

---

# **Oregon Investment Council**

---

April 29, 2015 - 9:00 AM

---

**PERS Headquarters  
11410 S.W. 68<sup>th</sup> Parkway  
Tigard, OR 97223**

**Katy Durant**  
Chair

**John Skjervem**  
Chief Investment Officer

**Ted Wheeler**  
State Treasurer





# OREGON INVESTMENT COUNCIL

## Agenda

April 29, 2015  
9:00 AM

PERS Headquarters  
11410 S.W. 68<sup>th</sup> Parkway  
Tigard, OR 97223

<u>Time</u>	<u>A. Action Items</u>	<u>Presenter</u>	<u>Tab</u>
9:00-9:05	1. <b>Review &amp; Approval of Minutes</b> March 4, 2015 Regular Meeting	<b>Katy Durant</b> <i>OIC Chair</i>	1
	<b>Committee Reports</b>	<b>John Skjervem</b> <i>Chief Investment Officer</i>	
9:05-9:35	2. <b>Strategic Asset Allocation &amp; Staffing Discussion</b>	<b>John Skjervem</b>	2
9:35-10:15	3. <b>Blackstone Capital Partners VII, LP</b> <i>OPERF Private Equity</i>	<b>Sam Green</b> <i>Investment Officer</i> <b>Tony James</b> <i>President &amp; Chief Operating Officer, Blackstone</i> <b>Mike Satirhos</b> <i>Senior Managing Director, Blackstone</i> <b>David Fann</b> <i>TorreyCove Capital Partners</i> <b>Tom Martin</b> <i>TorreyCove Capital Partners</i>	3
10:15-10:30	----- <b>BREAK</b> -----		
	<b><u>B. Information Items</u></b>		
10:30-10:50	4. <b>OPERF Policy Implementation Overlay Review</b>	<b>Greg Norquist</b> <i>Director, Overlay Strategies, Russell Investments</i> <b>Philip Lee</b> <i>Portfolio Manager, Russell Investments</i>	4

<b>10:50-11:00</b>	<b>5. Policy and Procedure Update</b>	<b>John Skjervem</b> <b>Kim Olson</b> <i>Policy Analyst</i>	<b>5</b>
<b>11:00-11:20</b>	<b>6. Blackrock Solutions/Aladdin Update</b> <i>OPERF Private Equity</i>	<b>Byron Williams</b> <i>Chief Audit Executive</i> <b>Shannon Smith</b> <i>Director of Aladdin Implementations, Blackrock</i> <b>Anne Keys</b> <i>Senior Consultant, Cutter Associates</i>	<b>6</b>
<b>11:20-11:30</b>	<b>7. Asset Allocations &amp; NAV Updates</b> a. Oregon Public Employees Retirement Fund b. SAIF Corporation c. Common School Fund d. HiEd Pooled Endowment Fund	<b>John Skjervem</b>	<b>7</b>
	<b>8. Calendar — Future Agenda Items</b>		<b>8</b>
	<b>9. Other Items</b>	<b>Council Staff Consultants</b>	

**C. Public Comment Invited**  
15 Minutes



STATE OF OREGON  
OFFICE OF THE STATE TREASURER  
350 WINTER STREET NE, SUITE 100  
SALEM, OREGON 97301-3896

OREGON INVESTMENT COUNCIL  
MARCH 4, 2015  
MEETING MINUTES

Members Present: Rukaiyah Adams, Katy Durant, Keith Larson, Steve Rodeman, Dick Solomon, Ted Wheeler

Staff Present: Darren Bond, Tony Breault, Austin Carmichael, Karl Cheng, Michael Cox, Garrett Cudahey, Sam Green, Scott Harra, John Hershey, Julie Jackson, Perrin Lim, Tom Lofton, Ben Mahon, Mike Mueller, Kim Olson, Priyanka Shukla, John Skjervem, Michael Viteri, Byron Williams

Consultants Present: David Fann (TorreyCove); Allan Emkin and David Glickman (PCA); Janet Becker-Wold, Jim Callahan, Jason Ellement, Gene Podkaminer and Uvan Tseng (Callan)

Legal Counsel Present: Dee Carlson and Deena Bothello, Oregon Department of Justice

The March 4, 2015 OIC meeting was called to order at 9:00 am by Katy Durant, Vice-Chair.

I. **9:00 am Review and Approval of Minutes**

**MOTION:** Treasurer Wheeler moved approval of the February 4, 2015 meeting minutes. Mr. Larson seconded the motion, which then passed by a 5/0 vote.

COMMITTEE REPORTS

John Skjervem, OST Chief Investment Officer gave an update on the following committee actions taken since the February 4, 2015 OIC meeting:

**Private Equity Committee:**

February 9, 2015	EnCap Energy Capital Fund X, L.P.	\$150 million
February 9, 2015	GGV Capital Select, L.P.	\$50 million
February 9, 2015	RRJ Capital Master Fund III, L.P.	\$150 million

**Alternatives Committee:**

NONE

**Opportunity Portfolio Committee:**

February 20, 2015	TPG Specialty Lending Europe Fund I, L.P.	\$100 million
-------------------	---	---------------

**Real Estate Committee:**

NONE

Consistent with OST Policy 4.04.01, which requires a report on all staff-authorized investment activity, Mr. Skjervem concluded his committee remarks by noting a \$17.4 million co-investment staff initiated alongside existing OPERF real estate manager Waterton Residential.

**II. 9:03 am OIC Board Elections**

As described in OIC Policy 04.00.02, the Council is comprised of the State Treasurer and four members appointed by the Governor. The Director of the Public Employees Retirement System is also a Council member, but may not vote. Voting Council members biennially elect both a Chair and Vice Chair from among the four gubernatorial appointees. The Vice Chair functions as the Chair in the event the Chair resigns or is unable to fulfill the Chair's duties.

**MOTION:** Treasurer Wheeler moved approval for Katy Durant to assume the role of Council Chair and for Rukaiyah Adams to assume the role of Council Vice Chair. Mr. Larson seconded the motion which then passed on a 5/0 vote.

**III. 9:05 am OPERF Asset/Liability Study & Strategic Asset Allocation Recommendation**

Jim Callahan, Janet Becker-Wold, Jason Ellement, and Gene Podkaminer from Callan Associates presented an Asset/Liability Study & Strategic Asset Allocation Recommendation for OPERF. The Council discussed the merits of the recommendation as well as staff's concerns regarding its current resource and capacity constraints. The Council directed staff to prepare an assessment of the Callan recommendation relative to the investment division's current resource/capacity profile for further discussion at a proposed joint OIC/PERS meeting tentatively scheduled for March 30, 2015.

**IV. 11:00 am HiED Endowment Review and Update**

Mike Mueller, Deputy Chief Investment Officer gave an update and review of the HiED Endowment Fund. Staff is seeking OIC approval for the following contingency:

Staff may revise and adjust the current HiED asset class policy targets and/or manager allocations such that any remaining OST/OIC managed accounts would conform to the following asset allocation:

Global Equities 70%  
Fixed Income 30%

**MOTION:** Mr. Solomon moved approval of the staff recommendation. Ms. Adams seconded the motion, which passed by a vote of 5/0.

**V. 11:03 am Opportunity Portfolio Procedure Clarification**

John Hershey, Director of Alternative Investments described that the Policies and Procedures documents for OPERF's Private Equity, Alternatives and Real Estate programs contain an "OST Staff Authority" section. In contrast, the Policies and Procedures document governing OPERF's Opportunity Portfolio contains no such section, an omission staff recommends rectifying so that the Policies and Procedures document for the Opportunity Portfolio is consistent with the documents governing OPERF's Private Equity, Alternatives and Real Estate programs.

Mr. Hershey indicated that staff would normally propose this policy change during the annual OPERF policies and procedures update exercise; however, staff is currently negotiating the sale of a small LP interest in the Opportunity Portfolio, a transaction that necessitates seeking Council approval for this change now.

**MOTION:** Mr. Solomon moved approval of the staff recommendation. Mr. Larson seconded the motion, which then passed by a 5/0 vote.

**VI. 11:04 am Real Estate Portfolio Policy Waiver Request**

Anthony Breault, Senior Investment Officer presented and described that staff is seeking OIC approval for a variance request regarding the Real Estate Committee's \$250 million commitment limitation to accommodate a first close commitment to Lone Star Real Estate Fund IV (LSREF IV). With such an approval, Staff will convene the Real Estate Committee in March in order to secure a full subscription commitment and preferred "first close" economic terms. Note this variance request applies only to the currently contemplated investment in LSREF IV.

**MOTION:** Mr. Solomon moved approval of the staff recommendation. Treasurer Wheeler seconded the motion which passed by a vote of 5/0.

**VII. 11:05 am OPERF Q4 Performance & Risk Report**

Janet Becker-Wold from Callan Associates gave a fourth quarter OPERF investment performance update.

**VIII. 11:20 am BlackRock Solutions Update**

Darren Bond, Deputy State Treasurer gave an update on the investment division's BlackRock Solutions project as well as the status of the Investment Modernization Act.

**IX. 11:30 am Asset Allocation & NAV Updates**

Mr. Skjervem reviewed asset allocations and NAVs across OST-managed accounts for the period ended January 31, 2015.

**X. 11:30 am Calendar-Future Agenda Items**

Mr. Skjervem presented a revised schedule of future OIC meetings and associated agenda topics.

**XI. 11:33 am Other Items**

None

**11:34 am Public Comments**

Unite Here's Elliott Mullen provided commentary from his organization in connection with recent developments at OPERF manager Lonestar. Evan Demma and Patrick Di Iorio, both servers at the Hotel Burnam in Chicago, then urged Council members to contact Lonestar regarding the firm's Hotel Burnam ownership and unionization efforts underway by that hotel's employees.

Ms. Durant adjourned the meeting at 11:45 am.

Respectfully submitted,



Julie Jackson  
Executive Support Specialist

**OREGON INVESTMENT COUNCIL REGULAR MEETING**

**WEDNESDAY, APRIL 29, 2015**

**TAB 02.01 OPERF Strategic Asset Allocation**

**(This will be a verbal presentation)**

## Blackstone Capital Partners VII, L.P.

---

### Purpose

Subject to satisfactory negotiation of terms and conditions with Staff working in concert with Department of Justice personnel, Staff recommends an up to \$500 million commitment to Blackstone Capital Partners VII, L.P. (the “Fund” or “Fund VII”) for the OPERF Private Equity Portfolio. This commitment would continue an existing OPERF relationship.

### Background

The Blackstone Group (“Blackstone” or the “Firm”) was founded in 1985, and has grown to be one of the largest private equity and asset management firms in the world, with over \$290 billion in assets under management. Since inception, the Firm has grown to nearly 2,000 employees, including 137 at the Senior Managing Director (partner) level, with 24 offices around the world. Blackstone manages capital across five major themes, including private equity, credit strategies, real estate, hedge funds, and tactical opportunities. The firm also operates financial advisory businesses which serve corporate mergers and acquisitions, restructuring and reorganization, and fund placement clients. The Firm’s private equity group, which will invest and manage Fund VII, consists of 125 investment professionals, including 23 Senior Managing Directors. On behalf of OPERF, the OIC committed \$200 million to a previous Blackstone global fund (Fund VI) in 2010, and another \$200 million to Blackstone Energy Partners II, L.P. (BEP II) in 2014. Fund VII and BEP II are expected to share energy investments on a 60/40 basis.

### Strategy

With Fund VII, Blackstone is targeting \$15 billion of commitments to continue its successful, control-oriented private equity strategy on a global basis. The Firm has not set a hard-cap for Fund VII, but the target is approximately the same size as Fund VI. In Fund VII, Blackstone intends to build a portfolio of 25-40 investments, diversified across geography and sectors. Typical equity investments will be \$300 million to \$800 million in companies with enterprise values of \$500 million to \$5 billion. The Firm will also seek to diversify investments across stage and size, and these investments are expected to include growth equity, development projects, buy-and-build, mid-cap buyout, and large buyout transactions. A central theme of Blackstone’s strategy is to improve their portfolio companies post-acquisition, and the Firm has built a robust infrastructure, which partners with company management, in achieving such improvements. In addition to Operating Partners and a Portfolio Operations Group, which many large private equity firms now employ, Blackstone can call on its financial advisory resources, capital markets group, and strategic advisors to assist company management teams. The Firm also established a group purchasing program in 2005 which is now producing portfolio company cost savings of approximately \$600 million per year. In Blackstone’s fully realized investments, over 67 percent of value creation has been attributable to operating improvements and increased earnings, while less than a third came from paying down debt and valuation-multiple expansion.

### Issues to Consider

#### Attributes:

- *Strong investment performance.* Since 1988, six previous Blackstone Capital Partners funds have invested \$43.4 billion in 183 investments. As of December 31, 2014, these investments had generated an aggregate net IRR of 16.4% and a net total value multiple of 1.7x. According to Cambridge Associates data as of September 30, 2014, of the 18 quartile rankings for these prior funds (IRR, TVM, and DPI), one ranks in the third quartile, seven in the second quartile, and ten in the first quartile.
- *Deal Sourcing Capability.* The Blackstone Group’s size, brand, and global reach generate a high volume of potential deal flow. Through both its as asset management and financial advisory businesses, the Firm has cultivated a vast, global network of business leaders, investment and

commercial bankers, advisors, consultants, accounting firms, and law firms, which provide ample and attractive deal flow.

- *Operational Value Creation.* The Firm has dedicated substantial resources to improving the operations and profitability of its portfolio companies, and this active management has been the primary driver of value creation.
- *Portfolio Fit.* One of the objectives arising from the 2015 Private Equity planning session was to diversify OPERF's exposure to large buyouts via approximately same-size commitments, across four or five "core" managers. This commitment would represent a core relationship within the large corporate finance sector of OPERF's private equity portfolio.
- *Existing relationship.* OPERF has an existing relationship with Blackstone, having committed to one of the Firm's global funds, one of the Firm's energy-focused funds and, more recently, to its "Tac-Ops" opportunistic fund. The Firm has been a good partner in terms of reporting, communications and responsiveness.

#### Concerns:

- *Potential headline risk.* Blackstone has been, or is the defendant in a number of lawsuits, either settled or pending, which have high "headline" risk. These suits include alleged violations of antitrust laws, breach of fiduciary duties, pay-to-play kickbacks, and several class action securities claims arising from public listings of portfolio companies. [Mitigant: All large private equity firms are subject to litigation due to the nature of their business. Blackstone denies wrongdoing in these actions and intends to vigorously defend itself. The Firm asserts that the "Dahl" antitrust settlement, which included and was agreed to by most large private managers, was settled for economic reasons, and without admission of wrongdoing by any of the parties.]
- *Fund V Underperformance.* In 2006, Blackstone raised Fund V, the largest private equity fund in history with \$21.7 billion in total commitments and at 3.4x the size of the Firm's previous fund. Fund V made its first investment in April, 2006, and invested a majority of its capital prior to the onset of the global financial crisis. Many of these early investments were in large companies, at high valuations, and with high leverage levels. [Mitigant: Blackstone acknowledges that Fund V has underperformed, and asserts the Firm has both learned valuable lessons from this experience, and has instituted changes to strengthen its investment approval process.]
- *Reputational Risk.* Blackstone was one of a number of financial firms investigated by the Department of Justice and Securities and Exchange Commission related to alleged improprieties at Libya's sovereign wealth fund (SWF). [Mitigant: While Blackstone engaged in discussions about a potential investment by Libya's SWF, the Firm ultimately did not accept Libyan SWF investment capital.]

#### **Terms**

The Fund is offering economic incentives for large commitments and first close participants. Terms include a lower than market management fee, a standard carry, an 8% preferred return, and a 100% management fee offset (an improvement over the prior fund). Finally, no placement agent had contact with Staff in connection with this offering.

#### **Conclusion**

Blackstone Capital Partners VII, L.P. represents an attractive opportunity to continue investing with an existing, high-performing partner, and represents a core large corporate finance relationship within the OPERF private equity portfolio.



## MEMORANDUM

**TO:** Oregon Public Employees Retirement Fund (“OPERF”)  
**FROM:** TorreyCove Capital Partners (“TorreyCove”)  
**DATE:** April 14, 2015  
**RE:** Blackstone Capital Partners VII, L.P. (the “Fund”)

---

### Strategy:

Fund VII will focus on making 25 to 40 control and control-oriented private equity investments on a global basis, with a target gross IRR greater than 20% on average. Blackstone will continue to pursue a value-oriented, sector-based approach to private equity investing with a focus on four key transaction types: (i) large buyouts, defined as those with enterprise values greater than \$4 billion (e.g. Hilton Worldwide); (ii) mid-cap buyouts defined as those with enterprise values less than \$4 billion (e.g. Mivisa); (iii) buy-and-build platforms (e.g. Merlin Entertainments Group); and (iv) growth equity and development projects, respectively defined as significant minority investments in mature companies and greenfield development projects in energy/power (e.g. Cheniere). These transaction types share a common goal of leveraging the Firm’s platform to improve operations, thereby growing cash flow and enterprise value.

Please see the attached investment memorandum for further detail on the investment opportunity.

### Allocation:

A new commitment to the Fund would be allocated 100% to the Corporate Finance sub-sector. As of the September 30, 2014 report, OPERF’s allocation to Corporate Finance is listed in the table below. It is important to note that since allocation is based on fair market value, a commitment to the Fund would not have an immediate impact on OPERF’s current portfolio allocation. Commitments to the Fund are complementary to OPERF’s existing fund commitments and provide the overall portfolio with a further degree of diversification.

As of September 30, 2014	Target	FMV	FMV + Unfunded
Corporate Finance	65-85%	69%	70%

### Conclusion:

The Fund offers OPERF an opportunity to participate in a differentiated portfolio of private equity investments with relatively attractive overall terms. TorreyCove’s review of the General Partner and the proposed Fund indicates that the potential returns available justify the risks associated with an investment in the Fund. TorreyCove recommends that OPERF consider a commitment of \$500 million to the Fund. TorreyCove’s recommendation is contingent upon the following:

- (1) Satisfactory negotiation or clarification of certain terms of the investment;
- (2) Satisfactory completion of legal documents;



**TORREYCOVE**  
CAPITAL PARTNERS

- (3) Satisfactory continuation and finalization of due diligence;
- (4) No material changes to the investment opportunity as presented; and
- (5) Confidentiality maintained regarding the commitment of OPERF to the Partnership until such time as all the preceding conditions are met.

# Blackstone Capital Partners Private Equity Overview

April 2015

Prepared at the Request and for the Exclusive Use of  
Oregon Investment Council

# BCP Overview

## Key Messages

### Outstanding Long-Term & Recent Returns

- ▶ 16% net IRR since 1987, ~800 bps over S&P 500 for 27 years<sup>(1)</sup>
- ▶ In 2014: BCP funds up 19% net<sup>(2)</sup>
- ▶ In last 2 years: \$25 billion gross cash distributions; \$17 billion publicly-traded securities created<sup>(3)</sup>

### Simple Structure/ Incentive Alignment

- ▶ Only fund at Blackstone to invest in control-oriented corporate PE
- ▶ Highly selective strategy investing in only 10–15 companies per year
- ▶ Single, global investment committee / single dedicated team
- ▶ Carried interest in BCP fund is key economic incentive for professionals
- ▶ Simple, best-in-class fund terms

### World-Class Investment Organization

- ▶ 128 professionals on four continents
- ▶ One single team with long tenure at firm
- ▶ Deep portfolio operations intervention team
- ▶ Blackstone network and breadth of business benefits BCP

### Well-Defined Investment Philosophy

- ▶ Proactive, targeted sourcing program
- ▶ Value-oriented discipline
- ▶ Returns made largely from growth in cash flow, not use of leverage
- ▶ Must intervene operationally to drive value

Note: All information as of December 31, 2014 unless otherwise noted. Headcount as of January 1, 2015. Past performance is not indicative of future results and there can be no assurance that any Blackstone Fund will achieve its objectives or avoid substantial losses. Please refer to the Appendix for the full performance records and for important legends and disclosures. These examples may not be representative of all investments made by Blackstone, both from a performance and an underlying company perspective, and it should not be assumed that Blackstone will make equally successful or comparable investments in the future. **As of December 31, 2014, the net IRR and MOIC of BCP V are 8% and 1.6x, respectively.**

(1) The S&P 500 index comparison provided herein is solely for informational purposes only and should not be relied upon for any purpose. Blackstone's funds differ from the S&P 500 in that Blackstone's funds are actively managed entities that bear fees and use leverage among other factors. Please see the end of the presentation for further information on the S&P and other important disclosures.

(2) Excludes BEP I and BCOM.

(3) As of March 13, 2015. Actual returns to investors will be reduced by fees, expenses, and unrealized currency gains / losses.

## Broad Mix of Transaction Types Producing Consistently High Returns<sup>(1)</sup>

(\$ in millions)

Transaction Type	Representative Companies	Key Characteristics	Average BCP Equity Investment <sup>(2)</sup>	Total Equity Investment <sup>(2)</sup>	Cumulative Gross IRR
Large Buyout		▶ Global scale with strong brands and high relative market shares	\$684	\$9,574 (25%)	20%
		▶ Well positioned for international growth			
		▶ Substantial scope for margin improvement ▶ Attractive public market exit options			
Mid-cap Buyout		▶ Differentiation versus larger competitors / protected market niche	336	11,429 (30%)	17%
		▶ Multiple growth avenues (acquisitions, new products, new geographies, operating improvements)			
		▶ Viable strategic exit options			
Buy & Build Platforms		▶ Scalable platform and backable management team	261	6,267 (17%)	46%
		▶ Large, fragmented industries lacking existing scale participants			
		▶ Substantial revenue and margin benefits from consolidation			
Growth Equity / Development Projects		▶ Substantial earnings / TEV growth opportunity	188	9,015 (24%)	18%
		▶ Our capital, operating expertise as a necessary catalyst			
		▶ Low / no goodwill premia paid at setup			
Total <sup>(3)</sup>				\$37,675 (100%)	

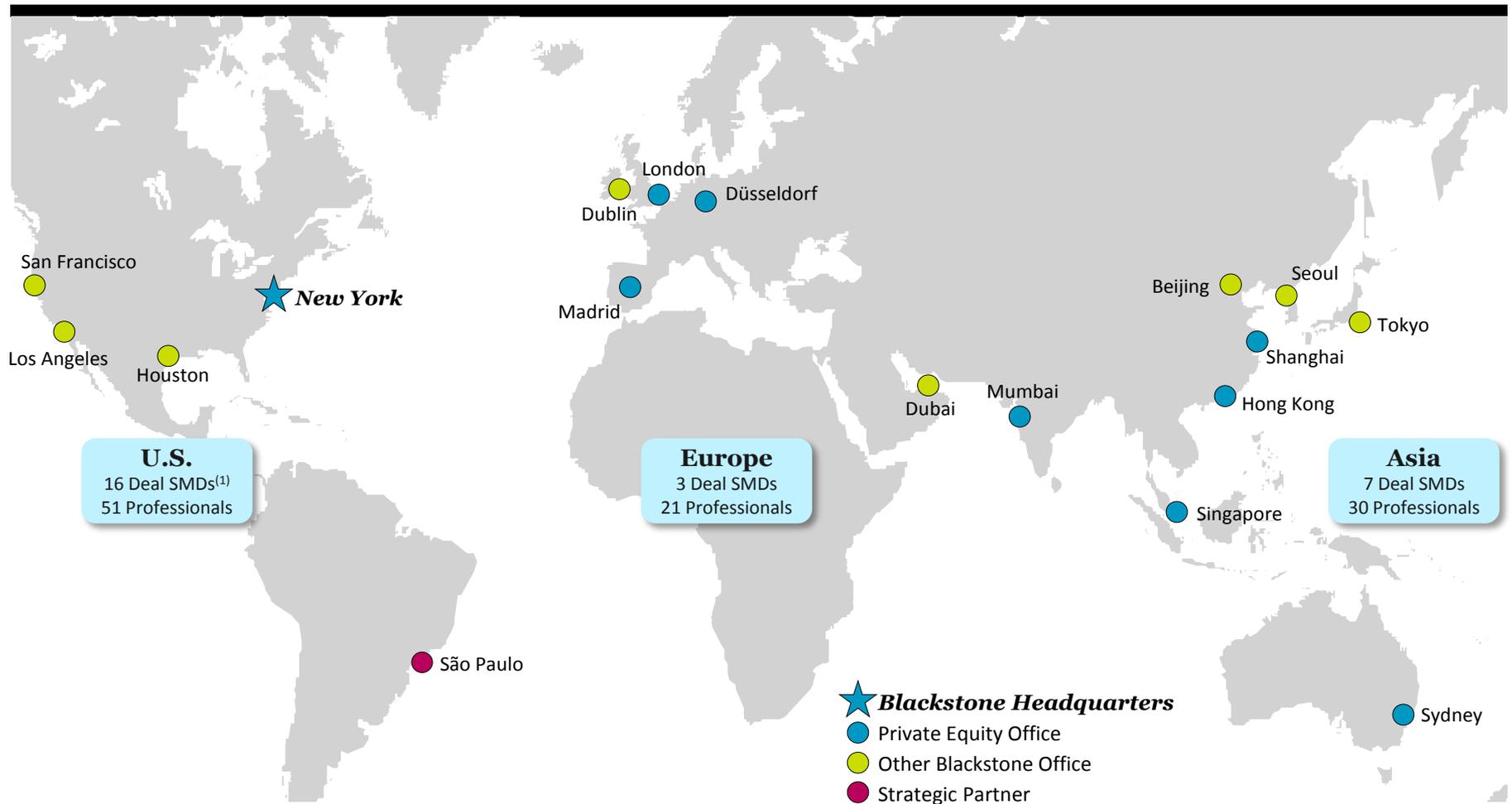
Note: Performance figures as of December 31, 2014. Past performance is not indicative of future results and there can be no assurance that these investments will achieve their objectives or avoid substantial losses. Please refer to the Appendix for the full performance records and for important legends and disclosures. Figures exclude 'Other' of \$1.4 billion total equity invested. These investments were selected to demonstrate an investment theme and should be evaluated in the context of an entire portfolio. Net IRR is not calculated on a deal by deal basis. **The net IRRs for BCP IV, BCP V and BCP VI are 36%, 8% and 15%, respectively.**

(1) Reflects all investments made since February 2003 in BCP IV, BCP V and BCP VI.

(2) Based on invested / committed capital as of December 31, 2014.

(3) Includes \$1.4 billion of 'Other' transaction type, representing 4% of total capital deployed.

# 128 private equity deal professionals on four continents



Note: Headcount as of January 1, 2015. Includes Páttria (Brazil) in which Blackstone has a 40% non-controlling ownership interest. Páttria is a Brazilian alternative investment firm with which Blackstone has a strategic relationship. Páttria is not an affiliate and Blackstone is not involved with and will not serve as an investment advisor to any Páttria fund. Excludes Blackstone's Advisory business, which is expected to be spun off in 2015.

(1) Includes Steve Schwarzman and Tony James.

## Fund Performance

BCP Returns – Over 27 years, we have outperformed the S&P 500 by ~800 bps per annum<sup>(1)</sup>

Fund	Cumulative		Realized / Partially Realized
	Net IRR Fund Life to Date	Net MOIC Fund Life to Date	Gross IRR Fund Life to Date
BEP	34%	1.4X	78.7%
BCP VI	15%	1.2X	70.1%
BCP V	8%	1.6X	14.1%
BCP IV	36%	2.4X	57.6%
All Other <sup>(2)</sup>	18%	1.8X	27.4%
<b>Cumulative</b>	<b>16%</b>	<b>1.6x</b>	<b>27.8%</b>

**Average premium to prior quarter marks of recent realizations / IPOs: 39%<sup>(3)</sup>**

Note: As of December 31, 2014, for realized / partially realized returns, gross IRRs shown because net IRRs are not calculated on a deal by deal basis. Actual returns to investors will be reduced by management fees, carried interest, and other fees and expenses. Past performance is not indicative of future results and there can be no assurance that these funds will achieve their objectives or avoid substantial losses. Please see the Appendix of this presentation for the full performance records and for important legends and disclosures.

(1) This index comparison is being provided solely for informational purposes as an indication of returns that could be earned by investors by making similar investments in the S&P 500 Index and should not be relied upon for any purpose. S&P 500 Annual Return has been calculated as the internal rate of return of the total contributions and distributions (including fees, drawdown of expenses, return of capital and recouped losses), and the corresponding annual rate of return of the S&P 500 Index from each contribution / disposition date to the quarter end for all investments. For all BCP funds, excluding BCP I and BCP II, the weighted S&P 500 Annual Return has been calculated as the internal rate of return considering the total contributions and distributions (including fees, drawdown of expenses, return of capital and recouped losses), and the corresponding annual rate of return of the S&P 500 Index from each contribution/distribution date to the quarter end for all investments. For BCP I and BCP II, the S&P return has been calculated from the most material investment tranche date to the final exit date for each investment. Weighted S&P 500 Annual Rate of Return is provided solely as an indication of returns that could be earned by investors by making similar investments in the S&P 500 Index. Blackstone's funds differ from the S&P 500 Index in that, among other factors, Blackstone's funds are actively managed entities that bear fees and use leverage.

(2) Includes BCP I, II, III and BCOM as applicable.

(3) As of March 13, 2015. Reflects premium over previous quarter marks on all strategic dispositions and IPO events since January 1, 2013.

## Outstanding Post-Crisis Track Record<sup>(1)</sup>

(\$ in millions)

	Representative Deals	Capital Deployed	Realizations	Total Gross IRR	Total Gross MOIC
BCP V		\$6,222	\$8,687	21.9%	2.2x
BCP VI / BEP I		\$10,734	\$2,208	28.5%	1.4x
<b>Total</b>		<b>\$16,956</b>	<b>\$10,895</b>	<b>23.6%</b>	<b>1.7x</b>

Note: As of December 31, 2014. Actual returns to investors will be reduced by management fees, carried interest, and other fees and expenses. As of December 31, 2014, the net IRRs and net MOICs for BCP V, BCP VI and BEP I are 8% and 1.6x, 15% and 1.2x and 34% and 1.4x, respectively. Past performance is not indicative of future results and there can be no assurance that these investments will achieve their objectives or avoid substantial losses. Please see the Appendix of this presentation for the full performance records and for important legends and disclosures.

These investments were selected to demonstrate an investment theme and should be evaluated in the context of an entire portfolio. Gross MOIC is not calculated on a deal by deal basis. Actual returns to investors will be reduced by fees, expenses, and unrealized currency gains / losses.

(1) Includes all transactions announced after January 1, 2008 and completed since June 30, 2008. Excludes BlueStar, which was announced in 2007. Birds Eye represents Pinnacle Foods acquisition of Birds Eye at current valuation. PBF Energy initial refinery purchase occurred in May 2010.

## Recent Performance: Recent Sales / IPOs / Refinancings

Since the beginning of 2013, 38 Companies Sold / IPO'd / Refinanced<sup>(1)(2)</sup> – \$25.2 billion realized at 2.5x gross MOIC<sup>(2)</sup>

	BCP IV / BCOM		BCP V		BCP VI / BEP	
Recent Liquidity <sup>(3)</sup>	\$4.8 billion		\$17.6 billion		\$2.8 billion	
						
<i>(\$ in billions)</i>						
	<b>BCP IV</b>	<b>BCOM</b>	<b>BCP V</b>		<b>BCP VI</b>	<b>BEP</b>
<b>Fund to Date Cash Returned</b>	\$18.3	\$2.7	\$18.4		\$1.6	\$0.6
<b>Total Realized / Unrealized Value</b>	\$21.2	\$2.9	\$35.6		\$12.1	\$2.9
<b>Gross MOIC</b>	2.8x	1.3x	1.8x		1.4x	1.5x

Note: As of December 31, 2014, unless otherwise indicated. Actual returns to investors will be reduced by fees, expenses, and unrealized currency gains / losses. As of December 31, 2014 the net MOICs for BCP VI, BEP, BCP V, BCOM, and BCP IV were 1.2x, 1.4x, 1.6x, 1.2x, and 2.4x respectively. Past performance is not indicative of future results and there can be no assurance that these investments will achieve their objectives or avoid substantial losses.

(1) Excludes partial harvests, with the exception of Apria, which sold one of its major business units, Coram, and also any fully realized deals where the prior quarter carrying value upon disposition / announced sale was less than \$100 million. Excludes: ADS, Arden, Axtel, BlueStar, CAH, Cumulus, eAccess, DT, Gokaldas, Klockner, and Tragus.

(2) As of March 13, 2015. Includes co-invest. MOIC represents multiple for dispositions and dividends only; calculation excludes \$1.9 billion of current income and dispositions in private companies that still hold residual value.

(3) Represents exits from January 1, 2013 through March 13, 2015.

(4) Announced / pending sale. There is no assurance this transaction will close as expected or at all.

## **How We Generate Returns**

## Our Investment Philosophy

### Adhere to our core discipline

- ▶ **Ability to intervene to change performance of company** – actions under our control
- ▶ **Unlevered returns drive value decision** – focus on yield not comparables
- ▶ **Proactive, targeted deal sourcing** – 80% of BCP VI investments non-auction<sup>(1)</sup>

### BCP Core Investment Themes

- ▶ **Growth platforms**
  - High-growth tech services companies uncorrelated to GDP
  - Platforms in consolidating industries
  - BCP to drive acquisition-led and new product growth
- ▶ **Transformational operating intervention**
  - Underexploited consumer brands
  - Mature industrial businesses
- ▶ **Mismatch between requirement for capital and its supply**
  - Energy & power development
  - Consumer finance
- ▶ **Cyclical opportunities**
  - U.S. power generation
  - Transportation / logistics
  - Natural gas
  - Financial assets

Note: There can be no assurance that any Blackstone fund will achieve its objectives or avoid substantial losses.  
(1) Based on number of investments.

## Portfolio Operations

# Key Drivers of Blackstone Intervention

Fit for purpose operating executives working with CEOs and coordinated by Dave Calhoun

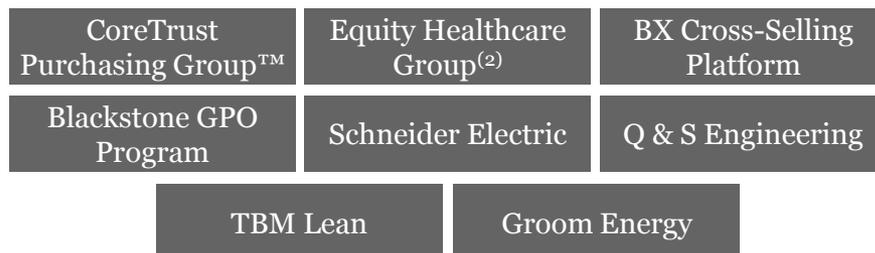


Supported by

### Functional Experts



### Strategic Support Groups



23 full-time Blackstone professionals

Note: As of December 31, 2014.

(1) Independent full-time operating advisors, senior advisors and consultants who are not Blackstone employees. The level of involvement and role of the advisors and consultants with Blackstone portfolio companies may vary.

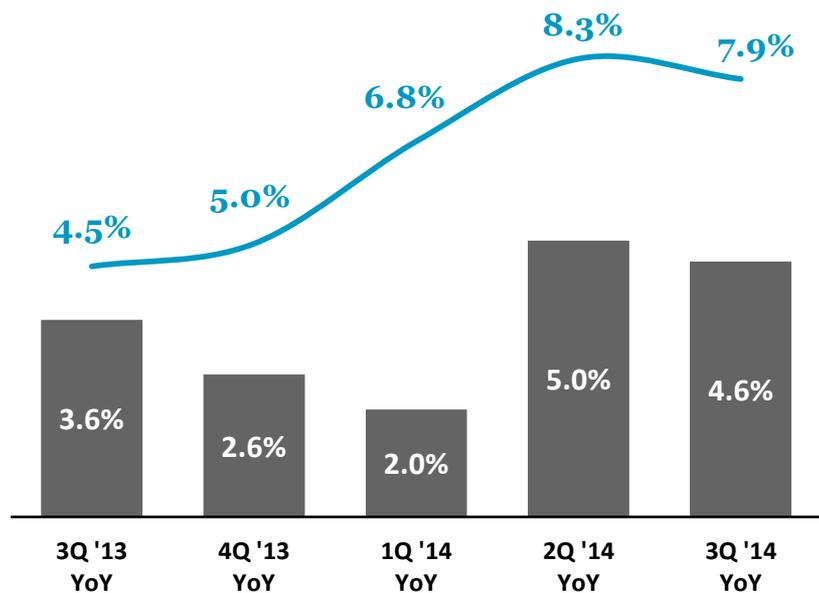
(2) Equity Healthcare is an affiliate of Blackstone.

## How We Generate Returns

# Revenue and EBITDA results vs. PY continue to outperform relative to S&P

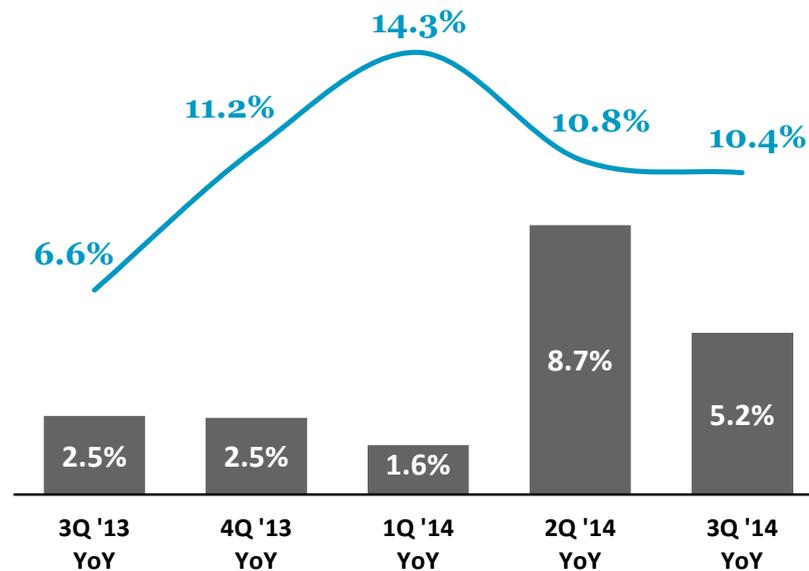
### Revenue YoY% Growth / (Decline)<sup>(1)</sup>

(Based on FMV)



### EBITDA YoY% Growth / (Decline)<sup>(1)</sup>

(Based on FMV)



— BCP Portfolio Companies

■ S&P 500 Performance

Note: Past performance is not indicative of future results and there can be no assurance that these investments will achieve their objectives or avoid substantial losses. Please refer to the Appendix for the full performance records and for important legends and disclosures.

(1) Current S&P Index statistics sourced from Capital IQ as of September 30, 2014. Includes 44 of the current BCP investments (excluding energy investments, new investments, and investments for which information is not available). The S&P 500 index comparison provided herein is solely for informational purposes only and should not be relied upon for any purpose. Blackstone's funds differ from the S&P 500 in that Blackstone's funds are actively managed entities that bear fees and use leverage, among other factors. Please see end of this presentation for further information on the S&P and other important disclosures.

## **Conclusion**

### ▶ **Superior structure / business model**

- Single global fund to do control-oriented corporate PE; not separate funds by region / deal type
- Enables us to focus on 10–15 best opportunities per year across all sectors and geographies
- We are required to invest less capital, can be more selective
- Structure of our fund enables us to take advantage of volatility / dislocations

### ▶ **Unique investment culture and strong process**

- Single global investment committee adhering to one standard
- Single global team – grown organically – one investment culture
- Focus on limiting capital loss first and foremost
- Produces excellent record: less than 10% of invested capital has generated a realized loss<sup>(1)</sup> AND strong long-dated returns of 16% net IRR<sup>(2)</sup>

### ▶ **Proven capability to add operational value to our companies**

- Model of engagement with our companies works
- Large team of operating professionals with specific functional knowledge
- Superior leadership by Dave Calhoun
- Proven results: our companies are growing faster than the S&P 500<sup>(1)</sup>

### ▶ **Global scale, Blackstone brand, broad network produces unique opportunities**

- Proactive sourcing model – ~80% of BCP VI deals non-auction<sup>(2)</sup>
- Deep sector expertise in most important industries: Energy, Consumer/Leisure, Healthcare, Industrials
- Real Estate, Credit businesses make us better

### ▶ **Careful management of organization to produce great talent**

- Recruiting / training young talent
- Managing economic allocation / promotions
- Long SMD tenure – almost all homegrown talent

# Appendix

## Important Disclosures

---

Past performance is not necessarily indicative of future results. Unless otherwise indicated, all internal rates of return are presented on a “gross” basis (i.e., they do not reflect reductions for the management fees, organizational expenses, the general partner’s carried interest, and other expenses and taxes to be borne by investors, which in the aggregate are expected to be substantial, and do not take into account potential defaults on unrealized investments). Actual realized value of currently unrealized investments will depend on, among other factors, future operating results, the value of the assets and market conditions at the time of disposition, holding periods, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which the current unrealized valuations are based. Accordingly, the actual realized values of unrealized investments may differ materially from the values indicated herein. Net Annual Rate of Return represents the IRR after management fees, drawdowns for organizational expenses and partnership expenses, taxes and other amounts withheld from distributions, and the General Partner’s allocation of profits but does not include taxes or withholdings specific to certain limited partners. Further information is available upon request.

Prospective investors should be aware that an investment in a Fund involves a high degree of risk. The following is a summary of only certain considerations and is qualified in its entirety by the more detailed “Risk Factors and Potential Conflicts of Interest” set forth in the applicable Offering Memorandum. Capitalized terms used below have the meanings set forth in the applicable Offering Memorandum, which must be read carefully prior to investing in the Fund.

**No Assurance of Investment Return.** There can be no assurance that the Fund’s objectives will be achieved or that a Limited Partner will receive any distribution from the Fund. An investment should only be considered by persons who can afford a loss of their entire investment. Past activities of investment entities sponsored by Blackstone provide no assurance of future results.

**Leveraged Investments.** Certain assets in which the Fund will invest are expected to employ significant leverage. The leveraged capital structure of such assets will increase their exposure to certain factors such as rising interest rates, downturns in the economy, or deterioration in the financial condition of such assets or industry. In the event an asset cannot generate adequate cash flow to meet its debt service, the Fund will suffer a partial or total loss of capital invested in the asset, which would adversely affect the returns of the Fund.

**No Market for Limited Partnership Interests and Restrictions on Transfer.** Interests in the Fund have not been registered under the securities laws of any jurisdiction, and, therefore, cannot be sold unless they are subsequently registered under applicable securities laws or an exemption from registration is available. There is no public market for Interests in the Fund and one is not expected to develop. A Limited Partner will generally not be permitted to assign, sell, exchange, or transfer its Interest in the Fund without the consent of the General Partner (which consent may not be unreasonably withheld).

**Failure to Make Payments.** In the case of a private equity fund, if a Limited Partner fails to pay when due installments of its capital commitment or its portion of Management Fees, Organizational Expenses or other obligations to the Fund, such Limited Partner will be subject to various remedies including, without limitation, preclusion from further investment in the Fund, reductions in its capital or loan account balance, and a forced sale of its Interest in the Fund.

**Highly Competitive Market for Investment Opportunities.** The activity of identifying, completing and realizing attractive investments is highly competitive and involves a high degree of uncertainty. There can be no assurance that the Fund will be able to locate, consummate and exit investments that satisfy the Fund’s rate of return objectives or realize upon their values or that it will be able to invest fully its committed capital.

**Reliance on the General Partner and the Investment Advisor.** The success of the Fund will depend in part upon the skill and expertise of the professionals of the Fund’s investment advisor and General Partner. The interests of these professionals in the General Partner and the Investment Advisor should tend to discourage them from withdrawing from participation in the Fund’s investment activities. However, there can be no assurance that such professionals will continue to be associated with the Investment Advisor or General Partner throughout the life of the Fund.

In calculating IRRs, the amount of capital that was invested via fund- or deal-level leverage secured by the commitments of the fund is only reflected in the calculations to the extent capital contributions were made by the partners of the fund to repay such leverage. In the case of Gross IRRs, such repayments by the partners are treated as outflows on the date of the initial investment; in the case of the Net IRR, such amounts are treated as outflows only on the dates of the actual capital contributions. As a result, the Net IRR as shown herein may be higher than it otherwise would be if these temporary timing differences in the recognition of the repayment of leverage did not exist and may, in certain cases, result in the Net IRR exceeding the Gross IRR even though Net IRR reflects reduction for management fees, carried interest, taxes and other fees and expenses as fully described in the fund’s PPM.

# Important Disclosures

---

Any target or similar returns set forth herein are based on Blackstone's belief about the returns that may be achievable on investments that the Partnership intends to pursue. Such returns are based on the General Partner's current view in relation to future events and financial performance of potential investments and various models, estimations and "base case" assumptions made by the General Partner, including estimations and assumptions about events that have not occurred. Among the assumptions to be made by the General Partner in performing its analysis are (i) the amount and frequency of current income from an investment, (ii) the holding period length, (iii) EBITDA growth and cost savings over time, (iv) the manner and timing of sale, (v) exit multiples reflecting long-term averages for the relevant asset type, (vi) customer growth and other business initiatives, (vii) availability of financing, (viii) potential investment opportunities Blackstone is currently or has recently reviewed and (ix) overall macroeconomic conditions such as GDP growth, unemployment and interest rate levels. While such "base case" assumptions are based on assumptions that General Partner believes are reasonable under the circumstances, they are subject to uncertainties, and changes. Any such modification could be adverse to the actual overall returns. Actual events and conditions may differ materially from the assumptions used to establish returns and there is no guarantee that the assumptions will be applicable to the Partnership's investments. None of Blackstone, its affiliates or any of the respective directors, officers, employees, partners, shareholders, advisers and agents of any of the foregoing makes any assurance, representation or warranty as to the accuracy of such assumptions.

Potential Conflicts of Interest. There may be occasions when the General Partner, the Investment Advisor, and their affiliates will encounter potential conflicts of interest in connection with the Fund's activities including, without limitation, the allocation of investment opportunities, relationships with Blackstone's investment banking and advisory clients, and the diverse interests of the Fund's limited partner group.

Material, Non-Public Information. By reason of their responsibilities in connection with other activities of Blackstone, certain employees of the General Partner, the Advisor and their respective affiliates may acquire confidential or material non-public information or be restricted from initiating transactions in certain securities. The Fund will not be free to act upon any such information. Due to these restrictions, the Fund may not be able to initiate a transaction that it otherwise might have initiated and may not be able to sell an Investment that it otherwise might have sold.

This presentation and any related documents are for informational purposes only and do not constitute an offer to sell, or a solicitation of an offer to buy, any security or instrument in or to participate in any trading strategy with any Blackstone Fund. If such offer is made, it will only be made by means of an offering memorandum as it may be amended, supplemented or restated from time to time (the "Offering Memorandum"), which would contain material information (including certain risks of investing in such Fund) not contained in this document and which would supersede and which would qualify in its entirety the information set forth in this document. Any decision to invest in a Fund should be made after reviewing the Offering Memorandum of the Fund, conducting such investigations as the investor deems necessary and consulting the investor's own legal, accounting and tax advisors in order to make an independent determination of the suitability and consequences of an investment in the Fund.

None of the Funds or their affiliates make any representation or warranty, express or implied, as to the accuracy or completeness of the information contained herein and nothing contained herein should be relied upon as a promise or representation as to past or future performance of a Fund or any other entity. Any prior investment results of any Fund or any of its affiliates and any hypothetical information are presented in this document for illustrative purposes only and are not indicative of the future results of such Fund.

Certain information contained in this presentation has been obtained from sources outside Blackstone. While such information is believed to be reliable for purposes used herein, no representations are made as to the accuracy or completeness thereof and none of the Funds or their affiliates take any responsibility for such information.

Certain information contained in the presentation discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice.

Certain information has been derived from surveys of Blackstone portfolio companies. Such surveys were not scientifically conducted and may not constitute a representative sample of companies across industries and geographies. Investors should not rely on the results of the survey in making any investment decision.

Past performance is not necessarily indicative of future results. Except as otherwise noted, the Gross Annual Rate of Return represents the compound annual rate of return ("IRR") before partnership expenses, management fees, drawdowns for organizational and partnership expenses, and the General Partner's allocation of profit, but after partnership expenses withheld from distributions. The Net Annual Rate of Return represents the IRR after management fees, drawdowns for organizational expenses and partnership expenses, partnership expenses withheld from distributions, and the General Partner's allocation of profits but does not include taxes or withholdings specific to certain limited partners.

Please be advised that certain information contained herein might constitute material non-public information and, therefore, potentially could impose certain trading restrictions on the recipient.

The S&P 500 index comparison provided herein is solely for informational purposes as an indication of returns that could be earned by investors by making similar investments in the S&P 500 Index and should not be relied upon for any purpose. S&P 500 annual return has been calculated as the internal rate of return assuming each amount contributed or paid to BCP I-VI (and excluding BEP I and BCOM) were invested and disposed of in the S&P 500 Total Return Index on the same respective dates. Outperformance measures the net IRR to Limited Partners for such an investment in BCP I-VI compared to the aggregate hypothetical S&P 500 Total Return Index for such periods. The performance of each of BCP I-VI relative to the S&P 500 is different from the overall performance of such funds relative to the S&P 500. Blackstone's funds differ from the S&P 500 Total Return Index in that, among other factors, (i) the volatility of the S&P 500 Total Return Index may be materially different from that of the Blackstone funds; (ii) the S&P 500 Total Return Index employs different investment guidelines and criteria than the Blackstone funds and, therefore, holdings in such funds differ significantly from holdings of the securities that comprise the S&P 500 Total Return Index; (iii) the performance of the S&P 500 Index may not necessarily be selected to represent an appropriate benchmark or index to compare to the performance of the referenced Blackstone funds, but rather, is disclosed to allow for comparison of the referenced Blackstone funds' performance to that of a well-known benchmark or index; and (iv) Blackstone's funds are actively managed entities that bear fees and use leverage. Further information regarding the methodologies and other related information referred to above is available upon request.

## Forward-Looking Statements

---

This presentation may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934 which reflect Blackstone's current views with respect to, among other things, Blackstone's operations and financial performance. You can identify these forward-looking statements by the use of words such as "outlook," "believes," "expects," "potential," "continues," "may," "will," "should," "seeks," "approximately," "predicts," "intends," "plans," "estimates," "anticipates" or the negative version of these words or other comparable words. Such forward-looking statements are subject to various risks and uncertainties. Accordingly, there are or will be important factors that could cause actual outcomes or results to differ materially from those indicated in these statements. Blackstone believes these factors include but are not limited to those described under the section entitled "Risk Factors" in its Annual Report on Form 10-K for the fiscal year ended December 31, 2014, as such factors may be updated from time to time in its periodic filings with the Securities and Exchange Commission, which are accessible on the SEC's website at [www.sec.gov](http://www.sec.gov). These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements that are included in this presentation and in the filings. Blackstone undertakes no obligation to publicly update or review any forward-looking statement, whether as a result of new information, future developments or otherwise.

All information regarding projected performance is with regard to past investments and is provided solely as an update to existing limited partners on the status of their current investments. Nothing herein is intended as an offer to invest in, or the solicitation of an investment in, any Blackstone managed fund, account or transaction.

## **OPERF Policy Implementation Overlay Manager Annual Update**

### **Purpose**

To provide the OIC an update on the OPERF Policy Implementation Overlay program, currently managed by Russell Investments.

### **Background**

Beginning in late 1998, the OIC elected to have State Street Bank & Trust, through State Street Global Advisors (SSgA), implement and manage a cash equitization program. In that program, daily, excess manager cash was invested through two different commingled investment vehicles. For domestic equities, excess cash was equitized through SSgA's Stock Performance Index Futures Fund (SPIFF), and for international equities, excess cash was equitized through SSgA's International Stock Performance Index Futures Fund (ISPIFF). The respective benchmarks for these two funds were the S&P 500 Index and the MSCI EAFE Index.

In September 2005, the OIC retained Russell Investments to implement a more robust overlay program that would do more than simply equitize excess manager cash. Specifically, Russell monitors and, if necessary, equitizes both excess manager cash and general OPERF cash held to meet benefit payments and fund capital calls. As part of its overlay program, Russell also monitors OPERF's asset allocation relative to its OIC-established strategic targets (see attached OIC Policy 4.01.18; rev 9/2014) and trades equity and fixed income futures to align the Fund's overall asset allocation at any point in time with these OIC-established targets. For perspective on Russell's overlay program, OIC members receive a monthly update on the program's overlay exposures in the asset allocation section of the regular OIC meeting materials.

As of March 31, 2015, the OPERF overlay program was long \$1.5 billion in fixed income contracts and long \$376 million in global equity contracts for a total notional exposure of \$1.9 billion.

### **Staff Recommendation**

None, information only.

**FUNCTION: General Policies & Procedures**

**ACTIVITY: OPERF Asset Allocation and Rebalancing Policy**

**POLICY:** The Oregon Investment Council (OIC) establishes asset allocation ranges and targets for the Oregon Public Employees Retirement Fund (OPERF or the Fund). On an ongoing basis, Oregon State Treasury (OST) staff manages OPERF's asset allocation relative to OIC-established targets, fund-level cash flows and financial and real asset market volatility.

The OIC undertakes a rigorous study of OPERF's assets and liabilities every three to five years (or more frequently, if desired). These asset-liability studies shall include the following elements for OIC consideration: 1) capital market assumptions by asset class which include expected returns, volatilities and correlations; 2) asset mix optimizations using various portfolio modeling/construction techniques; 3) scenario, risk contribution and plan liability analyses; 4) pension surplus/cost projections; and 5) recommended strategic asset allocation targets and a rebalancing framework.

The purpose of OST staff's rebalancing efforts are to ensure that OPERF's actual asset allocation does not drift significantly from the strategic targets approved by the OIC and informed by the asset-liability study described above. Moreover, rebalancing ensures that the return objectives and risk tolerance parameters approved by the OIC are consistently and effectively reflected in OST staff's management of OPERF assets over time. With OIC oversight, implementing the approved rebalancing framework is an OST staff responsibility, although the illiquid nature of many private market assets may exempt those assets from staff's short-term rebalancing activities.

**PROCEDURES:**

1. BACKGROUND

In the absence of any other considerations, the optimal rebalancing strategy would suggest continually rebalancing back to OPERF's strategic asset allocation targets. However, rebalancing involves transactions costs such as brokerage fees and market impact. As a result of these costs, ranges have been established around the strategic asset allocation targets in order to balance the desirability of achieving precise target allocations with the various and often material transactions costs associated with these same rebalancing activities. In addition, the overlay manager is expected to minimize cash exposures at both the Fund and individual manager level.

A breach of any of the established asset allocation ranges triggers a review and possible rebalancing back to established targets with due consideration given to the liquidity of the affected investments, all anticipated transaction costs and the current portfolio structure within each asset class.

## 2. IMPLEMENTATION

- A. OST Staff will undertake the implementation of the rebalancing program.
- B. The Fund's actual asset allocation shall be reviewed at the end of each month when asset valuations become available. More frequent reviews may be undertaken, if appropriate, provided the required asset value information is also available. Rebalancing will take place if the allocation to any particular asset class exceeds the corresponding, stipulated policy range. Staff shall manage liquidity by rebalancing assets between and among managers, as necessary, to a) meet the Fund's cash needs and b) maintain the preferred portfolio structure (i.e., maintain specific manager weightings) within each asset class. All physical rebalancings shall be executed in concert with the overlay manager as described above.
- C. Rebalancing should be implemented by the most cost-effective means available. For example, cash flows into and out of the Fund will first be used to rebalance back toward asset class targets, whenever possible. Crossing opportunities in index fund investments and futures/options may also be used in rebalancing in order to reduce costs.
- D. When rebalancing occurs, OST staff shall make a recommendation to the Chief Investment Officer regarding the most appropriate asset allocation, taking into account portfolio characteristics, preferred portfolio structure, existing manager weights, market conditions and the Fund's cash flow requirements.
- E. All rebalancing shall take place within the asset class and sub-asset class ranges established in policy by the OIC.
- F. For illiquid assets such as private equity and real estate, rebalancing considerations should include higher transaction costs and the availability of alternative rebalancing opportunities, if any.
- G. Staff shall report to the OIC the actual market valuations versus the target allocations by asset class monthly as well as any and all rebalancing activity quarterly.

### 3. ASSET ALLOCATION POLICY TARGETS AND RANGES

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Range</b>
Public Equities	37.5%	32.5 – 42.5%
Private Equity	20.0%	16.0 – 24.0%
<b>Total Equity</b>	<b>57.5%</b>	<b>52.5 – 62.5%</b>
Fixed Income	20.0%	15.0 – 25.0%
Real Estate	12.5%	9.5 – 15.5%
Alternatives	10.0%	0.0 – 10.0%
Opportunity Portfolio	0.0%	0.0 – 3.0%
Cash	0.0%	0.0 – 3.0%
<b>Total Fund</b>	<b>100.0%</b>	

*Note: Targets and ranges as established by the OIC in June 2013. Full implementation will take multiple years.*

### 4. ASSET ALLOCATION AND EXPECTED RETURNS

- A. Periodically (annually or twice a year) the OIC's general consultant updates its capital market and asset class return assumptions.
- B. At least annually, and for OIC approval, OST staff will work with the general consultant to update the policy mix and return expectations for the OPERF Regular Account as reflected in the Statement of Investment Objectives and Policy Framework.

**SAMPLE FORMS, DOCUMENTS OR REPORTS (Attached):** None

# State of Oregon

## Russell Overlay Update

Steve Cauble – Regional Director

Philip Lee, CFA – Portfolio manager

Greg Nordquist, CFA – Director, Overlay Strategies

APRIL 29, 2015

---

## Important information

Russell Investments is a trade name and registered trademark of Frank Russell Company, a Washington USA corporation, which operates through subsidiaries worldwide, including Russell Implementation Services Inc. a SEC registered investment adviser and broker-dealer, member FINRA. Russell Investments is a subsidiary of London Stock Exchange Group.

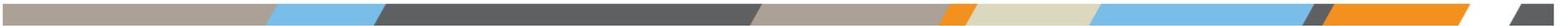
Date of first use: April 2015

RIS RC: 2562

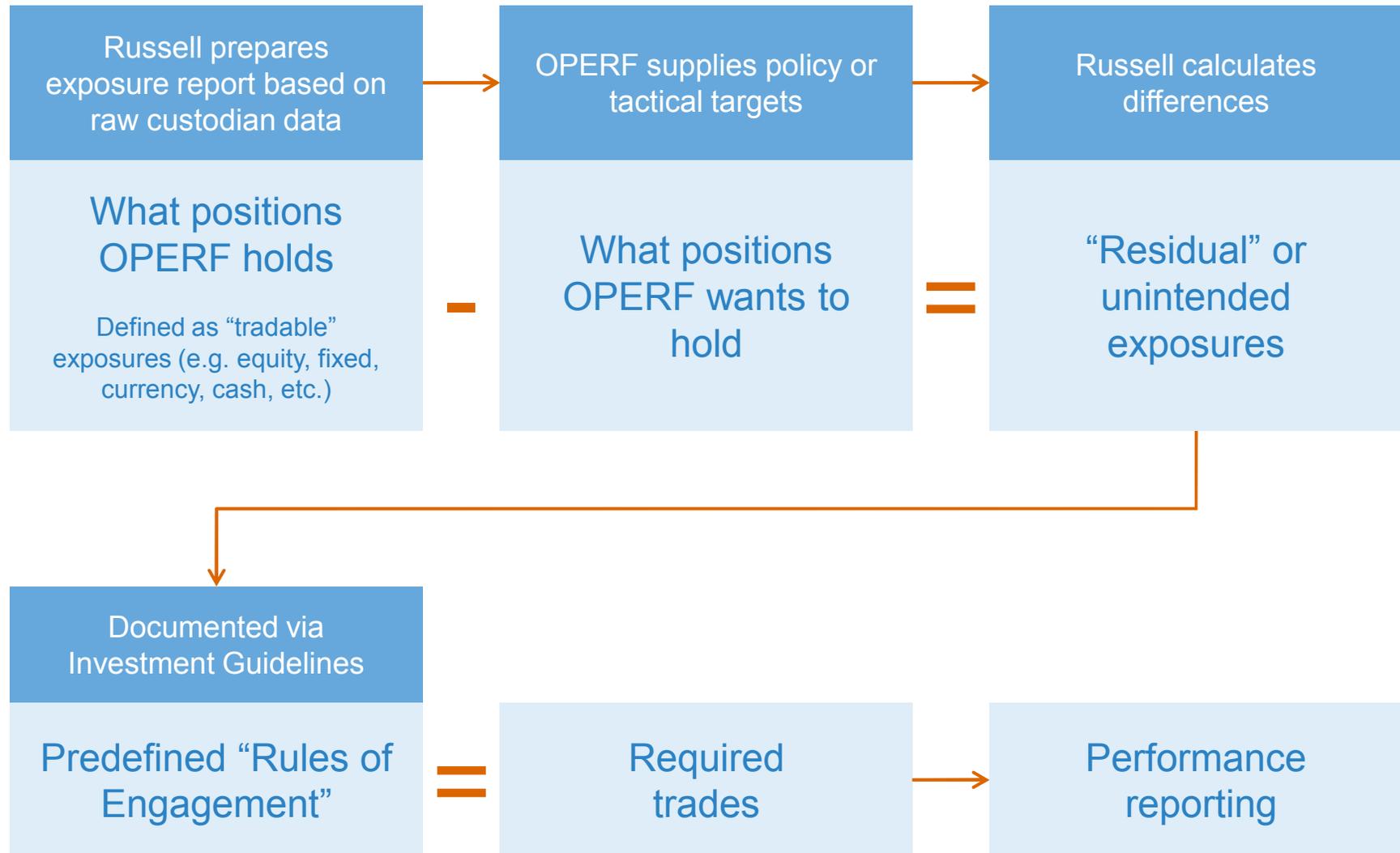
# Contents

- › Overlay update
  - › 1 Year ending March 31, 2015
  - › 5 Years ending March 31, 2015
- › Appendix

# Overlay update



# Investment process

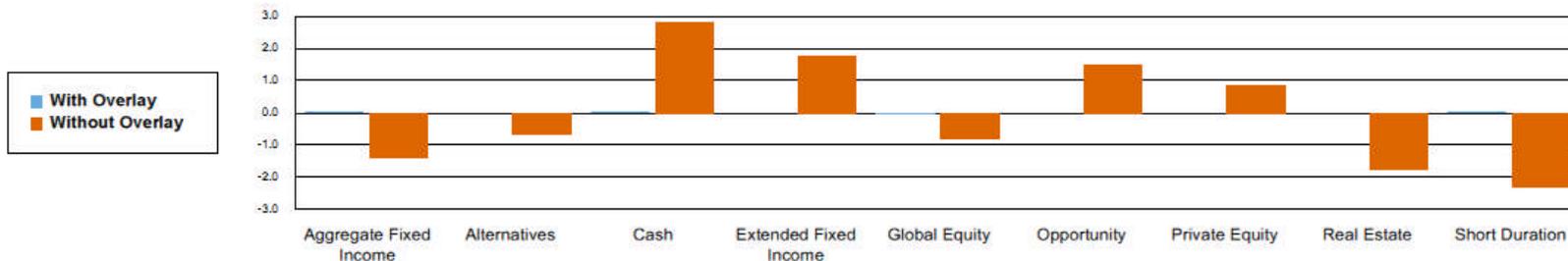


For illustrative purposes only.

# Asset Summary

Asset Class	Physical Exposure		Synthetic Exposure		Net Position		Overlay Target		Policy Target	
	Value	%	Value	%	Value	%	Value	%	Value	%
<b>Total Market Value</b>	<b>69,742.2</b>	<b>100.0%</b>	<b>0.0</b>	<b>0.0%</b>	<b>69,742.2</b>	<b>100.0%</b>	<b>69,742.2</b>	<b>100.0%</b>	<b>69,742.2</b>	<b>100.0%</b>
<b>Cash</b>	<b>1,937.8</b>	<b>2.8%</b>	<b>-1,909.0</b>	<b>-2.7%</b>	<b>28.8</b>	<b>0.0%</b>	<b>9.7</b>	<b>0.0%</b>	<b>0.0</b>	<b>0.00%</b>
Cash	1,937.8	2.8%	-1,909.0	-2.7%	28.8	0.0%	9.7	0.0%	0.0	0.00%
<b>Equity</b>	<b>42,935.4</b>	<b>61.6%</b>	<b>375.8</b>	<b>0.5%</b>	<b>43,311.1</b>	<b>62.1%</b>	<b>43,361.0</b>	<b>62.2%</b>	<b>42,891.4</b>	<b>61.50%</b>
Global Equity	28,387.3	40.7%	375.8	0.5%	28,763.1	41.2%	28,813.0	41.3%	28,942.9	41.50%
Private Equity	14,548.0	20.9%	0.0	0.0%	14,548.0	20.9%	14,548.0	20.9%	13,948.4	20.00%
<b>Fixed</b>	<b>15,066.4</b>	<b>21.6%</b>	<b>1,533.3</b>	<b>2.2%</b>	<b>16,599.6</b>	<b>23.8%</b>	<b>16,568.9</b>	<b>23.8%</b>	<b>16,389.4</b>	<b>23.50%</b>
Short Duration	4,962.4	7.1%	1,078.9	1.5%	6,041.3	8.7%	6,028.0	8.6%	6,555.8	9.40%
Extended Fixed Income	4,512.9	6.5%	0.0	0.0%	4,512.9	6.5%	4,512.9	6.5%	3,277.9	4.70%
Aggregate Fixed Income	5,591.1	8.0%	454.3	0.7%	6,045.4	8.7%	6,028.0	8.6%	6,555.8	9.40%
<b>Other</b>	<b>9,802.6</b>	<b>14.1%</b>	<b>0.0</b>	<b>0.0%</b>	<b>9,802.6</b>	<b>14.1%</b>	<b>9,802.6</b>	<b>14.1%</b>	<b>10,461.4</b>	<b>15.00%</b>
Opportunity	1,019.5	1.5%	0.0	0.0%	1,019.5	1.5%	1,019.5	1.5%	0.1	0.00%
Alternatives	1,291.3	1.9%	0.0	0.0%	1,291.3	1.9%	1,291.3	1.9%	1,743.6	2.50%
Real Estate	7,491.8	10.7%	0.0	0.0%	7,491.8	10.7%	7,491.8	10.7%	8,717.8	12.50%

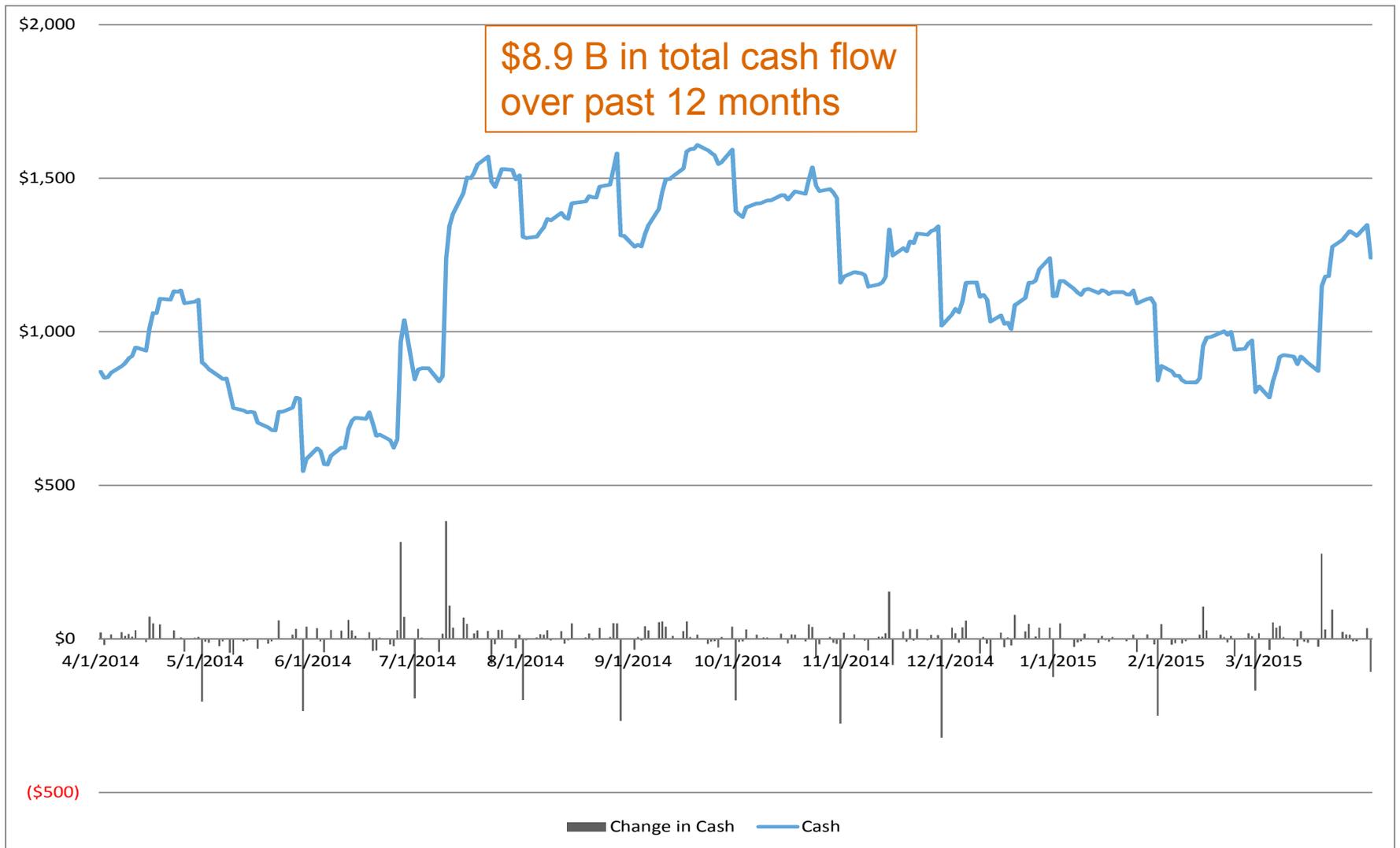
Deviations from Target Allocation



Past performance is not a guarantee of future results.

# 599G Cash Account

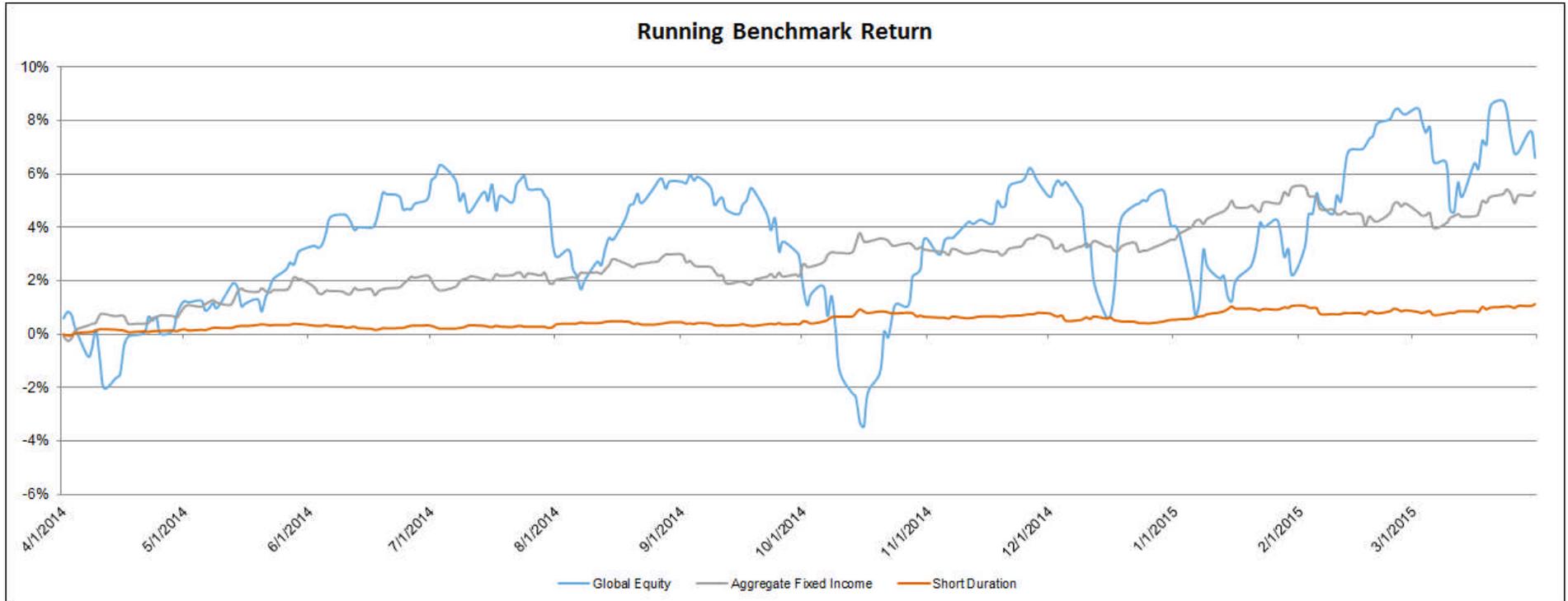
Daily change in cash (\$ mm)



Past performance is not a guarantee of future results.

# Benchmark returns

Apr-01 2014 to Mar-31 2015



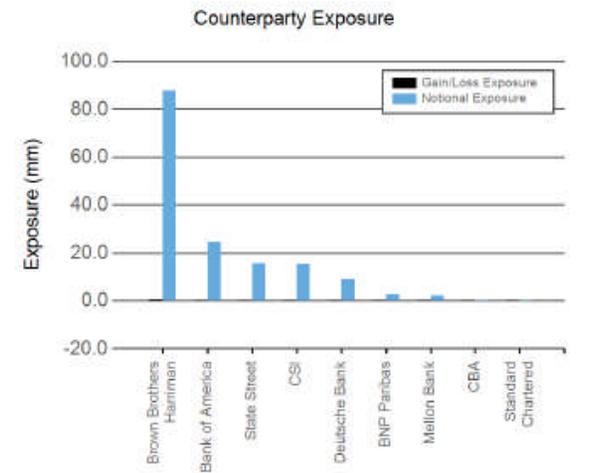
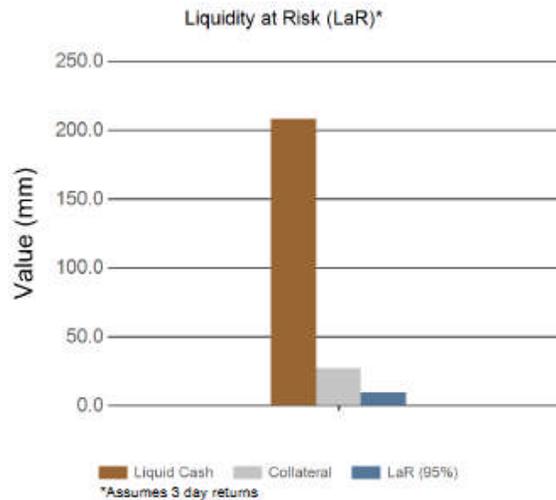
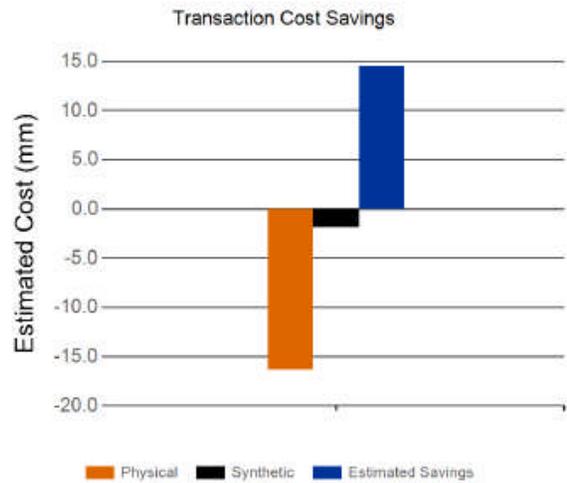
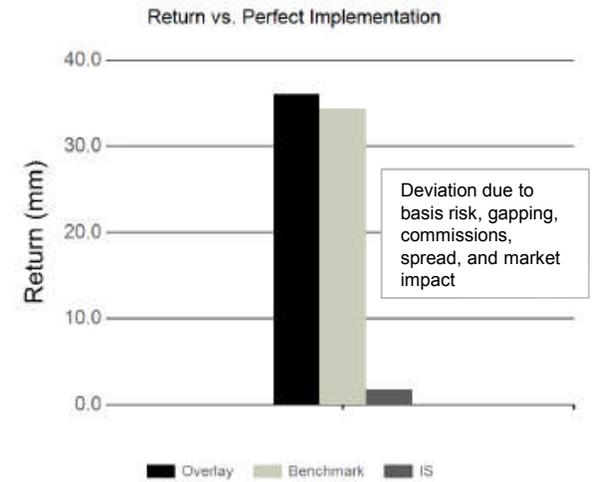
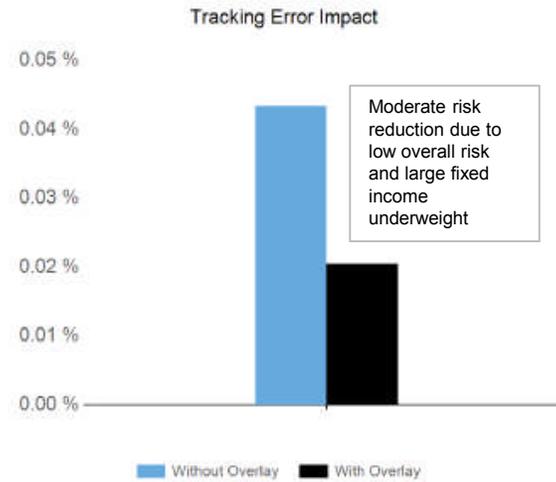
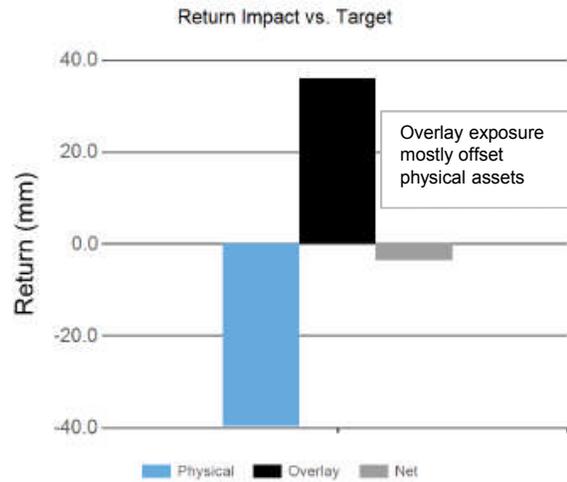
Past performance is not a guarantee of future results. Indexes and/or benchmarks are unmanaged and cannot be invested in directly.

# Oregon overlay highlights

<u>What</u>	→	<u>Why</u>	→	<u>Results</u> <small>(ending 3/31/15)</small>
<ul style="list-style-type: none"> <li>› Overlay frictional cash with underweight asset class</li> </ul>		<ul style="list-style-type: none"> <li>› Capture risk premium of policy over cash</li> <li>› Reduce tracking error from unintended exposures</li> </ul>		<ul style="list-style-type: none"> <li>› Cumulative Returns (port/bench)</li> <li>› 1 year +\$36 mm (+5 bps/+5 bps)</li> <li>› 5 years + \$372 mm (+13/+13)</li> <li>› ITD 10/2005 -\$105 mm (0/-1)</li> </ul>
<ul style="list-style-type: none"> <li>› Long/short for deviations outside predetermined ranges (+/-2%)                             <ul style="list-style-type: none"> <li>› Extreme market moves or tactical shifts</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>› Reduce tracking error from unintended exposures (<i>offset to physical</i>)</li> <li>› Reduce transaction costs (<i>trade physicals as a last line of defense</i>)</li> </ul>		<ul style="list-style-type: none"> <li>› Risk</li> <li>› TE from unintended exposures decreased by ~50%</li> </ul>
<ul style="list-style-type: none"> <li>› Raise cash opportunistically                             <ul style="list-style-type: none"> <li>› Piggyback on other cash flows</li> <li>› Conditional crosses</li> </ul> </li> </ul>		<ul style="list-style-type: none"> <li>› Reduce transaction costs</li> <li>› Reduced administrative burden</li> </ul>		<ul style="list-style-type: none"> <li>› Transaction Costs</li> <li>› Savings by equitizing and rebalancing with futures versus physicals:                             <ul style="list-style-type: none"> <li>› \$16 mm last 1 year</li> <li>› \$80 mm last 5 years</li> </ul> </li> </ul>

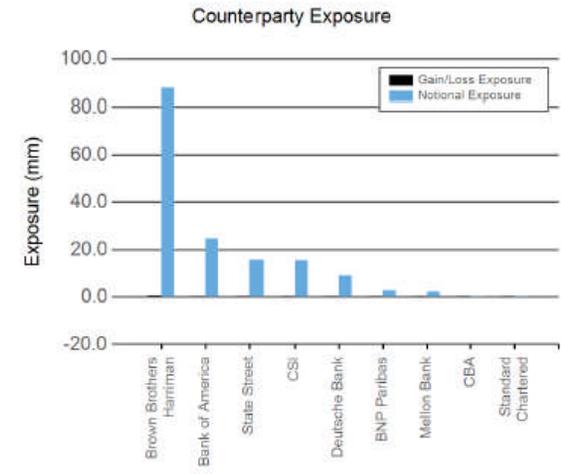
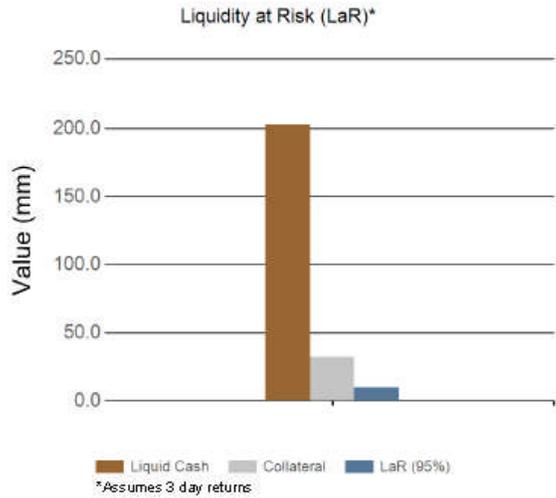
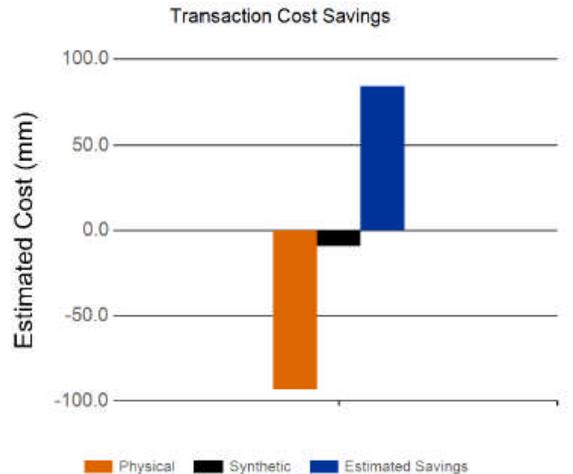
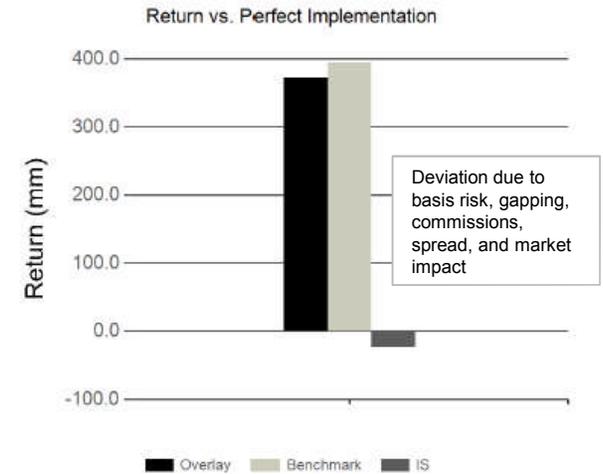
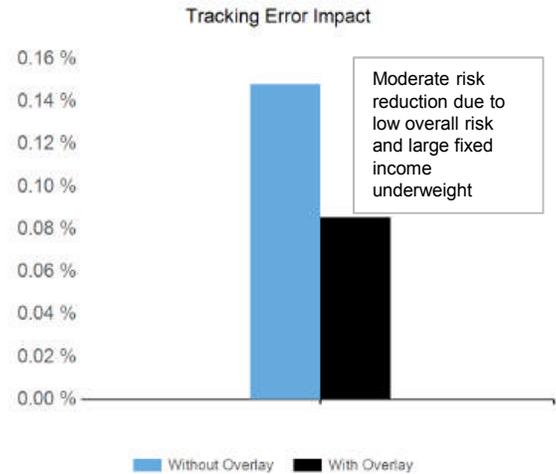
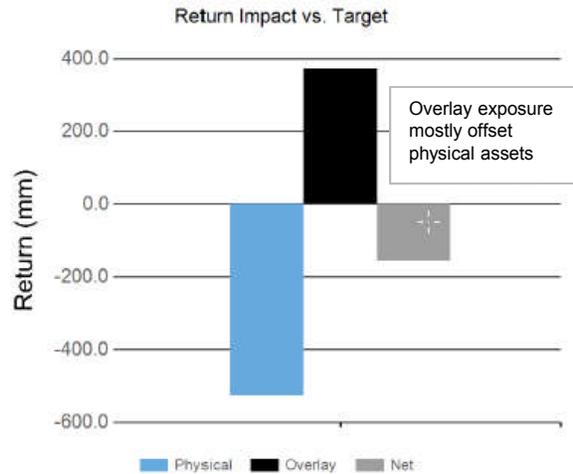
These costs assume one-way trading cost plus one quarterly roll. Indexes are unmanaged and cannot be invested in directly. For illustrative purposes only.

# Overlay Highlights - Oregon



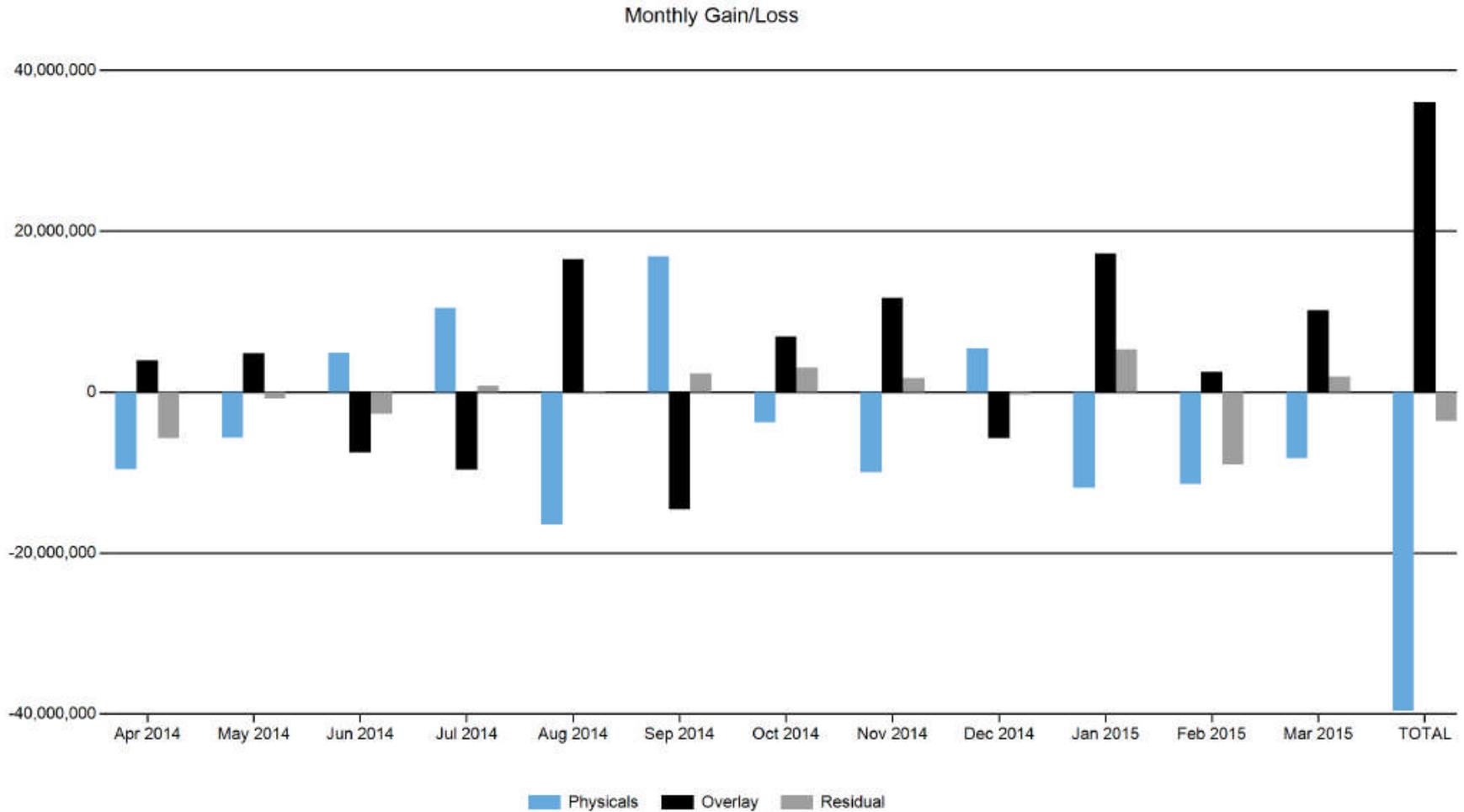
Past performance is not a guarantee of future results.

# Overlay Highlights - Oregon



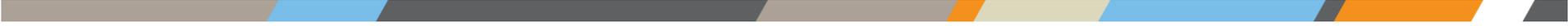
Past performance is not a guarantee of future results.

# Return Impact vs. Physical Portfolio



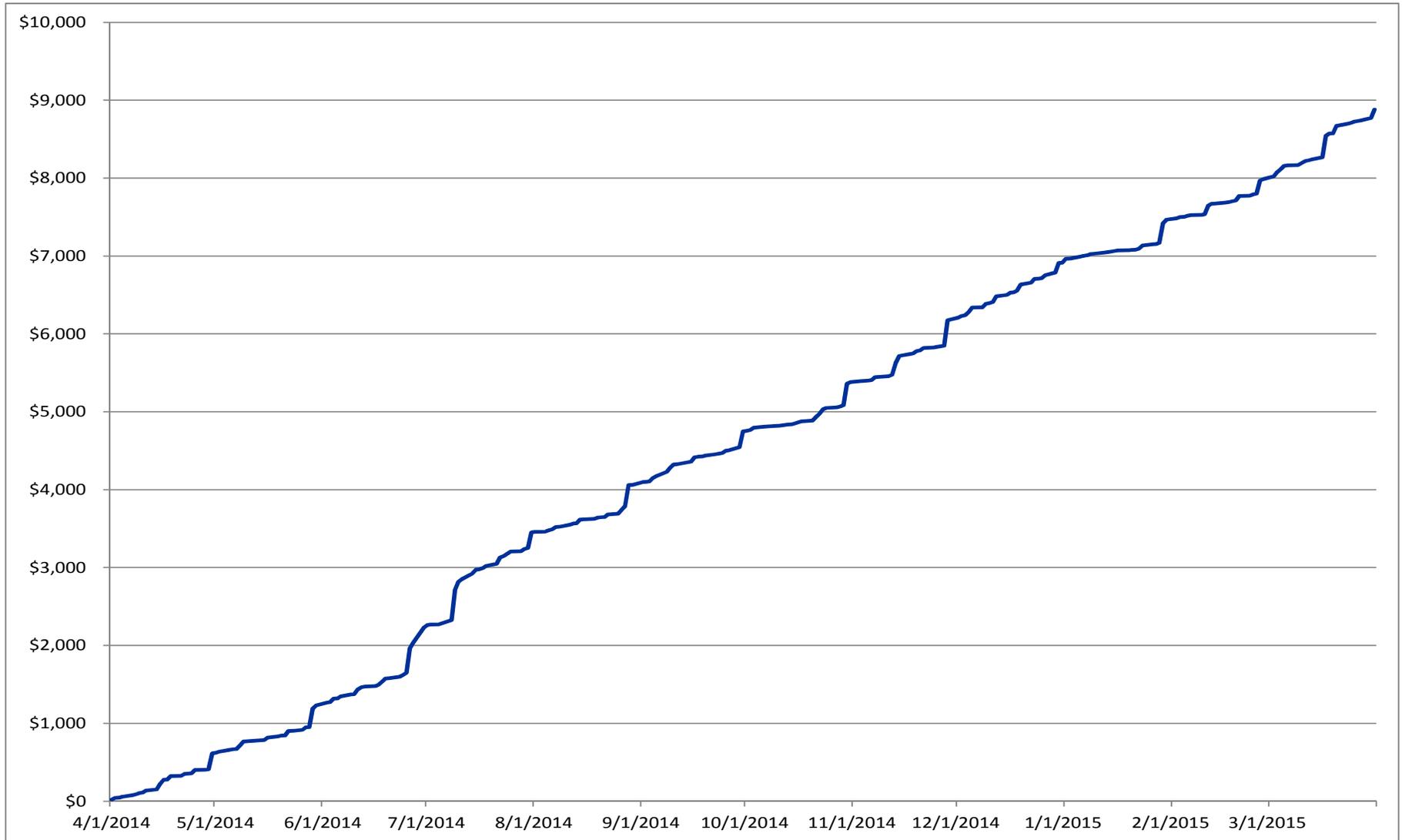
Past performance is not a guarantee of future results.

# Appendix



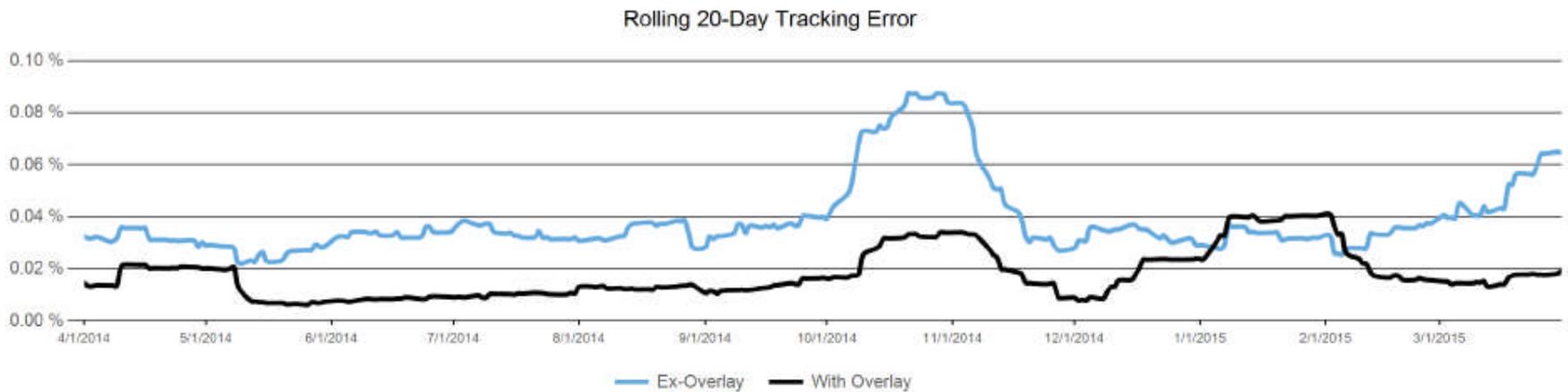
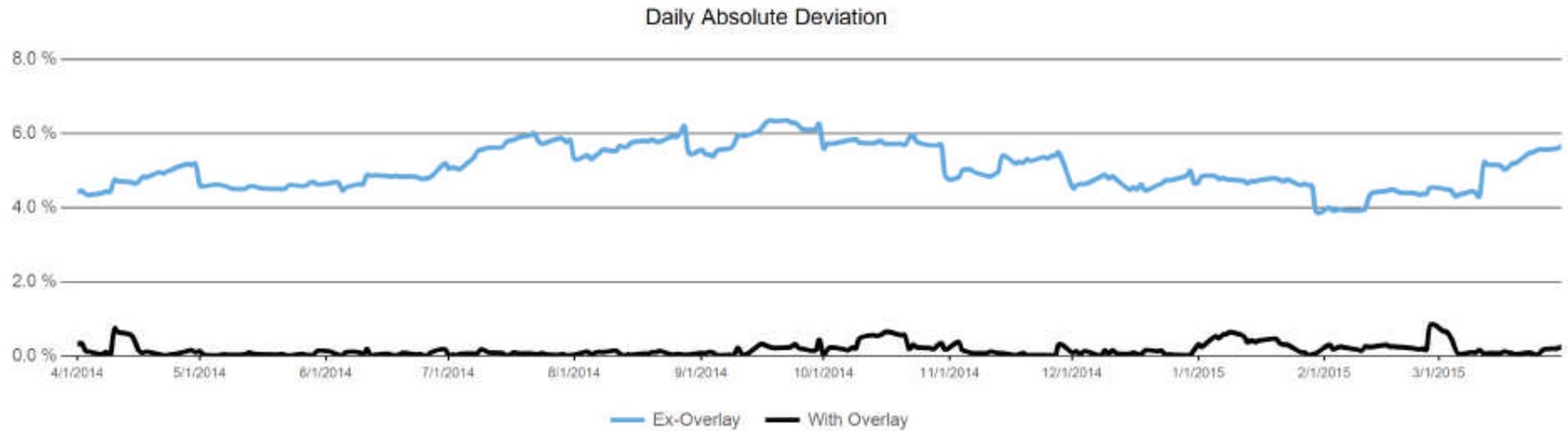
# 599G Cash Account

Cumulative change in cash (\$ mm)



Past performance is not a guarantee of future results.

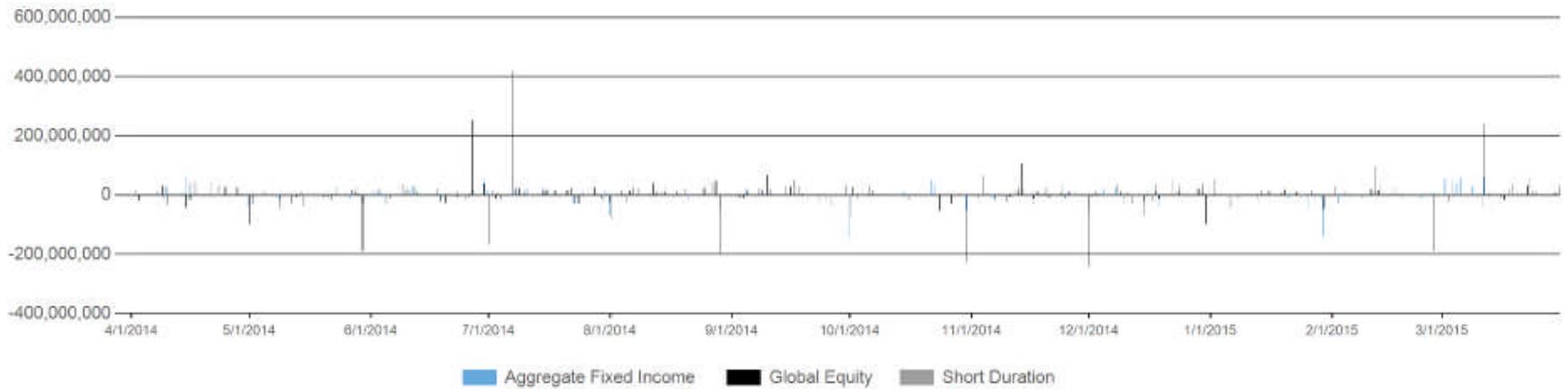
# Total Fund Risk Management



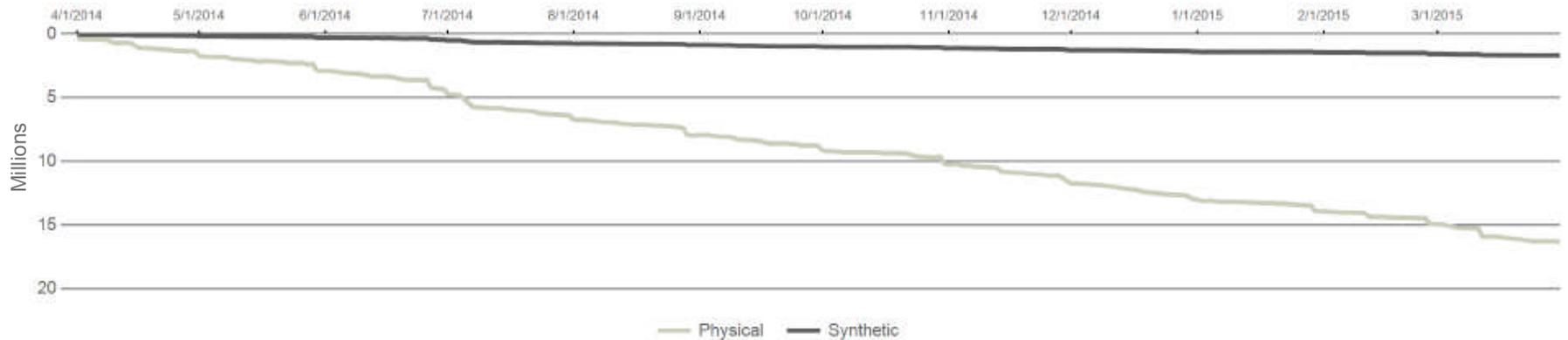
Past performance is not a guarantee of future results.

# Transaction Cost Savings

Daily Traded Flows



Estimated Transaction Costs

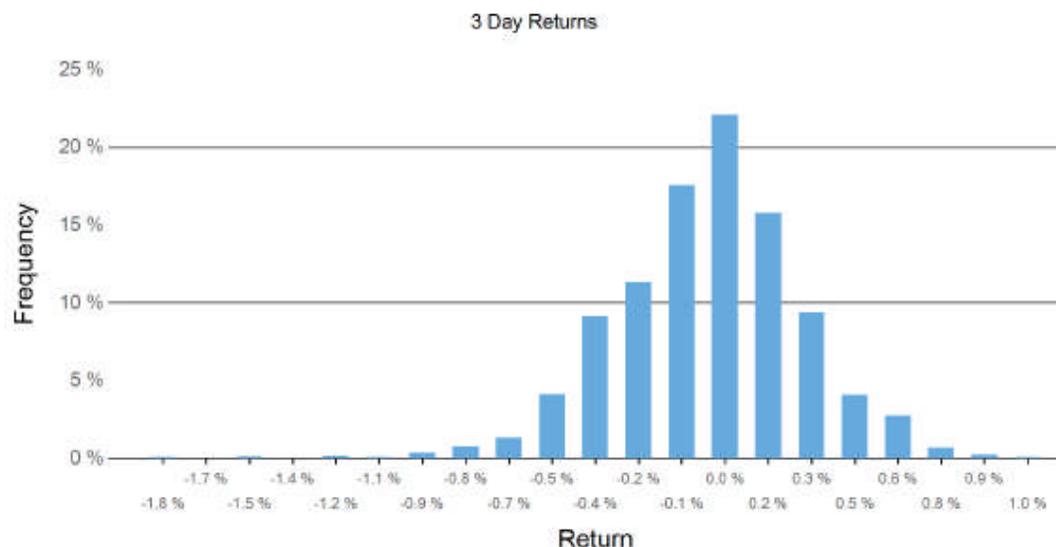


Past performance is not a guarantee of future results.

# Liquidity at Risk

Account Cash	
Margin Cash	234,998,238
Security Collateral	0
Cash Collateral	33,299,856
Unrealized G/L	170,881
Liquid Cash	201,527,501

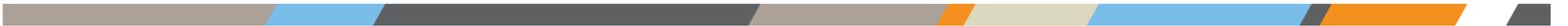
Drawdown Analysis	
Liquidity at Risk	9,916,671
Max Drawdown	35,511,810
Times Below 0	0



Asset Class	Notional	Volatility	LaR
Global Equity	317,319,617	15.5 %	8,848,290
Short Duration	1,139,831,656	3.8 %	7,829,155
Aggregate Fixed Income	519,730,220	3.8 %	3,569,868
<b>Total:</b>	<b>1,976,881,493</b>		

Security Type	Notional	Volatility	LaR
Futures	1,976,881,493	2.7 %	9,522,240
Currency	132,024,526	6.6 %	1,576,357
<b>Total:</b>	<b>2,108,906,019</b>		

Past performance is not a guarantee of future results. Indexes and/or benchmarks are unmanaged and cannot be invested in directly.



## **Policy and Procedure Update**

### **Purpose**

To provide the OIC an update on OST's plans to institute an automated, systematic approach to policy and procedure reviews.

### **Background**

In September 2014, OST hired a policy analyst to evaluate OST's policies and procedures and design an efficient method for their review and approval. The policy analyst assessed nearly a dozen web-based policy management tools and ultimately recommended OST procure PolicyStat to streamline and automate the policy review, revision and approval process. During the first phase of PolicyStat's implementation, OST management identified owners, review dates and sets of approvers for each OST policy, and then uploaded all policies into the PolicyStat application. Going forward, PolicyStat will automatically email the owner when a policy is coming due for review, and push the policy through an approval workflow. The Policy Analyst estimates the first round of review for OST's policies will be complete in mid-2017.

In addition to implementing PolicyStat, the policy analyst also evaluated outstanding audit findings related to policy management. In August 2012, OST hired Cortex Applied Research Inc. to produce a Fiduciary Benchmarking Study comparing Oregon to peer groups. With regards to investment policies and procedures, Cortex noted two issues: 1) lack of clarity concerning which entity, OIC or OST, approves individual policies or procedures; and 2) lack of separation between Council-level policies and OST operating procedures. These findings were reiterated in a January 2013 OST internal audit and again during a May 2013 OIC meeting presentation. The second phase of the PolicyStat implementation will resolve these audit findings. During the individual policy review process, the policy owner, together with the policy analyst, will establish a clear distinction between policy and procedure and clearly identify the approving entity. The revised policies will come before the OIC for approval, while operating procedures will be approved by the CIO.

### **Staff Recommendation**

None, information only.



# Investment Policies and Procedures Update

April 29, 2015

# Project Description

---

- ▶ Concern: Policies and procedures require regular review and approval; OST has not used a systematic method to ensure this review and approval process occurs.
- ▶ Solution: In May 2015, OST will introduce a web-based policy management tool called PolicyStat.
  - ▶ The tool will automate the policy review and approval process.
  - ▶ Each policy will have an owner and automated review schedule.
  - ▶ Council-level policies will be separated from OST operating procedures.

# Addressing Outstanding Audit Findings

---

- ▶ **August 2012: Cortex Fiduciary Benchmarking Study**
  - ▶ Lack of clarity regarding which entity (OIC or OST) approves individual policies or procedures.
  - ▶ Lack of separation between Council-level policies and OST operating procedures.
- ▶ **January 2013: OST Internal Audit Operational Review**
  - ▶ OIC should collaborate with OST staff to determine which policies do not require OIC oversight and can be converted to procedures.
- ▶ **May 2013: OST Recommendations**
  - ▶ Establish a clear distinction between policies and procedures.
  - ▶ Establish a policy-specific review schedule and clearly identify the approving entity.

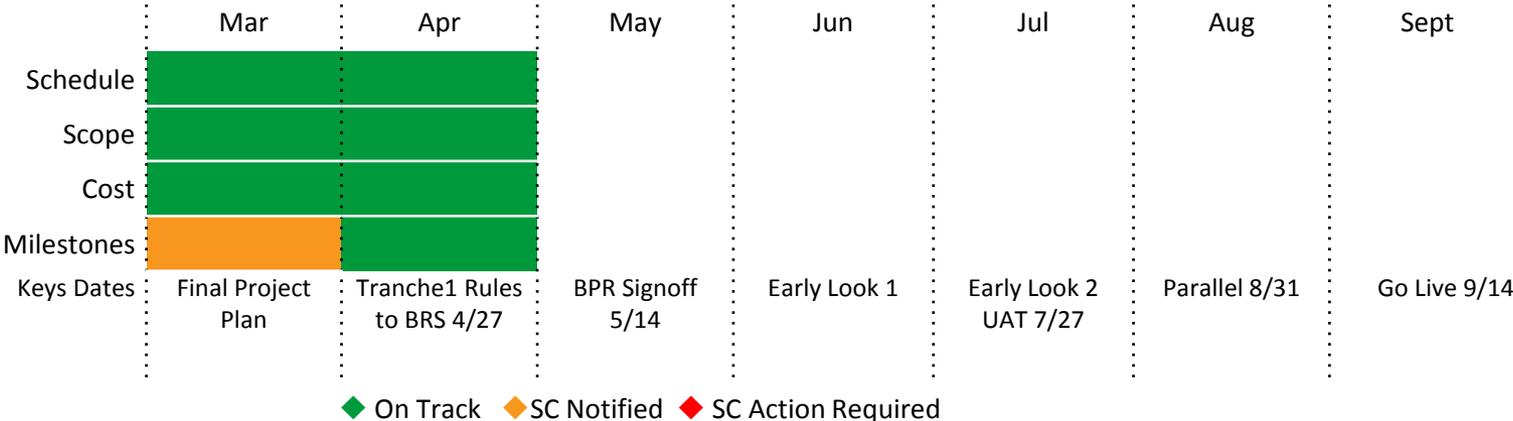
# Management Summary 04/16/2015

## Highlights

- Approved final project plan delayed. Plan updated with feedback, Compliance timeline realigned for approval this week; all other approvals complete.
- Future state demos and challenge sessions continue. No new requirements or gaps identified.
- OST initiating contract work with market data vendors; will begin costing approvals
- Green Package design sessions conducted; additional discussions to refine portfolio tree next week
- Tranche1 Compliance interpretive issues review & approvals by CEC this week. Timeline adjusted for remaining tranches.
- Significant progress made toward finalizing required data interfaces.

## Issues and Risks

- PFPCP Update – the move to FHLB Des Moines has introduced additional complexity in requirements and data interfaces. Discussions to transition custodial responsibilities continue for 6 banks not covered by FHLB Des Moines.
- Network issues impacted IT resources; no impact on project timeline anticipated. Assessing prioritization is on critical path items and possibly adjusting non-critical path tasks.



# Channel Summary

	Status	Completed Tasks	Next Steps
<b>Planning</b>	At-risk	<ul style="list-style-type: none"> <li>Team Lead approvals in for all but Compliance</li> <li>Compliance timeline realigned</li> <li>No impact to project Go Live date</li> </ul>	<ul style="list-style-type: none"> <li>Finalize Compliance Channel approval</li> </ul>
<b>Technical Infrastructure</b>	On-track	<ul style="list-style-type: none"> <li>Weekly call with vendors to solicit updates &amp; get target install dates</li> </ul>	<ul style="list-style-type: none"> <li>Continue environment build, expected for BRS access on May 1</li> <li>Begin FTP environment build; target May 1</li> </ul>
<b>BPRs</b>	On-track	<ul style="list-style-type: none"> <li>Completed majority of Future State Challenge 1 sessions</li> <li>Distributed draft documentation and performed demos</li> </ul>	<ul style="list-style-type: none"> <li>Conduct additional Future State sessions to finalize future state – Cash Mgmt., Alternatives, CIO Risk Rptg.</li> <li>Continue dialogue with teams to address remaining questions and provide sign-off</li> </ul>
<b>Green Package &amp; Analytics</b>	On-track	<ul style="list-style-type: none"> <li>Design sessions completed – public and private market teams</li> </ul>	<ul style="list-style-type: none"> <li>Discuss and incorporate feedback regarding portfolio tree and groups</li> </ul>
<b>Data Interfaces</b>	On-track	<ul style="list-style-type: none"> <li>Continue to confirm scope of critical interface development; a few remaining questions</li> <li>Cash requirement discussions conducted</li> </ul>	<ul style="list-style-type: none"> <li>Finalize Misc. Cash and New Cash input file sources</li> <li>Begin requirement docs for confirmed files</li> </ul>
<b>Market Data</b>	On-track	<ul style="list-style-type: none"> <li>Contacted all vendors and initiating discussions</li> <li>Provided security data required for cost estimates</li> <li>Responding to questionnaires as received</li> </ul>	<ul style="list-style-type: none"> <li>Update costs estimates as new information arrives</li> <li>Initiate contract discussions with vendors</li> <li>Begin cost approvals – BRS pass-thru's</li> </ul>
<b>Data Conversion</b>	On-track		<ul style="list-style-type: none"> <li>Communicate expected data requests/timing to SSB</li> <li>Determine position review criteria and responsibilities</li> </ul>
<b>Compliance</b>	On-track	<ul style="list-style-type: none"> <li>Deloitte provided Tranche 1 interpretive issues to BRS for feedback to OST</li> <li>OST interpretive issue review and approval underway</li> <li>Began review of Tranche 2 rules</li> </ul>	<ul style="list-style-type: none"> <li>Complete rule validation for Tranche 1</li> <li>Begin Tranche 2 interpretive issue analysis</li> </ul>

**Completed**
 **On-track**
 **At-risk**
 **Delayed**

## Asset Allocations at March 31, 2015

Regular Account								Variable Fund	Total Fund
OPERF	Policy	Target <sup>1</sup>	\$ Thousands	Pre-Overlay	Overlay	Net Position	Actual	\$ Thousands	\$ Thousands
Public Equity	32.5-42.5%	37.5%	28,709,278	40.8%	(123,980)	28,585,298	40.7%	752,221	29,337,519
Private Equity	16-24%	20.0%	14,572,046	20.7%		14,572,046	20.7%		14,572,046
<b>Total Equity</b>	<b>52.5-62.5%</b>	<b>57.5%</b>	<b>43,281,324</b>	<b>61.6%</b>	<b>(123,980)</b>	<b>43,157,344</b>	<b>61.4%</b>		<b>43,909,565</b>
Opportunity Portfolio			1,072,558	1.5%		1,072,558	1.5%		1,072,558
<b>Fixed Income</b>	<b>15-25%</b>	<b>20.0%</b>	<b>15,034,944</b>	<b>21.4%</b>	<b>1,659,562</b>	<b>16,694,506</b>	<b>23.7%</b>		<b>16,694,506</b>
<b>Real Estate</b>	<b>9.5-15.5%</b>	<b>12.5%</b>	<b>7,970,259</b>	<b>11.3%</b>	<b>(20,600)</b>	<b>7,949,659</b>	<b>11.3%</b>		<b>7,949,659</b>
<b>Alternative Investments</b>	<b>0-10%</b>	<b>10.0%</b>	<b>1,365,902</b>	<b>1.9%</b>		<b>1,365,902</b>	<b>1.9%</b>		<b>1,365,902</b>
<b>Cash*</b>	<b>0-3%</b>	<b>0.0%</b>	<b>1,579,411</b>	<b>2.2%</b>	<b>(1,514,982)</b>	<b>64,429</b>	<b>0.1%</b>	8,384	<b>72,813</b>
<b>TOTAL OPERF</b>		<b>100%</b>	<b>\$ 70,304,398</b>	<b>100.0%</b>	<b>\$ -</b>	<b>\$ 70,304,398</b>	<b>100.0%</b>	<b>\$ 760,605</b>	<b>\$ 71,065,003</b>

<sup>1</sup>Targets established in June 2013. Interim policy benchmark consists of: 41.5% MSCI ACWI Net, 23.5% Custom FI Benchmark, 20% Russell 3000+300bps (1 quarter lagged), 12.5% NCREIF (1 quarter lagged), & 2.5% CPI+400bps.

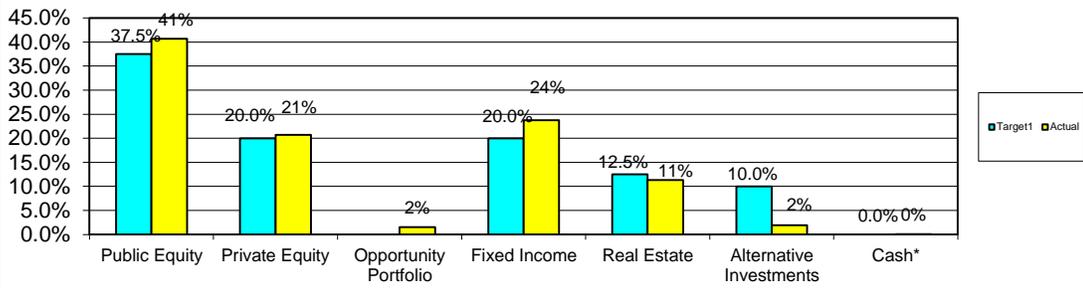
\*Includes cash held in the policy implementation overlay program.

SAIF	Policy	Target	\$ Thousands	Actual
<b>Total Equity</b>	<b>7-13%</b>	<b>10.0%</b>	<b>456,030</b>	<b>9.7%</b>
<b>Fixed Income</b>	<b>80-90%</b>	<b>85.0%</b>	<b>4,188,758</b>	<b>89.4%</b>
<b>Real Estate</b>	<b>0-7%</b>	<b>5.0%</b>	<b>0</b>	<b>0.0%</b>
<b>Cash</b>	<b>0-3%</b>	<b>0%</b>	<b>38,425</b>	<b>0.8%</b>
<b>TOTAL SAIF</b>			<b>\$4,683,213</b>	<b>100.0%</b>

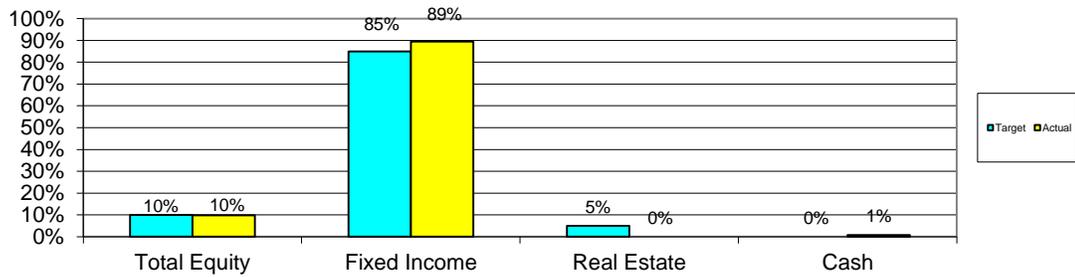
CSF	Policy	Target	\$ Thousands	Actual
Domestic Equities	25-35%	30%	\$466,408	31.8%
International Equities	25-35%	30%	407,371	27.8%
Private Equity	0-12%	10%	152,651	10.4%
<b>Total Equity</b>	<b>65-75%</b>	<b>70%</b>	<b>1,026,430</b>	<b>70.0%</b>
<b>Fixed Income</b>	<b>25-35%</b>	<b>30%</b>	<b>417,322</b>	<b>28.5%</b>
<b>Cash</b>	<b>0-3%</b>	<b>0%</b>	<b>22,730</b>	<b>1.5%</b>
<b>TOTAL CSF</b>			<b>\$1,466,482</b>	<b>100.0%</b>

HIED	Policy	Target	\$ Thousands	Actual
Domestic Equities	20-30%	25%	\$1,356	2.9%
International Equities	20-30%	25%	2,095	4.5%
Private Equity	0-15%	10%	4,015	8.7%
<b>Growth Assets</b>	<b>50-75%</b>	<b>60%</b>	<b>7,466</b>	<b>16.2%</b>
Real Estate	0-10%	7.5%	961	2.1%
TIPS	0-10%	7.5%	215	0.5%
<b>Inflation Hedging</b>	<b>7-20%</b>	<b>15%</b>	<b>1,176</b>	<b>2.5%</b>
Fixed Income	20-30%	25%	724	1.6%
Cash	0-3%	0%	36,774	79.7%
<b>Diversifying Assets</b>	<b>20-30%</b>	<b>25%</b>	<b>37,498</b>	<b>81.3%</b>
<b>TOTAL HIED</b>			<b>\$46,140</b>	<b>100.0%</b>

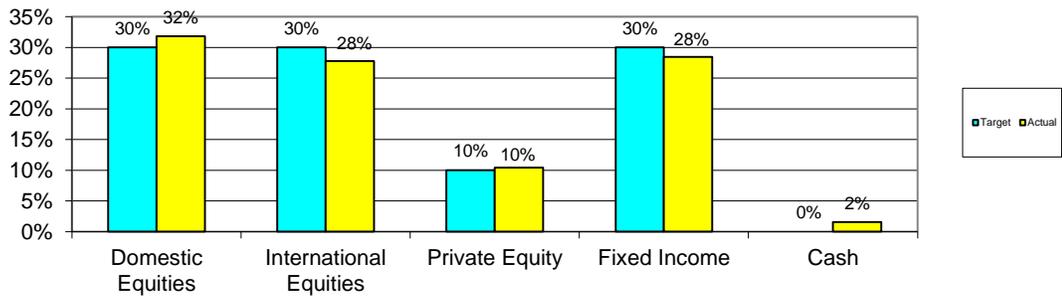
### OPERF Asset Allocation



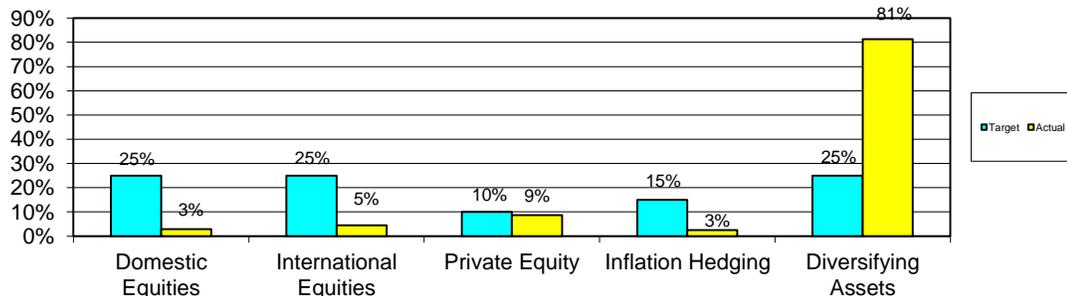
### SAIF Asset Allocation



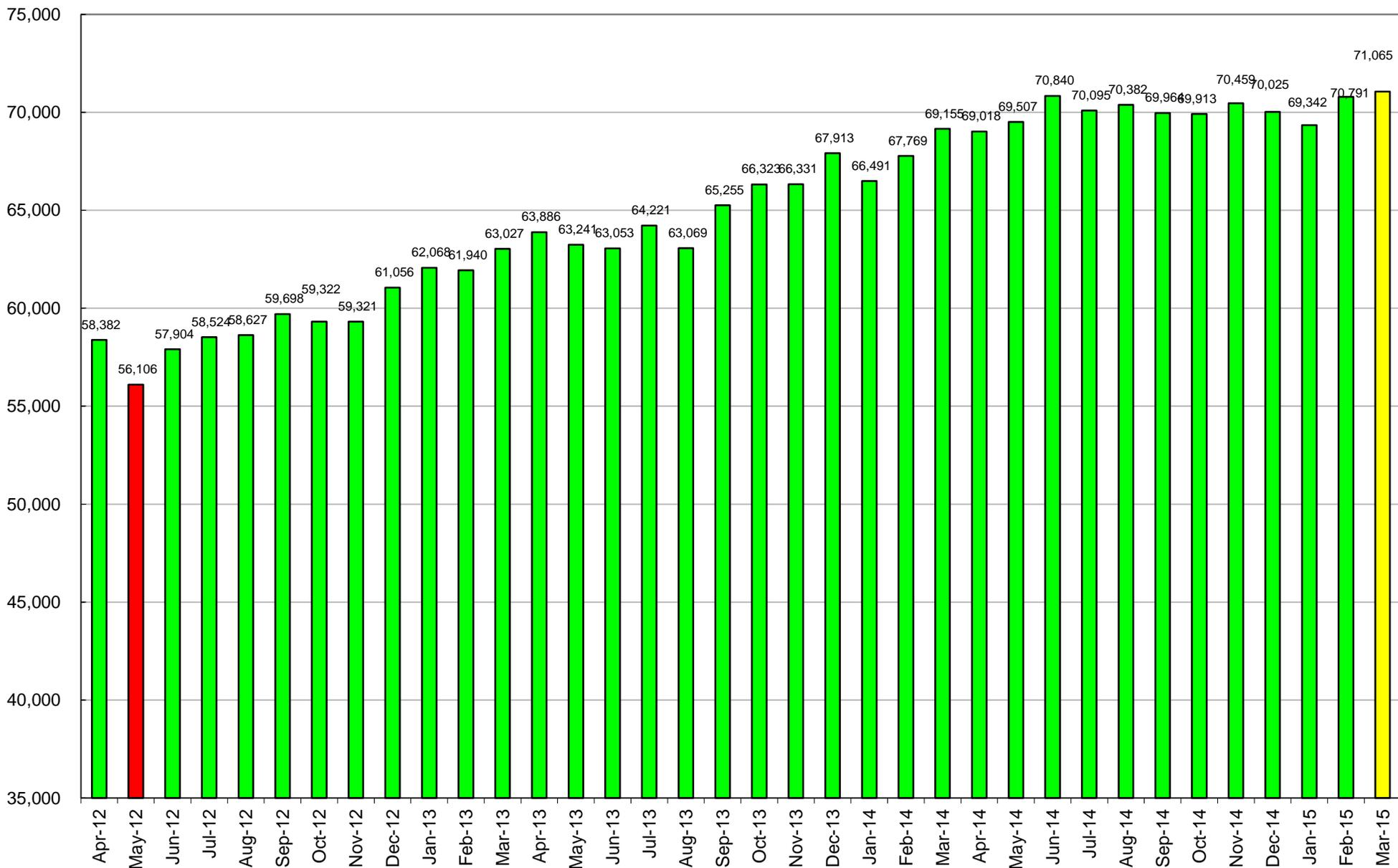
### CSF Asset Allocation



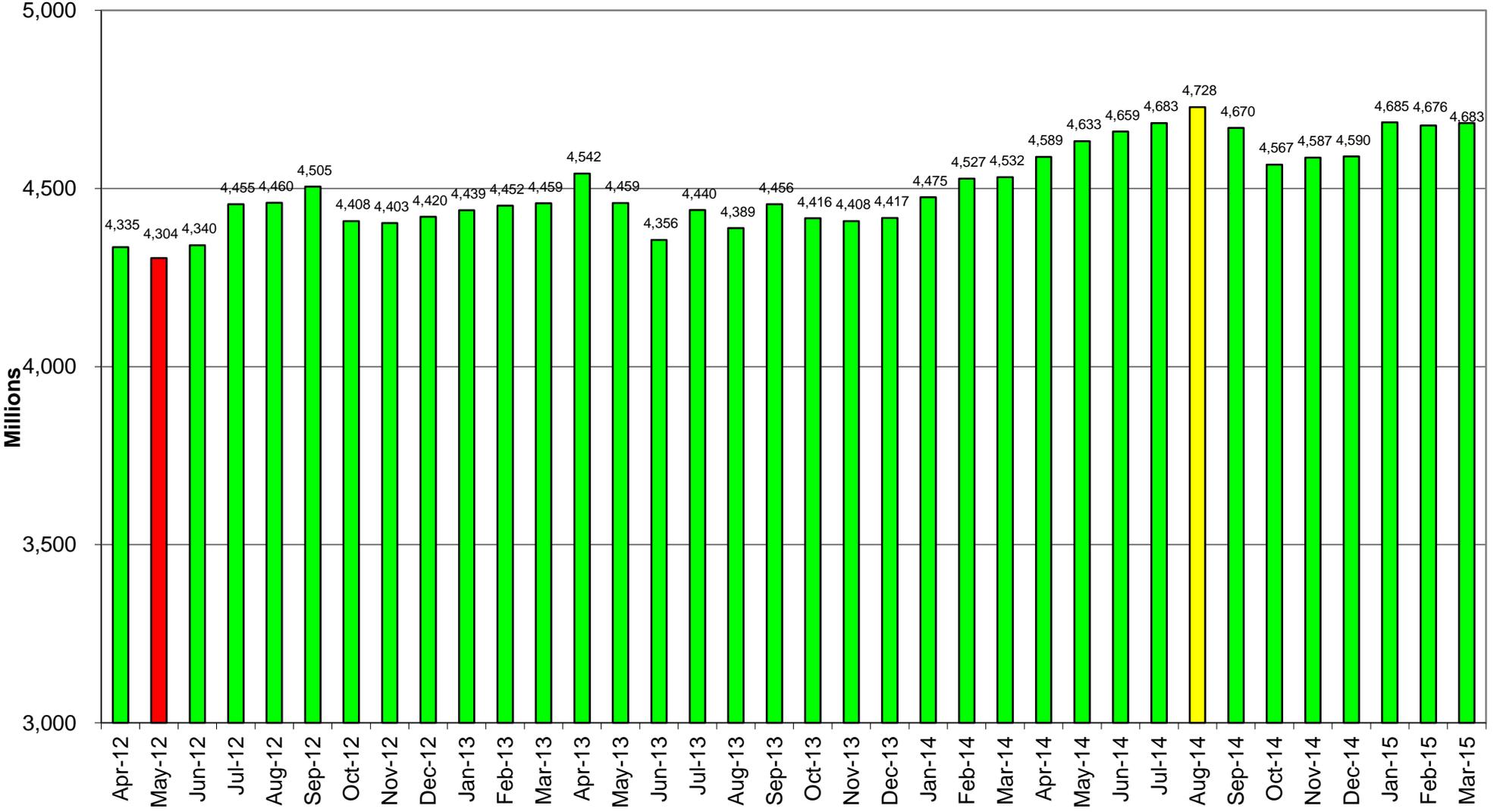
### HIED Asset Allocation



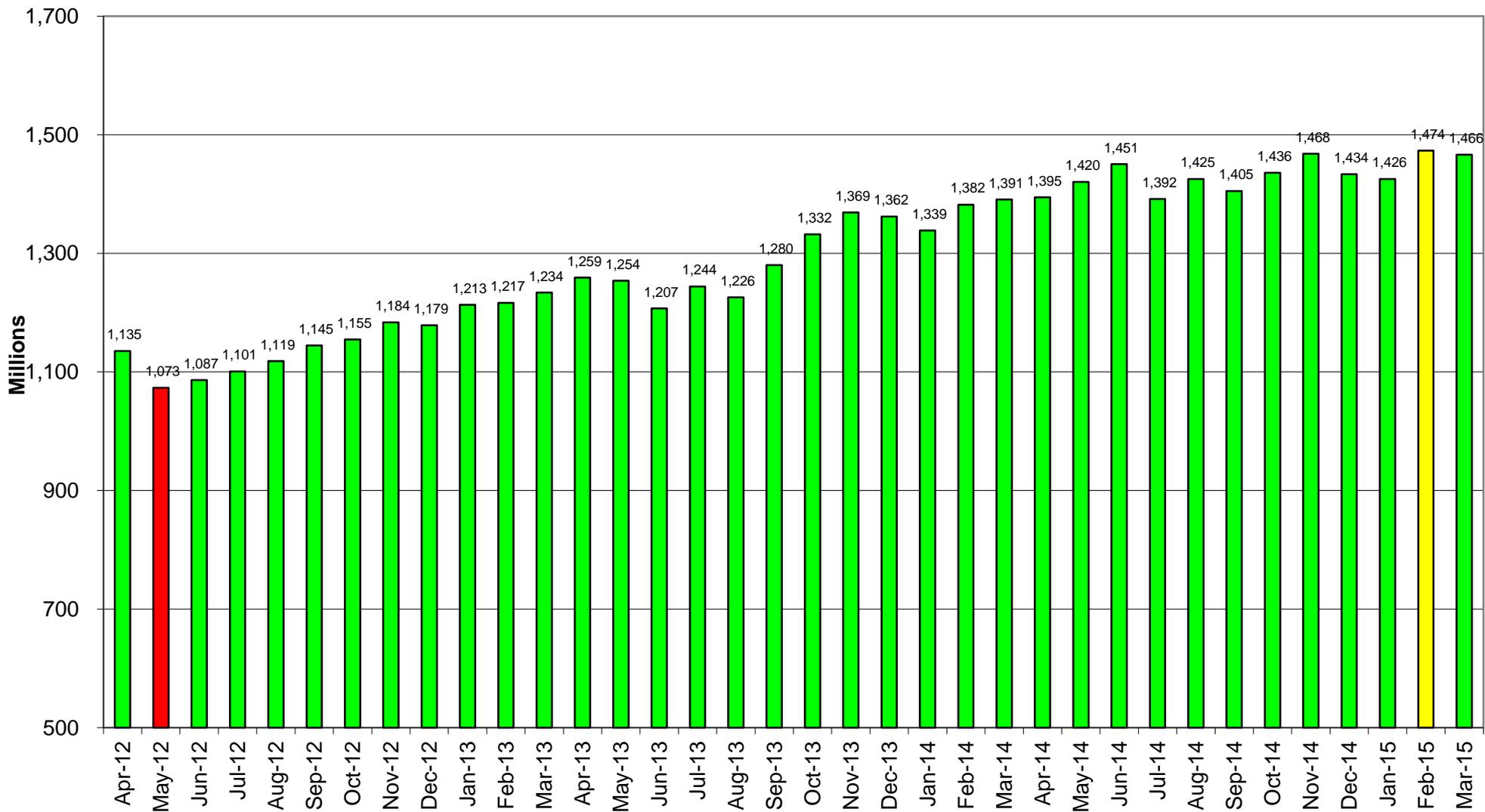
**OPERF NAV**  
**Three years ending March 2015**  
**(\$ in Millions)**



**SAIF NAV**  
**Three years ending March 2015**  
**(\$ in Millions)**



**CSF NAV**  
**Three years ending March 2015**  
**(\$ in Millions)**



## **2015 OIC Forward Agenda Topics**

- June 3:** OPERF/OSTF Securities Lending Update  
OITP Review  
OPERF Q1 2015 Performance Report  
Litigation Update
- July 29:** OPERF Private Equity Manager Recommendation  
OSGP Annual Update  
Private Equity Update  
Fixed Income Update
- September 9:** OPERF Public Equity Review  
OIC Policy Housekeeping Updates  
OIC Private Equity Consultant Recommendation  
OPERF Q2 2015 Performance
- October 28:** OSTF Annual Review  
OPERF Real Estate Review  
OPERF Alternative Portfolio Review  
CEM Benchmarking Report  
Approve 2016 OIC Calendar
- December 9:** OPERF Opportunity Portfolio Review  
SAIF Annual Review  
CSF Annual Review  
OIC Election of Chair/Vice-Chair  
OPERF Q3 2015 Performance Report