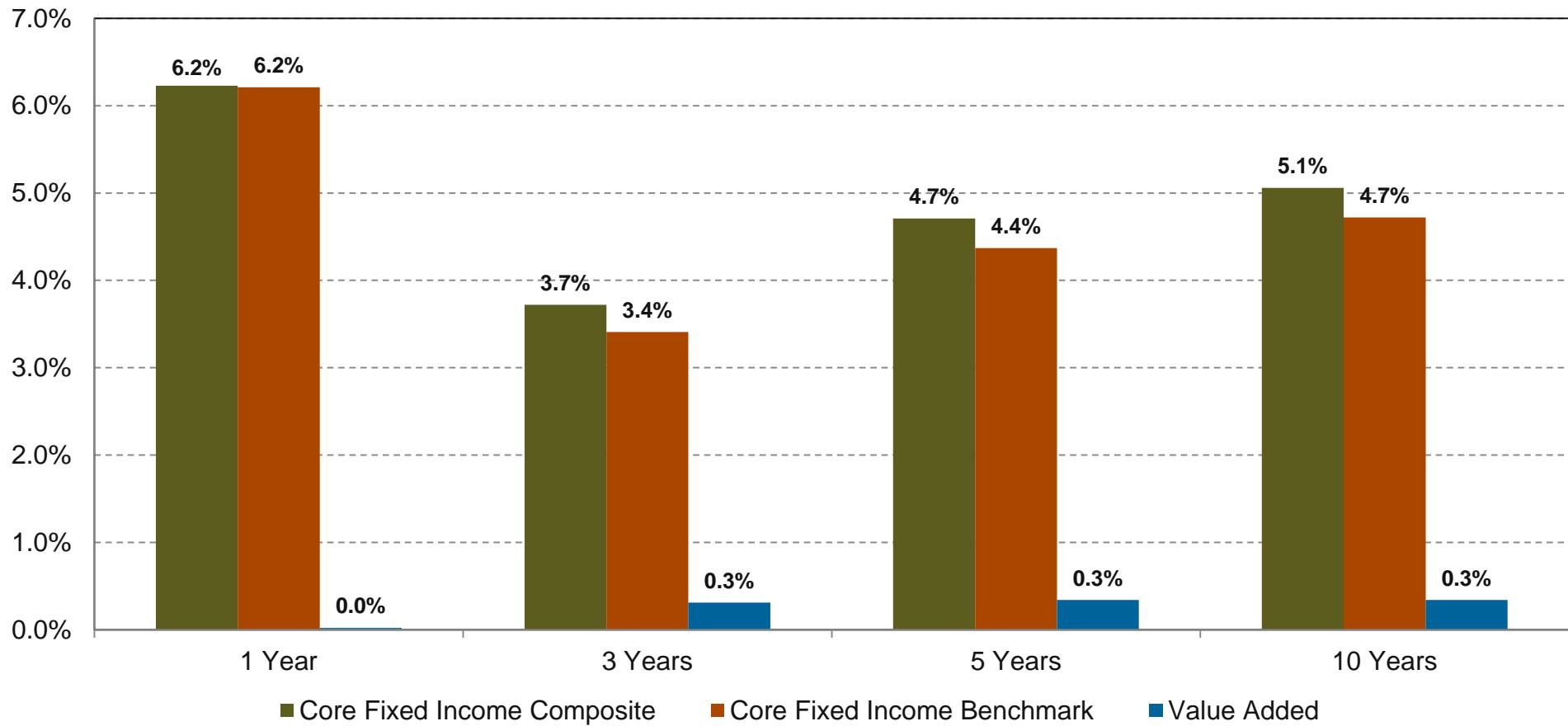


■ Acadian Frontier ■ MSCI Frontier Markets Country Capped Net Divs

\* "Since Inception" figure used due to lack of trailing 1-year returns. Inception date of 4/30/2015 for Acadian Frontier.

# PRIT Core Fixed Income (\$8.0 Billion)

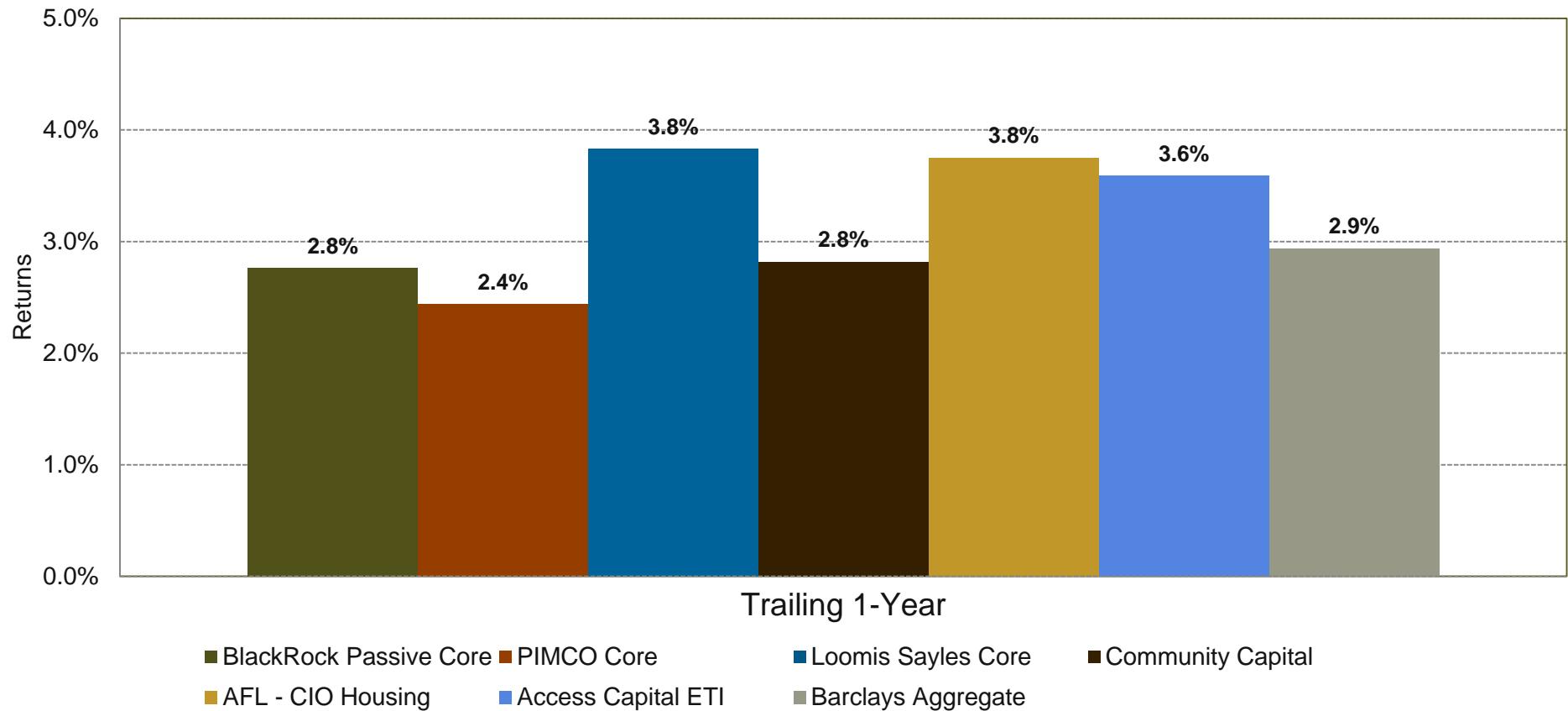
Gross of Fees Performance as of September 30, 2015



# PRIT Fixed Income Managers

as of September 30, 2015

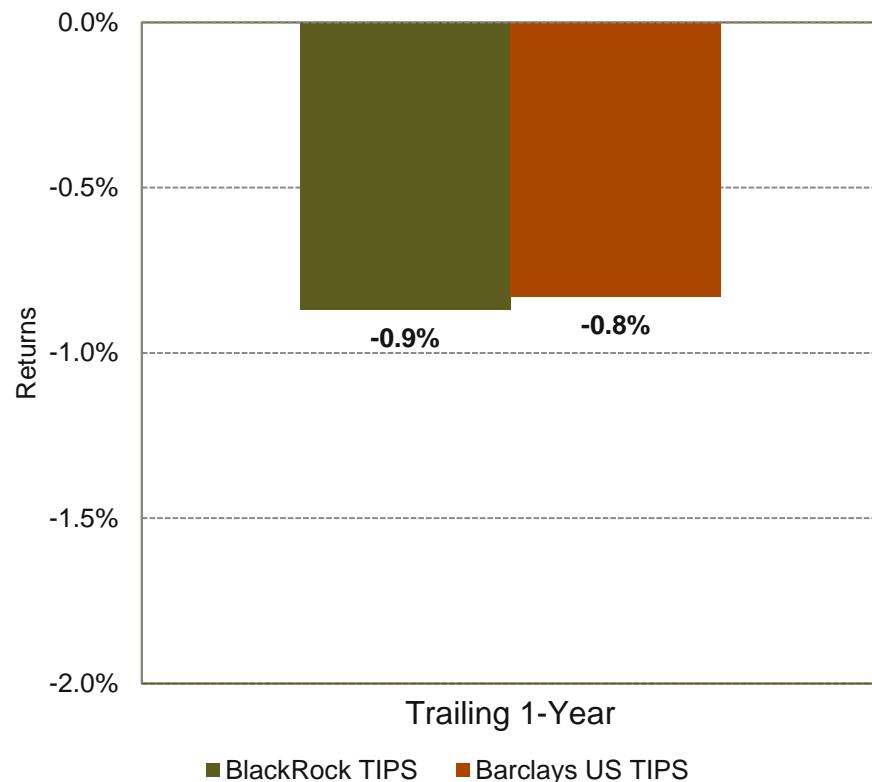
## Versus Barclays Aggregate



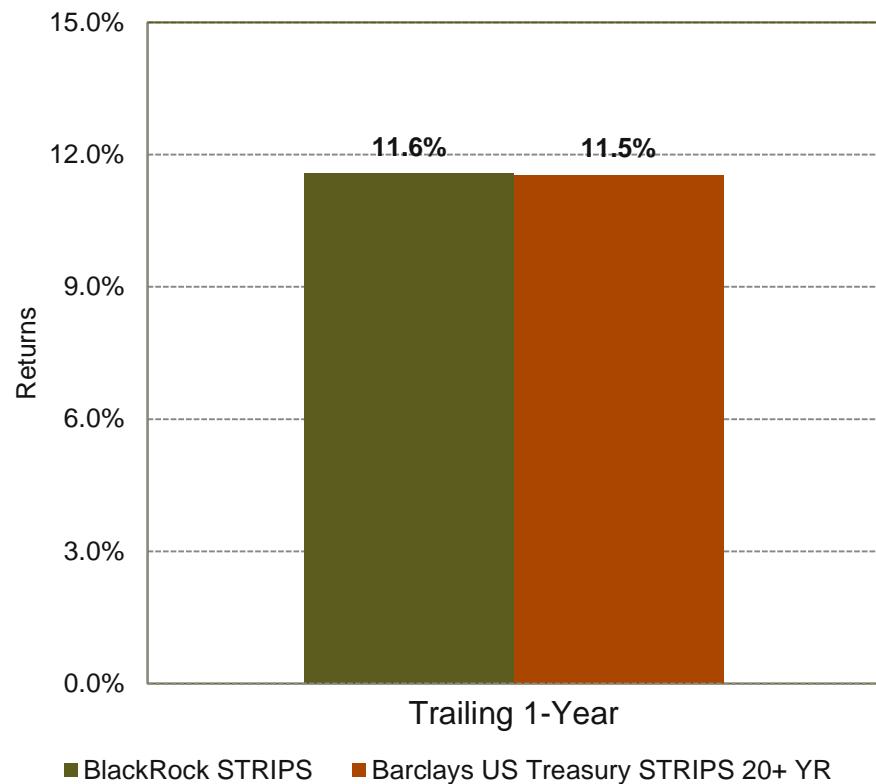
# PRIT Fixed Income Managers

as of September 30, 2015

## BlackRock Versus Barclays U.S. TIPS



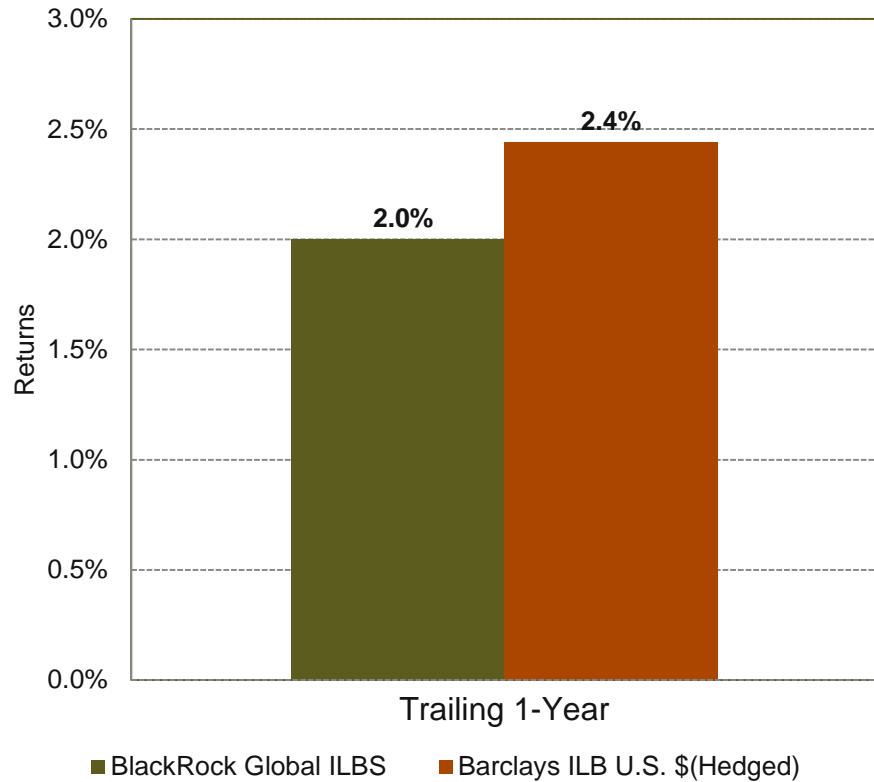
## BlackRock STRIPS vs. BC U.S. Treasury STRIPS 20+ Year



# PRIT Fixed Income Managers

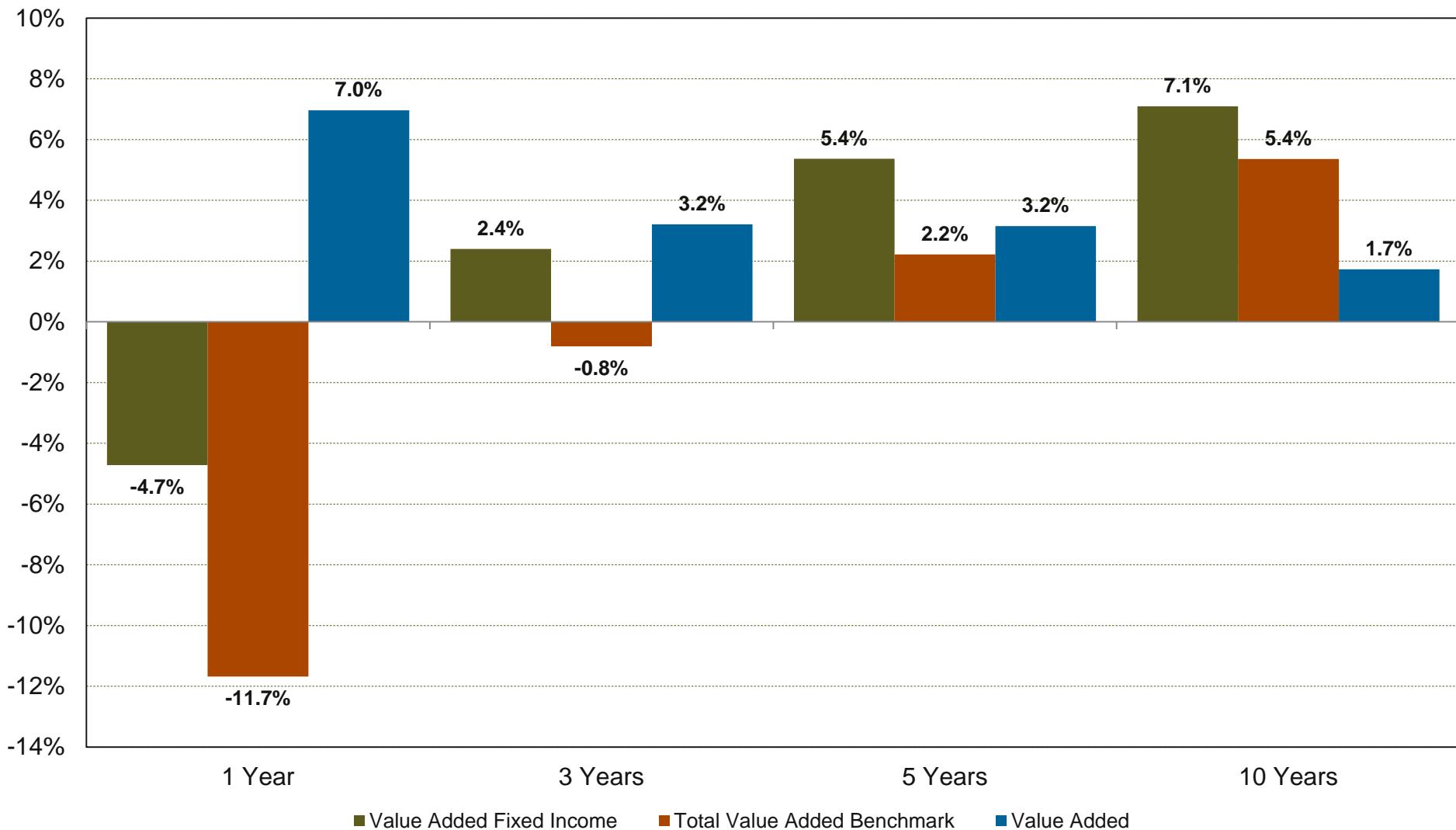
as of September 30, 2015

## BlackRock Global vs. Barclays ILB U.S.\$ (Hedged)



# PRIT Value Added Fixed Income (\$5.0 Billion)

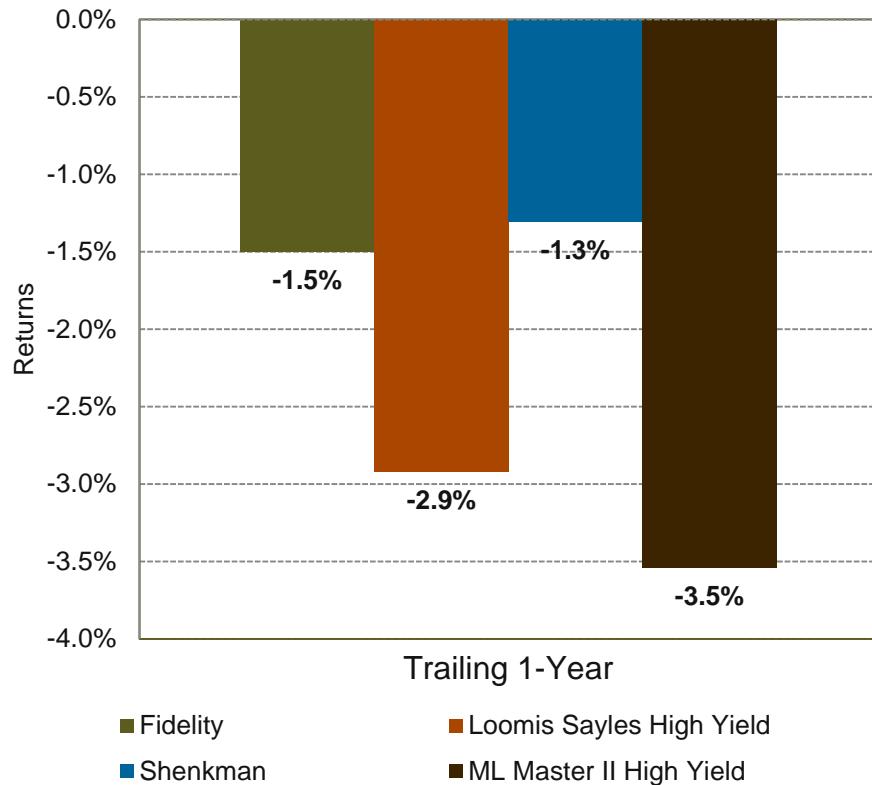
Gross of Fees Performance as of September 30, 2015



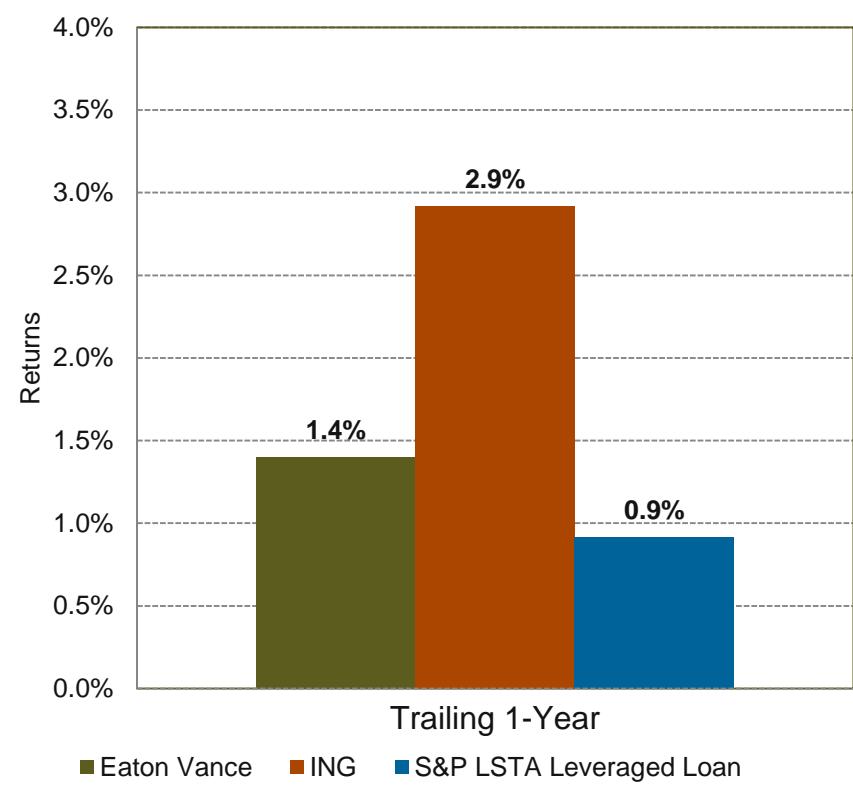
# PRIT Value Added Fixed Income Managers

as of September 30, 2015

## High Yield Managers vs. ML Master II High Yield



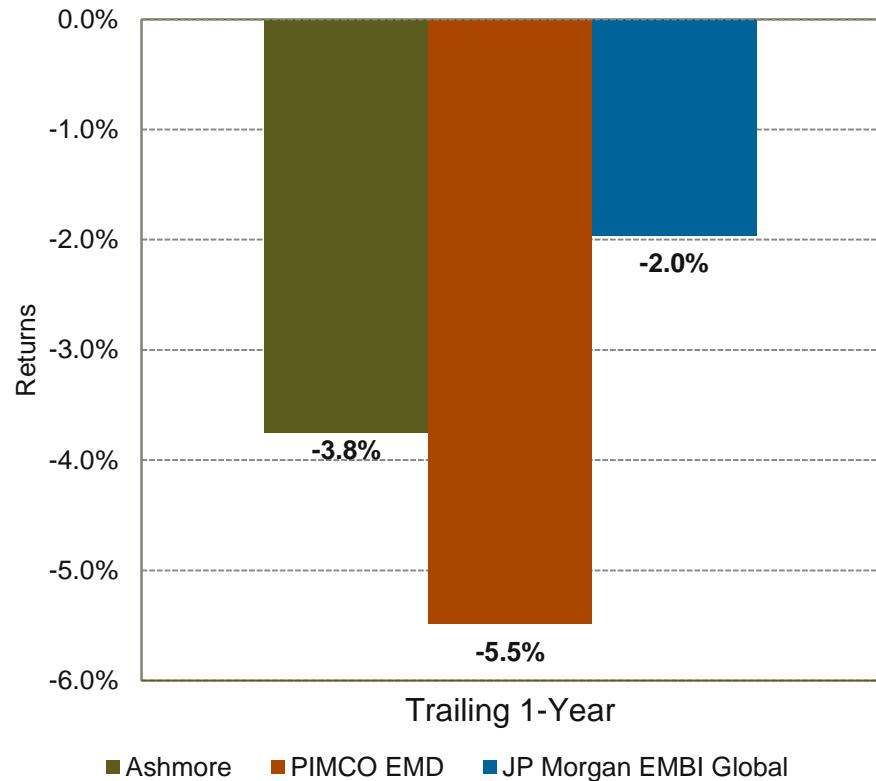
## Bank Loan Managers vs. S&P LSTA Leveraged Loan



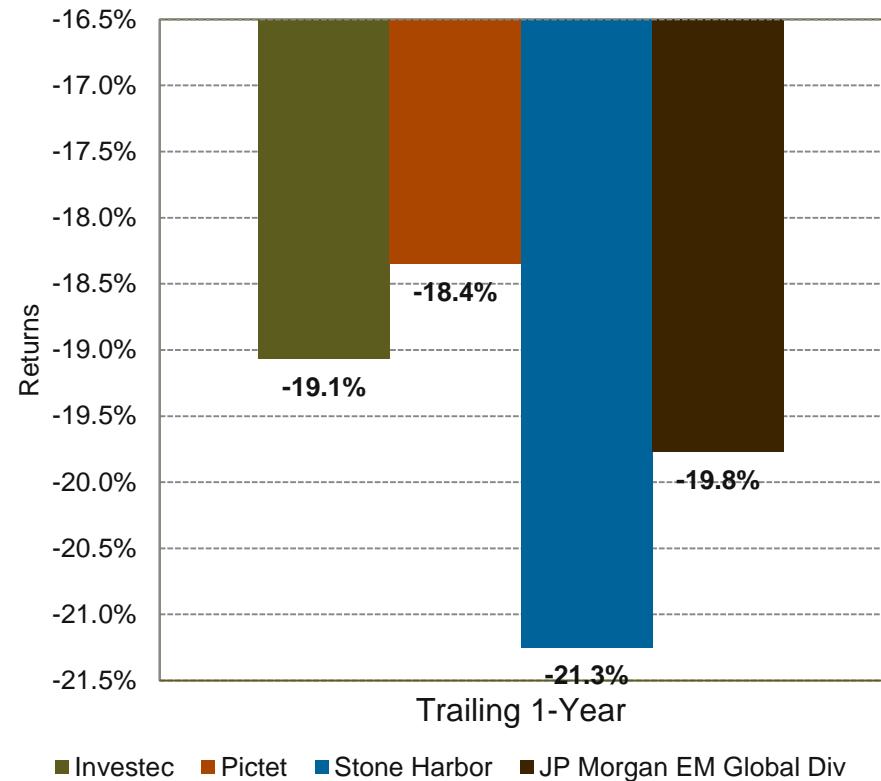
# PRIT Value Added Fixed Income Managers

as of September 30, 2015

## Emerging Debt Managers vs. JP Morgan EMBI Global



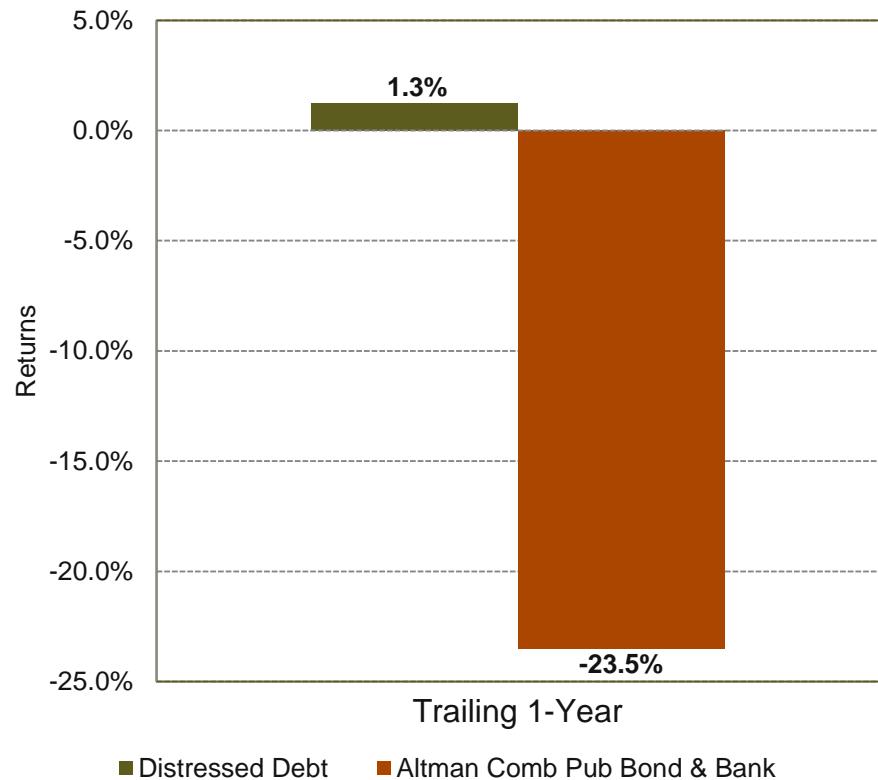
## Emerging Markets Debt Local vs. JP Morgan EM Global Diversified



# PRIT Value Added Fixed Income Managers

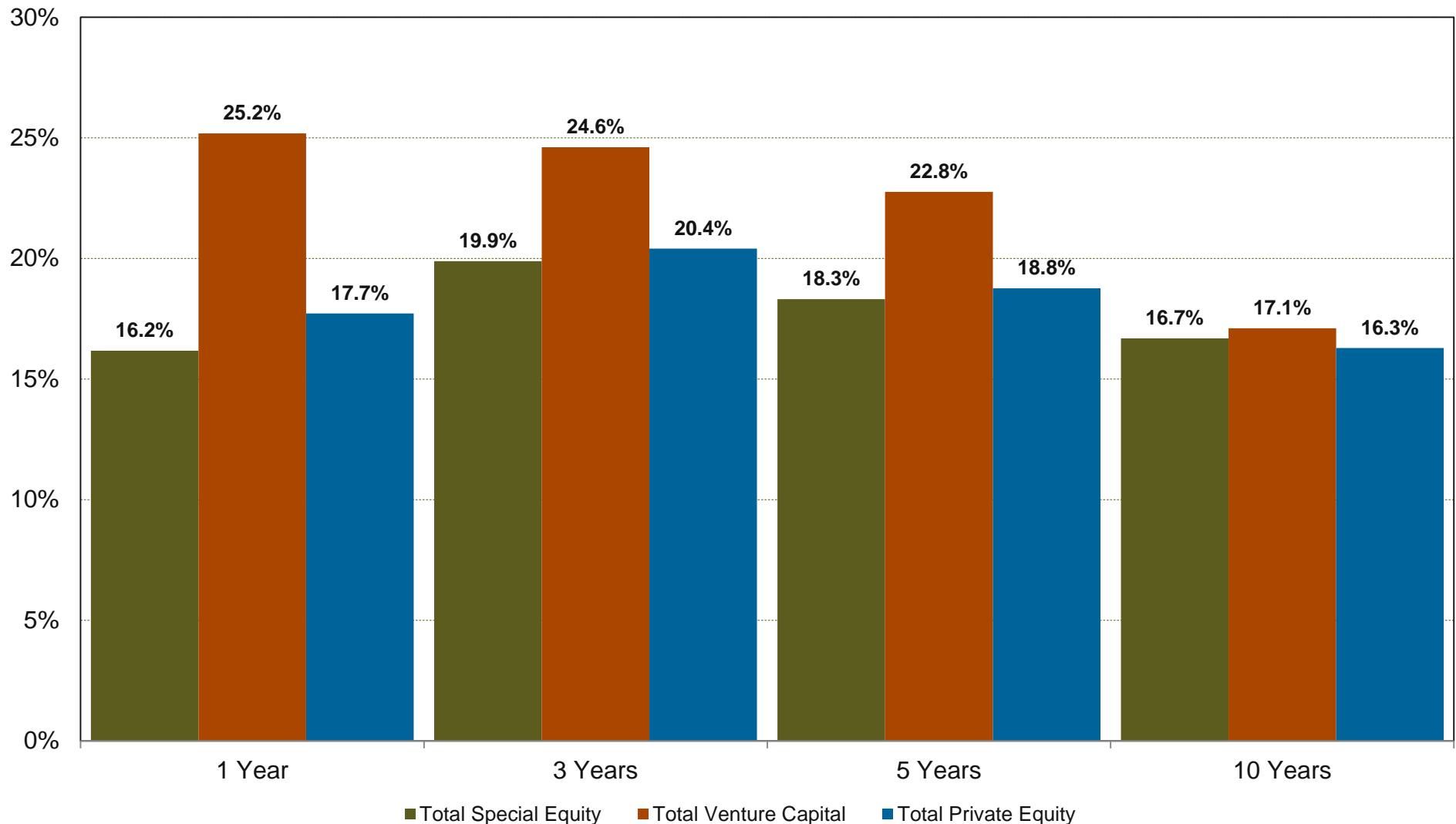
as of September 30, 2015

## Distressed Debt vs. Altman Comb Pub Bond & Bank



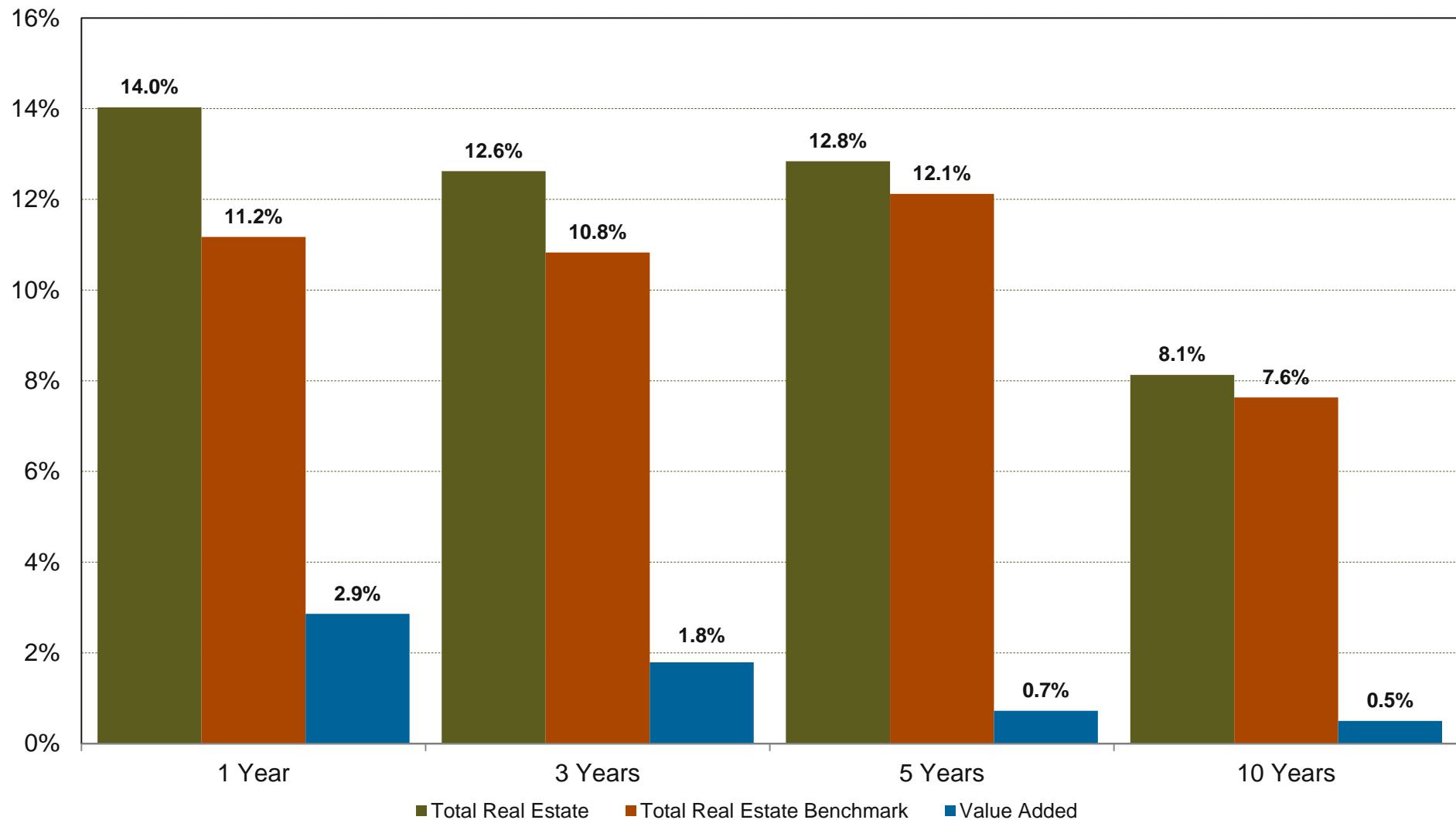
# PRIT Private Equity (\$6.9 Billion)

Gross of Fees Performance as of September 30, 2015



# PRIT Real Estate (\$6.3 Billion)

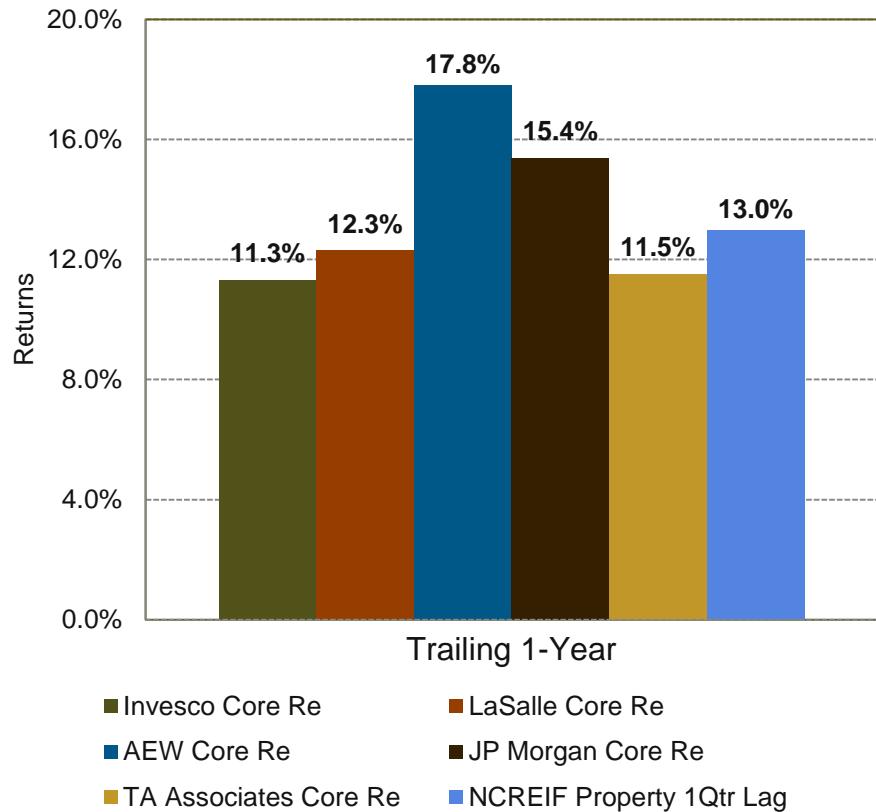
Gross of Fees Performance as of September 30, 2015



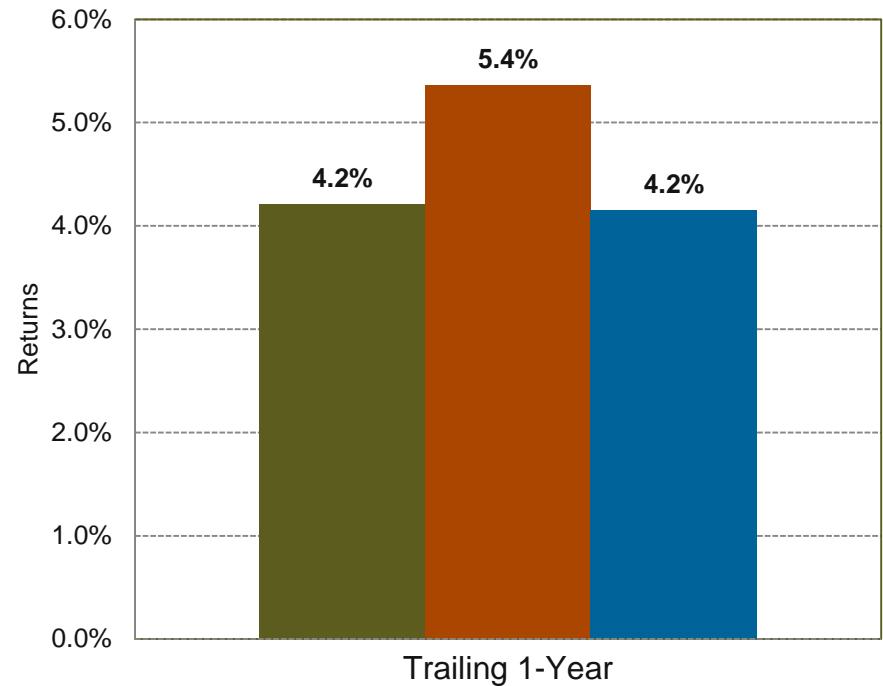
# PRIT Real Estate Managers

as of September 30, 2015

## Real Estate (SA) vs. NCREIF (One Quarter Lag)

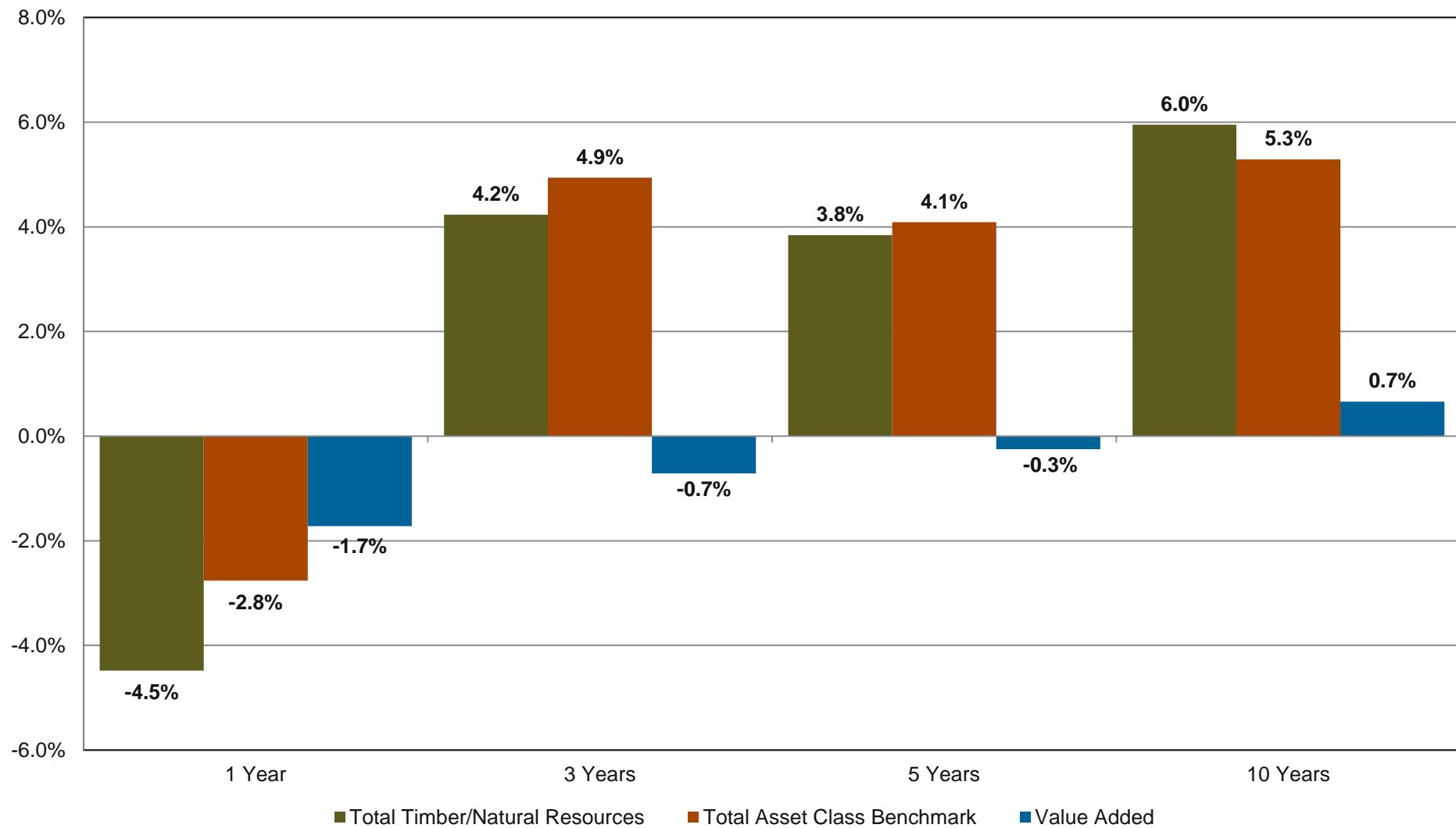


## Global REIT Managers vs. EPRA/NAREIT Developed REIT Index



# PRIT Timber/Natural Resources (\$2.2 Billion)

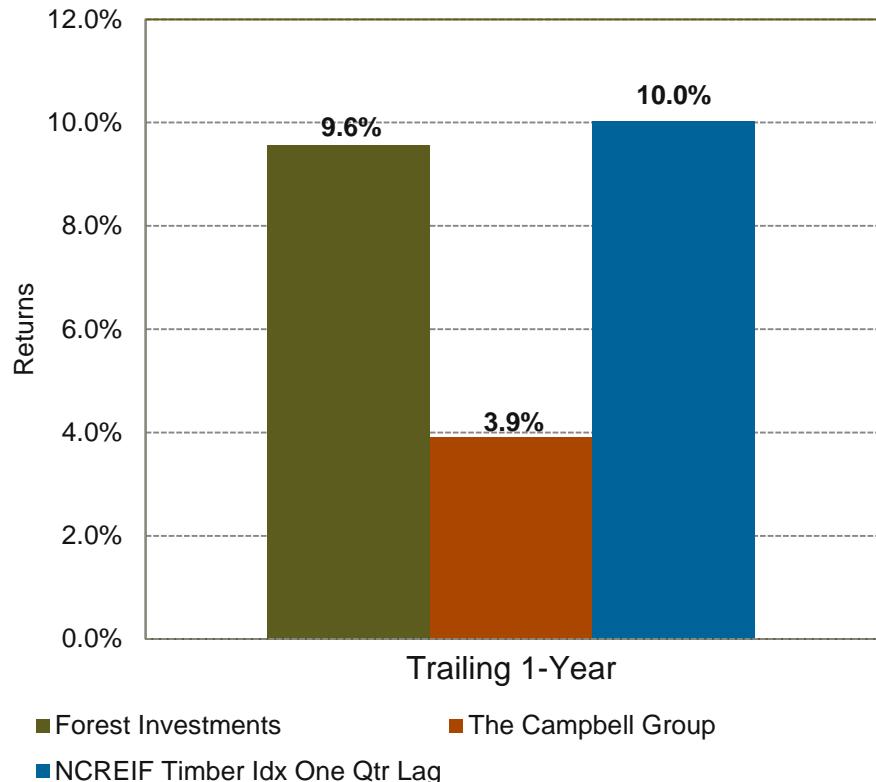
Gross of Fees Performance as of September 30, 2015



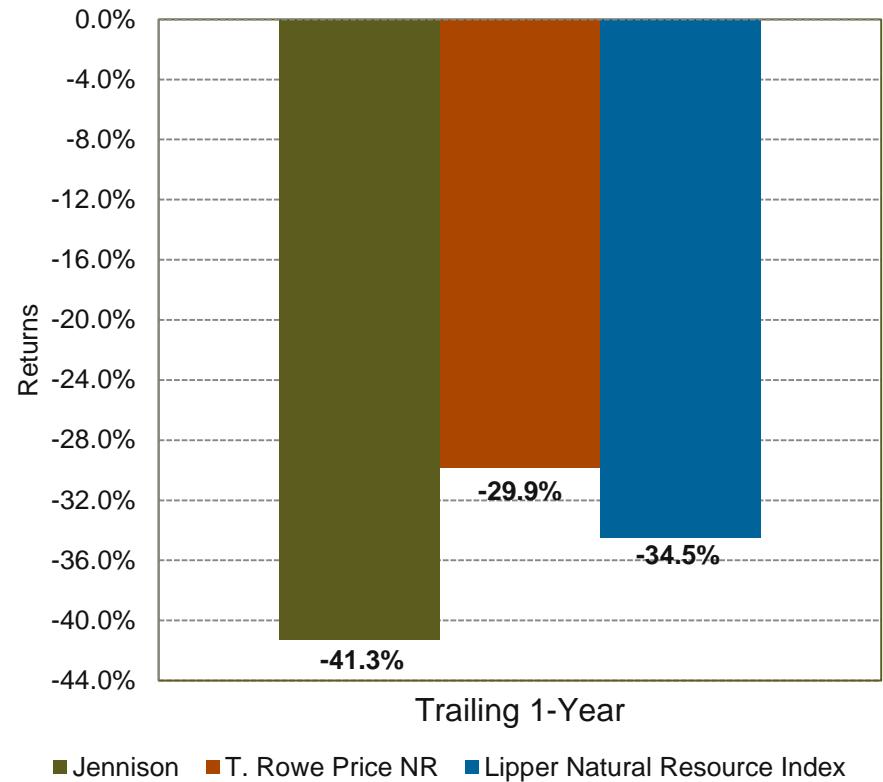
# PRIT Timber/Natural Resource Managers

as of September 30, 2015

## Timber Managers vs. NCREIF Timber (One Qtr Lag)



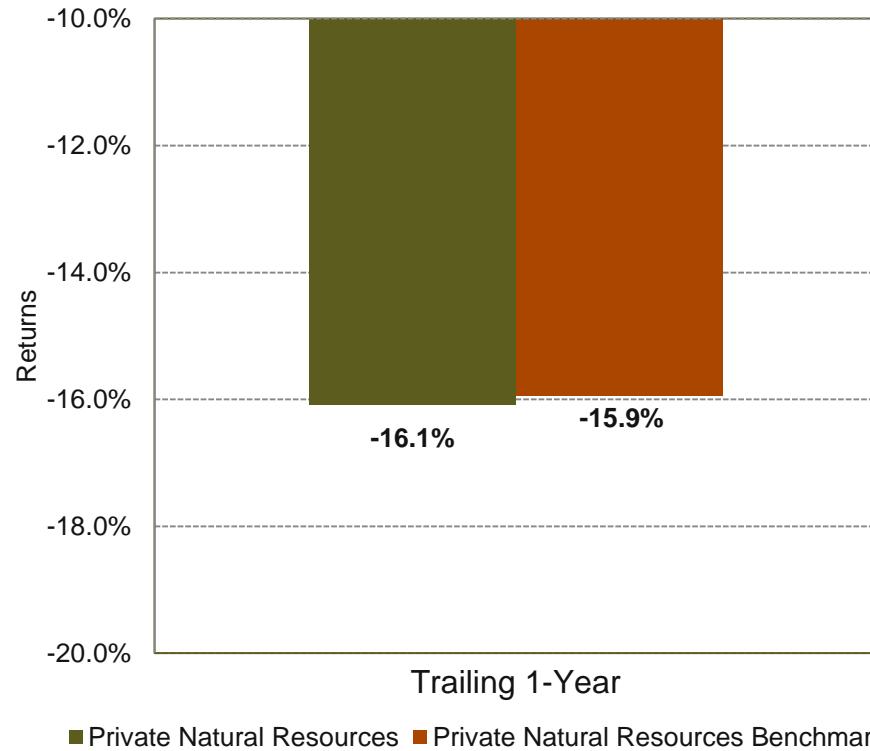
## Natural Resources vs. Lipper Natural Resource Index



# PRIT Private Natural Resource Managers

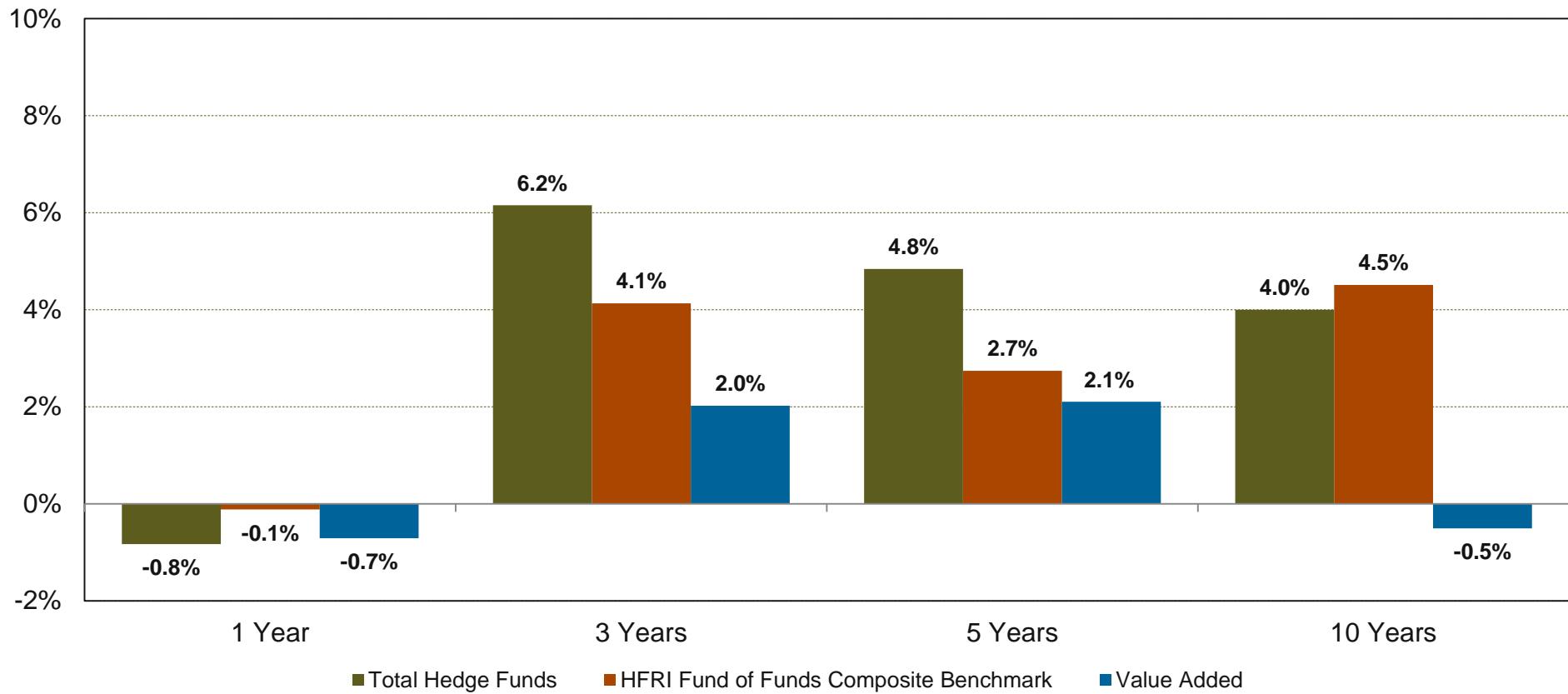
as of September 30, 2015

## Private Natural Resources vs. Private Natural Resources Benchmark



# PRIT Hedge Funds (\$5.0 Billion)

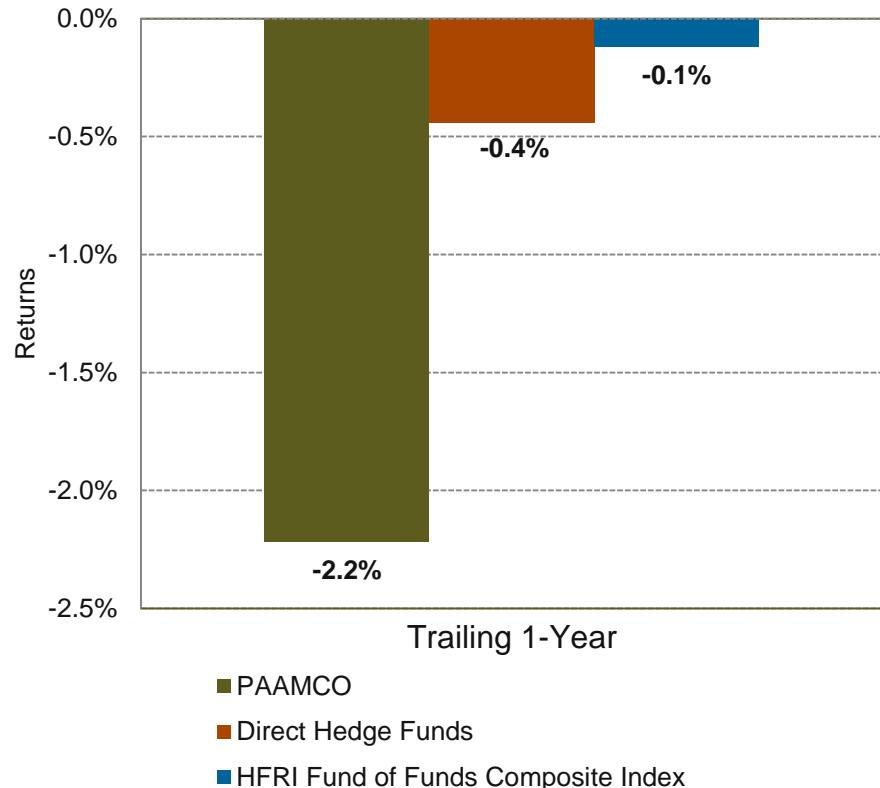
NET of Fees Performance as of September 30, 2015



# PRIT Hedge Fund Managers

NET of Fees Performance as of September 30, 2015

## Hedge Funds Versus HFRI Fund of Funds Composite Index



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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix C

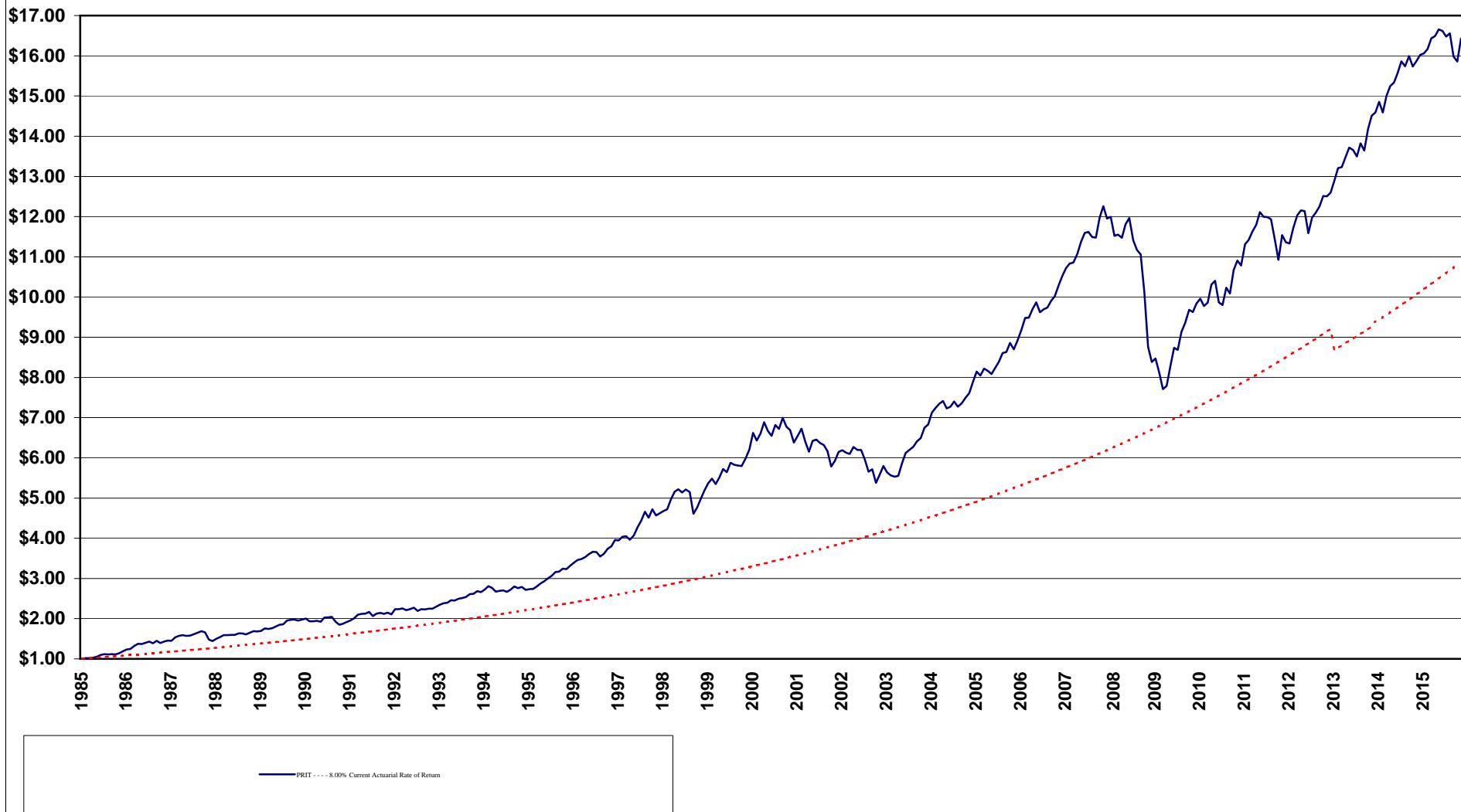
BNY Mellon Gross of Fees Performance Report

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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**Pension Reserves Investment Management Board  
Performance Measurement  
October 31, 2015**

**Growth of a Dollar invested in the PRIT Fund**  
**Monthly, December 31, 1984 to October 31, 2015**  
**\$1.00 invested in the PRIT Fund on January 1, 1985 would have grown to \$16.43 by October 31, 2015**



PENSION RESERVES INVESTMENT TRUST SUMMARY OF PLAN PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015											
	NAV \$ (M)	Target Allocation %	Actual Allocation %	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Since Inception
<b>GLOBAL EQUITY</b>	26,332,230	42.5%	43.4%	7.62	-2.74	0.77	0.41	10.31	8.32	5.97	5.34
<b>CORE FIXED INCOME</b>	7,766,315	13.0%	12.8%	-0.01	3.21	-1.22	3.83	3.57	4.54	5.24	7.66
<b>VALUE-ADDED FIXED INCOME</b>	5,062,695	10.0%	8.3%	1.94	-1.65	-0.90	-3.58	2.85	5.53	7.38	8.48
<b>PRIVATE EQUITY</b>	6,821,503	10.0%	11.2%	-0.21	5.44	15.23	17.75	20.30	18.65	16.25	14.61
<b>REAL ESTATE</b>	6,375,879	10.0%	10.5%	1.29	3.91	9.31	13.21	12.91	12.85	8.29	6.48
<b>TIMBER/NATURAL RESOURCES</b>	2,251,110	4.0%	3.7%	1.57	-1.93	-3.00	-1.50	4.90	3.91	6.09	7.75
<b>HEDGE FUNDS (NET OF FEES)</b>	5,164,294	10.0%	8.5%	0.51	-3.96	-1.48	0.40	6.11	4.64	4.19	4.51
<b>PORTFOLIO COMPLETION STRATEGIES</b>	299,816	0.5%	0.5%	0.66	3.97	-1.32					-1.32
<b>OVERLAY</b>	604,956	0.0%	1.0%	6.99	2.80	3.51	4.70				6.91
<b>TOTAL CORE</b>	<b>60,705,871</b>	<b>100%</b>	<b>100%</b>	<b>3.62</b>	<b>-0.30</b>	<b>2.31</b>	<b>3.55</b>	<b>9.56</b>	<b>8.57</b>	<b>6.59</b>	<b>9.45</b>
<i>INTERIM BENCHMARK (target allocation without private equity benchmark)<sup>1</sup></i>				3.41	-1.28	1.63	2.21	8.39	7.63	6.40	9.94
<i>TOTAL CORE BENCHMARK (target allocation with private equity benchmark)<sup>2</sup></i>				3.57	-1.40	1.14	1.66	7.37	6.67	6.04	9.82
PARTICIPANTS CASH	16,754			0.02	0.06	0.14	0.16	0.14	0.15	1.44	3.98
TEACHERS' AND EMPLOYEES' CASH	16,266			0.02	0.06	0.14	0.16	0.14	0.15	1.18	2.74
<b>TOTAL FUND</b>	<b>60,738,891</b>			<b>3.61</b>	<b>-0.30</b>	<b>2.30</b>	<b>3.54</b>	<b>9.53</b>	<b>8.54</b>	<b>6.57</b>	<b>9.50</b>

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>DOMESTIC EQUITY</b>												
INTECH	903,124	1.5%	6.90	1.90	3.91	6.81	17.31	15.15	8.06	7.58		1/31/2006
PIMCO DOMESTIC	930,475	1.5%	8.91	0.42	2.03	4.49	16.04	14.99	7.94	7.36		2/28/2006
SSGA S&P 500	7,535,910	12.4%	8.40	1.28	2.50	5.05	16.23		16.45	16.38		12/31/2011
CLOSED PORTFOLIOS	0	0.0%										
TOTAL LARGE CAP MANAGERS	9,369,508	15.4%	8.30	1.25	2.59	5.18	16.33	16.14	8.67	7.37	6.72	7/31/1997
<i>S&amp;P 500</i>					8.44	1.45	2.70	5.20	16.20	14.33	7.85	
SUMMIT CREEK	198,037	0.3%	2.72	-6.54	-0.08	1.55				11.89	12.56	5/31/2013
<i>RUSSELL 2000 GROWTH</i>				5.67	-8.13	-0.10	3.52					
FRONTIER	180,838	0.3%	6.54	-1.04	1.47	4.18				11.52	7.35	5/31/2013
HUBER	241,597	0.4%	8.60	-6.45	-6.71	-10.04				0.72	7.35	5/31/2013
TOTAL SMALL CAP VALUE	422,435	0.7%	7.71	-4.21	-3.38	-4.46				4.78	7.35	5/31/2013
<i>RUSSELL 2000 VALUE</i>				5.60	-5.74	-5.02	-2.88					
RIVERBRIDGE	162,527	0.3%	5.06	-2.62	2.07	5.11				11.18	12.86	5/31/2013
<i>RUSSELL 2500 GROWTH</i>				5.23	-6.40	1.18	4.17					
SOUTHERNSUN	141,915	0.2%	6.96	-8.40	-4.26	-5.98				9.26	10.53	5/31/2013
SSGA R2500	1,506,635	2.5%	5.61	-5.24	-0.80	1.45	14.64			14.67	14.81	12/31/2011
TOTAL SMID CAP CORE	1,648,550	2.7%	5.73	-5.52	-1.10	0.76	14.52			14.58	14.81	12/31/2011
<i>RUSSELL 2500</i>				5.59	-5.28	-0.73	1.50	14.85				
TOTAL SMALL/SMID CAP EQUITY	2,431,549	4.0%	5.77	-5.19	-1.22	0.15	13.78			14.01	14.66	12/31/2011
<i>70.5% RUSSELL 2500/5.5% RUSSELL 2500 GROWTH/6.5% RUSSELL 2000 GROWTH/17.5% RUSSELL 2000 VALUE<sup>3</sup></i>					5.58	-5.60	-1.33	1.02	14.65			
CLOSED PORTFOLIOS	(0)	0.0%										
DOMESTIC EQUITY CASH	(679)	0.0%										
<b>TOTAL DOMESTIC EQUITY</b>	<b>11,800,379</b>	<b>19.4%</b>	<b>7.77</b>	<b>-0.13</b>	<b>1.82</b>	<b>4.15</b>	<b>15.83</b>	<b>14.00</b>	<b>6.64</b>	<b>10.30</b>	<b>10.55</b>	<b>2/28/1985</b>
ASSET CLASS BENCHMARK: 78.9% S&P 500/14.88% RUSSELL 2500/1.16% RUSSELL 2500 GROWTH/1.37% RUSSELL 2000 GROWTH/3.69% RUSSELL 2000 VALUE <sup>4</sup>					7.83	-0.06	1.87	4.34	15.89	14.03	7.51	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>INTERNATIONAL EQUITY</b>												
SSGA WORLD EX-US	5,136,934	8.5%	7.28	-3.67	1.28	-0.53	7.86	4.96	4.64	6.04	5.56	3/31/1992
<i>CUSTOM MSCI WORLD EX-US IMI NET DIVS<sup>5</sup></i>			7.28	-3.80	0.80	-1.14	7.19	4.35	3.99			
MARATHON-LONDON	2,446,567	4.0%	7.24	-0.85	8.47	6.98	12.20	8.42	7.93	8.76	4.56	10/31/1996
BAILLIE GIFFORD	1,816,435	3.0%	9.30	-2.80	4.18	2.15	8.61	6.57	6.49	7.88	5.72	8/31/2004
MONDRIAN INVESTMENT	775,577	1.3%	8.13	-2.38	2.98	2.54	9.70	6.03		1.00	0.19	6/30/2008
FIS	105,442	0.2%	6.61	-2.45	4.09	3.30				2.92	1.17	10/31/2013
SSGA TRANSITION INTERNATIONAL EQUITY	-	0.0%										
CLOSED PORTFOLIOS	14	0.0%										
INTERNATIONAL EQUITY CASH	652	0.0%										
<i>CUSTOM MSCI EAFE STANDARD INDEX NET DIVS<sup>6</sup></i>			7.79	-3.36	1.91	-0.22	7.99	4.71	4.03			
<b>TOTAL INTERNATIONAL EQUITY</b>	<b>10,281,621</b>	<b>16.9%</b>	<b>7.68</b>	<b>-2.72</b>	<b>3.67</b>	<b>2.01</b>	<b>9.20</b>	<b>6.21</b>	<b>5.23</b>	<b>7.98</b>	<b>6.44</b>	<b>7/31/1986</b>
<b>ASSET CLASS BENCHMARK: 50% CUSTOM MSCI WORLD EX-US IMI NET DIVS, 50% CUSTOM MSCI EAFE STANDARD INDEX NET DIVS<sup>7</sup></b>					7.53	-3.58	1.36	-0.68	7.50	4.53	4.08	
<b>EMERGING MARKETS EQUITY</b>												
SSGA EMERGING MKTS	1,081,541	1.8%	6.94	-11.76	-8.38	-13.04	-1.92	-2.21		-0.21	-0.56	5/31/2010
<i>CUSTOM MSCI EM IMI NET DIVS<sup>8</sup></i>			6.93	-11.98	-8.79	-13.46	-2.08	-2.58				
AQR EMERGING	553,965	0.9%	7.10	-11.65						-13.09	-12.66	3/31/2015
BAILLIE GIFFORD EMM	628,736	1.0%	9.57	-8.93						-11.26	-12.66	3/31/2015
DRIEHAUS CAPITAL	581,263	1.0%	5.77	-8.43						-7.93	-12.66	3/31/2015
HARDING LOEVNER	414,008	0.7%	8.47	-8.47						-9.35	-12.66	3/31/2015
PZENA INV	565,968	0.9%	6.65	-9.85						-9.98	-12.66	3/31/2015
EMERGING MARKETS TRANSITION	851	0.0%										
TOTAL EMERGING MARKETS CORE	2,744,791	4.5%	7.48	-9.42	-9.50	-13.96	-2.78	-3.05	4.65	8.98	4.87	2/28/1990
<i>CUSTOM MSCI EM STANDARD INDEX NET DIVS<sup>9</sup></i>			7.10	-12.02	-9.47	-14.21	-2.58	-2.66	5.84			
CLOSED PORTFOLIOS	53	0.0%										
EMERGING MARKETS CASH	283	0.0%										
ACADIAN	130,884	0.2%	5.67	-10.24	-4.11	-7.64	10.02		10.84	1.27		5/31/2012
WASATCH	97,041	0.2%	4.95	-8.46	-4.47	-5.58	1.38		0.83	1.27		5/31/2012
TOTAL EMERGING MARKETS SMALL CAP	227,925	0.4%	5.36	-9.49	-4.26	-6.77	4.07		3.90	1.27		5/31/2012
<i>CUSTOM MSCI EM SMALL CAP NET DIVS<sup>10</sup></i>			5.91	-11.57	-4.12	-8.31	1.43					
ACADIAN FRONTIER	99,501	0.2%	4.08	-1.93						2.18	-6.66	4/30/2015
CITY OF LONDON	96,136	0.2%	4.13	-5.32						-2.49	-4.89	2/28/2015
TOTAL FRONTIER	195,637	0.3%	4.10	-4.10						-1.31	-4.89	2/28/2015
<i>CUSTOM MSCI FRONTIER MKTS COUNTRY CAPPED INDEX NET DIVS</i>			4.12	-6.97								
<b>TOTAL EMERGING MARKETS</b>	<b>4,250,230</b>	<b>7.0%</b>	<b>7.07</b>	<b>-9.83</b>	<b>-8.37</b>	<b>-12.84</b>	<b>-1.85</b>	<b>-2.09</b>	<b>5.05</b>	<b>9.14</b>	<b>4.91</b>	<b>2/28/1990</b>
<b>ASSET CLASS BENCHMARK<sup>11</sup></b>					6.86	-11.80	-8.69	-13.37	-2.05	-2.56	5.95	
<b>TOTAL GLOBAL EQUITY<sup>12</sup></b>	<b>26,332,230</b>	<b>43.4%</b>	<b>7.62</b>	<b>-2.74</b>	<b>0.77</b>	<b>0.41</b>	<b>10.31</b>	<b>8.32</b>	<b>5.97</b>	<b>5.34</b>	<b>4.34</b>	<b>1/31/2001</b>
<b>ASSET CLASS BENCHMARK: 44% DOMESTIC EQUITY BM/40% INTERNATIONAL EQUITY BM/16% EMERGING MARKETS BM<sup>13</sup></b>					7.56	-3.37	0.03	-0.54	9.62	7.53	5.59	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>DOMESTIC INVESTMENT GRADE FIXED INCOME</b>												
BLACKROCK PASSIVE	793,845	1.3%	0.04	1.23	1.04	1.86	1.63	3.08	4.80	5.59	5.61	6/30/1995
PIMCO CORE	788,935	1.3%	-0.02	0.12	0.47	1.39	1.56	3.02	5.48	7.25	6.38	9/30/1990
LOOMIS SAYLES CORE	1,133,798	1.9%	0.12	1.17	1.90	2.85	2.72	4.31	5.54	7.45	6.48	5/31/1990
COMMUNITY CAPITAL MANAGEMENT	28,022	0.0%	-0.10	1.58	2.01	1.99	2.23	3.20		4.86	4.99	7/31/2006
AFL - CIO HOUSING INVESTMENT	126,131	0.2%	-0.09	1.38	1.86	2.81	1.95	3.29		5.04	4.80	8/31/2007
ACCESS CAPITAL - ETI	103,525	0.2%	0.10	1.04	1.99	2.77	2.28	3.21	4.73	4.34	4.30	4/30/2004
TOTAL AGGREGATE <sup>14</sup>	2,974,257	4.9%	0.05	0.92	1.37	2.29	1.98	3.38	5.03	5.68	5.33	7/31/1999
BARCLAYS CAPITAL AGGREGATE					0.02	1.25	1.14	1.96	1.65	3.03	4.72	
BLACKROCK - STRIPS	2,951,412	4.9%	-0.30	7.30	-2.92	6.72				15.80	15.71	4/30/2014
BC US TREASURY STRIPS 20+ YR INDEX					-0.32	7.25	-3.01	6.65				
CLOSED PORTFOLIOS					1	0.0%						
FIXED INCOME CASH					1,756	0.0%						
<b>TOTAL DOMESTIC INVESTMENT GRADE FIXED INCOME</b>	<b>5,927,426</b>	<b>9.8%</b>	<b>-0.12</b>	<b>4.25</b>	<b>-1.45</b>	<b>4.70</b>	<b>4.43</b>	<b>4.87</b>	<b>5.85</b>	<b>6.23</b>	<b>5.80</b>	<b>7/31/1999</b>
ASSET CLASS BENCHMARK: 50% BC AGGREGATE BOND/50% BC US TREASURY STRIPS 20+ YR INDEX <sup>15</sup>					-0.15	4.39	-1.57	4.56	4.13	4.53	5.48	
<b>INFLATION-LINKED FIXED INCOME</b>												
BLACKROCK - TIPS	589,390	1.0%	0.27	-0.90	-0.50	-1.48	-2.02	2.05	4.13	5.35	5.41	4/30/2001
BARCLAYS CAPITAL US TIPS					0.25	-0.90	-0.55	-1.42	-2.03	2.06	4.17	
BLACKROCK ILBs	1,249,500	2.1%	0.38	-0.07	0.00	1.64	1.75	3.86	1.74	0.96	0.50	10/31/2005
CLOSED PORTFOLIOS					-0.0%							
TOTAL ILBs	1,249,500	2.1%	0.38	-0.07	0.00	1.64	1.75	3.86	1.59	0.81	0.50	10/31/2005
BC LB US\$ HEDGED <sup>16</sup>					0.29	0.30	0.14	1.75	1.49	3.59	1.29	
<b>TOTAL INFLATION-LINKED FIXED INCOME</b>	<b>1,838,890</b>	<b>3.0%</b>	<b>0.35</b>	<b>-0.34</b>	<b>-0.16</b>	<b>0.62</b>	<b>0.49</b>	<b>3.27</b>	<b>1.87</b>	<b>3.56</b>	<b>1.25</b>	<b>4/30/2001</b>
33% BC US TIPS/67% BC ILB US\$ HEDGED <sup>17</sup>					0.28	-0.10	-0.08	0.71	0.32	3.09	1.65	
<b>TOTAL CORE FIXED INCOME</b>	<b>7,766,315</b>	<b>12.8%</b>	<b>-0.01</b>	<b>3.21</b>	<b>-1.22</b>	<b>3.83</b>	<b>3.57</b>	<b>4.54</b>	<b>5.24</b>	<b>7.66</b>	<b>7.11</b>	<b>9/30/1985</b>
ASSET CLASS BENCHMARK <sup>18</sup>					-0.05	3.37	-1.29	3.74	3.29	4.23	4.90	



PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>PRIVATE EQUITY</b>												
SPECIAL EQUITY	18,828	0.0%	0.60	-0.88	7.47	0.43	19.81	17.46	13.97	14.76		9/30/1986
SPECIAL EQUITY - 2000	13,370	0.0%	-0.25	9.59	24.33	39.53	29.60	20.98	18.27	16.71		2/29/2000
SPECIAL EQUITY - 2001	59,538	0.1%	0.23	1.53	13.42	12.09	21.11	15.59	18.40	20.20		4/30/2001
SPECIAL EQUITY - 2002	4,822	0.0%	-0.86	7.77	13.44	-1.05	9.67	23.63	25.49	18.25		7/31/2002
SPECIAL EQUITY - 2003	80,227	0.1%	-0.16	1.39	3.34	6.02	11.61	11.98	15.80	15.77		7/31/2003
SPECIAL EQUITY - 2004	77,857	0.1%	0.44	9.04	25.04	27.45	25.60	22.16	15.42	13.31		7/31/2004
SPECIAL EQUITY - 2005	397,614	0.7%	-0.26	5.85	12.92	13.89	18.07	17.56	12.75	12.02		6/30/2005
SPECIAL EQUITY - 2006	610,939	1.0%	-0.08	4.76	10.91	11.76	19.36	18.48		6.05		4/30/2006
SPECIAL EQUITY - 2007	868,889	1.4%	-0.25	6.44	12.48	12.98	17.19	15.66		8.06		7/31/2007
SPECIAL EQUITY - 2008	887,490	1.5%	-0.27	8.79	19.26	22.00	24.83	22.32		10.30		4/30/2008
SPECIAL EQUITY - 2009	178,563	0.3%	-0.17	6.10	19.55	28.71	27.01	24.10		11.07		8/31/2009
SPECIAL EQUITY - 2010	472,222	0.8%	-0.32	5.03	11.39	15.09	18.22			5.48		1/31/2011
SPECIAL EQUITY - 2011	609,144	1.0%	-0.05	6.01	26.20	31.32	20.29			-24.83		7/31/2011
SPECIAL EQUITY - 2012	230,378	0.4%	-0.92	0.02	6.05	8.10	17.78			-12.89		8/31/2012
SPECIAL EQUITY - 2013	186,298	0.3%	-0.73	1.39	4.81	6.98				3.88		6/30/2013
SPECIAL EQUITY - 2014	243,627	0.4%	-0.34	0.40	0.04	2.26				-10.44		5/31/2014
SPECIAL EQUITY - 2015	89,526	0.1%	-0.67	-3.10						-6.44		3/31/2015
TOTAL SPECIAL EQUITY	5,029,331	8.3%	-0.25	5.40	13.98	16.21	19.75	18.17	16.65	16.20		9/30/1986
<b>VENTURE CAPITAL</b>												
VENTURE CAPITAL	12,323	0.0%	0.00	-3.92	2.36	7.09	8.93	9.18	15.06	11.21		4/30/1986
VENTURE CAPITAL - 2000	63,066	0.1%	0.05	0.63	3.33	0.77	8.39	11.31	10.21	6.18		2/29/2000
VENTURE CAPITAL - 2001	35,467	0.1%	-0.18	0.87	6.82	9.71	11.02	10.67	11.59	12.12		2/28/2001
VENTURE CAPITAL - 2002	13,978	0.0%	0.00	-1.04	-0.39	7.99	5.02	3.44	0.03	-0.08		4/30/2003
VENTURE CAPITAL - 2003	31,582	0.1%	0.00	3.26	26.57	22.81	37.38	22.87	15.10	13.51		2/29/2004
VENTURE CAPITAL - 2004	32,263	0.1%	-0.07	-6.93	21.02	24.03	21.43	35.71	27.03	24.41		2/28/2005
VENTURE CAPITAL - 2005	114,495	0.2%	0.00	3.53	21.86	24.59	23.14	19.94	12.04	11.17		3/31/2005
VENTURE CAPITAL - 2006	127,054	0.2%	-0.06	-0.49	6.82	11.37	17.39	17.48		10.75		4/30/2006
VENTURE CAPITAL - 2007	196,562	0.3%	0.00	10.13	18.92	25.46	27.70	28.54		17.28		4/30/2007
VENTURE CAPITAL - 2008	32,604	0.1%	0.00	4.83	11.38	14.58	27.98	38.89		24.55		7/31/2008
VENTURE CAPITAL - 2009	248,788	0.4%	-0.04	8.11	22.51	28.57	25.48	21.75		13.25		8/31/2009
VENTURE CAPITAL - 2010	284,046	0.5%	0.00	11.24	44.35	47.32	37.60	25.79		18.53		4/30/2010
VENTURE CAPITAL - 2011	99,967	0.2%	-0.22	6.02	24.88	27.84	26.16			13.39		2/28/2011
VENTURE CAPITAL - 2012	244,953	0.4%	-0.31	5.50	22.87	29.13	23.26			11.86		5/31/2012
VENTURE CAPITAL - 2013	51,280	0.1%	0.00	8.64	17.72	17.41				6.65		6/30/2013
VENTURE CAPITAL - 2014	53,245	0.1%	-0.42	1.42	4.49	2.65				-1.64		6/30/2014
VENTURE CAPITAL - 2015	5,155	0.0%	-0.28	-3.80						-12.47		3/31/2015
TOTAL VENTURE CAPITAL	1,646,828	2.7%	-0.09	5.88	21.28	25.16	24.61	22.73	17.09	13.10		4/30/1986
PRIVATE EQUITY CASH	145,345	0.2%										
<b>TOTAL PRIVATE EQUITY</b>	<b>6,821,503</b>	<b>11.2%</b>	<b>-0.21</b>	<b>5.44</b>	<b>15.23</b>	<b>17.75</b>	<b>20.30</b>	<b>18.65</b>	<b>16.25</b>	<b>14.61</b>	<b>17.12</b>	<b>4/30/1986</b>
ASSET CLASS BENCHMARK <sup>24</sup>			-0.21	5.44	15.23	17.75	20.30	18.65	16.25			
<b>7 YEAR ANNUALIZED RETURN PE <sup>25</sup></b>				<b>1.04</b>	<b>3.98</b>	<b>9.42</b>	<b>11.30</b>	<b>12.30</b>	<b>14.18</b>	<b>14.76</b>	<b>7.88</b>	<b>7/31/2007</b>
7 YEAR ANNUALIZED RUSSELL 3000 +3% <sup>26</sup>				1.33	4.38	10.45	12.30	10.02	8.97			

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>PRIVATE REAL ESTATE</b>												
<b>CORE</b>												
INVESCO CORE	1,103,811	1.8%	0.38	2.54	5.32	11.30	13.38	13.56	8.87	9.88	9.73	5/31/1995
LASALLE	1,509,337	2.5%	0.27	3.00	10.02	12.30	13.45	14.20	8.75	10.47	9.66	1/31/1995
AEW	1,137,335	1.9%	0.36	2.79	11.21	19.61	14.56			14.23	12.30	1/31/2011
JP MORGAN	790,996	1.3%	0.35	3.41	8.96	15.29	9.79	12.53	7.36	10.49	9.09	9/30/2000
AEW-C TRANSITION	1,149,822	1.9%	0.23							0.23	0.00	10/31/2015
CLOSED PORTFOLIOS	-	0.0%										
TOTAL CORE ACCOUNTS	5,691,301	9.4%	0.31	3.07	9.20	13.55	12.21	13.08	8.11	9.95	9.70	12/31/1994
PORTFOLIO DEBT	(995,271)	-1.6%										
CLOSED PORTFOLIOS	-	0.0%										
<b>TOTAL SEPARATE ACCOUNTS - LEVERAGED</b>	<b>4,696,030</b>	<b>7.7%</b>	<b>0.34</b>	<b>3.55</b>	<b>10.63</b>	<b>16.03</b>				<b>14.77</b>	<b>11.81</b>	<b>2/28/2013</b>
<b>NON-CORE</b>												
NON-CORE	367,190	0.6%	0.24	5.89	12.58	14.26	10.92			12.46	11.33	1/31/2012
NON-CORE (ETI EXCLUDED)	367,190	0.6%	0.24	5.89	12.58	14.26	10.92			12.46	11.33	1/31/2012
<b>ETI (PARTNERSHIPS)</b>												
CANYON JOHNSON II	2,123	0.0%	0.00	-11.65	-10.69	-11.28	-5.00	-4.72	-5.76	-5.64	8.65	5/31/2005
INTERCONT IV	1,190	0.0%	0.00	15.47	41.05	69.99	25.14	18.00	0.07	0.06	8.43	7/31/2005
NEW BOSTON URBAN I	6,493	0.0%	0.00	2.91	0.51	1.38	4.10	5.15		-4.02	7.12	12/31/2006
TOTAL ETI ACCOUNTS	9,805	0.0%	0.00	-1.92	-1.78	1.58	2.14	1.82	-4.97	-4.80	8.65	5/31/2005
<b>TOTAL NON-CORE</b>	<b>376,995</b>	<b>0.6%</b>	<b>0.23</b>	<b>5.65</b>	<b>12.06</b>	<b>13.82</b>	<b>10.39</b>	<b>8.42</b>	<b>-1.94</b>	<b>-1.91</b>	<b>8.65</b>	<b>5/31/2005</b>
<b>TOTAL PRIVATE REAL ESTATE<sup>27</sup></b>	<b>5,073,025</b>	<b>8.4%</b>	<b>0.33</b>	<b>3.74</b>	<b>10.76</b>	<b>15.81</b>	<b>14.37</b>	<b>14.36</b>	<b>8.87</b>	<b>11.00</b>	<b>9.66</b>	<b>11/30/1994</b>
NCREIF PROPERTY ONE QTR LAG					0.00	3.14	10.08	12.98	11.63	12.72	8.16	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>PUBLIC REAL ESTATE (REITS)</b>												
INVESCO GLOBAL REIT	276,076	0.5%	5.37	4.59	1.83	2.82	9.28			9.80	9.17	5/31/2012
CENTERSTOCK GLOBAL REIT	789,220	1.3%	5.66	4.77	2.64	4.26	9.37			9.84	9.17	5/31/2012
INVESCO TRANSITION	150,878	0.2%	5.35	4.57	1.73	2.72				3.00	3.29	8/31/2014
TOTAL GLOBAL REITS	1,216,174	2.0%	5.56	4.70	2.29	3.59	8.86			9.29	9.17	5/31/2012
<i>FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN</i>					5.72	4.18	1.19	2.53	8.62			
<b>CLOSED PORTFOLIOS</b>					26							
REIT CASH					14	0.0%						
<b>TOTAL REITS</b>	<b>1,216,214</b>	<b>2.0%</b>	<b>5.56</b>	<b>4.71</b>	<b>2.33</b>	<b>3.63</b>	<b>8.87</b>	<b>9.03</b>	<b>5.65</b>	<b>9.72</b>	<b>8.27</b>	<b>6/30/1998</b>
<i>100% FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN<sup>28</sup></i>					5.72	4.18	1.19	2.53	8.62	8.91	5.24	
REAL ESTATE LEVERAGE CASH	(28)	0.0%										
CORE REAL ESTATE CASH	86,668	0.1%										
REAL ESTATE TRANSITION	0	0.0%										
TOTAL CORE ACCOUNT	6,375,879	10.5%	1.29	3.91	9.31	13.21	12.91	12.85	8.29	10.69	9.85	12/31/1994
<b>TOTAL REAL ESTATE</b>	<b>6,375,879</b>	<b>10.5%</b>	<b>1.29</b>	<b>3.91</b>	<b>9.31</b>	<b>13.21</b>	<b>12.91</b>	<b>12.85</b>	<b>8.29</b>	<b>6.48</b>	<b>7.97</b>	<b>1/31/1986</b>
<i>ASSET CLASS BENCHMARK: 80% NCREIF PROPERTY ONE QTR LAG/20% FTSE EPRA NAREIT DEVELOPED NET TOTAL RETURN<sup>29</sup></i>					1.14	3.42	8.39	10.97	11.19	12.18	7.82	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>TIMBER</b>												
FOREST INVESTMENTS	1,124,190	1.9%	0.00	1.90	3.39	9.56	9.80	6.78	7.57	7.63	7.28	1/31/2002
THE CAMPBELL GROUP	536,458	0.9%	0.45	-2.67	0.60	4.19	7.45			6.16	7.54	11/30/2011
TIMBER CASH	53	0.0%										
<b>TOTAL TIMBER</b>	<b>1,660,702</b>	<b>2.7%</b>	<b>0.15</b>	<b>0.38</b>	<b>2.47</b>	<b>7.82</b>	<b>9.19</b>	<b>6.51</b>	<b>8.66</b>	<b>9.63</b>	<b>7.28</b>	<b>1/31/2002</b>
<i>NCREIF TIMBER INDEX ONE QTR LAG <sup>30</sup></i>					0.00	0.51	8.43	10.02	9.77	6.10	8.26	
<b>NATURAL RESOURCES - PUBLIC</b>												
JENNISON	162,572	0.3%	11.34	-13.83	-16.62	-27.60	-8.29	-6.76		-6.89	-8.66	7/31/2008
T.ROWE PRICE NR	176,470	0.3%	10.33	-8.67	-11.64	-19.05	-1.01	-0.17		-4.93	-8.66	7/31/2008
PUBLIC NATURAL RESOURCES CASH	4	0.0%										
TOTAL NATURAL RESOURCES PUBLIC	339,047	0.6%	10.81	-11.21	-14.09	-23.38	-4.78	-3.52		-5.85	-8.66	7/31/2008
<i>LIPPER NATURAL RESOURCES GLOBAL FUND INDEX</i>					9.37	-13.35	-15.28	-23.59	-6.13	-4.74		
<b>NATURAL RESOURCES- PRIVATE</b>												
NATURAL RESOURCES- PRIVATE	257,316	0.4%	-0.32	-3.22	-17.33	-16.26	-3.33	4.73		1.02	0.59	8/31/2008
PRIVATE NATURAL RESOURCES CASH	(5,955)	0.0%										
TOTAL NATURAL RESOURCES PRIVATE	251,361	0.4%	-0.32	-3.15	-17.20	-16.13	-3.18	4.90		0.59	0.59	8/31/2008
<i>BENCHMARK - NAT. RES. PRIVATE <sup>31</sup></i>					-0.32	-3.15	-17.20	-16.13	-3.18	4.90		
<b>TOTAL TIMBER/NATURAL RESOURCES</b>	<b>2,251,110</b>	<b>3.7%</b>	<b>1.57</b>	<b>-1.93</b>	<b>-3.00</b>	<b>-1.50</b>	<b>4.90</b>	<b>3.91</b>	<b>6.09</b>	<b>7.75</b>	<b>5.24</b>	<b>1/31/2002</b>
<i>ASSET CLASS BENCHMARK <sup>32</sup></i>					1.25	-2.35	0.78	-0.21	5.59	3.99	5.42	

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>HEDGE FUNDS (NET OF FEES)</b>												
ARDEN HFOF LIQUIDATION	36,205	0.1%	-1.60	-4.43	-2.08	-2.42	4.65			4.83		10/31/2012
IVY LIQUIDATION	4,567	0.0%	-1.00	-2.68	0.16	2.33	6.15	1.96		2.35		3/31/2009
PAAMCO	897,919	1.5%	0.21	-4.95	-1.84	-1.22	6.52	4.51	4.77	4.75	4.77	8/31/2004
<i>100% HFRI FUND OF FUNDS COMPOSITE INDEX<sup>33</sup></i>			0.83	-2.76	-0.12	1.46	4.55	2.63	4.55			
DIRECT HEDGE FUNDS	4,223,390	7.0%	0.60	-3.73	-1.51	0.85	6.20			5.80	3.93	11/30/2011
<i>HFRI FUND OF FUNDS COMPOSITE INDEX<sup>34</sup></i>			0.83	-2.76	-0.12	1.46	4.55					
HEDGE FUND CASH	2,213	0.0%										
<b>TOTAL HEDGE FUNDS (NET OF FEES)</b>	<b>5,164,294</b>	<b>8.5%</b>	<b>0.51</b>	<b>-3.96</b>	<b>-1.48</b>	<b>0.40</b>	<b>6.11</b>	<b>4.64</b>	<b>4.19</b>	<b>4.51</b>	<b>4.77</b>	<b>7/31/2004</b>
<b>ASSET CLASS BENCHMARK:</b>												
<i>HFRI FUND OF FUNDS COMPOSITE INDEX<sup>35</sup></i>				0.83	-2.76	-0.12	1.46	4.55	2.63	4.55		
<b>PORTFOLIO COMPLETION STRATEGIES</b>	<b>299,816</b>	<b>0.5%</b>	<b>0.66</b>	<b>3.97</b>	<b>-1.32</b>					<b>-1.32</b>	<b>2.65</b>	<b>1/31/2015</b>
<i>PORTFOLIO COMPLETION STRATEGIES COMPOSITE INDEX<sup>36</sup></i>				0.26	1.05		2.65					

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>PORTABLE ALPHA WIND DOWN (NET OF FEES)</b>												
AUSTIN CAPITAL	1,409	0.0%	-0.11	0.04	0.49	-3.22	-11.70	-11.22		-9.40	-0.91	9/30/2008
CRESTLINE	10,691	0.0%	-0.58	-4.75	-13.88	-11.28	-4.97	-2.12		0.17	-0.35	9/30/2006
STRATEGIC	14,926	0.0%	0.57	-2.98	-5.36	-5.66	-1.47	-2.80		-0.95	-0.63	10/31/2006
TOTAL FUND OF FUNDS (NET OF FEES)	27,025	0.0%	0.08	-3.52	-8.78	-7.83	-4.17	-3.24		-0.93	-0.35	9/30/2006
CLOSED PORTFOLIOS	-	0.0%										
PORTABLE ALPHA CASH	47	0.0%										
<b>TOTAL PORTABLE ALPHA WIND DOWN (NET OF FEES)</b>	<b>27,072</b>	<b>0.0%</b>	<b>0.08</b>	<b>-3.51</b>	<b>-8.70</b>	<b>-7.75</b>	<b>-4.13</b>	<b>-3.28</b>		<b>-5.81</b>	<b>-0.35</b>	<b>9/30/2006</b>
<b>ASSET CLASS BENCHMARK:</b>												
<i>HFR Fund of Funds Composite Index<sup>37</sup></i>					0.83	-2.76	-0.12	1.46	4.55	2.63		
<b>OVERLAY</b>												
CLIFTON	155,431	0.3%	4.72	-1.88	-1.05	0.55				5.72	5.72	10/31/2013
OVERLAY CASH	449,526	0.7%										
<b>TOTAL OVERLAY</b>	<b>604,956</b>	<b>1.0%</b>	<b>6.99</b>	<b>2.80</b>	<b>3.51</b>	<b>4.70</b>				<b>6.91</b>	<b>6.91</b>	<b>10/31/2013</b>
<b>ASSET CLASS BENCHMARK<sup>38</sup></b>					6.99	2.80	3.51	4.70				

PENSION RESERVES INVESTMENT TRUST SUMMARY OF MANAGER PERFORMANCE RATES OF RETURN (GROSS OF FEES) Periods Ending October 31, 2015												
	NAV \$ (M)	%	Month	FY '16	Calendar YTD	1 Year	3 Year	5 Year	10 Year	Manager ITD	Manager Benchmark - ITD	Inception Month
<b>TOTAL CORE</b>	<b>60,705,871</b>	<b>99.9%</b>	<b>3.62</b>	<b>-0.30</b>	<b>2.31</b>	<b>3.55</b>	<b>9.56</b>	<b>8.57</b>	<b>6.59</b>	<b>9.45</b>		<b>2/28/1985</b>
<b>CASH FUND</b>												
PARTICIPANTS' CASH (NET OF FEES)	16,754	0.0%	0.02	0.06	0.14	0.16	0.14	0.15	1.44	3.98	3.81	7/31/1985
<i>MERRILL LYNCH 90 DAY T BILL</i>				<i>-0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>0.02</i>	<i>0.05</i>	<i>0.07</i>	<i>1.31</i>		
MASS STATE TEACHERS CASH (NET OF FEES)	4,489	0.0%	0.02	0.06	0.14	0.16	0.14	0.15	1.19	2.58	2.59	7/31/1996
MASS STATE EMPLOYEES CASH (NET OF FEES)	11,777	0.0%	0.02	0.06	0.14	0.16	0.14	0.15	1.19	2.58	2.59	7/31/1996
<i>MERRILL LYNCH 90 DAY T BILL</i> <sup>39</sup>				<i>-0.01</i>	<i>0.01</i>	<i>0.01</i>	<i>0.02</i>	<i>0.05</i>	<i>0.07</i>	<i>1.44</i>		
TEACHERS' AND EMPLOYEES' CASH	16,266	0.0%	0.02	0.06	0.14	0.16	0.14	0.15	1.18	2.74		7/31/1996
<b>TOTAL FUND</b>	<b>60,738,891</b>	<b>100.0%</b>	<b>3.61</b>	<b>-0.30</b>	<b>2.30</b>	<b>3.54</b>	<b>9.53</b>	<b>8.54</b>	<b>6.57</b>	<b>9.50</b>		<b>1/31/1985</b>
POLICY RETURN <sup>40</sup>					3.75	-0.46	1.70	2.88	8.69	8.09	6.76	9.57
<i>TOTAL CORE BENCHMARK</i>					3.57	<i>-1.40</i>	<i>1.14</i>	<i>1.66</i>	<i>7.37</i>	<i>6.67</i>	<i>6.04</i>	<i>9.82</i>

PENSION RESERVES INVESTMENT TRUST  
FOOTNOTES  
RATES OF RETURN  
Periods Ending October 31, 2015

**Direct Real Estate**

- (1) Direct core and value real estate performance is time series weighted and based on property distributed income and capital appreciation/depreciation resulting from external appraisals and dispositions. PRIM's real estate appraisal policy requires that approximately one quarter of the directly owned properties be appraised by a real estate appraiser with an MAI designation every quarter. The goal is to obtain updated market values for each property annually.
- (2) The NCREIF Property Index (NPI) is an unleveraged, time series composite measurement of the investment performance of a large group of commercial real estate properties. The NPI is released 25 days after the end of each quarter. Because Mellon's performance report is released earlier, the NPI used as benchmark is lagged one quarter.
- (3) Direct Real Estate Manager NAV's are net of property level debt.

**Timber/Natural Resources**

- (4) PRIM's Timber/Natural resources appraisal policy states that all timber/natural resources properties be externally appraised every three years using a full narrative report format. These reports (and property values) are then updated annually by a Timber/Natural Resources Appraiser to reflect changes in timber markets, inventories and land values. The goal is to obtain market values for each timberland annually.
- (5) PRIM's timber portfolio currently does not utilize leverage.
- (6) The NCREIF Timber/Natural Resources Index (NTI) is an unleveraged, time series composite measurement of the investment performance of individual timber properties. The NTI is released 25 days after the end of each quarter. Because Mellon's performance report is released earlier, the NTI used as benchmark is lagged one quarter.

**REITs**

- (7) The FTSE NAREIT ALL EQUITY REITS Index is an unmanaged index of publicly traded U.S., tax-qualified REITs that have 75% or more of their gross assets invested in the equity ownership of real estate. This index does not include Real Estate Operating Companies (REOCs) although these are acceptable investments as part of the manager's guidelines and included in PRIM's REIT holdings.
- (8) The FTSE NAREIT ALL EQUITY REITS index can be considered a "leveraged" index given that the majority of the REITs included in the index use leverage as part of their investment strategy.

**ETI**

- (9) Real estate ETI Funds are primarily invested in development projects with a three to five year lifecycle. These investments require substantial capital investment with very little income during the initial stage of the cycle, resulting in a J curve return profile. The returns are expected later in the cycle, upon project completion and lease up. For lack of a better benchmark, the NPI which is a core property benchmark used to track stabilized, institutional grade properties is used by PRIM. However, Staff is focused more on deal flow quality and on returns generated relative to the risk adjusted returns projected by Managers in their offering memoranda.

**Private Equity**

- (10) Private Equity performance represents time weighted returns reflecting the most recent partnership financial statement valuations (typically lagging one calendar quarter) adjusted for actual cash flows through the reporting date. The Private Equity portfolio consists primarily of assets that are illiquid in nature, and valuations are determined by the General Partner based on current industry fair market value practices. Limited Partnership valuations are reviewed through a formal audit process annually, and valuations are also commonly reviewed by partnership advisory boards on a quarterly basis.

**Hedge Fund of Funds**

- (11) The Hedge Fund of Fund valuations are net of underlying manager fees and net of all Hedge Fund manager administrative, base and performance fees.

<b>PENSION RESERVES INVESTMENT TRUST</b> <b>BENCHMARK/COMPOSITE FOOTNOTES</b> <b>RATES OF RETURN</b> <b>Periods Ending October 31, 2015</b>
<b>Interim Benchmark</b>
(1) Interim benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The PE component of this uses the S&P 500 + 5% through 6/30/2000; currently Actual PE Performance (formally labeled Interim Policy Benchmark)
<b>Total Core Benchmark</b>
(2) The Total Core benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The Private Equity benchmark used for the Total Core benchmark calculation is the 7-year annualized return of the Russell 3000 +3% (formally labeled Policy Benchmark)
<b>Domestic Equity</b>
(3) Russell 2500 through 6/30/14; currently 70.5% Russell 2500/5.5% Russell 2500 Growth/6.5% Russell 2000 Growth/17.5% Russell 2000 Value
(4) Dow Jones Wilshire 5000 through 04/30/08; Russell 3000 through 06/30/2009; 78% Russell 3000/22% 3 Month Libor + 3% through 12/31/2009; Russell 3000 through 10/31/2011; 80% S&P 500/20% Russell 2500 through 6/30/2014; currently 78.9% S&P 500/14.88% Russell 2500/1.16% Russell 2500 Growth/1.37% Russell 2000 Growth/3.69% Russell 2000 Value
<b>International</b>
(5) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; currently Custom World ex-US IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.
(6) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2010; currently Custom MSCI EAFE Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.
(7) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; Custom World ex-US IMI Net Dividends through 8/31/2014; currently 50% custom MSCI World Ex-US IMI Net Dividends, 50% Custom MSCI EAFE Standard Index Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities. (Current blend is maintained by MSCI)
<b>Emerging Markets</b>
(8) MSCI Emerging Markets IMI Net Dividends through 12/31/2010; currently Custom MSCI Emerging Markets IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.
(9) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 12/31/2010; currently Custom MSCI Emerging Markets Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.
(10) MSCI Emerging Markets Small Cap Net Dividends Index through 8/31/2014; currently Custom MSCI Emerging Market Small Cap Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.
(11) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 4/30/2010; MSCI Emerging Markets IMI Net Dividends through 12/31/2010; Custom MSCI Emerging Markets IMI Net Dividends through 8/31/2014; 50% Custom MSCI EM IMI Net Dividends, 43% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends through 1/31/2015; 25% Custom MSCI EM IMI Net Dividends, 67.37% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends, .63% Custom MSCI Frontier Markets Country Capped Net Dividends through 2/28/2015. Weights were based on the beginning adjusted monthly market value of each index group, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities through 8/31/2015. Currently 25% Custom MSCI EM IMI Net Divs, 64% MSCI EM Standard Net Divs, 7% Custom MSCI EM Small Cap Net Divs, 4% CUSTOM MSCI EM 15% Country Capped Index net divs. (Current blend is maintained by MSCI)
<b>Global Equity</b>
(12) The Total Global Equity composite inception date coincides with the establishment of the MSCI All Country World Index on January 1, 2001.
(13) MSCI All Country World Net Index through 4/30/2010; MSCI All Country World IMI Net Dividends through 12/31/2010; Custom MSCI All Country World IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities through 10/31/2011; 35% S&P 500/8% Russell 2500/42% Custom MSCI World Ex-US IMI Net Dividends/15% Custom MSCI EM IMI Net Dividends through 4/30/2012; 35% S&P 500/9% Russell 2500/40% Custom MSCI World Ex-US IMI Net Dividends/16% Custom MSCI EM IMI Net Dividends through 6/30/2014; currently 44% Domestic Equity BM/40% International Equity BM/16% Emerging Markets BM
<b>Core Fixed Income</b>
(14) Effective 2/28/2015, the Total Aggregate performance was changed to include the complete performance histories of Economically Targeted Investment managers: Access Capital, Community Capital Management, and AFL-CIO Housing Investment. As a result, prior period Total Aggregate performance was revised from 4/30/2004-1/31/2015.
(15) 100% BC Aggregate through 2/28/2014; 34% BC Agg/66% BC STRIPS 20+ through 2/28/2015; Domestic Investment Grade Fixed Income benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the core fixed income portfolio through 9/30/2015; currently 50% BC Aggregate Bond/50% BC US Treasury STRIPS 20+ Yr Index
(16) BC Aggregate through 6/01; 67% BC Aggregate / 20% BC US TIPS/13% Custom Commodities BM ; Custom Commodities BM through 06/30/2009; currently BC ILB USS Hedged
(17) 33% BC US TIPS/67% BC ILB USS Hedged
(18) 77% BC Aggregate/8% BC US TIPS/15% BC ILB USS Hedged through 2/28/2014; weights were based on the beginning adjusted monthly market value of each index group 3/31/2014 – 9/30/2015; currently 38.5% BC Aggregate/7.6% BC US TIPS/15.4% BC ILP USS Hedged/38.5% BC STRIPS 20+.
<b>Value-Added Fixed Income</b>
(19) CSFB Thru 07/2002; ML Master II HY Thru 02/2007; currently ML Master II HY Constrained Index
(20) Public Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the public value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.
(21) Actual Performance through 2/07; ML Master II FI Constrained Index through 12/31/2009; currently Altman NYU Salomon Center Combined Defaulted Public Bond & Bank Loan Index
(22) The Total Value-Added Fixed Income composite inception date coincides with PRIM's initiative to separate High Yield from Core Fixed Income. Underlying manager market values and cash flows are unavailable prior to July 1, 2001.
(23) CSFB through 7/02 / 43% ML Master II HY Index/43% JPM EMBI Global/14% Actual Distressed Debt through 02/07/ through 06/08 60% ML Master II HY Constrained Index and 40% JPM EMBI Global/ 50% ML Master II HY Constrained Index/ 33% JPM EMBI Global/17% S&P LSTA Leveraged Index through 06/30/2009; 58% ML Master II HY Constrained Index/ 25% JPM EMBI Global/17% S&P LSTA Leveraged Index through 12/31/2009; 24% ML Master II HY Constrained Index/17% S&P LSTA Leveraged Index/20% JPM EMBI Global/39% Altman Index through 03/31/2010; 24.20% ML Master II HY Constrained Index/16.56% S&P LSTA Leveraged Index/19.43% JPM EMBI Global/39.81% Altman Index through 06/30/2010; 22.10% ML Master II HY Constrained Index/14.60% S&P LSTA Leveraged Loan Index/20.65% JPM EMBI Global/42.65% Altman Index through 09/30/2010; 22.46% ML Master II HY Constrained Index/12.92% S&P LSTA Leveraged Loan Index/21.56% JPM EMBI Global/43.06% Altman Index through 12/31/2010; 22.14% ML Master II HY Constrained Index/11.13% S&P LSTA Leveraged Loan Index/21.60% JPM EMBI Global/45.13% Altman Index through 3/31/2011; 23.15% ML Master II HY Constrained Index/9.45% S&P LSTA Leveraged Loan Index/22.74% JPM EMBI Global/44.66% Altman Index through 6/30/2011; 23.95% ML Master II HY Constrained Index/9.21% S&P LSTA Leveraged Loan Index/22.99% JPM EMBI Global/43.88% Altman Index through 9/30/2011; 21.58% ML Master II HY Constrained Index/11.08% S&P LSTA Leveraged Loan Index/22.24% JPM EMBI Global/45.10% Altman Index through 12/31/2011; 27.90% ML Master II HY Constrained Index/13.58% S&P LSTA Leveraged Loan Index/20.65% JPM EMBI Global/37.87% Altman Index through 3/31/2012; 28.24% ML Master II HY Constrained Index/13.30% S&P LSTA Leveraged Loan Index/20.71% JPM EMBI Global/37.75% Altman Index through 4/30/2012; 23.55% ML Master II HY Constrained Index/10.63% S&P LSTA Leveraged Loan Index/16.61% JPM EMBI Global/20.36% JPM GBI-EM Global Diversified/28.85% Altman Index through 6/30/2012; 18.21% ML Master II HY Constrained Index/11.24% S&P LSTA Leveraged Loan Index/17.63% JPM EMBI Global/20.80% JPM GBI-EM Global Diversified/32.12% Altman Index through 9/30/2012; 18.29% ML Master II HY Constrained Index/11.98% S&P LSTA Leveraged Loan Index/18.28% JPM EMBI Global/21.32% JPM GBI-EM Global Diversified/29.10% Altman Index through 2/28/2013; Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.
<b>Private Equity</b>
(24) Through 6/30/2000, S&P 500 + 5%; currently Actual Performance. This benchmark is used in the Interim Policy Benchmark.
(25) The 7 Year Annualized performance is used in the Policy Return and Policy Benchmark.
(26) Wilshire 5000 + 3% through 4/30/2008; Currently 7 Year Annualized Russell 3000 + 3%

<b>PENSION RESERVES INVESTMENT TRUST</b> <b>BENCHMARK/COMPOSITE FOOTNOTES</b> <b>RATES OF RETURN</b> <i>Periods Ending October 31, 2015</i>
<b>Real Estate - Private/Public</b> (27) On 06/30/02 PRIM instituted portfolio leverage of up to 40%; increased to 50% leverage on 02/03/04. Portfolio leverage was paid down in September 2005 (\$450 million), October 2005 (\$200 million), and July 2007 (\$450 million). Composite includes Value Added Separate Account opened 4/30/2007 and closed 12/31/2010. (28) FTSE NAREIT ALL EQUITY REITS through 3/31/2008; 63% FTSE NAREIT ALL EQUITY REITS/27% NAREIT Global REIT/10% NAREIT International REIT through 06/30/09; 50% FTSE NAREIT ALL EQUITY REITS/50% FTSE EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 100% FTSE EPRA NAREIT Developed Net Total Return (29) NCREIF through 6/30/03; 67% NCREIF/33% FTSE NAREIT ALL EQUITY REITS through 12/31/06; NCREIF + Ratio of 2% FTSE NAREIT ALL EQUITY REITS to PRIT Fund through 03/31/08; 73% NCREIF Property One Qtr Lag/17% FTSE NAREIT ALL EQUITY REITS/7.25% NAREIT Global REIT/2.75% NAREIT Intl REIT through 06/30/09; 82% NCREIF Property One Qtr Lag/9% FTSE NAREIT ALL EQUITY REITS/9% FTSE EPRA NAREIT Developed Ex US REIT through 7/31/09; 80% NCREIF Property One Qtr Lag/10% FTSE NAREIT ALL EQUITY REITS/10% FTSE EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 80% NCREIF PROPERTY ONE QTR LAG/20% FTSE EPRA NAREIT Developed Net Total <b>Timber/Natural Resources</b> (30) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 2/28/2010; currently NCREIF Timber Index (31) Currently Private Natural Resources Actual Performance. (32) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 06/30/08; 50% NCREIF Timber Index Ex-PRIM/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2010; 50% NCREIF Timber Index/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 10/31/2011; 53% NCREIF Timber Index/ 39% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2014; currently the Timber/Natural Resources benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the Timber/Natural Resources portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter. <b>Hedge Funds</b> (33) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change) (34) HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change) (35) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change) <b>Portfolio Completion Strategies</b> (36) Portfolio Completion Strategies Composite Index is calculated by applying the underlying benchmark return for each manager to the manager's weight within the Portfolio Completion Strategies Composite. These weights are based on the beginning adjusted monthly market value of each portfolio. <b>Portable Alpha Wind Down</b> (37) S&P 500 Index through April 2008; Russell 3000 Index through July 2009; US 3 Month Libor + 3% through 12/31/2009; currently HFRI FOF Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change) <b>Overlay</b> (38) Actual performance <b>Total Fund</b> (39) ML 90 Day T-Bill through 6/30/03; ML 3-Month Libor through 03/31/08; currently ML 90 Day T-Bill <b>Policy Return</b> (40) The Policy Return is calculated by applying the investment performance of each asset class times its actual allocation. The Private Equity portion of the Policy Return is the 7-year annualized return of the Private Equity asset class monthized.

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix D

Callan Investment Measurement Service Monthly Review

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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September 30, 2015



**Massachusetts Pension  
Reserves  
Investment Management Board**

**Investment Measurement Service  
Monthly Review**

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The following report was prepared by Callan Associates Inc. ("CAI") using information from sources that include the following: fund trustee(s); fund custodian(s); investment manager(s); CAI computer software; CAI investment manager and fund sponsor database; third party data vendors; and other outside sources as directed by the client. CAI assumes no responsibility for the accuracy or completeness of the information provided, or methodologies employed, by any information providers external to CAI. Reasonable care has been taken to assure the accuracy of the CAI database and computer software. Callan does not provide advice regarding, nor shall Callan be responsible for, the purchase, sale, hedge or holding of individual securities, including, without limitation securities of the client (i.e., company stock) or derivatives in the client's accounts. In preparing the following report, CAI has not reviewed the risks of individual security holdings or the conformity of individual security holdings with the client's investment policies and guidelines, nor has it assumed any responsibility to do so. Advice pertaining to the merits of individual securities and derivatives should be discussed with a third party securities expert. Copyright 2015 by Callan Associates Inc.

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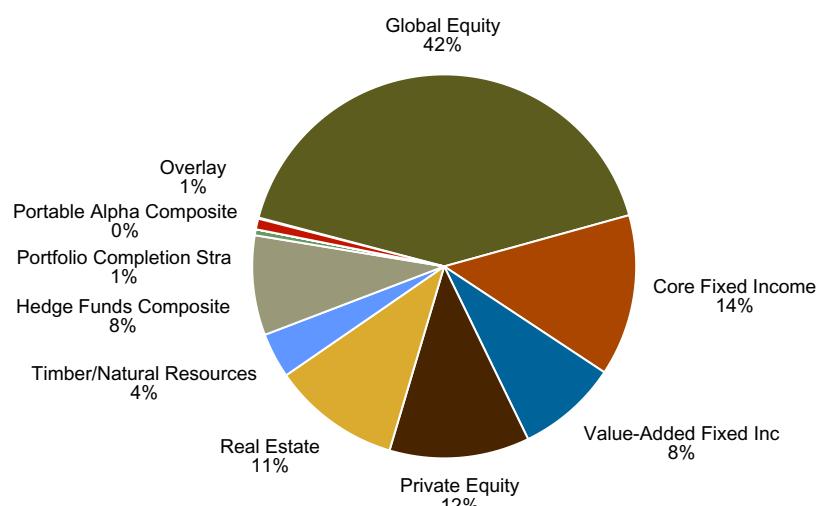
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**September 30, 2015**

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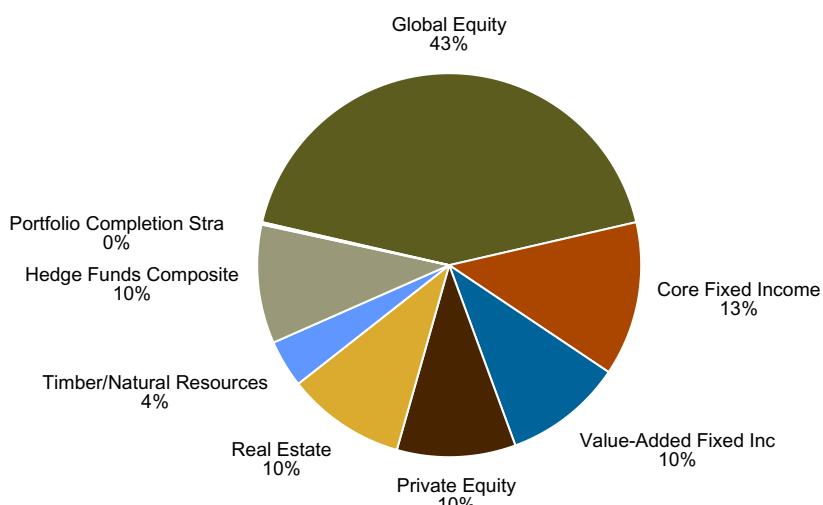
## Actual vs Target Asset Allocation

The first chart below shows the Fund's asset allocation as of September 30, 2015. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

**Actual Asset Allocation**



**Target Asset Allocation**



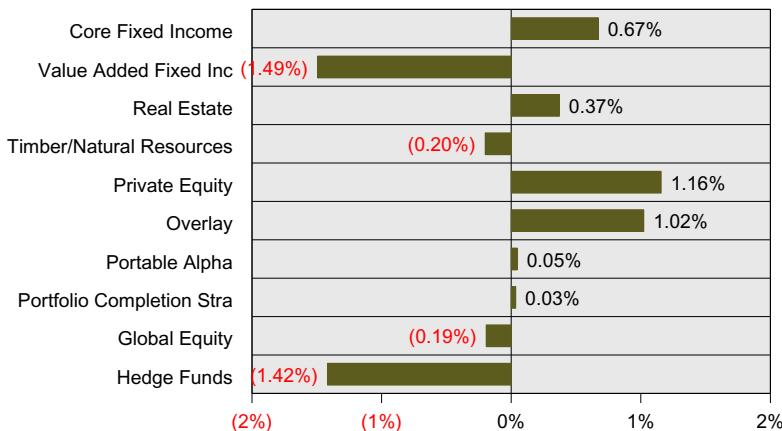
Asset Class	\$000s Actual	Percent Actual	Percent Target	Percent Difference	\$000s Difference
Global Equity	24,468,993	41.6%	42.8%	(1.2%)	(683,337)
Core Fixed Income	7,966,124	13.6%	13.0%	0.6%	326,397
Value-Added Fixed Inc	4,989,555	8.5%	10.0%	(1.5%)	(887,158)
Private Equity	6,938,782	11.8%	10.0%	1.8%	1,062,069
Real Estate	6,344,612	10.8%	10.0%	0.8%	467,899
Timber/Natural Resources	2,231,617	3.8%	4.0%	(0.2%)	(119,068)
Hedge Funds Composite	4,962,151	8.4%	10.0%	(1.6%)	(914,561)
Portfolio Completion Stra	297,859	0.5%	0.2%	0.3%	180,324
Portable Alpha Composite	27,173	0.0%	0.0%	0.0%	27,173
Overlay	540,260	0.9%	0.0%	0.9%	540,260
Total	58,767,125	100.0%	100.0%		

\*Current Month Target Performance is calculated using monthly rebalancing.

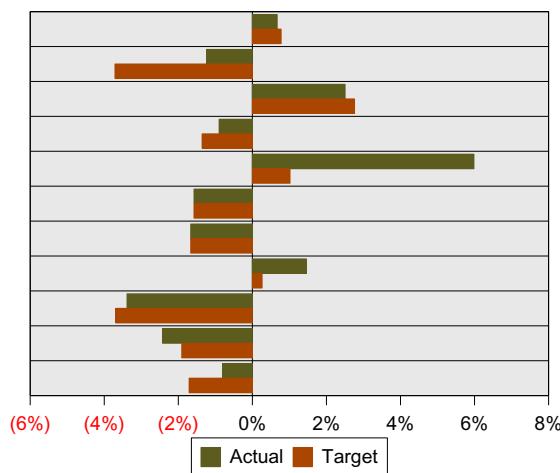
## Monthly Total Fund Relative Attribution - September 30, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

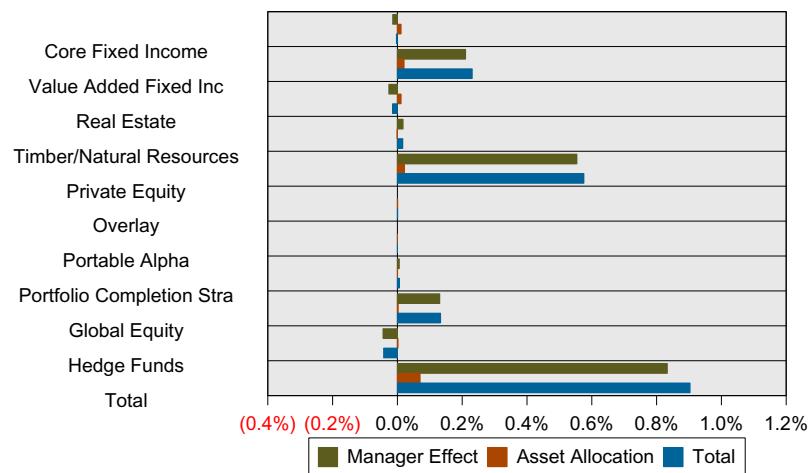
**Asset Class Under or Overweighting**



**Actual vs Target Returns**



**Relative Attribution by Asset Class**



**Relative Attribution Effects for Month ended September 30, 2015**

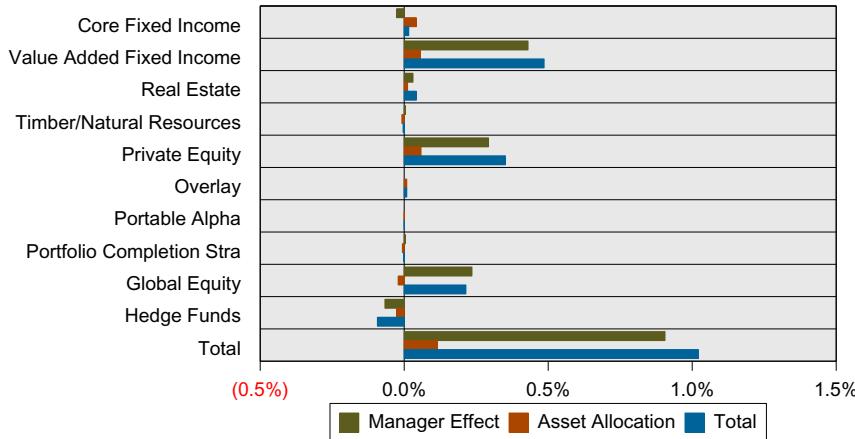
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	0.67%	0.78%	(-0.01%)	0.01%	(-0.00%)
Value Added Fixed Inc	9%	10%	(-1.24%)	(-3.71%)	0.21%	0.02%	0.23%
Real Estate	10%	10%	2.50%	2.76%	(-0.03%)	0.01%	(-0.02%)
Timber/Natural Resources	4%	4%	(-0.90%)	(-1.36%)	0.02%	0.00%	0.02%
Private Equity	11%	10%	5.98%	1.02%	0.55%	0.02%	0.58%
Overlay	1%	0%	(-1.58%)	(-1.58%)	0.00%	0.00%	0.00%
Portable Alpha	0%	0%	(-1.67%)	(-1.67%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	1.46%	0.26%	0.01%	0.00%	0.01%
Global Equity	42%	43%	(-3.39%)	(-3.69%)	0.13%	0.00%	0.13%
Hedge Funds	9%	10%	(-2.42%)	(-1.91%)	(-0.04%)	0.00%	(-0.04%)
<b>Total</b>			<b>(-0.80%) = (-1.71%) + 0.83% + 0.07%</b>				<b>0.90%</b>

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

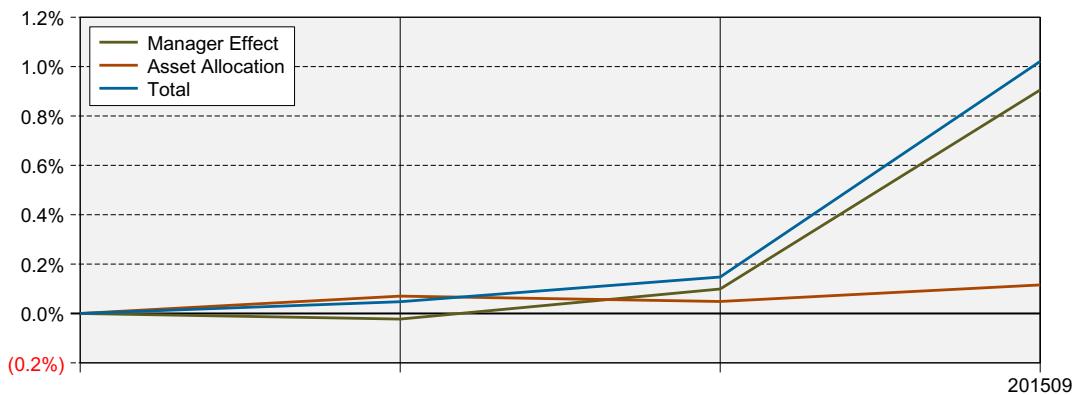
## Cumulative Total Fund Relative Attribution - September 30, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Months Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Months Relative Attribution Effects

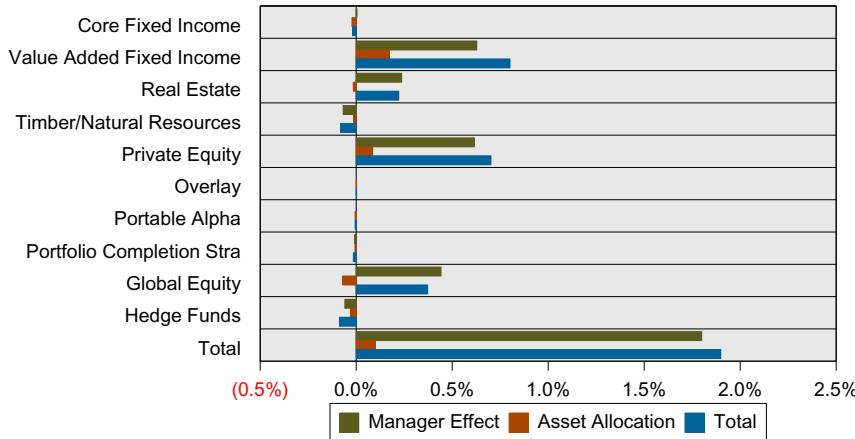
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	14%	13%	3.22%	3.42%	(0.03%)	0.04%	0.02%
Value Added Fixed Income	8%	10%	(3.52%)	(8.59%)	0.43%	0.06%	0.49%
Real Estate	10%	10%	2.59%	2.25%	0.03%	0.01%	0.04%
Timber/Natural Resources	4%	4%	(3.45%)	(3.55%)	0.00%	(0.01%)	(0.00%)
Private Equity	11%	10%	5.66%	3.01%	0.29%	0.06%	0.35%
Overlay	1%	0%	(3.92%)	(3.92%)	0.00%	0.01%	0.01%
Portable Alpha	0%	0%	(3.59%)	(3.59%)	0.00%	0.00%	0.00%
Portfolio Completion Stra	0%	0%	3.30%	0.79%	0.00%	(0.01%)	(0.00%)
Global Equity	43%	43%	(9.63%)	(10.16%)	0.24%	(0.02%)	0.21%
Hedge Funds	9%	10%	(4.45%)	(3.66%)	(0.07%)	(0.03%)	(0.09%)
<b>Total</b>					<b>(3.79%) = (4.81%) + 0.91% + 0.12%</b>		<b>1.02%</b>

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

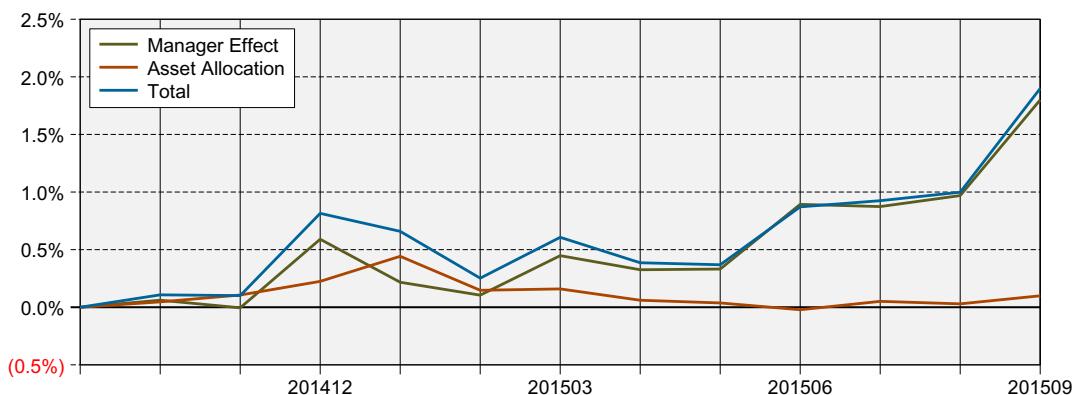
## Cumulative Total Fund Relative Attribution - September 30, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

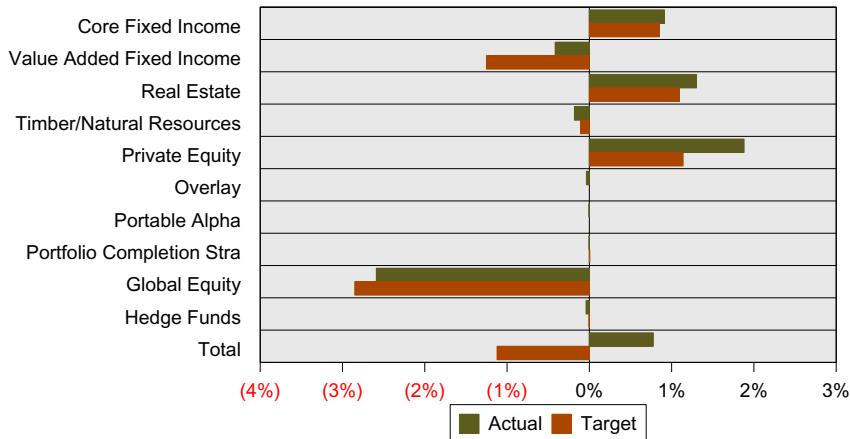
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Core Fixed Income	15%	13%	6.23%	6.21%	0.00%	(0.02%)	(0.02%)
Value Added Fixed Income	8%	10%	(4.72%)	(11.68%)	0.63%	0.17%	0.80%
Real Estate	10%	10%	14.03%	11.17%	0.24%	(0.02%)	0.22%
Timber/Natural Resources	4%	4%	(4.48%)	(2.76%)	(0.07%)	(0.01%)	(0.08%)
Private Equity	11%	10%	17.72%	11.65%	0.62%	0.09%	0.70%
Overlay	1%	0%	(0.79%)	(0.79%)	0.00%	0.00%	0.00%
Portable Alpha	0%	0%	(8.66%)	(8.66%)	0.00%	(0.01%)	(0.01%)
Portfolio Completion Stra	0%	0%	-	-	(0.01%)	(0.01%)	(0.01%)
Global Equity	42%	43%	(5.79%)	(6.78%)	0.44%	(0.07%)	0.37%
Hedge Funds	9%	10%	(0.83%)	(0.12%)	(0.06%)	(0.03%)	(0.09%)
<b>Total</b>			<b>0.78% = (1.12%) + 1.80% + 0.10%</b>				<b>1.90%</b>

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

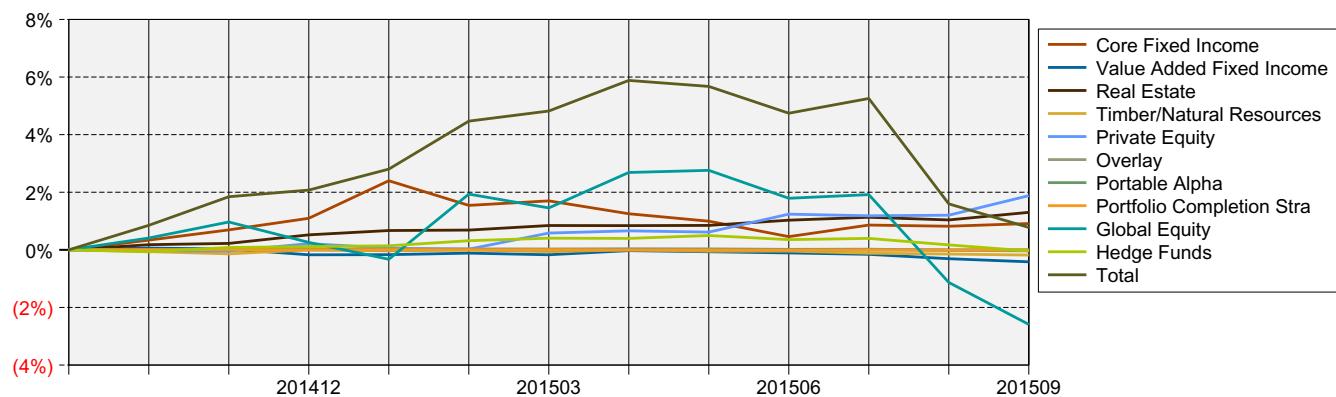
## Cumulative Total Fund Absolute Attribution - September 30, 2015

The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of absolute total fund Performance and target performance. These cumulative results quantify the longer-term contribution of each asset class to absolute total fund return as well as the target return.

### One Year Absolute Return Contributions



### Cumulative Absolute Return Contributions



### One Year Absolute Attribution Effects

	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
Core Fixed Income	15%	6.23%	0.91%	13%	6.21%	0.85%	0.06%
Value Added Fixed Income	8%	(4.72%)	(0.42%)	10%	(11.68%)	(1.25%)	0.83%
Real Estate	10%	14.03%	1.30%	10%	11.17%	1.09%	0.21%
Timber/Natural Resources	4%	(4.48%)	(0.18%)	4%	(2.76%)	(0.11%)	(0.07%)
Private Equity	11%	17.72%	1.88%	10%	11.65%	1.14%	0.74%
Overlay	1%	(0.79%)	(0.04%)	0%	(0.79%)	0.00%	(0.04%)
Portable Alpha	0%	(8.66%)	(0.01%)	0%	(8.66%)	0.00%	(0.01%)
Portfolio Completion Stra	0%	(1.96%)	(0.00%)	0%	2.38%	0.01%	(0.01%)
Global Equity	42%	(5.79%)	(2.59%)	43%	(6.78%)	(2.85%)	0.26%
Hedge Funds	9%	(0.83%)	(0.04%)	10%	(0.12%)	(0.00%)	(0.04%)

**Total Fund Return 0.78%**

**Target Return (1.12%)**

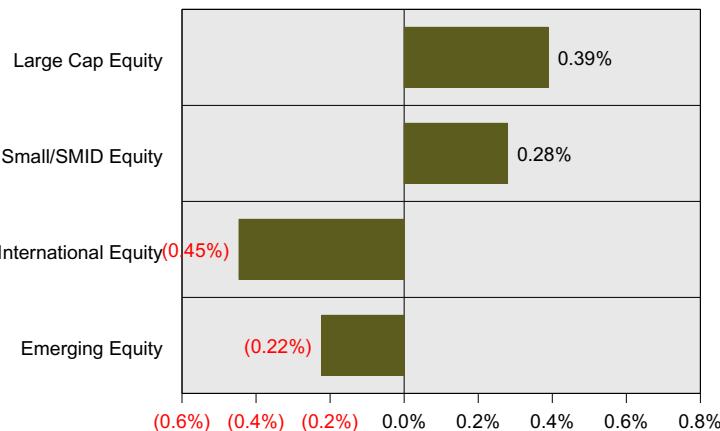
**1.90%**

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
Attribution is run on Gross returns.

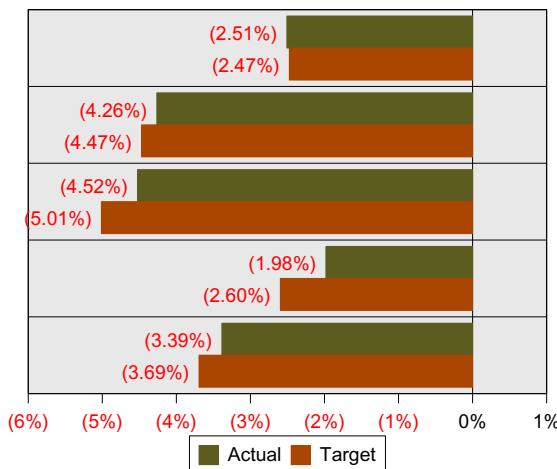
## Monthly Total Fund Relative Attribution - September 30, 2015

The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation Effect and Manager Selection Effect. The Asset Allocation Effect represents the excess return due to the actual total fund asset allocation differing from the target asset allocation. Manager Selection Effect represents the total fund impact of the individual managers excess returns relative to their benchmarks.

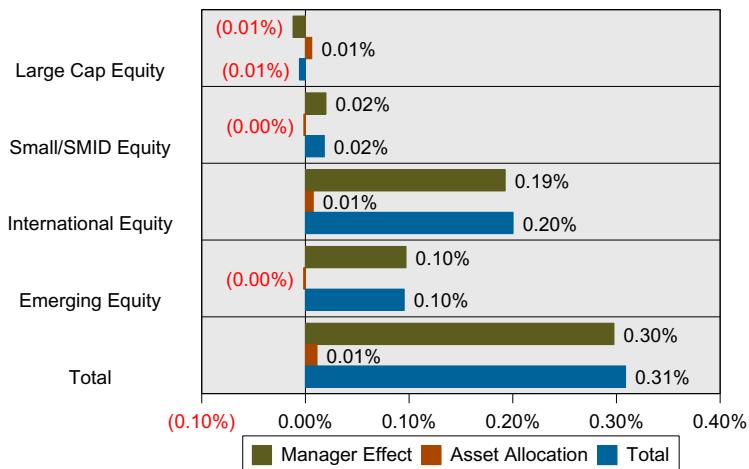
**Asset Class Under or Overweighting**



**Actual vs Target Returns**



**Relative Attribution by Asset Class**



**Relative Attribution Effects for Month ended September 30, 2015**

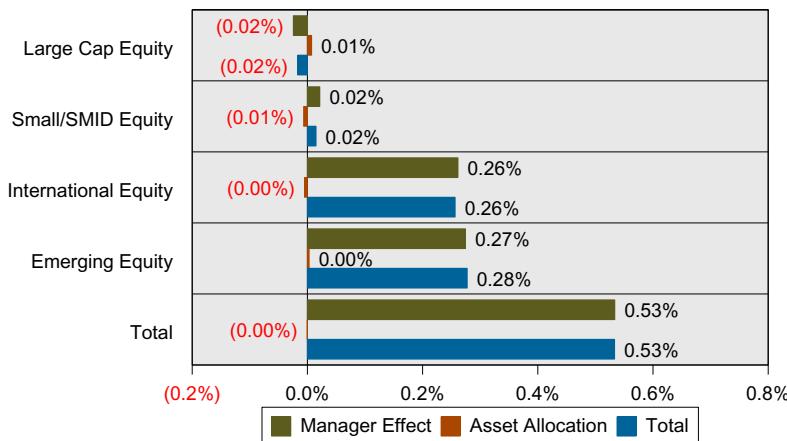
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(2.51%)	(2.47%)	(0.01%)	0.01%	(0.01%)
Small/SMID Equity	10%	9%	(4.26%)	(4.47%)	0.02%	(0.00%)	0.02%
International Equity	40%	40%	(4.52%)	(5.01%)	0.19%	0.01%	0.20%
Emerging Equity	16%	16%	(1.98%)	(2.60%)	0.10%	(0.00%)	0.10%
<b>Total</b>			<b>(3.39%) = (3.69%) + 0.30% + 0.01%</b>				<b>0.31%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

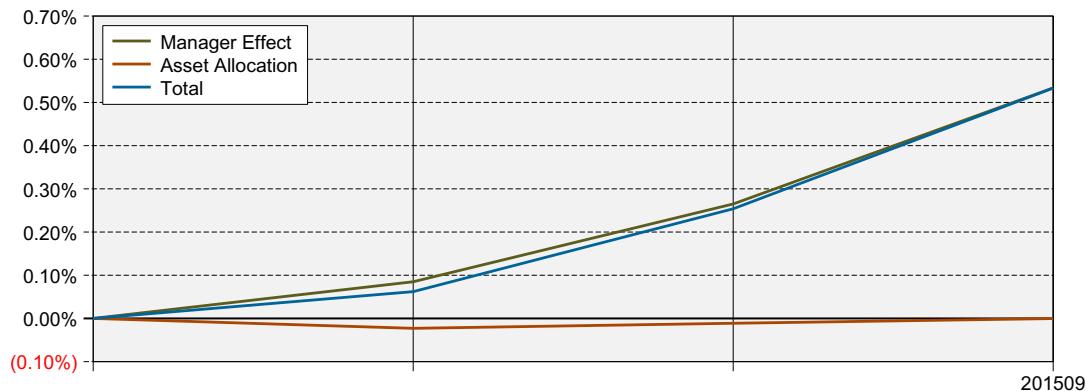
## Cumulative Total Fund Relative Attribution - September 30, 2015

The charts below accumulate the Total Global Equity Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total global equity fund performance relative to target. These cumulative results quantify the longer-term sources of total global equity fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total global equity fund excess return into Asset Allocation Effect and Manager Selection Effect.

### Three Months Relative Attribution Effects



### Cumulative Relative Attribution Effects



### Three Months Relative Attribution Effects

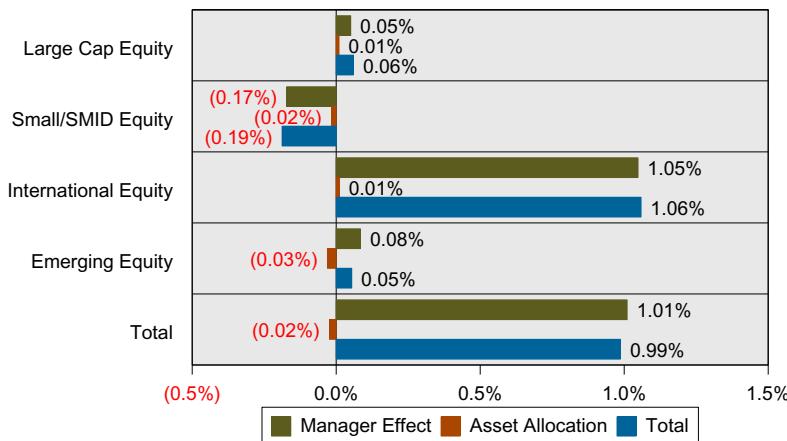
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	35%	35%	(6.51%)	(6.44%)	(0.02%)	0.01%	(0.02%)
Small/SMID Equity	10%	9%	(10.36%)	(10.59%)	0.02%	(0.01%)	0.02%
International Equity	40%	40%	(9.66%)	(10.33%)	0.26%	(0.00%)	0.26%
Emerging Equity	16%	16%	(15.79%)	(17.46%)	0.27%	0.00%	0.28%
<b>Total</b>			<b>(9.63%) = (10.16%) + 0.53% + (0.00%)</b>				<b>0.53%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

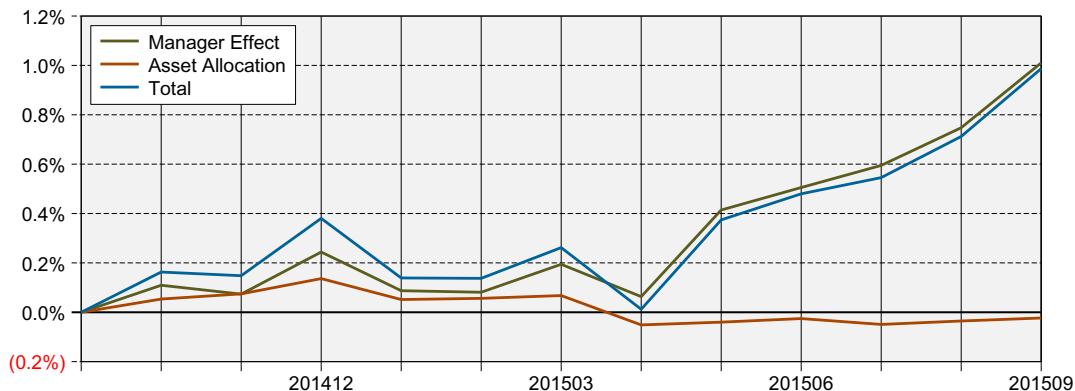
## Cumulative Total Fund Relative Attribution - September 30, 2015

The charts below accumulate the Total Global Equity Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total global equity fund performance relative to target. These cumulative results quantify the longer-term sources of total global equity fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total global equity fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Relative Attribution Effects



### Cumulative Relative Attribution Effects



### One Year Relative Attribution Effects

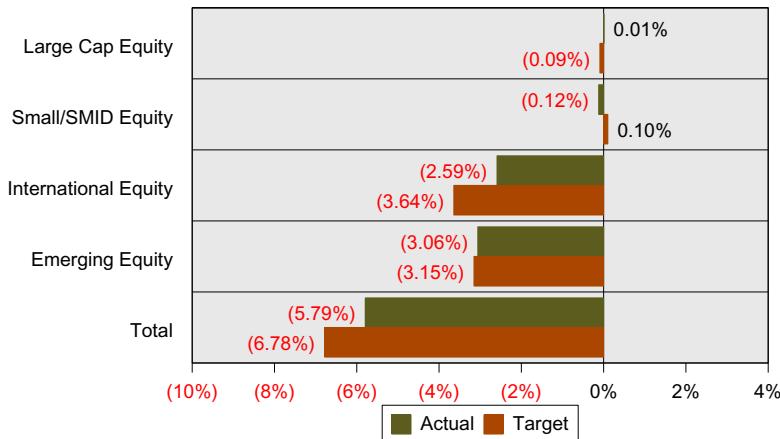
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap Equity	36%	35%	(0.48%)	(0.61%)	0.05%	0.01%	0.06%
Small/SMID Equity	10%	9%	(1.44%)	0.45%	(0.17%)	(0.02%)	(0.19%)
International Equity	39%	40%	(6.46%)	(9.13%)	1.05%	0.01%	1.06%
Emerging Equity	16%	16%	(17.66%)	(18.19%)	0.08%	(0.03%)	0.05%
<b>Total</b>			<b>(5.79%) = (6.78%) + 1.01% + (0.02%)</b>				<b>0.99%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

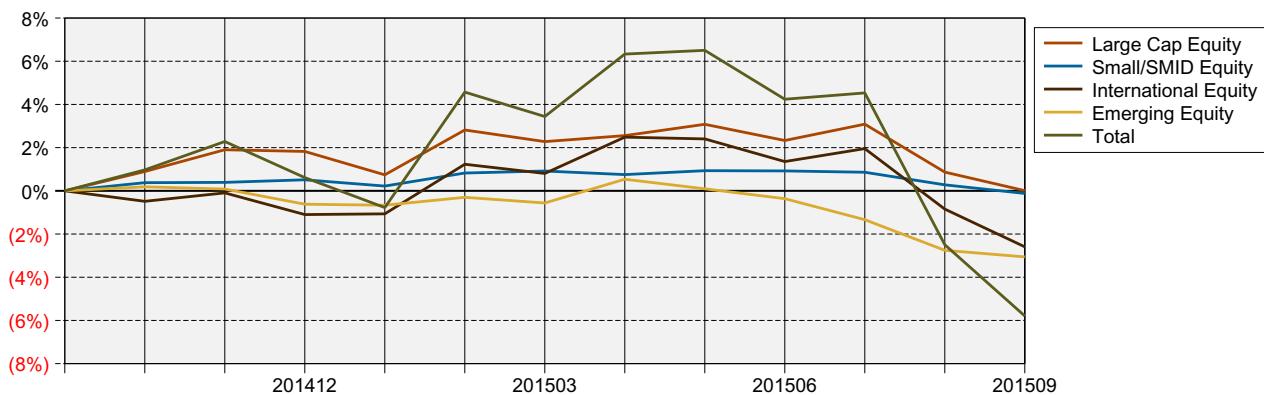
## Cumulative Total Fund Absolute Attribution - September 30, 2015

The charts below accumulate the Total Global Equity Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total global equity fund performance relative to target. These cumulative results quantify the longer-term sources of total global equity fund excess return relative to target by asset class. These relative attribution effects separate the cumulative sources of total global equity fund excess return into Asset Allocation Effect and Manager Selection Effect.

### One Year Absolute Return Contributions



### Cumulative Absolute Return Contributions



### One Year Absolute Attribution Effects

Asset Class	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
Large Cap Equity	36%	(0.48%)	0.01%	35%	(0.61%)	(0.09%)	0.10%
Small/SMID Equity	10%	(1.44%)	(0.12%)	9%	0.45%	0.10%	(0.22%)
International Equity	39%	(6.46%)	(2.59%)	40%	(9.13%)	(3.64%)	1.05%
Emerging Equity	16%	(17.66%)	(3.06%)	16%	(18.19%)	(3.15%)	0.09%
<b>Total Fund Return (5.79%)</b>				<b>Target Return (6.78%)</b>			<b>0.99%</b>

\* Current Month Target = 40.0% Custom World Ex-US IMI Net Divs (7), 34.7% S&P 500 Index, 16.0% Custom MSCI EM IMI Net Divs (10), 6.5% Russell 2500 Index, 1.6% Russell 2000 Value Index, 0.6% Russell 2000 Growth Index and 0.5% Russell 2500 Growth Index.  
Attribution is run on Gross returns.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of January 31, 2015, with the distribution as of December 31, 2014. All Returns and market values provided by custodian.

### Asset Distribution Across Investment Managers

	September 30, 2015	August 31, 2015		
	Market Value	% of Total Fund	Market Value	% of Total Fund
<b>Total Global Equity</b>	<b>\$24,468,992,504</b>	<b>41.59%</b>	<b>\$24,926,617,925</b>	<b>41.89%</b>
Intech	844,703,801	1.44%	860,270,264	1.45%
PIMCO Stock Plus	854,456,154	1.45%	883,910,019	1.49%
SSgA S&P 500	6,952,037,965	11.82%	7,030,009,033	11.81%
Summit Creek SCG	192,934,210	0.33%	199,754,002	0.34%
Frontier SCV	169,842,488	0.29%	173,574,723	0.29%
Huber SCV	222,631,290	0.38%	233,572,049	0.39%
Riverbridge SMIDG	154,772,077	0.26%	161,448,616	0.27%
SouthernSun SMID	132,741,636	0.23%	141,470,940	0.24%
SSgA Russell 2500	1,426,595,410	2.42%	1,492,864,963	2.51%
Domestic Eq. Cash	-635,592	(0.00%)	-551,156	(0.00%)
SSgA World ex-US	4,788,374,416	8.14%	4,956,632,812	8.33%
Marathon Asset Mgmt	2,281,930,055	3.88%	2,379,476,720	4.00%
Baillie Gifford	1,662,229,847	2.82%	1,676,091,241	2.82%
Mondrian Investment Partners	717,452,706	1.22%	759,627,721	1.28%
FIS	98,944,835	0.17%	103,480,943	0.17%
International Equity Cash	564,679	0.00%	664,625	0.00%
SSgA Emerging Markets	1,011,359,552	1.72%	986,624,091	1.66%
AQR Emerging	517,221,399	0.88%	504,477,725	0.85%
Baillie Gifford EMM	574,033,487	0.98%	549,785,111	0.92%
Driehaus Capital	549,733,617	0.93%	537,460,313	0.90%
Harding Loevner	381,861,977	0.65%	370,005,338	0.62%
Pzena Inv	530,925,987	0.90%	517,732,196	0.87%
Acadian EM SC	123,952,880	0.21%	122,922,159	0.21%
Wasatch EM SC	92,530,658	0.16%	93,499,217	0.16%
Acadian FM	75,714,720	0.13%	61,993,906	0.10%
City of London FM	92,374,010	0.16%	94,938,246	0.16%
Emerging Markets Transition	19,342,452	0.03%	34,557,636	0.06%
Emerging Markets Cash	299,817	0.00%	255,142	0.00%
<b>Core Fixed Income</b>	<b>\$7,966,123,629</b>	<b>13.54%</b>	<b>\$8,314,710,096</b>	<b>13.97%</b>
Blackrock Passive (Core)	793,529,158	1.35%	888,128,839	1.49%
PIMCO (Core)	789,180,206	1.34%	788,969,971	1.33%
Loomis Sayles Core Corporate	1,132,580,628	1.92%	1,125,542,998	1.89%
Blackrock STRIPS	3,160,315,773	5.37%	3,412,582,329	5.73%
Blackrock TIPS	587,788,284	1.00%	591,358,826	0.99%
Blackrock Global ILBs	1,244,868,726	2.12%	1,249,764,073	2.10%
Access Capital/Merrill Lnch ETI	103,474,104	0.18%	103,090,075	0.17%
Community Capital Management	28,060,098	0.05%	27,799,821	0.05%
AFL-CIO Housing Investor Trust	126,259,662	0.21%	125,213,758	0.21%
Core FI Closed Portfolios	757	0.00%	748	0.00%
Core Fixed Cash	66,232	0.00%	2,258,658	0.00%
<b>Value Added Fixed Income</b>	<b>\$4,989,555,024</b>	<b>8.48%</b>	<b>\$5,043,157,449</b>	<b>8.47%</b>
Fidelity (High Yield)	307,475,302	0.52%	314,200,071	0.53%
Loomis Sayles High Yield	309,762,839	0.53%	317,531,528	0.53%
Shenkman	289,259,962	0.49%	296,107,076	0.50%
FI Distressed Debt Cash	22,271,940	0.04%	-15,530,997	(0.03%)
FI High Yield Debt Cash	91,799	0.00%	126,203	0.00%
Eaton Vance Bank Loans	465,385,013	0.79%	468,058,946	0.79%
ING Bank Loans	463,271,035	0.79%	465,742,355	0.78%
Ashmore Emerging Markets Debt	470,543,349	0.80%	479,592,759	0.81%
PIMCO Emerging Debt	292,595,352	0.50%	301,039,917	0.51%
Investec EM Debt	277,728,552	0.47%	286,107,160	0.48%
Pictet EM Debt	460,532,131	0.78%	474,641,403	0.80%
Stone Harbor EM Debt	271,809,664	0.46%	281,488,338	0.47%
Distressed Debt Portfolio	1,358,828,086	2.31%	1,374,052,690	2.31%

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of January 31, 2015, with the distribution as of December 31, 2014. All Returns and market values provided by custodian.

### Asset Distribution Across Investment Managers

	September 30, 2015	August 31, 2015		
	Market Value	% of Total Fund	Market Value	% of Total Fund
<b>Private Equity</b>	<b>\$6,938,781,877</b>	<b>11.79%</b>	<b>\$6,699,371,458</b>	<b>11.26%</b>
Special Equity	18,836,296	0.03%	19,154,826	0.03%
Special Equity 2000	13,503,316	0.02%	12,290,067	0.02%
Special Equity 2001	59,414,635	0.10%	58,505,732	0.10%
Special Equity 2002	4,863,733	0.01%	4,495,701	0.01%
Special Equity 2003	81,125,613	0.14%	92,612,144	0.16%
Special Equity 2004	83,814,223	0.14%	77,372,906	0.13%
Special Equity 2005	402,228,999	0.68%	385,869,008	0.65%
Special Equity 2006	635,343,270	1.08%	620,322,648	1.04%
Special Equity 2007	878,450,821	1.49%	841,984,676	1.41%
Special Equity 2008	911,721,127	1.55%	875,237,225	1.47%
Special Equity 2009	202,268,351	0.34%	232,228,186	0.39%
Special Equity 2010	498,372,493	0.85%	483,109,007	0.81%
Special Equity 2011	610,951,729	1.04%	572,440,736	0.96%
Special Equity 2012	232,384,458	0.39%	230,454,449	0.39%
Special Equity 2013	183,049,728	0.31%	168,464,399	0.28%
Special Equity 2014	219,635,586	0.37%	212,420,569	0.36%
Special Equity 2015	82,915,978	0.14%	80,336,981	0.13%
Venture Capital	12,445,620	0.02%	12,953,229	0.02%
Venture Capital 2000	63,904,180	0.11%	66,840,764	0.11%
Venture Capital 2001	35,790,550	0.06%	36,656,826	0.06%
Venture Capital 2002	13,978,130	0.02%	14,159,907	0.02%
Venture Capital 2003	31,582,284	0.05%	30,762,823	0.05%
Venture Capital 2004	32,961,846	0.06%	36,050,216	0.06%
Venture Capital 2005	117,551,789	0.20%	117,358,713	0.20%
Venture Capital 2006	132,292,911	0.22%	135,519,347	0.23%
Venture Capital 2007	197,308,109	0.34%	180,641,136	0.30%
Venture Capital 2008	32,603,661	0.06%	31,509,807	0.05%
Venture Capital 2009	253,515,925	0.43%	226,185,673	0.38%
Venture Capital 2010	284,724,901	0.48%	257,393,620	0.43%
Venture Capital 2011	96,384,049	0.16%	90,916,514	0.15%
Venture Capital 2012	230,444,250	0.39%	215,418,266	0.36%
Venture Capital 2013	51,279,685	0.09%	43,821,323	0.07%
Venture Capital 2014	51,053,065	0.09%	49,229,285	0.08%
Venture Capital 2015	4,542,379	0.01%	3,496,814	0.01%
Private Equity Cash	177,538,183	0.30%	183,157,950	0.31%
<b>Real Estate</b>	<b>\$6,344,611,556</b>	<b>10.78%</b>	<b>\$6,105,538,763</b>	<b>10.26%</b>
Invesco Core	1,095,350,693	1.86%	1,117,221,044	1.88%
LaSalle Core	1,509,154,305	2.56%	1,481,033,775	2.49%
AEW Core	1,133,977,987	1.93%	1,126,756,489	1.89%
JP Morgan I.M.	772,485,245	1.31%	755,891,685	1.27%
TA Associates	1,147,723,488	1.95%	1,120,069,371	1.88%
Core Real Estate Portfolio Debt	-994,550,786	(1.69%)	-994,521,816	(1.67%)
Canyon-Johnson II	4,856,208	0.01%	5,518,556	0.01%
Intercontinental IV	1,189,599	0.00%	1,035,695	0.00%
New Boston Urban I	6,492,889	0.01%	7,428,285	0.01%
Non Core 2011	451,882,271	0.77%	424,796,635	0.71%
INVESCO Global REIT	262,090,473	0.45%	257,777,801	0.43%
CenterSquare Global REIT	747,101,442	1.27%	734,519,084	1.23%
EII (INVESCO TRAN)	143,261,315	0.24%	140,911,536	0.24%
RREEF/European Investors Tran	25,434	0.00%	25,629	0.00%
Real Estate Leverage Cash	-108,470	(0.00%)	-55,159	(0.00%)
REIT Cash	20,083	0.00%	44,328	0.00%
Core Real Estate Cash	63,659,340	0.11%	-72,914,203	(0.12%)

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of January 31, 2015, with the distribution as of December 31, 2014. All Returns and market values provided by custodian.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Total Fund	Market Value	% of Total Fund
<b>Timber/Natural Resources</b>	<b>\$2,231,616,885</b>	<b>3.79%</b>	<b>\$2,251,895,079</b>	<b>3.78%</b>
Forest Investment Associates	1,124,189,980	1.91%	1,109,272,886	1.86%
The Campbell Group	533,360,759	0.91%	538,300,957	0.90%
Timber Cash	7,502,437	0.01%	56,213	0.00%
Jennison Natural Resources	146,052,522	0.25%	162,393,484	0.27%
T Rowe Natural Resources	159,999,972	0.27%	172,962,599	0.29%
Public Natural Resources Cash	3,951	0.00%	7,854	0.00%
Private Natural Resources	252,193,278	0.43%	268,916,736	0.45%
Private Natural Resources Cash	8,313,986	0.01%	-15,649	(0.00%)
<b>Portfolio Completion Strategy</b>	<b>\$297,858,503</b>	<b>0.51%</b>	<b>\$293,636,301</b>	<b>0.49%</b>
Portfolio Completion Strategy	297,858,503	0.51%	293,636,301	0.49%
<b>Hedge Funds</b>	<b>\$4,962,151,120</b>	<b>8.43%</b>	<b>\$5,104,040,966</b>	<b>8.58%</b>
Arden HFOF (Liquidating)	38,114,744	0.06%	46,207,164	0.08%
Ivy (Liquidating)	4,612,899	0.01%	4,680,156	0.01%
PAAMCO	896,072,422	1.52%	914,845,783	1.54%
Direct Hedge Funds	4,023,334,223	6.84%	4,077,273,486	6.85%
Hedge Fund Cash	16,832	0.00%	61,034,377	0.10%
<b>Portable Alpha</b>	<b>\$27,173,218</b>	<b>0.05%</b>	<b>\$27,633,676</b>	<b>0.05%</b>
Austin Capital Management	1,455,024	0.00%	1,576,199	0.00%
Crestline Advisors	10,752,686	0.02%	11,066,508	0.02%
Strategic Investment	14,841,765	0.03%	14,988,456	0.03%
Portable Alpha Cash	123,743	0.00%	2,513	0.00%
<b>Total Overlay</b>	<b>\$540,260,310</b>	<b>0.92%</b>	<b>\$665,344,830</b>	<b>1.12%</b>
Clifton Overlay	123,163,722	0.21%	141,790,266	0.24%
Overlay Cash	417,096,588	0.71%	523,554,564	0.88%
Participant Cash	45,601,124	0.08%	50,554,656	0.08%
Teachers and Employees Cash	27,426,882	0.05%	26,891,585	0.05%
<b>Total Fund</b>	<b>\$58,840,152,633</b>	<b>100.0%</b>	<b>\$59,509,392,784</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Fund ex-cash (Core)</b>	<b>(0.80%)</b>	<b>(3.79%)</b>	<b>0.78%</b>	<b>8.25%</b>	<b>8.27%</b>
Interim Benchmark (1)	(1.21%)	(4.54%)	(0.54%)	7.12%	7.40%
Total Core Bechmark (2)	(1.71%)	(4.81%)	(1.12%)	6.08%	6.42%
Global Equity	(3.39%)	(9.63%)	(5.79%)	7.43%	7.49%
Global Equity Benchmark (13)	(3.69%)	(10.16%)	(6.78%)	6.79%	6.75%
Core Fixed Income	0.67%	3.22%	6.23%	3.72%	4.71%
Core Fixed-Income Bench (18)	0.78%	3.42%	6.21%	3.41%	4.37%
Value-Added Fixed Income	(1.24%)	(3.52%)	(4.72%)	2.40%	5.37%
Value-Added Benchmark (23)	(3.71%)	(8.59%)	(11.68%)	(0.80%)	2.22%
Private Equity	5.98%	5.66%	17.72%	20.40%	18.76%
Private Equity Benchmark (24)	5.98%	5.66%	17.72%	20.40%	18.76%
Private Equity Benchmark (26)	1.02%	3.01%	11.65%	9.76%	8.81%
Real Estate	2.50%	2.59%	14.03%	12.62%	12.84%
Real Estate Benchmark (29)	2.76%	2.25%	11.17%	10.83%	12.11%
Timber/Natural Resources	(0.90%)	(3.45%)	(4.48%)	4.23%	3.84%
Timber/Natural Benchmark (32)	(1.36%)	(3.55%)	(2.76%)	4.94%	4.09%
Portfolio Completion Strategy	1.46%	3.30%	-	-	-
Portfolio Completion Benchmark (36)	0.26%	0.79%	-	-	-
Hedge Funds	(2.42%)	(4.45%)	(0.83%)	6.15%	4.84%
Hedge Funds Benchmark (35)	(1.91%)	(3.66%)	(0.12%)	4.13%	2.73%
Portable Alpha	(1.67%)	(3.59%)	(8.66%)	(3.82%)	(3.03%)
Portable Alpha Benchmark (37)	(1.91%)	(3.66%)	(0.12%)	4.13%	2.73%
Total Overlay	(1.58%)	(3.92%)	(0.79%)	-	-
Total Overlay Benchmark (38)	(1.58%)	(3.92%)	(0.79%)	-	-
Participant Cash	0.02%	0.05%	0.15%	0.14%	0.15%
Teachers and Employees Cash	0.02%	0.04%	0.15%	0.14%	0.15%
Merrill Lynch 90 Day Tbill (39)	0.00%	0.01%	0.02%	0.06%	0.08%
<b>Total Fund</b>	<b>(0.80%)</b>	<b>(3.77%)</b>	<b>0.78%</b>	<b>8.22%</b>	<b>8.24%</b>
Interim Benchmark (1)	(1.21%)	(4.54%)	(0.54%)	7.12%	7.40%
Total Core Bechmark (2)	(1.71%)	(4.81%)	(1.12%)	6.08%	6.42%

\* Current Month Target = 42.5% Global Equity Benchmark (12), 13.0% Core Fixed Income Benchmark, 10.0% Value-Added FI Benchmark (21), 10.0% Real Estate Benchmark (27), 10.0% Hedge Fund Benchmark (33), 10.0% 7 YEAR ANNUALIZED Rus 3000+3% (24), 4.0% Timberland/Natural Benchmark (30) and 0.5% MassPRIM-Portfolio Completion Stat BM.  
All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

### Asset Distribution Across Investment Managers

	September 30, 2015	August 31, 2015		
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Domestic Equity</b>	<b>\$10,950,079,451</b>	<b>44.75%</b>	<b>\$11,176,323,453</b>	<b>44.84%</b>
<b>Large Cap</b>	<b>\$8,651,197,919</b>	<b>35.36%</b>	<b>\$8,774,189,316</b>	<b>35.20%</b>
Intech	844,703,801	3.45%	860,270,264	3.45%
PIMCO Stock Plus	854,456,154	3.49%	883,910,019	3.55%
SSgA S&P 500	6,952,037,965	28.41%	7,030,009,033	28.20%
<b>Small/SMID Cap Core</b>	<b>\$2,299,517,111</b>	<b>9.40%</b>	<b>\$2,402,685,294</b>	<b>9.64%</b>
<b>Small Cap Growth</b>				
Summit Creek SCG	192,934,210	0.79%	199,754,002	0.80%
<b>Small Cap Value</b>	<b>\$392,473,778</b>	<b>1.60%</b>	<b>\$407,146,772</b>	<b>1.63%</b>
Frontier SCV	169,842,488	0.69%	173,574,723	0.70%
Huber SCV	222,631,290	0.91%	233,572,049	0.94%
<b>SMID Growth</b>				
Riverbridge SMIDG	154,772,077	0.63%	161,448,616	0.65%
<b>SMID Cap Core</b>	<b>\$1,559,337,046</b>	<b>6.37%</b>	<b>\$1,634,335,904</b>	<b>6.56%</b>
SouthernSun SMID	132,741,636	0.54%	141,470,940	0.57%
SSgA Russell 2500	1,426,595,410	5.83%	1,492,864,963	5.99%
Domestic Eq. Cash	-635,592	(0.00%)	-551,156	(0.00%)
<b>International Equity</b>	<b>\$9,549,510,904</b>	<b>39.03%</b>	<b>\$9,875,988,483</b>	<b>39.62%</b>
SSgA World ex-US	4,788,374,416	19.57%	4,956,632,812	19.88%
Marathon Asset Mgmt	2,281,930,055	9.33%	2,379,476,720	9.55%
Baillie Gifford	1,662,229,847	6.79%	1,676,091,241	6.72%
Mondrian Investment Partners	717,452,706	2.93%	759,627,721	3.05%
FIS	98,944,835	0.40%	103,480,943	0.42%
International Equity Cash	564,679	0.00%	664,625	0.00%
<b>Emerging Markets</b>	<b>\$3,969,402,149</b>	<b>16.22%</b>	<b>\$3,874,305,989</b>	<b>15.54%</b>
SSgA Emerging Markets	1,011,359,552	4.13%	986,624,091	3.96%
AQR Emerging	517,221,399	2.11%	504,477,725	2.02%
Baillie Gifford EMM	574,033,487	2.35%	549,785,111	2.21%
Driehaus Capital	549,733,617	2.25%	537,460,313	2.16%
Harding Loevner	381,861,977	1.56%	370,005,338	1.48%
Pzena Inv	530,925,987	2.17%	517,732,196	2.08%
<b>Emerging Markets Small Cap</b>	<b>\$216,483,538</b>	<b>0.88%</b>	<b>\$216,421,376</b>	<b>0.87%</b>
Acadian EM SC	123,952,880	0.51%	122,922,159	0.49%
Wasatch EM SC	92,530,658	0.38%	93,499,217	0.38%
<b>Total Frontier</b>	<b>\$168,492,515</b>	<b>0.69%</b>	<b>\$157,187,259</b>	<b>0.63%</b>
Acadian Frontier	75,714,720	0.31%	61,993,906	0.25%
City of London EM	92,374,010	0.38%	94,938,246	0.38%
Emerging Markets Transition	19,342,452	0.08%	34,557,636	0.14%
Emerging Markets Cash	299,817	0.00%	255,142	0.00%
<b>Total Global Equity</b>	<b>\$24,468,992,504</b>	<b>100.0%</b>	<b>\$24,926,617,925</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Domestic Equity</b>	(2.88%)	(7.33%)	(0.64%)	12.34%	13.15%
Domestic Equity Benchmark (4)	(2.90%)	(7.32%)	(0.35%)	12.37%	13.18%
<b>Large Cap</b>	(2.51%)	(6.51%)	(0.48%)	12.58%	15.17%
Intech	(1.78%)	(4.67%)	3.35%	13.90%	14.43%
PIMCO Stock Plus	(3.31%)	(7.80%)	(1.84%)	12.16%	13.96%
SSgA S&P 500	(2.50%)	(6.57%)	(0.78%)	12.46%	-
S&P 500 Index	(2.47%)	(6.44%)	(0.61%)	12.40%	13.34%
<b>Small/SMID Cap Core</b>	(4.26%)	(10.36%)	(1.44%)	11.28%	-
Small/SMID Benchmark (3)	(4.47%)	(10.59%)	0.45%	12.20%	-
<b>Small Cap Growth</b>	(3.34%)	(9.02%)	4.25%	-	-
Summit Creek SCG	(6.32%)	(13.06%)	4.04%	12.85%	13.26%
Russell 2000 Growth Index					
<b>Small Cap Value</b>	(3.51%)	(11.07%)	(8.40%)	-	-
Frontier SCV	(2.07%)	(7.12%)	2.05%	-	-
Huber SCV	(4.57%)	(13.86%)	(15.03%)	-	-
Russell 2000 Value Index	(3.46%)	(10.73%)	(1.60%)	9.18%	10.17%
<b>SMID Cap Growth</b>	(4.07%)	(7.32%)	6.50%	-	-
Riverbridge SMIDG	(5.47%)	(11.05%)	3.35%	13.79%	13.93%
Russell 2500 Growth Index					
<b>SMID Cap Core</b>	(4.58%)	(10.64%)	(0.95%)	12.02%	-
SouthernSun SMID	(6.11%)	(14.36%)	(13.19%)	-	-
SSgA Russell 2500	(4.44%)	(10.28%)	0.37%	12.18%	-
Russell 2500 Index	(4.47%)	(10.30%)	0.38%	12.39%	12.69%
<b>International Equity</b>	(4.52%)	(9.66%)	(6.46%)	6.73%	5.36%
International Equity Benchmark (7)	(5.01%)	(10.33%)	(9.13%)	5.18%	3.76%
SSgA World ex-US	(4.84%)	(10.21%)	(8.79%)	5.63%	4.24%
International Equity Benchmark (5)	(4.90%)	(10.32%)	(9.46%)	4.96%	3.63%
Marathon Asset Mgmt	(4.15%)	(7.54%)	(1.46%)	9.62%	7.48%
Baillie Gifford	(3.68%)	(11.07%)	(6.22%)	5.71%	5.45%
Mondrian Investment Partners	(5.61%)	(9.71%)	(7.72%)	7.08%	5.10%
FIS	(4.49%)	(8.50%)	(3.83%)	-	-
International Equity Benchmark (6)	(5.13%)	(10.34%)	(8.81%)	5.65%	3.89%
<b>Emerging Markets</b>	(1.98%)	(15.79%)	(17.66%)	(4.20%)	(2.82%)
EM Benchmark (8)	(2.60%)	(17.46%)	(18.19%)	(4.42%)	(3.26%)
SSgA Emerging Markets	(2.44%)	(17.48%)	(17.92%)	(4.28%)	(2.93%)
CUSTOM MSCI EM IMI NET DIVS (8)	(2.51%)	(17.68%)	(18.32%)	(4.47%)	(3.29%)
AQR Emerging	(2.31%)	(17.51%)	-	-	-
Baillie Gifford EMM	(0.08%)	(16.89%)	-	-	-
Driehaus Capital	(2.34%)	(13.42%)	-	-	-
Harding Loevner	(3.27%)	(15.61%)	-	-	-
Pzena Inv	(2.27%)	(15.46%)	-	-	-
Custom MSCI EM STANDARD INDEX (9)	(2.92%)	(17.85%)	(18.83%)	(4.97%)	(3.44%)
<b>Emerging Markets Small Cap</b>	(0.01%)	(14.09%)	(12.41%)	2.44%	-
Acadian EM SC	0.92%	(15.05%)	(13.87%)	8.68%	-
Wasatch EM SC	(1.24%)	(12.77%)	(10.38%)	(0.28%)	-
Custom MSCI Emer Mkt SC (10)	0.00%	(16.50%)	(14.92%)	(0.97%)	-
<b>Total Frontier</b>	(2.15%)	(7.88%)	-	-	-
Acadian Frontier	(1.54%)	(5.77%)	-	-	-
City of London EM	(2.64%)	(9.07%)	-	-	-
Custom MSCI Frontier Mkt Capped Net	(2.43%)	(10.65%)	-	-	-
<b>Global Equity (12)</b>	(3.39%)	(9.63%)	(5.79%)	7.43%	7.49%
Global Equity Benchmark (13)	(3.69%)	(10.16%)	(6.78%)	6.79%	6.75%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Domestic Investment Grade Fixed Income</b>	\$6,133,466,618	76.99%	\$6,473,587,196	77.86%
<b>Total Aggregate</b>	<b>\$2,973,083,856</b>	<b>37.32%</b>	<b>\$3,058,745,462</b>	<b>36.79%</b>
Blackrock Passive (Core)	793,529,158	9.96%	888,128,839	10.68%
PIMCO (Core)	789,180,206	9.91%	788,969,971	9.49%
Loomis Sayles Core Corporate	1,132,580,628	14.22%	1,125,542,998	13.54%
Access Capital/Merrill Lynch ETI	103,474,104	1.30%	103,090,075	1.24%
Community Capital Management	28,060,098	0.35%	27,799,821	0.33%
AFL-CIO Housing Investor Trust	126,259,662	1.58%	125,213,758	1.51%
<b>Blackrock STRIPS</b>	<b>\$3,160,315,773</b>	<b>39.67%</b>	<b>\$3,412,582,329</b>	<b>41.04%</b>
<b>TIPS &amp; ILBs Fixed Income</b>	<b>\$1,832,657,010</b>	<b>23.01%</b>	<b>\$1,841,122,899</b>	<b>22.14%</b>
Blackrock TIPS	587,788,284	7.38%	591,358,826	7.11%
Blackrock Global ILBs	1,244,868,726	15.63%	1,249,764,073	15.03%
Core Fixed Cash	66,232	0.00%	2,258,658	0.03%
Core FI Closed Portfolios	757	0.00%	748	0.00%
<b>Core Fixed Income</b>	<b>\$7,966,123,629</b>	<b>100.0%</b>	<b>\$8,314,710,096</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Domestic Investment Grade Fixed Income</b>	<b>1.02%</b>	<b>4.38%</b>	<b>7.67%</b>	<b>4.59%</b>	<b>5.01%</b>
Domestic Invest Grade Fixed (15)	1.11%	4.55%	7.54%	4.25%	4.63%
<b>Total Aggregate (14)</b>	<b>0.48%</b>	<b>0.87%</b>	<b>3.27%</b>	<b>2.08%</b>	<b>3.49%</b>
Blackrock Passive (Core)	0.68%	1.19%	2.76%	1.67%	3.14%
PIMCO (Core)	0.03%	0.14%	2.44%	1.69%	3.21%
Loomis Sayles Core Corporate	0.60%	1.05%	3.83%	2.93%	4.45%
Community Capital Management	0.97%	1.68%	2.82%	2.34%	3.30%
AFL-CIO Housing Investor Trust	0.85%	1.47%	3.75%	1.99%	3.34%
Access Capital/Merrill Lynch ETI	0.42%	0.94%	3.59%	2.28%	3.39%
Barclays Aggregate Index	0.68%	1.23%	2.94%	1.71%	3.10%
<b>Blackrock STRIPS</b>	<b>1.53%</b>	<b>7.62%</b>	<b>11.57%</b>	-	-
Barclays US Strip 20+ Idx	1.53%	7.60%	11.54%	3.44%	9.46%
<b>TIPS &amp; ILBs Fixed Income</b>	<b>(0.47%)</b>	<b>(0.68%)</b>	<b>1.06%</b>	<b>0.60%</b>	<b>3.50%</b>
33% BC Tips/67% BC ILB Hedged (17)	(0.33%)	(0.37%)	1.36%	0.42%	3.32%
Blackrock TIPS	(0.61%)	(1.17%)	(0.87%)	(1.86%)	2.49%
Barclays US TIPS Index	(0.59%)	(1.15%)	(0.83%)	(1.83%)	2.55%
Blackrock Global ILBs	(0.41%)	(0.45%)	2.00%	1.84%	3.89%
BC ILB US Hedged (16)	(0.21%)	0.01%	2.44%	1.54%	3.69%
<b>Core Fixed Income</b>	<b>0.67%</b>	<b>3.22%</b>	<b>6.23%</b>	<b>3.72%</b>	<b>4.71%</b>
Core Fixed-Income Bench (18)	0.78%	3.42%	6.21%	3.41%	4.37%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Total High Yield</b>	<b>\$906,589,902</b>	<b>18.17%</b>	<b>\$927,964,878</b>	<b>18.40%</b>
Pyramis (High Yield)	307,475,302	6.16%	314,200,071	6.23%
Loomis Sayles High Yield	309,762,839	6.21%	317,531,528	6.30%
Shenkman	289,259,962	5.80%	296,107,076	5.87%
FI High Yield Debt Cash	91,799	0.00%	126,203	0.00%
<b>Total Bank Loans</b>	<b>\$928,656,049</b>	<b>18.61%</b>	<b>\$933,801,301</b>	<b>18.52%</b>
Eaton Vance Bank Loans	465,385,013	9.33%	468,058,946	9.28%
ING Bank Loans	463,271,035	9.28%	465,742,355	9.24%
<b>Total Emerging Debt</b>	<b>\$763,138,701</b>	<b>15.29%</b>	<b>\$780,632,676</b>	<b>15.48%</b>
Ashmore Emerging Markets Debt	470,543,349	9.43%	479,592,759	9.51%
PIMCO Emerging	292,595,352	5.86%	301,039,917	5.97%
<b>Total EM Debt - Local</b>	<b>\$1,010,070,347</b>	<b>20.24%</b>	<b>\$1,042,236,901</b>	<b>20.67%</b>
Investec	277,728,552	5.57%	286,107,160	5.67%
Pictet	460,532,131	9.23%	474,641,403	9.41%
Stone Harbor	271,809,664	5.45%	281,488,338	5.58%
Distressed Debt Portfolio	1,358,828,086	27.23%	1,374,052,690	27.25%
Distressed Debt Cash	22,271,940	0.45%	-15,530,997	(0.31%)
<b>Value Added Fixed Income</b>	<b>\$4,989,555,024</b>	<b>100.0%</b>	<b>\$5,043,157,449</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total High Yield</b>	(2.33%)	(4.41%)	(1.90%)	4.27%	6.75%
Pyramis (High Yield)	(2.11%)	(3.05%)	(1.50%)	4.82%	7.40%
Loomis Sayles High Yield	(2.53%)	(5.54%)	(2.92%)	4.56%	7.20%
Shenkman	(2.38%)	(4.64%)	(1.31%)	3.38%	5.65%
ML Master II HY Benchmark (19)	(2.56%)	(4.88%)	(3.54%)	3.47%	5.94%
<b>Total Bank Loans</b>	(0.51%)	(0.73%)	2.15%	3.82%	5.01%
Eaton Vance Bank Loans	(0.52%)	(0.99%)	1.40%	3.11%	4.47%
ING Bank Loans	(0.50%)	(0.46%)	2.92%	4.53%	5.57%
S&P/LSTA Leveraged Loan	(0.65%)	(1.35%)	0.92%	3.25%	4.48%
<b>Total Emerging Debt</b>	(2.20%)	(4.19%)	(4.43%)	(0.38%)	3.65%
Ashmore Emerging Markets Debt	(1.84%)	(3.79%)	(3.75%)	(0.21%)	3.75%
PIMCO Emerging	(2.78%)	(4.81%)	(5.49%)	(0.63%)	3.49%
JPM EMBI Global	(1.38%)	(2.04%)	(1.96%)	0.51%	4.40%
<b>Total EM Debt - Local</b>	(3.08%)	(10.09%)	(19.38%)	(9.09%)	-
Investec	(3.02%)	(10.26%)	(19.07%)	(8.21%)	-
Pictet	(2.93%)	(9.03%)	(18.35%)	(8.79%)	-
Stone Harbor	(3.39%)	(11.57%)	(21.25%)	(10.45%)	-
JPM GBI EM GI Diversified	(2.97%)	(10.54%)	(19.77%)	(8.72%)	(3.56%)
<b>Public Value-Add Fixed Income</b>	(2.06%)	(5.09%)	(6.82%)	(0.91%)	2.95%
Public VAFI BM (20)	(1.94%)	(4.98%)	(7.05%)	(0.95%)	2.91%
Distressed Debt Portfolio	0.97%	0.84%	1.25%	12.10%	11.67%
Altman Benchmark (21)	(8.58%)	(18.05%)	(23.53%)	(1.23%)	0.52%
<b>Value Added Fixed Income (22)</b>	(1.24%)	(3.52%)	(4.72%)	2.40%	5.37%
Value-Added Benchmark (23)	(3.71%)	(8.59%)	(11.68%)	(0.80%)	2.22%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Total Special Equity</b>	<b>\$5,118,880,358</b>	<b>73.77%</b>	<b>\$4,967,299,262</b>	<b>74.15%</b>
Special Equity	18,836,296	0.27%	19,154,826	0.29%
Special Equity 2000	13,503,316	0.19%	12,290,067	0.18%
Special Equity 2001	59,414,635	0.86%	58,505,732	0.87%
Special Equity 2002	4,863,733	0.07%	4,495,701	0.07%
Special Equity 2003	81,125,613	1.17%	92,612,144	1.38%
Special Equity 2004	83,814,223	1.21%	77,372,906	1.15%
Special Equity 2005	402,228,999	5.80%	385,869,008	5.76%
Special Equity 2006	635,343,270	9.16%	620,322,648	9.26%
Special Equity 2007	878,450,821	12.66%	841,984,676	12.57%
Special Equity 2008	911,721,127	13.14%	875,237,225	13.06%
Special Equity 2009	202,268,351	2.92%	232,228,186	3.47%
Special Equity 2010	498,372,493	7.18%	483,109,007	7.21%
Special Equity 2011	610,951,729	8.80%	572,440,736	8.54%
Special Equity 2012	232,384,458	3.35%	230,454,449	3.44%
Special Equity 2013	183,049,728	2.64%	168,464,399	2.51%
Special Equity 2014	219,635,586	3.17%	212,420,569	3.17%
Special Equity 2015	82,915,978	1.19%	80,336,981	1.20%
<b>Total Venture Capital</b>	<b>\$1,642,363,334</b>	<b>23.67%</b>	<b>\$1,548,914,262</b>	<b>23.12%</b>
Venture Capital	12,445,620	0.18%	12,953,229	0.19%
Venture Capital 2000	63,904,180	0.92%	66,840,764	1.00%
Venture Capital 2001	35,790,550	0.52%	36,656,826	0.55%
Venture Capital 2002	13,978,130	0.20%	14,159,907	0.21%
Venture Capital 2003	31,582,284	0.46%	30,762,823	0.46%
Venture Capital 2004	32,961,846	0.48%	36,050,216	0.54%
Venture Capital 2005	117,551,789	1.69%	117,358,713	1.75%
Venture Capital 2006	132,292,911	1.91%	135,519,347	2.02%
Venture Capital 2007	197,308,109	2.84%	180,641,136	2.70%
Venture Capital 2008	32,603,661	0.47%	31,509,807	0.47%
Venture Capital 2009	253,515,925	3.65%	226,185,673	3.38%
Venture Capital 2010	284,724,901	4.10%	257,393,620	3.84%
Venture Capital 2011	96,384,049	1.39%	90,916,514	1.36%
Venture Capital 2012	230,444,250	3.32%	215,418,266	3.22%
Venture Capital 2013	51,279,685	0.74%	43,821,323	0.65%
Venture Capital 2014	51,053,065	0.74%	49,229,285	0.73%
Venture Capital 2015	4,542,379	0.07%	3,496,814	0.05%
Private Equity Cash	177,538,183	2.56%	183,157,950	2.73%
<b>Private Equity</b>	<b>\$6,938,781,877</b>	<b>100.0%</b>	<b>\$6,699,371,458</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Special Equity</b>	<b>5.94%</b>	<b>5.67%</b>	<b>16.17%</b>	<b>19.88%</b>	<b>18.31%</b>
Special Equity	(1.51%)	(1.47%)	(0.26%)	19.97%	17.39%
Special Equity 2000	9.87%	9.87%	39.73%	29.71%	21.09%
Special Equity 2001	1.62%	1.29%	11.58%	21.06%	15.64%
Special Equity 2002	8.19%	8.70%	(0.79%)	10.07%	24.24%
Special Equity 2003	1.57%	1.55%	5.94%	11.70%	12.05%
Special Equity 2004	9.19%	8.57%	25.32%	25.40%	22.11%
Special Equity 2005	6.08%	6.13%	13.97%	18.23%	17.75%
Special Equity 2006	5.04%	4.84%	11.68%	19.40%	18.51%
Special Equity 2007	6.73%	6.71%	12.84%	17.38%	15.82%
Special Equity 2008	9.02%	9.09%	22.08%	25.00%	22.50%
Special Equity 2009	6.29%	6.28%	28.56%	26.89%	23.95%
Special Equity 2010	5.61%	5.37%	15.30%	18.32%	-
Special Equity 2011	6.82%	6.07%	30.88%	19.86%	-
Special Equity 2012	0.48%	0.95%	8.22%	18.39%	-
Special Equity 2013	3.82%	2.14%	7.45%	-	-
Special Equity 2014	3.01%	0.74%	1.87%	-	-
Special Equity 2015	(0.07%)	(2.45%)	-	-	-
<b>Total Venture Capital</b>	<b>6.48%</b>	<b>5.97%</b>	<b>25.18%</b>	<b>24.61%</b>	<b>22.76%</b>
Venture Capital	(3.92%)	(3.92%)	7.09%	8.93%	9.18%
Venture Capital 2000	1.30%	0.58%	0.72%	8.37%	11.30%
Venture Capital 2001	(0.13%)	1.05%	9.84%	11.10%	10.78%
Venture Capital 2002	(1.04%)	(1.04%)	7.99%	5.02%	3.44%
Venture Capital 2003	2.81%	3.26%	22.81%	37.38%	22.87%
Venture Capital 2004	(6.86%)	(6.86%)	24.12%	21.46%	35.73%
Venture Capital 2005	3.69%	3.53%	24.59%	23.14%	19.98%
Venture Capital 2006	(0.43%)	(0.43%)	11.44%	17.41%	17.49%
Venture Capital 2007	10.26%	10.14%	25.48%	27.59%	28.54%
Venture Capital 2008	4.83%	4.83%	14.58%	27.98%	38.89%
Venture Capital 2009	10.47%	8.15%	28.45%	25.43%	21.76%
Venture Capital 2010	11.45%	11.24%	47.32%	37.42%	25.37%
Venture Capital 2011	6.30%	6.25%	27.61%	26.36%	-
Venture Capital 2012	6.44%	5.82%	29.10%	23.46%	-
Venture Capital 2013	8.64%	8.64%	17.41%	-	-
Venture Capital 2014	2.87%	1.84%	2.97%	-	-
Venture Capital 2015	(3.54%)	(3.54%)	-	-	-
<b>Private Equity</b>	<b>5.98%</b>	<b>5.66%</b>	<b>17.72%</b>	<b>20.40%</b>	<b>18.76%</b>
Private Equity Benchmark (24)	5.98%	5.66%	17.72%	20.40%	18.76%
Private Equity Benchmark (26)	1.02%	3.01%	11.65%	9.76%	8.81%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

### Asset Distribution Across Investment Managers

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Private Real Estate</b>	<b>\$5,128,561,898</b>	<b>80.83%</b>	<b>\$5,045,229,720</b>	<b>82.63%</b>
<b>Private Core Real Estate</b>	<b>\$5,658,691,718</b>	<b>89.19%</b>	<b>\$5,600,972,364</b>	<b>91.74%</b>
Invesco Core	1,095,350,693	17.26%	1,117,221,044	18.30%
LaSalle Core	1,509,154,305	23.79%	1,481,033,775	24.26%
AEW Core	1,133,977,987	17.87%	1,126,756,489	18.45%
JP Morgan I.M.	772,485,245	12.18%	755,891,685	12.38%
TA Associates	1,147,723,488	18.09%	1,120,069,371	18.35%
Core Real Estate Debt	-994,550,786	(15.68%)	-994,521,816	(16.29%)
<b>Total Non-Core</b>	<b>\$464,420,967</b>	<b>7.32%</b>	<b>\$438,779,172</b>	<b>7.19%</b>
<b>Total ETI</b>	<b>\$12,538,696</b>	<b>0.20%</b>	<b>\$13,982,536</b>	<b>0.23%</b>
Canyon-Johnson II	4,856,208	0.08%	5,518,556	0.09%
Intercontinental IV	1,189,599	0.02%	1,035,695	0.02%
New Boston Urban I	6,492,889	0.10%	7,428,285	0.12%
Non Core 2011	451,882,271	7.12%	424,796,635	6.96%
<b>Total REITs</b>	<b>\$1,152,498,746</b>	<b>18.17%</b>	<b>\$1,133,278,378</b>	<b>18.56%</b>
<b>Global REITS</b>	<b>\$1,152,453,230</b>	<b>18.16%</b>	<b>\$1,203,460,820</b>	<b>19.71%</b>
INVESCO Global REIT	262,090,473	4.13%	257,777,801	4.22%
CenterSquare Global REIT	747,101,442	11.78%	734,519,084	12.03%
EII (INVESCO TRAN)	143,261,315	2.26%	140,911,536	2.31%
RREEF/European Investors Tran	25,434	0.00%	25,629	0.00%
REIT Cash	20,083	0.00%	44,328	0.00%
Real Estate Leverage Cash	-108,470	(0.00%)	-55,159	(0.00%)
Core Real Estate Cash	63,659,340	1.00%	-72,914,203	(1.19%)
<b>Total Real Estate</b>	<b>\$6,344,611,556</b>	<b>100.0%</b>	<b>\$6,105,538,763</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Private Real Estate (27)</b>	<b>2.71%</b>	<b>3.39%</b>	<b>15.74%</b>	<b>14.39%</b>	<b>14.36%</b>
<b>Private Core Real Estate</b>	<b>2.06%</b>	<b>2.75%</b>	<b>13.27%</b>	<b>12.24%</b>	<b>13.09%</b>
Invesco Core	1.42%	2.15%	11.31%	13.33%	13.52%
LaSalle Core	2.17%	2.72%	12.30%	13.44%	14.18%
AEW Core	1.76%	2.42%	17.81%	14.58%	-
JP Morgan I.M.	2.28%	3.05%	15.38%	9.84%	12.54%
TA Associates	2.71%	3.50%	11.52%	10.58%	11.60%
NCREF Property 1Q Lag	3.14%	3.14%	12.98%	11.63%	12.72%
<b>Total Non-Core Real Estate</b>	<b>5.05%</b>	<b>5.40%</b>	<b>16.91%</b>	<b>10.31%</b>	<b>8.36%</b>
<b>ETI (Partnerships)</b>	<b>(1.92%)</b>	<b>(1.92%)</b>	<b>1.58%</b>	<b>2.14%</b>	<b>1.82%</b>
Canyon-Johnson II	(11.65%)	(11.65%)	(11.28%)	(5.00%)	(4.72%)
Intercontinental IV	15.47%	15.47%	69.99%	25.14%	18.00%
New Boston Urban I	2.91%	2.91%	1.38%	4.10%	5.15%
Non Core 2011	5.28%	5.64%	17.48%	10.83%	-
NCREF Property 1Q Lag	3.14%	3.14%	12.98%	11.63%	12.72%
<b>Total REITs</b>	<b>1.63%</b>	<b>(0.80%)</b>	<b>4.84%</b>	<b>7.25%</b>	<b>8.67%</b>
REIT Benchmark (28)	1.23%	(1.45%)	3.43%	6.91%	8.60%
<b>Global REITS</b>	<b>1.63%</b>	<b>(0.81%)</b>	<b>4.81%</b>	<b>7.24%</b>	-
INVESCO Global REIT	1.59%	(0.74%)	4.21%	7.65%	-
CenterSquare Global REIT	1.65%	(0.84%)	5.36%	7.66%	-
EII (INVESCO TRAN)	1.58%	(0.74%)	-	-	-
EPRA/NAREIT Dev Net Total Idx	1.23%	(1.45%)	3.42%	6.91%	-
<b>Real Estate</b>	<b>2.50%</b>	<b>2.59%</b>	<b>14.03%</b>	<b>12.62%</b>	<b>12.84%</b>
Real Estate Benchmark (29)	2.76%	2.25%	11.17%	10.83%	12.11%

All returns reported gross-of-fee.

## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Total Timber</b>	<b>\$1,665,053,176</b>	<b>74.61%</b>	<b>\$1,647,630,056</b>	<b>73.17%</b>
Forest Investment Associates	1,124,189,980	50.38%	1,109,272,886	49.26%
The Campbell Group	533,360,759	23.90%	538,300,957	23.90%
Timber Cash	7,502,437	0.34%	56,213	0.00%
<b>Natural Resources - Public</b>	<b>\$306,056,445</b>	<b>13.71%</b>	<b>\$335,363,937</b>	<b>14.89%</b>
Jennison Natural Resources	146,052,522	6.54%	162,393,484	7.21%
T. Rowe Natural Resources	159,999,972	7.17%	172,962,599	7.68%
Public Natural Resources Cash	3,951	0.00%	7,854	0.00%
<b>Natural Resources - Private</b>	<b>\$260,507,264</b>	<b>11.67%</b>	<b>\$268,901,087</b>	<b>11.94%</b>
Private Natural Resources	252,193,278	11.30%	268,916,736	11.94%
Private Natural Resources Cash	8,313,986	0.37%	-15,649	(0.00%)
<b>Total Timber/Natural Resources</b>	<b>\$2,231,616,885</b>	<b>100.0%</b>	<b>\$2,251,895,079</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Total Timber</b>	<b>1.04%</b>	<b>0.23%</b>	<b>7.72%</b>	<b>9.21%</b>	<b>6.48%</b>
Forest Investment Associates	1.90%	1.90%	9.56%	9.80%	6.78%
The Campbell Group	(0.72%)	(3.11%)	3.90%	7.61%	-
NCREIF Timber Index 1 Qtr Lag (30)	0.51%	0.51%	10.02%	9.77%	6.10%
<b>Natural Resources Public</b>	<b>(8.89%)</b>	<b>(19.88%)</b>	<b>(35.82%)</b>	<b>(8.66%)</b>	<b>(4.69%)</b>
Jennison Natural Resources	(10.26%)	(22.61%)	(41.29%)	(12.47%)	(7.92%)
T. Rowe Natural Resources	(7.60%)	(17.22%)	(29.86%)	(4.50%)	(1.39%)
Lipper Glbl Nat Res Idx	(8.64%)	(20.77%)	(34.50%)	(9.33%)	(5.57%)
<b>Total Natural Resources Private</b>	<b>(2.79%)</b>	<b>(2.83%)</b>	<b>(15.94%)</b>	<b>(3.23%)</b>	<b>4.34%</b>
Private Natural Resources	(2.86%)	(2.91%)	(16.08%)	(3.38%)	4.18%
Natural Resource Private Bench (31)	(2.79%)	(2.83%)	(15.94%)	(3.23%)	4.34%
<b>Timber/Natural Resources</b>	<b>(0.90%)</b>	<b>(3.45%)</b>	<b>(4.48%)</b>	<b>4.23%</b>	<b>3.84%</b>
Timber/Natural Benchmark (32)	(1.36%)	(3.55%)	(2.76%)	4.94%	4.09%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Portfolio Completion Strategy	297,858,503	100.00%	293,636,301	100.00%
<b>Total Portfolio Completion Strategy</b>	<b>\$297,858,503</b>	<b>100.0%</b>	<b>\$293,636,301</b>	<b>100.0%</b>

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## Investment Manager Returns

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The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
Portfolio Completion Strategy	1.46%	3.30%	-	-	-
<b>Total Portfolio Completion Strategy</b>	<b>1.46%</b>	<b>3.30%</b>	-	-	-
Total Portfolio Completion BM (36)	0.26%	0.79%	-	-	-

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Arden HFOF (Liquidating)	38,114,744	0.77%	46,207,164	0.91%
Ivy (Liquidating)	4,612,899	0.09%	4,680,156	0.09%
PAAMCO	896,072,422	18.06%	914,845,783	17.92%
Direct Hedge Funds	4,023,334,223	81.08%	4,077,273,486	79.88%
Hedge Fund Cash	16,832	0.00%	61,034,377	1.20%
<b>Hedge Funds Composite</b>	<b>\$4,962,151,120</b>	<b>100.0%</b>	<b>\$5,104,040,966</b>	<b>100.0%</b>

## Investment Manager Returns

The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
Arden HFOF (Liquidating)	(1.29%)	(2.87%)	(1.38%)	5.54%	-
Ivy Liquidating	(1.44%)	(1.69%)	2.61%	6.06%	2.42%
PAAMCO	(2.05%)	(5.15%)	(2.22%)	6.71%	4.86%
HFRI Composite Index (33)	(1.91%)	(3.66%)	(0.12%)	4.13%	2.73%
Direct Hedge Funds	(2.52%)	(4.30%)	(0.44%)	6.18%	-
HFRI Composite Index (34)	(1.91%)	(3.66%)	(0.12%)	4.13%	2.73%
<b>Hedge Funds</b>	<b>(2.42%)</b>	<b>(4.45%)</b>	<b>(0.83%)</b>	<b>6.15%</b>	<b>4.84%</b>
Total Hedge Funds Benchmark (35)	(1.91%)	(3.66%)	(0.12%)	4.13%	2.73%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
<b>Portable Alpha</b>	<b>\$27,049,475</b>	<b>99.54%</b>	<b>\$27,631,163</b>	<b>99.99%</b>
Austin Capital Management	1,455,024	5.35%	1,576,199	5.70%
Crestline Advisors	10,752,686	39.57%	11,066,508	40.05%
Strategic Investment	14,841,765	54.62%	14,988,456	54.24%
Portable Alpha Cash	123,743	0.46%	2,513	0.01%
<b>Total Portable Alpha Wind Down</b>	<b>\$27,173,218</b>	<b>100.0%</b>	<b>\$27,633,676</b>	<b>100.0%</b>

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## Investment Manager Returns

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The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
<b>Portable Alpha</b>	<b>(1.67%)</b>	<b>(3.59%)</b>	<b>(8.76%)</b>	<b>(3.85%)</b>	<b>(2.98%)</b>
Austin Capital Management	0.03%	0.15%	3.50%	(11.83%)	(11.13%)
Crestline Advisors	<b>(2.84%)</b>	<b>(4.19%)</b>	<b>(13.37%)</b>	<b>(4.28%)</b>	<b>(1.69%)</b>
Strategic Investment	<b>(0.98%)</b>	<b>(3.53%)</b>	<b>(6.41%)</b>	<b>(1.33%)</b>	<b>(2.62%)</b>
<b>Total Portable Alpha</b>	<b>(1.67%)</b>	<b>(3.59%)</b>	<b>(8.66%)</b>	<b>(3.82%)</b>	<b>(3.03%)</b>
Portable Alpha Benchmark (37)	(1.91%)	(3.66%)	(0.12%)	4.13%	2.73%

All returns reported gross-of-fee.

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## Investment Manager Asset Allocation

The table below contrasts the distribution of assets across the Fund's investment managers as of September 30, 2015, with the distribution as of August 31, 2015.

**Asset Distribution Across Investment Managers**

	September 30, 2015		August 31, 2015	
	Market Value	% of Asset Class	Market Value	% of Asset Class
Clifton Overlay	123,163,722	22.80%	141,790,266	21.31%
Overlay Cash	417,096,588	77.20%	523,554,564	78.69%
<b>Total Overlay</b>	<b>\$540,260,310</b>	<b>100.0%</b>	<b>\$665,344,830</b>	<b>100.0%</b>

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## Investment Manager Returns

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The table below details the rates of return for the fund's investment managers over various time periods ended September 30, 2015. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

**Returns for Periods Ended September 30, 2015**

	Last Month	Fiscal YTD	Last 12 Months	Last 36 Months	Last 60 Months
Clifton Overlay	(2.44%)	(6.31%)	(2.36%)	-	-
<b>Total Overlay</b>	<b>(1.58%)</b>	<b>(3.92%)</b>	<b>(0.79%)</b>	-	-
Total Overlay Benchmark (38)	(1.58%)	(3.92%)	(0.79%)	-	-

All returns reported gross-of-fee.

#### Interim Benchmark

(1) Interim benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The PE component of this uses the S&P 500 + 5% through 6/30/2000; currently Actual PE Performance (formally labeled Interim Policy Benchmark)

#### Total Core Benchmark

(2) The Total Core benchmark is calculated by applying the investment performance of the asset class benchmarks to the Fund's asset allocation targets. The Private Equity benchmark used for the Total Core benchmark calculation is the 7-year annualized return of the Russell 3000 +3% (formally labeled Policy Benchmark)

#### Domestic Equity

(3) Russell 2500 through 6/30/14; currently 70.5% Russell 2500/5.5% Russell 2500 Growth/6.5% Russell 2000 Growth/17.5% Russell 2000 Value

(4) Dow Jones Wilshire 5000 through 04/30/08; Russell 3000 through 06/30/2009; 78% Russell 3000/22% 3 Month Libor + 3% through 12/31/2009; Russell 3000 through 10/31/2011; 80% S&P 500/20% Russell 2500 through 6/30/2014; currently 78.9% S&P 500/14.88% Russell 2500/1.16% Russell 2500 Growth/1.37% Russell 2000 Growth/3.69% Russell 2000 Value

#### International

(5) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; currently Custom World ex-US IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(6) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2010; currently Custom MSCI EAFE Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(7) MSCI EAFE Net Dividends through 9/30/2007; MSCI EAFE Net Dividends Provisional Standard Index through 5/31/2008; MSCI EAFE Net Dividends Standard Index through 12/31/2009; MSCI World ex-US IMI Net Dividends through 12/31/2010; Custom World ex-US IMI Net Dividends through 8/31/2014; currently 50% custom MSCI World Ex-US IMI Net Dividends, 50% Custom MSCI EAFE Standard Index Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities. (Current blend is maintained by MSCI)

#### Emerging Markets

(8) MSCI Emerging Markets IMI Net Dividends through 12/31/2010; currently Custom MSCI Emerging Markets IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(9) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 12/31/2010; currently Custom MSCI Emerging Markets Net Dividends Standard Index, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(10) MSCI Emerging Markets Small Cap Net Dividendss Index through 8/31/2014; currently Custom MSCI Emerging Market Small Cap Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(11) MSCI EMF through 6/30/2004; MSCI Emerging Markets Net Dividends through 9/30/2007; MSCI Emerging Markets Net Dividends Provisional Standard Index through 5/31/2008; MSCI Emerging Markets Net Dividends Standard Index through 4/30/2010; MSCI Emerging Markets IMI Net Dividends through 12/31/2010; Custom MSCI Emerging Markets IMI Net Dividends through 8/31/2014; 50% Custom MSCI EM IMI Net Dividends, 43% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends through 1/31/2015; 25% Custom MSCI EM IMI Net Dividends, 67.37% Custom MSCI EM Standard Net Dividends, 7% Custom MSCI EM Small Cap Net Dividends, .63% Custom MSCI Frontier Markets Country Capped Net Dividends through 2/28/2015. currently weights are based on the beginning adjusted monthly market value of each index group, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities. (Current blend is maintained by MSCI)

#### Global Equity

(12) The Total Global Equity composite inception date coincides with the establishment of the MSCI All Country World Index on January 1, 2001.

(13) MSCI All Country World Net Index through 4/30/2010; MSCI All Country World IMI Net Dividends through 12/31/2010; Custom MSCI All Country World IMI Net Dividends, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities through 10/31/2011; 35% S&P 500/8% Russell 2500/42% Custom MSCI World Ex-US IMI Net Dividends/15% Custom MSCI EM IMI Net Dividends through 4/30/2012; 35% S&P 500/9% Russell 2500/40% Custom MSCI World Ex-US IMI Net Dividends/16% Custom MSCI EM IMI Net Dividends through 6/30/2014; currently 44% Domestic Equity BM/40% International Equity BM/16% Emerging Markets BM

#### Core Fixed Income

- (14) Effective 2/28/2015, the Total Aggregate performance was changed to include the complete performance histories of Economically Targeted Investment managers: Access Capital, Community Capital Management, and AFL-CIO Housing Investment. As a result, prior period Total Aggregate performance was revised from 4/30/2004-1/31/2015.
- (15) 100% BC Aggregate through 2/28/2014; 34% BC Agg/66% BC STRIPS 20+ through 2/28/2015; currently Domestic Investment Grade Fixed Income benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the core fixed income portfolio.
- (16) BC Aggregate through 6/01; 67% BC Aggregate / 20% BC US TIPS/13% Custom Commodities BM ; Custom Commodities BM through 06/30/2009; currently BC ILB US\$ Hedged
- (17) 33% BC US TIPS/67% BC ILB US\$ Hedged
- (16) 80% ML MTGS 30 YR / 20% ML US TREAS 1-10 YR through 12/31/08; currently BC Securitized Index
- (18) 77% BC Aggregate / 8% BC US TIPS/15% BC ILB US\$ Hedged through 2/28/2014; currently weights are based on the beginning adjusted monthly market value of each index group.

#### Value-Added Fixed Income

- (19) CSFB Thru 07/2002; ML Master II HY Thru 02/2007; currently ML Master II HY Constrained Index
- (20) Public Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the public value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.
- (21) Actual Performance through 2/07; ML Master II FI Constrained Index through 12/31/2009; currently Altman NYU Salomon Center Combined Defaulted Public Bond & Bank Loan Index
- (22) The Total Value-Added Fixed Income composite inception date coincides with PRIM's initiative to separate High Yield from Core Fixed Income. Underlying manager market values and cash flows are unavailable prior to July 1, 2001.
- (23) CSFB through 7/02 / 43% ML Master II HY Index/43% JPM EMBI Global/14% Actual Distressed Debt through 02/07/ through 06/08 60% ML Master II HY Constrained Index and 40% JPM EMBI Global/ 50% ML Master II HY Constrained Index/ 33% JPM EMBI Global/17% S&P LSTA Leveraged Index through 06/30/2009; 58% ML Master II HY Constrained Index/ 25% JPM EMBI Global/17% S&P LSTA Leveraged Index through 12/31/2009; 24% ML Master II HY Constrained Index/17% S&P LSTA Leveraged Index/20% JPM EMBI Global/39% Altman Index through 03/31/2010; 24.20% ML Master II HY Constrained Index/16.56% S&P LSTA Leveraged Index/19.43% JPM EMBI Global/39.81% Altman Index through 06/30/2010; 22.10% ML Master II HY Constrained Index/14.60% S&P LSTA Leveraged Loan Index/20.65% JPM EMBI Global/42.65% Altman Index through 09/30/2010; 22.46% ML Master II HY Constrained Index/12.92% S&P LSTA Leveraged Loan Index/21.56% JPM EMBI Global/43.06% Altman Index through 12/31/2010; 22.14% ML Master II HY Constrained Index/11.13% S&P LSTA Leveraged Loan Index/21.60% JPM EMBI Global/45.13% Altman Index through 3/31/2011; 23.15% ML Master II HY Constrained Index/9.45% S&P LSTA Leveraged Loan Index/22.74% JPM EMBI Global/44.66% Altman Index through 6/30/2011; 23.95% ML Master II HY Constrained Index/9.21% S&P LSTA Leveraged Loan Index/22.96% JPM EMBI Global/43.88% Altman Index through 9/30/2011; 21.58% ML Master II HY Constrained Index/11.08% S&P LSTA Leveraged Loan Index/22.24% JPM EMBI Global/45.10% Altman Index through 12/31/2011; 27.90% ML Master II HY Constrained Index/13.58% S&P LSTA Leveraged Loan Index/20.65% JPM EMBI Global/37.87% Altman Index through 3/31/2012; 28.24% ML Master II HY Constrained Index/13.30% S&P LSTA Leveraged Loan Index/20.71% JPM EMBI Global/37.75% Altman Index through 4/30/2012; 23.55% ML Master II HY Constrained Index/10.63% S&P LSTA Leveraged Loan Index/16.61% JPM EMBI Global/20.36% JPM GBI-EM Global Diversified/28.85% Altman Index through 6/30/2012; 18.21% ML Master II HY Constrained Index/11.24% S&P LSTA Leveraged Loan Index/17.63% JPM EMBI Global/20.80% JPM GBI-EM Global Diversified/32.12% Altman Index through 9/30/2012; 18.29% ML Master II HY Constrained Index/11.98% S&P LSTA Leveraged Loan Index/18% JPM EMBI Global/21.03% JPM GBI-EM Global Diversified/30.70% Altman Index through 12/31/2012; 19.40% ML Master II HY Constrained Index/11.90% S&P LSTA Leveraged Loan Index/18.28% JPM EMBI Global/21.32% JPM GBI-EM Global Diversified/29.10% Altman Index through 2/28/2013; Value Added benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the value added fixed income portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.

#### Private Equity

- (24) Through 6/30/2000, S&P 500 + 5%; currently Actual Performance. This benchmark is used in the Interim Policy Benchmark
- (25) The 7 Year Annualized performance is used in the Policy Return and Policy Benchmark.
- (26) Wilshire 5000 + 3% through 4/30/2008; Currently 7 Year Annualized Russell 3000 + 3%

#### Real Estate - Private/Public

(27) On 06/30/02 PRIM instituted portfolio leverage of up to 40%; increased to 50% leverage on 02/03/04. Portfolio leverage was paid down in September 2005 (\$450 million), October 2005 (\$200 million), and July 2007 (\$450 million). Composite includes Value Added Separate Account opened 4/30/2007 and closed 12/31/2010.

(28) FTSE NAREIT ALL EQUITY REITS through 3/31/2008; 63% FTSE NAREIT ALL EQUITY REITS/27% NAREIT Global REIT/10% NAREIT International REIT through 06/30/09; 50% FTSE NAREIT ALL EQUITY REITS/50% FTSE EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 100% FTSE EPRA NAREIT Developed Net Total Return

(29) NCREIF through 6/30/03; 67% NCREIF/33% FTSE NAREIT ALL EQUITY REITS through 12/31/06; NCREIF + Ratio of 2% FTSE NAREIT ALL EQUITY REITS to PRIT Fund through 03/31/08; 73% NCREIF Property One Qtr Lag/17% FTSE NAREIT ALL EQUITY REITS/7.25% NAREIT Global REIT/2.75% NAREIT Intl REIT through 06/30/09; 82% NCREIF Property One Qtr Lag/9% FTSE NAREIT ALL EQUITY REITS/9% FTSE EPRA NAREIT Developed Ex US REIT through 7/31/09; 80% NCREIF Property One Qtr Lag/10% FTSE NAREIT ALL EQUITY REITS/10% FTSE EPRA NAREIT Developed Ex US REIT through 4/30/2012; currently 80% NCREIF PROPERTY ONE QTR LAG/20% FTSE EPRA NAREIT Developed Net Total Return

#### Timber/Natural Resources

(30) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 2/28/2010; currently NCREIF Timber Index  
(31) Currently Private Natural Resources Actual Performance.

(32) NCREIF Timber Index through 6/30/03; NCREIF Timber Index Ex-PRIM through 06/30/08; 50% NCREIF Timber Index Ex-PRIM/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2010; 50% NCREIF Timber Index/ 42% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 10/31/2011; 53% NCREIF Timber Index/ 39% Lipper Natural Resources Global Fund Index/ 8% Actual Natural Resources Private through 2/28/2014; currently the Timber/Natural Resources benchmark is calculated by applying the investment performance of the sub asset class benchmarks to the sub asset class weights within the Timber/Natural Resources portfolio. These weightings will be automatically adjusted at the end of every quarter for usage in the upcoming quarter.

#### Hedge Funds

(33) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

(34) HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

(35) ML 90 Day T-Bill + 4% through 12/31/2009; currently HFRI Fund of Funds Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

#### Portfolio Completion Strategies

(36) Portfolio Completion Strategies Composite Index is calculated by applying the underlying benchmark return for each manager to the manager's weight within the Portfolio Completion Strategies Composite. These weights are based on the beginning adjusted monthly market value of each portfolio.

#### Portable Alpha Wind Down

(37) S&P 500 Index through April 2008; Russell 3000 Index through July 2009; US 3 Month Libor + 3% through 12/31/2009; currently HFRI FOF Composite Index. (HFRI indices - Flash returns are used through 12/31/11. Current returns reflect most up to date performance and are subject to change)

#### Overlay

(38) Actual performance

#### Total Fund

(39) ML 90 Day T-Bill through 6/30/03; ML 3-Month Libor through 03/31/08; currently ML 90 Day T-Bill

#### Policy Return

(40) The Policy Return is calculated by applying the investment performance of each asset class times its actual allocation. The Private Equity portion of the Policy Return is the 7-year annualized return of the Private Equity asset class monthized.



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix E

PRIM 2012 Board Approved Compensation Philosophy

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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## **PRIM Compensation Philosophy**

### **Massachusetts PRIM Compensation Philosophy**

**Approved by the PRIM Board December 4, 2012**

**Amended by the PRIM Board December 2, 2014**

### **Introduction**

The PRIM Board and staff manage the PRIT Fund. The PRIT Fund is comprised of pension assets set aside to fund current and future retirement benefit obligations for participants in Massachusetts state retirement systems, including the systems of state employees, teachers and other municipalities. The PRIT Fund seeks to maximize the total return on its investments within acceptable levels of risk and cost for a public pension fund.

The beneficiaries of PRIM's success include:

- State and local workers - who are assured that their retirement assets are safe and well managed.
- The Commonwealth's tax-payers, including its citizens, companies, counties and municipalities - all of whom benefit from effective pension fund management at the lowest appropriate costs.

To achieve its objectives, PRIM must employ investment professionals with specialized, investment-related skills and experiences, and finance professionals and administrative staff with investment-industry-related skills and experience.

- PRIM's investment professionals must have the financial market knowledge required to make wise decisions about PRIM's assets and ensure that PRIM takes the appropriate level of risk, achieves the best returns and invests Massachusetts' pension assets with reputable, well-managed firms.
- PRIM's finance professionals and administrative staff typically must have investment-industry-related experience to support the achievement of PRIM's mission.
- PRIM competes for its staff - investment professionals, finance professionals and administrative staff - with high-paying, private sector financial services firms.

PRIM's compensation philosophy and plan differ from other Massachusetts agencies. The compensation plan recognizes that PRIM: (1) is a highly specialized investment organization; and (2) by statute, must be located in Boston, a world-class city with a high cost of living and one of the largest and most competitive financial services markets. PRIM's location makes recruitment and retention challenging for PRIM. While PRIM seeks to attract, retain and incentivize highly skilled employees to achieve its mission, PRIM's compensation plan must also reflect the fact that PRIM is a quasi-state agency that is subject to public scrutiny relative to individual compensation levels.

## **Objectives of PRIM's Compensation Plan**

PRIM's compensation plan is designed to satisfy the following objectives:

1. Attract highly skilled employees.
2. Retain highly skilled employees (i.e., minimize undesirable staff turnover).
3. Motivate highly skilled employees.
4. Provide financial incentives to achieve above-benchmark investment returns while taking prudent levels of risk in both up and down markets.
5. Reinforce a commitment to shared success among all PRIM staff, while allowing PRIM to incentivize and reward exceptional individual performance.
6. Benefit all stakeholders - PRIM beneficiaries, PRIM employees, and Massachusetts taxpayers - through a compensation plan that is:
  - a. Clear - so that costs/payouts are easy to understand and linked to results.
  - b. Predictable and stable.
  - c. Competitive, recognizing that PRIM is a public agency that competes with the private sector to attract and retain talent.
  - d. Cost effective.

## **Defining Individual Compensation Levels**

PRIM is committed to providing all employees with reasonable and competitive compensation opportunities consisting of salary, benefits and, when earned, incentive compensation.

In defining each employee's salary and incentive opportunity, PRIM considers multiple factors, including:

- Competitive market compensation ranges for the individual's position (discussed below).
- The individual's experience in a similar position, both at PRIM and at previous employers, including other State agencies and/or the private sector.
- The individual's prior compensation at previous employers, including other State agencies and/or the private sector.
- The individual's sustained performance at PRIM.
- The individual's contribution to PRIM's results.
- Private sector pay in the Boston financial services and related industries and actual pay rates for other State positions that have similar knowledge, skill and experience requirements.
- Internal equity relationships between the individual's position and other positions at PRIM (e.g., compensation levels for that position's subordinates, managers and peers).
- PRIM's overall cost structure and its annual budget.

For the above reasons, compensation opportunities can vary from position-to-position and from incumbent-to-incumbent in the same position, and from year-to-year.

## **Defining PRIM's Competitive Market Compensation Ranges**

Massachusetts' law specifies that all State authority's Compensation Committees shall "analyze and assess comparable compensation for positions with similar functions and responsibilities at state agencies and authorities, as well as for-profit and non-profit private-sector *employers* ...". M.G.L.c.29 § 29K

In accordance with this statute, the Compensation Committee has determined, that for purposes of identifying PRIM's compensation ranges (i.e., salary range minimum, midpoint and maximum; incentive opportunities) PRIM's comparator group is defined as other public pension funds of roughly comparable size and/or complexity (i.e., a peer group of at least 15 other public pension funds with roughly half the funds larger than PRIM and the other half smaller than PRIM, as measured by assets under management (AUM)). In the event that public pension fund compensation survey data is not available for a specific PRIM position (e.g., Client Service Officer), then private sector data will be used to evaluate competitive compensation requirements.

The midpoint of PRIM's compensation ranges will approximate the 75<sup>th</sup> percentile (high quartile) of the public fund peer group.

By targeting the midpoint of PRIM's compensation ranges at the public fund 75th percentile:

- PRIM can address, at least in part: (1) the recruiting pressure of its Boston location, where, unlike most of its public fund peers, PRIM faces ongoing staffing competition from private sector financial services firms; and (2) Boston's higher cost of living, compared with most of PRIM's public fund peers.
- PRIM can be assured that its compensation decisions are not impacted by statistical pay anomalies or outliers that could result if it targeted pay at a higher market percentile.
- PRIM can attract and retain the highly skilled employees needed to deliver superior, long-term investment performance.

## **Periodic Market Reviews**

To ensure that PRIM remains competitive with market trends, PRIM will conduct a comprehensive market compensation level analysis at least every four years. To ensure that PRIM adequately awards individual performance, PRIM will review its employee management and evaluation policies at least every four years.

## **The Process for Adjusting Compensation Levels**

Subject to the provisions of PRIM's By-Laws and Massachusetts law, PRIM's Board will evaluate and approve any change(s) to the salary and/or annual incentive award of PRIM's Executive Director.

- The Executive Director will evaluate and approve any changes to the salary and/or incentive awards of all other staff, provided that such adjustments:
  - Fall within salary ranges and incentive guidelines that have been recommended by the Executive Director, reviewed by the Compensation Committee, and approved by the Board.
  - Fall within approved budgeted expense levels.

- Any individual compensation that falls above or below the approved ranges must: (1) conform to approved expense budgets; and (2) be disclosed in advance, to the Chair of the Board of Directors and the Administration and Audit Committee.

Adjustments to individual employee salaries and/or incentive opportunities will be based on the criterion described earlier in the section "Defining Individual Compensation Levels."

#### **Positions that are Incentive Eligible**

PRIM's incentive plan is designed to: (1) incentivize superior investment performance within acceptable levels of risk; (2) support the organization's collaborative culture; (3) reinforce staffs shared commitment to success; and (4) reflect competitive compensation requirements. Accordingly, all PRIM staff are eligible to participate in the incentive plan, with the level of annual incentive maximum increasing with the degree to which any particular position directly impacts the growth and security of the PRIT Fund.

#### **Accountabilities and Performance Linkages that the Incentive Plan Should Promote**

PRIM's incentive plan is designed to recognize and reward individual and group contributions to PRIM's overall success. In particular, the incentive plan is designed to reward:

- PRIM's three-year relative investment results versus its adjusted policy benchmark. By generating positive three-year relative investment results versus its adjusted policy benchmark, PRIM's goal is to maximize the likelihood of meeting or exceeding its long-term actuarial return objective, within acceptable levels of risk.
- Exceptional individual contributions that may or may not be reflected in PRIM's overall results.
- PRIM's absolute returns.
- The PRIM Board has the authority, at its sole discretion, to defer paying out incentives that are earned in years when PRIM's overall absolute returns are negative. The specific mechanics of this aspect of the policy are described in a separate document.



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix F

### PRIM 2012 Board Approved Incentive Compensation Plan

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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**PRIM Incentive Compensation Plan**  
**Approved by the PRIM Board on December 4, 2012**

**A. OVERVIEW**

The Pension Reserves Investment Management (“PRIM”) Board manages the Pension Reserves Investment Trust (“PRIT”) Fund. PRIM’s Incentive Compensation Plan (“Plan”) is designed to recognize and reward individual staff performance and overall PRIT Fund performance. In particular, PRIM’s Plan is designed to reward eligible employees for:

- The PRIT Fund’s three-year relative investment performance. By generating positive three-year relative investment results, PRIM will maximize the likelihood of meeting or exceeding its long-term actuarial return objective, within acceptable levels of risk.
- Exceptional individual contributions that may or may not be reflected in PRIM’s overall results.
- The PRIT Fund’s absolute investment performance.

Incentive awards are based on fiscal year results. The PRIM Board, as the “Plan Administrator”, retains the sole and complete authority to terminate, revise, amend, or rescind any and/or all aspects of this Plan, which serves as a policy and not a contract.

The Plan Administrator designates the Executive Director to implement the Plan as described below.

**B. OBJECTIVES**

Consistent with the terms of the PRIM Board-approved compensation philosophy, this incentive Plan is designed to help PRIM:

1. Attract, retain and motivate highly skilled employees.
2. Achieve above-benchmark investment returns while taking prudent levels of risk in both up and down markets.
3. Reinforce a commitment to shared success among all staff, while also allowing PRIM to recognize exceptional individual performance.
4. Benefit all stakeholders – PRIM’s beneficiaries, PRIM’s staff/committees/Board, and Massachusetts’ tax-payers – through a compensation plan that is clear, predictable, stable, competitive and cost effective.

**C. ELIGIBILITY FOR PARTICIPATION IN THE PLAN**

All active PRIM employees who are scheduled to work at least twenty-four hours per week are eligible to participate in this Plan. To be eligible to receive an award under this Plan, participants must receive an individual performance evaluation of at least “meets expectations” for the relevant performance year.

Generally, employees who are typically scheduled to work at least twenty-four hours per week, but are on an approved leave of absence are considered to be eligible to participate in this Plan.

Eligibility to participate in this Plan in any one year does *not* confer the right to participate in any other year *nor* to receive Plan payouts for the current and/or any future year. Eligibility to participate in this Plan does not confer the right to continued employment. Subject to the provisions of this Plan, only active PRIM employees may receive payments under this Plan.

For all employees other than the Executive Director, the Executive Director will resolve all questions about Plan eligibility. In the case of the Executive Director, the Plan Administrator will resolve all questions about Plan eligibility.

#### D. OVERALL PLAN MECHANICS

1. Each eligible Plan participant will be assigned a *Maximum Incentive Opportunity* that is expressed as a percentage of their full year actual earned base salary.
2. The *Maximum Incentive Opportunity* will vary by position as shown below. These incentive opportunities reflect competitive market pay requirements and increase with the degree to which the position directly impacts the growth and security of the PRIT Fund.

Maximum Incentive Opportunities	
<b>Investments</b>	(% salary)
ED/CIO	40%
Senior Investment Officer	40%
Senior Risk Manager	40%
Dep. CIO Public Markets	40%
Investment Officer	30%
Risk Manager	30%
Investment Analyst	20%
 <b>Administration</b>	
CFO	30%
General Counsel	30%
All Other Admin Staff	20%

3. Calculation of *Final Incentive Awards* is a two-step process:
  - a) First, *Preliminary Incentive Awards* are the sum of the *PRIT Fund Investment Performance Component* and the *Individual Performance Component* (as defined in section D.4).
  - b) *Final Incentive Awards* are determined by adjusting the *Preliminary Incentive Awards*, up or down, by an amount equal to the PRIT Fund's one-year Policy Return Performance (as defined in Section G).
4. *Preliminary Incentive Awards* equal the sum of two Plan components:
  - a) The *PRIT Fund Investment Performance Component* (80% weight) is determined based on the PRIT Fund's trailing three-year Policy Return Performance versus the Adjusted Policy Benchmark (as described in Section E).
  - b) The *Individual Performance Component* (20% weight) is determined as part of the employee's annual performance review. It is an assessment of the individual participant's actual performance versus goals and objectives (as described in Section F).
5. Payout Provisions: After the PRIM Board's approval of the fiscal year audit report, *Final Incentive Awards* will paid out as follows:
  - a) Deferral Provision:
    - If the one-year PRIT Fund Policy Return Performance is positive: *Final Incentive Awards* will be paid out within two months following the PRIM Board's approval of the fiscal year audit.
    - If the one-year PRIT Fund Policy Return Performance is between 0% and -10%: *Final Incentive Awards* will be paid out or deferred (until the first full fiscal year of positive Policy Return Performance) at the Plan Administrator's sole discretion.
    - If the one-year PRIT Fund Policy Return Performance is less than -10%: *Final Incentive Awards* will be paid out or deferred (until the first full fiscal year of positive Policy Return Performance) at the Plan Administrator's sole discretion.

*Incentive Awards* will be deferred until after the first full fiscal year of positive Policy Return Performance.

- b) Deferred awards will earn “interest,” applied annually, equal to the PRIT Fund’s Policy Return Performance over the deferral period.
- c) Deferred awards will be subject to forfeiture in the event of certain forms of termination of employment.

#### **E. PRIM INVESTMENT PERFORMANCE COMPONENT**

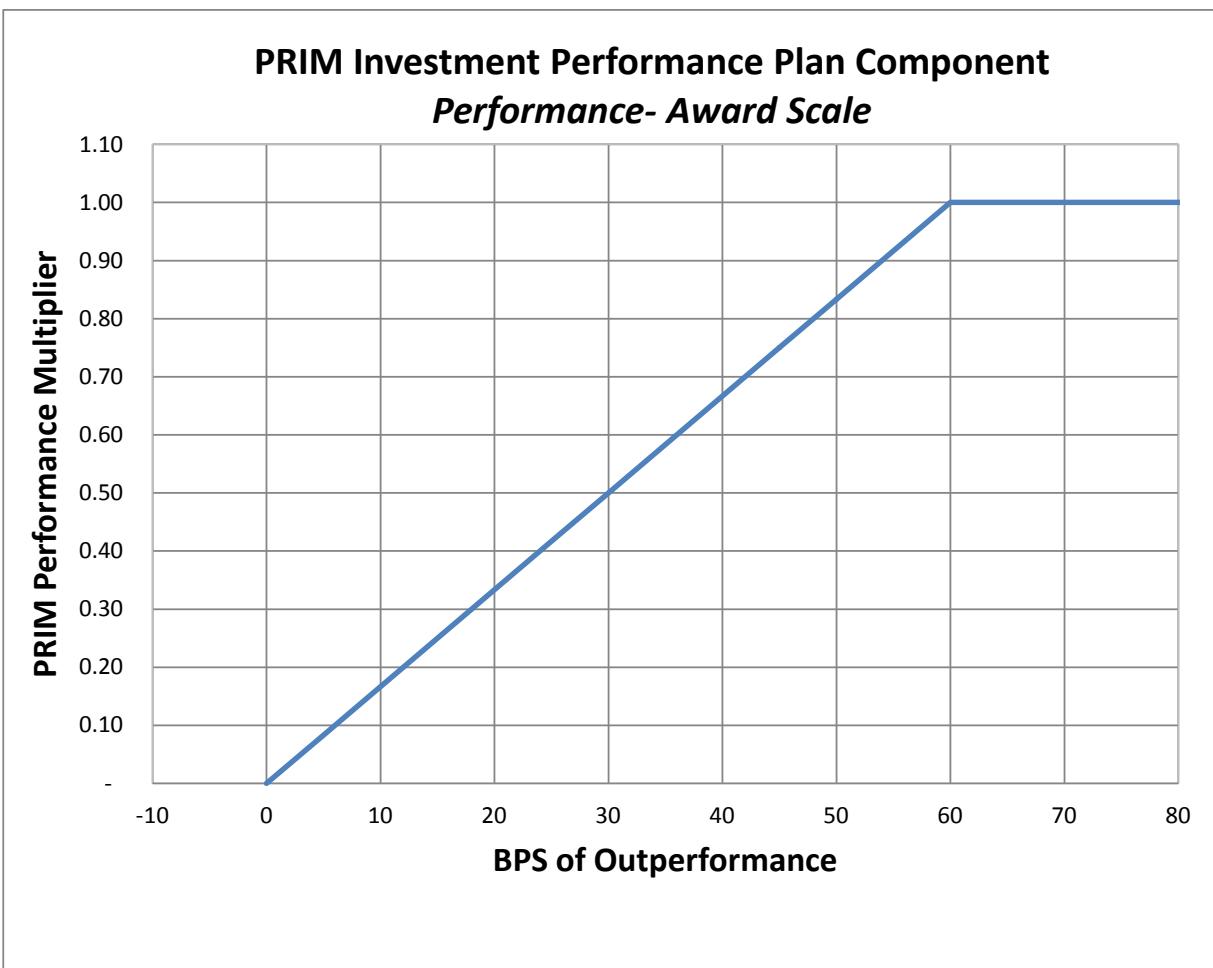
PRIM investment performance is used to calculate 80% of each participant’s *Preliminary Incentive Award*. All or a portion of this Plan component is earned when the PRIT Fund’s trailing three-year Policy Return Performance exceeds the Adjusted Policy Benchmark for the equivalent period.

For purposes of this Plan:

- The one-year PRIT Fund Policy Return Performance is the Fund’s actual annual Policy Return Performance as calculated by the Fund’s custodian net of all manager fees and PRIM Board expenses (the “Policy Return Performance”). The PRIT Fund’s trailing three-year Policy Return Performance is the PRIT Fund’s average annual Policy Return Performance for the preceding three fiscal years.
- The Adjusted Policy Benchmark is calculated by subtracting all costs of the PRIT Fund’s illiquid investments (e.g., Alternate Investments, Hedge Funds, Distressed Debt, Real Estate, Timber and Natural Resources) from the Policy Benchmark.

As the performance-award scale (below) shows, when the PRIT Fund’s three-year Policy Return Performance relative to the Adjusted Policy Benchmark:

- Equals zero or less (i.e., no relative value added), the PRIM Performance multiplier will equal zero and there will be no PRIM investment performance payout in the *Preliminary Incentive Award*.
- Equals 60 bps or more, the PRIM performance multiplier will equal 1.00 and the maximum PRIM investment performance payout will be included in the *Preliminary Incentive Award*.
- Equals between zero and 60 bps, the PRIM performance multiplier will be determined by a straight line interpolation as depicted below (e.g., at 30 bps, the multiplier will be .50; at 45 bps, the multiplier will be .75, etc.)



The *PRIM Investment Performance Component* will be determined as follows:

$$\begin{aligned}
 & \text{Participant's Earned Base Salary (\$)} \\
 \times & \text{Maximum Incentive Opportunity (\% of salary, section D)} \\
 = & \text{Maximum Incentive Opportunity (\$)} \\
 \times & 80\% \\
 \times & \text{PRIM Investment Performance Multiplier (defined in chart above)} \\
 = & \textbf{\textit{PRIM Investment Performance Component (\$)}}
 \end{aligned}$$

#### F. INDIVIDUAL PERFORMANCE COMPONENT

Individual performance is used to calculate 20% of each participant's *Preliminary Incentive Award*. Each participant's individual performance multiplier will reflect:

- The extent to which the participant satisfied assigned goals and objectives, including initiatives described in PRIM's Investment Plans (for investment staff) and/or the participant's personal development plan (for all staff).
- Each participant's overall contribution to PRIM beyond pre-established personal or organizational goals.
- Assessments of individual performance are defined using the following scale and the accompanying individual performance multipliers.

Individual Performance	
Performance vs. Individual Goals & Objectives	Performance Multiplier
Far Exceeds High Expectations	1.00
Meets High Expectations	0.60
Does Not Meet High Expectations	0.00

*Intermediate points may be interpolated.*

- Individual Performance Multipliers are determined during the annual review process by the:
  - Executive Director for all staff, other than the Executive Director. In completing these reviews, the Executive Director will consider the input and recommendations of PRIM's senior managers and department heads.
  - Board upon recommendation of the Compensation Committee for the Executive Director's position.

The *Individual Performance Component* will be determined as follows:

$$\begin{aligned}
 & \text{Participant's Earned Base Salary (\$)} \\
 \times & \text{ Maximum Incentive Opportunity (\% of salary, section D)} \\
 = & \text{ Maximum Incentive Opportunity (\$)} \\
 \times & 20\% \\
 \times & \text{ Individual Performance Multiplier} \\
 = & \text{ Individual Performance Component (\$)}
 \end{aligned}$$

## G. DETERMINING FINAL INCENTIVE AWARDS

Final Incentive Award is equal to the *Preliminary Incentive Award* adjusted up or down based on the PRIT Fund's fiscal one-year Policy Return Performance as follows:

$$\begin{aligned}
 & \text{PRIM Investment Performance Component (\$)} \\
 + & \text{ Individual Performance Component (\$)} \\
 = & \text{ Preliminary Incentive Award (\$)} \\
 \times & 1 + \text{PRIT Fund's One-Year Policy Return Performance} \\
 = & \text{ Final Incentive Award (\$)}
 \end{aligned}$$

The timing of payout of *Final Incentive Awards* may be deferred as described in section D5.

## PLAN PROVISIONS

- **Payout Date:** Awards will be paid within two months following the PRIM Board's approval of the fiscal year audit.
- **New Employees:** Employees who join PRIM after the commencement of the fiscal year may be eligible to participate in this Plan. As with existing employees, the dollar amount of any new employee's maximum award opportunities will be based on their actual salary earned during the year (i.e., which reflects pro-ration of their annualized salary based on the actual number of days that they were employed by PRIM during the year).

- ***Minimum Individual Performance Standard:*** To be eligible to receive any payment under this Plan, the participant must have an individual performance rating of at least “meets expectations.” Participants receiving a performance rating below “meets expectations” will forfeit incentive amounts related to the current year.
- ***Termination of Employment Due to Death, Permanent Disability or Retirement<sup>1</sup>:***
  - Awards Related to the Current Performance Year: Terminated employees may or may not be eligible for an award. For all employees, other than Executive Director, the Executive Director will determine the terms and timing of such payouts, if any. In the case of the Executive Director, the Plan Administrator will determine the terms and timing of such payouts, if any.
  - Mandatory Deferrals: Amounts mandatorily deferred from prior years, plus accrued interest, positive or negative, through the end of the most recently completed fiscal year, will be paid out within 60 days of the date of termination.
- ***All Other Forms of Termination of Employment:*** Unless as otherwise determined by the Plan Administrator, participants whose employment with PRIM is terminated for any other reason will forfeit all rights under the terms of this Plan. That is, as it relates to such terminated employees, prior year deferrals, plus accrued interest, will be forfeited and they will cease to participate in the current year’s Plan. All employment with PRIM is at will and no employment contract or term of employment should be inferred from the Plan.

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<sup>1</sup> For the purpose of the Plan, termination of employment due to retirement shall only apply to eligible employees who terminate their employment and file for retirement benefits with the Massachusetts State Retirement Board.

## **Attachment**

### **Overall Plan Concept – Illustrating the Plan’s Mechanics**

#### **Near the Beginning of Each year**

1. Identify/Reconfirm Maximum Award (assume \$50K)
2. Weight Maximum Awards

Plan Component	Incentive Weighting	Weighted Portion of Max Incentive
PRIM Performance	80%	\$40,000
Individual Performance	20%	\$10,000
Total	100%	\$50,000

3. Establish Performance Goals & Objectives

PRIM Investment Performance		Individual Performance	
3-Year Relative Performance	Performance Multiplier	Performance vs. Individual Goals & Objectives	Performance Multiplier
60 bps or more	1.00	Far Exceeds High Expectations	1.00
:	:	Meets High Expectations	0.60
0 bps or worse	0.00	Does Not Meet High Expectations	0.00

*Intermediate points are interpolated.*

#### **After the End of Each year**

1. Determine Multiplier for Each Plan Component

Plan Components	Performance (illustrative)	Performance Multiplier
PRIM Performance	+40 bps	→ 0.67
Individual Performance	"Very good year"	→ 0.80

2. Calculate and Determine Earned Incentive Based on Relative & Absolute Performance

Scenario #1:  PRIT Fund's One Year Policy Return Performance was	Plan Component	Weighted Portion of Max Incentive	Performance Multiplier	Actual Award
	PRIM (80%)	\$40,000	x 0.67 =	\$26,667
	Individual (20%)	10,000	x 0.80 =	8,000
		Initial Award		\$34,667
		<u>x PRIT Fund's One Year Policy Return Performance</u>		1.10
		<u>\$38,133</u>		
Scenario #2: PRIT Fund's One Year Policy Return Performance was down 15%	Plan Component	Weighted Portion of Max Incentive	Performance Multiplier	Actual Award
	PRIM (80%)	\$40,000	x 0.67 =	\$26,667
	Individual (20%)	10,000	x 0.80 =	8,000
	Total	\$50,000		\$34,667
		<u>x PRIT Fund's One Year Policy Return Performance</u>		0.85
		<u>\$29,467</u>		

3. Pay Out Award

Incentive Payout Schedule	
PRIT Fund's One-Year Absolute Returns	Payout Approach
Positive (greater than 0%)	Earned incentives are paid out
0% to -10%	The Board, at its discretion, may elect to defer all or a portion of earned incentives
-10% or worse	Earned incentives are deferred

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PENSION RESERVES  
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## Appendix G

McLagan's Comparator Data Salary Range Update 2015

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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## Compensation Range Update - November 2015

Pension Reserves Investment Management Board

November 19, 2015

## Introduction

- In late 2012, the Massachusetts Pension Reserves Investment Management (PRIM) Compensation Committee and Board adopted a Compensation Philosophy (as shown on the next page) specifying that:
  - PRIM staff compensation should be determined by comparison to a peer group of at least fifteen other public pension funds with roughly half the funds larger than PRIM and the other half smaller than PRIM, as measured by assets under management (AUM).
  - Due to the significantly higher cost of living in Boston (compared to the other comparator public pension funds) and the competition from financial services industry in Boston, the midpoint of PRIM's compensation ranges should approximate the 75<sup>th</sup> percentile of the public fund peer group.
  - Market compensation levels be reviewed at least every four years to ensure that PRIM remains competitive.
- This 2015 analysis provides updated data based on current compensation levels from the Board-approved public pension fund peer group.
- Importantly, this review is intended to ensure that PRIM's pay program remains:
  - Competitive – so that PRIM can continue to attract and retain high quality staff.
  - Aligned with the provisions of PRIM's Board-approved Compensation Philosophy.
- In reviewing this analysis, it should be noted that PRIM's current salary ranges were implemented using 2012 performance year competitive market data. PRIM's comparator salary data has changed since then, but PRIM's salary ranges have remained unchanged.

## Excerpts from PRIM's 2012 Board-approved Compensation Philosophy

- Defining PRIM's competitive market compensation ranges
  - *"In accordance with this statute, the Compensation Committee has determined, that for purposes of identifying PRIM's compensation ranges (i.e., salary range minimum, midpoint and maximum; incentive opportunities) PRIM's comparator group is defined as other public pension funds of roughly comparable size and/or complexity (i.e., a peer group of at least 15 other public pension funds with roughly half the funds larger than PRIM and the other half smaller than PRIM, as measured by assets under management (AUM))."*
- Recognizing the high cost of living in Boston, particularly in relation to PRIM's public pension fund comparator group, and also competition from the private sector financial services industry in Boston
  - *"The midpoint of PRIM's compensation ranges will approximate the 75th percentile (high quartile) of the public fund peer group."*
  - *"By targeting the midpoint of PRIM's compensation ranges at the public fund 75th percentile:*
    - *PRIM can address, at least in part: (1) the recruiting pressure of its Boston location, where, unlike most of its public fund peers, PRIM faces ongoing staffing competition from private sector financial services firms; and (2) Boston's higher cost of living, compared with most of PRIM's public fund peers.*
    - *PRIM can attract and retain the highly skilled employees needed to deliver superior, long-term investment performance."*
- Periodic market reviews
  - *"To ensure that PRIM remains competitive with market trends, PRIM will conduct a comprehensive market compensation level analysis at least every four years."*

# Are PRIM's current salaries & salary guidelines aligned with the 2012 Board-approved Compensation Philosophy and Plan?

- To update the 2012 PRIM comparator compensation ranges, McLagan:
  1. Updated and confirmed PRIM staff positions and survey job matches.
  2. Assembled data from other leading public pension funds of roughly comparable size and/or complexity (i.e., per the Board approved Compensation Philosophy, “a peer group of at least 15 other public pension funds with roughly half the funds larger than PRIM and the other half smaller than PRIM, as measured by AUM”). See Appendix I for a listing of these 15 public pension fund comparator peers.
  3. Completed multiple analyses comparing PRIM’s actual salaries to the comparator group data.
- Detailed results of these analyses are shown on the following pages.

# How do PRIM's approved 2012 and proposed 2015 comparator salary ranges compare?

- In comparing the current (2012 developed) and proposed (2015 developed) salary bands, McLagan found that across all salary bands, midpoints increased by an average of about 12%.

	PRIM Salary Bands						% Δ in Midpt	
	Current (2012 Developed)			Proposed (2015 Developed)				
	Minimum	Midpoint	Maximum	Minimum	Midpoint	Maximum		
<b>Executive Director</b>	\$275	\$360	\$445	\$345	\$430	\$520	19%	
<b>Deputy ED/Gen Counsel</b>	207	270	333	240	300	360	11%	
<b>COO/CFO</b>								
<b>Deputy CIO</b>	154	200	246	185	230	280	16%	
<b>Chief Technology Officer</b>								
<b>Sr Investment Officer</b>								
<b>Dir of Finance &amp; Administration</b>								
<b>Dir of Investment Operations</b>	123	160	198	140	180	210	11%	
<b>Sr Client Services Officer</b>								
<b>Investment Officer</b>	98	128	158	110	135	165	7%	
<b>Risk Management Officer</b>								
<b>Financial Reporting Manager</b>								
<b>Investment Research Analyst</b>	78	102	126	90	110	130	7%	
<b>Manager - Client/Inv Reporting</b>								
<b>Compliance Analyst</b>								
<b>Investment Analyst</b>	63	82	101	70	88	105	7%	
<b>Accounting Assistant</b>								
<b>Executive Assistant</b>								
<b>Financial Analyst</b>	45	60	75	56	70	84	17%	
<b>Help Desk Specialist</b>								
<b>Office Administrator</b>								
<b>Average</b>	\$130	\$170	\$210	\$155	\$193	\$232	12%	

## PRIM's Public Fund Comparator Group

PRIM's Competitor Group	AUM 12/31/2014
Teacher Retirement System of Texas	\$129.9
New York State Teachers Retirement System	106.0
State of Wisconsin Investment Board	96.1
Ohio Public Employees Retirement System	89.8
North Carolina Retirement System	88.8
Georgia Employees Retirement System	82.4
State Teachers Retirement System Ohio	73.6
Oregon Public Employees' Retirement Fund	70.1
Virginia Retirement Systems	65.9
Pennsylvania Public School Employees' Ret Sys	50.9
Maryland State Retirement Agency	44.9
Colorado Public Employees' Retirement Association	44.8
Retirement System of Alabama	33.2
SC Retirement System Investment Commission	29.8
Pennsylvania State Employees Retirement System	27.2
State Universities Retirement System of Illinois	16.6
Maine State Retirement System	12.5
South Dakota Investment Council	11.7
<b>Massachusetts PRIM</b>	<b>\$60.5</b>

*"PRIM's comparator group consists of at least 15 other public pension funds with roughly half the funds larger than PRIM and the other half smaller than PRIM, as measured by AUM."*  
*(source Massachusetts PRIM 2012 Board approved Compensation Philosophy and Plan)*



PENSION RESERVES  
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## Appendix H

### Portfolio Completion Strategies: Real Assets Primer

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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PENSION RESERVES  
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# *Portfolio Completion Strategies*

*Eric R. Nierenberg, Ph.D.*

*Deborah B. Goldberg, Treasurer and Receiver General, Chair*

*Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer*



# **Portfolio Completion Strategies Overview**

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## **Asset Allocation Changes**

- Approved a 4% allocation to Portfolio Completion Strategies (PCS)
- To be funded as follows:
  - Reduce Global Equities by 3%
  - Reduce Hedge Funds by 1%
- Specific strategies to be vetted by PRIM investment staff and presented to Investment Committee and Board for approval.

## **Objective of Portfolio Completion Strategies**

- Improve PRIT Fund overall diversification benefits.
- Enhance PRIT Fund risk/return profile.
- Increase collaboration across teams.
- Source unique, uncorrelated strategies without a home within current asset allocation framework.



# ***Portfolio Completion Strategies***

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## **Strategies Under Consideration**

- Alternative Risk Premia
- Unconstrained/Absolute Return Fixed Income
- Tangible / Intangible Assets (Real Assets)

## **Investments Completed To Date:**

- Alternative Risk Premia: \$500 million





# *Portfolio Completion Strategies*

## *An Introduction to Tangible / Intangible Assets (Real Assets)*



# *Tangible and Intangible Assets*

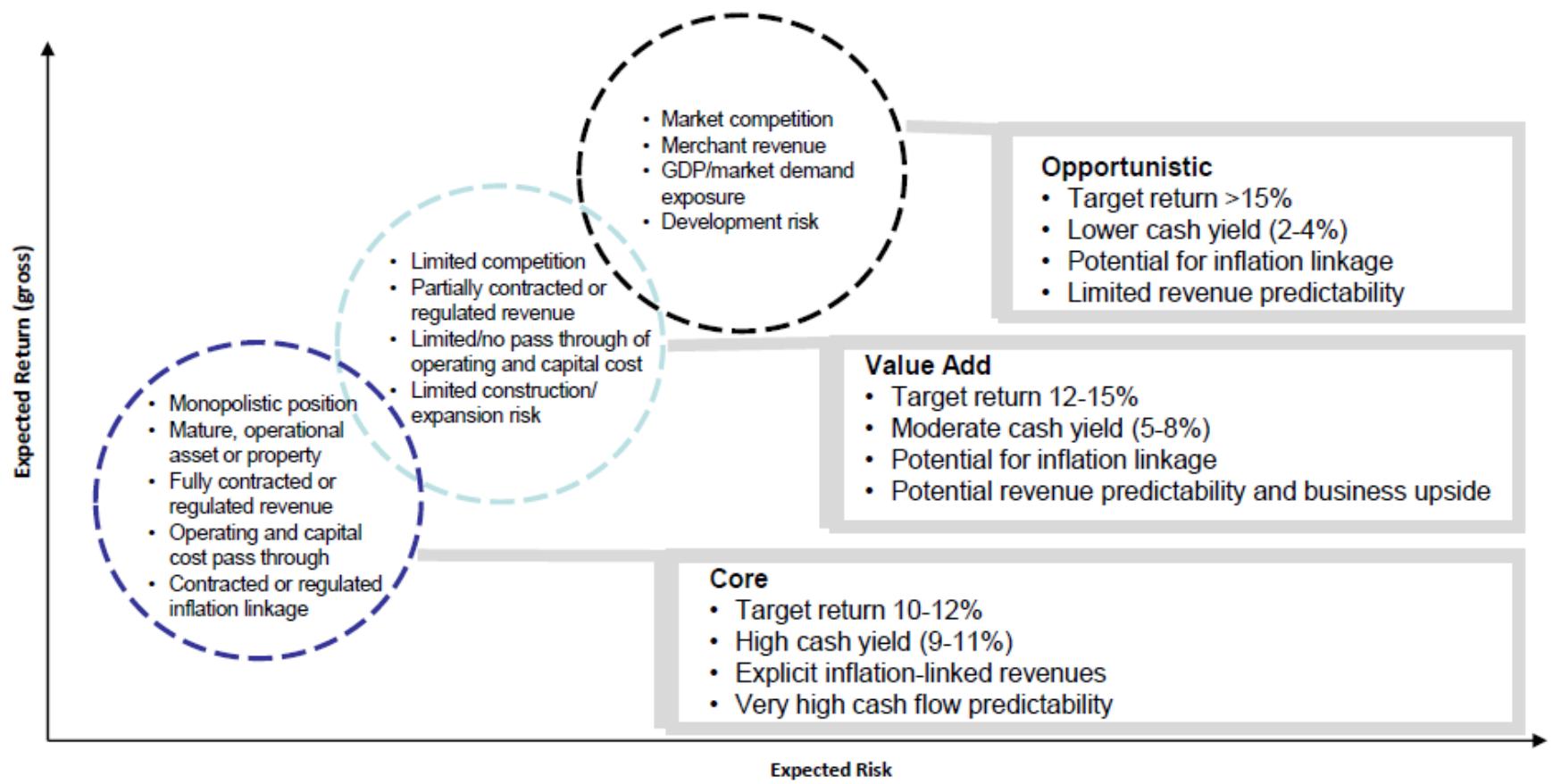
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- Tangible Assets (Real Assets).
  - Agriculture & Forestry.
  - Infrastructure.
  - Property & Equipment.
  - Energy & Minerals.
  
- Intangible Assets (Non-Real Assets).
  - Royalties.
  - Liens.
  - Insurance risk.
  - Other.



# *Risk/Return does not depend on physical characteristics*

Real assets strategies offer a range of risk profiles & potential return outcomes



# *Process, Evaluation, Structuring*

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- Process.
  - PCS team evaluates and sources opportunities in conjunction with existing asset classes and teams.
- Evaluation.
  - Expected Return, Volatility, Correlation.
  - Quantitative and qualitative assessments.
- Structuring.
  - Risks and Returns often fit between core & opportunistic.
  - Structures & fees need to be an appropriate fit for risk/return profile.



# Research

---

- PCS contributors have evaluated dozens of opportunities in the real asset universe.
- Based on due diligence and underlying investment characteristics, have identified several areas of focus.
  - Agriculture: Permanent crops.
  - Land banking.
  - Infrastructure.
  - Insurance.



# **Example A – Infrastructure Fund**

---

- Opportunity.
  - 10 year infrastructure fund. Example: new build 4 lane U.S. highway.
  - Targeting 16% gross IRR and 2.0x gross MOIC.
- Does PRIM own similar assets?
  - No. PCS team determines opportunity does not fit into PRIM's traditional asset classes.
  - PCS → Tangible / Intangible Assets → Infrastructure.
- Evaluation:
  - Expected Return: 2.5%-3.5% unlevered yields.
  - Risk/Volatility: 90% LTV. Government Subsidized debt. Development risk.
  - Correlation: highway traffic is pro-cyclical.
- Conclusion: Pass



# ***Example B – Agriculture Fund: Row Crops***

---

- Opportunity.
  - Farmland fund. Examples: Corn, wheat, soybeans.
- Does PRIM own similar assets?
  - No. PCS team determines opportunity does not fit into PIRM's traditional asset classes.
  - PCS → Tangible / Intangible Assets → Agriculture.
- Evaluation:
  - Expected Return: 2.5%-4.5% yield; aggressive assumptions on land price appreciation.
  - Risk/Volatility: Operating (commodity price) risk. 50% LTV leverage.
  - Correlation: commodity prices display low correlation to other asset classes.
- Conclusion: Pass.



# Pipeline – Active Opportunity

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- Opportunity: Permanent Crops (tree fruits, tree nuts).
- Firm: Extremely experienced team; 2 year old firm.
  - 100% employee owned.
  - Manager selects client base.
- Strategy: Farmland-Plus.
  - Value-add approach. Production and Processing.
    - Real asset ownership with investments in supply chain.
  - Olives, grapes, apples, blueberries, integrated dairy.
  - Flexible investment approach helps solve problems for farmers.
  - Targeted returns 8.5%-12% unlevered yields vs. 3%-4% for row crops.
- Structure: Separately Managed Account.
  - Lower fees. Direct control and ownership. Aligned incentives.
  - Potential to invest large amounts of capital w/ tiered fee structure.
- Conclusion: Ongoing Due-Diligence.



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PENSION RESERVES  
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## Appendix I

### Real Estate and Timberland Portfolio Report

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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***Real Estate and Timberland  
Portfolio Report  
As of October 31, 2015***

***By Timothy V. Schlitzer, CRE  
Senior Investment Officer  
Director of Real Estate and Timberland Investments***

***Presentation to the PRIM Board  
December 1, 2015***

***Deborah B. Goldberg, Treasurer and Receiver General, Chair  
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer***



# *Table of Content*

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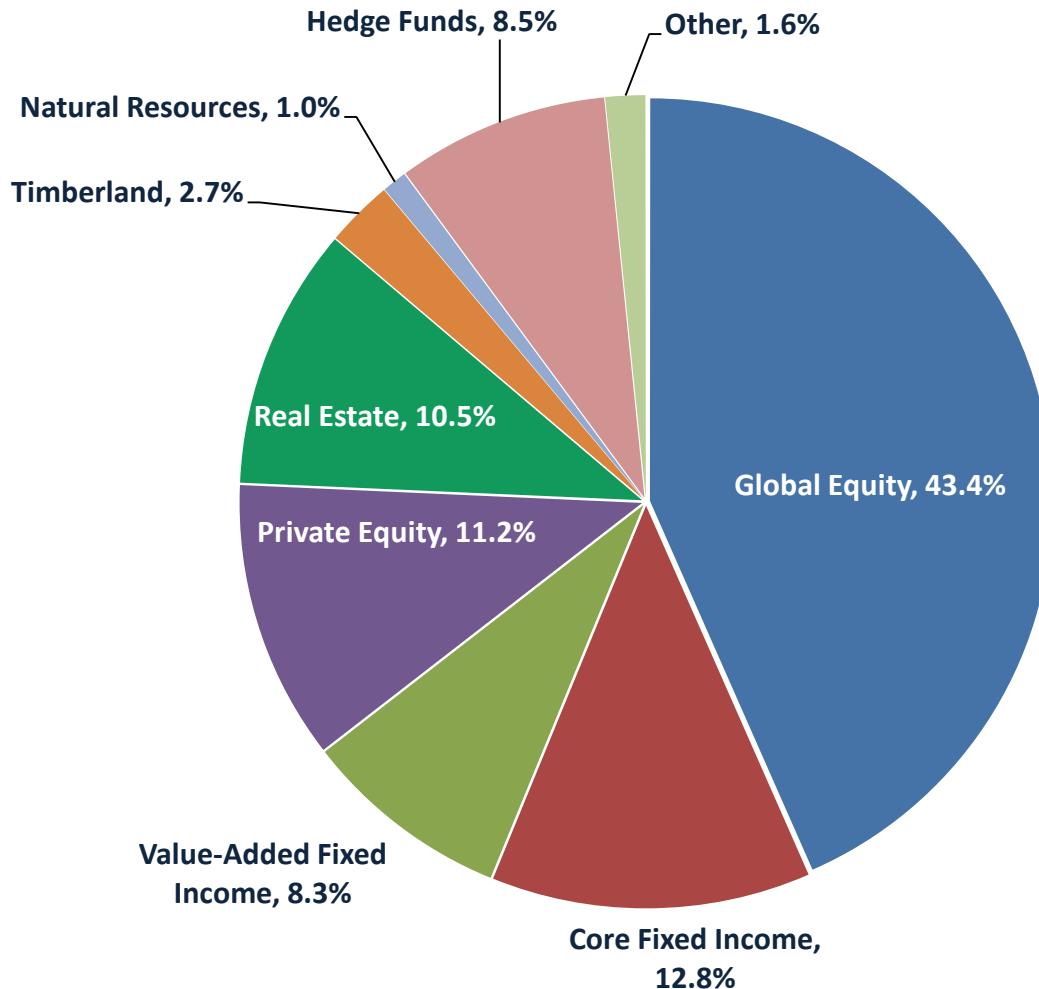
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# *Portfolio Overview*



# ***PRIT Asset Allocation***

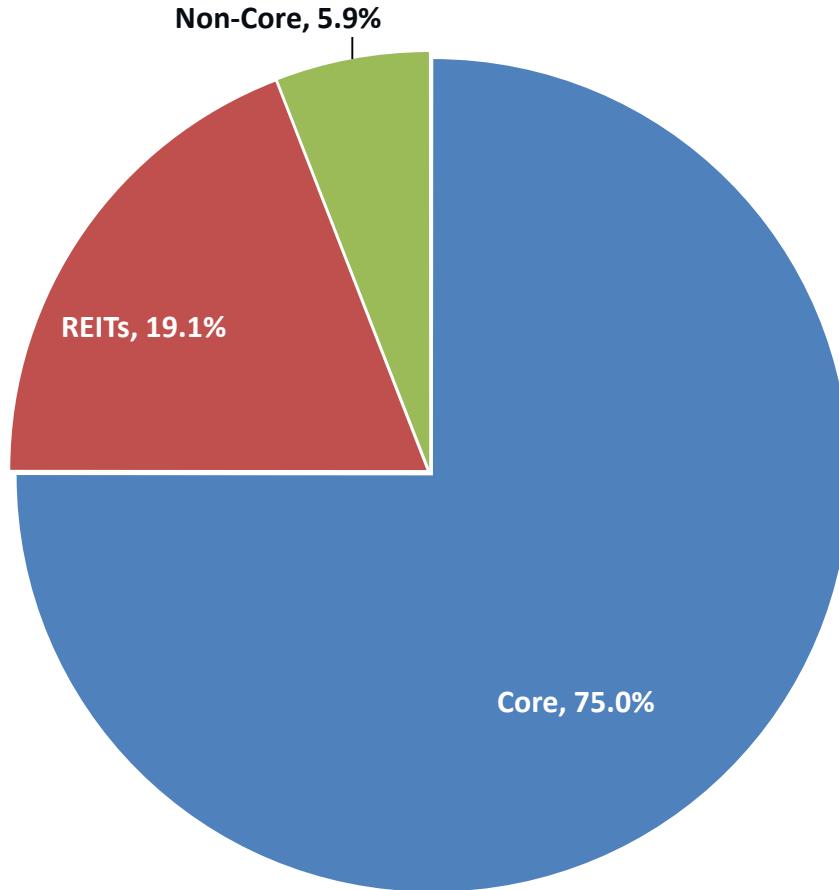
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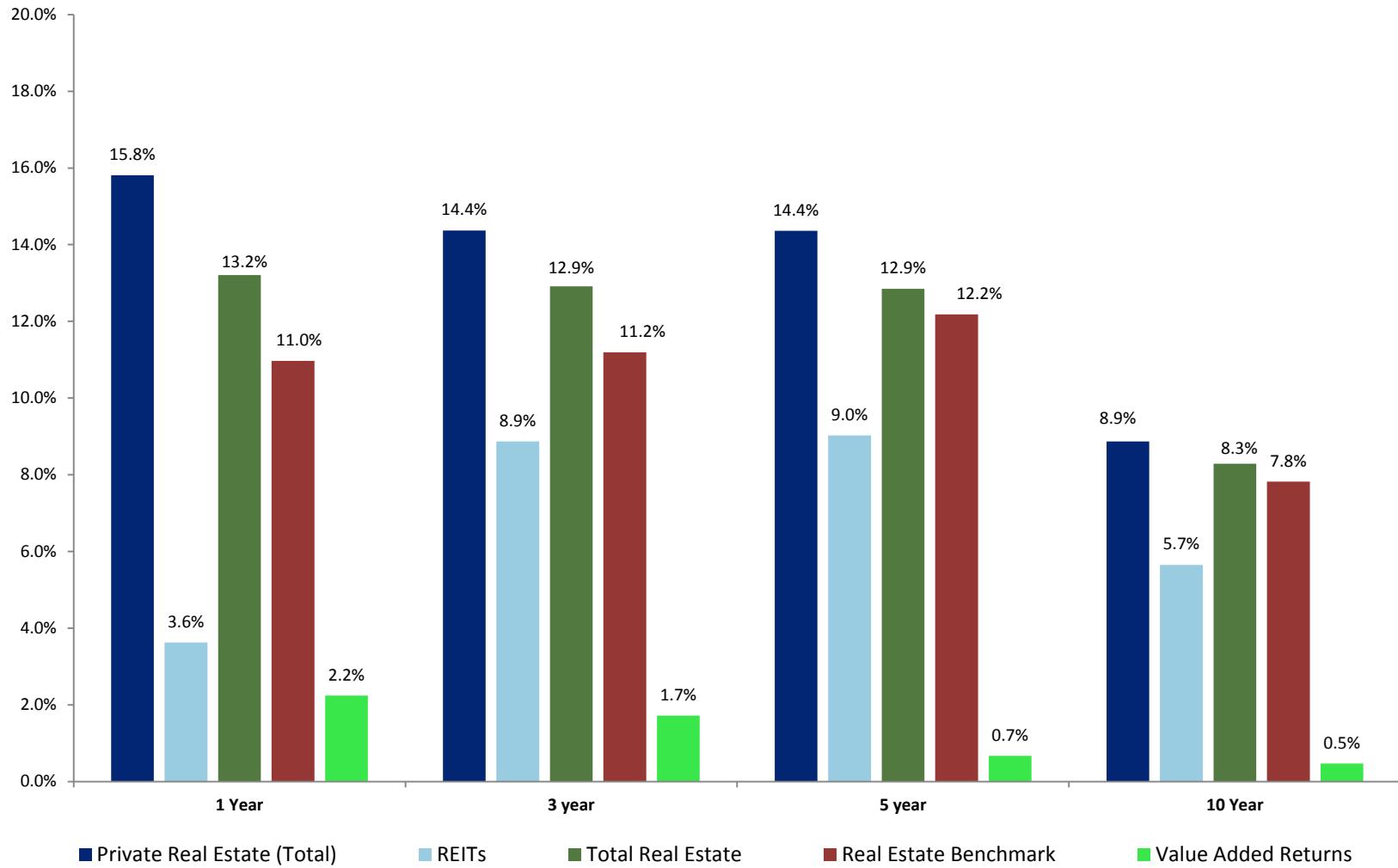
# Real Estate Asset Allocation

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Targets	
Core	70%
Non-Core	10%
REITs	20%



# Total Real Estate Performance



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# *Private Real Estate Portfolio*



# Manager Performance

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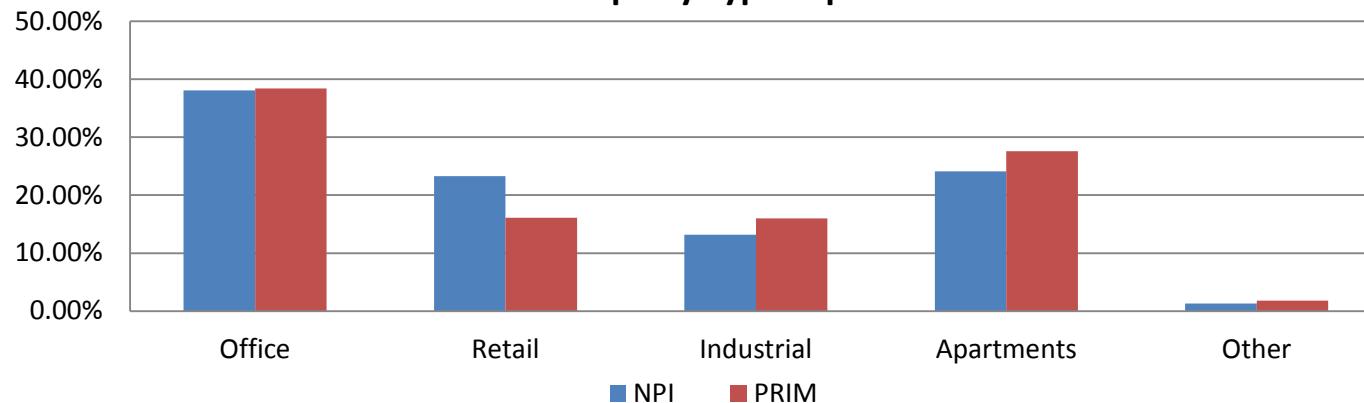
Separate Accounts	1 year	3 years	5 years	10 years	ITD
<b>AEW</b>	<b>19.6%</b>	<b>14.6%</b>			<b>14.2%</b>
<i>Excess Return</i>	6.6%	2.9%			1.9%
<b>LaSalle</b>	<b>12.3%</b>	<b>13.5%</b>	<b>14.2%</b>	<b>8.8%</b>	<b>10.5%</b>
<i>Excess Return</i>	-0.7%	1.8%	1.5%	0.6%	0.8%
<b>AEW Takeover Account</b>					<b>0.2%</b>
<i>Excess Return</i>					0.2%
<b>Invesco</b>	<b>11.3%</b>	<b>13.4%</b>	<b>13.6%</b>	<b>8.9%</b>	<b>9.9%</b>
<i>Excess Return</i>	-1.7%	1.8%	0.8%	0.7%	0.2%
<b>J.P. Morgan</b>	<b>15.3%</b>	<b>9.8%</b>	<b>12.5%</b>	<b>7.4%</b>	<b>10.5%</b>
<i>Excess Return</i>	2.3%	-1.8%	-0.2%	-0.8%	1.4%
<b>Total Core Composite</b>	<b>13.6%</b>	<b>12.2%</b>	<b>13.1%</b>	<b>8.1%</b>	<b>10.0%</b>
<i>Excess Return</i>	0.6%	0.6%	0.4%	-0.1%	0.3%
<b>Total Core Composite Leveraged</b>	<b>16.0%</b>				<b>14.8%</b>
<i>Excess Return</i>	3.1%				3.0%
<b>NCREIF Property Index (Quarter Lag)</b>	<b>13.0%</b>	<b>11.6%</b>	<b>12.7%</b>	<b>8.2%</b>	
* Green Box: Positive Relative Return. Red Box: Negative Relative Return					



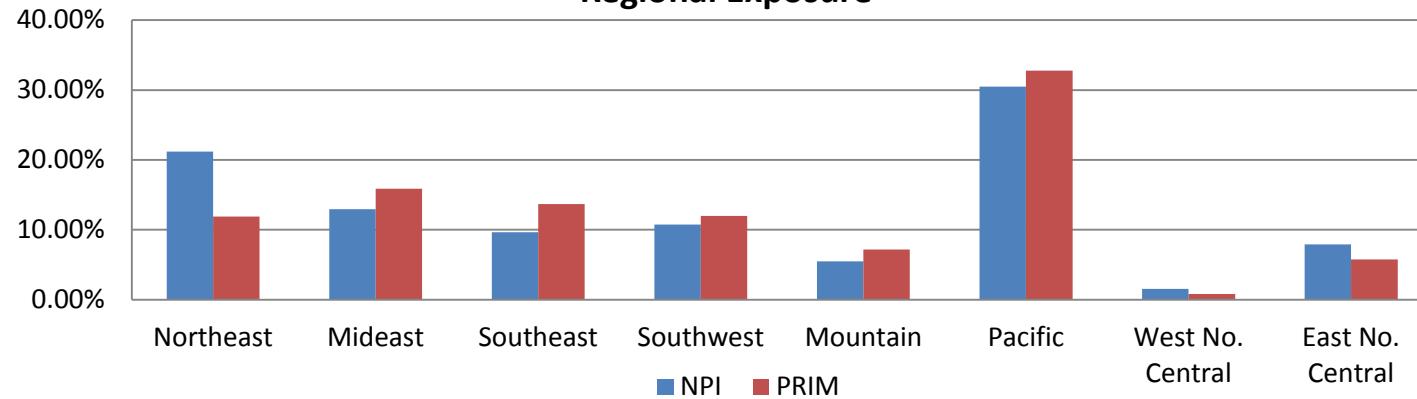
# Exposure

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## Property Type Exposure

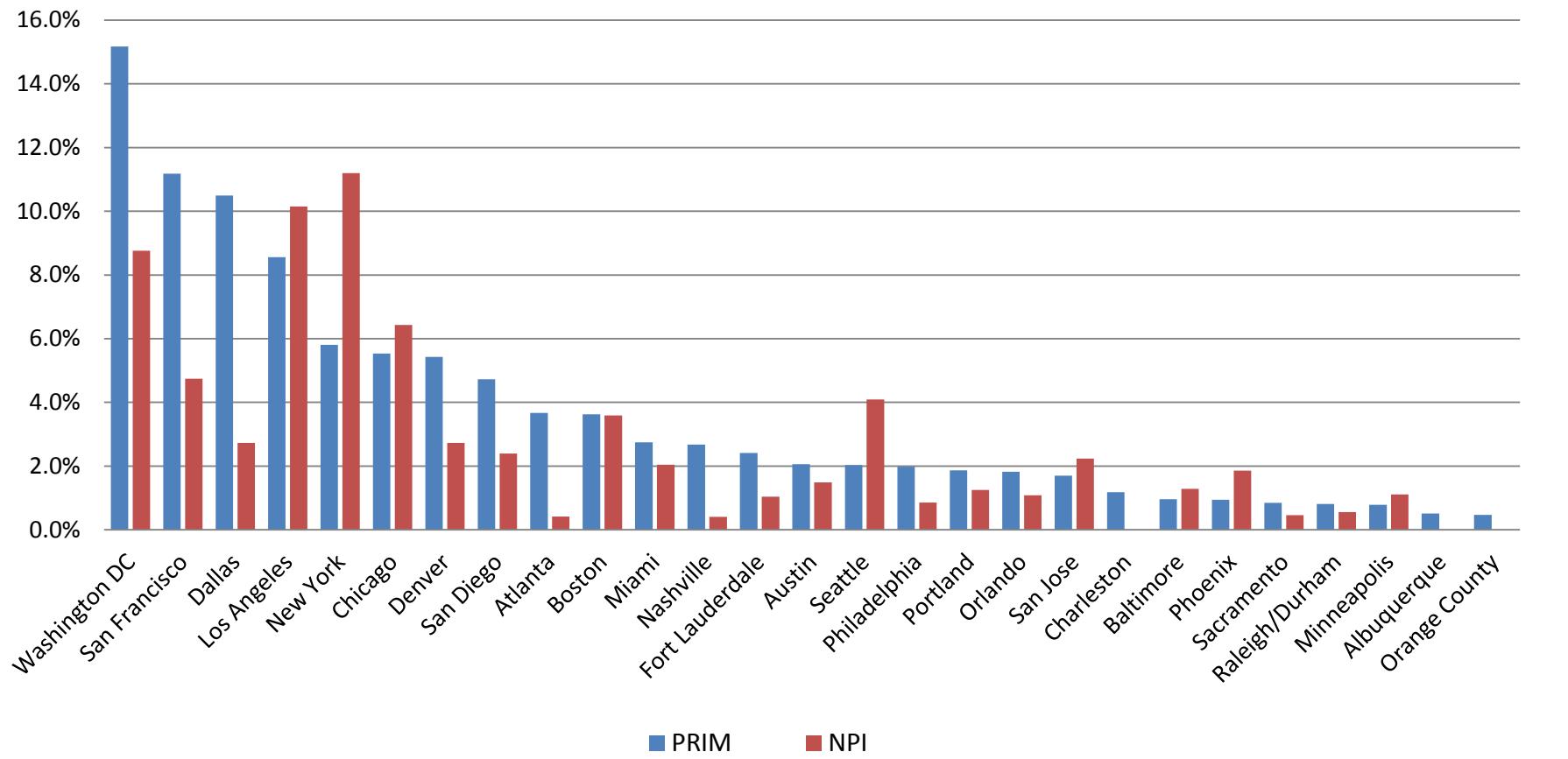


## Regional Exposure



# Exposure by MSA

Ranked by PRIM Exposure



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## *Non-Core Real Estate*



# Performance

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	1 year	3 years	5 years	ITD
Intercon IV	70.0%	25.1%	18.0%	0.1%
<i>Excess Return</i>	<b>57.0%</b>	<b>13.5%</b>	<b>5.3%</b>	<b>-8.4%</b>
Canyon Johnson	-11.3%	-5.0%	-4.7%	-5.7%
<i>Excess Return</i>	<b>-24.3%</b>	<b>-16.6%</b>	<b>-17.4%</b>	<b>-14.4%</b>
New Boston	1.4%	4.1%	5.2%	-4.0%
<i>Excess Return</i>	<b>-11.6%</b>	<b>-7.5%</b>	<b>-7.6%</b>	<b>-11.1%</b>
Non Core (Ex. ETI)*	14.3%	10.9%		12.5%
<i>Excess Return</i>	<b>1.3%</b>	<b>-0.7%</b>		<b>1.1%</b>
<b>NCREIF Property Index (Quarter lag)</b>	<b>13.0%</b>	<b>11.6%</b>	<b>12.7%</b>	

*Green Box: Positive Relative Return; Red Box: Negative Relative Return*

*\*Reflects J-curve impact of development projects.*



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## *Real Estate Securities (REITs) Portfolio*



# Manager Performance

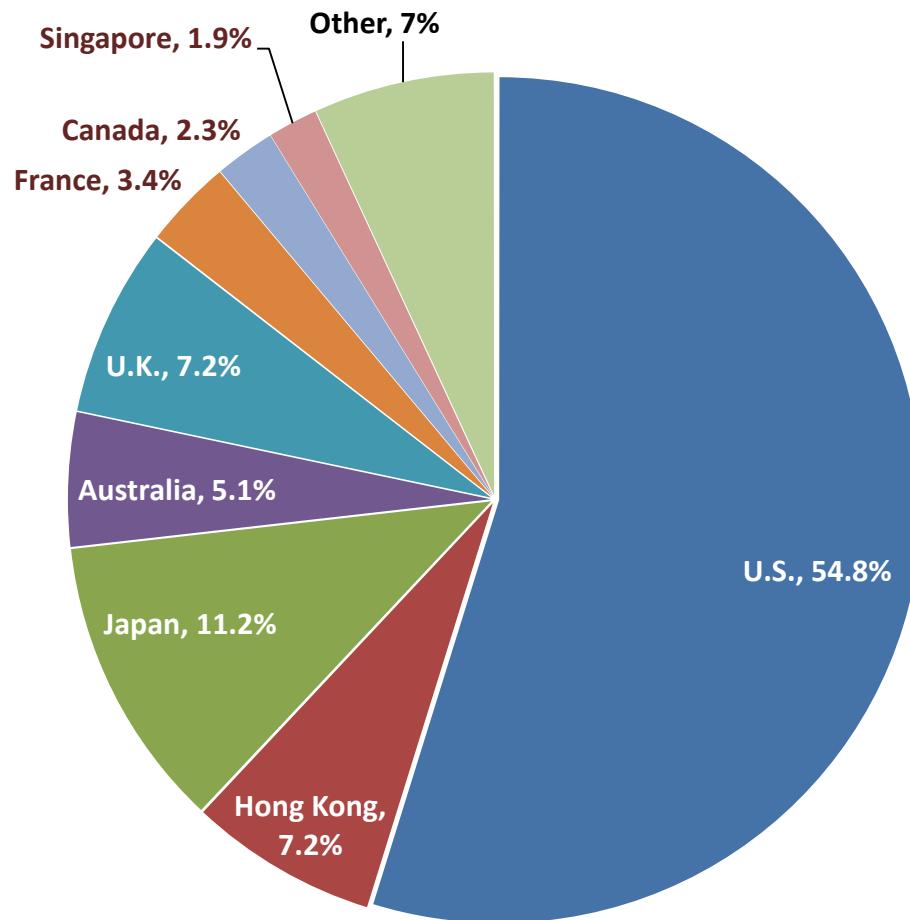
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REITs Performance					
Global REITs	Month	1 year	3 years	5 years	ITD
Invesco	5.4%	2.8%	9.3%		9.8%
<i>Excess Return</i>	-0.4%	0.3%	0.7%		0.6%
CenterSquare	5.7%	4.3%	9.4%		9.8%
<i>Excess Return</i>	-0.1%	1.7%	0.8%		0.7%
Invesco Takeover	5.4%	2.7%			3.0%
<i>Excess Return</i>	-0.4%	0.2%			-0.3%
<b>EPRA NAREIT Developed</b>	<b>5.7%</b>	<b>2.5%</b>	<b>8.6%</b>		
<i>* Green Box: Positive Relative Return; Red Box: Negative Relative Return.</i>					
Total REITs	Month	1 year	3 years	5 years	ITD
Total REITs Composite	5.6%	3.6%	8.9%	9.0%	9.7%
<i>Excess Return</i>	-0.2%	1.1%	0.3%	0.1%	1.5%
<b>Total REITs Benchmark</b>	<b>5.7%</b>	<b>2.5%</b>	<b>8.6%</b>	<b>8.9%</b>	<b>8.3%</b>



# *REITs Exposure by Country*

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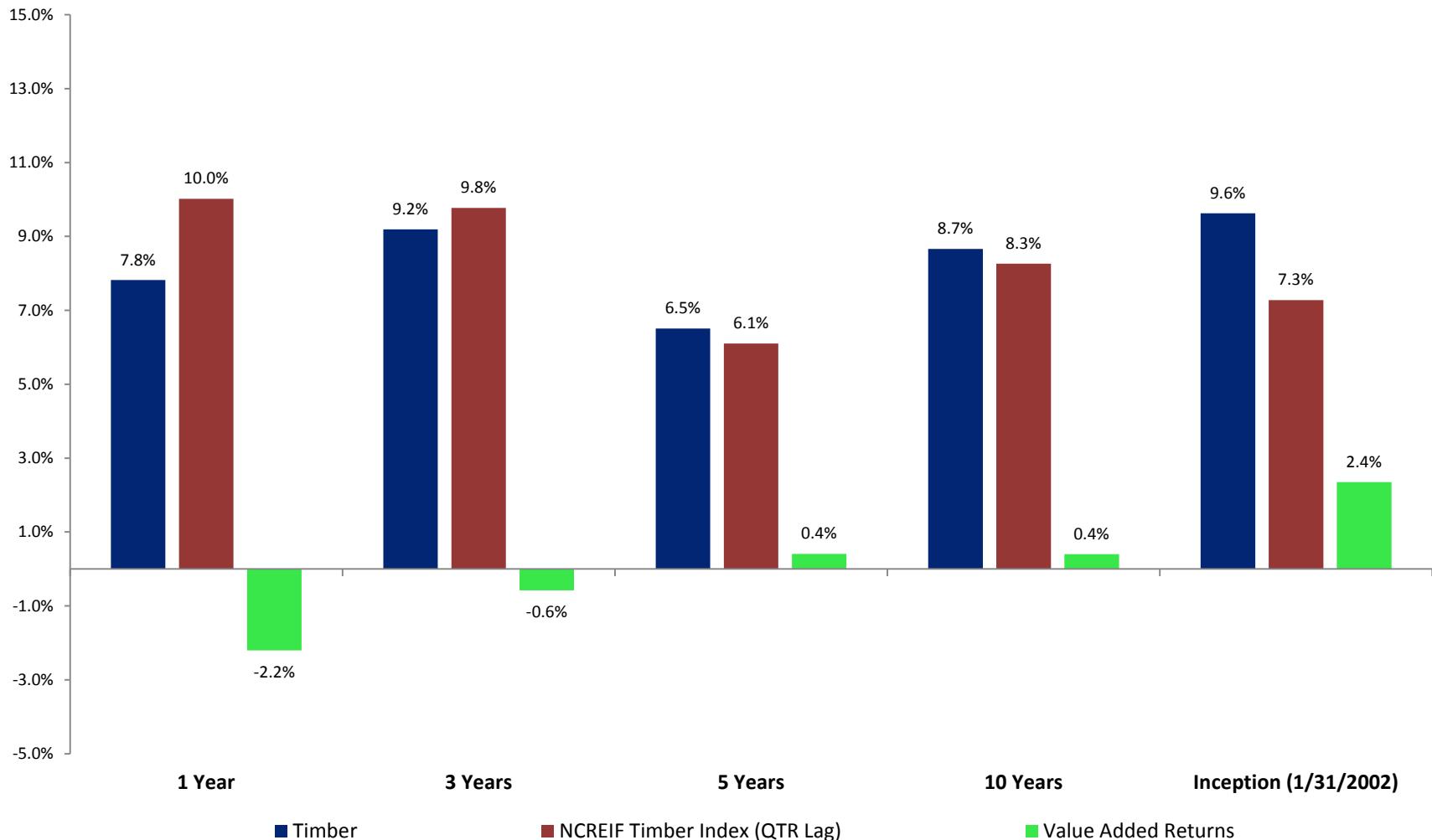


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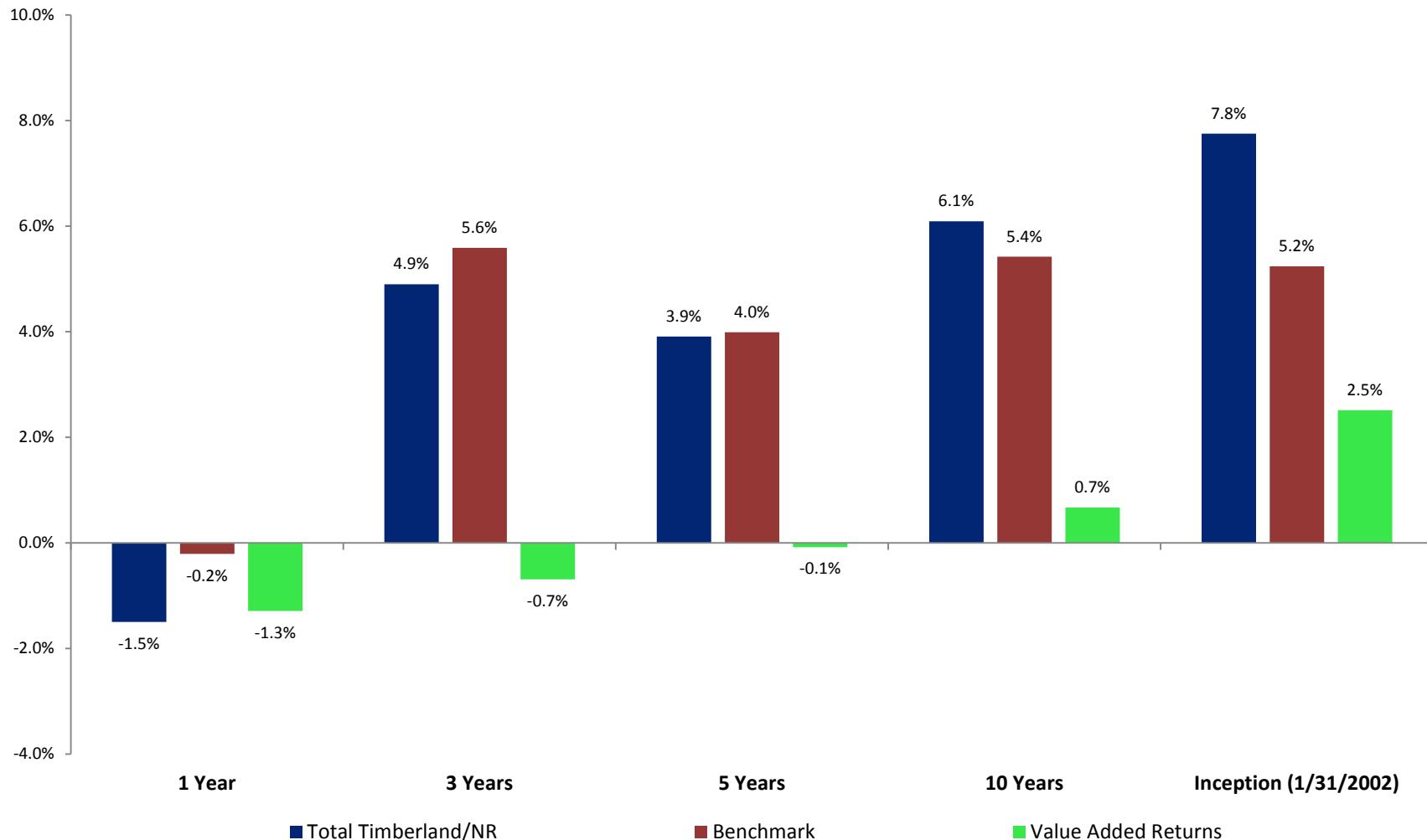
## *Timberland Portfolio*



# Timberland Performance



# Total Timberland/Natural Resources Performance



# Manager Performance

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Timberland	1 year	3 years	5 years	ITD
FIA	9.6%	9.8%	6.8%	7.6%
<i>Excess Return vs. NTI</i>	-0.5%	0.0%	0.7%	0.4%
CG	4.2%	7.5%		6.2%
<i>Excess Return vs. NTI</i>	-5.8%	-2.3%		-1.4%
Total Timber Composite	7.8%	9.2%	6.5%	9.6%
<i>Excess Return vs. NTI</i>	-2.2%	-0.6%	0.4%	2.4%
<b>NCREIF Timber Index (Quarter Lag)</b>	<b>10.0%</b>	<b>9.8%</b>	<b>6.1%</b>	

\* Green Box: Positive Relative Return; Red Box: Negative Relative Return.

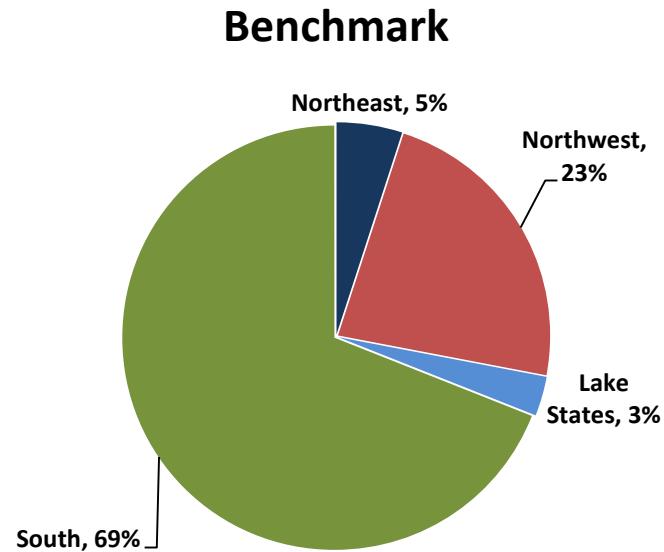
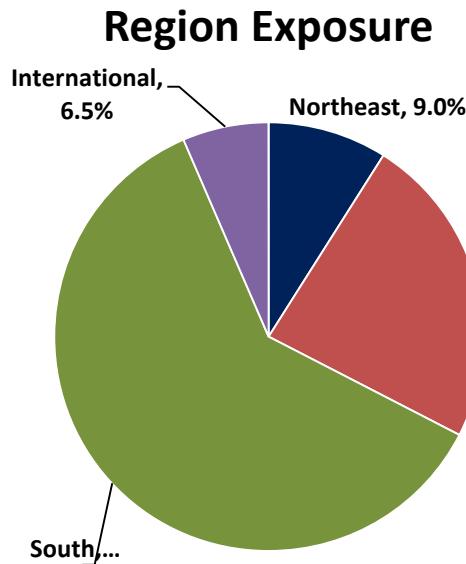
Natural Resources	1 year	3 years	5 years	ITD
Jennison	-27.6%	-8.3%	-6.8%	-6.9%
<i>Excess Return</i>	-4.0%	-2.2%	-2.0%	1.8%
T. Rowe Price	-19.1%	-1.0%	-0.2%	-4.9%
<i>Excess Return</i>	4.5%	5.1%	4.6%	3.7%
Total Composite	-23.4%	-4.8%	-3.5%	-5.9%
<i>Excess Return</i>	0.2%	1.4%	1.2%	2.8%
<b>Lipper Natural Resources Global Fund Index</b>	<b>-23.6%</b>	<b>-6.1%</b>	<b>-4.7%</b>	

\* Green Box: Positive Relative Return; Red Box: Negative Relative Return.



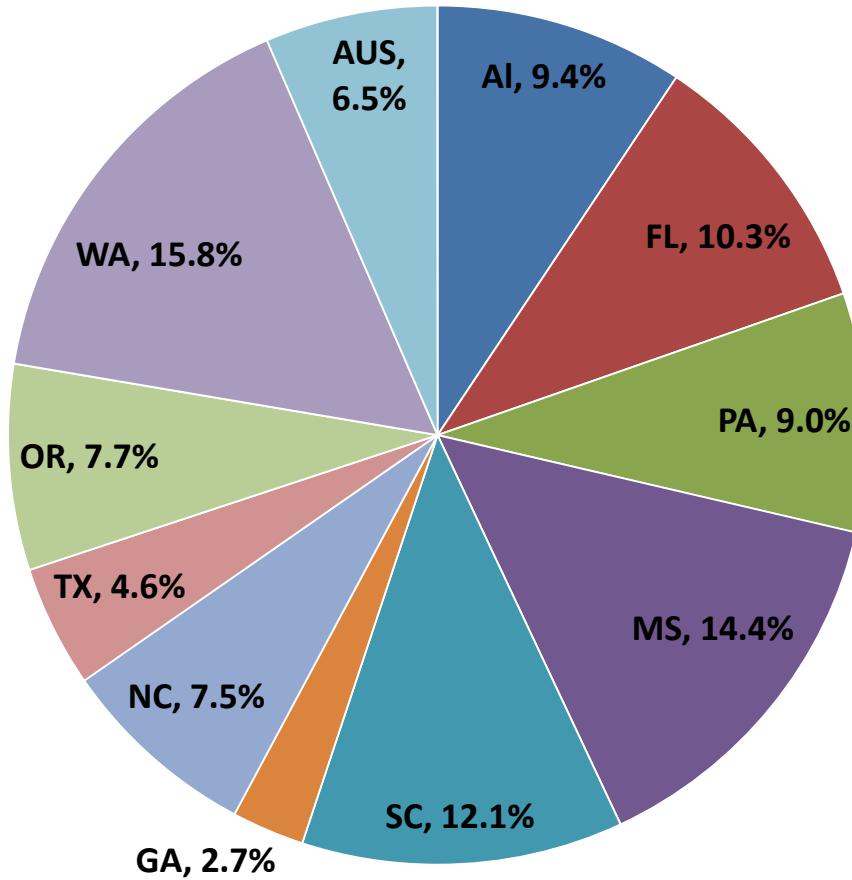
# *Exposure to Timberland by Region*

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# *Exposure to Timberland by State*

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

**Appendix J**

Global REIT Investment Management Services RFP – Evaluation Committee Recommendation

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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**REQUEST FOR PROPOSALS FOR  
GLOBAL REIT INVESTMENT MANAGEMENT SERVICES**

**EVALUATION COMMITTEE RECOMMENDATION**

**Background**

On June 15, 2015, PRIM issued a Request for Proposals (RFP) for Global REIT Investment Management Services. The RFP was in response to the termination of the Investment Management Agreement with EII Capital Management, Inc. ("EII") due to excessive turnover of its investment team and concern about the stability of the firm. At the time of the termination, EII managed a global REIT portfolio for PRIM valued at approximately \$507 million. The portfolio formerly managed by EII (the "Invesco Transition Portfolio") was temporarily assigned to Invesco Advisers, Inc. ("Invesco"), an existing global REIT investment manager with PRIM, pending the completion of a procurement (RFP). As of October 2015, the market value of the Invesco Transition Portfolio was approximately \$153 million due primarily to portfolio rebalancing.

**RFP Summary**

The purpose of the RFP is to select one or more investment management firms to manage a portfolio(s) of public global REIT securities benchmarked against the FTSE EPRA NAREIT Developed Index. The RFP was advertised in *Pensions and Investments* and in the Commonwealth's *Goods and Services Bulletin*, and was posted on PRIM's website. Twenty-six responses were submitted by the July 7, 2015 proposal deadline.

**Evaluation Process**

An evaluation committee (the "Evaluation Committee") was created that included Jill Hatton, CRE, Gar Morse, CRE, Tim Schlitzer, CRE, John La Cara, Eric Nierenberg, Ph.D., Matt Liposky, Donald Payne, and Dan Stenger (The Townsend Group). All responses were evaluated according to the Selection Criteria established in the RFP.

- Stability and experience of the firm.
- Experience and stability of the team dedicated to the subject product.
- Investment philosophy and process.
- The product's return and risk characteristics.
- Client references.
- Fee proposal.

As a result of the review period, eight firms were identified as finalists. The Evaluation Committee conducted interviews with each of the eight finalists on September 16, 2015 and September 18, 2015 at PRIM's offices. At the interviews, finalists were required to present a firm overview, introduce investment team members, detail their firm's investment philosophy and process for the proposed engagement, and provide an outlook of the global real estate markets.

Following the interviews, the Evaluation Committee agreed to eliminate four firms from further consideration and additional due diligence meetings were conducted at each firm's office by members of PRIM Staff, including Tim Schlitzer, Director of Real Estate and Timberland, John La Cara, Senior Investment Officer, Matt Liposky, Director of Investment Operations, and Donald Payne, Risk Management Officer. The site visits encompassed (1) a review of each firm's portfolio management

process with a demonstration of relevant systems that are used throughout the investment process; (2) a review of internal processes and controls, trading system process and procedures, business contingency plans, compliance regime, and operational capabilities; and (3) a firm update and office tour. Additionally, revised fee proposals were requested from each of the four remaining finalists.

#### Recommendation

The Evaluation Committee recommends that Brookfield Investment Management (“Brookfield”) and Presima, Inc. (“Presima”) are each awarded an initial allocation of up to \$200 million. Additionally, the Evaluation Committee recommends that BlackRock, Inc. (“BlackRock”) and Timbercreek Asset Management (“Timbercreek”) are placed on the PRIM Manager Bench (“Manager Bench”) and are each eligible for a future allocation up to \$200 million.

As a reminder, the PRIM Board approved the Manager Bench Program on February 5, 2013 in order to create a more nimble approach to manager procurement and monitoring. Investment managers may be placed on the Manager Bench to allow for continued monitoring of investment performance, expected organizational changes or other factors. Placement on the Manager Bench does not guarantee an investment manager will be funded in the future.

Presima and Brookfield both offer attractive characteristics that will enhance the returns of the REIT portfolio. Each firm aims to manage a relatively concentrated portfolio of high conviction names driven by best ideas. These strategies are further benefited by each firm’s belief that constraining the level of assets under management for each strategy allows them to be more nimble and opportunistic with security selection and the execution of investment themes. Although Brookfield’s strategy is currently closed to institutional investors, PRIM was successful in negotiating an allocation up to \$100 million.

The strategies managed by Brookfield and Presima will complement the existing REIT mandates managed by Center Square Investment Management (“CSIM”) and Invesco. Presima and Brookfield will enhance the diversification of the total REIT portfolio, improving alpha and risk-adjusted returns. PRIM’s risk analysis indicates that combining Brookfield and Presima with existing strategies (CSIM and Invesco) increases expected return with minimal impact to portfolio risk. The information ratio (a measure of risk-adjusted performance) of the new portfolio increases from .36 to .75.

BlackRock is a candidate for the manager bench in order to allow PRIM Staff to monitor a longer performance track record. BlackRock anticipates that it will raise approximately \$600 million in strategy assets in 2016, bringing total assets under management to approximately \$1.6 billion. This asset growth will help solidify the group within the broader BlackRock organization by enhancing strategy profitability. Moreover, the performance history will reach the three-year mark in March 2016. Timbercreek, similarly, is a candidate for the manager bench in order to allow PRIM Staff to further monitor its investment performance and track the growth of its platform.

#### Summary of Investment Managers

##### ***Brookfield***

Brookfield Asset Management Inc. (“BAM”) is a global alternative asset manager with over \$200 billion in assets under management. Brookfield is an indirect wholly-owned subsidiary of BAM. Brookfield is a registered investment advisor that invests in global listed real estate and infrastructure equities, corporate credit and securitized credit strategies. The real estate securities team is headquartered in Chicago, IL. Affiliates of Brookfield maintain offices and investment teams in New York City, Boston and Toronto. As of September 30, 2015, the real estate securities team managed approximately \$6 billion of assets under management.

Brookfield's investment team is responsible for bottom-up stock selection and research with the focus in the U.S. being on earnings, cash flows and multiples. Internationally, the focus is on premium or discount to NAV. A focus on income, and the duration and characteristics of the income, are also primary to the investment strategy. The firm utilizes a proprietary screening tool that houses both quantitative and qualitative factors that is sourced real time from a number of external providers. This output allows Brookfield to rank the companies in its coverage universe. The strategy follows a fundamental research based approach, but focuses on under-followed and out-of-favor companies.

The portfolio managers for the strategy are Jason Baine and Bernhard Krieg, CFA.

- Mr. Baine is a portfolio manager across Brookfield's U.S. and Global REIT strategies. He oversees and contributes to the portfolio construction process, including execution of buy/sell decisions. Mr. Baine joined Brookfield in September 2001 and has managed all real estate strategies since inception. He has 19 years of investment management experience in the real estate securities area, including portfolio management for institutional accounts. Mr. Baine is a member of the National Association of Real Estate Investment Trusts (NAREIT). He earned a Bachelor of Arts degree from Georgetown University where he majored in Government and minored in Economics.
- Mr. Krieg is a portfolio manager across Brookfield's U.S. and Global REIT strategies. He oversees and contributes to the portfolio construction process, including execution of buy/sell decisions. He joined Brookfield in April 2006 and has 17 years of industry experience. He holds the Chartered Financial Analyst designation. Mr. Krieg earned a Master of Business Administration degree in Land Economics and Real Estate from Texas A&M University and his undergraduate equivalent in Business Administration and Civil Engineering from the Technical University in Dresden, Germany.

Performance:

**Returns as of September 30, 2015**

	<b>Aug-15</b>	<b>Sep-15</b>	<b>YTD</b>	<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>
<b>Brookfield</b>	-5.7%	0.0%	-4.4%	3.5%	10.0%	10.1%
<b>Index</b>	-6.0%	1.1%	-4.8%	2.7%	6.2%	7.5%
<b>Alpha</b>	<b>0.2%</b>	<b>-1.1%</b>	<b>0.4%</b>	<b>0.8%</b>	<b>3.7%</b>	<b>2.5%</b>
<b>Information Ratio</b>	NA	NA	NA	NA	<b>1.2</b>	<b>0.8</b>

**Calendar Year Returns**

	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
<b>Brookfield</b>	20.5%	6.6%	33.0%	-6.7%	23.5%	55.3%
<b>Index</b>	15.0%	3.7%	27.7%	-6.5%	19.6%	37.1%
<b>Alpha</b>	5.5%	2.9%	5.2%	-0.2%	3.9%	18.2%

**Presima**

Presima is a boutique investment manager focused exclusively on global listed real estate securities located in Montreal, Canada. The firm was created in 1998 as part of the Caisse de dépôt et placement du Québec, one of the largest institutional fund managers in North America. After developing extensive knowledge and expertise in global real estate securities, Presima began managing its products for third-party investors in 2005, ranging from public and private pension funds to insurance companies and distribution platforms. On June 28, 2010, NAB Asset Management, the National Australia Bank Group (NAB Group), acquired Presima to act as a wholly-owned subsidiary. As of September 30, 2015, the real estate securities team managed approximately \$1 billion of assets under management.

Presima manages a high conviction strategy that exploits best ideas across regions, sectors and risk profile, providing investors with a liquid and diversified global portfolio of securities. This strategy is driven by bottom-up research, with a top down overlay. The portfolio is constructed to exploit mispricing opportunities at the stock level while ensuring that there are no unintended risks in the portfolio's overall positioning. Its concentrated nature allows Presima to express its conviction in significant positions relative to traditional market indices, thereby generating a higher active share than traditional benchmark-aware strategies.

The portfolio managers for the strategy are Stéphane Larsen, CFA, Chris Blanchard, CFA, Vincent Felteau, CFA, Marc-André Flageole, CFA, and Martin Pepin, CFA.

- Mr. Larsen joined Presima in 2002. He is responsible for analysis, financial modelling as well as being co-responsible for all investment decisions made within the North American region and for portfolio construction. Mr. Larsen joined the financial industry in 2000, having worked for a wealth management firm, where he covered various sectors including chemical, utility and pharmaceutical companies on a global basis. Mr. Larsen holds a Master of Finance from the University of Sherbrooke and a Bachelor of Business Administration (Finance) from HEC Montreal, and he is a CFA charterholder.
- Mr. Blanchard joined Presima in 2007. He is responsible for analysis, financial modeling and for investment decisions, as well as portfolio construction. Mr. Blanchard joined the financial industry in 1999, in a role within Cordiant Capital, where he managed an emerging market portfolio. He subsequently took on a role as director of Capital Markets Group with CBRE in Montreal. Mr. Blanchard holds a Bachelor of Arts from Queen's University and is a CFA charterholder.
- Mr. Felteau joined Presima in 2007. He is responsible for the analysis and financial modelling, as well as being co-responsible for all investment decisions made within the Asia-Pacific region and for portfolio construction. Mr. Felteau joined the financial industry in 2004, having worked as a financial analyst at a Montreal-based investment management firm, where he directly contributed to the development and management of various investment strategies. Mr. Felteau holds a Master of Finance from the University of Sherbrooke and a Bachelor of Business Administration (Finance) from HEC Montreal, and he is a CFA charterholder.
- Mr. Flageole joined Presima in 2006. He is responsible for the analysis and financial modelling, as well as being co-responsible for all investment decisions made within the Asia-Pacific region and for portfolio construction. Mr. Flageole joined the financial industry in 2005, having worked as a risk manager at the Caisse de dépôt et placement du Québec, where he analyzed both market and non-market risks of portfolios comprised of equities, derivatives, bonds, private equity and real estate investments. Mr. Flageole holds a Master of Finance and a Bachelor of Business Administration from HEC Montreal, is a CFA charterholder and FRM certified.
  - Mr. Pepin joined Presima in 2008. He is responsible for analysis, financial modelling as well as being co-responsible for all investment decisions made within the North American region and for portfolio construction. Mr. Pepin joined the financial industry in 1999 as a financial analyst for a Caisse de dépôt et placement du Québec subsidiary. His subsequent role was a portfolio manager for Hydro-Québec's retirement fund, where he was responsible for security selection in the financial services and energy industries. Mr. Pepin holds a Master of Finance and a Bachelor of Business Administration from HEC Montreal, and he is a CFA charterholder.

Performance:

**Returns as of September 30, 2015**

	Aug-15	Sep-15	YTD	1 Year	3 Year	5 Year
<b>Presima</b>	-5.5%	1.6%	-1.3%	7.1%	8.6%	9.9%
<b>Index</b>	-6.0%	1.1%	-4.8%	2.7%	6.2%	7.5%
<b>Alpha</b>	<b>0.4%</b>	<b>0.5%</b>	<b>3.5%</b>	<b>4.4%</b>	<b>2.4%</b>	<b>2.4%</b>
<b>Information Ratio</b>	NA	NA	NA	NA	<b>1.4</b>	<b>1.2</b>

**Calendar Year Returns**

	2014	2013	2012	2011	2010	2009
<b>Presima</b>	19.7%	2.2%	31.5%	-3.9%	18.5%	40.1%
<b>Index</b>	15.0%	3.7%	27.7%	-6.5%	19.6%	37.1%
<b>Alpha</b>	4.7%	-1.5%	3.8%	2.6%	-1.1%	3.0%

### ***BlackRock***

BlackRock is one of the largest asset management firms in the world with over \$4 trillion of assets under management. BlackRock is independent in ownership and governance with no single majority stockholder and a majority of independent directors. PNC owns approximately 22% of BlackRock and institutional investors, employees and the public hold an economic interest of approximately 78%.

BlackRock's Global Real Estate Securities team, located in New York City, is an organically built team that began with the hiring of Jack Chandler, Managing Director and Chairman of BlackRock's Global Real Estate business. Jack identified real estate securities as a missing component from the suite of available real estate offerings at BlackRock when he joined. He made the decision to hire Mark Howard-Johnson, Managing Director and Global Head of Real Estate Securities Management. As of September 30, 2015, the real estate securities team managed approximately \$1 billion of assets under management.

The Global Real Estate Securities team employs a fundamental approach towards stock selection combined with consistent portfolio construction to generate steady, long-term outperformance. This approach leverages each of the senior investors' backgrounds. The aim of the stock selection process is to identify and exploit relatively mispriced real estate securities that have a likely catalyst for the identified mispricing to close within the short- to medium-term. The foundation of this process is a proprietary Relative Value Matrix, which calculates the expected alpha of each security within BlackRock's universe and aggregates an extensive set of comparative valuation metrics.

Alpha is estimated by comparing the current relative mispricing of an individual security to the regional average. Mispricing is calculated by comparing their assessment of a security's indicative value to its current share price. This process enables them to rank securities within their respective sectors and geographies based on relative attractiveness.

The portfolio managers for the strategy are Mark Howard-Johnson, CFA, Sherry Rexroad, CFA, Alastair Gillespie, CFA, and James Wilkinson.

- Mark Howard-Johnson is Global Head of the Global Real Estate Securities Group with 30 years of experience in real estate and real estate securities. Mark most recently served as Chief Investment Officer for the real estate securities team at Building and Land Technology, where he was responsible for launching its real estate securities management effort. Previously, he was global head and CIO for the Real Estate Securities Team at Goldman Sachs Asset Management with excess of \$5 billion of AUM. Mark earned his BA from Dartmouth College and holds the Chartered Financial Analyst

designation. He is an active member of the National Association of Real Estate Investment Trusts (NAREIT) and sits on the Investment Advisory Council.

- Sherry Rexroad, CFA, is Chief Investment Officer of the Americas and Chairperson of the Investment Committee for the Global Real Estate Securities Group and possesses 28 years of experience in real estate and real estate securities. Sherry most recently served as the Senior Portfolio Manager, REITs-Americas for Aviva Investors Global Listed Real Estate Securities Team. She was previously a Managing Director and Portfolio Manager with ING Clarion Real Estate Securities with \$10 billion in AUM. Her experience includes global, U.S., income and long/short hedge fund mandates. Prior to ING, she worked for AEW Capital Management, the U.S. Environmental Protection Agency and the General Services Administration. Sherry graduated from Haverford College and holds an MBA from The Wharton School, University of Pennsylvania. She also holds the Chartered Financial Analyst designation and is a member of the CFA Institute, the CFA Society of Philadelphia, NAREIT, a member of BlackRock Americas Corporate Governance Committee, a member of the FTSE NAREIT Index Series Advisory Committee, and an Advisory Board member for "Fords in Finance" (Haverford College).
- Alastair Gillespie, CFA, is the APAC Chief Investment Officer of the Global Real Estate Securities Group with 16 years of investment experience. Alastair previously was a portfolio manager for Principal Global Investors based in Singapore. He was managing director and co-global portfolio manager, and responsible for the firm's Asia Pacific and domestic Australian real estate capability in listed real estate securities. Prior to this Alastair was a sell-side real estate analyst for 11 years. His most recent role was as an executive director, and co-head of Asian real estate research at UBS AG in Singapore. From 2006 to present he has been a management board member of the Asian Public Real Estate Association (APREA) and subsequently the board of the Singapore chapter of APREA. Prior to working in Asia, Alastair covered the Australian listed real estate securities market for eight years with UBS, ABN Amro and BT Alex Brown. He received a Masters of Applied Finance from Macquarie University in Australia, and a Bachelor of Commerce degree in finance from the University of Wollongong in Australia. Alastair holds the Chartered Financial Analyst designation and holds a Graduate Diploma in Applied Finance and Investment from the Securities Institute of Australia.
- James Wilkinson is the European Chief Investment Officer of the Global Real Estate Securities Group with 18 years of investment experience. James was previously a fund manager at Thames River Capital where he worked on a range of traditional long only and long/short real estate securities funds, including the S&P Capital IQ Gold rated Thames River Real Estate Securities Fund. Prior to this, he worked at Henderson Global Investors as a member of the European real estate securities team. Mr. Wilkinson began his career at Healey & Baker as a Chartered Surveyor. James graduated from the University of East Anglia with a BA Hons degree in Philosophy and gained his MA in Property Valuation and Law from City University Business School, London (now Cass Business School). James is a Member of the Royal Institution of Chartered Surveyors.

Performance:

**Returns as of September 30, 2015**

	Aug-15	Sep-15	YTD	1 Year	3 Year	5 Year
<b>BlackRock</b>	-5.2%	0.6%	-1.9%	8.0%	NA	NA
<b>Index</b>	-6.0%	1.1%	-4.8%	2.7%	6.2%	7.5%
<b>Alpha</b>	<b>0.8%</b>	<b>-0.6%</b>	<b>2.9%</b>	<b>5.2%</b>	<b>NA</b>	<b>NA</b>
<b>Information Ratio</b>	NA	NA	NA	NA	NA	NA

**Calendar Year Returns**

	2014	2013	2012	2011	2010	2009
<b>BlackRock</b>	21.9%	NA	NA	NA	NA	NA
<b>Index</b>	15.0%	3.7%	27.7%	-6.5%	19.6%	37.1%
<b>Alpha</b>	6.8%	NA	NA	NA	NA	NA

### ***Timbercreek***

Timbercreek, founded in 1999, is an active manager of global real estate focused on delivering sustainable and growing returns to investors. Timbercreek employs more than 500 individuals across 18 offices in Canada, the United States, Europe and Australia. It currently manages approximately CAD\$4.5 billion in total assets, private and public real estate, and offers investors an integrated platform across the real estate spectrum. Timbercreek is privately held with 75% of the company owned by its founders and senior management team. The remaining 25% are held by a number of individuals that helped seed the company during the early years of expansion. As of September 30, 2015, the real estate securities team managed approximately \$542 million of assets under management.

The investment philosophy for the strategy is to provide investors with exposure to a “best of breed” portfolio focused on owning high quality management teams, cycle tested balance sheets, core focused business models with minimal development exposure and high quality assets located in supply constrained developed markets around the world. The strategy focuses on REITs that derive the majority of their income from rents using conservative financing structures and have exhibited lower volatility relative to peers over a full market cycle. The strategy does not manage the portfolio to the benchmark and targets Class A real estate.

The portfolio managers for the strategy are Corrado Russo, CFA, Samuel Sahn and Claudia Floyd.

- Corrado Russo, CFA, is the Global Head of Securities for Timbercreek Asset Management where he is responsible for managing the Global Securities platform including the Timbercreek Global Real Estate Fund and the Timbercreek Four Quadrant Strategy. Mr. Russo has an extensive background in the investment management field, having held positions in portfolio management, equity research, and direct real estate investments. Prior to joining Timbercreek, Mr. Russo was an Executive Director and portfolio manager of global real estate securities at Forum Securities Ltd. (2009-2011), a portfolio manager of global real estate securities for Citi Property Investors (2005-2009), a portfolio manager of general equities and income funds for Empire Life Financial (2004-2005), an analyst of real estate securities and general equities at Investors Group (2001-2004) and an assistant portfolio manager of direct real estate for Ontario Teacher’s Pension Plan Board (1997-2001). Mr. Russo holds an MBA from the Schulich School of Business at York University in Toronto, and holds the Chartered Financial Analyst designation.
- Samuel Sahn is a portfolio manager where he heads up the New York office. Mr. Sahn has over 11 years in real estate equities and financial services industry experience. Prior to joining Timbercreek, Mr. Sahn was an Executive Director and portfolio manager with Forum Securities (2009 – 2012), a

senior analyst with Citigroup Property Investors global real estate securities team (2004 – 2009), and an analyst for the real estate securities team at Alliance Bernstein Institutional Investments (2001 – 2004) covering companies across the United States, Canada, Brazil and Australia. During his tenure with Forum Securities, Mr. Sahn was the lead portfolio manager of the Global Income and Global Liquid Core strategies and co-Portfolio Manager of Forum's flagship Global Diversified Strategy with total assets under management of \$1 billion. Further, Mr. Sahn has a four year track record managing the U.S. REIT component of Global Real Estate portfolios. As a member of the Alliance Bernstein Institutional Investment Management group he was responsible for proposals that generated in excess of \$1.25 billion in new funds for Alliance Bernstein. Mr. Sahn holds an MBA in Finance (Beta Gamma Sigma) from Fordham University Graduate School of Business and a BA in Economics from the University of Michigan.

- Claudia Floyd is a portfolio manager where she heads up the Zurich office in Switzerland and manages global strategies in the listed real estate universe. Ms. Floyd has extensive expertise in real estate securities and she has developed a strong knowledge base on regulatory needs of European clients. Prior to joining Timbercreek, Ms. Floyd was Head of Real Estate Securities at 4IP Management Ltd. ("4IP") / (2008 – 2012), a portfolio manager working alongside Corrado Russo at Citi Property Investors (2004-2008) and a Co-Portfolio Manager and an international real estate analyst for European Investors in New York (2001 – 2004). Ms. Floyd was a principal contributor to the management buy-out of the real estate securities business of Sal Oppenheim in 2011 to establish 4IP independently. Based out of New York, London, Los Angeles and Switzerland, her analytical coverage has included Europe, Asia/Pacific as well as North America. Ms. Floyd is a graduate from the University of Cologne, Germany with an MBA in Finance and Banking.

#### Performance:

**Returns as of September 30, 2015**

	Aug-15	Sep-15	YTD	1 Year	3 Year	5 Year
<b>Timbercreek</b>	-5.8%	1.6%	-4.9%	2.3%	7.2%	8.7%
<b>Index</b>	-6.0%	1.1%	-4.8%	2.7%	6.2%	7.5%
<b>Alpha</b>	<b>0.2%</b>	<b>0.5%</b>	<b>-0.1%</b>	<b>-0.4%</b>	<b>0.9%</b>	<b>1.2%</b>
<b>Information Ratio</b>	NA	NA	NA	NA	<b>0.4</b>	<b>0.4</b>

**Calendar Year Returns**

	2014	2013	2012	2011	2010	2009
<b>Timbercreek</b>	15.6%	4.7%	28.7%	-3.5%	22.7%	NA
<b>Index</b>	15.0%	3.7%	27.7%	-6.5%	19.6%	37.1%
<b>Alpha</b>	0.5%	1.0%	0.9%	3.0%	3.0%	NA

#### Summary of Fee Proposals

Firm	Asset Based Fee Proposals	Performance Based Fee Proposals		
	~ \$100 AUM	Base Rate	Excess Return Rate	Max Rate
Brookfield	0.69%			
BlackRock	0.42%			
Presima	0.50%			
Timbercreek	NA	0.20%	25%	0.45%



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix K

Global REIT Investment Management Services RFP – Recommendation Handout

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

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# ***Global REIT Investment Management Services RFP***

## ***Recommendation***

***PRIM Board Meeting***

***December 1, 2015***

***Deborah B. Goldberg, Treasurer and Receiver General, Chair***

***Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer***



# *History*

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- PRIM terminated a relationship with EII Capital Management (“EII”) in July 2014 because of significant departures within its investment team and concern for its organizational stability.
- PRIM temporarily assigned the portfolio managed by EII to Invesco pending the completion of an RFP.
- At the time of the termination the market value of the portfolio was approximately \$507 million.
- In March 2015, PRIM liquidated \$385 million from the portfolio to rebalance the total real estate portfolio’s exposure to REIT securities from 27.5% to the policy target of 20%.



# RFP Process

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- Issued RFP on June 15, 2015.
- Received proposals from 26 firms.
- Created an evaluation committee.
- Reviewed the qualifications of each firm based on stated criteria in the RFP.
- Interviewed eight finalists on September 16 & 18 at PRIM.
- Evaluation committee elected to continue due diligence on four firms.
- Additional due diligence was conducted at each firm's office.



# ***Recommendation***

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- Award Brookfield Investment Management a mandate with an initial allocation up to \$200 million.
- Award Presima, Inc. a mandate with an initial allocation up to \$200 million.
- Place BlackRock, Inc. and Timbercreek Asset Management on the Manager Bench and allocate up to \$200 million in capital to each firm.



# **Manager Bench Rationale**

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- Objectives of Manager Bench:

- Approved by the PRIM Board on February 5, 2013.
- Create a more nimble and dynamic approach to manager procurement and monitoring.
- Encourage investment staff, across asset classes, to become familiar with a wider set of managers.
- Alternative approach to portfolio construction and asset class implementation.

- Reasons a manager might be placed on the Manager Bench:

- Structural changes to an asset class.
- Additional monitoring period desired to evaluate qualitative and/or quantitative aspects of a firm.

- Trigger points for funding manager on Manager Bench include:

- Resolution of asset class structure review;
- Satisfactory performance during an evaluation period.
- Termination of an existing manager.

- Manager funding is not guaranteed with inclusion on Manager Bench.



# New Allocation vs. Current

Projected Metrics of Proposed Allocation vs. Current Allocation

Portfolio Statistics	Proposed Portfolio	Current Portfolio	Difference	Benchmark
Number of Assets - Total	149	117	32	330
Predicted Beta	1.00	1.00	0.00	1
Portfolio Risk	13.31%	13.27%	0.04%	13.24%
Active Risk	1.00%	1.04%	-0.04%	0.00%
Specific Risk	1.69%	1.71%	-0.01%	1.46%
Active Country Risk	0.25%	0.24%	0.01%	0.00%
United States Mkt Risk	2.39	2.38	0.00	2.32%
United Kingdom Mkt Risk	0.40	0.42	-0.02	0.41
France Mkt Risk	0.34	0.30	0.03	0.13
Germany Mkt Risk	0.30	0.30	0.00	0.28
Australia Mkt Risk	0.52	0.48	0.04	0.52
Japan Mkt Risk	1.48	1.55	-0.07	1.54
Hong Kong Mkt Risk	0.91	0.92	-0.01	1.05
China Domestic Mkt Risk	0	0	0	0

Source: Barra Portfolio Manager

Five Year Return Attribution Comparison (As of 9/30/2015)

	Proposed Portfolio	Current Portfolio	Difference
Net Return	9.23%	8.90%	0.33%
Alpha	0.77%	0.44%	0.33%
Stock Selection	1.16%	0.81%	0.35%
Portfolio Risk	14.52%	14.50%	0.02%
Active Risk	1.03%	1.14%	-0.11%
Information Ratio	0.75	0.39	0.36

Source: Barra Portfolio Manager



# Performance

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Performance Metrics as of September 30, 2015

Period	BlackRock	Brookfield	Presima	Timbercreek	Benchmark
YTD Return	-1.9%	-4.4%	-1.3%	-4.9%	-4.8%
YTD Alpha	2.9%	0.4%	<b>3.5%</b>	<b>-0.1%</b>	
1 Year Return	8.0%	3.5%	7.1%	2.3%	2.7%
1 Year Alpha	<b>5.2%</b>	0.8%	4.4%	<b>-0.4%</b>	
3 Year Return	NA	10.0%	8.6%	7.2%	6.2%
3 Year Alpha	NA	<b>3.7%</b>	2.4%	<b>0.9%</b>	
5 Year Return	NA	10.1%	9.9%	8.7%	7.5%
5 Year Alpha	NA	<b>2.5%</b>	2.4%	<b>1.2%</b>	

Best Alpha

Worst Alpha

## Peer Group Analysis

One Year	Return	Three Year	Return	Five Year	Return
BlackRock	8.0%	Brookfield	10.0%	<b>25th Percentile</b>	10.2%
Presima	7.1%	<b>25th Percentile</b>	8.7%	<b>Brookfield</b>	10.1%
<b>25th Percentile</b>	6.1%	Presima	8.6%	<b>Presima</b>	9.9%
<b>50th Percentile</b>	4.1%	<b>50th Percentile</b>	7.9%	<b>50th Percentile</b>	8.9%
Brookfield	3.5%	Timbercreek	7.2%	<b>Timbercreek</b>	8.7%
Timbercreek	2.3%	<b>75th Percentile</b>	6.2%	<b>75th Percentile</b>	8.0%
<b>75th Percentile</b>	1.3%	<b>95 Percentile</b>	0.4%	<b>95 Percentile</b>	6.3%
<b>95 Percentile</b>	-8.6%				
<b>Top Half</b>	<b>Bottom Half</b>				

Source: eVestment, PRIM



# Risk Comparison

---

Projected Risk Metrics as of 9/30/2015

Portfolio Statistics	BlackRock	Brookfield	Presima	Timbercreek
Predicted Beta	1.01	1.02	1.00	0.99
Portfolio Risk	13.50%	13.73%	13.53%	13.26%
Active Risk	1.98%	2.39%	2.49%	2.20%
Specific Risk	2.21%	2.53%	2.83%	2.40%
Active Country Risk	0.27%	0.93%	0.33%	0.40%
United States Mkt Risk	2.31	2.39	2.40	2.27
United Kingdom Mkt Risk	0.55	0.24	0.40	0.29
France Mkt Risk	0.09	0.44	0.52	0.30
Germany Mkt Risk	0.25	0.59	0.00	0.36
Australia Mkt Risk	0.49	0.84	0.52	0.58
Japan Mkt Risk	1.50	0.87	1.51	1.26
Hong Kong Mkt Risk	0.98	0.80	0.97	1.12
Singapore Mkt Risk	0.16	0.20	0.23	0.25
China Domestic Mkt Risk	0	0	0	0

Source: Barra Portfolio Manager

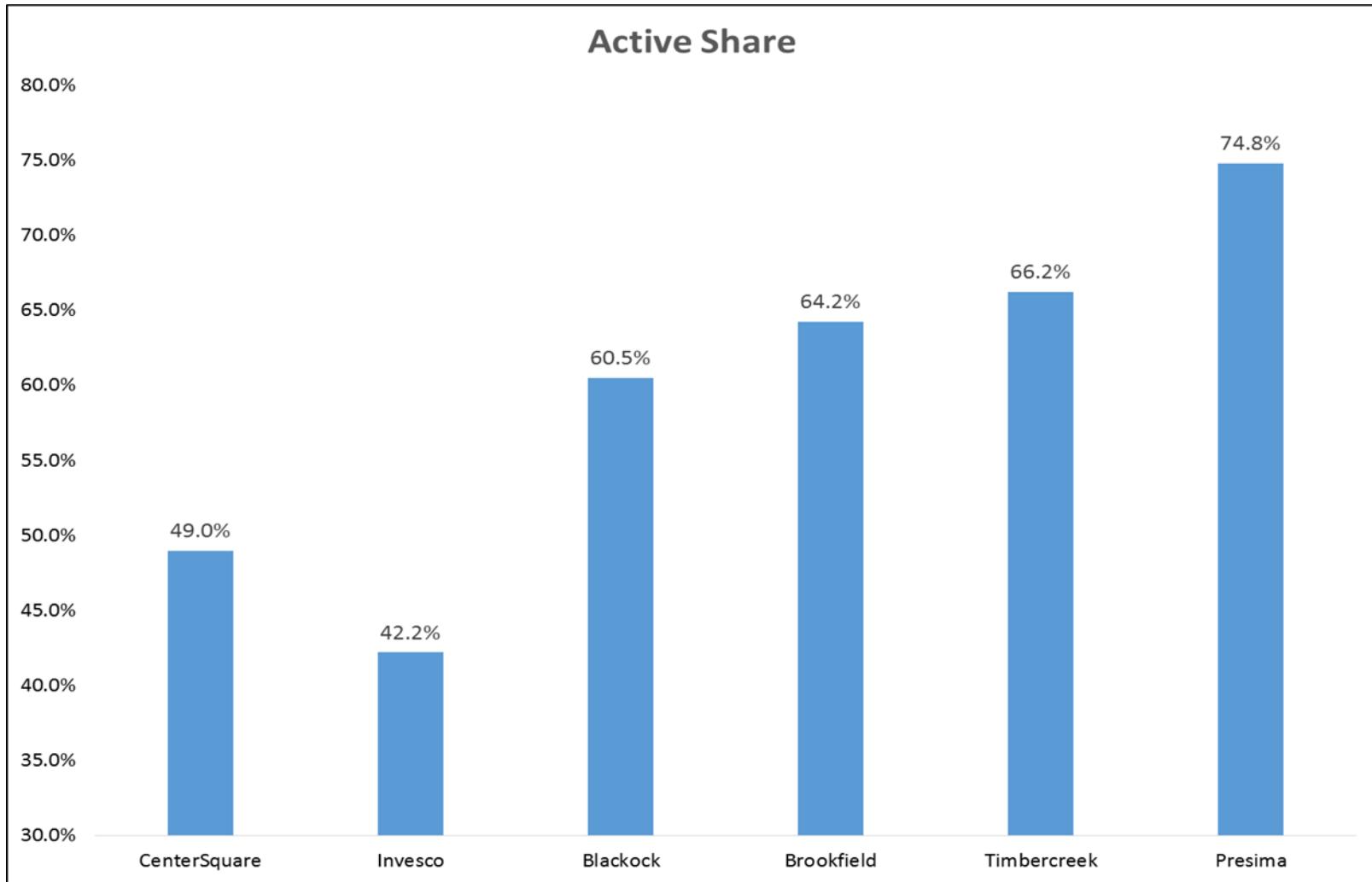


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# Appendix



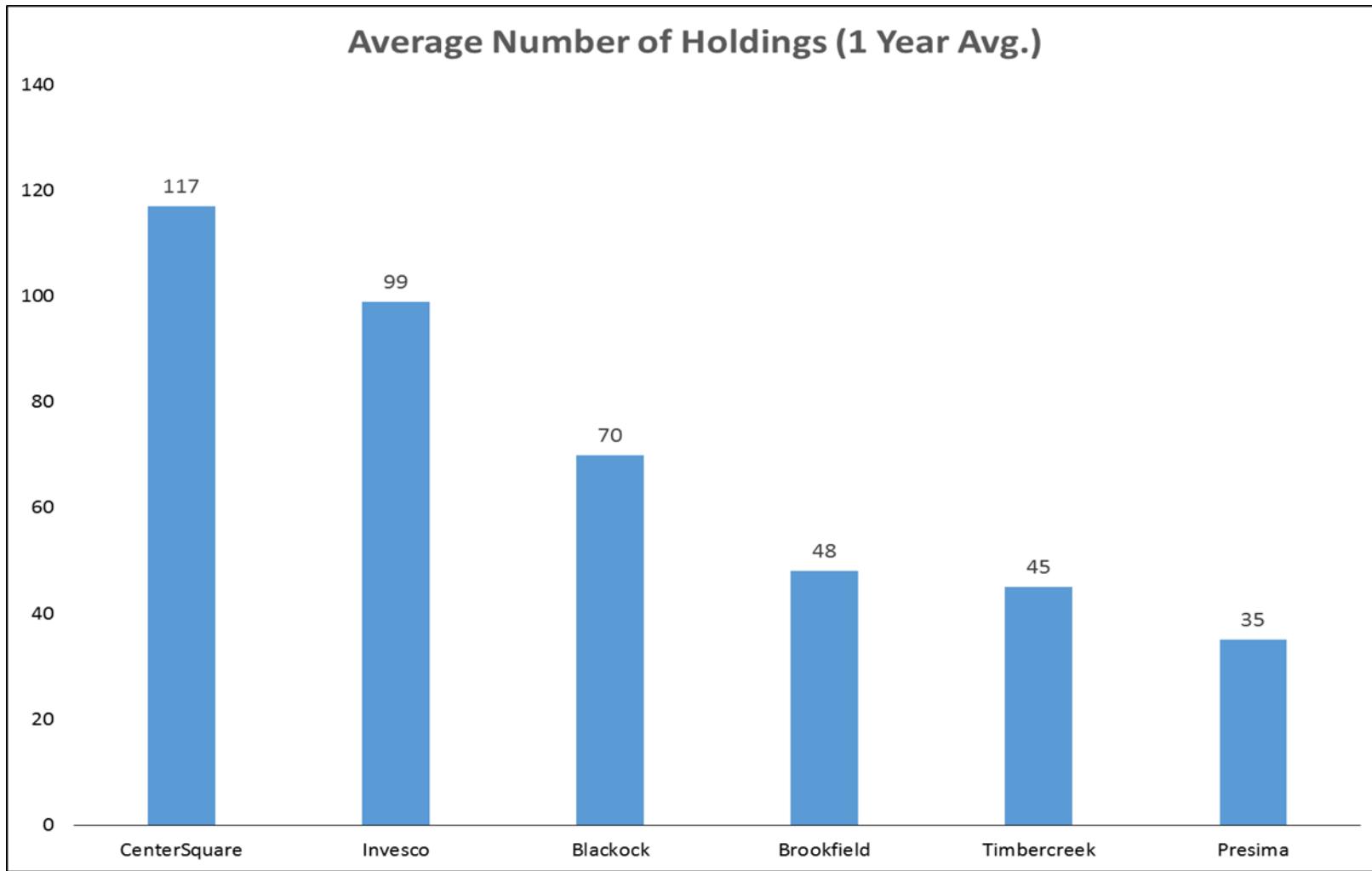
# Comparative Analysis



Data Source: eVestment



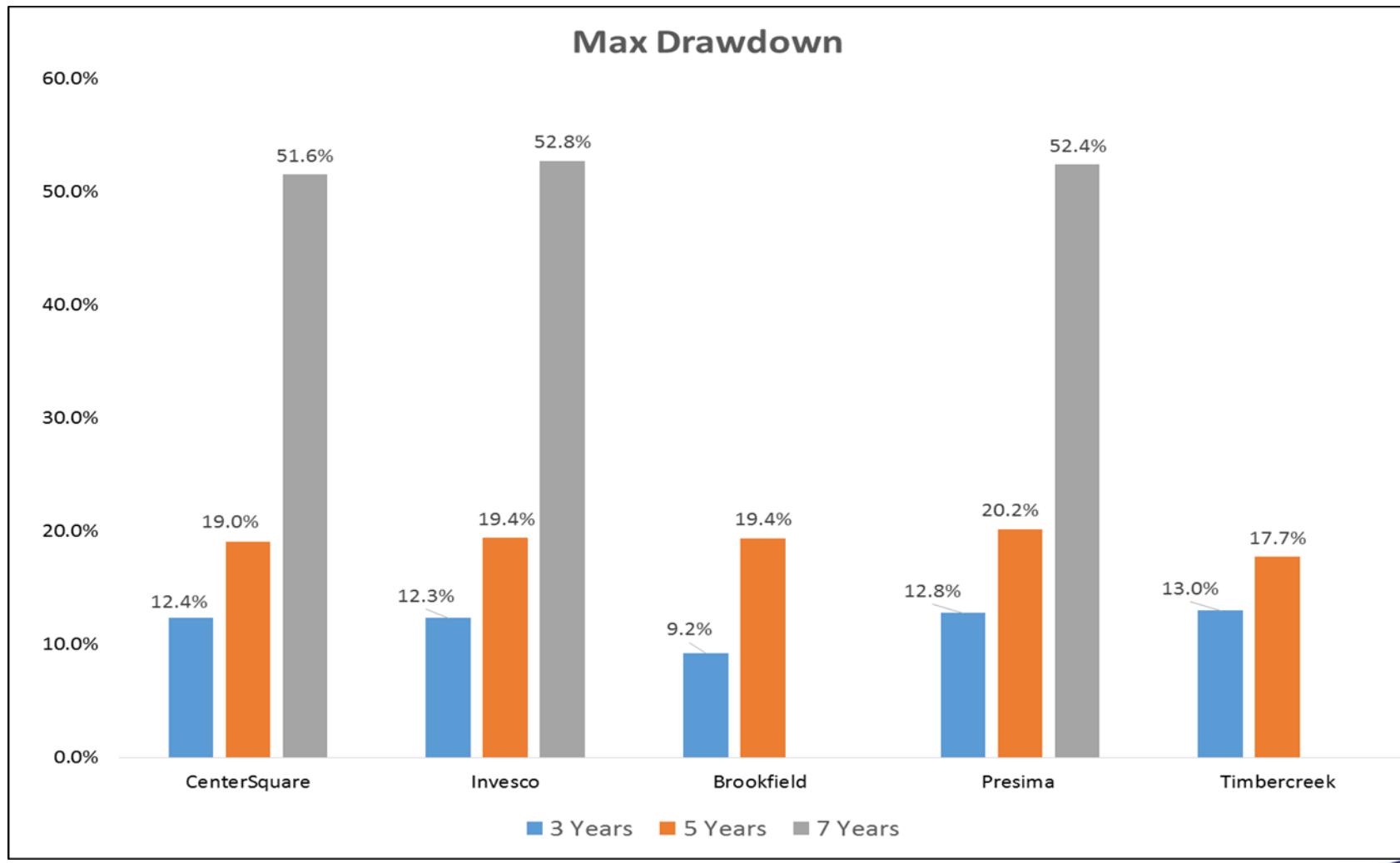
# Comparative Analysis



Data Source: eVestment



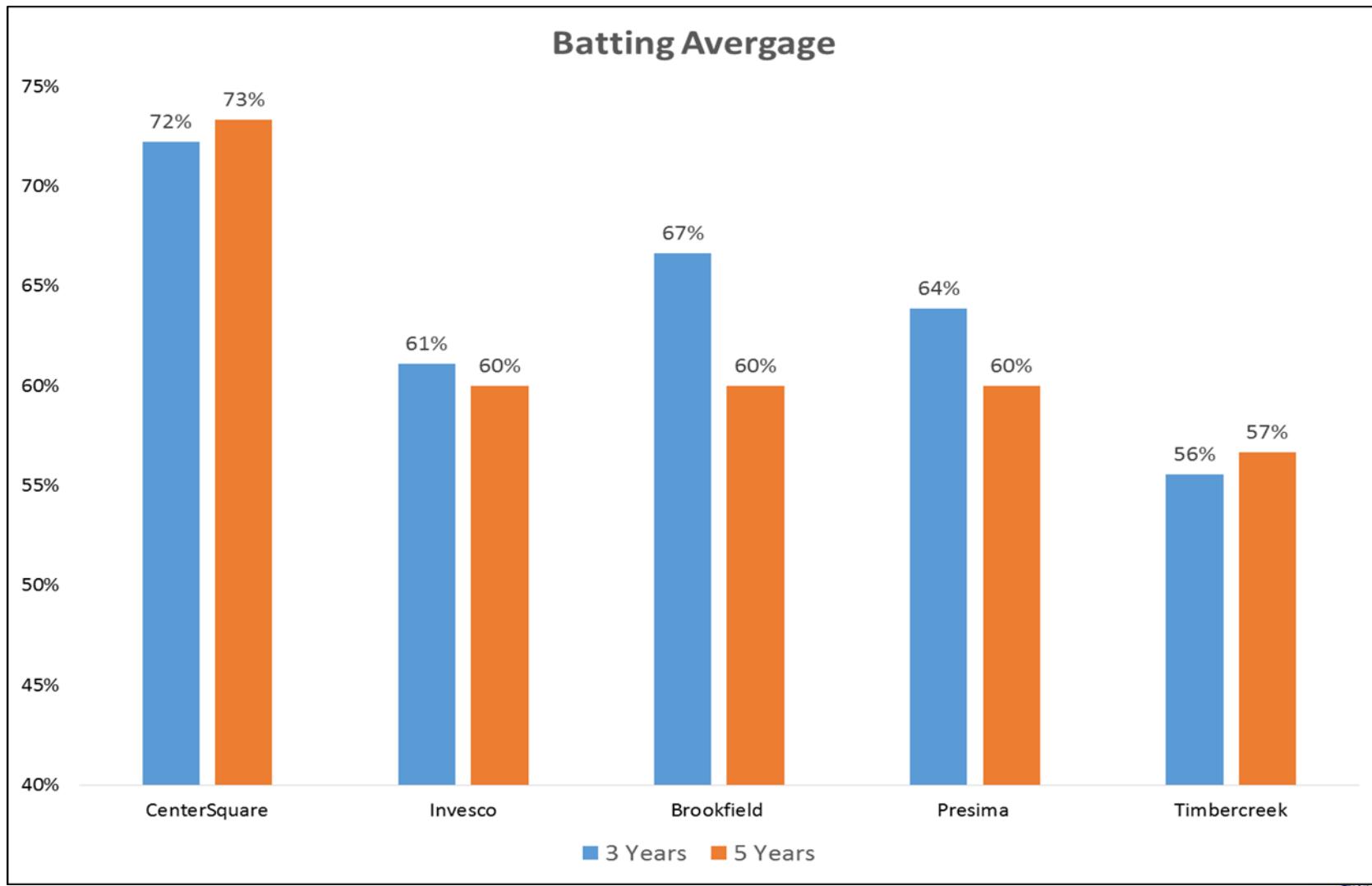
# Comparative Analysis



Data Source: eVestment



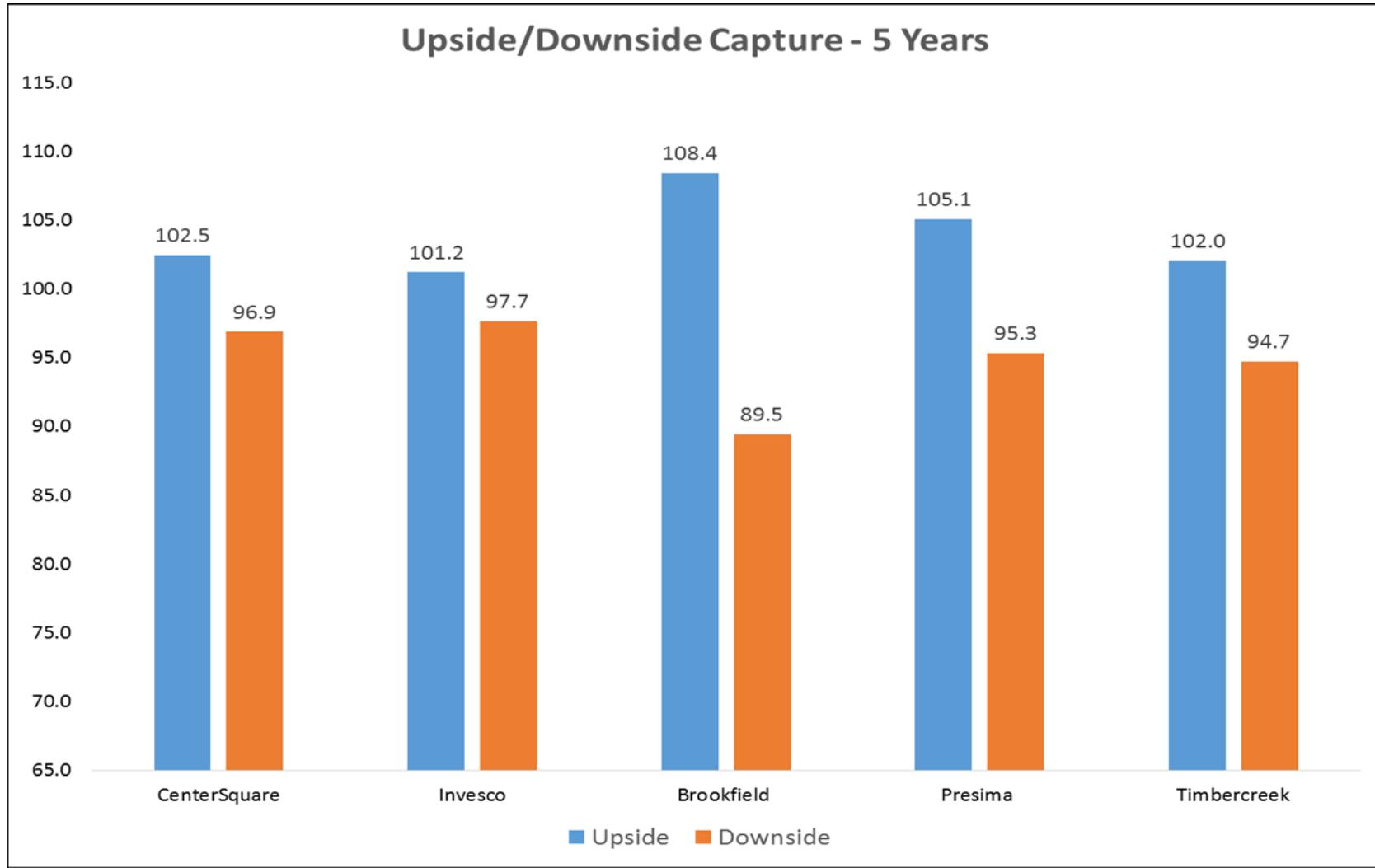
# Comparative Analysis



Data Source: eVestment



# Comparative Analysis



Data Source: eVestment





PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix L

Global REIT Investment Management Services RFP – Townsend Group Recommendation

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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## MEMORANDUM

**DATE:** November 18, 2015  
**SUBJECT:** Global Real Estate Securities Investment Management Request for Proposals (RFP)  
**TO:** Tim Schlitzer, Director, Real Estate and Timberland, Massachusetts Pension Reserves Investment Management Board ("PRIM")  
John LaCara, Senior Investment Officer, Real Estate and Timberland, Massachusetts Pension Reserves Investment Management Board ("PRIM")  
**FROM:** Dan Stenger, Principal, The Townsend Group

---

Massachusetts PRIM issued an RFP for Global Real Estate Securities investment manager(s) to invest in a separate account format. Initial responses were due on July 7, 2015. 26 responses were received. Two responses were disqualified for not meeting the minimum qualifications of the RFP. The remaining respondents included:

Adelante Capital Management	Forum
AEW	Heitman
Alliance Bernstein	LaSalle
AMP Capital	MFS Investment Management
BlackRock	Morgan Stanley
Brookfield	Presima
CBRE Clarion	Principal
Cohen and Steers	Prudential
Deutsche AWM	State Street
Dimensional	Third Avenue
Duff and Phelps	Timbercreek Asset Management
First State	Wellington

Following an initial review of the RFP responses by PRIM's Search Committee as well as the Townsend Group, the list was reduced to eight firms to be interviewed at PRIM's office. These firms were selected due to their attractive strategies, track records, capacity for investment, assigned team, fee proposals, etc. Following is a list of managers that participated in the interviews:

- BlackRock (World Real Estate Securities)
- Brookfield (Global Real Estate Securities Alpha)
- Forum (Global Alpha)
- Heitman (Global Focused)
- MFS (Global Real Estate Securities)



- Presima (Global Real Estate Securities Concentrated)
- Third Avenue (Real Estate Value Separate Account)
- Timber Creek (Core Global Real Estate Securities)

Each of these managers provided a strategy that would complement PRIM's existing global securities managers and included groups with strong track records, portfolios with high active share, and conviction based portfolios, etc. Following the interviews, the Search Committee narrowed the list down to four managers who participated in on-site meetings. These firms included:

- BlackRock
- Brookfield
- Presima
- Timbercreek

Reference checks were completed on the four finalists with previous and existing clients of those firms. All finalists received positive references on teams, performance, transparency, reporting etc. Following the on-site meetings, the Search Committee has chosen to allocate capital to Brookfield and Presima and to place BlackRock and Timbercreek on the "bench" for a potential allocation at a later date. The following provides some of the details on the reasoning behind selecting Brookfield and Presima to receive allocations:

#### Brookfield

- Complimentary focused strategy
- Consistent top quartile performance
- Large and established team
- Information advantage due to large real estate organization

#### Presima

- Highly focused complimentary strategy
- Strong track record
- High active share

Based on the information outlined above, Townsend recommends allocating up to \$200 million each to Brookfield and Presima and placing BlackRock and Timbercreek on the "bench" for a potential allocation in the future.



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix M

Real Estate Appraisal Services RFP – Evaluation Committee Recommendation

*PRIM Board Meeting*  
*Tuesday, December 1, 2015*

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**REQUEST FOR PROPOSALS FOR  
REAL ESTATE APPRAISAL SERVICES**

**EVALUATION COMMITTEE RECOMMENDATION**

**RFP Summary**

PRIM issued a Request for Proposals (“RFP”) for real estate appraisal services on July 27, 2015. The purpose of the RFP is to select a firm to annually value each of PRIM’s private real estate assets over the next three years. PRIM advertised the RFP in *Pensions & Investments* and the Commonwealth’s *Goods & Services Bulletin*. The RFP proposal deadline was September 1, 2015. Nine proposals were received prior to the deadline and one firm submitted a proposal after the deadline. The eight qualifying proposals were submitted by the following firms:

- Altus Group U.S. Inc. (“Altus”)
- CBRE, Inc. (“CRBE”)
- Colliers International Valuation & Advisory Services, LLC (“Colliers”)
- Duff & Phelps, LLC
- Integra Realty Resources, Inc. (“Integra Realty”)
- Joseph J. Blake & Associates (“Blake”)
- National Property Valuation Advisors
- Real Estate Research Corp. (“RERC”)

**Evaluation Process and Finalists**

An evaluation committee (the “Evaluation Committee”) was created that included Tim Schlitzer, CRE, John La Cara, Cathy Hodges and Dan Stenger (The Townsend Group). All responses were evaluated according to the Selection Criteria established in the RFP.

- Qualifications and experience with similar clients,
- Quality of proposal,
- Quality of proposed team,
- Quality of references, and
- Fee proposal.

As a result of the review period, three firms were selected as finalists and invited to present to the Evaluation Committee. The selected finalists were Altus, Colliers and Integra Realty. The Evaluation Committee interviewed the finalists at PRIM on October 14, 2015. After the interviews, the Evaluation Committee decided to eliminate Integra Realty from further consideration. Revised fee proposals were requested from the remaining finalists, Altus and Colliers.

### Recommendation

The Evaluation Committee recommends that Altus be engaged to provide private real estate appraisals over the next three years (2016 to 2018). The Evaluation Committee agreed that Altus was most qualified to provide the necessary services required by PRIM. Throughout the process, Altus demonstrated that it maintains superior capabilities and demonstrated qualities that will benefit PRIM, including the following:

- Demonstrated experience and expertise in providing appraisal services to institutional investors similar to PRIM, including direct experience with PRIM's assets and managers;
- As a manager of appraisal services for other clients, Altus has superior access to market information;
- Employees are not compensated based on the volume of appraisal work. They are incented to produce quality reports;
- Altus offers a superior technology platform and reporting capabilities that will allow PRIM to save and store historical data, benchmark performance against a peer group, conduct trend analysis, and perform portfolio analysis. Moreover, PRIM will have access to the Altus performance attribution tool that is being developed and made available to Altus clients in Q1 2016;
- Focus solely on valuation and valuation advisory services;
- Reduced potential for conflicts due to its lack of affiliation with a major brokerage.

### Altus Group Summary

Altus is a wholly-owned subsidiary of Altus Group Limited, a publicly listed company on the Toronto Stock Exchange. Altus Group was formed in 2005 with the merger of three of Canada's leading real estate consulting companies, and is now the leading provider of independent advisory services, software, and data solutions to the global commercial real estate industry. Altus Group maintains 70 offices in 10 countries, the U.S. headquarters is located in Jersey City, New Jersey.

Its core business segments include Research, Valuation and Advisory; ARGUS Software; Property Tax Consulting; Cost Consulting & Project Management; Geomatics. The Valuation and Advisory practice is primarily responsible for the valuation assignments. Altus specializes in real estate appraisal and appraisal management services and oversees approximately \$320 billion in asset valuations (~6,000 assets) each quarter in the U.S. Altus provides valuation services to all 23 constituents of the NCREIF ODCE index. Its other valuation clients include, but is not limited to: CalPERS, CalSTRS, TIAA-CREF, Morgan Stanley, J.P. Morgan, Clarion Partners, Principal Financial, BlackRock and Met Life.

A majority of the professionals in the Valuation and Advisory group were formerly employed at the Valuation Advisory Practice of Price Waterhouse and Coopers LLP ("PWC") and retained by Altus after it acquired PWC in 2010. Professionals in the Valuation and Advisory group consist of the former heads of valuations at PWC, the former chief appraiser at Principal Financial and two former chairs of NCREIF's Valuation Committee.

Summary of Final Fee Proposals

Firm	Year 1	Year 2	Year 3	Total
Altus	\$401,880	\$412,070	\$412,070	\$1,226,020
Colliers	\$454,000	\$348,800	\$348,800	\$1,151,600

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

**Appendix N**

Real Estate Appraisal Services RFP – Townsend Group Recommendation

*PRIM Board Meeting*  
*Tuesday, December 1, 2015*

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## MEMORANDUM

**DATE:** November 18, 2015  
**SUBJECT:** Real Estate Appraisal RFP  
**TO:** Tim Schlitzer, Director, Real Estate and Timberland, Massachusetts Pension Reserves Investment Management Board ("PRIM")  
John LaCara, Senior Investment Officer, Real Estate and Timberland, Massachusetts Pension Reserves Investment Management Board ("PRIM")  
**FROM:** Dan Stenger, Principal, The Townsend Group

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Massachusetts PRIM issued an RFP for a real estate appraiser to appraise the PRIM portfolio over the next three years. Initial responses were due on August 31, 2015 and eight responses were received in total and included:

- Altus Group
- CBRE
- Colliers
- Duff & Phelps
- Integra Realty Resources
- Joseph J. Blake
- NPV Advisors
- Real Estate Research Corp.

Following an initial review of the RFP responses by PRIM's Search Committee and the Townsend Group, the list was reduced to three appraisal firms who participated in face-to-face interviews. These firms were selected due to their qualifications, previous experience, assigned team, fee proposals, etc. Following is a list of advisors that participated in the interviews:

- Altus Group
- Colliers
- Integra Realty Resources

Each of these advisors stood out for multiple reasons. A brief summary of the items that qualified them to be interviewed follows:

- Altus Group
  - Relevant experience
  - Significant presence in the real estate market (work with 22 of 23 Open End Core Fund Managers)
  - Access to Argus Software and data from servicing those clients
  - Electronic tracking and management software (Data Bridge and Data Exchange)

- New attribution tool that will allow better portfolio analysis and comparison to other industry assets
- Integra
  - Relevant experience
  - Qualified team
  - Significant on the ground presence (66 offices, 220 MAIs, 34 states)
  - Electronic tracking and management software
- Colliers
  - Relevant experience
  - Qualified team
  - Significant on the ground presence (43 valuation offices, 90 MAIs)

Reference checks were completed on the finalists as well as in person interviews which were held with the three finalists on October 14, 2015. During the meetings and in discussions that surrounded the meetings, several points were a focus in the selection of an appraiser. Those points were as follows:

- Depth of appraisal staff and ability to provide a quality work product
- Ability to complete the appraisal assignment in a reasonable time frame
- Ability to communicate the status of the assignment and results in an efficient manner
- Availability and source of information used to complete appraisals

Following the interviews, the search committee decided that Altus provided PRIM with the best solution for their appraisal needs.

While each of the finalists is qualified in the appraisal business, Altus stood out as the most favorable. Altus's qualifications include:

- Strong team including 16 MAIs
- Most sophisticated systems providing appraisers with information necessary to complete the appraisal assignment
- Electronic systems allowing efficient communication and status monitoring of the assignment
- A minimum of one member of staff licensed to complete appraisals in all 50 states
- Significant experience in the appraisal industry
- Salaried employees instead of contract labor

Given the qualifications above, Townsend recommends that Altus be selected as PRIM's real estate appraiser.



PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix O

Fiscal Year 2015 Comprehensive Annual Report (CAFR)

*PRIM Board Meeting*  
*Tuesday, December 1, 2015*

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# PENSION RESERVES INVESTMENT

## TRUST FUND

(A Component Unit of the Commonwealth of Massachusetts)

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

Fiscal Year Ended June 30, 2015

(With Basic Financial Statements for the Fiscal Years Ended June 30, 2015 and 2014)



Deborah B. Goldberg, Treasurer and Receiver General, Chair

Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer

**PENSION RESERVES INVESTMENT TRUST FUND**  
**(A Component Unit of the Commonwealth of Massachusetts)**

**COMPREHENSIVE ANNUAL FINANCIAL REPORT**

For the Year Ended June 30, 2015

(With Basic Financial Statements for the Fiscal Years Ended June 30, 2015 and 2014)

DRAFT

**Prepared By**

**Pension Reserves Investment Management Board Staff**

## **For More Information**

**All correspondence may be directed to:**

**Paul Todisco**

**Senior Client Service Officer**

**Pension Reserves Investment Management Board**

**84 State Street**

**Boston, MA 02109**

**Telephone: 617-946-8423 (Direct)**

**Facsimile: 617-946-8475**

**Website: [www.mapension.com](http://www.mapension.com)**

DRAFT

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*Introductory Section*

**PENSION RESERVES INVESTMENT TRUST FUND**

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

84 State Street, Second Floor  
Boston, Massachusetts 02109

Deborah B. Goldberg, Treasurer and Receiver General, Chair  
Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer

December 1, 2015

To Chairman Goldberg, the Trustees of the Pension Reserves Investment Management Board (the PRIM Board), Committee members, Participants, and Beneficiaries:

I am pleased to transmit the *Comprehensive Annual Financial Report* (CAFR) of the Massachusetts Pension Reserves Investment Trust Fund (the PRIT Fund) for the fiscal year ending June 30, 2015. The document that follows is the 11<sup>th</sup> consecutive CAFR to be produced in the 31-year existence of the PRIM Board as Trustee of the PRIT Fund. We hope that you will find the CAFR useful in understanding the performance and financial position of the PRIT Fund as of June 30, 2015.

The CAFR contains the basic financial statements presented in accordance with generally accepted accounting principles (GAAP) and the standards applicable to financial audits contained in *Government Auditing Standards*. The CAFR and the basic financial statements are the responsibility of the PRIM Board. The fiscal year 2015 audit was conducted by KPMG LLP, a firm of licensed certified public accountants.

The CAFR is divided into four major sections:

**Introductory Section:** This section contains the letter of transmittal, the *Certificate of Achievement for Excellence in Financial Reporting*, and outlines the PRIM Board's organizational structure.

**Financial Section:** This section contains the report of the independent auditors, Management's Discussion and Analysis (MD&A), the financial statements of the PRIT Fund, the notes to the financial statements, and supporting schedules.

**Investment Section:** This section contains a summary of the PRIT Fund's investment strategy, investment policies, investment holdings, investment results, and supporting tables and schedules.

**Statistical Section:** This section contains information regarding financial ratios of the PRIT Fund.

Within the financial section, the MD&A follows the independent auditors' report and provides an overview of the PRIT Fund's financial statements and financial results. The MD&A complements this letter of transmittal and should be read in conjunction with this letter. Responsibility for both the accuracy and completeness of the data and the contents of this report rests with the PRIM Board. The PRIM Board has implemented a system of internal controls designed to provide reasonable assurance that the financial statements are free from material misstatements, that all assets will be properly safeguarded, and that transactions will be properly executed. The concept of reasonable assurance recognizes that the cost of a control should not exceed the benefits to be derived, the objective is to provide reasonable, rather than absolute assurance, that the financial statements are free of any material misstatements.

***Profile of the PRIT Fund***

The PRIT Fund is a pooled investment trust fund established to invest the assets of the Massachusetts State Teachers' and Employees' Retirement Systems, as well as the assets of county, authority, district, and municipal retirement systems. The PRIT Fund was created by the Legislature in 1983 (Chapter 661 of the Acts of 1983) with a mandate to accumulate assets through investment earnings to reduce the Commonwealth's unfunded pension liability, and to assist local participating retirement systems in meeting their future pension obligations. The PRIT Fund merged with the Massachusetts State Teachers' and Employees' Retirement Systems (MASTERS) Trust in 1997, in accordance with Chapter 315 of the Acts of 1996.

The Massachusetts State Teachers', State Employees', and State-Boston/Teachers' Retirement Systems are mandated by statute to invest all of their assets in the PRIT Fund. Other retirement systems may voluntarily invest all or part of their assets in the PRIT Fund. Furthermore, Chapter 84 of the Acts of 1996 explicitly granted retirement boards the ability to invest only in individual asset classes of the PRIT Fund through a segmentation program. See Note 1 of the financial statements for more information on the profile and background of the PRIT Fund.

The most recent Public Employee Retirement Administration Commission (PERAC) valuation report, dated August 28, 2015, calculated the Commonwealth's unfunded actuarial pension liability at \$33.4 billion. The PERAC valuation report estimates that, as of January 1, 2015, the pension liability is 59.0% funded using a target date of 2036. It should be noted that the unfunded actuarial pension liability is calculated on a calendar year basis.

The PRIM Board seeks to maximize the return on the PRIT Fund investments within acceptable levels of risk by broadly diversifying its investment portfolio, capitalizing on economies of scale to achieve cost-effective operations, and gaining access to high quality, innovative investment management firms. The PRIT Fund's Investment Policy Statement establishes investment objectives and policies designed to provide a framework for implementing investment strategy and oversight. A summary of the Investment Policy Statement is included in the Investment Section.

As of June 30, 2015, the PRIT Fund had approximately \$61.2 billion in net position compared to \$60.7 billion at the end of fiscal year 2014, which is an increase of \$567.0 million in net position. The PRIM Board contracts with a custodian bank to safeguard investment holdings and to ensure the proper settlement and recording of investment and cash transactions.

***Executive Director/ Chief Investment Officer Discussion***

Fiscal 2015 was a transition year for PRIM as we welcomed a new Chair, Treasurer Deborah B. Goldberg, two new Board members, and seven new committee members. As anticipated, financial markets transitioned to a lower return environment and the PRIT Fund returned 3.9% in the fiscal year, 113 basis points above benchmark, and in the top one-third of our peer group. It is noteworthy that this performance followed two exceptionally strong years in fiscal 2013 and fiscal 2014, in which the PRIT fund was up 12.7% (183 basis points above benchmark) and 17.6% (268 basis points above benchmark), respectively.

Furthermore, the PRIT Fund return of 11% per year annualized over the past five years, the period marking the economic recovery since the world financial crisis, is gratifying because this high performance was achieved while we prepared for a slower growth, lower return environment by reducing the Fund's exposure to riskier investments. As a reminder, the asset allocation changes over the past five years included reducing the Global Equity target allocation from 49% to 40%, adding long-duration Treasury bond exposure, and adding low volatility Portfolio Completion Strategies. Given the volatility in the markets since the end of June, these changes have proven to be very well-timed.

Organizationally, fiscal 2015 was an outstanding year. Only one senior-level employee departed this year for personal reasons, and I am happy to report that we are nearly fully-staffed with exceptional investment and finance professionals. Our team continues to be recognized around the nation for the success and innovation of our investment program and for the transparency and completeness of our financial reporting. We have never been stronger, but retention of key employees remains my primary concern. The employment environment in the nation and in the region is strong, there are opportunities for our employees outside of PRIM, and I have spent a considerable amount of time and effort on retention strategies for key PRIM employees. We must all be vigilant to ensure that we provide a challenging and rewarding opportunity for all of our employees.

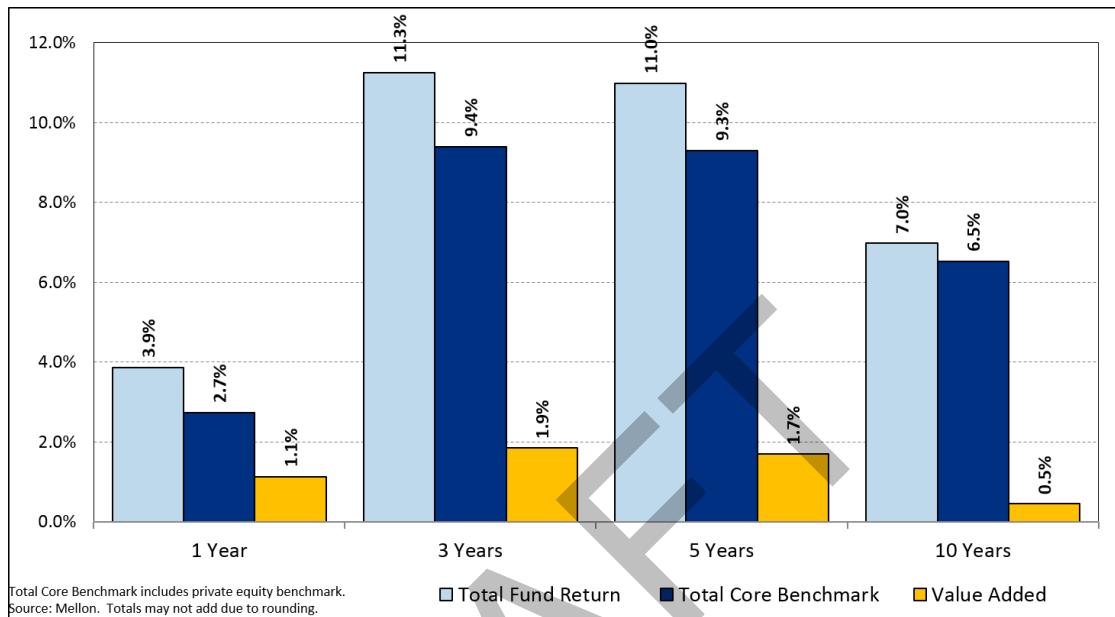
#### **PRIT Fund Performance**

As of June 30, 2015, the PRIT Fund net position stood at \$61.2 billion. The PRIT Fund's trailing 1, 3, 5, and 10-year returns remain strong both on an absolute and on a relative basis.

- The PRIT Fund was up 3.9% for FY2015, outperforming its benchmark by 113 basis points.
- The return equates to an investment gain of \$2.4 billion.
- The outperformance equates to added value of \$684 million above the benchmark return.
- Net total outflows to pay benefits for the fiscal year were approximately \$1.5 billion.
- At \$61.2 billion, the PRIT Fund ended the fiscal year with its highest net position since inception in 1984.

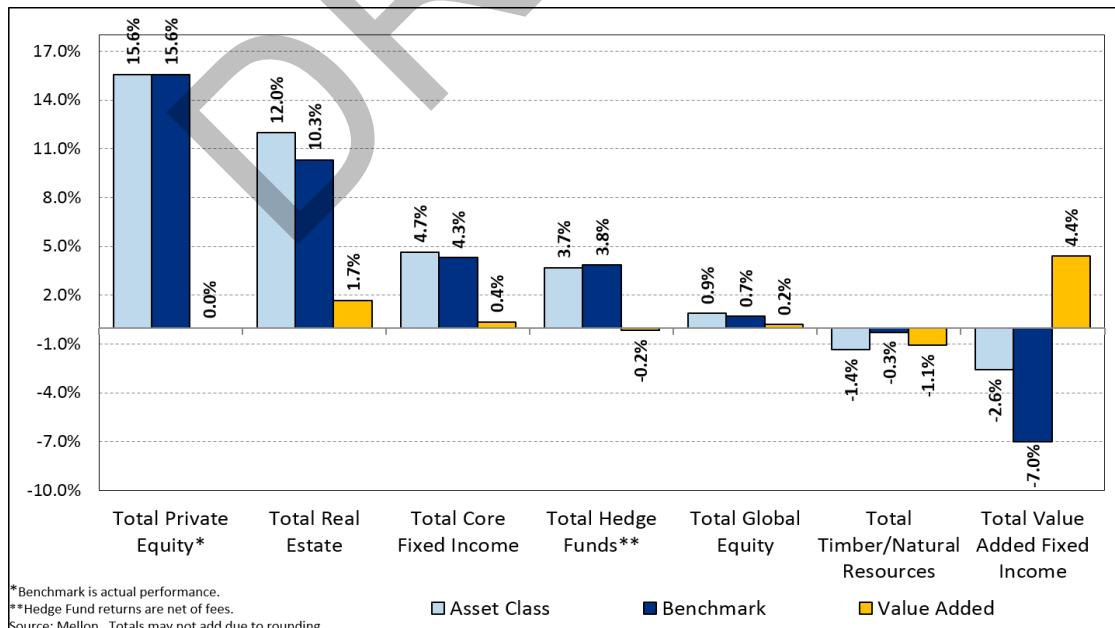
## PRIT Total Core Fund Returns (Gross of Fees)

Annualized Returns as of June 30, 2015



## PRIT Asset Class Performance (Gross of Fees)

One Year Ended June 30, 2015



**PRIT Asset Class Performance (Gross of Fees)**  
**Annualized Return as of June 30, 2015**

1 Year	3 Year	5 Year	10 Year
Private Equity 15.6%	Private Equity 18.7%	Private Equity 18.4%	Private Equity 16.9%
Real Estate 12.0%	Global Equity 13.7%	Real Estate 13.8%	Real Estate 8.6%
Core Fixed Income 4.7%	Real Estate 12.8%	Global Equity 12.7%	Value-Added Fixed Income 7.7%
Hedge Funds 3.7%	Hedge Funds 8.8%	Value-Added Fixed Income 7.0%	Global Equity 6.7%
Global Equity 0.9%	Timber / Natural Resources 6.2%	Hedge Funds 6.4%	Timber / Natural Resources 6.4%
Timber / Natural Resources (1.4%)	Value-Added Fixed Income 4.9%	Timber / Natural Resources 5.8%	Hedge Funds 4.9%
Value-Added Fixed Income (2.6%)	Core Fixed Income 3.3%	Core Fixed Income 4.7%	Core Fixed Income 4.7%

**PRIT Core Fund Performance Summary**  
**Gross of Fees Performance**  
**Trailing 1-Year Performance as of June 30, 2015**

Trailing 1-Year Performance: June 30, 2015	Performance:	Return	Benchmark Return	Over/(Under) Benchmark (bps)	\$Value (millions)	% of PRIT Fund **
<b>Total PRIT Fund</b>	<b>3.9%</b>	<b>2.7%</b>		<b>113</b>	<b>61,174</b>	<b>100%</b>
<b>Total Global Equity</b>	<b>0.9%</b>	<b>0.7%</b>		<b>19</b>	<b>26,098</b>	<b>42.7%</b>
<i>Domestic Equity</i>	<i>6.8%</i>	<i>7.1%</i>		<i>(37)</i>	<i>11,745</i>	<i>19.2%</i>
<i>International Developed</i>	<i>-2.8%</i>	<i>-4.5%</i>		<i>178</i>	<i>10,341</i>	<i>16.9%</i>
<i>Emerging Markets</i>	<i>-5.9%</i>	<i>-3.9%</i>		<i>(193)</i>	<i>4,011</i>	<i>6.6%</i>
<b>Private Equity</b>	<b>15.6%</b>	*	*		<b>6,936</b>	<b>11.3%</b>
<b>Real Estate</b>	<b>12.0%</b>	<b>10.3%</b>		<b>167</b>	<b>6,093</b>	<b>10.0%</b>
<b>Timberland/Natural Resources</b>	<b>-1.4%</b>	<b>-0.3%</b>		<b>(107)</b>	<b>2,347</b>	<b>3.8%</b>
<b>Hedge Funds</b>	<b>3.7%</b>	<b>3.8%</b>		<b>(16)</b>	<b>5,575</b>	<b>9.1%</b>
<b>Value Added Fixed Income</b>	<b>-2.6%</b>	<b>-7.0%</b>		<b>441</b>	<b>5,053</b>	<b>8.3%</b>
<b>Core Fixed Income</b>	<b>4.7%</b>	<b>4.3%</b>		<b>38</b>	<b>8,378</b>	<b>13.7%</b>

\*Private Equity, a long-term asset class, does not have a relevant 1-year benchmark.

\*\*Total does not add to 100% due to small allocations such as Portfolio Completion Strategies not included in this chart.

**Summary of Fiscal Year 2015 Key Accomplishments****A. Organizational.****1. Maintained low employee turnover**

- Only one senior member of team departed in fiscal year 2015 (for personal reasons).

**2. Implemented PRIM Professional Development Program**

- Launched a cross-training and career development program.
- Designed to develop employee interdisciplinary skills and to reduce organizational silos.
- Allows high-performing employees to grow their expertise beyond their core responsibilities.
- Participants will rotate through private equity, real estate, hedge funds and risk management for four month intervals to learn more about them, to contribute to their work, and to encourage cross fertilization of ideas and initiatives.

**3. Initiated Diversity staffing initiatives**

- Met with local industry leaders to learn about their diversity recruiting initiatives.
- Expanded pool of applicants by building relationships with affinity groups including: National Association of Black Accountants (NABA), Robert Toigo Foundation, 17 local university and college affinity groups, 100 Women in Hedge Funds, and the Boston Club.
- Joined Boston Securities Analysts Society *Women's Initiative*.
- Joined *Invest in Girls*.
- PRIM representative attended the AI-CIO: "*The Missing Women of Asset Management Conference*".
- PRIM representative attended the CFA/AIF *Women Investors Conference*.
- Worked cooperatively with Treasurer Goldberg and the Office of Economic Empowerment to supplement state-wide efforts.

**4. Maintained an organizational culture that is innovative, professional, and productive.**

- Maintained sense of collegiality and camaraderie among PRIM Board, committee, and staff members.
- Built a reputation among other large public pension funds, and other state agencies, for being a very effective, well-run organization.

**5. Successfully completed the first phase of Project SAVE ("Strategic Analysis for Value Enhancement").**

- Launched in January 2013, the project realized over \$120 million in value enhancement initiatives.

- The Project SAVE philosophy is now firmly a part of PRIM's culture and processes - an integral and important part of every decision we make.
- Project SAVE has been nationally recognized for its innovation and success.
- The following is a summary of the progress-to-date on Project SAVE:

Project SAVE Initiative	Annualized Value Target	Annualized Value Realized	% of Target Achieved
Hedge Fund-of-Funds Unwind	\$40 mm	\$38.2 mm	96
Cash Overlay Program	\$20 mm	\$42.3 mm	100
Public Markets Fee Negotiations	\$1.5 mm	\$1.94 mm	100
Private Equity Co-Investment	\$25 mm	\$820,000	3
Hedge Fund Replication	\$7 mm	\$7.4 mm	100
Securities Litigation	\$700,000	\$576,000	82
Security Lending	\$15 mm	\$10 mm	67
Hedge Fund Fee Negotiations & Managed Accounts	\$10.9 mm	\$20.6 mm	100
Private Equity Stock Distribution	\$250,000	\$132,000	53
Real Estate Co/Direct Investing	\$2 mm	\$0	0
<b>Totals</b>	<b>\$122,350,000</b>	<b>\$121,968,000</b>	<b>99.7%</b>

**6. Encouraged professional and continuing education to all PRIM Board, committee and staff members.**

- PRIM staff frequently participates in educational courses, conferences and functions with financial services trade and peer organizations to discuss industry issues and share ideas with peers.
- Our staff credentials: 2 Ph.D.s, 10 Master's Degrees, 1 J.D., 6 CFAs, 5 CPAs, and 18 CFA Claritas.

**7. Implemented an enhanced, proactive communications program.**

- Streamlined media response protocol. Created an efficient media response protocol for handling a high volume of industry related media inquiries, ensuring that they are handled promptly and carefully, keeping in mind the interests of the PRIT Fund and its constituents, as well as relationships with media members.

**8. Continued to support the Commonwealth's State Retiree Benefits Trust Fund (SRBTF) clients and onboard their Other Post-Employment Benefits (OPEB) assets to PRIM.**

- Supported 43 OPEB accounts (up from 25 last year) with \$850 million in assets invested in the PRIT Fund.
- Developed accounting system to track PRIM costs associated with supporting SRBTF activities and implemented an interagency cost reimbursement system. The SRBTF reimburses PRIM to support this initiative.
- Developed an accounting system with our custodian to enable the SRBTF Board to accept and invest OPEB assets from other Commonwealth municipalities and agencies.
- Supported appropriate legislative initiatives to enable and streamline the SRBTF/PRIM relationship.

**B. Investments, Legal, Finance, Operations and Technology.**

**1. Asset Allocation Changes.**

- Implemented the asset allocation recommendations approved by the PRIM Board on February 11, 2015 to lower the risk profile of the PRIT Fund.
- Developed proprietary asset allocation tools to help identify factors that drive performance of individual asset classes. Tools are used to inform our asset allocation decisions and to challenge the recommendations of our asset allocation consultant.

**Approved Asset Allocation Changes**

	2014	2015	Change
U.S. Large Cap	14.5%	14.5%	
U.S. Small/Mid Cap	3.5%	3.5%	
International	16%	16%	
Emerging Markets	6%	6%	
<b>Total Global Equity</b>	<b>40%</b>	<b>40%</b>	
Core Bonds	0%	3%	+3%
20+ Year Treasury Strips*	10%	7%	-3%
TIPS	3%	3%	
<b>Total Core Fixed Income</b>	<b>13%</b>	<b>13%</b>	
High Yield	1.5%	1.5%	
Bank Loans	1.5%	1.5%	
EMD (Dollar Denominated)	1.0%	1.0%	
EMD (Local Currency)	2.0%	2.0%	
Private Debt	4%	4%	
<b>Total Value Added Fixed Income</b>	<b>10%</b>	<b>10%</b>	
<b>Private Equity</b>	<b>10%</b>	<b>10%</b>	
Real Estate	10%	10%	
Timber	4%	4%	
Hedge Funds	9%	9%	
<b>Portfolio Completion Strategies</b>	<b>4%</b>	<b>4%</b>	
<b>5-7 Year Expected Return</b>	<b>6.8%</b>	<b>6.8%</b>	
<b>30 Year Expected Return</b>	<b>7.9%</b>	<b>7.9%</b>	
<b>Risk (Std. Deviation)</b>	<b>12.5%</b>	<b>12.6%</b>	<b>+0.1%</b>
<b>Sharpe Ratio</b>	<b>0.41</b>	<b>0.40</b>	<b>-0.1%</b>

\* Subsequently reduced to 5% target (June 4, 2015)

**2. Risk Management.**

- Updated the Investment Policy Statement to reflect new initiatives of the PRIT Fund.
- Implemented the Securities Lending Program in January 2015, which will add approximately \$10-\$15 million in annual returns to the PRIT Fund.
- Continued to utilize PRIM's risk tools by working with all asset class teams on various investment projects including asset allocation, investment manager RFP searches, and hedge fund monitoring.

**3. Public Markets.**

- Completed foreign exchange hedging research.
- Concluded emerging markets equity Request for Proposal utilizing PRIM-developed proprietary screening tools. Seven new portfolios were funded with a total of \$3 billion.

**4. Private Equity.**

- Completed 18 new investments totaling \$2.2 billion in new commitments.
- Declined new investments with 14 existing managers.
- Launched a new private-equity co-investment program which, when fully-implemented, will significantly reduce the cost of private equity investing.
- Implemented enhanced stock distribution process at lower cost; projected annual savings of \$250,000.
- Completed research on buyouts space to supplement proprietary sourcing process.
- Increased M.G.L. Chapter 240-compliant investments (Economic Development Reorganization Act of 2010) by 50%, raising PRIM's total investment in Chapter 240 compliant vehicles to \$77 million as of June 2015.

**5. Hedge Funds and Low Volatility Strategies.**

- Successfully negotiated all new hedge fund investments in Managed Account format with significant fee discounts. Over \$1 billion are invested in managed accounts across hedge funds and Portfolio Completion Strategies (PCS).
- Internally-developed, low cost, Hedge Fund Replication strategy achieved success in its first year. PRIM replication returned 12.3% versus 6.3% for S&P 500 Index and 10.8% for underlying funds. 1.3 information ratio since inception (6/30/2015).
- Identified multiple areas of investment for PCS, including alternative risk premia, unconstrained fixed-income, and real asset investing.

**6. Real Estate and Timberland.**

- FY 2015 Transaction Activity – approximately: \$1 billion in real estate acquired (core / non-core real estate), \$600 million in dispositions, \$81 million timberland acquired.

- Direct Real Estate Investment Strategy – Staff underwrote and bid on PRIM's first ever direct real estate acquisition. Came in second in bid process losing to a strategic buyer who paid a premium for synergies related to its other holdings. Developed a framework for future investments (and fee savings).

## 7. Legal.

- Successfully negotiated the settlement of the last of the three pending securities litigation class action lawsuits (Fannie Mae, Massey, and Schering Plough) in which PRIM serves as lead plaintiff:
  - Schering – after extensive litigation, and on the eve of trial, achieved an all-cash \$473 million settlement, ranked among the 25 largest securities litigation settlements ever, and the largest securities litigation settlement ever against a pharmaceutical company.
  - Massey/Alpha – after extensive litigation and a multi-phase mediation proceeding, first arrived at a \$265 million total consideration settlement in phase 1 of mediation, followed by a phase 2 mediation regarding the appropriate mix of cash and stock, in which PRIM successfully avoided any non-cash component, and instead received an all-cash payment of the entire \$265 million (and Alpha subsequently filed for bankruptcy in August 2015.)
  - Fannie Mae – after extensive litigation and mediation, reached an initial global \$170 million settlement, followed by a negotiated 73%-27% allocation between the common share class (which PRIM represents) and the preferred share class; the court granted approval of the settlement in March 2015.
- PRIM received more than \$35,000 to reimburse its costs as lead plaintiff in Schering, more than \$38,000 for its efforts as lead plaintiff in Massey, more than \$42,000 in Fannie Mae, in addition to \$100,000 for legal expenses in the BNY Mellon settlement, for a total of nearly \$215,000 in reimbursed legal expenses.
- Passive class member domestic securities class action litigation: continue to study and improve PRIM's litigation claims and monitoring systems, and continue to increase settlement recoveries through improved claims-filing procedures, to ensure that no opportunities are missed and maximum recovery and participation in settlements is achieved; adopted new and innovative claims-filing method projected to result in a 10% increase annually in PRIM passive class member securities litigation settlement recoveries.
- Offensive litigation: prepared to file litigation, negotiated settlement, and/or filed litigation, including foreign securities litigation, in Australia, Belgium, France, Italy, Japan, the Netherlands, the United Kingdom, the federal court of claims in Washington DC, and federal district court in Texas.

## 8. Finance, Operations and Technology.

- Implemented custom proxy voting guidelines which enhanced PRIM's strong stance on issues such as board diversity, labor and human rights standards, recycling, renewable energy, and tobacco advertising.
- Enhanced Private Equity Stock Distribution liquidation process.

- Developed and implemented a client service system for automating and reporting client transactions.

C. Recognition.

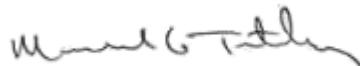
1. Michael G. Trotsky, CFA, Executive Director and Chief Investment Officer, was nominated as one of five finalists for Chief Investment Officer Magazine 2015 “CIO Industry Innovations Award.”
  - From the editor: “The central questions of these awards: What is innovation, and who is executing it? To the CIO editorial team and the board of asset owners—the Class of 2015 winners—who advise our judgments, innovation means more than re-labeling old strategies. It means more than producing sub-par returns for above-par prices. At its core, innovation means matching new challenges with new ideas—ridding the asset management world of its sacred cows and failed strategies. And it means results.”
2. Michael R. Bailey, Senior Investment Officer – Director of Private Equity, was nominated for the Investor Intelligence Award for Excellence in Private Equity by Investor Intelligence Network (January 7, 2015).
  - Sponsored by Institutional Investor, the Investor Intelligence Awards recognize the most outstanding and innovative public plan sponsors in North America.
3. Sarah N. Samuels, CFA, Deputy Chief Investment Officer, was named to Chief Investment Officer Magazine’s 2015 “40 Under 40” list.
  - A worldwide award which recognizes up-and-coming asset owners who have made meaningful investment contributions to their organizations.
  - The “40 under 40” list includes asset owners from public and corporate pension plans, endowments and foundations, health care funds, and insurance funds across the globe.
4. Chris Supple, Deputy Executive Director and General Counsel, was awarded the Commonwealth’s Citation for Outstanding Performance on September 24, 2015.
  - \$473 million recovered from Schering Plough. One of top 25 securities fraud settlements ever and the largest ever from a pharmaceutical company.
  - \$265 million recovered from Massey Energy.
  - \$170 million recovered from Fannie Mae.
  - Chris was also re-appointed to a second term as co-chair of the Securities Litigation Committee of the National Association of Public Pension Attorneys (NAPPA).
5. *Buyouts Magazine* in February 2015 named PRIM as the best-performing private equity portfolio of the 22 largest pensions it evaluates for the 1-year, 3-year, 5-year, and 10-year time periods.
6. The *Private Equity Growth Capital Council* in October 2014 named PRIM #2 best performing private equity investment portfolio of 153 U.S. public pensions it considered.

**Acknowledgements**

The public recognition PRIM has received could not have been achieved without the support of the PRIM Board trustees and an outstanding staff. I would like to take this opportunity to thank the Board and the PRIM team for your contributions to PRIM's many successes over the years. In particular, I would like to thank former PRIM Board trustee, Alex Aikens, who left the Board earlier this year after 15 years of service to the Commonwealth. Alex was among the most thoughtful fiduciaries to ever serve on the Board.

I am also very pleased to report that the transition to new Board leadership under Chair Goldberg has been very smooth, enjoyable and productive. It has been a pleasure to work with Chair Goldberg, her outstanding Treasury staff, and the new appointments to the Board and committees. Each member of the new team has invested a significant amount of time and effort learning about PRIM and that has enabled each member to quickly begin to contribute to PRIM's mission and success. We are all rowing in the same direction with a sense of camaraderie and purpose that I am confident will enable us to continue our high achievement.

Very respectfully,



Michael G. Trotsky, CFA  
Executive Director and Chief Investment Officer



Government Finance Officers Association

## Certificate of Achievement for Excellence in Financial Reporting

Presented to

**Pension Reserves Investment  
Trust Fund, Massachusetts**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

June 30, 2014

A handwritten signature in black ink that reads "Jeffrey R. Eason".

Executive Director/CEO

### Certificate of Achievement for Excellence in Financial Reporting

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the PRIM Board for its comprehensive annual financial report for the fiscal year ended June 30, 2014. This was the tenth consecutive year that the PRIM Board has achieved this prestigious award. In order to be awarded a Certificate of Achievement, an entity must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both U.S. generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

## PRIM Board Trustees

**Deborah B. Goldberg, Chair, Ex Officio Member**

State Treasurer & Receiver General, Commonwealth of Massachusetts

**Robert L. Brousseau, Elected Representative, State Teachers Retirement System**

Retired Teacher, Town of Wareham Public School System

**Ruth Ellen Fitch, Appointee of the State Treasurer**

**Michael Heffernan, Appointee of the Governor**

**Anthony E. Hubbard, Esq., Appointee of the Governor, Non-State Employee or Official Member**

Partner, Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, MA

**Theresa F. McGoldrick, Esq., Elected Member, State Employees' Retirement Board**

President, SEIU/NAGE Unit 6

**Dennis J. Naughton, Elected Member, State Teachers' Retirement Board**

Retired Educator, Millis Public Schools

**Dana A. Pullman, Appointee of the Governor**

Treasurer, State Police Association of Massachusetts

**Paul E. Shanley, Elected Representative, State Employees' Retirement System**

Director of Professional Liability, Amity Insurance, Quincy, MA

## Advisory Committees to the PRIM Board

### Investment Committee

**Deborah B. Goldberg, Chair**

Ex Officio Board Member

**Joseph C. Bonfiglio**

Massachusetts & Northern New England Laborers' District Council

**C. LaRoy Brantley**

Investment Consultant, Cambridge Associates, LLC

**Michael Even, CFA**

President and CEO, Numeric Investors

**Constance M. Everson, CFA**

Managing Director, Capital Markets Outlook Group

**Ruth Ellen Fitch**

Board Member

**Michael Heffernan**

Board Member

**Edward W. Kane**

Senior Advisor, HarbourVest Partners, LLC

**Paul E. Shanley**

Board Member

**Glenn P. Strehle, CFA**

Treasurer Emeritus, MIT

**Timothy L. Vaill**

Former Chairman & CEO, Boston Private Financial

Current CFO, Anbaric Energy

### Real Estate Committee

**Jill S. Hatton, CRE, Chair**

Real Estate Investment Professional

**Deborah B. Goldberg**

Ex Officio Board Member

**Anthony E. Hubbard, Esq.**

Board Member

**Dennis Kanin**

New Boston Ventures

**Dr. Jack Lutz, PhD.**

Forest Research Group

**William F. McCall, Jr., CRE**

McCall & Almy, Inc.

**Garlan Morse, Jr., CRE**

Morris and Morse Company, Inc.

**Peter F. O'Connell**

Marina Bay Company

## Advisory Committees to the PRIM Board, continued

### Administration and Audit Committee

**Robert L. Brousseau, Chair**

Board Member

**Deborah B. Goldberg**

Ex Officio Board Member

**Ted C. Alexiades, CPFO**

Hingham Town Administrator

**Patrick E. Brock**

Chairman, Hampshire County Retirement Board

**Joseph Connolly**

Norfolk County Treasurer

**Karen E. Gershman, CPA**

Chief Operating Officer, Health Advances

**Eileen Glovsky**

Treasurer Appointee

**Michael Heffernan**

Board Member

**Theresa F. McGoldrick, Esq.**

Board Member

**Dennis J. Naughton**

Board Member

**Michele A. Whitham, Esq.**

Partner, Foley Hoag

### Compensation Committee

**Michele A. Whitham, Esq., Chair**

Partner, Foley Hoag

**Deborah B. Goldberg**

Ex Officio Board Member

**Robert L. Brousseau**

Board Member

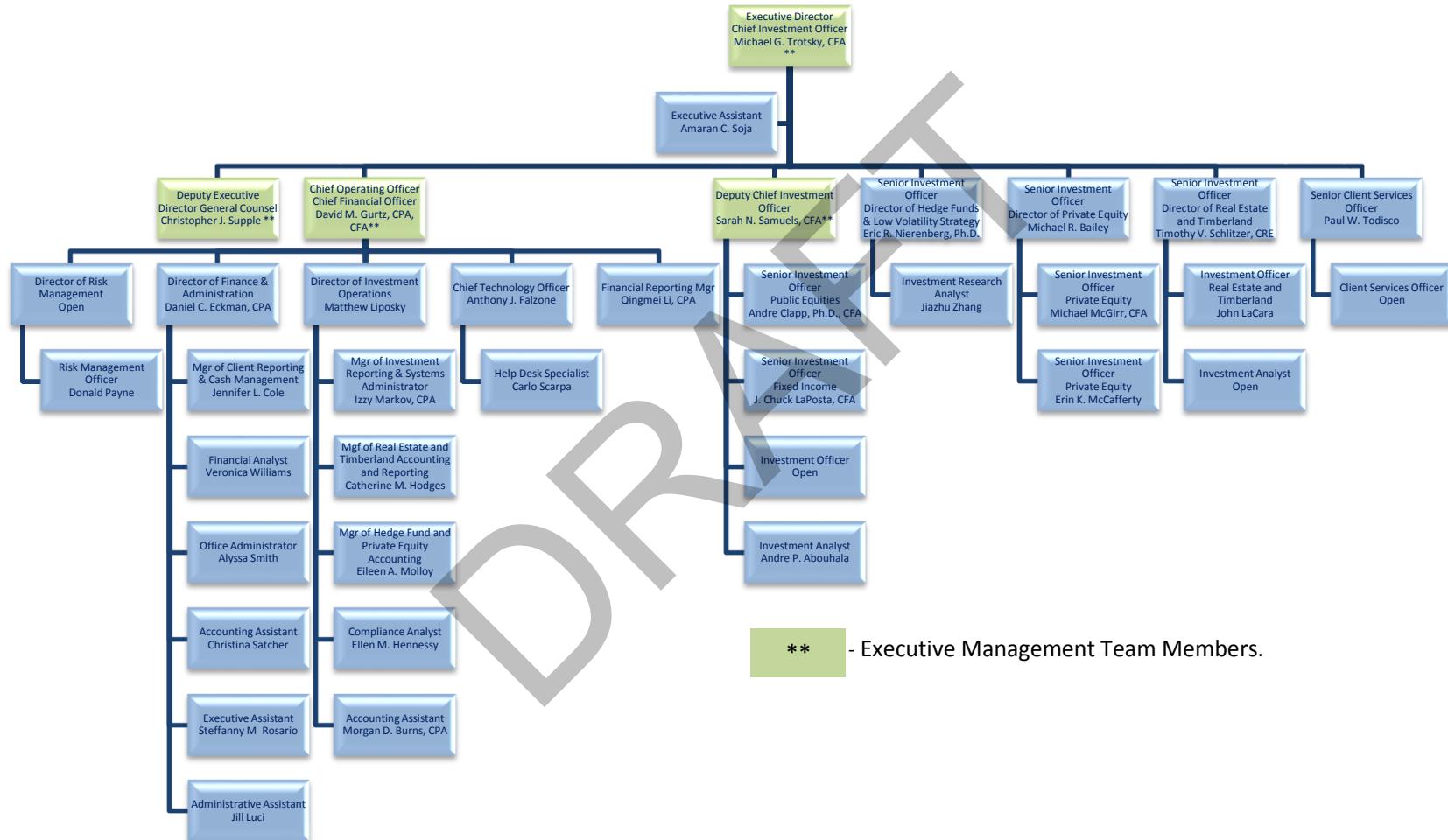
**Patrick E. Brock**

Chairman, Hampshire County Retirement Board

**Joseph Connolly**

Norfolk County Treasurer

# PRIM Board Staff Organizational Chart



## PRIM Board Investment Advisors

**Callan Associates**  
Public Market Advisory Services

**Arden Asset Management, LLC**  
Hedge Funds Advisory Services

**Hamilton Lane**  
Private Equity Advisory Services

**NEPC, LLC**  
Asset Allocation Advisory Services

**The Townsend Group**  
Real Estate and Timberland Advisory Services

DRAFT

*Financial Section*

## **Independent Auditors' Report**

The Administration and Audit Committee and Trustees,  
Pension Reserves Investment Management Board and  
Participating and Purchasing Systems of the Pension Reserves Investment Trust Fund:

### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, as of and for the years ended June 30, 2015 and 2014, and the related notes to the financial statements, which collectively comprise the PRIT Fund's basic financial statements as listed in the table of contents.

#### ***Management's Responsibility for the Financial Statements***

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

#### ***Auditors' Responsibility***

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the pooled net position of the Pension Reserves Investment Trust Fund as of June 30, 2015 and 2014, and the changes in its pooled net position for the years then ended in accordance with U.S. generally accepted accounting principles.

## **Other Matters**

### *Required Supplementary Information*

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 23-26 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

### *Other Supplementary Information*

Our audit was conducted for the purpose of forming an opinion on the PRIT Fund's basic financial statements. The Schedule of Pooled Net Position – Capital Fund and Cash Fund and Schedule of Changes in Pooled Net Position – Capital Fund and Cash Fund (collectively, the Schedules) are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The Schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

### *Other Information*

The Introductory, Investment and Statistical Sections have not been subject to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them.

### **Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated October 16, 2015 on our consideration of the PRIT Fund's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the PRIT Fund's internal control over financial reporting and compliance.

October 16, 2015

Required Supplementary Information –  
Management's Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

This section presents management's discussion and analysis of the Pension Reserves Investment Trust Fund's (the PRIT Fund's) financial performance for the fiscal years ended June 30, 2015 and 2014 and should be read in conjunction with the financial statements, which follow this section.

The PRIT Fund is a pooled investment fund, created in 1983 through Massachusetts legislation, that invests the assets of the State Teachers' and State Employees' Retirement Systems, and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund, as well as the assets of the State Retiree Benefits Trust (SRBT) Fund.

The investment return percentages reported in management's discussion and analysis are presented gross of management fees.

### **Overview of the Financial Statements**

The financial statements include the statements of pooled net position and the statements of changes in pooled net position. They present the financial position of the PRIT Fund as of June 30, 2015 and 2014 and its financial activities for the years then ended. The notes to the financial statements provide further information that is essential to a full understanding of the financial statements. The notes describe the significant accounting policies of the PRIT Fund and provide detailed disclosures on certain account balances. The supplementary schedules of pooled net position and changes in pooled net position on pages 57 and 58 separately display the balances and activities of the Capital Fund and Cash Fund of the PRIT Fund.

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, as promulgated by the Governmental Accounting Standards Board (GASB).

### **Financial Highlights**

#### **Fiscal Year 2015**

- The net position of the PRIT Fund increased \$567.0 million during the year ended June 30, 2015. Total net position was \$61.2 billion at June 30, 2015, compared to \$60.7 billion at June 30, 2014.
- Net investment income for fiscal year 2015 was \$2.1 billion, compared to net investment income of \$9.0 billion for the prior fiscal year. The PRIT Fund returned 3.86% in fiscal year 2015, compared to 17.53% in fiscal year 2014.
- Contributions to the PRIT Fund totaled \$2.2 billion during fiscal year 2015, compared to \$2.1 billion in 2014.

(Continued)

Required Supplementary Information –  
Management's Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

- Redemptions from the PRIT Fund totaled \$3.7 billion during the year ended June 30, 2015, compared to \$3.6 billion during the year ended June 30, 2014.

**Fiscal Year 2014**

- The net position of the PRIT Fund increased \$7.4 billion during the year ended June 30, 2014. Total net position was \$60.7 billion at June 30, 2014, compared to \$53.2 billion at June 30, 2013.
- Net investment income for fiscal year 2014 was \$9.0 billion, compared to net investment income of \$5.9 billion for the prior fiscal year. The PRIT Fund returned 17.53% in fiscal year 2014, compared to 12.69% in fiscal year 2013.
- Contributions to the PRIT Fund totaled \$2.1 billion during fiscal year 2014, compared to \$1.8 billion in 2013.
- Redemptions from the PRIT Fund totaled \$3.6 billion during the year ended June 30, 2014, compared to \$3.4 billion during the year ended June 30, 2013.

**Condensed Financial Information**

Summary balances and activities of the PRIT Fund as of and for the years ended June 30, 2015, 2014, and 2013 are presented below:

	June 30		
	2015	2014	2013
	(Dollars in thousands)		
<b>Summary of pooled net position:</b>			
Assets:			
Investments	\$ 62,536,105	62,501,717	54,619,445
Cash	282,624	189,947	140,375
Securities lending collateral	557,158	—	—
Receivables and other assets	<u>1,658,706</u>	<u>1,045,399</u>	<u>1,155,290</u>
Total assets	<u>65,034,593</u>	<u>63,737,063</u>	<u>55,915,110</u>
Liabilities:			
Other liabilities	3,193,890	3,035,697	2,661,583
Securities lending obligations	557,135	—	—
Management fees payable to PRIM	<u>39,823</u>	<u>24,592</u>	<u>23,902</u>
Total liabilities	<u>3,790,848</u>	<u>3,060,289</u>	<u>2,685,485</u>
Net position held in trust for pool participants	<u>\$ 61,243,745</u>	<u>60,676,774</u>	<u>53,229,625</u>

(Continued)

Required Supplementary Information –  
Management's Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

	June 30		
	2015	2014	2013
	(Dollars in thousands)		
<b>Summary of changes in pooled net position:</b>			
Additions:			
Contributions	\$ 2,178,927	2,050,248	1,812,191
Net investment income	<u>2,073,376</u>	<u>8,991,375</u>	<u>5,922,932</u>
Total additions	4,252,303	11,041,623	7,735,123
Deductions:			
Redemptions	<u>3,685,332</u>	<u>3,594,474</u>	<u>3,373,305</u>
Change in pooled net position	566,971	7,447,149	4,361,818
<b>Net position held in trust for pool participants:</b>			
Balance, beginning of year	60,676,774	53,229,625	48,867,807
Balance, end of year	<u>\$ 61,243,745</u>	<u>60,676,774</u>	<u>53,229,625</u>

#### The PRIT Fund Performance during the year ended June 30, 2015

The PRIT Fund began fiscal year 2015 with net position of \$60.7 billion and ended the fiscal year with a net position of \$61.2 billion, representing a 0.93% increase. Net investment income for the year ended June 30, 2015 was \$2.1 billion, which when added to net participant redemptions (contributions less redemptions) of \$1.5 billion, resulted in an overall increase in net position of \$567.0 million.

For the year ended June 30, 2015, the PRIT Fund returned 3.86%, exceeding its benchmark of 2.74% by 112 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan. It assumes that the PRIT Fund's actual allocation is identical to its target allocation and that all asset classes achieve index-like returns.

The asset classes of the PRIT Fund and related investment returns for the year ended June 30, 2015 are as follows: Domestic Equity 6.75%; International Equity -2.76%; Emerging Markets -5.85%; Core Fixed Income 4.68%; Value-Added Fixed Income -2.60%; Private Equity 15.57%; Real Estate 11.99%; Timber/Natural Resources -1.35%; Hedge Funds 3.68%; Portfolio Completion Strategies -5.09%; and Overlay 2.09%.

The PRIT Fund outperformed its benchmark for the fiscal year ended June 30, 2015 and has returned an average of 9.62% annually since January 1, 1985. According to the Trust Universe Comparison Service (TUCS) for Public Pension Funds, the most widely accepted benchmark for the performance of institutional assets, the PRIT Fund

(Continued)

Required Supplementary Information –  
Management's Discussion and Analysis

June 30, 2015 and 2014

(Unaudited)

ranked in the second quartile of public pension plans with net position in excess of \$1 billion over the ten-year period ended June 30, 2015.

**The PRIT Fund Performance during the year ended June 30, 2014**

The PRIT Fund began fiscal year 2014 with net position of \$53.2 billion and ended the fiscal year with a net position of \$60.7 billion, representing a 13.99% increase. Net investment income for the year ended June 30, 2014 was \$9.0 billion, which when added to net participant redemptions (contributions less redemptions) of \$1.5 billion, resulted in an overall increase in net position of \$7.4 billion.

For the year ended June 30, 2014, the PRIT Fund returned 17.53%, exceeding its benchmark of 14.92% by 261 basis points. The benchmark provides a measure of how well the PRIT Fund has implemented its asset allocation plan. It assumes that the PRIT Fund's actual allocation is identical to its target allocation and that all asset classes achieve index-like returns.

The asset classes of the PRIT Fund and related investment returns for the year ended June 30, 2014 are as follows: Domestic Equity 24.93%; International Equity 24.44%; Emerging Markets 14.07%; Core Fixed Income 5.77%; Value-Added Fixed Income 9.98%; Private Equity 26.75%; Real Estate 13.52%; Timber/Natural Resources 13.43%; Hedge Funds 10.78%; and Overlay 9.52%.

**Other Information**

This financial report is designed to provide a general overview of the PRIT Fund's financial results. Additional information can be found on the PRIM Board's website at [www.mapension.com](http://www.mapension.com). Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the Pension Reserves Investment Management Board, 84 State Street, Boston, Massachusetts 02109.

## Statements of Pooled Net Position

June 30, 2015 and 2014

(Dollars in thousands)

	<b>2015</b>	<b>2014</b>
<b>Assets:</b>		
Investments, at fair value (note 3):		
Short-term	\$ 1,733,529	1,152,040
Fixed income	14,389,277	14,942,944
Equity	24,642,955	25,123,614
Real estate (note 6)	7,678,800	6,964,718
Timberland	1,664,581	1,510,688
Private equity	6,980,423	6,912,243
Hedge funds	5,351,631	5,895,470
Other	94,909	—
Total investments	<u>62,536,105</u>	<u>62,501,717</u>
Cash	282,624	189,947
Securities lending collateral (notes 3 and 5)	557,158	—
Interest and dividends receivable	139,679	142,634
Receivable for investments sold and other assets	1,281,902	791,846
Securities sold on a when-issued basis	223,685	103,776
Unrealized gains on foreign currency exchange contracts	13,440	7,143
Total assets	<u>65,034,593</u>	<u>63,737,063</u>
<b>Liabilities:</b>		
Payable for investments purchased and other liabilities	1,007,366	1,198,048
Real estate debt (note 7)	1,511,769	1,548,854
Securities lending obligations (note 5)	557,135	—
Securities purchased on a when-issued basis	648,945	273,711
Unrealized losses on foreign currency exchange contracts	25,810	15,084
Management fees payable to PRIM (note 9)	39,823	24,592
Total liabilities	<u>3,790,848</u>	<u>3,060,289</u>
Net position held in trust for pool participants	<u>\$ 61,243,745</u>	<u>60,676,774</u>

See accompanying notes to financial statements.

## Statements of Changes in Pooled Net Position

Years ended June 30, 2015 and 2014

(Dollars in thousands)

	<b>2015</b>	<b>2014</b>
<b>Additions:</b>		
Contributions:		
State employees	\$ 580,527	547,627
State teachers	721,148	709,114
Other participants	877,252	793,507
Total contributions	<u>2,178,927</u>	<u>2,050,248</u>
Net investment income:		
From investment activities:		
Net realized gain on investments and foreign currency transactions	2,552,747	2,948,549
Net change in unrealized (depreciation) appreciation on investments and foreign currency translations	(1,730,479)	4,646,758
Interest income	270,131	358,677
Dividend income	650,996	699,442
Real estate income	260,366	241,202
Timberland income	11,854	8,724
Private equity income	151,001	172,187
Management fees (note 9)	<u>2,166,616</u>	<u>9,075,539</u>
Net income from investment activities	<u>(98,166)</u>	<u>(84,164)</u>
From securities lending activities:		
Securities lending income	5,624	—
Securities lending expenses	(698)	—
Net income from securities lending activities	<u>4,926</u>	<u>—</u>
Total net investment income	<u>2,073,376</u>	<u>8,991,375</u>
Total additions	<u>4,252,303</u>	<u>11,041,623</u>
<b>Deductions:</b>		
Redemptions:		
State employees	1,266,799	1,220,075
State teachers	1,650,026	1,635,224
Other participants	768,507	739,175
Total deductions	<u>3,685,332</u>	<u>3,594,474</u>
Net increase in pooled net position	<u>566,971</u>	<u>7,447,149</u>
Net position held in trust for pool participants:		
Balance, beginning of year	60,676,774	53,229,625
Balance, end of year	<u>\$ 61,243,745</u>	<u>60,676,774</u>

See accompanying notes to financial statements.

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(1) Description of the Pension Reserves Investment Trust Fund****(a) General**

The Pension Reserves Investment Trust Fund (the PRIT Fund), a component unit of the Commonwealth of Massachusetts, was created in 1983 under Chapter 661 of the Acts of 1983, as amended by Chapter 315 of the Acts of 1996. The PRIT Fund is a pooled investment fund that invests the assets of the State Teachers' and State Employees' Retirement Systems of Massachusetts and the assets of county, authority, school district, and municipal retirement systems that choose to invest in the PRIT Fund. The PRIT Fund is not registered with the Securities and Exchange Commission, but is subject to oversight provided by the Pension Reserves Investment Management Board (the PRIM Board). The PRIM Board was created by legislation to provide general supervision of the investments and management of the PRIT Fund. The PRIM Board is a separate legal entity that issues its own financial statements, which are not included in the accompanying financial statements of the PRIT Fund.

A nine-member Board of Trustees governs the PRIM Board. The Trustees include: (1) the Governor, ex officio, or his designee; (2) the State Treasurer, ex officio, or his designee who shall serve as Chair of the PRIM Board; (3) a private citizen experienced in the field of financial management appointed by the State Treasurer; (4) an employee or retiree who is a member of the State Teachers' Retirement System, elected by the members of such system for a term of three years; (5) an employee or retiree who is a member of the State Employees' Retirement System, elected by the members of such system for a term of three years; (6) the elected member of the State Retirement Board; (7) one of the elected members of the Teachers' Retirement Board chosen by the members of the Teachers' Retirement Board; (8) a person who is not an employee or official of the Commonwealth appointed by the Governor; and (9) a representative of a public safety union appointed by the Governor. Appointed members serve for a term of four years. The Board of Trustees has the authority to employ an Executive Director, outside investment managers, custodians, consultants, and others as it deems necessary; to formulate policies and procedures; and to take such other actions as necessary and appropriate to manage the assets of the PRIT Fund.

The PRIM Board seeks to maximize the total return on investments within acceptable levels of risk for a public pension fund. Under current law, by the year 2040, the PRIT Fund will have grown, through annual payments in accordance with a legislatively approved funding schedule and through total return of the PRIT Fund, to an amount sufficient to meet the then-existing pension obligations of the Commonwealth. The Commonwealth has adopted a schedule of state pension appropriations that assumes a long-term actuarial rate of return for the PRIT Fund of 7.75%.

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

The State Teachers' and State Employees' Retirement Systems are mandated by statute to invest all of their assets in the PRIT Fund and are, therefore, considered involuntary participants. Other retirement systems have the option to become Participating or Purchasing System participants in the PRIT Fund. Participating Systems must transfer all of their assets to the PRIT Fund, commit to remain invested for five years, and are entitled to share in appropriations made to the PRIT Fund by the Commonwealth in accordance with Massachusetts General Laws, Chapter 32, Section 22B. The Commonwealth has made no such appropriation to the PRIT Fund on behalf of Participating Systems since fiscal year 2000.

Purchasing Systems may invest all or a portion of their assets in the PRIT Fund and retain the ability to contribute and withdraw funds at their discretion; however, they are not entitled to state appropriations. Participating and Purchasing Systems share in the investment earnings of the PRIT Fund based on their proportionate share of net assets. As of June 30, 2015, there were 41 Participating Systems and 54 Purchasing Systems invested in the PRIT Fund.

On July 15, 2007, the Governor signed into law Chapter 68 of the Acts of 2007, An Act to Reduce the Stress on Local Property Taxes through Enhanced Pension Fund Investment, better known as the Municipal Partnership Act. Section 2 of Chapter 68 requires the Public Employee Retirement Administration Commission (PERAC) to assess the investment performance and funded ratio of retirement systems as of January 1 of each year. If a system is less than 65% funded and has trailed the performance of the PRIT Fund by 2% or more on an annualized basis over the previous 10-year period, then PERAC declares the system "underperforming" and requires it to transfer its assets to the PRIT Fund as a participating system. For the years ended June 30, 2015 and 2014, no retirement systems were required to transfer their assets to the PRIT Fund under the provisions of this Act.

**(b) Investment Funds**

The PRIT Fund consists of two investment funds, the Capital Fund and the Cash Fund. Each of these funds is managed, accounted for, and held separately by the PRIT Fund's custodian.

The Cash Fund consists of short-term investments, which are used to meet the liquidity requirements of Participating and Purchasing Systems. All Cash Fund earnings are reinvested. The State Teachers' Retirement System and the State Employees' Retirement System make daily deposits into the Cash Fund, which is their source of funds for benefit payments and operating expenses. The Cash Fund maintains a stable net asset value of \$1.00 per unit.

Assets contributed by retirement systems are initially deposited in the Cash Fund and then transferred to the Capital Fund. Funds transferred into the Capital Fund are generally invested in the General Allocation Account, which invests in all asset classes of the PRIT Fund in accordance with the

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

PRIM Board's asset allocation plan and investment policy guidelines. The Capital Fund serves as the investment portfolio of the PRIT Fund and consists of the following accounts at June 30, 2015: General Allocation (holds units of all other accounts), Domestic Equity, Core Fixed Income, Value-Added Fixed Income, International Equity, Emerging Markets, Real Estate, Timber/Natural Resources, Hedge Funds, Distressed Debt, Overlay, Portfolio Completion Strategies, Private Equity Investments, and Private Equity Investments Vintage Years 2000-2015. Vintage Year refers to the fiscal year in which the PRIT Fund made a commitment to invest in a private equity investment.

The Capital Fund consists of the following accounts at June 30, 2014: General Allocation (holds units of all other accounts), Domestic Equity, Core Fixed Income, Value-Added Fixed Income, International Equity, Emerging Markets, Real Estate, Timber/Natural Resources, Hedge Funds, Distressed Debt, Overlay, Private Equity Investments, and Private Equity Investments Vintage Years 2000-2014.

Upon deposit by a Participating or Purchasing System into the accounts of the Capital Fund, units of participation equal to the total value of the contribution are issued. The value of a unit of each account is determined monthly by dividing the value of the net assets of the account by the number of units outstanding at each month-end valuation date. The unit price fluctuates with the performance of the Capital Fund. The number of units generally changes only when a retirement system makes a contribution or redemption.

Chapter 84 of the Acts of 1996 permits Massachusetts retirement boards to purchase units in the individual investment accounts of the PRIT Fund as an alternative to investing in its General Allocation Account. This investment option, also referred to as "segmentation," was established by an amendment to the PRIM Board's Operating Trust Agreement in 1994 in response to requests from retirement boards wishing to invest in certain asset classes of the PRIT Fund. Purchasing Systems, as "segmented investors," may invest in one or more of the following accounts of the Capital Fund: Domestic Equity, International Equity, Emerging Markets, Core Fixed Income, Public Value Added Fixed Income, Real Estate, Hedge Funds, and Private Equity Vintage Year accounts. At June 30, 2015 and 2014, there were 39 segmented investors in the PRIT Fund. The remaining Purchasing Systems invested in the General Allocation Account.

**(2) Summary of Significant Accounting Policies****(a) Basis of Accounting and Financial Statement Presentation**

The financial statements of the PRIT Fund are reported using the economic resources measurement focus and the accrual basis of accounting. They are prepared in conformity with U.S. generally accepted accounting principles, which require management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosure of contingent assets and

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

liabilities, at the dates of the financial statements and the reported amounts of additions and deductions during the reporting periods. Actual results could differ from those estimates.

The PRIT Fund follows Governmental Accounting Standards Board (GASB) guidance as applicable to external investment pools.

**(b) Investments**

The PRIM Board recognizes that over the long term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. The PRIM Board's asset allocation plan embodies its decisions to invest portions of the Capital Fund in domestic and international equity securities, emerging markets, fixed income securities, value added fixed income, real estate, timberland, hedge funds, natural resources, private equity and, where appropriate, the various sub asset classes of each asset class. Statutes prohibit the PRIT Fund from investing in certain securities. The PRIM Board ensures that investment managers adhere to the requirements of Massachusetts General Laws.

Security transactions are recorded on the date the securities are purchased or sold. The cost of a security is the purchase price or, in the case of assets transferred to the PRIT Fund by a Participating or Purchasing System, the fair value of the securities on the transfer date. The calculation of realized gains (losses) is independent of the calculation of the net change in unrealized appreciation (depreciation) on investments. Realized gains and losses on investments sold in the current year include previously recorded unrealized amounts and are included in net realized gain on investments in the accompanying statements of changes in pooled net position.

The PRIM Board values investments in fixed income, money market, other short-term investments, and U.S. government agency obligations using independent pricing services. In determining the price, the services may reflect such factors as market prices, yields, maturities, and ratings, supplemented by dealer quotations. Investments in equity securities traded on national securities exchanges are valued at the last daily sale price or, if no sale price is available, at the closing bid price. Securities traded on any other exchange are valued in the same manner or, if not so traded, on the basis of closing over-the-counter (OTC) bid prices. If no bid price exists, valuation is determined by the custodian bank either by establishing the mean between the most recent published bid and asked prices or averaging quotations obtained from dealers, brokers, or investment bankers. Securities for which such valuations are unavailable are reported at their fair value as estimated in good faith by the PRIM Board based on information provided by the investment managers responsible for such investments. Fair values for investments in pooled investment vehicles (commingled funds) are based on the commingled fund's net asset value as determined by the investment managers.

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

The PRIT Fund invests a portion of its assets in emerging capital markets. These investments may involve greater risks than investments in more developed markets, and the prices of such investments may be volatile. The consequences of political, social, or economic changes in these markets may have disruptive effects on the market prices of these investments and the income they generate, as well as the PRIT Fund's ability to repatriate such amounts.

Investments in real estate represent the PRIT Fund's ownership interest in PRIT Core Realty Holdings LLC (the LLC) (see note 6). The LLC holds investments in real estate properties, real estate private equity fund investments, and Real Estate Investment Trust (REIT) securities. Investments in real estate properties are stated at fair value based on appraisals prepared by independent real estate appraisers or on estimated valuations determined by the PRIM Board. These estimated valuations are based on valuations prepared by the real estate investment managers under the general supervision of the PRIM Board. Generally, third-party appraisals are performed on each real estate property within 18 months of the date of acquisition and at least annually thereafter. Determination of fair value involves judgment because the actual fair value of a real estate investment can be determined only by negotiation between parties in a sales transaction. Due to the inherent uncertainty of valuation, fair values used may differ significantly from values that would have been determined had a ready market for the investments existed, and the differences could be material. Real estate private equity fund investments are invested through limited partnerships and are recorded at fair value estimated by the PRIM Board in the same manner as the PRIT Fund's private equity investments. REIT securities are publicly traded securities and are valued in the same manner as the PRIT Fund's traded equity securities.

Investments in timberland are valued similarly to investments made by the LLC in real estate properties; however, independent appraisals of timberland investments are required to be performed every three years, but management has had independent appraisals performed annually.

Hedge fund investments represent the PRIT Fund's ownership in both direct hedge funds including managed accounts and hedge fund-of-funds. The investment in hedge funds is recorded at fair value as estimated by the PRIM Board, generally using the net asset value as a practical expedient. These estimated fair values are determined in good faith by the PRIM Board with guidance from the PRIT Fund's hedge fund investment managers and is based on the value of the PRIT Fund's ownership in the underlying hedge fund investments.

Private equity investments are typically made through limited partnerships that, in turn, invest in venture capital, leveraged buyouts, private placements, and other investments where the structure, risk profile, and return potential differ from traditional equity and fixed income investments. These investments are recorded at fair values estimated by the PRIM Board, generally using the net asset

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

value of the underlying fund as a practical expedient. These estimated fair values are determined in good faith by investment managers or general partners using consistently applied procedures.

Portfolio completion strategies investments are recorded at fair value as estimated in good faith by the PRIM Board based on information provided by the investment managers responsible for the investments.

**(c) *Investment Income***

Dividend income is recorded on the ex-dividend date, and interest income is accrued as earned. For the years ended June 30, 2015 and 2014, foreign taxes withheld of \$25,167 and \$24,519, respectively, have been netted against dividend income in the statements of changes in pooled net position. Real estate income includes dividends earned on REIT securities as well as cash distributions of operating income from investments in real estate properties less interest expenses on real estate debt. Timberland income includes cash distributions of operating income from investments in timberland properties. Private equity investment income is recorded on a cash distribution basis.

**(d) *Foreign Currency Translation and Transactions***

The accounting records of the PRIT Fund are maintained in U.S. dollars. Investment securities and other assets and liabilities denominated in a foreign currency are translated into U.S. dollars at the prevailing rates of exchange at month-end. Purchases and sales of securities, income receipts, and expense payments are translated into U.S. dollars at the prevailing exchange rate on the respective dates of the transactions.

Unrealized net currency gains and losses from valuing foreign currency-denominated assets and liabilities at month-end exchange rates are reflected as a component of net unrealized appreciation (depreciation) on investments. For financial reporting purposes, it is not practicable to isolate that portion of the results of operations arising as a result of changes in foreign exchange rates from the fluctuations arising from changes in the market price of securities during the period.

Net realized gains and losses on foreign currency transactions represent principally gains and losses from sales and maturities of forward foreign currency contracts, disposition of foreign currencies, and currency gains and losses realized between the trade and settlement dates on securities transactions.

**(e) *Derivative Instruments***

In accordance with GASB Statement No. 53, *Accounting and Financial Reporting of Derivative Instruments*, the PRIT Fund has recorded all of its derivative activity at fair value as investment

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## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

instruments within the equity, fixed income, and real estate investments and the related change in such instruments within the net change in unrealized appreciation (depreciation) on investments and foreign currency translations in the accompanying financial statements.

The PRIT Fund regularly trades derivative financial instruments with off-balance sheet risk in the normal course of its investing activities to manage exposure to certain risks within the fund. The PRIT Fund also enters into derivative transactions to gain exposure to currencies and markets where derivatives are the most effective instrument. The PRIT Fund's derivative financial instruments include foreign currency exchange contracts, financial and commodity futures contracts, and customized swap agreements (see note 8 for more detail). These derivative instruments can be exchange-traded or OTC contracts. The primary difference in risk associated with OTC contracts and exchange-traded contracts is credit and liquidity risks. For exchange-traded contracts, credit risk is limited to the role of the exchange or clearing corporation. OTC contracts contain credit risk for unrealized gains from various counterparties for the duration of the contract.

**(f) When-Issued Securities Transactions**

The PRIT Fund may purchase or sell securities on a "when-issued" or delayed-delivery basis. Delivery and payment for such securities may take place a month or more after the trade date. Normally, settlement occurs within three months. The price of the underlying securities and the date when the securities will be delivered and paid for are fixed at trade date. During the time a delayed delivery sell transaction is outstanding, the contract is marked to market daily and substantially equivalent deliverable securities are held by the PRIT Fund for the transaction to the extent available. For delayed delivery purchase transactions, the PRIT Fund maintains segregated assets with a fair value equal to or greater than the amount of its purchase commitments. The receivables and payables associated with the sale and purchase of delayed delivery securities are reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis. Losses may arise due to changes in the value of the underlying securities, if the counterparty does not perform under the contract, or if the issuer does not issue the securities due to political, economic, or other factors.

The PRIT Fund may also enter into mortgage dollar-roll and reverse mortgage dollar-roll agreements on a when-issued basis. A mortgage dollar-roll is an agreement in which the PRIT Fund sells securities on a when-issued basis and simultaneously contracts with the same counterparty to repurchase similar (same type, coupon, and maturity) but not identical securities on a specified future date. During the roll period, principal and interest on these securities are not received. The PRIT Fund is compensated by the difference between the current sales price and the forward price for the future purchase. A reverse mortgage dollar-roll is an agreement to buy securities and to sell substantially

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## Notes to Financial Statements

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(Dollars in thousands)

similar securities on a specified future date. During the roll period, the PRIT Fund receives the principal and interest on the securities purchased. The receivables and payables associated with mortgage dollar-rolls and reverse mortgage dollar-rolls are also reflected in the accompanying statements of pooled net position as securities sold and purchased on a when-issued basis.

**(3) Investments and Securities Lending Collateral Investments**

A summary of investments, at fair value, is as follows:

	June 30	
	2015	2014
Short-term:		
Money market investments	\$ 1,733,529	1,152,040
Fixed income:		
U.S. government obligations (1)	5,225,621	4,463,870
Domestic fixed income (2)	4,660,555	5,545,436
International fixed income (3)	3,152,349	3,604,539
Distressed debt	1,350,752	1,329,099
	<u>14,389,277</u>	<u>14,942,944</u>
Equity:		
Domestic equity securities	10,353,626	10,409,415
International equity securities	14,289,329	14,714,199
	<u>24,642,955</u>	<u>25,123,614</u>
Real estate	7,678,800	6,964,718
Timberland	1,664,581	1,510,688
Private equity:		
Venture capital	1,579,463	1,389,868
Special equity	5,400,960	5,522,375
	<u>6,980,423</u>	<u>6,912,243</u>
Hedge funds:		
Direct hedge funds and hedge fund of funds	5,323,426	5,845,788
Liquidating hedge fund of funds	28,205	49,682
	<u>5,351,631</u>	<u>5,895,470</u>
Other:		
Portfolio completion strategies investment funds	94,909	—
Total investments excluding securities lending collateral	<u>62,536,105</u>	<u>62,501,717</u>
Securities lending collateral investments:		
Repurchase agreements	200,000	—
Money market investments	147,978	—
Domestic fixed income (4)	209,180	—
Total securities lending collateral investments	<u>557,158</u>	<u>—</u>
Total investments including securities lending collateral	<u>\$ 63,093,263</u>	<u>62,501,717</u>

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## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

- (1) Fiscal 2015 rates range from 0.00% to 9.13%, and maturities range from 2015 to 2045. Fiscal 2014 rates range from 0.00% to 10.63%, and maturities range from 2014 to 2044.
- (2) Fiscal 2015 rates range from 0.00% to 12.64%, and maturities range from 2015 to 2115. Fiscal 2014 rates range from 0.00% to 13.79%, and maturities range from 2014 to 2114.
- (3) Fiscal 2015 rates range from 0.00% to 16.39%, and maturities range from 2015 to 2115. Fiscal 2014 rates range from 0.00% to 16.00%, and maturities range from 2014 to 2073.
- (4) U.S. government agency securities with maturities of less than three months.

**(4) Deposits and Investments Risks****(a) Custodial Credit Risk**

Custodial credit risk is the risk that in the event of bank failure, the PRIT Fund's deposits and investments may not be returned. The PRIM Board manages the PRIT Fund's exposure to custodial credit risk by requiring all relevant investment managers to hold investments in separate accounts with the PRIM Board's custodian (see note 9). The PRIM Board has not adopted a formal custodial credit risk policy.

Cash balances represent amounts held in bank depository accounts that may be subject to custodial credit risk. As of June 30, 2015 and 2014, all but \$250 of the PRIT Fund's \$282,624 and \$189,947 cash balances, respectively, were uninsured and uncollateralized and, therefore, exposed to custodial credit risk.

**(b) Interest Rate Risk**

Interest rate risk is the risk that changes in interest rates of fixed income investments will adversely affect the fair value of an investment. While the PRIM Board does not have a formal policy relating to interest rate risk, the PRIM Board manages the PRIT Fund's exposure to fair value loss arising from movements in interest rates by establishing duration guidelines with its fixed income investment managers. The guidelines with each individual manager require that the effective duration of the domestic fixed income investment portfolio be within a specified percentage or number of years of the effective duration band of the appropriate benchmark index. For emerging markets fixed income investments, the portfolio must have duration with a band ranging from three to eight years. Effective duration is a measure of a fixed income investment's exposure to fair value changes arising from changes in interest rates. Effective duration makes assumptions regarding the most likely timing and amounts of variable cash flows. These assumptions take into consideration factors indicative of investments highly sensitive to interest rate changes, including callable options, prepayments, and

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

other factors. These factors are reflected in the effective duration numbers provided in the following table. The PRIM Board compares the effective duration of a manager's portfolio to their relevant benchmark including Barclays Capital Aggregate index, US Treasury STRIPS 20+ Year index, Barclays Capital US TIPS index, Barclays Capital Inflation Linked Bonds index, S&P LSTA Leveraged Loan index, JPMorgan Global Emerging Markets Bond index, JPMorgan Global Diversified Emerging Markets Bond index, and the Merrill Lynch High Yield Master II index.

The following table shows the debt investments by investment type, fair value, and effective weighted duration rate at June 30:

Investment	2015		2014	
	Fair value	Effective weighted duration rate (Years)	Fair value	Effective weighted duration rate (Years)
Asset-backed securities	\$ 154,740	2.19	\$ 238,794	1.83
Commercial mortgage-backed securities	235,583	2.18	395,208	2.89
Commercial paper and CDs	51,922	0.14	48,875	1.33
Corporate bonds and other credits	4,018,855	13.01	5,124,760	5.21
U.S. government bonds	3,988,370	24.23	3,271,542	21.81
U.S. government agencies	55,097	3.91	93,468	3.97
U.S. government TIPS	1,237,251	8.04	1,192,328	8.37
U.S. government mortgage-backed securities	1,179,408	1.99	1,193,603	2.80
Global inflation linked bonds	378,121	9.61	376,534	7.32
Municipal bonds	40,134	10.35	54,426	10.54
Pooled money market fund	1,733,529	—	1,152,040	—
Other pooled funds	3,049,796	—	2,953,406	—
Total fixed income and short-term investments	\$ 16,122,806		\$ 16,094,984	
Securities lending collateral investments:				
U.S. government agencies	\$ 209,180	—	\$ —	—
Pooled money market fund	147,978	—	—	—
Repurchase agreements	200,000	—	—	—
Total securities lending collateral investments	\$ 557,158		\$ —	

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(c) Credit Risk**

Credit risk is the risk that an issuer or other counterparty to an investment will fail to meet its debt obligations.

The PRIM Board does not have a formal investment policy governing credit risk; each fixed income securities investment managers is given a specific set of guidelines to invest within based on the mandate for which it was hired. These guidelines vary depending on the manager's strategy and the role of its portfolio to the overall diversification of the PRIT Fund. The guidelines for the PRIT Fund's core fixed income portfolio establish the minimum credit rating for any security in the portfolio and the overall weighted average credit rating of the portfolio. For example, all securities held must generally be investment grade. The guidelines for the PRIT Fund's high yield fixed income portfolio establish a market value range of securities to be held with a specific minimum credit rating and the overall weighted average credit rating of the portfolio.

Credit risk for derivative instruments held by the PRIT Fund results from counterparty risk. The PRIT Fund is exposed to credit risk resulting from counterparties being unable to meet their obligations under the terms of the derivative agreements. See note 8 for more information on the PRIT Fund's derivative instruments.

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## Notes to Financial Statements

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(Dollars in thousands)

The weighted average quality rating of the debt securities portfolio, excluding pooled investments, investments explicitly backed by the U.S. government and other nonrated investments was A- at June 30, 2015 and BBB+ at June 30, 2014. The following tables present the PRIT Fund's fixed-income securities credit ratings at June 30:

Investment	Total fair value	2015					
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Not rated
Asset-backed securities	\$ 154,740	69,846	76,967	779	6,905	243	—
Commercial mortgage-backed securities	235,583	64,170	57,091	52,448	37,610	23,050	1,214
Commercial paper and CDs	51,922	—	3,097	48,825	—	—	—
Corporate bonds and other credits	4,018,855	127,408	1,271,634	1,318,177	889,931	141,220	270,485
U.S. government agencies	55,097	—	55,097	—	—	—	—
U.S. government mortgage-backed securities	988,164	105	636,993	—	—	—	351,066
Global inflation linked bonds	378,121	110,287	172,755	95,079	—	—	—
Municipal bonds	40,134	593	34,475	1,948	3,118	—	—
Pooled money market fund	1,733,529	—	—	—	—	—	1,733,529
Other pooled funds	3,049,796	—	—	—	—	—	3,049,796
Total credit risk, fixed income, and short-term investments	10,705,941	372,409	2,308,109	1,517,256	937,564	164,513	5,406,090
Fixed income investments explicitly backed by the U.S. government	5,416,865	—	—	—	—	—	—
Total fixed income and short-term investments	\$ 16,122,806	—	—	—	—	—	—
Securities lending collateral investments:							
U.S. government agencies	\$ 209,180	—	209,180	—	—	—	—
Pooled money market fund	147,978	—	—	—	—	—	147,978
Repurchase agreements	200,000	—	—	200,000	—	—	—
Total securities lending collateral investments	\$ 557,158	—	209,180	200,000	—	—	147,978

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

Investment	Total fair value	2014					
		Investment grade			Noninvestment grade		
		AAA	AA+ to A-	BBB+ to BBB-	BB+ to B-	CCC+ to D	Not rated
Asset-backed securities	\$ 238,794	96,734	125,689	989	6,714	8,373	295
Commercial mortgage-backed securities	395,208	158,394	70,098	91,866	46,563	26,879	1,408
Commercial paper and CDs	48,875	—	13,694	2,286	—	—	32,895
Corporate bonds and other credits	5,124,760	239,913	1,196,204	1,670,820	698,436	209,665	1,109,722
U.S. government agencies	93,468	—	93,364	—	—	—	104
U.S. government mortgage-backed securities	974,362	—	817,444	—	—	—	156,918
Global inflation linked bonds	376,534	191,512	152,644	32,378	—	—	—
Municipal bonds	54,426	1,673	47,652	1,921	3,180	—	—
Pooled money market fund	1,152,040	—	—	—	—	—	1,152,040
Other pooled funds	2,953,406	—	—	—	—	—	2,953,406
Total credit risk, fixed income, and short-term investments	11,411,873	688,226	2,516,789	1,800,260	754,893	244,917	5,406,788
Fixed income investments explicitly backed by the U.S. government	4,683,111						
Total fixed income and short-term investments	\$ 16,094,984						

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(d) Foreign Currency Risk**

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of investments. Although the PRIM Board has no overall policy regarding foreign currency risk, the PRIM Board does manage the PRIT Fund's exposure to foreign currencies by establishing investment guidelines with each of its international managers. These guidelines set maximum investment balances for any currency and/or country holdings must be within a certain percentage of predefined benchmarks. In addition, the PRIM Board's investment managers may actively manage the PRIT Fund's exposure to foreign currencies through the use of forward foreign currency contracts. The following tables present the PRIT Fund's foreign currency exposures at June 30 (stated in U.S. dollars):

	2015				
	Cash and short-term investments	Equity	Fixed income	Private equity investments	Timber investments
Australian Dollar	\$ 4,699	452,827	12,549	—	172,588
Brazilian Real	918	108,213	197,872	—	—
British Pound	29,184	2,276,111	362,371	91,237	—
Canadian Dollar	23,085	462,151	31,505	18,364	—
Danish Krone	351	303,635	3,947	—	—
Euro	9,530	2,340,962	293,225	1,188,043	—
Hong Kong Dollar	9,336	1,077,867	—	—	—
Japanese Yen	116,886	2,240,071	47,659	—	—
Mexican Peso	13,091	103,000	129,819	—	—
New Taiwan Dollar	16,188	449,513	—	—	—
S. African Comm Rand	1,729	286,470	91,292	—	—
South Korean Won	2,614	514,806	27,665	—	—
Swedish Krona	808	366,189	16,956	—	—
Swiss Franc	11,318	789,138	—	—	—
Other foreign currencies	13,614	1,002,358	681,368	—	—
Total securities subject to foreign currency risk	253,351	12,773,311	1,896,228	1,297,644	172,588
International investments denominated in U.S. dollars	—	1,516,018	1,256,121	—	—
Total international investments and cash deposits	\$ 253,351	14,289,329	3,152,349	1,297,644	172,588
					19,165,261

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

	2014					
	Cash and short-term investments	Equity	Fixed income	Private equity investments	Timber investments	Total
Australian Dollar	\$ 5,629	567,019	134,282	—	172,373	879,303
Brazilian Real	3,662	236,552	295,874	—	—	536,088
British Pound	37,611	2,180,933	340,590	112,710	—	2,671,844
Canadian Dollar	11,437	532,480	37,880	15,192	—	596,989
Danish Krone	64	326,814	2,757	—	—	329,635
Euro	58,882	2,457,268	428,037	1,327,484	—	4,271,671
Hong Kong Dollar	6,216	971,845	—	—	—	978,061
Indian Rupee	3,783	234,396	2,830	—	—	241,009
Indonesian Rupiah	700	104,435	96,780	—	—	201,915
Japanese Yen	42,637	1,963,600	38,037	—	—	2,044,274
Malaysian Ringgit	601	106,236	119,357	—	—	226,194
Mexican Peso	1,223	145,564	122,637	—	—	269,424
New Taiwan Dollar	2,198	432,813	—	—	—	435,011
New Turkish Lira	824	113,709	107,661	—	—	222,194
S. African Comm Rand	1,133	280,808	107,698	—	—	389,639
South Korean Won	1,857	661,188	20,660	—	—	683,705
Swedish Krona	3,239	380,903	19,668	—	—	403,810
Swiss Franc	172	807,726	—	—	—	807,898
Other foreign currencies	9,563	649,630	422,700	—	—	1,081,893
 Total securities subject to foreign currency risk	 191,431	 13,153,919	 2,297,448	 1,455,386	 172,373	 17,270,557
 International investments denominated in U.S. dollars	 —	 1,560,280	 1,307,091	 —	 —	 2,867,371
 Total international investments and cash deposits	 <u>\$ 191,431</u>	 <u>14,714,199</u>	 <u>3,604,539</u>	 <u>1,455,386</u>	 <u>172,373</u>	 <u>20,137,928</u>

**(e) Concentration of Credit Risk**

The PRIM Board manages the PRIT Fund's exposure to concentration of credit risk by establishing guidelines with each investment manager that limit the percentage of investment in any single issue or issuer. The PRIT Fund has no investments, at fair value, that exceed 5% of the PRIT Fund's total investments as of June 30, 2015 and 2014.

**(f) Financial Instruments with Off-Balance-Sheet Risk**

In the normal course of business, the PRIT Fund enters into financial instrument transactions with off-balance-sheet risk. These financial instruments involve varying degrees and type of risks,

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## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

including credit and market risks, which may be in excess of the amounts recognized in the Statements of Pooled Net Position. Futures and foreign currency exchange contracts represent commitments to purchase or sell foreign currencies at a future date and at a specified price. The PRIT Fund could be exposed to risks if the counterparties to the contracts are unable to meet the terms of their contracts or if the value of the foreign currency changes unfavorably.

**(5) Securities Lending Program**

In October 2014, the PRIM Board hired a third-party securities lending agent to launch a securities lending program on January 2, 2015. The program loans domestic and international equity, REIT, and fixed income securities for collateral with a simultaneous agreement to return the collateral for the same securities in the future. Securities on loan are secured with collateral ranging from 102% to 105% determined by the type of securities lent. Securities on loan are valued daily to maintain the collateral requirement and, where applicable, additional collateral is delivered. At June 30, 2015, PRIT has no credit risk exposure to borrowers because the borrowers provided collateralization greater than 100% of the fair value of the securities on loan. PRIT cannot pledge or sell the collateral securities unless the lending agent defaults. The lending agent is required to indemnify PRIT in the event that it fails to return the securities on loan (and if the collateral is inadequate to replace the securities on loan) or if the lending agent fails to perform its obligations as stipulated in the agreement. There was no loss during the year ended June 30, 2015 resulting from default by the lending agent.

Securities loans are terminable on demand therefore maturities of the securities loans do not generally match the maturities of investments made with cash collateral. Investments made with cash collateral are primarily in short-term investments with maximum maturity of three months from the date of purchase.

Securities on loan are included in investments at fair value in the accompanying statements of pooled net position. As of June 30, 2015, the fair value of securities on loan was \$534,843 and the associated cash collateral was \$557,135. The cash collateral received is reported as securities lending obligations in the accompanying statements of pooled net position. There was no security collateral or noncash collateral at June 30, 2015. The fair value of reinvested cash collateral was \$557,158 at June 30, 2015 and is reported as securities lending collateral in the accompanying statements of pooled net position. There were no securities on loan in 2014.

**(6) Real Estate – Investment in the LLC**

On October 19, 2001, the LLC was formed and was governed by an operating agreement entered into by the PRIM Board, as trustee of the PRIT Fund, as the sole member. The principal purpose of the LLC is to conduct the investment activities of the real estate program in a manner consistent with the PRIT Fund Declaration of Trust and any business or activities incidental to or in support of such investment activities.

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## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

According to the operating agreement, as of any valuation date, the net assets of the LLC shall be the fair value of investments, less the amount of debt and accrued expenses. The unit net asset value of the LLC shall be the net asset value of the LLC divided by the number of units outstanding on such date. The LLC holds core and value real estate assets consisting of real estate properties, real estate private equity investments, and REIT securities.

**(7) Real Estate Debt*****(a) Notes Payable***

The LLC's notes payable obligations consisted of the following as of June 30:

	<b>Face value</b>	
	<b>2015</b>	<b>2014</b>
Senior unsecured term loan	\$ 500,000	500,000
Senior unsecured notes	500,000	500,000
<b>Total</b>	<b>\$ 1,000,000</b>	<b>1,000,000</b>

Scheduled long-term maturities of existing indebtedness at June 30, 2015 in each of the next five years and in the aggregate thereafter are as follows:

	<b>Amount</b>
<b>Year ending June 30:</b>	
2016	\$ —
2017	—
2018	500,000
2019	—
2020	175,000
2021–2025	325,000
	<b>\$ 1,000,000</b>

***(i) Senior Unsecured Term Loan***

On February 12, 2013, the LLC issued a Senior Unsecured Term Loan in the aggregate principal amount of \$500,000, maturing February 12, 2018. Interest is payable monthly based on LIBOR plus an applicable rate based upon the range into which the Total

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

Leverage Ratio falls as outlined in the Term Loan agreement. As of June 30, 2015 and 2014, the applicable rate is 1.15%.

**(ii) Senior Unsecured Notes**

On February 14, 2013, the LLC issued 3.25% Series A Senior Notes in the aggregate principal amount of \$175,000 maturing February 14, 2020; 3.85% Series B Senior Notes in the aggregate principal amount of \$175,000 maturing February 14, 2023; 4.00% Series C Senior Notes in the aggregate principal amount of \$150,000 maturing February 14, 2025. Interest on the notes is payable semi-annually.

Both the Senior Unsecured Term Loan and Senior Unsecured Notes contain certain financial covenants as outlined in the respective agreements. The LLC was in compliance with such covenants at June 30, 2015 and 2014.

**(b) Mortgage Loans Payable**

The LLC had 21 and 19 property-level mortgage loans payable as of June 30, 2015 and 2014, respectively. The mortgages have a weighted average interest rate of 3.86% and 3.76% and a weighted average maturity of 2.9 and 3.5 years at June 30, 2015 and 2014, respectively. The following table presents the face value of mortgage loans payable at June 30:

	<b>2015</b>	<b>2014</b>
Mortgage loans payable	\$ 511,769	\$ 548,854
Total	<hr/> \$ 511,769	<hr/> \$ 548,854

**(8) Derivative Investments**

The PRIT Fund regularly trades financial instruments with off-balance-sheet risk in the normal course of its investing activities to assist in managing exposure to market risks. These financial instruments include foreign currency exchange contracts, futures contracts, and swap contracts.

**(a) Foreign Currency Exchange Contracts**

A foreign currency exchange contract is an agreement between two parties to buy or sell a fixed quantity of currency at a set price on a future date. The PRIT Fund may enter into foreign currency exchange contracts to hedge its exposure to the effect of changes in foreign currency exchange rates upon its non-U.S. dollar-denominated investments. The fair value of such contracts will fluctuate with

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## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

changes in currency exchange rates. The contracts are valued daily, and the changes in fair value are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the cost of the contract at the time it was opened and the value at the time it was closed.

Foreign currency exchange contracts open at June 30 (in U.S. dollars) were as follows:

			2015			
	Fair value	Aggregate face value	Delivery date(s)	Unrealized gains	Unrealized losses	
<b>Foreign currency exchange contracts purchased:</b>						
Australian Dollar	\$ 34,988	34,852	7/2/15–8/17/15	\$ —	(136)	
Brazilian Real	167,092	167,462	7/1/15–10/4/16	370	—	
British Pound	749,982	740,541	7/2/15–8/5/15	—	(9,441)	
Canadian Dollar	51,671	52,682	7/2/15–7/21/15	1,011	—	
Chinese Yuan Renminbi	49,068	48,222	7/23/15–9/16/15	—	(846)	
Euro	603,573	601,815	7/2/15–8/18/15	—	(1,758)	
Japanese Yen	279,827	277,681	7/2/15–9/24/15	—	(2,146)	
Mexican New Peso	159,721	163,325	7/7/15–9/30/15	3,604	—	
New Turkish Lira	80,305	78,889	7/15/15–9/16/15	—	(1,416)	
Polish Zloty	36,427	36,939	7/2/15–9/16/15	512	—	
Singapore Dollar	57,915	57,712	7/2/15–9/16/15	—	(203)	
South African Comm Rand	48,899	48,356	7/3/15–9/16/15	—	(543)	
South Korean Won	38,164	38,225	7/1/15–9/16/15	61	—	
Other foreign currencies	224,170	225,609	7/1/15–12/4/15	2,683	(1,246)	
<b>Foreign currency exchange contracts sold:</b>						
Brazilian Real	144,387	143,624	7/2/15–9/16/15	763	—	
British Pound	385,343	386,077	7/1/15–8/5/15	—	(734)	
Canadian Dollar	34,009	34,345	7/3/15–7/22/15	—	(336)	
Chilean Peso	42,621	43,701	7/27/15–9/16/15	—	(1,080)	
Chinese Yuan Renminbi	54,564	53,939	8/13/15–9/16/15	625	—	
Euro	348,545	350,536	7/1/15–8/18/15	—	(1,991)	
Indian Rupee	37,051	36,763	7/1/15–9/16/15	288	—	
Japanese Yen	171,258	169,829	7/1/15–9/15/15	1,429	—	
Malaysian Ringgit	34,848	35,210	7/2/15–9/17/15	—	(362)	
Mexican New Peso	61,529	62,623	7/1/15–9/30/15	—	(1,094)	
New Turkish Lira	91,317	90,507	7/29/15–9/16/15	810	—	
Polish Zloty	66,252	67,074	7/2/15–9/16/15	—	(822)	
South African Comm Rand	50,825	49,936	7/6/15–9/16/15	889	—	
Other foreign currencies	241,876	243,137	7/1/15–12/16/15	395	(1,656)	
Total				\$ 13,440	(25,810)	

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

				2014		
	Fair value	Aggregate face value	Delivery date(s)	Unrealized gains	Unrealized losses	
<b>Foreign currency exchange contracts purchased:</b>						
Australian Dollar	\$ 278,708	277,562	7/1/14–9/12/14	\$ —	(1,146)	
Brazilian Real	131,237	129,567	7/1/14–5/5/15	—	(1,670)	
British Pound	351,167	349,512	7/1/14–9/11/14	—	(1,655)	
Canadian Dollar	41,839	40,617	7/3/14–9/18/14	—	(1,222)	
Colombian Peso	26,593	25,887	7/7/14–8/29/14	—	(706)	
Euro	521,140	518,405	7/1/14–9/17/14	—	(2,735)	
Hungarian Forint	27,627	27,807	7/2/14–2/18/15	180	—	
Japanese Yen	82,648	82,234	7/1/14–9/12/14	—	(414)	
New Turkish Lira	25,522	25,367	7/1/14–9/17/14	—	(155)	
Russian Rubel	56,204	53,842	7/2/14–10/31/14	—	(2,362)	
South African Comm Rand	35,256	35,332	7/1/14–9/17/14	76	—	
Singapore Dollar	37,933	37,767	7/1/14–9/17/14	—	(166)	
Other foreign currencies	220,039	219,048	7/1/14–9/8/15	941	(1,932)	
<b>Foreign currency exchange contracts sold:</b>						
Australian Dollar	120,718	120,557	7/1/14–9/12/14	161	—	
Brazilian Real	93,305	92,580	7/1/14–8/4/14	725	—	
Chinese Yuan Renminbi	42,747	42,756	7/3/14–9/8/15	—	(9)	
Colombian Peso	40,604	39,165	7/1/14–10/15/14	1,439	—	
Euro	94,912	94,474	7/1/14–2/18/15	438	—	
Indian Rupee	31,973	31,702	7/2/14–9/17/14	271	—	
Malaysian Ringgit	28,490	28,155	7/4/14–8/25/14	335	—	
Mexican New Peso	46,153	46,051	7/1/14–10/22/14	102	—	
New Turkish Lira	31,998	32,024	8/5/14–9/17/14	—	(26)	
Peruvian Nuevo Sol	26,619	26,645	7/16/14–8/4/14	—	(26)	
Polish Zloty	40,545	40,786	8/11/14–9/17/14	—	(241)	
Russian Rubel	48,363	47,327	7/2/14–10/15/14	1,036	—	
Thailand Baht	25,645	25,635	7/16/14–9/17/14	10	—	
Other foreign currencies	162,678	161,867	7/1/14–11/19/14	1,429	(619)	
Total				\$ 7,143	(15,084)	

For the years ended June 30, 2015 and 2014, the change in net unrealized appreciation (depreciation) on foreign currency exchange contracts was \$(4,429) and \$(15,476), respectively.

**(b) Futures Contracts**

The PRIT Fund enters into financial and commodity futures on various exchanges. A futures contract is an agreement between two parties to buy or sell units of a particular index, security, or commodity

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

at a set price on a future date. Upon entering into financial and commodity futures contracts, the PRIT Fund is required to pledge to the broker an amount of cash or securities equal to a certain percentage of the contract amount (initial margin deposit). Pursuant to the contract, the PRIT Fund agrees to receive from, or pay to, the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as “variation margin” and are recorded by the PRIT Fund as unrealized gains or losses. When the contract is closed, the PRIT Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed. The potential risk to the PRIT Fund is that the change in value of futures contracts primarily corresponds with the value of underlying instruments, which may not correspond to the change in value of the hedged instruments. The PRIT Fund is also subject to credit risk should its clearing brokers be unable to meet their obligations to the PRIT Fund.

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(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

Futures contracts held at June 30 were as follows:

Description	Number of contracts	Expiration date	Gross notional amount	Fair value of notional amount	Unrealized appreciation (depreciation)
Short cash and cash equivalents:					
90-Day Eurodollar	(3,243)	12/15-12/17	\$ (792,354)	(796,126)	(3,772)
Long cash and cash equivalents:					
90-Day Eurodollar	3,895	7/15-3/16	968,943	970,133	1,190
Other long cash and cash equivalents	1,642	9/15	173,229	173,642	413
Long fixed income:					
US 5-Yr Treasury Notes	818	9/15	97,279	97,553	274
US 10-Yr Treasury Notes	2,580	9/15	327,007	325,523	(1,484)
Ultra US Treasury Bond	1,490	9/15	231,003	229,553	(1,450)
Other long fixed income	4,041	8/15-9/15	61,747	64,493	2,746
Short fixed income:					
TSE 10-Yr Japanese Government Bond	(61)	9/15	(72,048)	(73,266)	(1,218)
US 10-Yr Treasury Notes	(386)	9/15	(48,770)	(48,702)	68
Other short fixed income	(631)	9/15	(107,490)	(105,804)	1,686
Short equity and commodities:					
Other short equity and commodities	(1,495)	7/15-9/15	(21,461)	(21,514)	(53)
Long equity and commodities:					
S&P 500 E-mini Index	6,319	9/15	661,075	649,088	(11,987)
S&P 500 Index	1,175	9/15	614,290	603,480	(10,810)
MINI MSCI Emerging Markets Index	4,264	9/15	205,358	204,544	(814)
MSCI EAFE Index	1,122	9/15	104,814	102,887	(1,927)
Dow Jones EURO STOXX 50 Index	1,477	9/15	58,338	56,545	(1,793)
Other long equity and commodities	3,378	7/15-9/15	353,241	348,252	(4,989)
Total futures exposure			\$ 2,814,201	2,780,281	(33,920)

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

Description	Number of contracts	Expiration date	2014		
			Gross notional amount	Fair value of notional amount	Unrealized appreciation (depreciation)
Short cash and cash equivalents:					
90-Day Eurodollar	(957)	6/15	\$ (238,093)	(238,018)	75
Long cash and cash equivalents:					
90-Day Eurodollar	5,221	9/15–9/16	1,289,077	1,291,240	2,163
Other long cash and cash equivalents	1,295	9/14–3/17	191,732	194,193	2,461
Long fixed income:					
US 5-Yr Treasury Notes	2,738	9/14	326,983	327,084	101
US 10-Yr Treasury Notes	2,023	9/14	253,038	253,223	185
Ultra US Treasury Bond	1,431	9/14	211,165	214,561	3,396
Other long fixed income	1,543	8/14–9/14	33,425	34,883	1,458
Short fixed income:					
Australian 10-Yr Treasury Bond	(686)	9/14	(76,155)	(78,004)	(1,849)
US 2-Yr Treasury Notes	(275)	9/14	(60,380)	(60,388)	(8)
US 10-Yr Treasury Notes	(301)	9/14	(37,520)	(37,677)	(157)
US Treasury Bond	(443)	9/14	(60,231)	(60,774)	(543)
Other short fixed income	(402)	9/14	(103,653)	(105,294)	(1,641)
Long equity and commodities:					
S&P 500 E-mini Index	4,612	9/14	445,115	450,223	5,108
S&P 500 Index	1,175	9/14	566,295	573,518	7,223
MINI MSCI Emerging Markets Index	1,665	9/14	86,675	86,638	(37)
Dow Jones EURO STOXX 50 Index	1,182	9/14	52,622	52,305	(317)
Other long equity and commodities	2,897	7/14–9/14	332,153	337,850	5,697
Total futures exposure			\$ 3,212,248	3,235,563	23,315

For the years ended June 30, 2015 and 2014, the change in net unrealized appreciation (depreciation) on futures contracts was \$(57,235) and \$44,490, respectively.

**(c) Swaps**

The PRIT Fund enters into swap agreements to gain exposure to certain markets and actively hedge other exposures to market and credit risks. The PRIT Fund utilizes interest rate, credit default, inflation, and total return swaps within the portfolio. The PRIT Fund's OTC swap agreements are

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

recorded at fair value as estimated by the PRIM Board. These estimated fair values are determined in good faith by using information from the PRIT Fund's investment managers, including methods and assumptions considering market conditions and risks existing at the date of the statements of pooled net position. Such methods and assumptions incorporate standard valuation conventions and techniques, such as discounted cash flow analysis and option pricing models. All methods utilized to estimate fair values result only in general approximations of value, and such values may or may not actually be realized.

Open swap contracts at June 30 were as follows:

Description	2015		Maturity date	Gross notional amount	Net unrealized appreciation (depreciation)
	PRIT pays/receives interest rate	PRIT pays/receives index/protection			
Interest rate swaps	0.12%–13.92%	Various*	4/16–12/45	\$ 1,335,368	2,669
Inflation swaps	1.85%–3.52%	Inflation protection	3/16–12/44	61,214	(599)
Credit default swaps	0.11%–3.36%	Credit default protection	9/15–5/46	186,582	(5,677)
Total swaps				\$ 1,583,164	(3,607)

\* PRIT pays/receives counterparty based on 1-Month LIBOR, 3-Month USD LIBOR, 3-Month CNY rate, 3-Month HKD HIBOR rate, 3-Month SAFEX-JIBAR rate, 6-Month Euro LIBOR, 6-Month GBP LIBOR, 6-Month JPY LIBOR, 6-Month SGD rate, 6-Month THBFIIX rate, Brazil CDI rate, China seven-day repo rate, Mexican TIIE rate.

Description	2014		Maturity date	Gross notional amount	Net unrealized appreciation (depreciation)
	PRIT pays/receives interest rate	PRIT pays/receives index/protection			
Interest rate swaps	0.4%–12.56%	Various*	10/14–3/44	\$ 1,521,506	8,078
Inflation swaps	1.85%–2.07%	Inflation protection	2/16–3/18	116,010	92
Credit default swaps	0.18%–5.00%	Credit default protection	9/14–7/45	289,001	2,913
Total swaps				\$ 1,926,517	11,083

\* PRIT pays/receives counterparty based on 3-Month AUD BBSW, 6-Month AUD-BBR-BBSW, 3-Month LIBOR, 3-Month Euribor, Fed Funds rate, Brazil CDI rate, Mexican TIIE rate, 6-Month THBFIIX rate, and 3-Month KLIBOR.

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

For the years ended June 30, 2015 and 2014, the change in net unrealized appreciation (depreciation) on swap contracts was \$(14,690) and \$(8,929), respectively.

The PRIT Fund's exposures in the event of nonperformance by counterparties at June 30 were as follows:

Counterparty	Credit rating	2015					
		Interest rate swaps		Credit default swaps		Inflation swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
Bank of America NA	A	\$ 966	(2)	33,385	(2,259)	—	—
Barclays Bank PLC	A-	47,978	160	31,513	(590)	54,860	(279)
CME Group Inc.	AA-	212,920	636	—	—	—	—
Citibank NA	A	21,807	52	10,213	(339)	—	—
Deutsche Bank AG	BBB+	6,899	68	26,300	(153)	—	—
LCH.Clearnet Ltd	A+	386,810	1,541	—	—	—	—
UBS AG	BBB+	23,797	(361)	21,071	(3)	—	—
U.S. Bank National Association	AA-	500,000	303	—	—	—	—
All others	Various	134,191	272	64,100	(2,333)	6,354	(320)
		\$ 1,335,368	2,669	186,582	(5,677)	61,214	(599)
2014							
Counterparty	Credit rating	Interest rate swaps		Credit default swaps		Inflation swaps	
		Gross notional	Fair value	Gross notional	Fair value	Gross notional	Fair value
		\$ 23,150	291	12,500	(64)	116,010	92
Barclays Bank PLC	A	\$ 784,699	4,955	—	—	—	—
CME Group Inc.	AA-	181,717	107	29,361	14	—	—
Citibank NA	A	—	—	35,700	255	—	—
Deutsche Bank AG	A	—	—	78,294	2,653	—	—
Intercontinental Exchange Inc.	A-	22,617	(19)	9,900	45	—	—
JPMorgan Chase Bank NA	A+	4,582	42	27,346	152	—	—
UBS AG	A	500,000	2,603	—	—	—	—
U.S. Bank National Association	AA-	4,741	99	95,900	(142)	—	—
All others	Various	\$ 1,521,506	8,078	289,001	2,913	116,010	92

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(9) Management Fees**

In accordance with the PRIM Board's Operating Trust Agreement, expenses incurred by the PRIM Board in managing the PRIT Fund are charged to the PRIT Fund in the form of management fees. These expenses consist of investment management fees, investment advisory fees, custodian fees and professional fees, as well as staff salaries and other administrative expenses of the PRIM Board.

**(a) Investment Management Fees**

Investment management fees are paid to discretionary managers pursuant to executed contracts. Total investment management fees were \$83,142 and \$69,564 for the years ended June 30, 2015 and 2014, respectively.

All domestic, international, and emerging market equity managers are paid a base fee calculated as a percentage of either current net assets under management or an agreed-upon funded amount, typically equal to the amount of original and subsequent funding. In certain cases, this is subject to periodic revision. Base fees are paid quarterly. In addition, some active (nonindexed) equity managers are eligible to receive a performance fee. Such fees are earned annually by those managers whose annualized three-year performance exceeds the contractual benchmark by a specified minimum amount.

Fixed income managers are generally paid a quarterly asset-based fee. Certain managers are eligible for a performance fee.

Fees for private equity investments are typically a percentage of committed capital with the fee percentage decreasing over time. In addition, the general partners (investment managers) of private equity limited partnerships are entitled to a performance fee based on the net gains on realized partnership investments.

The LLC's investment management fees generally consist of a base fee and a performance fee. Base fees are calculated and paid monthly. Performance fees are paid every two years to managers who out-perform their respective hurdle rates.

Timberland investment management fees consist of a base fee and a performance fee component and are calculated and paid similar to the LLC's investment management fees; however, performance fees are paid every three years.

Hedge fund-of-funds investment managers are paid base fees, which are calculated and paid quarterly.

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

Fees for direct hedge fund investments generally consist of a base fee and a performance fee based on return.

The majority of investment management fees for private equity and distressed debt investments are charged by the general partners to the investment partnerships and not to the limited partner investors directly. All investment management fees for hedge funds and commingled account investments are charged to the respective investments. Base investment management fees for investments in real estate properties and timber are charged against the respective investments. Therefore, the fair values of these investments are reported net of "indirect" management fees.

**(b) *Investment Advisory Fees***

NEPC, LLC, Callan Associates, Arden Asset Management, LLC, Hamilton Lane, and The Townsend Group served as the PRIM Board's principal investment advisors in fiscal year 2015. NEPC, LLC served as the asset allocation advisor, Callan Associates served as the public markets advisor, Arden Asset Management, LLC provided hedge fund advisory services, Hamilton Lane served as the private equity advisor, and The Townsend Group provided real estate and timberland advisory services. These investment advisors, among others, provided the PRIM Board with comprehensive investment advisory services, including recommendations on asset allocation, selection of investment managers, and the monitoring of performance of the PRIT Fund and its individual investment managers.

For the years ended June 30, 2015 and 2014, as compensation for their services, investment advisors earned fees aggregating \$4,161 and \$4,493, respectively, and are included in management fees in the accompanying statements of changes in pooled net position.

**(c) *Custodian Fees***

BNY Mellon is the investment custodian and record keeper for the PRIT Fund. BNY Mellon records all daily transactions, including investment purchases and sales, investment income, expenses, and all participant activity for the PRIT Fund. BNY Mellon also provides portfolio performance analysis each month for the PRIT Fund.

In December 2013, BNY Mellon agreed to reimburse the PRIM Board \$15,450 in the form of a discount in custodian fees over a nine-year period to settle alleged foreign currency transaction overcharges from January 2000 to May 2011. In addition, BNY Mellon reimbursed the PRIM Board \$100 for legal fees incurred. For the years ended June 30, 2015 and 2014, custodian fees were \$674 and \$690, respectively, and are included in management fees in the accompanying statements of changes in pooled net position.

(Continued)

## Notes to Financial Statements

June 30, 2015 and 2014

(Dollars in thousands)

**(d) Other Administrative Fees**

For the years ended June 30, 2015 and 2014, other administrative expenses of the PRIM Board, including employee compensation, professional fees and occupancy costs, charged to the PRIT Fund totaled \$10,189 and \$9,417, respectively, and are included in management fees in the accompanying statements of changes in pooled net position.

**(10) Commitments**

As of June 30, 2015, the PRIT Fund had outstanding unfunded commitments to invest approximately \$5.2 billion in private equity, venture capital, distressed debt, hedge fund, and real estate investments.

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## Schedule of Pooled Net Position – Capital Fund and Cash Fund

June 30, 2015

(Dollars in thousands)

	<u>Capital Fund</u>	<u>Cash Fund</u>	<u>Total</u>
<b>Assets:</b>			
Investments, at fair value:			
Short-term	\$ 1,664,130	69,399	1,733,529
Fixed income	14,389,277	—	14,389,277
Equity	24,642,955	—	24,642,955
Real estate	7,678,800	—	7,678,800
Timberland	1,664,581	—	1,664,581
Private equity	6,980,423	—	6,980,423
Hedge funds	5,351,631	—	5,351,631
Other	94,909	—	94,909
Total investments	<u>62,466,706</u>	<u>69,399</u>	<u>62,536,105</u>
Cash	282,624	—	282,624
Securities lending collateral	557,158	—	557,158
Interest and dividends receivable	139,650	29	139,679
Receivable for investments sold and other assets	1,281,902	—	1,281,902
Securities sold on a when-issued basis	223,685	—	223,685
Unrealized gains on foreign currency exchange contracts	13,440	—	13,440
Total assets	<u>64,965,165</u>	<u>69,428</u>	<u>65,034,593</u>
<b>Liabilities:</b>			
Payable for investments purchased and other liabilities	1,007,366	—	1,007,366
Real estate debt	1,511,769	—	1,511,769
Securities lending obligations	557,135	—	557,135
Securities purchased on a when-issued basis	648,945	—	648,945
Unrealized losses on foreign currency exchange contracts	25,810	—	25,810
Management fees payable to PRIM	39,823	—	39,823
Total liabilities	<u>3,790,848</u>	<u>—</u>	<u>3,790,848</u>
Net position held in trust for pool participants	\$ <u>61,174,317</u>	<u>69,428</u>	<u>61,243,745</u>

See accompanying independent auditors' report.

## Schedule of Changes in Pooled Net Position – Capital Fund and Cash Fund

Year ended June 30, 2015

(Dollars in thousands)

	<b>Capital Fund</b>	<b>Cash Fund</b>	<b>Total</b>
<b>Additions:</b>			
Contributions:			
State employees	\$ —	580,527	580,527
State teachers	—	721,148	721,148
Other participants	—	877,252	877,252
Total contributions	—	2,178,927	2,178,927
Net investment income:			
From investment activities:			
Net realized income on investments and foreign currency transactions	2,552,747	—	2,552,747
Net change in unrealized depreciation on investments and foreign currency translations	(1,730,479)	—	(1,730,479)
Interest income	269,864	267	270,131
Dividend income	650,996	—	650,996
Real estate income	260,366	—	260,366
Timberland income	11,854	—	11,854
Private equity income	151,001	—	151,001
Management fees	2,166,349	267	2,166,616
Net income from investment activities	(98,166)	—	(98,166)
From securities lending activities:	2,068,183	267	2,068,450
Securities lending income	5,624	—	5,624
Securities lending expenses	(698)	—	(698)
Net income from securities lending activities	4,926	—	4,926
Total net investment income	2,073,109	267	2,073,376
Total additions	2,073,109	2,179,194	4,252,303
<b>Deductions:</b>			
Redemptions:			
State employees	—	1,266,799	1,266,799
State teachers	—	1,650,026	1,650,026
Other participants	—	768,507	768,507
Total deductions	—	3,685,332	3,685,332
Interfund transfers (out) in, net	(1,502,350)	1,502,350	—
Net increase (decrease) in pooled net position	570,759	(3,788)	566,971
Net position held in trust for pool participants:			
Balance, beginning of year	60,603,558	73,216	60,676,774
Balance, end of year	\$ 61,174,317	69,428	61,243,745

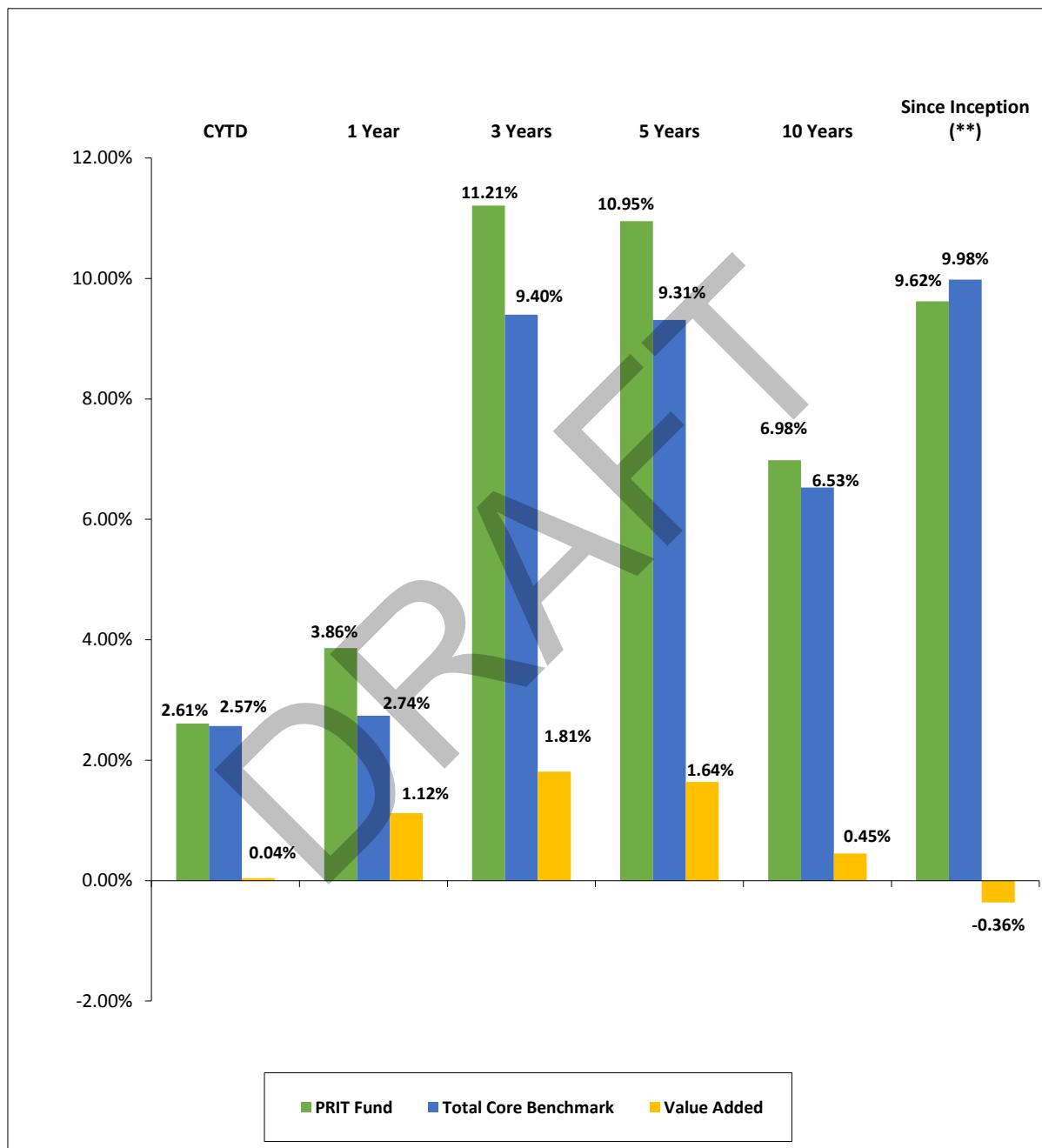
See accompanying independent auditors' report.

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*Investment Section*

## Total PRIT Fund Performance Summary (\*)

For the periods ended June 30, 2015



(\*) Gross of Fees. Total PRIT Fund includes the Core Fund and Cash Fund. Returns are annualized and calculated based on a time-weighted rate of return methodology.

(\*\*) Performance inception date of January 1, 1985

## Investment Strategy Overview

The PRIT Fund was formed in December 1983 with a mandate to accumulate assets through investment earnings to reduce the Commonwealth of Massachusetts' unfunded pension liability and, further on, to assist local participating retirement systems in meeting their future pension obligations. The PRIM Board is charged with the general oversight of the PRIT Fund. The PRIM Board seeks to maximize the return on investments within acceptable levels of risk by broadly diversifying its investment portfolio, capitalizing on economies of scale to achieve cost-effective operations, and gaining access to high quality, innovative investment management firms, all under the management of a professional staff and members of the PRIM Board. The PRIM Board's overall investment performance goal is to achieve an annual rate of return that exceeds the targeted actuarial rate of return used in determining the Commonwealth of Massachusetts' pension obligations (currently 7.75%). A summary of other investment objectives is provided in the Investment Policy Statement at the end of this section.

As of June 30, 2015, the PRIM Board employed thirty-two public markets investment managers, one hundred two private equity markets managers, thirteen real estate, natural resources, and timberland managers, one hedge fund-of-funds manager, twenty-two direct hedge fund managers, one portfolio completion strategies manager, and five external investment advisors. The PRIT Fund had approximately \$61.2 billion in assets under management at June 30, 2015. Each investment manager operates within guidelines that are established by the PRIM Board and are delineated in a detailed investment management agreement or partnership agreement.

The PRIT Fund's net investment portfolio fair values reported in this section and used as a basis for calculating investment returns differ from those shown in the Financial Section and the Financial Highlights in the Statistical Section of this report. The values used in this section are the appropriate industry standard basis for investment return calculations and are net of all investment receivables and payables. Unless otherwise noted, all return information provided is gross of fees. In addition, "PRIT Core" return information refers to returns for the PRIT Capital Fund. PRIT Core return information excludes the impact of the Cash Fund on the total PRIT Fund return.

## Asset Allocation and Diversification Discussion

The Investment Policy Statement adopted by the PRIM Board in September 1998 and subsequently updated in December 2014 states that over the long-term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. At reasonable intervals of not more than three to five years, the PRIM Board will complete a comprehensive review of its Asset Allocation Plan and its underlying assumptions, including: the Commonwealth's current and projected pension assets and liabilities; long-term capital markets rate of return assumptions; and the PRIM Board's risk tolerances. The PRIM Board shall examine the Asset Allocation Plan annually, and shall consider adjustments to the Plan as may be appropriate given the Plan's long-term nature and objectives. The PRIM Board's last comprehensive review of the PRIT Fund asset allocation was conducted during fiscal year 2014.

Asset Class	6/30/2015 Allocation % (3)	Long-Term Policy Target % (1)
Global Equity (*)	42.7	40.0
Core Fixed Income	13.7	13.0
Value-Added Fixed Income	8.3	10.0
Real Estate	10.0	10.0
Private Equity	11.3	10.0
Timber / Natural Resources	3.8	4.0
Hedge Funds	9.1	9.0
Portfolio Completion Strategies	0.2	4.0
Portable Alpha Wind Down (2)	0.1	0.0
Overlay (2)	0.9	0.0

(\*) Global Equity includes the PRIT Fund's investments in domestic, international, and emerging markets equities.

(1) Asset allocation approved February 11, 2015.

(2) These asset classes do not have target % because they are not components of the long-term policy target asset allocation.

(3) Totals may not add due to rounding.

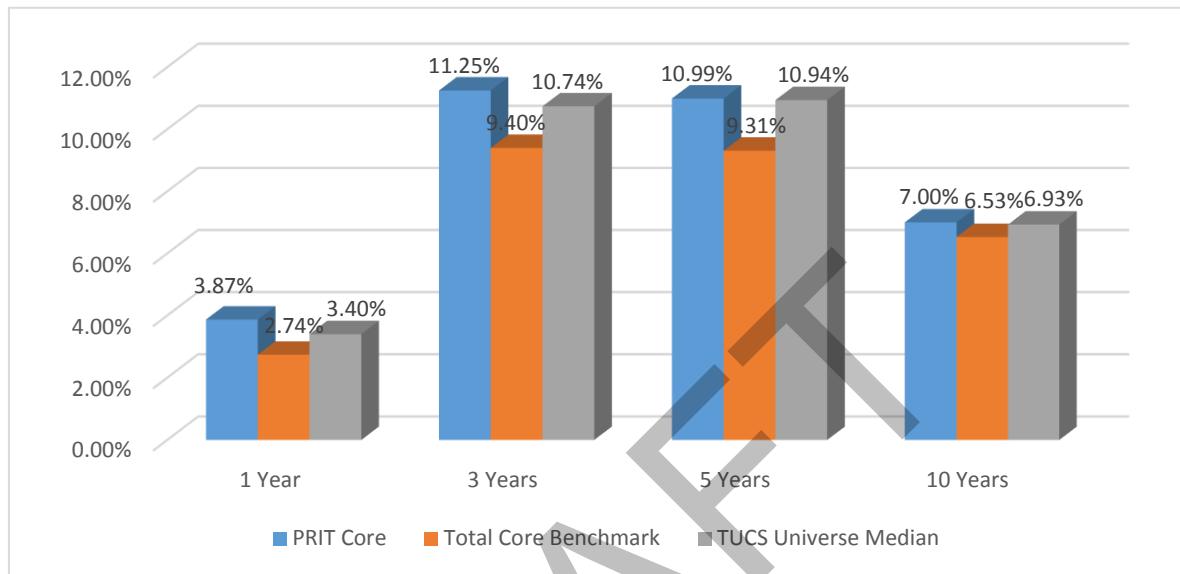
In addition to asset allocation, the PRIM Board seeks to diversify the PRIT Fund through a complementary diversification of investment styles within various asset classes. The PRIM Board requires detailed investment guidelines with each investment manager to ensure portfolios are managed with appropriate diversification and risk control.

### Income and Expense Allocation

Income earned and expenses incurred in each investment account are allocated to retirement systems based on each individual retirement system's share of ownership in each investment account. Expenses are classified in three categories for purposes of allocation to retirement systems: 1) investment management fees, 2) investment advisory fees, and 3) operational fees. Investment management fees are those directly associated with the investment management of a certain account. Investment advisory fees are fees that are either directly associated with an individual asset class, or, for general advisors, are allocated pro-rata based on net asset values of each asset class. Operational fees are custodian and other administrative expenses incurred by the PRIM Board in managing the PRIT Fund and are allocated pro-rata based on net asset values of each asset class.

## PRIT CORE PERFORMANCE: FISCAL YEAR 2015

*Returns are calculated based on a time-weighted rate of return methodology. PRIT Core Returns (gross of fees) and benchmarks for the periods ended June 30, 2015:*



In the fiscal year 2015, the PRIT Core Fund returned 3.87%, outperforming the Total Core benchmark return of 2.74% by 113 basis points. The PRIT Fund began fiscal year 2015 with a net asset value of \$60.7 billion and ended with \$61.2 billion. On a gross basis the fund increased \$567.0 million, which is the result of \$2.1 billion in net investment income along with \$1.5 billion in net redemptions from the State Employees, State Teachers' and Participant accounts.

The quarterly returns of the PRIT Core Fund in fiscal year 2015 were as follows:

- -0.83% for September 30, 2014 – versus a benchmark return of -1.09%.
- 2.08% for December 31, 2014 – versus a benchmark return of 1.24%.
- 2.69% for March 31, 2015 – versus a benchmark return of 2.92%.
- -0.07% for June 30, 2015 – versus a benchmark return of -0.34%.

The PRIT Fund seeks to outperform its three benchmarks in both up and down markets. In order of priority, these benchmarks are as follows: 1) beating the actuarial rate of return assumption of 7.75%; 2) exceeding the long-term Policy Benchmark, which measures how well the PRIT Fund has implemented its asset allocation; and 3) achieving top quartile rankings in the TUCS report, which measures the PRIT Fund's investment performance against its peers nationwide. Through June 30, 2015, the PRIT Core Fund returned 9.57% since inception, outperforming the actuarial rate of return of 7.75% by 182 basis points. According to the TUCS ranking, the PRIT Fund's performance ranked in the second quartile of all U.S. Public Pension Funds over \$1 billion in size for fiscal year 2015 and for the trailing 10-year period.

## Management Costs

Expenses incurred by the PRIM Board in managing the PRIT Fund are charged to the PRIT Fund. These expenses consist of investment management fees, advisory fees, custodian fees, professional fees, salaries and administrative expenses of the PRIM Board.

The PRIM Board tracks two types of fees: 1) direct fees and 2) indirect fees. Direct fees are fees the PRIM Board pays directly to vendors for services rendered. These fees include most investment management fees, advisory fees, custodian fees, and salaries and administrative expenses of the PRIM Board. Indirect fees are expenses typically incurred when investing in partnerships or other commingled investment vehicle structures, such as private equity funds, hedge funds, real estate, timberland, and other commingled funds. Indirect management fees incurred in these funds are charged to the respective investments. The fair value of these investments are reported net of indirect management fees.

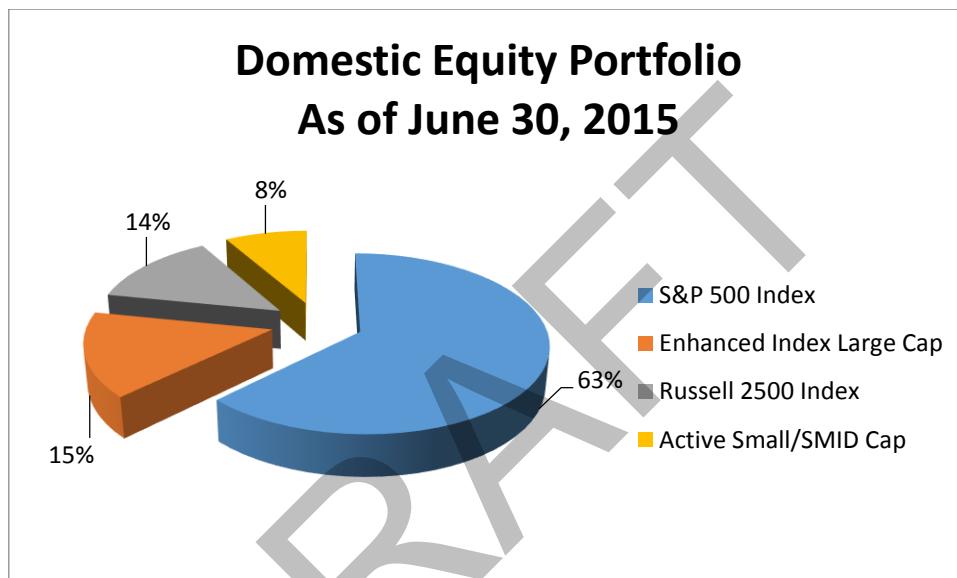
The PRIM Board's Investment managers operate with formal contracts. Outside Investment management fees accounted for approximately 84.4% of the PRIM Board's total direct expenses for fiscal 2015. The PRIM Board also contracts with a custodian and investment advisors. Fees to these providers were approximately 4.9% of the PRIM Board's total expense for fiscal year 2015.

Project SAVE which stands for "Strategic Analysis for Value Enhancement" was launched in 2013. The mission of this effort is to seek "value enhancement" for the PRIM Board, in terms of cost savings and return enhancements. The PRIM Board has successfully completed the first phase of Project SAVE, and since its launch, Project SAVE has realized over \$120 million in value enhancement initiatives. The PRIM Board continues to monitor the portfolio and processes for value enhancing opportunities and has begun research on the next phase of Project SAVE.

The total cost of managing the PRIT Fund for fiscal year 2015, *inclusive* of investment management (direct and indirect), advisory, custodial and overhead charges was 53 basis points of the average net asset value of the PRIT Fund compared to 55 basis points in fiscal year 2014. For information on expense ratios for each investment account, refer to the *Financial Highlights* and the *Financial Highlights Ratios* on pages 98-104 included in the Statistical Section of this report.

## Domestic Equity Portfolio

As of June 30, 2015, the Domestic Equity portfolio had approximately \$11.7 billion in net assets, which represented 19.2% of the PRIT Core Fund. Approximately 78% of the domestic equity portfolio is invested utilizing a large capitalization equity strategy (large cap) with the remaining 22% invested in small and middle capitalization equity strategies (small/smíd cap). In the view of the PRIM Board and its advisors, the overall domestic equity portfolio is highly diversified and balanced. The allocation between passively managed large cap investments, enhanced index large cap investments, passively managed small/smíd cap investments, and actively managed small/smíd cap investments is highlighted below.



During the fiscal year, the two enhanced index large capitalization managers outperformed their benchmarks. The S&P 500 Index fund, the Russell 2500 Index fund, and the five active small/smíd capitalization managers all underperformed their respective benchmarks. As of fiscal year end, the weighting of Domestic Equity was 45.0% of the Global Equity portfolio.

**Style Neutrality.** Because different styles (i.e. growth-oriented versus value oriented stocks) of investment management are favored in different economic and market environments, and because of the Board's long-term perspective, the Board seeks to maintain a style-neutral portfolio.

**Portfolio Risks.** Although historically long-term returns in equity investments have exceeded all other public market asset classes (i.e. fixed income and cash), as evidenced by the recent years, there is no guarantee that this trend will continue or that investment in the short-term or long-term will produce positive results. Prices may fluctuate based on changes in a company's financial condition and on overall market and economic conditions. Smaller companies are especially sensitive to these factors. There is a significant risk of loss of principal due to market and economic conditions.

**Portfolio Returns.** For the fiscal year, the portfolio produced a 6.75% return compared to 7.12% for the portfolio benchmark. The PRIT Fund's large cap managers returned 7.63% compared to the 7.42% return of the large cap

benchmark S&P 500 index. The PRIT Fund's small/smíd cap managers returned 3.31% compared to the 5.71% return of the small/smíd cap benchmark (70.5% Russell 2500/5.5% Russell 2500 Growth/6.5% Russell 2000 Growth/17.5% Russell 2000 Value at 6/30/2015).

On a three-, five-, and 10-year basis through June 30, 2015, The PRIT Fund's Domestic Equity portfolio has returned 17.64%, 17.41%, and 6.86%, respectively, compared to the benchmark, which returned 17.59%, 17.45%, and 7.74%, respectively.

The top ten holdings in the Domestic Equity portfolio at June 30, 2015 are illustrated below. A complete listing of holdings is available upon request.

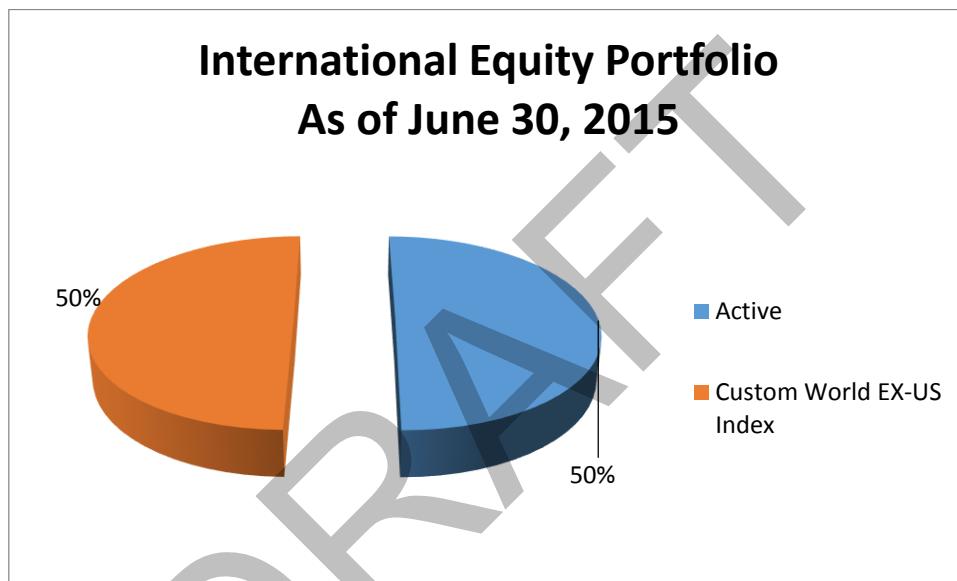
#	Issue Name	Fair Value (\$000s)	% of Account Fair Value
1	Apple Inc.	\$ 316,155	2.69%
2	Microsoft Corp.	153,672	1.31%
3	Exxon Mobil Corp.	151,002	1.29%
4	Johnson & Johnson	116,323	0.99%
5	Wells Fargo & Co.	114,560	0.98%
6	General Electric	111,288	0.95%
7	Berkshire Hathaway Inc.	106,826	0.91%
8	JPMorgan Chase & Co.	103,983	0.89%
9	Procter & Gamble	88,223	0.75%
10	Pfizer Inc	85,861	0.73%
TOTAL		\$ 1,347,893	11.49%

The PRIT Fund's Domestic Equity managers at June 30, 2015 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2015 (\$000s)
<i>State Street Global Advisors</i>	S&P 500 Index	\$ 7,367,985
<i>State Street Global Advisors</i>	Russell 2500 Index	1,589,947
<i>INTECH</i>	S&P 500 Enhanced Index	886,396
<i>PIMCO</i>	S&P 500 Enhanced Index	926,182
<i>Frontier Capital Management</i>	Small Cap Value	182,870
<i>Huber Capital</i>	Small Cap Value	258,487
<i>Riverbridge Partners</i>	SMID Cap Growth	167,014
<i>SouthernSun Asset Management</i>	SMID Cap Core	155,016
<i>Summit Creek Advisors</i>	Small Cap Growth	212,092
<i>Other portfolio net assets</i>		(636)
<b>Total Portfolio Fair Value</b>		<b>\$ 11,745,353</b>

## International Equity Portfolio

As of June 30, 2015, the International Equity portfolio had approximately \$10.3 billion in net assets, representing 16.9% of the PRIT Core Fund. The active international equity managers are benchmarked against the Custom MSCI EAFE Net Dividends index (Custom MSCI EAFE), whose name is derived from the geographical areas of inclusion – Europe, Australia and the Far East. The International Equity portfolio is allocated to one passively managed account (which comprises 50% of the portfolio) and four actively managed accounts (50% of the portfolio). The passive manager is benchmarked against the Custom World ex-U.S. Investable Market Index – Net dividends (Custom World ex-U.S. IMI). The PRIM Board maintains a target weighting of 50% passive and 50% active for the International Equity portfolio.



The primary strategy for this portfolio is investing in companies in developed markets, industrialized nations outside of the United States, including, but not limited to, Japan, Germany, the United Kingdom, France, Italy, Switzerland, Hong Kong, Canada, and Australia. As of fiscal year end, the weighting of International Equity was 39.6% of the Global Equity portfolio.

**Portfolio Risks.** Investing in developed markets outside of the United States carries additional risks as compared to U.S. domestic investments. The added risks are primarily associated with currency, higher trading and settlement cost, and less stringent investor protections and disclosure standards.

**Portfolio Returns.** For the fiscal year ending June 30, 2015, the International Equity portfolio returned -2.76% compared to the asset class benchmark return (50% Custom MSCI EAFE/50% Custom World ex-U.S. IMI at 6/30/2015) of -4.54%. All of the PRIT Core Fund's four active international equity managers outperformed the Custom MSCI EAFE index for the fiscal year. The passive manager outperformed the Custom World ex-U.S. IMI index for the fiscal year. Over the longer-term, PRIT's international equity managers continue to add value over the asset class benchmark. On a three-, five-, and 10-year basis through June 30, 2015, The PRIT Fund's international equity managers posted returns of 13.10%, 10.76%, and 6.22%, respectively, ahead of the benchmark, which returned 11.74%, 9.31%, and 5.18%, respectively, over the same periods.

The top ten holdings in the International Equity portfolio at June 30, 2015 are illustrated below. A complete listing of holdings is available upon request.

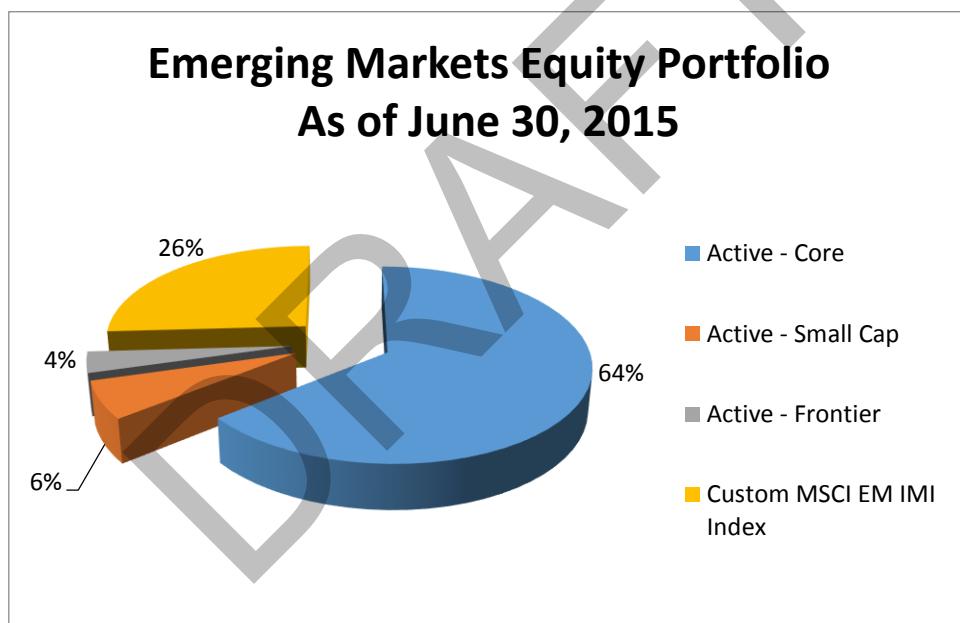
#	Issue Name	Fair Value (\$000s)	% of Account
			Fair Value
1	Nestle SA	\$ 139,167	1.35%
2	Roche Holding AG	137,094	1.33%
3	Novartis AG	118,781	1.15%
4	Novo Nordisk A/S	101,327	0.98%
5	Unilever PLC	93,184	0.90%
6	Toyota Motor Corp	86,849	0.84%
7	BP PLC	83,876	0.81%
8	MS&AD Insurance Group Holdings Inc	75,206	0.73%
9	Svenska Handelsbanken AB	71,114	0.69%
10	Sanofi	68,921	0.67%
<b>TOTAL</b>		<b>\$ 975,519</b>	<b>9.45%</b>

The PRIT Fund's International Equity managers at June 30, 2015 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2015 (\$000s)
<i>State Street Global Advisors</i>	Custom World ex-US IMI Index	\$ 5,154,161
<i>Marathon-London</i>	Custom MSCI EAFE	2,468,187
<i>Baillie Gifford</i>	Custom MSCI EAFE	1,815,041
<i>Mondrian Investment</i>	Custom MSCI EAFE	794,660
<i>FIS Group, Inc.</i>	Custom MSCI EAFE	108,145
<i>Other portfolio net assets</i>		1,113
<b>Total Portfolio Fair Value</b>		<b>\$ 10,341,307</b>

## Emerging Markets Portfolio

As of June 30, 2015, the Emerging Markets Equity portfolio had approximately \$4.0 billion in net assets, representing 6.6% of the PRIT Core Fund. The active emerging markets core equity managers are benchmarked against the Custom MSCI Emerging Markets Standard Index – Net Dividends (Custom MSCI Emerging Markets Standard). The active emerging markets small cap equity managers are benchmarked against the Custom MSCI Emerging Markets Small Cap Net Dividends Index (Custom MSCI Emerging Markets Small Cap) while the passive account is benchmarked against the Custom MSCI Emerging Markets Investable Market Index - Net Dividends (Custom MSCI Emerging Markets IMI). The active frontier market equity managers are benchmarked against the Custom MSCI Frontier Markets 15% Country Capped Net Dividends Index (Custom MSCI Frontier Markets 15% Country Capped). The emerging markets equity portfolio is allocated to five active core equity managers (which comprise about 64% of the emerging market portfolio), two active small cap equity managers (6% of the portfolio), two frontier equity managers (4% of the portfolio), and one passive manager (26% of the portfolio). The PRIM Board maintains a target weighting of 75% active and 25% passive for the Emerging Markets Equity portfolio.



The primary strategy for this portfolio is investing in companies in developing countries, including, but not limited to, China, Brazil, Russia, South Korea, Taiwan, India and Turkey. These countries typically have less efficient securities markets, and thus there is opportunity for substantial returns. As of fiscal year end, the weighting of Emerging Markets Equity was 15.4% of the Global Equity portfolio.

**Portfolio Risks.** Investing in emerging markets carries risks above and beyond those inherent to domestic and developed international equity markets. Emerging markets tend to be less efficient than both U.S. and non-U.S. developed markets, and therefore, are more volatile. In addition to the added volatility, and those risks mentioned in association with investments in developed international equity markets, emerging market investments are subject to economic and political risks; exchange control regulation; expropriation; confiscatory taxation; and social instability.

**Portfolio Returns.** For the fiscal year, the Emerging Markets Equity portfolio returned -5.85% compared to the custom asset class benchmark return of -3.92%. Since inception in March 2015, two of the PRIT Core Fund's five active emerging markets core equity managers outperformed the Custom MSCI Emerging Markets Standard index. The passive manager outperformed the Custom MSCI Emerging Markets IMI index. The PRIT Core Fund's two active emerging markets small cap equity managers outperformed the MSCI Emerging Markets Small Cap index for the fiscal year. The two active frontier equity managers, Acadian Frontier and City of London, outperformed the Custom MSCI Frontier Markets Country Capped index, since their inceptions in April and February 2015, respectively. On a three-, five-, and 10-year basis through June 30, 2015, the PRIT Fund's emerging markets equity managers posted returns of 4.23%, 4.11%, and 7.31%, respectively, compared to the custom asset class benchmark, which returned 4.54%, 3.97%, and 8.34% over the same periods.

The top ten holdings in the Emerging Markets Equity portfolio at June 30, 2015 are illustrated below. A complete listing of holdings is available upon request.

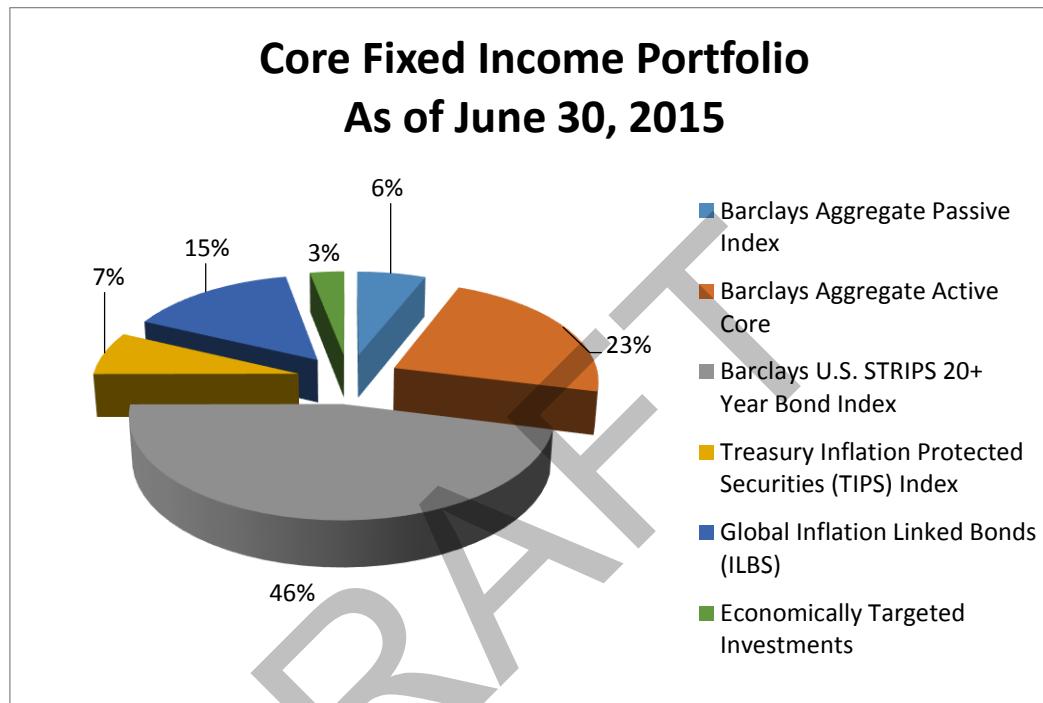
#	Issue Name	Market Value (\$000s)	% of Account Fair Value
1	Samsung Electronics	\$ 88,202	2.20%
2	Tawain Semiconductor Mfg. Co.	75,704	1.89%
3	Tencent Holdings Ltd	75,337	1.88%
4	Naspers Ltd	59,216	1.48%
5	China Mobile	56,362	1.41%
6	Hon Hai Precision Industry Co.	51,687	1.29%
7	China Construction Bank	46,953	1.17%
8	Ping An Insurance (Group) Co. of China	41,591	1.04%
9	Dragon Oil PLC	35,429	0.88%
10	SK Hynix Inc	29,451	0.73%
TOTAL		\$ 559,932	13.97%

The PRIT Fund's Emerging Markets Equity managers at June 30, 2015 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2015 (\$000s)
<i>State Street Global Advisors</i>	Custom MSCI EM IMI Index	\$ 1,038,913
<i>AQR Emeging</i>	EM Core	483,909
<i>Baillie Gifford EMM</i>	EM Core	561,314
<i>Driehaus Capital</i>	EM Core	586,818
<i>Harding Loevner</i>	EM Core	373,989
<i>Pzena Investment Management, LLC</i>	EM Core	505,836
<i>Wasatch</i>	EM Small Cap	106,088
<i>Acadian</i>	EM Small Cap	145,923
<i>Acadian Frontier</i>	Frontier	39,991
<i>City of London</i>	Frontier	101,613
<i>Other portfolio net assets</i>		66,898
<b>Total Portfolio Fair Value</b>		<b>\$ 4,011,292</b>

## Fixed Income Portfolio

The PRIM Board had approximately \$8.4 billion invested in the investment grade Core Fixed Income portfolio, representing 13.7% of the PRIT Core Fund as of June 30, 2015. The Core Fixed Income Portfolio is invested using the following strategies:



The Core Fixed Income portfolio is benchmarked to the Barclays Capital Aggregate Bond Index for core fixed income securities, the Barclays U.S. STRIPS 20+ Year Bond Index for STRIPS securities, the Barclays Capital US TIPS Index for U.S. TIPS securities, and the Barclays Capital Inflation Linked Bond US\$ Hedged Index for the Global Inflation Linked Bonds (ILBs).

The Barclays Capital Aggregate Passive Index replicates the investment grade bond market. The index is comprised of corporate, government, and mortgage-backed securities. The index fund is designed to approximate the performance of the Barclays Capital Aggregate Bond Index, while the active managers' mandate is to exceed the index return. The core strategy is designed to reduce the long-term volatility of the total PRIT Fund.

The Core Fixed Income portfolio also contains investments with three managers under the PRIM Board's Economically Targeted Investment (ETI) program, which are benchmarked against the Barclays Capital Aggregate Index. Further discussion on the PRIT Fund's ETI program is included in the Investment Policy Statement at the end of this section. The allocations to TIPS and to the ILBs strategy are designed to provide hedges against rises in inflation. The STRIPS portfolio is designed to approximate the performance of the Barclays U.S. STRIPS 20+ Year Bond Index and to lower overall volatility of the total PRIT Fund.

**Portfolio Risks.** As in the case of equities, the prices of fixed income securities increase and decrease in value. Price fluctuations in bonds result from rising and falling interest rates, changes in market conditions, and other economic and political developments. The portfolio is subject to credit risk through defaults on bonds and other fixed income securities. Although investment in the core fixed income portfolio is perceived as a "conservative" investment, erosion in principal value can result from credit risk and price fluctuations, and can adversely affect portfolio returns.

**Portfolio Returns.** For the fiscal year 2015, the Fixed Income composite return of 4.68% outperformed the benchmark (31% Barclays Capital Aggregate/47% Barclays U.S. STRIPS 20+ Year Bond Index /7% Barclays Capital US TIPS/15% Barclays Capital ILB US\$ Hedged as of 6/30/2015), which returned 4.30%. The Aggregate mandates including the ETI program returned 2.58%, outperforming their benchmark (Barclays Capital Aggregate Index) by 72 basis points. The STRIPS mandate returned 8.85%, compared to the Barclays U.S. STRIPS 20+ Year Bond Index return of 8.95%. The passively managed TIPS mandate returned -1.75%, compared to its benchmark (Barclays Capital US TIPS) which returned -1.73%. The actively managed ILBs mandate returned 3.36%, outperforming its benchmark (Barclays Capital ILB US\$ Hedged Index) by 2 basis points.

The top ten Core Fixed Income holdings as of June 30 2015, excluding TIPS investments and certain pooled funds, are illustrated below. A complete listing of holdings is available upon request.

#	Issue Name	% of Account	
		Fair Value (\$000s)	Fair Value
1	U.S. Treasury Bond Principal STRIP 0.000% February 2044	\$ 246,738	2.95%
2	U.S. Treasury Bond Principal STRIP 0.000% May 2044	243,134	2.90%
3	U.S. Treasury Bond Principal STRIP 0.000% February 2043	217,542	2.60%
4	U.S. Treasury Bond Principal STRIP 0.000% May 2043	207,987	2.48%
5	U.S. Treasury Bond Principal STRIP 0.000% November 2042	187,122	2.23%
6	U.S. Treasury Bond Principal STRIP 0.000% November 2043	179,731	2.15%
7	U.S. Treasury Bond Principal STRIP 0.000% May 2040	148,348	1.77%
8	U.S. Treasury Bond Principal STRIP 0.000% November 2039	134,053	1.60%
9	U.S. Treasury Bond Principal STRIP 0.000% August 2040	131,826	1.57%
10	U.S. Treasury Bond Principal STRIP 0.000% February 2040	123,800	1.48%
TOTAL		\$ 1,820,281	21.73%

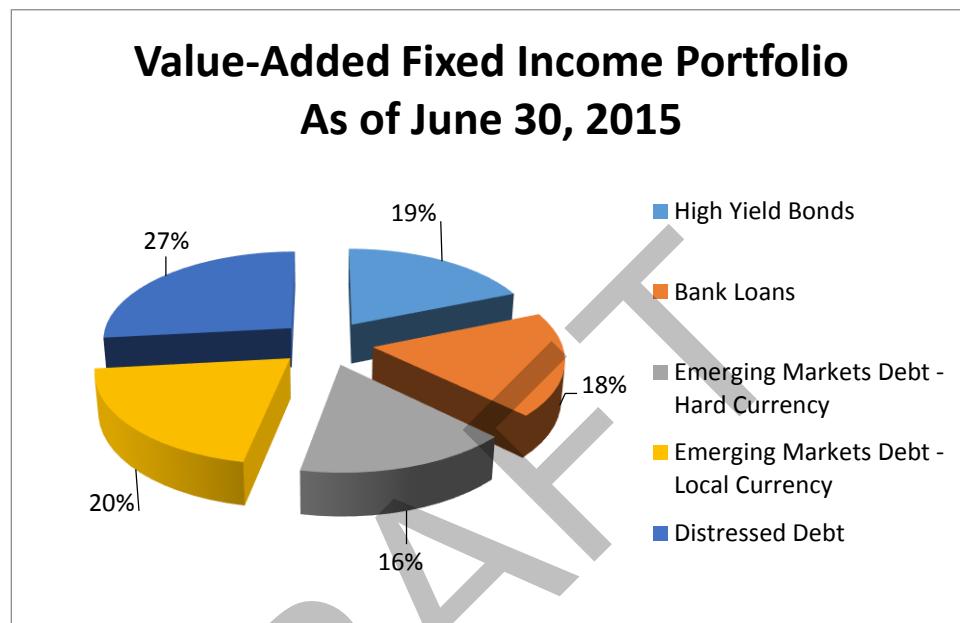
The PRIT Fund's Core Fixed Income portfolio managers at June 30, 2015 are presented in the following table:

<b>Manager</b>	<b>Investment Mandate</b>	<b>Portfolio Fair Value at June 30, 2015 (\$000s)</b>
<i>Blackrock Financial Management</i>	Core Index	\$ 508,665
<i>Loomis, Sayles &amp; Co., LP</i>	Active Core	1,120,762
<i>PIMCO</i>	Active Core	788,245
<i>Blackrock Financial Management</i>	Inflation Link Bonds	1,249,627
<i>Blackrock Financial Management</i>	STRIPS Index	3,860,954
<i>Blackrock Financial Management</i>	TIPS Index	594,742
<i>AFL - CIO Housing Investment</i>	ETI	124,473
<i>Access Capital</i>	ETI	102,668
<i>Community Capital Management</i>	ETI	27,595
<i>Other portfolio net assets</i>		3
<b>Total Portfolio Fair Value</b>		<b>\$ 8,377,734</b>

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### Value-Added Fixed Income Portfolio

The PRIM Board had approximately \$5.1 billion invested in the Value-Added Fixed Income portfolio, representing 8.3% of the PRIT Core Fund as of June 30, 2015. The Value-Added Fixed Income portfolio is invested using the following strategies:



**Distressed debt**, 2.2% of the PRIT Core Fund, represents investments in private partnerships that invest directly in distressed debt investment opportunities. As at June 30, 2015 the PRIT Fund had approximately \$1.4 billion in distressed debt investments with thirteen investment managers.

**High yield bonds**, which represent 1.6% of the PRIT Core Fund, are securities that are typically rated below Investment Grade by Standard & Poor's, Fitch or Moody's. These bonds are issued by companies without long track records of sales or earnings, or by those with questionable credit strength. This strategy also includes bonds that were Investment Grade at time of issue but have since declined in quality to below Investment Grade, referred to as "Fallen Angels". Despite the below Investment Grade rating, the PRIM Board's managers have successfully constructed portfolios and selected securities of high yield bonds to generate substantial returns and to mitigate risk by managing the expected default rate. There are three managers in the PRIT Fund high yield bond program, all through separate accounts.

**Emerging markets debt**, 3.0% of the PRIT Core Fund, represents investments in debt issued within the emerging marketplace. There are five managers in the PRIT emerging debt program, representing both Hard Currency and Local Currency strategies; one is through a commingled emerging debt investment vehicle while the others are through separate accounts.

**Bank Loans**, 1.5% of the PRIT Core Fund, represents investments in senior secured bank loans. There are two managers in the PRIT Fund bank loan program; both invest through commingled funds.

**Portfolio Risks.** As in the core fixed income portfolio, the prices of these securities increase and decrease in value. Price fluctuations in bonds result from rising and falling interest rates, changes in market conditions, and other economic and political developments. Lower-quality securities typically offer higher yields, but also carry more credit risk. The allocation of investments to emerging markets and distressed debt expose the portfolio to additional risks. Investments in emerging markets are subject to higher settlement, trading and management costs and greater economic, regulatory and political risk, as well as currency risk. Investments in private distressed debt funds subject the portfolio to liquidity, valuation and other risks associated with private investments.

**Portfolio Returns:** In fiscal year 2015, the Value-Added Fixed Income composite returned -2.60% compared to -7.01% for the asset class benchmark. The PRIT Core Fund's three high yield bond managers returned 0.56%, while the Merrill Lynch High Yield Master II Constrained index returned -0.54%. The Emerging Markets Debt Hard Currency portfolio returned -3.46% during the fiscal year, compared to the JP Morgan Emerging Markets Bond Index (JPM EMBI Global Index), which returned -1.57%. The Emerging Markets Debt Local Currency portfolio, managed by three managers, returned -15.25%, outperforming the JP Morgan GBI Emerging Markets Global Diversified index return of -15.39%. The two bank loan managers, returned 2.73%, outperforming the S&P LSTA Leveraged Loan index return of 1.82%. The Distressed Debt portfolio returned 3.55% compared to the index return of -13.09%. The benchmark for the Distressed Debt portfolio is the Altman NYU Salomon Center Combined Defaulted Public Bond & Bank Loan Index, since distressed debt resides within the Value-Added Fixed Income portfolio and high yield bond investments are used as a substitute for the distressed debt when there are no good distressed debt opportunities.

The top ten holdings in the Value-Added Fixed Income portfolio at June 30, 2015, excluding investments in emerging debt pooled funds, bank loan funds, distressed debt partnerships and other pooled funds, are illustrated below. A complete listing of holdings is available upon request.

#	Issue Name	% of Account	
		Fair Value (\$000s)	Fair Value
1	Brazil Notas Do Tesouro Nacional 10.000% January 2017	\$ 52,938	1.05%
2	Brazil Notas Do Tesouro Nacional 10.000% January 2021	28,714	0.57%
3	Mexican Bonos 10.000% December 2024	23,322	0.46%
4	South Africa Government Bond 10.500% December 2026	20,906	0.41%
5	Thailand Government Bond 3.650% December 2021	20,674	0.41%
6	Malaysia Government Bond 4.262% September 2016	18,527	0.37%
7	Turkey Government Bond 6.300% February 2018	16,357	0.32%
8	Indonesia Treasury Bond 9.000% March 2029	15,199	0.30%
9	Turkey Government Bond 9.500% January 2022	15,101	0.30%
10	Brazil Letras Do Tesouro Nacional 0.000% January 2018	14,900	0.29%
TOTAL		\$ 226,638	4.48%

The PRIT Fund's Value-Added Fixed Income portfolio managers at June 30, 2015 are presented in the following table:

<b>Manager</b>	<b>Investment Mandate</b>	<b>Portfolio Fair Value at June 30, 2015 (\$000s)</b>
<i>Fidelity Management Trust</i>	High Yield Bond	\$ 317,433
<i>Loomis, Sayles &amp; Co., LP</i>	High Yield Bond	327,944
<i>Shenkman Capital Management</i>	High Yield Bond	303,063
<i>Ashmore Investment Management</i>	Emerging Markets Debt Hard Currency	489,951
<i>PIMCO</i>	Emerging Markets Debt Hard Currency	307,387
<i>Investec</i>	Emerging Markets Debt Local Currency	283,814
<i>Pictet</i>	Emerging Markets Debt Local Currency	455,285
<i>Stone Harbor</i>	Emerging Markets Debt Local Currency	281,558
<i>Eaton Vance</i>	Bank Loans	470,543
<i>Voya</i>	Bank Loans	465,831
<i>Various partnerships</i>	Distressed Debt	1,350,752
<i>Other portfolio net assets</i>		(366)
<b>Total Portfolio Fair Value</b>		<b>\$ 5,053,195</b>

DRAFT

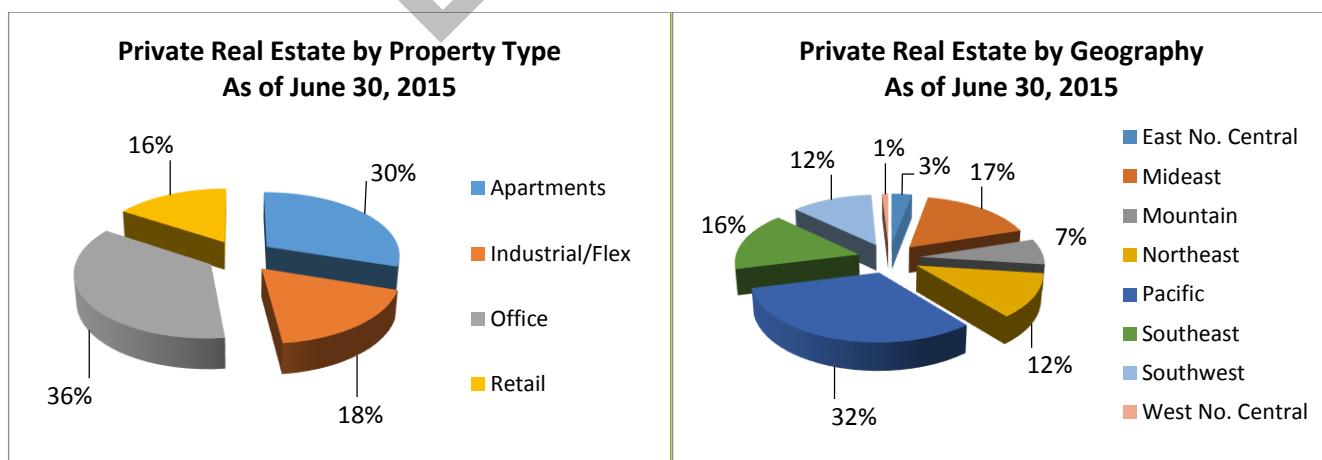
## Real Estate Portfolio

As of June 30, 2015 the PRIM Board had \$6.1 billion invested in real estate through the PRIT fund's ownership interest in PRIT Core Realty Holdings LLC (the LLC), representing 10.0% of the PRIT Core Fund. Real estate holdings consist of directly-owned properties, REITs, Investment in real estate private equity funds, and three ETI investments. The PRIT Fund invests in real estate because it provides the PRIT Fund with diversification and attractive returns. Real estate returns typically do not have a strong correlation with stock and bond returns, therefore offering an element of diversification to reduce volatility. Real estate can also offer attractive current returns as a portfolio of well-leased assets provides consistent cash flows from rental income.

Approximately 81% of the real estate allocation is dedicated to direct investments and private partnerships (the "Private Real Estate Investments"). The Private Real Estate Investments are subsequently broken down into Core and Non-Core real estate investments. As of June 30, 2015, \$4.5 billion (net of portfolio debt) of Core real estate investments and \$424 million of Non-Core real estate investments comprise PRIT's Private Real Estate Investments. Typically, Core investments are relatively low risk and substantially leased (80% or greater occupancy at the time of investment) institutional quality real estate. Non-Core investments offer higher potential returns at a higher risk profile, managed by the investment advisor. The PRIM Board's Non-Core program targets opportunities associated with development, vacancy and tenant exposure or the potential to physically or financially reposition an investment. Public REITs comprise the remainder of the investments in the PRIT Fund real estate portfolio. As of June 30, 2015 the PRIM Board had approximately \$1.2 billion allocated to public REITs. In June 2009, the Board voted to reduce the target allocation to public REITs from 3% of the PRIT Fund to 2% and increase the international (ex-U.S.) REIT allocation from 30% of total REITs to 50%. In April 2012, the Board voted to amend the 50% U.S. REIT / 50% international REIT (ex-U.S.) target allocation to a global weight linked to EPRA NAREIT and adopt the FTSE EPRA NAREIT Developed Net Total Return benchmark for the REIT program.

The public REIT portfolio represents 1.9% of the total PRIT fund.

The following charts display the property type and geographic diversification of the PRIM Board's directly owned Real Estate assets, at June 30, 2015:



The PRIM Board's strategies utilize a disciplined portfolio approach to real estate investing that is focused on investments in equity interests in institutional quality real estate. The PRIM Board's fiscal 2015 allocation to real estate is 10% of total plan assets, which allows the PRIM Board to establish separate accounts with capable real estate investment managers under terms that are beneficial to the PRIM Board. Because the PRIM Board is typically the sole owner of the real estate in each such account, the managers operate under clear policies and guidelines most appropriate to the PRIM Board's investment needs.

**Leverage.** The PRIM Board approved the Real Estate Portfolio Level Leverage Policy at its April 3, 2012 Board meeting. This policy permits portfolio level debt to be incurred subject to the following policy guidelines:

- (i) **Debt Service Coverage:** The amount of free cash flow to cover debt service should be no lower than 1.5x at the time debt is placed. In the event the debt service coverage ratio falls to 1.25x, leverage should be reduced to bring the ratio back into compliance with the 1.5x level. This ratio is to be calculated using a one-year trailing measure.
- (ii) **Spread of NOI over Borrowing Rate:** The spread of NOI over borrowing interest rate should be no lower than 200 basis points at the time debt is placed. In the event the spread is reduced to 100 basis points, leverage should be reduced until a 200 basis point spread can be achieved. This ratio is to be calculated using a one-year trailing measure.
- (iii) **Loan-to-Value Ratio:** The loan-to-value ratio should be no more than 40% of the total portfolio. This ratio would include any property-level financing (on separate account properties or funds, but exclusive of public securities debt) in place as well as the portfolio level facility. The calculation of the loan-to-value ratio will be: total debt/gross asset value of the private portfolio.
- (iv) **Fixed and Floating Interest Rates:** The facility may utilize fixed or floating interest rates and may utilize derivatives to achieve these rates. The decision to use fixed or floating rates will be determined at the time of borrowing and will be a function of availability, rate and risk. Fixed rate financing will be the preferred method.
- (v) **Allocation of Debt to Managers:** Managers will be allocated capital from the leverage facility at the discretion of staff with Board approval. The debt will be held at the portfolio level and will not affect the performance of the managers. New allocations of capital to the managers will essentially be considered as equity.

In February 2013, the LLC completed a \$1.0 billion portfolio level real estate financing through the issuances of a senior unsecured term loan and senior unsecured notes. At June 30, 2015, the LLC had portfolio level debt of \$1.0 billion and property level debt of \$511.8 million. The LLC was in compliance with the debt covenants at June 30, 2015.

**Portfolio Risks** Investments in real estate are subject to various risks, including adverse changes in economic conditions and in the capital markets, financial conditions of tenants, interest of buyers and sellers in real estate properties, environmental laws and regulations, zoning laws, governmental rules, uninsurable losses, and other factors beyond the control of the property owner. In addition, while diversification is an important tool used by the PRIM Board for mitigating risk, there is no assurance that diversification, either by geographic region or asset type, will consistently be maintained in the Core Real Estate Portfolio because of the illiquid nature of real estate. In addition, the portfolio is subject to valuation risk, as the valuation of the assets in this portfolio is based on estimates made by the PRIM Board in coordination with external appraisers and the investment managers. Furthermore, there can be no assurance that the fair value of the portfolio will ultimately correspond to the realized value of the underlying properties. Public REITs face risks similar to the risks of public equities both domestically and internationally since they are traded on public exchanges. They can experience corrections and price movements that are much more rapid than those experienced by private real estate portfolios and the share price can vary significantly from underlying NAV.

**Performance.** During the fiscal year, the PRIM Board's direct real estate and REIT investments produced strong performance in response to improving employment data, a continued low interest rate environment and strong demand for real estate in core markets.

For the fiscal year 2015, the real estate portfolio returned 11.99%, outperforming the asset class benchmark (80% NCREIF Property Index (one quarter lag)/20% FTSE EPRA NAREIT Developed Net Total Return) by 1.67%. The private real estate portfolio returned 15.26% for the year ended June 30, 2015, comparing to the NCREIF Property Index (one quarter lag), which returned 12.72% over the same period. REIT investments returned 0.94%, outperforming its benchmark by 0.65%.

The Real Estate portfolio returned 12.78% over the past three-years versus the asset class benchmark return of 11.19%. On a five-year basis, returns were 13.76% compared to the benchmark return of 12.94%. On a 10-year basis, the real estate portfolio returned 8.59% compared to the benchmark return of 7.92%.

The PRIT Fund's real estate investment managers at June 30, 2015 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2015 (\$000s)
Invesco Realty Advisors	Separate Accounts - Core	\$ 1,115,216
LaSalle Investment Management	Separate Accounts - Core	1,556,639
AEW	Separate Accounts - Core	988,716
J.P. Morgan Investment Management	Separate Accounts - Core	754,954
TA Associates Realty	Separate Accounts - Core	1,109,776
Various Non-Core Partnerships	Non-Core	409,972
Invesco Realty Advisors - Transition	Global REITs	144,325
Invesco Realty Advisors	Global REITs	264,037
CenterSquare Investment Management	Global REITs	753,455
Canyon Johnson	ETI	5,519
Intercontinental	ETI	1,036
New Boston	ETI	7,450
<i>Other portfolio net assets (portfolio debt included)</i>		(1,017,953)
<b>Total Portfolio Fair Value</b>		<b>\$ 6,093,142</b>

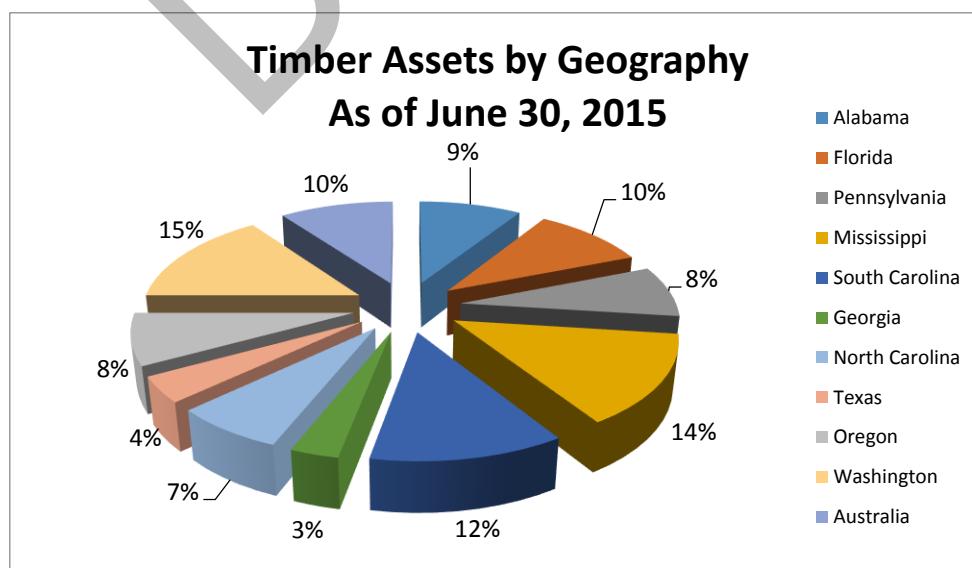
## Timber and Natural Resources Portfolio

As of June 30, 2015, the PRIM Board had \$1.7 billion invested in timber, representing 2.8% of the PRIT Core Fund. The PRIT Fund's allocation to timber is through two external timber investment managers, Forest Investment Associates (FIA) and The Campbell Group (Campbell). In February 2008, the Board voted to add a 2% allocation to Natural Resources in order to complement the timber allocation. In June 2009, the Board voted to set a 4% long-term target allocation to timber. In order to fund this allocation, the Board authorized the liquidation of the 2% allocation to publicly traded natural resources at the appropriate time. As of June 30, 2015, the PRIM Board had \$381.8 million invested with two Natural Resources managers, Jennison and T. Rowe Price, representing 0.6% of the PRIT Core Fund. These managers invest in publicly traded companies who focus on natural resource oriented companies (e.g. oil, mining, energy companies). An additional \$269.6 million is invested in natural resources through PRIM's Private Equity program, representing 0.4% of the PRIT Core Fund.

The United States timberland markets are divided into three regions, each with distinct economic characteristics: the Pacific Northwest, the Northeast and the Southeast. The Pacific Northwest is a high value softwood market, in which the growing cycle to produce a mature tree is forty to fifty years. The high value tree in this region is Douglas Fir, which is used primarily to produce high quality dimensional and structural lumber. The timber growing cycle in the Southeast is much shorter, in the range of twenty-five years. Southern pine is the dominant species and it is used typically to make pulp for the paper industry or lower quality-framing lumber. The Northeast market is much smaller than the other two markets and consists of a wider range of trees, including high value specialty woods such as cherry and oak.

In Australia, there is approximately 2 million hectares (4.9 million acres) of plantation timberlands that are almost evenly split between hardwood and softwood species. Australia is a net importer of forest products, with limited domestic supply and high demand. With increasing fiber demand from China, export opportunities exist for plantations with close proximity to ports.

The geographical diversification of the PRIT Fund's timber portfolio at June 30, 2015 is presented below.



Investment returns from timberland investments are derived from the net cash flow generated from the sale of trees (referred to as stumpage sales) combined with capital appreciation from the biological growth of the trees. Both of these return factors depend to some degree upon the direction of forest product commodity prices (paper goods and lumber products). There can also be gains from the timely sale of timberland and from the conversion of timberland into higher and better uses, such as vacation property sales.

**Portfolio Risks.** Investments in timberland assets are subject to various risks, including adverse changes in general economic conditions, fluctuations in the market price of timber, damage to timber properties due to infestation and weather related events, changes in regulatory conditions and other governmental rules. In addition, the portfolio is subject to valuation risk, as the valuation of the assets in this segment are based on estimates made by the PRIM Board through coordination with external appraisers and the PRIM Board's timber investment managers. Accordingly, there can be no assurance that the fair value of investments will correspond to the ultimate realized value of the properties. International timberland investments are also subject to currency fluctuations that can result in unpredictable gains or losses when foreign currency is converted into U.S. dollars.

**Performance.** As of June 30, 2015, the one-year Timber return was 9.69% as compared to the NCREIF Timber Index (one quarter lag) of 10.64%. Since its inception, in January 2002, the Timber portfolio has produced an annualized return of 9.85%. With a 2.8% investment in timber at fiscal year-end, the PRIM Board was under its target of 4%. For the year ended June 30, 2015, the publicly traded Natural Resource portfolio returned -27.90%, comparing to the Lipper Natural Resources Global Fund index return of -25.93%. The private Natural Resources investments returned -8.81% for the fiscal year. As of June 30, 2015, the one-year combined Timber/Natural Resources return was -1.35% as compared to the blended NCREIF Timber/Lipper Natural Resources Global Fund/Actual Private Natural Resources Index of -0.28%. On a three-, five-, and 10-year basis through June 30, 2015, the PRIT Fund's combined Timber/Natural Resources portfolio has returned 6.18%, 5.78%, and 6.41%, respectively, compared to the benchmark return of 7.35%, 6.25%, and 6.06%, respectively.

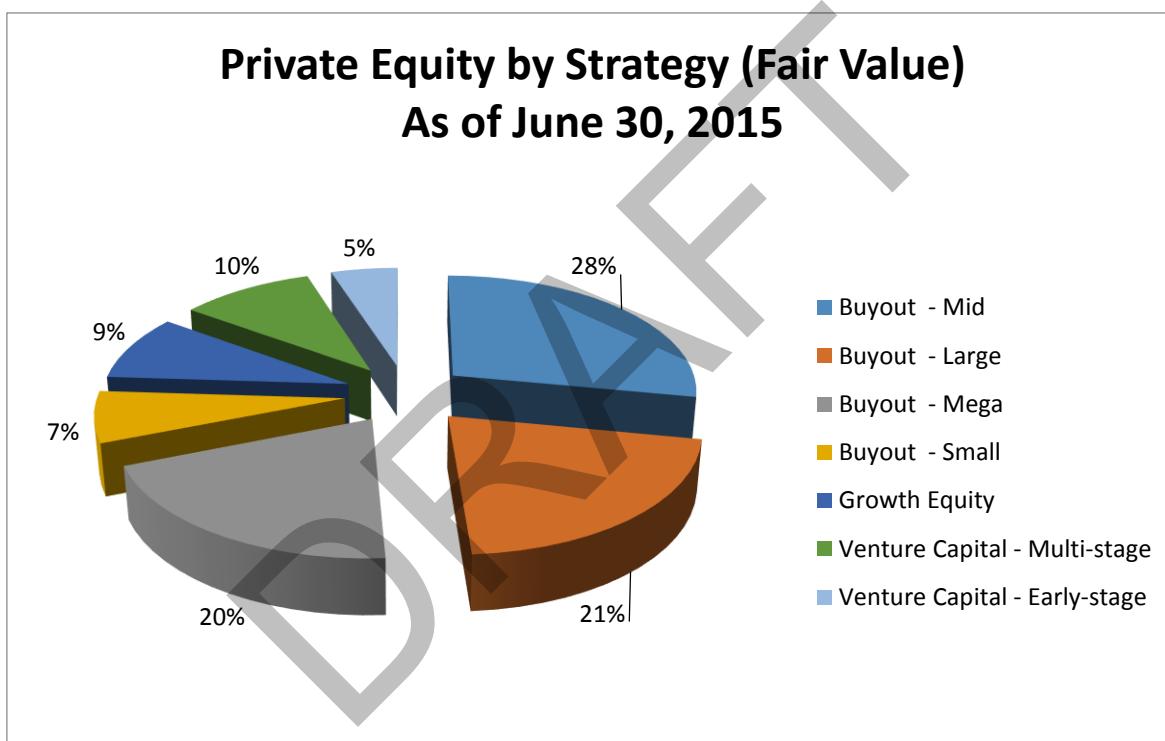
The PRIT Fund's Timber and Natural Resources investment managers at June 30, 2015 are presented in the following table:

Manager	Investment Mandate	Portfolio Fair Value at June 30, 2015 (\$000s)
<i>Forest Investments Associates</i>	Separate Accounts - Timber	\$ 1,109,273
<i>The Campbell Group</i>	Separate Accounts - Timber	549,695
<i>Jennison</i>	Global Natural Resources	188,502
<i>T. Rowe Price</i>	Global Natural Resources	193,291
<i>Various Private Equity Investments</i>	Natural Resources - Private	269,793
<i>Other portfolio net assets</i>		36,496
<b>Total Portfolio Fair Value</b>		<b>\$ 2,347,050</b>

## Private Equity Portfolio

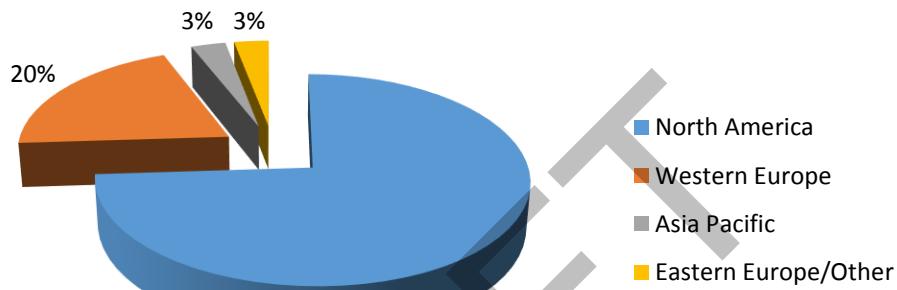
As of June 30, 2015 the market value of the Private Equity portfolio was \$6.9 billion or 11.3% of the total PRIT Core Fund. The PRIT Fund's long-term target allocation to Private Equity investments is 10%. Two components comprise the PRIT Fund's Private Equity portfolio: venture capital (early-stage and multi-stage) and special equity partnerships (large market buyout, middle market buyout, and growth equity). Unlike public markets, where the investor has the ability to "cash out" of positions at any time, these private market investments are illiquid. Therefore, an investment in this category is a long-term commitment.

The Private Equity portfolio is well-diversified by strategy and the allocation as of June 30, 2015 is highlighted below.

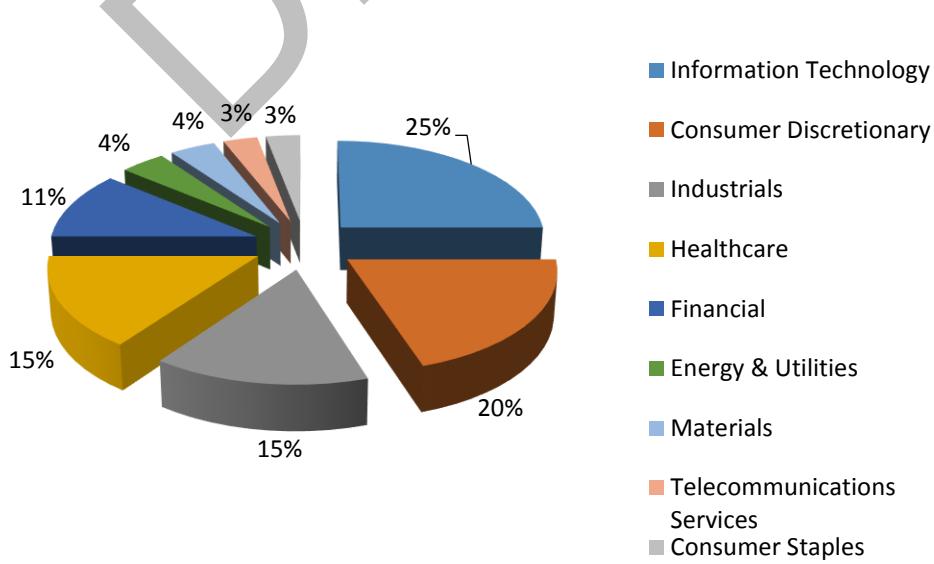


The Private Equity portfolio is diversified at the partnership level by strategy as well as at the underlying portfolio company level by industry and geography. The portfolio's current geographical and industry allocations are presented below.

### Private Equity by Geography As of June 30, 2015



### Private Equity by Industry As of June 30, 2015



Capital invested in private equity partnerships is subject to a relatively high degree of risk as compared to other potential investments, with the assumption that the investor will be rewarded with higher returns for that assumption of risk, i.e. the "risk/return trade-off". This risk/return trade-off is the key consideration in determining if this asset is appropriate for a particular portfolio. These risks are highlighted below.

**Portfolio Risks.** Risks associated with investing in private equity limited partnerships include, but are not limited to:

- **Illiquidity:** Limited partnership vehicles typically have 10-15 year life cycles during which limited partners are unable to liquidate their entire positions, but instead, will receive the cash flow from successful investments. A defined secondary market such as the New York Stock Exchange does not exist for private equity.
- **Volatility:** Volatility, as measured by standard deviation from a mean return, has historically been greater for private equity investing than many other assets. It is generally recognized that standard deviations for private equity should be estimated at approximately 25%, versus 17% for domestic public equity.
- **Management Fee Effect:** Typically, general partners' fees range from 150 to 250 basis points annually. This is usually drawn down against committed capital, although it may not be invested, and may result in negative returns until investments are realized successfully.
- **Valuation of investments:** Investment valuation at any time may not be reflective of fair market value. Due to recent U.S. accounting rule changes (ASC 820) Private Equity investments are generally valued at fair value. However, because of the inherent uncertainty of the valuation of the portfolio companies, the estimated value may differ significantly from the value that would have been used had a ready market for these securities existed.
- **General Partner Discretion:** Investors lack control over the general partner's investment decisions. The general partner is provided capital to manage at its discretion and investors are provided limited rights, such as termination of the partnership in certain instances. (These rights may not prove practical except in extreme circumstances.)
- **Binding Commitments:** There is limited ability to reduce or terminate investments. Under the contractual terms of the partnership, investments may be terminated in some cases by super-majority vote of the investors and after the occurrence of certain events. (These rights may not prove practical except in extreme circumstances.)
- **Risk of Loss:** There is risk of losing 100% of the investment. Investments in partnerships are usually equity and the risk nature of these investments could result in loss of the entire investment.

**Performance.** The PRIT Fund's Private Equity portfolio delivered a one-year return of 15.57% through June 30, 2015. The PRIT Fund's Private Equity managers were active in making new investments as well as in generating liquidity in the year ending June 30, 2015. The PRIT Fund's managers called \$1.2 billion of capital for additional investments including management fees and partnership expenses, which is higher than the \$1.1 billion called

during the prior fiscal year. From a liquidity standpoint, the portfolio generated total distributions of \$2.0 billion, similar to the \$2.0 billion distributed in the 2014 fiscal year.

While there is not currently a widely used or conventional benchmark in this asset class, the PRIM Board staff targets investment opportunities with the ability to generate a long-term rate of return equal to or greater than the Russell 3000 + 3%. The PRIT Fund's Private Equity program has achieved this goal over the 10-year period, outperforming the Russell 3000 by a minimum of 300 basis points. Over the long term the PRIT Fund's Private Equity portfolio has performed well with a 10-year annual return of 16.89% as of June 30, 2015, exceeding the Russell 3000 index return of 8.15% by 874 basis points. On a five-year basis, the portfolio outperformed the Russell 3000 by 85 basis points, 18.39% compared to 17.54%. For the three-year period ending June 30, 2015, the Private Equity portfolio returned 18.67%, outperforming the Russell 3000 index return of 17.73% by 94 basis points. For the one-year period ending June 30, 2015, the Private Equity portfolio returned 15.57%, outperforming the Russell 3000 index return of 7.29% by 828 basis points. It is important to remember that there is a one quarter lag inherent in private equity valuations. For this reason the June 30, 2015 results for the Private Equity portfolio do not reflect the same level of appreciation in asset values that are reflected in public market indices such as the Russell 3000.

Since inception to June 30, 2015, the PRIT Fund has committed over \$16.4 billion to 348 partnerships (265 active) of which \$13.5 billion has been invested. The program has generated \$14.7 billion in distributions. The net IRR since inception for the program is 13.23%.

## PRIVATE EQUITY EXTERNAL MANAGERS

**As of June 30, 2015**

<b>Partnership</b>	<b>Location</b>	<b>Partnership</b>	<b>Location</b>
1 ACON Investments	Washington, DC	53 Keytone Ventures	Beijing, China
2 Advent International	Boston, MA	54 Kohlberg Kravis Roberts & Co.	New York, NY
3 Alchemy Partners	London, UK	55 KPS Capital Partners	New York, NY
4 Alta Communications	Boston, MA	56 Landmark Partners	Simsbury, CT
5 American Securities	New York, NY	57 Madison Dearborn Capital Partners	Chicago, IL
6 APAX Partners & Co.	London, UK	58 M/C Venture Partners	Boston, MA
7 Apollo Management Co.	New York, NY	59 Menlo Ventures	Menlo Park, CA
8 Austin Ventures	Austin, TX	60 Montagu Private Equity	London, UK
9 Ascent Ventures	Boston, MA	61 Montreux Equity Partners	Palo Alto, CA
10 Bain Capital	Boston, MA	62 Nautic Partners	Providence, RI
11 Battery Ventures	Wellesley, MA	63 New Enterprise Associates	Baltimore, MD
12 Berkshire Partners, LLC	Boston, MA	64 Nordic Capital	Stockholm, Sweden
13 The Blackstone Group	New York, NY	65 Odyssey Investment Partners	New York, NY
14 Boston Ventures	Boston, MA	66 Olympus Growth Fund	Stamford, CT
15 Bridgepoint	London, UK	67 Onex Partners	Toronto, CA
16 Candover	London, UK	68 PAI Partners	Paris, France
17 Carlyle Partners	Washington, DC	69 Permira Europe	London, UK
18 Castile Ventures	Waltham, MA	70 Polaris Venture Partners	Waltham, MA
19 Catalyst Investors	New York, NY	71 Providence Equity Partners	Providence, RI
20 Centerbridge Capital Partners	New York, NY	72 Quad - C Management, Inc.	Charlottesville, VA
21 Charles River Ventures	Waltham, MA	73 Quantum Energy Partners	Houston, TX
22 Charlesbank Capital Partners	Boston, MA	74 Rembrandt Venture Partners	Menlo Park, CA
23 Charterhouse Capital Partners	London, UK	75 Rhône Capital	New York, NY
24 Chequers Capital	Paris, France	76 SAIF Partners	Hong Kong, China
25 Code Hennessey & Simmons	Chicago, IL	77 SCP Vitalife	Tel Aviv, Israel
26 Commonwealth Capital Ventures	Wellesley, MA	78 Sherbrooke Capital	Newton, MA
27 CVC Capital (Europe)	London, UK	79 Sofinnova Venture Partners	Menlo Park, CA
28 Cypress Merchant Banking	New York, NY	80 Spark Capital	Boston, MA
29 Denham Capital Management	Boston, MA	81 Spectrum Equity Partners	Boston, MA
30 DLJ Merchant Banking	New York, NY	82 Summit Ventures	Boston, MA
31 El Dorado Ventures	Menlo Park, CA	83 SV Life Sciences	Boston, MA
32 Equitable Capital Management	New York, NY	84 TA Associates	Boston, MA
33 Essex Woodlands	Houston, TX	85 TCV	Menlo Park, CA
34 Ethos Private Equity	Johannesburg, South Africa	86 Texas Pacific Group	San Fran./Fort Worth
35 Exponent Partners	London, UK	87 Thoma Bravo	Chicago/San Francisco
36 First Reserve Corporation	Greenwich, CT	88 Thoma Cressey	Chicago, IL
37 Flagship Ventures	Cambridge, MA	89 Thomas H. Lee Equity Partners	Boston, MA
38 Freeman Spogli Equity Partners	Los Angeles, CA	90 Torquest Partners	Toronto, CA
39 Genstar Capital Partners	San Francisco, CA	91 Towerbrook Capital Partners	New York/London
40 Guilde Buy Out Partners	Utrecht, Netherlands	92 Trident Capital	Palo Alto, CA
41 The Gores Group	Los Angeles, CA	93 Union Square Ventures	New York, NY
42 GTCR Golder, Rauner	Chicago, IL	94 VantagePoint Partners	San Bruno, CA
43 Hellman & Friedman Capital Partners	San Francisco, CA	95 Vestar Capital Partners	New York, NY
44 H.I.G. Capital	Miami, Fla.	96 Vista Equity Partners	San Francisco, CA
45 Highland Capital Partners	Boston, MA	97 Welsh CarsonAnderson & Stowe	New York, NY
46 Hony Capital	Beijing, China	98 Weston Presidio Capital	Boston/San Francisco
47 Index Ventures	Geneva, Switzerland	99 Westview Capital Partners	Boston, MA
48 Insight Venture Partners	New York, NY	100 Whitney & Co.	Stamford, CT
49 Institutional Venture Partners	Menlo Park, CA	101 Willis Stein	Chicago, IL
50 InterWest Partners	Menlo Park, CA/Dallas, TX	102 Xenon Private Equity	Milan, Italy
51 Kelso & Company	New York, NY		
52 Kepha Partners	Waltham, MA		

## Hedge Fund Portfolio

As of June 30, 2015 the Hedge Fund portfolio had approximately \$5.6 billion in assets, which represented 9.1% of the PRIT Fund. The PRIM Board has investments with twenty-two direct hedge fund managers including managed accounts, one hedge fund of funds manager, and two residual liquidating fund of funds portfolios. The Rock Creek Group is managing the liquidation of the Ivy Asset Management portfolio.

The PRIT Fund's Hedge Fund managers at June 30, 2015 are presented in the following table:

Manager	Strategy Focus	Portfolio Fair Value at June 30, 2015 (\$000s)
PAAMCO	Core - Emerging Managers	\$ 1,210,770
Arden Asset Management - Liquidation	Equity Market Neutral/Fundamental Credit	52,532
Ivy Asset Management Corp. - Liquidation	N/A	4,692
Direct Hedge Funds	Core	4,056,051
Other portfolio net assets		251,108
<b>Total Portfolio Fair Value</b>		<b>\$ 5,575,153</b>

**Portfolio Risks.** The Hedge Fund portfolio is subject to the various risks of underlying investments in hedge funds. The portfolio is subject to market risk through a general downturn in market conditions, as well as credit risk inherent in fixed income hedge fund strategies. The portfolio is also exposed to liquidity risk in unwinding underlying hedge fund investment positions. In addition, the hedge fund space is exposed to operational risks in executing investment strategies, and valuing investment positions. The PRIM Board has developed a detailed hedge fund investment plan to manage these risks and ensure appropriate diversification within the asset class.

**Performance.** The PRIT Fund's Hedge Fund portfolio managers returned 3.68% for the fiscal year versus a return of 3.84% for the benchmark HFRI Fund of Funds Composite Index. The Hedge Fund portfolio has returned 8.83% and 6.39% over the three and five year periods versus the asset class benchmark of 6.23% and 4.14%, respectively. On a 10-year basis, the Hedge Fund portfolio returned 4.88% compared to the benchmark return of 5.08%. All performance figures for this asset class are reported 'net of fees'.

## Portable Alpha Wind Down

In October 2009, the PRIM Board voted to terminate the Portable Alpha program. Beginning January 1, 2010, the Rock Creek Group began managing the liquidation and wind down of the portfolios. As of June 30, 2015, the Portable Alpha Wind Down portfolio had \$32.1 million in assets which represents 0.1% of the PRIT Fund. Prior to January 1, 2010, the returns of the Portable Alpha program are included in the Domestic Equity portfolio.

### Portfolio Completion Strategies (PCS) Portfolio

As of June 30, 2015 the PCS portfolio had approximately \$94.9 million in assets with one manager, which represented 0.2% of the PRIT Fund.

The objective of the PCS portfolio is to provide the PRIT Fund access to broader investment opportunities. Investments selected for the PCS portfolio should enhance the risk/return profile of the PRIT Fund. Investments may include long-term strategic investments or short-term opportunistic investments.

Each investment within the PCS portfolio is compared against an appropriate benchmark. The overall PCS portfolio benchmark is the weighted-average of each of the underlying investment benchmarks.

**Portfolio Risks.** The PCS portfolio is subject to the various risks of alternative risk premia and other underlying investments. The portfolio is subject to market risk through a general reversal of the risk premia that the strategies are trying to capture. The portfolio is also exposed to liquidity risk in unwinding illiquid positions. In addition, the PCS portfolio is exposed to operational risks in executing investment strategies and valuing investment positions. The PRIM Board has developed a detailed PCS investment plan to manage these risks and ensure appropriate diversification within the asset class.

**Performance.** Since its inception in January 2015, the PRIT Fund's PCS portfolio returned -5.09% comparing to the asset class benchmark return of 1.58%.

### Overlay

At the August 8, 2013 Board meeting, the PRIM Board voted to hire the Clifton Group for the Cash Overlay program. As of June 30, 2015, the Overlay portfolio had \$567.4 million in assets which represents 0.9% of the PRIT Fund. The Overlay portfolio returned 2.09% for the fiscal year and had a return of 6.59% since its inception in October 2013.

The objective of the overlay program is to provide market exposure to cash which is not invested with a similar risk/return profile of the PRIT Fund. Investments are made through the futures market.

**SCHEDULE OF TIME-WEIGHTED RETURNS BY ASSET CLASS\***  
**For the Periods Ended June 30, 2015**

Asset Class	Benchmark as of June 30, 2015	1 Year	3 Year	5 Year	10 Year
<b>Global Equity</b>					
44% Domestic Equity BM/40% International Equity BM/16%		<b>0.88%</b>	<b>13.70%</b>	<b>12.68%</b>	<b>6.72%</b>
Emerging Markets BM	0.69%	13.20%	12.05%	6.45%	
<b>Domestic Equity</b>	<b>6.75%</b>	<b>17.64%</b>	<b>17.41%</b>	<b>6.86%</b>	
79% S&P 500/15% Russell 2500/1% Russell 2500 Growth/1%					
Russell 2000 Growth/4% Russell 2000 Value	7.12%	17.59%	17.45%	7.74%	
<b>International Equity</b>	<b>-2.76%</b>	<b>13.10%</b>	<b>10.76%</b>	<b>6.22%</b>	
50% Custom MSCI World EX-US IMI NET DIVS/50% Custom MSCI EAFE Standard Index NET DIVS	-4.54%	11.74%	9.31%	5.18%	
<b>Emerging Markets</b>	<b>-5.85%</b>	<b>4.23%</b>	<b>4.11%</b>	<b>7.31%</b>	
Asset Class Benchmark (1)	-3.92%	4.54%	3.97%	8.34%	
<b>Core Fixed Income</b>		<b>4.68%</b>	<b>3.34%</b>	<b>4.70%</b>	<b>4.74%</b>
31% BC Agg/47% BC US STRIPS 20+ Year /7%BC US TIPS/15%					
BC ILB US\$ HEDGED	4.30%	2.78%	4.19%	4.31%	
<b>Value-Added Fixed Income</b>		<b>-2.60%</b>	<b>4.85%</b>	<b>7.00%</b>	<b>7.68%</b>
19% ML Master II HY Constrained Index/18% S&P LSTA Leveraged Loan Index/16% JPM EMBI Global/20% JPM GBI-EM Global/27% Altman Index	-7.01%	3.35%	4.99%	6.48%	
<b>Real Estate</b>		<b>11.99%</b>	<b>12.78%</b>	<b>13.76%</b>	<b>8.59%</b>
80% NCREIF Property One Qtr. Lag/20% FTSE EPRA NAREIT DEVELOPED Net Total Return	10.32%	11.19%	12.94%	7.92%	
<b>Private Equity</b>		<b>15.57%</b>	<b>18.67%</b>	<b>18.39%</b>	<b>16.89%</b>
No Benchmark	na	na	na	na	
<b>Timber/Natural Resources (2)</b>		<b>-1.35%</b>	<b>6.18%</b>	<b>5.78%</b>	<b>6.41%</b>
71% NCREIF Timber/17% Lipper Natural Resources Global Fund Index/12% Actual Natural Resources - Private	-0.28%	7.35%	6.25%	6.06%	
<b>Hedge Funds</b>		<b>3.68%</b>	<b>8.83%</b>	<b>6.39%</b>	<b>4.88%</b>
HFRI Fund of Funds Composite Index (3)	3.84%	6.23%	4.14%	5.08%	
<b>Portable Alpha Wind Down (4)</b>		<b>-4.28%</b>	<b>-2.63%</b>	<b>-1.88%</b>	<b>na</b>
HFRI Fund of Funds Composite Index (3)	3.84%	6.23%	4.14%	na	
<b>Overlay (5)</b>		<b>2.09%</b>	na	na	na
No Benchmark	na	na	na	na	
		<b>1 Year</b>	<b>3 Year</b>	<b>5 Year</b>	<b>10 Year</b>
<b>Total PRIT Core Fund</b>		<b>3.87%</b>	<b>11.25%</b>	<b>10.99%</b>	<b>7.00%</b>
Policy Benchmark	2.74%	9.40%	9.31%	6.53%	
TUCS Universe Median	3.40%	10.74%	10.94%	6.93%	
TUCS Universe Ranking	33rd	38th	47th	43rd	

(1) Current Emerging Markets benchmark is maintained by MSCI and is based on the beginning adjusted monthly market value of each index group, customized to exclude legislatively prohibited tobacco, Sudan and Iran securities.

(2) The Timber Account's inception date was January 1, 2002; Natural Resources Account's inception was August 1, 2008.

(3) The HFRI index benchmark commenced on January 1, 2010. Prior, the Hedge Fund index consisted of the ML 90-Day T-Bill plus 4%, while the Portable Alpha Index was tied to the Domestic Equity Index +3%.

(4) Prior to January 1, 2010, Portable Alpha returns are reflected in the Domestic Equity Account.

(5) The Overlay Account's inception date was October 31, 2013.

\* All return information is gross of fees, except Hedge Fund fees, which is net of fees. Returns are calculated based on a time-weighted rate of return methodology.

## Investment Summary at Fair Value

**As of June 30, 2015**

	<b>Fair Value (\$000s)</b>	<b>% of Fair Value</b>
<b>Short-term:</b>		
Money market investments	\$ 1,733,529	2.77%
<b>Fixed income:</b>		
U.S. government obligations	5,225,621	8.36%
Domestic fixed income	4,660,555	7.45%
International fixed income	3,152,349	5.04%
Distressed debt	1,350,752	2.16%
<b>Equity:</b>		
Domestic equity securities	10,353,626	16.56%
International equity securities	14,289,329	22.85%
<b>Real estate</b>	7,678,800	12.28%
<b>Timberland</b>	1,664,581	2.66%
<b>Private Equity:</b>		
Venture capital	1,579,463	2.53%
Special equity	5,400,960	8.64%
<b>Hedge Funds:</b>		
Direct hedge funds and hedge fund of funds	5,323,426	8.51%
Liquidating hedge fund of funds	28,205	0.04%
<b>Other:</b>		
Portfolio completion strategies investment funds	94,909	0.15%
<b>Total investments</b>	<b>\$ 62,536,105</b>	<b>100.00%</b>

## SUMMARY SCHEDULE OF BROKER COMMISSIONS

(Top 25 Brokers and Cumulative Fees Paid to Others)

**Fiscal Year Ended June 30, 2015**

<b>Brokerage Firms</b>	<b>Fees Paid (\$)</b>	<b>% Total</b>	<b>Average \$ per share</b>
Citigroup	\$ 922,304	9.1%	0.0044
Morgan Stanley	690,232	6.8%	0.0043
State Street	666,633	6.6%	0.0009
Merrill Lynch	586,791	5.8%	0.0035
UBS	565,245	5.6%	0.0030
JP Morgan	515,189	5.1%	0.0043
Credit Suisse	514,765	5.1%	0.0028
Macquarie	489,456	4.8%	0.0011
Goldman Sachs	418,526	4.1%	0.0020
Deutsche Bank	355,474	3.5%	0.0013
Instinet	342,148	3.4%	0.0049
Credit Lyonnais Securities	316,079	3.1%	0.0017
HSBC	302,723	3.0%	0.0015
Jefferies & Co	146,249	1.4%	0.0034
Camara De Lequidacao E Custodia	146,021	1.4%	0.0043
Barclays	124,778	1.2%	0.0016
Sanford C. Bernstein & Co	118,667	1.2%	0.0019
SG Securities	96,091	0.9%	0.0030
Investment Technology Group	95,584	0.9%	0.0043
Weeden & Co	81,315	0.8%	0.0244
Banco Santander	76,385	0.8%	0.0074
BNY Convergex	74,693	0.7%	0.0084
Rosenblatt Securities	74,149	0.7%	0.0214
Daewoo Securities	71,575	0.7%	0.0894
Daiwa Securities	65,716	0.6%	0.0021
Others	2,307,898	22.7%	0.0015
<b>Totals</b>	<b>\$ 10,164,686</b>	<b>100%</b>	<b>0.0020</b>

The PRIM Board has commission recapture agreements with several brokers. A summary of the commission recapture program is included in the Investment Policy Statement included at the end of the Investment Section. For the fiscal year ended June 30, 2015 the PRIT Fund earned \$2,276 from the commission recapture program.

## SCHEDULE OF DIRECT MANAGEMENT FEES

**Fiscal Year Ended June 30, 2015**

<b>Investment Management Fees by Asset Class:</b>	(\$000s)
Domestic Equity	\$ 14,071
Emerging Markets Equity	11,636
International Equity	16,401
Core Fixed Income	6,114
Value-Added Fixed Income	10,409
Real Estate	13,486
Timberland/Natural Resources	8,888
Private Equity	1,499
Hedge Funds	38
Overlay	600
<b>Total Investment Management Fees</b>	<b>83,142</b>
 <b>Investment Advisory Fees</b>	 4,161
<b>Custodian Fees</b>	674
<b>Other Administrative Fees</b>	<b>10,189</b>
 <b>Total Direct Management Fees charged to the PRIT Fund</b>	 <b>\$ 98,166</b>

## SCHEDULE OF RETIREMENT SYSTEMS BY INVESTMENT

Segmentation Accounts invested as of June 30, 2015

Retirement System	Net Asset Values (\$000s) 6/30/15	General Allocation	Domestic Equity	International Equity	Emerging Markets	Core Fixed Income	Real Estate	Private Equity	Hedge Funds	Public Value Added Fixed Income
Amesbury	\$ 47,352	X								
Andover	\$ 112,890	X								
Arlington	\$ 120,830	X								
Attleboro	\$ 183							X		
Barnstable	\$ 851,272	X							X	
Belmont	\$ 26,670	X		X			X	X	X	
Berkshire	\$ 194,144	X					X			
Beverly	\$ 99,728	X								
Blue Hills	\$ 9,760	X								
State Boston/Teachers	\$ 1,445,836	X								
Braintree	\$ 44,841	X					X		X	
Bristol County	\$ 38,948						X		X	X
Brookline	\$ 18,658							X	X	
Cambridge	\$ 76,592							X	X	
Chelsea	\$ 122,150	X								
Chicopee	\$ 28,338						X			
Clinton	\$ 39,212	X			X		X	X		
Concord	\$ 55,564	X					X	X		
Danvers	\$ 41,382			X	X		X	X	X	
Dedham	\$ 109,920	X								
Dukes County	\$ 61,350	X		X				X		
Easthampton	\$ 42,809	X								
Essex	\$ 333,867	X								
Everett	\$ 103,397	X								
Fairhaven	\$ 50,319	X								
Fall River	\$ 224,050	X								
Falmouth	\$ 11,689								X	
Fitchburg	\$ 92,975	X								
Framingham	\$ 258,165	X								
Franklin County	\$ 73,877	X		X				X		
Gardner	\$ 46,002	X								
Gloucester	\$ 84,884	X								
Greenfield	\$ 58,624	X								
Hampden County	\$ 287,486	X								
Hampshire County	\$ 84,247				X		X	X	X	
Haverhill	\$ 87,350			X	X	X	X	X	X	X
Hingham	\$ 95,749	X	X	X	X	X	X	X	X	X
Holyoke	\$ 2,213									X
Hull	\$ 37,273	X								
Lawrence	\$ 175,845	X								
Leominster	\$ 88,900	X								
Lexington	\$ 14,483								X	
Lowell	\$ 297,066	X								
Lynn	\$ 253,772	X								
Marblehead	\$ 88,788	X								
Mass Turnpike	\$ 184,045	X								
Massport	\$ 77,007					X	X	X	X	
Maynard	\$ 15,674				X	X	X		X	X
Medford	\$ 35,390						X	X	X	

## SCHEDULE OF RETIREMENT SYSTEMS BY INVESTMENT, continued

Retirement System	Net Asset Values (\$000s) 6/30/15	Segmentation Accounts invested as of June 30, 2015							
		General Allocation	Domestic Equity	International Equity	Emerging Markets	Core Fixed Income	Real Estate	Private Equity	Hedge Funds
Melrose	\$ 66,807	X							
Methuen	\$ 109,227	X							
Middlesex	\$ 997,721	X							
Milford	\$ 75,276	X							
Milton	\$ 108,187	X							
Minuteman	\$ 12,618	X							
Montague	\$ 34,318	X							
MSCBA	\$ 4,390	X							
MWRA	\$ 39,753	X					X	X	X
Natick	\$ 16,813	X					X	X	X
Needham	\$ 134,860	X							
Newburyport	\$ 64,658	X							
Newton	\$ 286,301	X							
Norfolk	\$ 80,857					X			X
North Adams	\$ 1,475						X	X	
Northbridge	\$ 28,813	X							
Northampton	\$ 1,737						X	X	
Norwood	\$ 24,013					X			X
Peabody	\$ 128,276	X							
Pittsfield	\$ 110,558	X							
Plymouth	\$ 31,458	X					X	X	X
Quincy	\$ 10,123	X						X	X
Reading	\$ 118,473	X							
Revere	\$ 126,169	X							
Salem	\$ 131,156	X							
Saugus	\$ 82,398	X							
Shrewsbury	\$ 96,143	X	X	X		X	X		
Southbridge	\$ 39,449	X							
Springfield	\$ 272,638	X							
State Employees'	\$ 23,796,142	X							
State Retiree Benefits Trust	\$ 849,883	X							
State Teachers'	\$ 25,241,023	X							
Stoneham	\$ 72,404	X							
Swampscott	\$ 32,843	X							
Wakefield	\$ 102,588	X							
Waltham	\$ 184,243	X							
Watertown	\$ 35,112		X				X	X	X
Webster	\$ 6,031						X	X	X
Wellesley	\$ 151,941	X							
Westfield	\$ 18,230						X		X
Weymouth	\$ 27,528						X		X
Winchester	\$ 25,124					X			X
Winthrop	\$ 53,940	X							
Woburn	\$ 50,608		X	X	X	X	X	X	X
Worcester	\$ 69,340						X		X
Worcester Regional	\$ 540,534	X							
		<u>\$ 61,243,745</u>							

## INVESTMENT POLICY STATEMENT

The following are significant elements and related excerpts from the PRIM Board's investment policy statement. The purpose of the statement is to delineate the investment policy and guidelines and to establish the overall investment strategies and discipline of the PRIM Board. This policy is intended to allow for sufficient flexibility to capture investment opportunities, yet provide parameters that ensure prudence and care in the execution of the investment program. This policy is issued for the guidance of fiduciaries, including Trustees, staff professionals, investment managers, custodians, and investment consultants, for managing the assets of the PRIT Fund. The policy is intended to provide a foundation from which to oversee the management of the PRIT Fund in a prudent manner.

### A. Investment Objectives

PRIM's overall objective is to achieve the highest level of investment performance that is compatible with its risk tolerance and prudent investment practices. Because of the long-term nature of the Commonwealth's pension liabilities, PRIM maintains a long-term perspective in formulating and implementing its investment policies, and in evaluating its investment performance. Investment performance is measured by three integrated long-term objectives: 1) the actuarial target rate of return, 2) the investment policy benchmark, and 3) peer universe comparisons.

The *actuarial target rate of return* is the key actuarial assumption affecting future Commonwealth funding rates and pension liabilities. Investment performance that exceeds or underperforms the target rate may materially impact future funding rates and liabilities. The PRIM Board seeks to have a long-term investment performance that will meet or exceed its actuarial target rate of return.

The *investment policy benchmark* is calculated by applying the investment performance of the asset class benchmarks to the PRIT Fund's asset allocation targets. The investment policy benchmark enables PRIM to compare the PRIT Fund's actual performance to a passively managed proxy and to measure the contribution of active investment management and policy implementation.

PRIM also compares its total fund performance to appropriate public plan sponsor *comparison universes*. A peer universe comparison permits PRIM to compare its performance to large public and other pension plans. While PRIM seeks to rank consistently in the top half of comparable public pension funds, PRIM recognizes that other funds may have investment objectives and risk tolerances that differ substantially from PRIM's.

PRIM expects to meet or exceed these objectives over its long-term investment horizon. The expected volatility of markets and unique objectives of PRIM relative to other pension plans may not favor, over shorter periods, PRIM's strategic investment policies.

### B. Asset Allocation Plan

PRIM recognizes that over the long-term, asset allocation is the single greatest contributor of return and risk to the PRIT Fund. At reasonable intervals of not more than three to five years, PRIM will complete a comprehensive review of its Asset Allocation Plan and its underlying assumptions, including: the Commonwealth's current and

projected pension assets and liabilities; long-term capital markets rate of return assumptions; and PRIM's risk tolerances. The PRIM Board shall examine the Asset allocation Plan annually, and shall consider adjustments to the Plan as may be appropriate given the Plan's long-term nature and objectives.

The PRIM Board conducted an asset/liability study in February 2014 to determine the optimum long-term asset allocation for the PRIT Fund, using the Massachusetts Public Employee Retirement Administration Commission (PERAC) valuation report as of January 1, 2013 and estimating the components of the valuation report as of January 1, 2014, which estimated a 60.6% and 61.5% funded ratio, respectively.

#### **C. Commission Recapture Policy**

In order to minimize the net costs of trading, PRIM will encourage its investment managers, on a "best efforts" basis, to execute 20% of total trades annually through brokers who have a commission recapture program. Should managers exceed the 20% suggested, the PRIT Fund will participate in those trades as well.

PRIM's investment managers may select two or three brokers to take part in this program. Any credits earned under the program should be remitted monthly or quarterly to the PRIT Fund.

PRIM's policies require managers to seek the best price and execution on all trades; this means that commission recapture trades should only be executed when such trades meet this standard. This program should not interfere with or reduce an investment manager's incentive to reduce trading costs.

#### **D. Rebalancing Policy**

The actual asset allocation mix will deviate from the Asset Allocation Plan's target due to market movement, cash flows, and manager performance. Material deviations from the asset allocation targets can alter the expected return and risk of the PRIT Fund. Accordingly, the PRIM Board has adopted asset class ranges for each asset class, and positioning within a specified asset class range is acceptable and constitutes compliance with the Asset Allocation Plan. It is the responsibility of PRIM staff to keep actual asset class allocations within the asset allocation bands. It is anticipated that the PRIM Board will make periodic revisions to the Asset Allocation Plan, and it is recognized that in some cases it may be prudent to allow an extended period of time to fully implement revisions to the Asset Allocation Plan. The spirit of this policy is to implement the investment strategy within the asset class ranges at a reasonable cost, recognizing that overly precise management of asset exposures can result in transaction costs that are not economically justified. In the circumstance that a rebalancing is warranted, staff shall have the discretion to instruct public securities managers (including an overlay manager) to use futures as a short-term tool to rebalance the PRIT Fund. The PRIM Board acknowledges that market conditions or circumstances beyond PRIM's control may lead to asset class weightings being temporarily out of their target ranges, especially as those ranges relate to illiquid asset classes.

#### **E. Proxy Voting Policy**

Under the contractual arrangements between the Pension Reserves Investment Management Board (the "Board") and its domestic and international separate account investment managers, the responsibility for voting proxies on the corporate shares owned is retained by the Board. Further, the Board may retain a consultant to

assist staff in evaluating shareholder proposals, communicating its vote to the corporation, and keeping account records of these votes.

The purpose of this policy is to outline the general principles applied by the Board in voting proxies. The Board recognizes that in applying these general rules exceptions will apply. The Executive Director and staff will vote in accordance with their best judgment in each circumstance.

The PRIM Board periodically reviews the PRIM Board Proxy Voting Policy to ensure that it contains appropriate guidance for staff in determining how votes will be cast on a variety of matters and the underlying rationale for such determination.

The main goal in voting any proxy question is to enhance the value of the security. PRIM staff will not vote the proxies in a manner that would reduce the value of shares owned by PRIT.

#### **F. Economically Targeted Investment Program**

PRIM recognizes its obligations under Massachusetts law to seek investment opportunities that will benefit the economic climate of the Commonwealth as a whole, provided that such investments are consistent with PRIM's obligations to the members and beneficiaries of its participating retirement systems. (See M.G.L. Ch. 32, sec. 23(2A) (h)) Accordingly, in cases where investment characteristics, including returns, risk, liquidity, compliance with allocation policy, and others, are equal, PRIM will favor those investments with a substantial, direct and measurable benefit to the economy of the Commonwealth.

Such Economically Targeted Investments ("ETIs") must meet the following criteria:

1. Investments must target risk-adjusted, market-rate returns and provide net returns equivalent to or higher than other available investments, at commensurate levels of risk. Economic or social benefits will not justify a lower return on any PRIT Fund investment. When evaluating ETI opportunities, PRIM will discount projected returns for any subsidies, deferral of income, higher risk levels, and other concessions to reach a real rate of return for comparison with other ETI and non-ETI investment alternatives. Similarly, ETI benefits will not justify higher investment risk. However, where appropriate, PRIM staff, its managers, and its advisors will actively seek out and develop guarantees, third party recourse, hedging, and other acceptable and customary risk management vehicles to reduce or eliminate risk in ETI investments.
2. Investments must not exceed a reasonable weighting in the portfolio, including tracking the degree of exposure to the Massachusetts economy and ensuring appropriate geographic diversification. Investments should maintain the overall portfolio's compliance with its asset allocation strategy. ETI benefits will not justify deviation from the Asset Allocation Plan adopted by the PRIM Board.
3. Investments should be placed with an experienced and capable manager through an objective and transparent process. Investments should be managed by qualified discretionary investment managers. PRIM will not make any direct investments.
4. Investments should target a "capital gap" where there are likely to be underserved markets.
5. Investments must be tracked (both investment performance and collateral benefits) and managed with the same rigor and discipline imposed on other investments. Investments should be reviewed and monitored by PRIM staff and advisors without disproportionate expenditure of time and resources.

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*Statistical Section*

## Schedules of Changes in Pooled Net Position

For Fiscal Years Ending June 30

(Dollars in thousands)

Additions	2015	2014	2013	2012	2011	2010	2009	2008	2007	2006
State Employees contributions	\$ 580,527	\$ 547,627	\$ 529,031	\$ 544,166	\$ 538,898	\$ 475,591	\$ 462,471	\$ 464,330	\$ 420,199	\$ 409,515
State teachers contributions	721,148	709,114	669,815	640,056	616,533	593,147	599,410	573,984	548,229	527,820
Other participants contributions	877,252	793,507	613,345	898,837	1,535,681	620,865	991,362	2,347,537	1,047,285	759,088
Net investment income (loss)	2,073,376	8,991,375	5,922,932	(280,407)	9,169,664	4,676,706	(12,492,194)	(1,185,523)	8,228,782	5,466,443
Total additions to pooled net position	4,252,303	11,041,623	7,735,123	1,802,652	11,860,776	6,366,309	(10,438,951)	2,200,328	10,244,495	7,162,866
Deductions										
State employees warrants	381,565	357,089	347,330	315,943	282,398	259,285	242,694	239,452	227,510	218,831
State teachers warrants	544,646	494,363	496,987	451,844	418,153	388,366	361,773	341,575	299,612	273,209
Participants redemptions	768,507	739,175	683,279	532,873	508,579	364,648	383,748	202,723	128,843	108,577
State appropriation funding	1,954,853	1,973,058	1,815,315	1,851,504	1,663,799	1,731,617	1,465,275	1,184,774	1,100,000	939,100
Operating expenses	35,761	30,789	30,394	28,447	26,391	27,332	24,954	23,294	15,447	18,305
Total deductions to pooled net position	3,685,332	3,594,474	3,373,305	3,180,611	2,899,320	2,771,248	2,478,444	1,991,818	1,771,412	1,558,022
Changes in pooled net position	\$ 566,971	\$ 7,447,149	\$ 4,361,818	\$ (1,377,959)	\$ 8,961,456	\$ 3,595,061	\$ (12,917,395)	\$ 208,510	\$ 8,473,083	\$ 5,604,844

The above table provides additional information regarding changes in pooled net position from that presented in the Statement of Changes in Pooled Net Position in the *Financial Section* of the CAFR. Deductions represent redemptions from the PRIT fund by state employees, state teachers and other participant retirement systems. Deductions also include redemptions for state appropriation funding and reimbursement of MASTERS operating expenses. State appropriation funding represents funds withdrawn to cover the shortfall in the pension appropriation of the Commonwealth of Massachusetts. Operating expenses represent redemptions made by state employees and state teachers for certain operating expenses. This information is derived from the same information used for the basic financial statements. Current fiscal year-end information should be read in conjunction with the Schedule of Changes in Pooled Net Position - Capital Fund and Cash Fund provided in the Financial Section.

## ***Financial Highlights and Financial Highlights Ratios***

Pages 99-100 provide the financial highlights of the PRIT Core Fund for the year ended June 30, 2015. In addition, pages 101-104 provide additional financial highlights ratios for the nine previous fiscal year ends. Together, these tables provide additional information regarding important ratios to assist the reader of the CAFR in understanding the financial position of the PRIT Core Fund. This information includes important return and expense ratios for the entire PRIT Fund as well as the various accounts that comprise the PRIT Core Fund. This information should be read in conjunction with the description of the investment program highlighted in the *Investment Section* of the CAFR.

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## Financial Highlights

For the year ended June 30, 2015

	General Allocation Account	Domestic Equity Account	International Equity Account	Emerging Markets Account	Core Fixed Income Account	Public Value-Added Fixed Income Account	Distressed Debt Account	Hedge Funds Account	Portable Alpha Wind Down Account	Private Equity Account	Private Equity Vintage Year 2000	Private Equity Vintage Year 2001	Private Equity Vintage Year 2002	Private Equity Vintage Year 2003	Private Equity Vintage Year 2004
Net asset value per unit, beginning of year	\$ 285.51	236.90	283.36	436.98	238.40	290.95	125.73	79.11	97.04	383.12	288.54	602.54	209.73	350.51	94.73
Investment operations:															
Net investment income (loss)(1)	5.94	4.12	7.26	8.80	2.46	14.51	2.42	(0.01)	(0.02)	3.56	3.87	36.08	18.46	21.99	5.79
Net realized and unrealized gain (loss) on investments and foreign currency	3.80	11.52	(15.59)	(35.63)	8.46	(29.46)	0.05	2.89	(4.10)	15.71	13.36	9.46	(9.83)	23.80	(0.13)
Total from investment operations	9.74	15.64	(8.33)	(26.83)	10.92	(14.95)	2.47	2.88	(4.12)	19.27	17.23	45.54	8.63	45.79	5.66
Net asset value per unit, end of year	\$ 295.25	252.54	275.03	410.15	249.32	276.00	128.20	81.99	92.92	402.39	305.77	648.08	218.36	396.30	100.39
Ratios and supplementary data:															
Total net return(2)	3.41%	6.60%	(2.94)%	(6.14)%	4.58%	(5.14)%	1.96%	3.64%	(4.25)%	5.03%	5.97%	7.56%	4.11%	13.06%	5.97%
Net assets, end of year ('000s)	\$ 59,982,623	11,745,353	10,341,307	4,011,292	8,377,734	3,702,871	1,350,323	5,575,153	32,057	52,713	103,656	102,397	20,089	145,442	119,669
Units outstanding, end of year ('000s)	203,159	46,508	37,600	9,780	33,603	13,416	10,533	67,998	345	131	339	158	92	367	1,192
Ratios to average net assets:															
Ratio of expenses, including indirect management fees	0.53%	0.14%	0.18%	0.31%	0.10%	0.47%	1.55%	1.40%	0.04%	0.04%	0.25%	0.22%	0.76%	0.38%	0.90%
Ratio of expenses, excluding indirect management fees	0.16%	0.14%	0.18%	0.31%	0.09%	0.30%	0.04%	0.04%	0.02%	0.04%	0.04%	0.05%	0.04%	0.04%	0.05%
Ratio of net investment income (loss)	2.05%	1.69%	2.72%	2.09%	1.06%	5.17%	1.90%	(0.01)%	(0.02)%	1.40%	1.16%	5.14%	8.21%	5.62%	2.15%

Note: Financial Highlights include only the Core Fund and does not include the Cash Fund which maintains a stable net asset value of \$1.00 per unit.

(1) Based on weighted average units outstanding.

(2) Total net return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

## ***Financial Highlights, continued***

**For the year ended June 30, 2015**

	Private Equity Vintage Year 2005 Account	Private Equity Vintage Year 2006 Account	Private Equity Vintage Year 2007 Account	Private Equity Vintage Year 2008 Account	Private Equity Vintage Year 2009 Account	Private Equity Vintage Year 2010 Account	Private Equity Vintage Year 2011 Account	Private Equity Vintage Year 2012 Account	Private Equity Vintage Year 2013 Account	Private Equity Vintage Year 2014 Account	Private Equity Vintage Year 2015 Account	Timber/ Real Estate Account	Natural Resources Account	Cash Overlay Account	Portfolio Completion Strategies Account
Net asset value per unit, beginning of year	\$ 120.67	84.12	25.65	88.87	73.98	87.80	49.60	12.23	91.34	78.15	100.00	444.89	256.16	147.46	100.00
Investment operations:															
Net investment income (loss)(1)	3.58	2.41	0.51	2.12	2.08	0.28	(0.03)	0.01	(2.61)	(0.02)	0.08	20.00	1.10	0.01	(0.10)
Net realized and unrealized gain (loss) on investments and foreign currency	14.70	7.27	1.81	12.69	15.69	16.48	11.97	1.43	(2.18)	(10.55)	(6.34)	30.29	(6.32)	7.65	(5.11)
Total from investment operations	18.28	9.68	2.32	14.81	17.77	16.76	11.94	1.44	(4.79)	(10.57)	(6.26)	50.29	(5.22)	7.66	(5.21)
Net asset value per unit, end of year	\$ 138.95	93.80	27.97	103.68	91.75	104.56	61.54	13.67	86.55	67.58	93.74	495.18	250.94	155.12	94.79
Ratios and supplementary data:															
Total net return(2)	15.15%	11.51%	9.04%	16.66%	24.02%	19.09%	24.07%	11.77%	(5.24)%	(13.53)%	(6.26)% (3)	11.30%	(2.04)%	5.19%	(5.21)% (3)
Net assets, end of year ('000s)	\$ 594,274	848,797	1,154,470	1,017,713	494,545	762,278	704,428	425,548	170,840	177,995	40,871	6,093,142	2,347,050	567,427	94,882
Units outstanding, end of year ('000s)	4,277	9,049	41,282	9,816	5,390	7,290	11,447	31,126	1,974	2,634	436	12,305	9,353	3,658	1,001
Ratios to average net assets:															
Ratio of expenses, including indirect management fees	0.82%	0.80%	1.01%	0.97%	1.71%	1.61%	2.21%	3.27%	8.83%	9.28%	2.57% (3)	0.64%	0.70%	0.07%	0.29% (3)
Ratio of expenses, excluding indirect management fees	0.05%	0.05%	0.04%	0.11%	0.04%	0.04%	0.15%	0.05%	0.04%	0.06%	0.02% (3)	0.27%	0.40%	0.07%	0.10% (3)
Ratio of net investment income (loss)	2.68%	2.63%	1.83%	2.16%	2.54%	0.30%	(0.06)%	0.05%	(0.90)%	(0.01)%	0.10% (3)	4.29%	0.44%	—%	(0.10)% (3)

Note: Financial Highlights include only the Core Fund and does not include the Cash Fund which maintains a stable net asset value of \$1.00 per unit.

(1) Based on weighted average units outstanding.

(2) Total net return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

(3) Denotes account commenced operations subsequent to the beginning of the fiscal year. Total return and ratios not annualized.

## Financial Highlights Ratios

For the years ended June 30, 2014-2006

	General Allocation Account	Domestic Equity Account	International Equity Account	Emerging Markets Account	Core Fixed Income Account	Public Value-Added Fixed Income Account	Distressed Debt Account	Hedge Funds Account	Portable Alpha Wind Down Account (2)	Private Equity Account	Vintage Year 2000 Account	Vintage Year 2001 Account	Vintage Year 2002 Account	Vintage Year 2003 Account
<b>Ratios and supplementary data:</b>														
<b>2014</b>														
Total net return (1)	17.18%	24.78%	24.23%	13.76%	5.66%	6.90%	15.18%	10.72%	(5.88)%	8.25%	23.80%	27.29%	8.97%	21.56%
Net assets, end of year (\$'000s)	59,507,530	11,478,177	10,382,202	4,263,167	8,398,309	3,787,240	1,360,006	5,845,587	49,684	94,631	137,922	133,764	35,025	197,688
Units outstanding, end of year ('000s)	208,428	48,451	36,639	9,756	35,228	13,017	10,817	73,892	512	247	478	222	167	564
<b>2013</b>														
Total net return (1)	12.28%	21.98%	19.34%	5.10%	(0.45)%	3.07%	9.16%	(3)	12.20%	2.39%	3.28%	8.68%	10.18%	11.79%
Net assets, end of year (\$'000s)	52,274,725	11,066,413	9,531,557	3,438,125	6,712,701	3,444,265	1,269,546	4,903,178	72,275	160,679	173,402	189,340	58,316	270,764
Units outstanding, end of year ('000s)	214,541	58,286	41,787	8,951	29,751	12,655	11,630	68,628	701	454	400	303	939	
<b>2012</b>														
Total net return (1)	(0.54)%	3.64%	(12.15)%	(16.79)%	7.96%	2.81%	N/A	(1.74)%	(7.47)%	(0.35)%	5.23%	(2.66)%	26.76%	0.80%
Net assets, end of year (\$'000s)	48,101,609	9,415,207	8,155,824	3,261,031	6,352,958	4,180,242	N/A	4,809,557	110,458	177,159	278,587	242,301	66,969	345,110
Units outstanding, end of year ('000s)	221,647	60,491	42,670	8,923	28,029	15,830	N/A	75,522	1,097	517	1,299	564	389	1,251
<b>2011</b>														
Total net return (1)	21.97%	32.07%	30.69%	28.88%	5.31%	16.18%	N/A	7.48%	6.43%	20.27%	15.85%	23.12%	32.48%	22.22%
Net assets, end of year (\$'000s)	49,546,154	11,073,922	10,865,457	3,304,907	6,619,356	3,024,257	N/A	3,611,056	220,570	275,801	370,120	298,784	121,827	416,819
Units outstanding, end of year ('000s)	227,076	73,736	49,937	7,525	31,528	11,775	N/A	55,719	2,027	802	1,816	677	897	1,523
<b>2010</b>														
Total net return (1)	12.47%	14.50%	9.50%	23.57%	11.56%	32.22%	N/A	7.10%	2.25%	15.73%	14.13%	17.76%	12.96%	24.05%
Net assets, end of year (\$'000s)	40,753,645	8,188,194	8,264,027	2,338,946	5,774,372	2,897,661	N/A	3,154,587	776,629	339,078	480,643	324,708	100,441	411,075
Units outstanding, end of year ('000s)	227,816	72,008	49,641	6,864	28,965	13,107	N/A	52,318	7,595	1,186	2,732	906	980	1,826
<b>2009</b>														
Total net return (1)	(24.41)%	(32.13)%	(31.95)%	(31.98)%	(5.57)%	(11.60)%	N/A	(14.45)%	N/A	(23.13)%	(18.99)%	(22.76)%	(27.47)%	(22.82)%
Net assets, end of year (\$'000s)	37,113,501	9,164,719	7,146,289	1,887,971	4,897,346	2,883,436	N/A	2,135,634	N/A	343,288	483,606	317,591	86,586	393,043
Units outstanding, end of year ('000s)	233,338	92,280	47,004	6,846	27,405	17,245	N/A	37,934	N/A	1,390	3,137	1,043	954	2,177
<b>2008</b>														
Total net return (1)	(2.30)%	(9.27)%	(0.03)%	14.18%	2.04%	N/A	1.73%	N/A	19.23%	17.10%	18.39%	19.01%	18.81%	
Net assets, end of year (\$'000s)	49,845,944	13,180,182	10,119,936	2,761,180	8,510,469	2,511,813	N/A	2,614,238	N/A	457,054	642,580	417,740	114,619	531,381
Units outstanding, end of year ('000s)	236,891	90,077	45,297	6,810	44,973	13,280	N/A	39,723	N/A	1,422	3,377	1,060	916	2,272
<b>2007</b>														
Total net return (1)	19.53%	20.60%	26.15%	42.26%	4.78%	14.73%	N/A	13.82%	N/A	24.53%	23.15%	50.18%	26.70%	63.10%
Net assets, end of year (\$'000s)	49,519,109	15,049,415	10,574,561	2,750,631	7,800,673	2,329,393	N/A	2,569,001	N/A	533,033	698,900	509,022	102,564	555,480
Units outstanding, end of year ('000s)	229,913	86,717	42,945	6,782	47,065	12,568	N/A	39,711	N/A	1,977	4,301	1,529	976	2,822
<b>2006</b>														
Total net return (1)	14.87%	9.30%	27.01%	36.12%	(0.51)%	5.80%	N/A	11.18%	N/A	36.45%	34.70%	55.07%	38.67%	32.12%
Net assets, end of year (\$'000s)	41,257,962	11,516,779	8,303,709	2,455,151	6,452,906	2,208,795	N/A	2,114,139	N/A	777,941	764,926	480,794	79,588	351,371
Units outstanding, end of year ('000s)	228,973	80,029	42,540	8,612	40,794	13,672	N/A	37,197	N/A	3,594	5,797	2,169	959	2,911
<b>Ratios to average net assets:</b>														
<b>2014</b>														
Ratio of expenses, including indirect management fees	0.55%	0.14%	0.19%	0.27%	0.11%	0.49%	1.90%	1.50%	0.10%	0.03%	0.25%	0.59%	0.49%	0.59%
Ratio of expenses, excluding indirect management fees	0.15%	0.14%	0.19%	0.24%	0.10%	0.31%	0.04%	0.05%	0.02%	0.03%	0.05%	0.07%	0.05%	0.04%
Ratio of net investment income (loss)	2.45%	1.65%	3.23%	2.10%	2.57%	5.41%	1.98%	(0.05)%	(0.02)%	1.82%	2.47%	1.16%	(0.05)%	2.20%
<b>2013</b>														
Ratio of expenses, including indirect management fees	0.55%	0.08%	0.19%	0.33%	0.14%	0.85%	0.92% (3)	1.33%	0.13%	—%	0.39%	0.59%	0.77%	0.90%
Ratio of expenses, excluding indirect management fees	0.14%	0.08%	0.19%	0.32%	0.12%	0.34%	0.01% (3)	0.05%	0.02%	(0.03)%	0.07%	0.09%	0.05%	0.05%
Ratio of net investment income (loss)	2.53%	2.02%	2.93%	2.59%	2.87%	6.27%	2.37% (3)	(0.05)%	(0.02)%	3.86%	4.02%	2.53%	1.19%	2.11%
<b>2012</b>														
Ratio of expenses, including indirect management fees	0.50%	0.09%	0.19%	0.32%	0.14%	0.89%	N/A	0.91%	0.09%	0.24%	0.54%	0.73%	0.81%	0.83%
Ratio of expenses, excluding indirect management fees	0.14%	0.09%	0.19%	0.30%	0.13%	0.18%	N/A	0.04%	0.02%	0.04%	0.07%	0.08%	0.04%	0.04%
Ratio of net investment income (loss)	2.55%	1.91%	3.37%	2.61%	3.41%	4.67%	N/A	(0.04)%	(0.02)%	0.38%	2.74%	0.96%	1.13%	2.23%

## Financial Highlights Ratios

For the years ended June 30, 2014-2006

	General Allocation Account	Domestic Equity Account	International Equity Account	Emerging Markets Account	Core Fixed Income Account	Public Value-Added Fixed Income Account	Hedge Funds Account	Portable Alpha Wind Down Account (2)	Private Equity Account	Vintage Year 2000 Account	Vintage Year 2001 Account	Vintage Year 2002 Account	Vintage Year 2003 Account
<b>2011</b>													
Ratio of expenses, including indirect management fees	0.50%	0.08%	0.19%	0.35%	0.15%	0.96%	0.81%	0.06%	0.32%	1.25%	1.49%	0.97%	0.89%
Ratio of expenses, excluding indirect management fees	0.14%	0.08%	0.19%	0.32%	0.14%	0.15%	0.03%	0.02%	(0.01)%	0.06%	0.08%	0.06%	0.02%
Ratio of net investment income (loss)	2.54%	1.76%	3.05%	2.34%	3.88%	3.67%	(0.03)%	(0.01)%	0.57%	2.34%	3.65%	(0.04)%	2.12%
<b>2010</b>													
Ratio of expenses, including indirect management fees	0.54%	0.20%	0.23%	0.25%	0.16%	1.08%	0.82%	0.14%	0.79%	1.57%	1.07%	1.13%	0.89%
Ratio of expenses, excluding indirect management fees	0.15%	0.08%	0.23%	0.17%	0.14%	0.28%	0.03%	0.02%	0.16%	0.08%	0.08%	0.06%	0.06%
Ratio of net investment income (loss)	2.34%	1.49%	2.69%	1.59%	3.85%	4.07%	(0.02)%	(0.01)%	0.75%	2.11%	1.47%	(0.05)%	2.94%
<b>2009</b>													
Ratio of expenses, including indirect management fees	0.51%	0.29%	0.29%	0.48%	0.14%	0.89%	0.85%	N/A	0.94%	1.39%	1.21%	1.19%	0.96%
Ratio of expenses, excluding indirect management fees	0.10%	0.11%	0.29%	0.38%	0.12%	0.16%	0.04%	N/A	0.16%	0.06%	0.07%	0.06%	0.06%
Ratio of net investment income (loss)	2.78%	1.72%	3.19%	2.19%	4.60%	5.97%	(0.03)%	N/A	0.04%	0.31%	1.18%	(0.02)%	0.37%
<b>2008</b>													
Ratio of expenses, including indirect management fees	0.52%	0.27%	0.26%	0.21%	0.17%	0.85%	0.76%	N/A	0.98%	1.43%	0.99%	1.13%	0.58%
Ratio of expenses, excluding indirect management fees	0.25%	0.17%	0.26%	0.10%	0.16%	0.21%	0.04%	N/A	0.14%	0.02%	0.02%	0.02%	0.02%
Ratio of net investment income (loss)	2.70%	1.49%	2.84%	2.23%	5.32%	5.41%	(0.02)%	N/A	1.85%	0.58%	1.63%	0.15%	0.32%
<b>2007</b>													
Ratio of expenses, including indirect management fees	0.54%	0.29%	0.27%	0.46%	0.13%	0.70%	1.26%	N/A	1.06%	1.61%	1.02%	1.55%	0.94%
Ratio of expenses, excluding indirect management fees	0.27%	0.16%	0.27%	0.33%	0.13%	0.24%	0.03%	N/A	0.19%	0.08%	0.09%	0.08%	0.08%
Ratio of net investment income (loss)	2.93%	1.87%	2.73%	2.76%	4.96%	5.95%	(0.03)%	N/A	2.89%	2.56%	6.96%	—%	4.57%
<b>2006</b>													
Ratio of expenses, including indirect management fees	0.63%	0.23%	0.23%	0.82%	0.14%	0.31%	1.09%	N/A	1.16%	1.99%	1.31%	2.43%	2.37%
Ratio of expenses, excluding indirect management fees	0.41%	0.23%	0.23%	0.82%	0.14%	0.30%	0.03%	N/A	0.14%	0.08%	0.09%	0.08%	0.08%
Ratio of net investment income (loss)	2.78%	1.51%	2.66%	2.33%	5.13%	6.22%	(0.02)%	N/A	1.73%	1.84%	3.28%	(0.07)%	0.66%

(1) Total net return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

(2) Prior to January 1, 2010, Portable Alpha assets were reflected in the Domestic Equity portfolio.

(3) Denotes account commenced operations subsequent to the beginning of the fiscal year. Total return and ratios not annualized.

## Financial Highlights Ratios

For the years ended June 30, 2014-2006

	Vintage Year 2004 Account	Vintage Year 2005 Account	Vintage Year 2006 Account	Vintage Year 2007 Account	Vintage Year 2008 Account	Vintage Year 2009 Account	Vintage Year 2010 Account	Vintage Year 2011 Account	Vintage Year 2012 Account	Vintage Year 2013 Account	Vintage Year 2014 Account	Core Real Estate Account	Noncore Real Estate Account	Timber / NR Account	Cash Overlay Account
<b>Ratios and supplementary data:</b>															
<b>2014</b>															
Total net return (1)	52.79%	20.33%	23.18%	22.67%	30.63%	27.66%	27.52%	17.90%	16.81%	(8.66)%	(21.85)% (2)	12.91%	N/A	12.81%	47.46% (2)
Net assets, end of year (\$'000s)	257,109	703,977	1,098,091	1,319,704	1,050,050	401,949	597,679	435,298	215,895	52,887	3,204	5,380,022	N/A	2,374,863	549,427
Units outstanding, end of year ('000s)	2,714	5,834	13,054	51,443	11,815	5,433	6,807	8,777	17,648	579	41	12,093	N/A	9,271	3,726
<b>2013</b>															
Total net return (1)	8.87%	13.07%	13.29%	14.39%	17.96%	15.65%	14.41%	(1.98)%	(21.87)%	N/A	N/A	12.28%	N/A	6.27%	N/A
Net assets, end of year (\$'000s)	265,784	801,538	1,217,424	1,212,620	895,341	301,492	391,799	201,700	61,569	N/A	N/A	4,382,052	N/A	2,129,694	N/A
Units outstanding, end of year ('000s)	4,287	7,993	17,827	57,995	13,161	5,203	5,691	4,794	5,879	N/A	N/A	11,121	N/A	9,379	N/A
<b>2012</b>															
Total net return (1)	9.06%	16.13%	13.20%	11.33%	14.15%	0.62%	(9.88)%	(54.42)%	(86.60)% (2)	N/A	N/A	9.41%	N/A	(8.68)%	N/A
Net assets, end of year (\$'000s)	360,592	879,582	1,291,372	1,072,936	685,645	184,789	214,792	97,989	134	N/A	N/A	4,724,457	N/A	1,903,043	N/A
Units outstanding, end of year ('000s)	6,332	9,918	21,422	58,687	11,889	3,688	3,569	2,283	10	N/A	N/A	13,463	N/A	8,906	N/A
<b>2011</b>															
Total net return (1)	50.10%	19.74%	23.61%	20.56%	20.34%	(7.45)%	(29.52)%	(5.84)% (2)	N/A	N/A	N/A	20.17%	N/A	19.20%	N/A
Net assets, end of year (\$'000s)	415,720	872,773	1,208,620	804,057	439,750	86,944	44,610	1,789	N/A	N/A	N/A	4,103,735	N/A	2,003,721	N/A
Units outstanding, end of year ('000s)	7,961	11,428	22,699	48,975	8,704	1,746	668	19	N/A	N/A	N/A	12,794	N/A	8,563	N/A
<b>2010</b>															
Total net return (1)	14.37%	15.50%	15.53%	11.18%	6.01%	(46.19)%	(5.25)% (2)	N/A	N/A	N/A	N/A	2.35%	N/A	(5.90)%	N/A
Net assets, end of year (\$'000s)	365,651	750,824	913,119	467,426	203,969	18,978	7,080	N/A	N/A	N/A	N/A	3,767,749	N/A	1,671,981	N/A
Units outstanding, end of year ('000s)	10,458	11,670	20,982	33,927	4,786	349	74	N/A	N/A	N/A	N/A	13,815	N/A	8,517	N/A
<b>2009</b>															
Total net return (1)	(19.91)%	(25.79)%	(23.62)%	(19.41)%	N/A	(23.90)%	(100.00)%	(14.84)%	N/A						
Net assets, end of year (\$'000s)	318,973	629,918	708,085	285,173	62,947	N/A	N/A	N/A	N/A	N/A	N/A	4,090,525	—	1,776,921	N/A
Units outstanding, end of year ('000s)	10,485	11,408	18,991	23,279	1,590	N/A	N/A	N/A	N/A	N/A	N/A	15,686	—	8,518	N/A
<b>2008</b>															
Total net return (1)	21.15%	22.18%	2.80%	(84.80)%	N/A (2)	N/A	N/A	N/A	N/A	N/A	N/A	4.41%	N/A	20.69%	N/A
Net assets, end of year (\$'000s)	388,181	748,612	783,796	163,835	8,038	N/A	N/A	N/A	N/A	N/A	N/A	5,520,030	2	1,065,586	N/A
Units outstanding, end of year ('000s)	10,222	10,060	16,056	10,778	91	N/A	N/A	N/A	N/A	N/A	N/A	16,109	—	4,350	N/A
<b>2007</b>															
Total net return (1)	22.32%	13.02%	(38.73)%	— (2)	N/A	15.65%	318.62%	14.67%	N/A						
Net assets, end of year (\$'000s)	319,874	385,139	251,773	740	N/A	4,316,265	2	1,598,166	N/A						
Units outstanding, end of year ('000s)	10,204	6,325	5,301	7	N/A	13,152	—	7,874	N/A						
<b>2006</b>															
Total net return (1)	(4.55)%	(32.12)%	(22.49)% (2)	N/A	22.70%	106.43%	18.52%	N/A							
Net assets, end of year (\$'000s)	143,419	106,808	3,182	N/A	4,618,446	38	1,480,574	N/A							
Units outstanding, end of year ('000s)	5,596	1,982	41	N/A	16,275	—	8,365	N/A							
<b>Ratios to average net assets:</b>															
<b>2014</b>															
Ratio of expenses, including indirect management fees	0.88%	0.91%	0.84%	1.32%	1.70%	2.59%	2.55%	4.26%	7.53%	14.31%	10.58% (2)	0.56%	N/A	0.55%	0.09% (2)
Ratio of expenses, excluding indirect management fees	0.08%	0.08%	0.06%	0.04%	0.15%	0.04%	0.04%	0.41%	0.05%	0.04%	0.11% (2)	0.17%	N/A	0.16%	0.09% (2)
Ratio of net investment income (loss)	4.30%	3.18%	2.54%	1.24%	3.35%	2.18%	0.65%	(0.14)%	0.29%	18.06%	(0.11)% (2)	4.69%	N/A	0.51%	(0.08)% (2)
<b>2013</b>															
Ratio of expenses, including indirect management fees	0.94%	1.01%	0.97%	1.70%	1.88%	3.26%	3.69%	7.38%	14.26%	N/A	N/A	0.49%	N/A	0.67%	N/A
Ratio of expenses, excluding indirect management fees	0.12%	0.09%	0.10%	0.04%	0.16%	0.04%	0.04%	0.17%	0.08%	N/A	N/A	0.13%	N/A	0.15%	N/A
Ratio of net investment income (loss)	1.60%	2.49%	1.84%	1.58%	1.03%	0.79%	0.36%	(0.13)%	(0.22)%	N/A	N/A	4.56%	N/A	0.13%	N/A
<b>2012</b>															
Ratio of expenses, including indirect management fees	0.80%	1.02%	1.11%	2.12%	2.54%	5.61%	7.85%	16.15%	8.19% (2)	N/A	N/A	0.50%	N/A	0.78%	N/A
Ratio of expenses, excluding indirect management fees	0.11%	0.08%	0.19%	0.04%	0.21%	0.04%	0.04%	0.04%	0.25% (2)	N/A	N/A	0.15%	N/A	0.19%	N/A
Ratio of net investment income (loss)	2.08%	0.77%	1.14%	1.18%	0.28%	0.81%	—%	0.62%	(488.92)% (2)	N/A	N/A	4.59%	N/A	0.03%	N/A

## ***Financial Highlights Ratios***

**For the years ended June 30, 2014-2006**

	Vintage Year 2004 Account	Vintage Year 2005 Account	Vintage Year 2006 Account	Vintage Year 2007 Account	Vintage Year 2008 Account	Vintage Year 2009 Account	Vintage Year 2010 Account	Vintage Year 2011 Account	Core Real Estate Account	Noncore Real Estate Account	Timber / NR Account
<b>2011</b>											
Ratio of expenses, including indirect management fees	1.05%	1.43%	1.45%	3.81%	3.98%	15.75%	13.44%	10.80%	0.53%	N/A	0.83%
Ratio of expenses, excluding indirect management fees	0.09%	0.11%	0.20%	(0.01)%	0.22%	0.04%	0.05%	0.02%	0.16%	N/A	0.22%
Ratio of net investment income (loss)	0.79%	2.14%	2.23%	0.53%	1.16%	0.66%	(0.04)%	(0.02)%	5.02%	N/A	0.26%
<b>2010</b>											
Ratio of expenses, including indirect management fees	1.16%	1.93%	2.03%	5.66%	9.21%	51.16%	0.06%	N/A	0.53%	N/A	0.57%
Ratio of expenses, excluding indirect management fees	0.18%	0.19%	0.30%	0.06%	0.06%	0.06%	0.06%	N/A	0.15%	N/A	0.07%
Ratio of net investment income (loss)	0.99%	0.15%	0.90%	0.46%	0.72%	0.15%	(32.74)%	N/A	4.80%	N/A	0.60%
<b>2009</b>											
Ratio of expenses, including indirect management fees	1.67%	1.67%	2.20%	7.96%	23.91%	N/A	N/A	N/A	(0.26)%	N/A	1.00%
Ratio of expenses, excluding indirect management fees	0.27%	0.18%	0.28%	0.05%	0.06%	N/A	N/A	N/A	(0.59)%	N/A	0.60%
Ratio of net investment income (loss)	0.43%	0.12%	0.31%	0.37%	4.62%	N/A	N/A	N/A	5.53%	N/A	(0.90)%
<b>2008</b>											
Ratio of expenses, including indirect management fees	0.97%	2.07%	2.37%	16.71%	—%	N/A	N/A	N/A	0.79%	N/A	2.33%
Ratio of expenses, excluding indirect management fees	0.27%	0.09%	0.18%	0.02%	—%	N/A	N/A	N/A	0.50%	N/A	2.10%
Ratio of net investment income (loss)	0.62%	0.14%	—%	(0.11)%	—%	N/A	N/A	N/A	4.18%	N/A	(1.64)%
<b>2007</b>											
Ratio of expenses, including indirect management fees	1.49%	5.20%	10.88%	—%	N/A	N/A	N/A	N/A	1.13%	N/A	0.98%
Ratio of expenses, excluding indirect management fees	0.31%	0.22%	1.81%	—%	N/A	N/A	N/A	N/A	0.80%	N/A	0.72%
Ratio of net investment income (loss)	0.22%	3.70%	(1.47)%	—%	N/A	N/A	N/A	N/A	3.94%	N/A	0.09%
<b>2006</b>											
Ratio of expenses, including indirect management fees	6.73%	20.92%	19.76%	N/A	N/A	N/A	N/A	N/A	1.66%	1.00%	2.27%
Ratio of expenses, excluding indirect management fees	1.04%	2.03%	0.21%	N/A	N/A	N/A	N/A	N/A	1.29%	1.00%	2.00%
Ratio of net investment income (loss)	(0.97)%	(1.66)%	(0.22)%	N/A	N/A	N/A	N/A	N/A	3.57%	2.85%	(0.04)%

(1) Total return calculation is based on the value of a single unit of participation outstanding throughout the year. It represents the percentage change in the net asset value per unit between the beginning and end of the year.

(2) Denotes account commenced operations subsequent to the beginning of the fiscal year. Total return and ratios not annualized.

## PRIT Core Fund Asset Allocation

**As of June 30:**

The following table is intended to provide readers of this CAFR with further information regarding the financial position of the PRIT Core Fund over the past ten years. This table provides the change in assets during this time period. This table should be read in conjunction with the discussion on asset allocation in the *Investment Section* of this CAFR.

	<b>2015</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>
Domestic Equity	19.2%	19.0%	20.8%	19.2%	22.0%	19.9%	24.4%	26.1%	29.9%	27.5%
International Equity	16.9%	17.1%	18.0%	16.7%	21.7%	20.0%	19.0%	20.0%	21.0%	19.8%
Emerging Markets	6.6%	7.0%	6.5%	6.7%	6.6%	5.7%	5.0%	5.5%	5.5%	5.9%
Core Fixed Income	13.7%	13.9%	12.6%	13.0%	13.2%	14.0%	13.0%	16.8%	15.4%	15.4%
Value-Added Fixed Income	8.3%	8.5%	8.9%	8.6%	6.0%	7.0%	7.7%	5.0%	4.6%	5.3%
Private Equity	11.3%	11.1%	11.7%	12.1%	10.7%	10.6%	9.6%	8.4%	6.7%	6.5%
Real Estate	10.0%	8.9%	8.2%	9.7%	8.2%	9.1%	10.9%	10.9%	8.6%	11.0%
Timber/Natural Resources	3.8%	3.9%	4.0%	3.9%	4.0%	4.1%	4.7%	2.1%	3.2%	3.5%
Hedge Funds	9.1%	9.6%	9.2%	9.9%	7.2%	7.7%	5.7%	5.2%	5.1%	5.1%
Portable Alpha Wind Down (1)	0.1%	0.1%	0.1%	0.2%	0.4%	1.9%	-	-	-	-
Overlay	0.9%	0.9%	-	-	-	-	-	-	-	-
Portfolio Completion Strategies	0.2%	-	-	-	-	-	-	-	-	-

Totals may not add due to rounding.

(1) Prior to January 1, 2010, Portable Alpha assets were reflected in the Domestic Equity portfolio.



PENSION RESERVES  
**INVESTMENT**  
MANAGEMENT BOARD

**Appendix P**

2016 Proposed PRIM Board and Committee Schedule

*PRIM Board Meeting*  
*Tuesday, December 1, 2015*

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## **Committee and Board Meeting Proposed Dates.**

### **January 2016.**

Tuesday, January 19, 2016 - Investment Committee.  
Wednesday, January 20, 2016 – Real Estate and Timberland Committee.  
Thursday, January 21, 2016 – Admin and Audit Committee.

### **February 2016**

Tuesday, February 2, 2016 – Board Meeting.

### **March 2016**

Tuesday, March 22, 2016 – Investment Committee.  
Wednesday, March 23, 2016 – Real Estate and Timberland Committee.  
Thursday, March 24, 2016 – Admin & Audit Committee.

### **April 2016**

Tuesday, April 5, 2016 – Board Meeting.

### **May 2016**

Tuesday, May 24, 2016 – Investment Committee.  
Wednesday, May 25, 2016 – Real Estate and Timberland Committee.  
Thursday, May 26, 2016 – Admin and Audit Committee.

### **June 2016**

Wednesday, June 8, 2016 – Board Meeting.

### **August 2016**

Tuesday, August 2, 2016 – Investment Committee.  
Wednesday, August 3, 2106 – Real Estate and Timberland Committee.  
Thursday, August 4, 2016 – Admin and Audit Committee.  
Tuesday, August 9, 2016 – Board Meeting.

### **September 2016**

Tuesday, September 20, 2016 – Investment Committee.  
Wednesday, September 21, 2016 – Real Estate and Timberland Committee.  
Thursday, September 22, 2016 – Admin & Audit Committee.

### **October 2016**

Tuesday, October 4, 2016 – Board Meeting.

### **November 2016**

Tuesday, November 15, 2016 – Investment Committee.  
Wednesday, November 16, 2016 – Real Estate and Timberland Committee.  
Thursday, November 17, 2016 – Admin and Audit Committee.  
Thursday, November 17, 2016 – Compensation Committee.

### **December 2016**

Tuesday, December 6, 2016 – Board Meeting.

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix Q

September 2015 Operating Budget

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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PENSION RESERVES INVESTMENT MANAGEMENT BOARD

Budget as of September 30, 2015

<u>FY 2016</u>	<u>Investment Management Fees</u>	<u>YTD Actual</u>	<u>YTD Budget</u>	<u>Variance Under (Over)</u>	<u>%</u>
15,048,014	Domestic Equity	3,595,333	3,761,992	166,659	4%
16,912,003	International Equity	4,047,580	4,227,993	180,413	4%
19,402,865	Emerging Markets Equity	4,053,032	4,850,707	797,675	16%
4,758,798	Core Fixed Income	1,128,388	1,189,691	61,303	5%
10,743,249	Value Added Fixed Income	2,484,554	2,685,806	201,252	7%
4,905,660	Real Estate - REIT's	1,075,211	1,226,415	151,204	12%
0	Real Estate - Core Strategy	(54,894)	-	54,894	0%
3,050,037	Timber/Natural Resources	(2,702,926)	762,506	3,465,432	454%
2,424,000	Private Equity	152,483	606,858	454,375	75%
50,000	Hedge Funds	12,603	12,501	(102)	-1%
416,553	Overlay/Foreign Currency	257,231	104,141	(153,090)	-147%
<b>77,711,179</b>	<b>Subtotal</b>	<b>14,048,595</b>	<b>19,428,610</b>	<b>5,380,015</b>	<b>28%</b>

PRIM Operations:

<u>Custody &amp; Outside Advisors</u>					
790,000	Custodian	121,161	197,499	76,338	39%
786,375	Consultant - General	180,291	196,586	16,295	8%
1,500,000	Consultant - Private Equity	403,536	375,000	(28,536)	-8%
585,000	Consultant - Real Estate	123,619	146,247	22,628	15%
3,617,784	Consultant - Hedge Funds	596,372	904,446	308,074	34%
444,000	Audit & Tax	86,000	110,997	24,997	23%
375,000	Legal	17,117	93,765	76,648	82%
259,184	Governance	50,888	64,794	13,906	21%
1,231,226	Risk Management	260,837	307,803	46,966	15%
<b>9,588,569</b>	<b>Subtotal</b>	<b>1,839,821</b>	<b>2,397,137</b>	<b>557,316</b>	<b>23%</b>
<u>Operations:</u>					
6,822,823	Salaries	1,400,177	1,705,702	305,525	18%
855,464	Occupancy	181,841	213,860	32,019	15%
303,336	Insurance	45,873	75,829	29,956	40%
167,500	Employee Benefits	29,226	41,871	12,645	30%
246,072	General Office Expenses	55,827	60,588	4,761	8%
866,980	Computer & MIS	175,759	216,741	40,982	19%
215,000	Due Diligence Travel	12,755	53,748	40,993	76%
100,000	Professional Development	11,915	24,999	13,084	52%
86,787	Client Service	1,305	18,695	17,390	93%
80,000	Dues & Subscriptions	18,874	19,998	1,124	6%
65,000	Temporary Labor	13,380	16,248	2,868	18%
<b>9,808,962</b>	<b>Subtotal</b>	<b>1,946,932</b>	<b>2,448,279</b>	<b>501,347</b>	<b>20%</b>
<b>19,397,531</b>	<b>Total Operations &amp; Advisors</b>	<b>3,786,753</b>	<b>4,845,416</b>	<b>1,058,663</b>	<b>22%</b>
<b>97,108,710</b>	<b>Total PRIM Direct Operating Budget</b>	<b>17,835,348</b>	<b>24,274,026</b>	<b>6,438,678</b>	<b>27%</b>
<u>Indirect Fees</u>					
24,445,573	Real Estate	5,893,942	6,111,391	217,449	4%
3,699,268	Timber	833,813	924,817	91,004	10%
108,873,088	Private Equity	24,197,124	27,218,271	3,021,147	11%
23,700,811	Distressed Debt	6,115,122	5,925,203	(189,919)	-3%
79,835,832	Hedge Funds	19,015,420	19,958,958	943,538	5%
10,000	Portable Alpha Wind Down	1,321	2,500	1,179	47%
7,758,000	Commingled Funds	1,936,408	1,939,497	3,089	0%
<b>2787377</b>	<b>Portfolio Completion Strategie</b>	<b>315,413</b>	<b>696,845</b>	<b>381,432</b>	<b>55%</b>
<b>251,109,949</b>	<b>Total PRIM Indirect Budget</b>	<b>58,308,563</b>	<b>62,777,482</b>	<b>4,468,919</b>	<b>7%</b>
<b>348,218,659</b>	<b>Total PRIM Direct &amp; Indirect Fees</b>	<b>76,143,911</b>	<b>87,051,508</b>	<b>10,907,597</b>	<b>13%</b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Domestic Equity**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Base Fees</u></b>				
2,497,689	PIMCO (Enhanced Index)	593,208	624,420	31,212
1,805,700	INTECH (Enhanced Index)	422,867	451,425	28,558
725,687	INTECH(Performance Fee)	249,862	181,421	(68,441)
689,567	SSgA (S&P 500 Index)	160,238	172,391	12,153
141,520	SSgA (Russell 2500 Index)	33,793	35,379	1,586
1,651,253	Frontier Capital	391,457	412,812	21,355
3,374,767	Huber Capital	733,298	843,690	110,392
1,201,614	Riverbridge Partners	296,403	300,402	3,999
1,091,995	SouthernSun Asset	251,651	272,997	21,346
1,868,222	Summit Creek Advisors	462,556	467,055	4,499
<b><u>15,048,014</u></b>	<b>Total Base Fees</b>	<b>3,595,333</b>	<b>3,761,992</b>	<b>166,659</b>
<b><u>15,048,014</u></b>	<b>Total Domestic Equity</b>	<b>3,595,333</b>	<b>3,761,992</b>	<b>166,659</b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**International Equity**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Base Fees</u></b>				
436,197	SSgA (World Ex-US Index)	109,204	109,047	(157)
7,807,126	Marathon	1,919,877	1,951,780	31,903
5,033,646	Baillie Gifford	1,181,599	1,258,410	76,811
2,938,159	Mondrian Investment	668,636	734,538	65,902
696,875	FIS Group	168,264	174,218	5,954
<b><u>16,912,003</u></b>	<b>Total Base Fees</b>	<b>4,047,580</b>	<b>4,227,993</b>	<b>180,413</b>
<b><u>16,912,003</u></b>	<b>Total International Equity</b>	<b>4,047,580</b>	<b>4,227,993</b>	<b>180,413</b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Emerging Markets Equity**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Base Fees</u></b>				
1,626,153	Acadian Asset	328,540	406,536	77,996
1,141,490	Wasatch	240,265	285,372	45,107
340,786	SSgA (EM Index)	78,425	85,195	6,770
372,881	AQR-Performance Fee	0	93,222	93,222
4,090,012	Baillie Gifford (Emerging)	842,206	1,022,502	180,296
760,729	City Of London	168,264	190,182	21,918
3,070,170	Driehaus Capital	654,148	767,541	113,393
3,050,632	Harding Loevner	685,628	762,657	77,029
3,466,482	Pzena Investment	819,921	866,619	46,698
1,483,530	Frontier	235,635	370,881	135,246
<hr/>				
<hr/>	19,402,865	4,053,032	4,850,707	797,675
<hr/>				
<hr/>	19,402,865	4,053,032	4,850,707	797,675

\* Separate account management fees are offset by credits related to investments in the Taiwan commingled f  
(Refer to "Indirect Fees").

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Core Fixed Income Value Added Fixed Income**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Core Fixed Income</u></b>				
<b>Base Fees</b>				
66,042	Blackrock (BA Index)	25,701	16,509	(9,192)
117,552	Blackrock (TIPS)	17,068	29,388	12,320
536,453	Blackrock (STRIPS)	101,142	134,112	32,970
112,782	Community Capital	27,874	28,194	320
1,571,543	Loomis Sayles	384,048	392,885	8,837
1,543,649	Blackrock (ILB)	374,041	385,911	11,870
726,558	PIMCO	198,514	181,638	(16,876)
4,674,579	Total Base Fees	1,128,388	1,168,637	40,249
<b>Performance Fees</b>				
84,219	PIMCO	0	21,054	21,054
<b>4,758,798</b>	<b>Total Core Fixed Income</b>	<b>1,128,388</b>	<b>1,189,691</b>	<b>61,303</b>
<b><u>Value Added Fixed Income</u></b>				
<b>High Yield</b>				
1,113,254	Pyramis Global	270,975	278,313	7,338
1,575,505	Loomis Sayles	374,242	393,876	19,634
1,176,380	Shenkman	283,628	294,093	10,465
3,865,139	Sub Total High Yield	928,845	966,282	37,437
<b><u>Emerging Market Debt</u></b>				
1,097,723	PIMCO	262,858	274,430	11,572
1,821,178	Investec	405,408	455,293	49,885
2,185,346	Pictet	496,550	546,336	49,786
1,773,863	Stone Harbor	390,893	443,465	52,572
6,878,110	Sub Total Emerging Market Debt	1,555,709	1,719,524	163,815
<b>10,743,249</b>	<b>Total Value Added Fixed Income</b>	<b>2,484,554</b>	<b>2,685,806</b>	<b>201,252</b>

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Real Estate, Timber and Natural Resources (PRIM Paid)**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>REIT Fees</u></b>				
1,379,881	Invesco	297,605	344,970	47,365
2,757,882	CenterSquare	614,938	689,472	74,534
767,897	INVESCO (transition)	162,668	191,973	29,305
<b>4,905,660</b>	<b>Total REIT Fees</b>	<b>1,075,211</b>	<b>1,226,415</b>	<b>151,204</b>
<b><u>Real Estate Incentive Fees*</u></b>				
0	Invesco	0	0	0
0	JP Morgan	0	0	0
0	LaSalle	0	0	0
0	TA Realty	0	0	0
0	AEW	(54,894)	0	54,894
<b>0</b>	<b>Total Core</b>	<b>(54,894)</b>	<b>0</b>	<b>54,894</b>
<b>4,905,660</b>	<b>Total Real Estate Fee</b>	<b>1,020,317</b>	<b>1,226,415</b>	<b>206,098</b>
<b><u>Timber Base Fees</u></b>				
900,205	Campbell International	133,936	225,051	91,115
<b>900,205</b>	<b>Total International Timber Base</b>	<b>133,936</b>	<b>225,051</b>	<b>91,115</b>
<b><u>Timber Incentive Fees*</u></b>				
0	Campbell Domestic	(1,009,715)	0	1,009,715
0	Campbell International	(2,260,259)	0	2,260,259
0	Forest Investment Associates	0	0	0
<b>0</b>	<b>Total Timber Incentive</b>	<b>(3,269,974)</b>	<b>0</b>	<b>3,269,974</b>
<b><u>Natural Resources Fees</u></b>				
900,957	Jennison Associates	177,638	225,237	47,599
1,248,875	T. Rowe Price	255,474	312,218	56,744
<b>2,149,832</b>	<b>Total Natural Resources Fees</b>	<b>433,112</b>	<b>537,455</b>	<b>104,343</b>
<b>3,050,037</b>	<b>Total Timber/Natural Resources Fees</b>	<b>(2,702,926)</b>	<b>762,506</b>	<b>3,465,432</b>

\* for these asset classes, PRIM incurs both direct and indirect fees.

Refer to "Indirect Fees" for further details.

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Private Equity**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Private Equity</u></b>				
2,400,000	Domestic Special Equity	144,214	600,000	455,786
24,000	International Special Equity	8,269	6,858	(1,411)
<b><u>2,424,000</u></b>	<b>Total Private Equity *</b>	<b><u>152,483</u></b>	<b><u>606,858</u></b>	<b><u>454,375</u></b>

\* For this asset class, PRIM incurs both direct and indirect fees.  
 Refer to "Indirect Fees" for further details.

**PRIM Board  
Budget Detail  
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September 30, 2015**

**Hedge Funds**

<b>FY 2016 Budget</b>	<b>Manager</b>	<b>Year to Date</b>	<b>Year to Date</b>	<b>Variance</b>
		<b>Actual</b>	<b>Budget</b>	<b>Under (Over)</b>
<b><u>Hedge Funds</u></b>				
50,000	Direct Hedge Fund	12,603	12,501	(102)
<b>50,000</b>	<b>Total Hedge Funds</b>	<b>12,603</b>	<b>12,501</b>	<b>(102)</b>

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Overlay/Foreign Currency**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Overlay/Foreign Currency</u></b>				
74,138	Clifton Group-Domestic Equity	43,320	18,536	(24,784)
133,449	Clifton Group-Int'l Equity	30,815	33,363	2,548
88,966	Cilfton Group-Fixed Income	19,520	22,242	2,722
120,000	Currency Trading	163,576	30,000	(133,576)
<b>416,553</b>	<b>Total Overlay/Foreign Currency</b>	<b>257,231</b>	<b>104,141</b>	<b>(153,090)</b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Custody and Consultants**

			Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b>FY 2016 Budget</b>					
<b>Custody</b>					
650,000	BNY Mellon		121,161	162,498	41,337
80,000	OTC Valuation		0	20,001	20,001
10,000	Other/Contingency		0	2,499	2,499
50,000	GASB Reporting		0	12,501	12,501
<b>790,000</b>	<b>Total Custody</b>		<b>121,161</b>	<b>197,499</b>	<b>76,338</b>
<b>General Consultant</b>					
317,375	General - Callan		73,750	79,343	5,593
202,500	Asset Allocation - NEPC		68,861	50,625	(18,236)
52,000	Legislative Restriction - ISS		13,605	12,999	(606)
40,000	Curr. Reporting-FX Transparency		0	9,999	9,999
35,000	Benchmarking - CEM		0	8,748	8,748
94,500	Communication - O'Neill & Asso		23,625	23,625	0
25,000	Compensation-McLagan		450	6,249	5,799
20,000	Other/Contingency		0	4,998	4,998
<b>786,375</b>	<b>Total General Consultant</b>		<b>180,291</b>	<b>196,586</b>	<b>16,295</b>
<b>Private Equity - Consultant</b>					
1,500,000	Hamilton Lane		400,000	375,000	(25,000)
0	Administration Services		3,536	0	(3,536)
<b>1,500,000</b>	<b>Total Private Equity Consultant</b>		<b>403,536</b>	<b>375,000</b>	<b>(28,536)</b>
<b>Real Estate Consultant</b>					
370,000	Townsend		92,500	92,499	(1)
165,000	Leverage Reporting - KPMG		0	41,250	41,250
50,000	Other/Contingency		31,119	12,498	(18,621)
<b>585,000</b>	<b>Total Real Estate Consultant</b>		<b>123,619</b>	<b>146,247</b>	<b>22,628</b>
<b>Hedge Fund Consultant</b>					
750,000	Direct HF - Cliffwater		187,500	187,500	0
2,867,784	Managed Acct Platform Provider		408,872	716,946	308,074
0	Other/Contingency		0	0	0
<b>3,617,784</b>	<b>Total Hedge Fund Consultant</b>		<b>596,372</b>	<b>904,446</b>	<b>308,074</b>

**PRIM Board**  
**Budget Detail**  
**September 30, 2015**

**Audit Tax, Legal, Governance, and Risk Management**

<b>FY 2016 Budget</b>		<b>Year to Date Actual</b>	<b>Year to Date Budget</b>	<b>Variance Under (Over)</b>
<b>Audit &amp; Tax</b>				
260,000	Financial Statement Audit	65,000	64,998	(2)
84,000	Agreed-Upon Procedures	21,000	21,000	0
25,000	Accounting - Other	0	6,249	6,249
75,000	Tax Services	0	18,750	18,750
<b>444,000</b>	<b>Total Audit &amp; Tax</b>	<b>86,000</b>	<b>110,997</b>	<b>24,997</b>
<b>Legal</b>				
375,000	Total Legal	17,117	93,765	76,648
<b>375,000</b>	<b>Total Legal</b>	<b>17,117</b>	<b>93,765</b>	<b>76,648</b>
<b>Governance</b>				
177,684	Proxy Voting Services - ISS	43,338	44,421	1,083
31,500	Council of Inst. Investors	7,500	7,875	375
20,000	Board Education	50	4,998	4,948
30,000	Other	0	7,500	7,500
<b>259,184</b>	<b>Total Governance</b>	<b>50,888</b>	<b>64,794</b>	<b>13,906</b>
<b>Risk Management</b>				
630,438	Risk Management - MSCI Barra	189,916	157,608	(32,308)
600,788	Investment Tools and Analytics	70,921	150,195	79,274
<b>1,231,226</b>	<b>Total Risk Management</b>	<b>260,837</b>	<b>307,803</b>	<b>46,966</b>

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Salaries, Occupancy, Insurance Benefits**

FY 2016 Budget		Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b>Salaries</b>				
5,173,126	Staff Salaries	1,018,235	1,293,280	275,045
1,493,697	Incentive Plan	373,424	373,422	(2)
84,000	Vacation & Sick Accruals	(4,786)	21,000	25,786
72,000	Staff Recruitment	13,304	18,000	4,696
<b><u>6,822,823</u></b>	<b>Total Salaries</b>	<b>1,400,177</b>	<b>1,705,702</b>	<b>305,525</b>
<b>Occupancy</b>				
671,419	Lease	166,649	167,853	1,204
37,657	Lease - CAM	(24)	9,414	9,438
30,000	Occupancy-Equipment	0	7,500	7,500
60,069	Utilities	6,688	15,015	8,327
46,319	Parking	7,930	11,579	3,649
10,000	Other	598	2,499	1,901
<b><u>855,464</u></b>	<b>Total Occupancy</b>	<b>181,841</b>	<b>213,860</b>	<b>32,019</b>
<b>Insurance</b>				
271,314	Fiduciary	38,548	67,827	29,279
26,672	Business Insurance Policies	6,143	6,666	523
5,350	Workers Compensation	1,182	1,336	154
<b><u>303,336</u></b>	<b>Total Insurance</b>	<b>45,873</b>	<b>75,829</b>	<b>29,956</b>
<b>Employee Benefits</b>				
6,679	Dental/Vision	1,428	1,668	240
43,821	Disability	13,093	10,953	(2,140)
105,000	Medicare Tax	14,705	26,250	11,545
12,000	Unemployment Contingency	0	3,000	3,000
<b><u>167,500</u></b>	<b>Total Benefits</b>	<b>29,226</b>	<b>41,871</b>	<b>12,645</b>

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Office Expenses**

<b>FY 2016 Budget</b>		<b>Year to Date</b>	<b>Year to Date</b>	<b>Variance</b>
		<b>Actual</b>	<b>Budget</b>	<b>Under (Over)</b>
28,000	Postage and Courier	1,578	6,999	5,421
10,872	Payroll / Timesheets	2,260	2,718	458
22,500	Meeting Expenses	1,715	5,625	3,910
14,000	Records Storage	3,912	3,498	(414)
50,000	Office Supplies	4,494	12,498	8,004
40,000	Office Infrastructure	0	9,999	9,999
24,700	Other Expenses	4,303	6,168	1,865
11,000	Stenographer	1,181	1,833	652
45,000	Printing	1,289	11,250	9,961
0	Capitalized Assets-Office Equi	35,095	0	(35,095)
0	Capitalized Assets-Leasehold &	0	0	0
<b>246,072</b>	<b>Total Office Expense</b>	<b>55,827</b>	<b>60,588</b>	<b>4,761</b>

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Computer and MIS Expenses**

<b>FY 2016 Budget</b>		<b>Year to Date</b>	<b>Year to Date</b>	<b>Variance</b>
		<b>Actual</b>	<b>Budget</b>	<b>Under (Over)</b>
166,580	Computer Hardware & Software	26,334	41,643	15,309
612,400	Computer Support	127,406	153,099	25,693
88,000	Internet & Network Services	5,921	21,999	16,078
0	Capitalized Assets-Computer Eq	16,098	0	(16,098)
0	Capitalized Assets-Software De	0	0	0
<b>866,980</b>	<b>Total Computer &amp; MIS</b>	<b>175,759</b>	<b>216,741</b>	<b>40,982</b>

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Travel, Development, Client Services, Dues, and Temporary Labor**

		Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b>FY 2016 Budget</b>				
<b>Due Diligence Travel</b>				
215,000	Due Diligence	12,755	53,748	40,993
<b>215,000</b>	<b>Total Due Diligence Travel</b>	<b>12,755</b>	<b>53,748</b>	<b>40,993</b>
<b>Professional Development</b>				
100,000	Professional Development	11,915	24,999	13,084
<b>100,000</b>	<b>Total Professional Development</b>	<b>11,915</b>	<b>24,999</b>	<b>13,084</b>
<b>Client Services</b>				
55,000	Meetings & Conferences	0	13,749	13,749
14,375	Auto Mileage	0	3,593	3,593
12,000	Other - Printing, Binding	0	0	0
5,412	Parking	1,305	1,353	48
<b>86,787</b>	<b>Total Client Services</b>	<b>1,305</b>	<b>18,695</b>	<b>17,390</b>
<b>Dues &amp; Subscriptions</b>				
80,000	Dues & Subscriptions	18,874	19,998	1,124
<b>80,000</b>	<b>Total Dues &amp; Subscriptions</b>	<b>18,874</b>	<b>19,998</b>	<b>1,124</b>
<b>Temporary Labor</b>				
65,000	Temporary Labor	13,380	16,248	2,868
<b>65,000</b>	<b>Total Temporary Labor</b>	<b>13,380</b>	<b>16,248</b>	<b>2,868</b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Real Estate and Timber Indirect Fees**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Real Estate Indirect Fees</u></b>				
2,781,714	Invesco	1,087,481	695,428	(392,053)
3,810,070	J. P. Morgan	813,467	952,517	139,050
4,620,236	LaSalle	1,315,607	1,155,059	(160,548)
5,057,013	TA Realty	1,024,336	1,264,253	239,917
3,336,431	AEW	775,617	834,107	58,490
<b>19,605,464</b>	<b>Total Core</b>	<b>5,016,508</b>	<b>4,901,364</b>	<b>(115,144)</b>
475,000	The Carlyle Group	77,286	118,750	41,464
743,000	DivcoWest Fund III	47,855	185,750	137,895
1,130,000	DivcoWest Fund IV	314,834	282,500	(32,334)
704,109	JP Morgan	158,518	176,027	17,509
580,000	AEW	130,704	145,000	14,296
203,000	Industrial Development	40,419	50,750	10,331
200,000	Add'l New Investment	0	50,000	50,000
260,000	DivcoWest Co-investment Fund I	63,306	65,000	1,694
<b>4,295,109</b>	<b>Total Non-Core</b>	<b>832,922</b>	<b>1,073,777</b>	<b>240,855</b>
270,000	Canyon Johnson	19,552	67,500	47,948
125,000	Intercontinental	6,264	31,250	24,986
150,000	New Boston Fund	18,696	37,500	18,804
<b>545,000</b>	<b>Total Economically Targeted Investments</b>	<b>44,512</b>	<b>136,250</b>	<b>91,738</b>
<b>24,445,573</b>	<b>Total Real Estate Indirect Fees</b>	<b>5,893,942</b>	<b>6,111,391</b>	<b>217,449</b>
<b><u>Timber Indirect Fees</u></b>				
1,497,000	Campbell Group	319,906	374,250	54,344
2,202,268	Forest Investment Associates	513,907	550,567	36,660
<b>3,699,268</b>	<b>Total Timber Indirect Fees</b>	<b>833,813</b>	<b>924,817</b>	<b>91,004</b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Private Equity and Distressed Debit Indirect Fees**

<b>FY 2016 Budget</b>	<b>Manager</b>	<b>Year to Date</b>	<b>Year to Date</b>	<b>Variance Under (Over)</b>
		<b>Actual</b>	<b>Budget</b>	
<b><u>Private Equity Indirect Fees</u></b>				
28,879,061	Domestic Venture	6,422,533	7,219,765	797,232
52,922,646	Domestic Special Equity	12,289,440	13,230,661	941,221
2,410,809	International Venture	561,154	602,702	41,548
20,010,572	International Special Equity	4,029,430	5,002,643	973,213
4,650,000	Natural Resources	894,567	1,162,500	267,933
<b><u>108,873,088</u></b>	<b>Total Private Equity Indirect Fees</b>	<b><u>24,197,124</u></b>	<b><u>27,218,271</u></b>	<b><u>3,021,147</u></b>
<b><u>Distressed Debt Indirect Fees</u></b>				
23,400,811	Distressed Debt	6,115,122	5,850,203	(264,919)
300,000	Potential New Commitments	0	75,000	
<b><u>23,700,811</u></b>	<b>Total Distressed Debt Indirect Fees</b>	<b><u>6,115,122</u></b>	<b><u>5,925,203</u></b>	<b><u>(189,919)</u></b>

**PRIM Board  
Budget Detail  
For Month Ending  
September 30, 2015**

**Hedge Funds Direct and Indirect Fees**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Hedge Fund of Funds Base Fees</u></b>				
10,281,332	PAAMCO	1,973,723	2,570,333	596,610
10,281,332	Total Indirect Base Fees	1,973,723	2,570,333	596,610
<b><u>Hedge Fund of Funds Performance Fees</u></b>				
0	Arden	0	0	0
0	Total Indirect Performance Fees	0	0	0
<b><u>Hedge Fund Replications-SSgA</u></b>				
0	HF Replication	0	0	0
0	Total Hedge Fund Replication	0	0	0
<b><u>Separately Managed Accounts</u></b>				
20,420,936	Separately Managed Accounts	1,785,434	5,105,234	3,319,800
20,420,936	Total Separately Managed Accounts	1,785,434	5,105,234	3,319,800
<b><u>Direct Hedge Fund Fees</u></b>				
49,133,564	Direct Hedge Funds	15,256,263	12,283,391	(2,972,872)
49,133,564	Total Direct Hedge Funds Indirect Fees	15,256,263	12,283,391	(2,972,872)
<b>79,835,832</b>	<b>Total All Hedge Funds Indirect Fees</b>	<b>19,015,420</b>	<b>19,958,958</b>	<b>943,538</b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Portable Alpha Wind Down Indirect Fees**

FY 2016 Budget	Manager	Year to Date Actual	Year to Date Budget	Variance Under (Over)
<b><u>Portable Alpha Wind Down Base Fees</u></b>				
10,000	Crestline Liquidation	1,321	2,500	1,179
10,000	Total Portable Alpha - Base Fees	1,321	2,500	1,179
<b><u>10,000</u></b>	<b><u>Total Portable Alpha Indirect Fees</u></b>	<b><u>1,321</u></b>	<b><u>2,500</u></b>	<b><u>1,179</u></b>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

**Commingled Funds Indirect Fees**

<b>FY 2016 Budget</b>	<b>Manager</b>	<b>Year to Date</b>	<b>Year to Date</b>	<b>Variance</b>
		<b>Actual</b>	<b>Budget</b>	<b>Under (Over)</b>
<b>Fixed Income Commingled</b>				
666,000	Access Capital Strategies LLC	159,557	166,500	6,943
195,000	AFL-CIO Housing Invest.Trust	46,872	48,750	1,878
<u>861,000</u>	Total Fixed Income Commingled	<u>206,429</u>	<u>215,250</u>	<u>8,821</u>
<b><u>Emerging Markets Debt Funds</u></b>				
3,208,000	Ashmore Emerging Markets	824,191	801,999	(22,192)
<u>3,208,000</u>	Total High Yield Funds (Emerging Mkts)	<u>824,191</u>	<u>801,999</u>	<u>(22,192)</u>
<b>Senior Bank Loans</b>				
2,034,000	Eaton Vance Senior Loan Trust	499,748	508,500	8,752
1,655,000	ING Senior Loan Invest. Trust	406,040	413,748	7,708
<u>3,689,000</u>	Total Bank Loans	<u>905,788</u>	<u>922,248</u>	<u>16,460</u>
<u>7,758,000</u>	<b>Total Commingled Funds</b>	<u>1,936,408</u>	<u>1,939,497</u>	<u>3,089</u>

**PRIM Board**  
**Budget Detail**  
**For Month Ending**  
**September 30, 2015**

		<u>Portfolio Completion Strategies</u>		Year to Date	Variance
FY 2016 Budget	Manager	Actual	Budget	Date	Under (Over)
<b><u>Portfolio Completion Strategies</u></b>					
2,787,377	Managed Acct Platform Provider	315,413	696,845	381,432	
<b>2,787,377</b>	<b>Total Portfolio Completion Strategies</b>	<b>315,413</b>	<b>696,845</b>	<b>381,432</b>	

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PENSION RESERVES  
INVESTMENT  
MANAGEMENT BOARD

## Appendix R

Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development

*PRIM Board Meeting  
Tuesday, December 1, 2015*

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PRIM BOARD  
Due Diligence Travel, Trustee and Staff Fiduciary Education, and Professional Development  
FY 2016

Dates	Name	Organization	Location	Purpose	Due Diligence Travel	Staff Development
8/11/15-8/23/15	Michael Bailey	Gilde	Netherlands	Due Diligence	2,431.25	2,431.25
	Total Michael Bailey					
9/21/15-9/22/15	David Gurtz	Conference at Treasury	Washington, DC	Fiduciary Education	447.30	-
9/30/2015	David Gurtz	PIMCO Conference	Boston, MA	Fiduciary Education	11.00	-
	Total David Gurtz				458.30	
8/24/15-8/25/15	John LaPosta	Progress Investment Management	San Francisco, CA	Due Diligence	474.00	-
	Total John LaPosta				474.00	-
8/24/15-8/25/15	Michael McGirr	Progress Investment Management	San Francisco, CA	Due Diligence	746.21	-
	Total Michael McGirr				746.21	-
8/24/15-8/25/15	Sarah Samuels	Progress Investment Management and potential managers	San Francisco and Los Angeles	Due Diligence	1,460.81	-
9/8/15-9/10/15	Sarah Samuels	AIF Women Investor's Forum	New York, NY	Fiduciary Education	1,460.81	1,778.43
	Total Sarah Samuels				1,460.81	1,778.43
David Gurtz, Eric Nierenberg, Michael McGirr, Paul Stanley, C.LaRoy Brantley, Mike Heffernan	BSAS Seminar, "Ten Laureates Economics"	Boston, MA	Fiduciary Education		360.00	-
9/10/2015	Total PRIM Trustees and Staff				360.00	