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# **Oregon Investment Council**

May 29, 2013 - 9:00 AM

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



**Keith Larson**  
Chair

**John Skjervem**  
Chief Investment Officer

**Ted Wheeler**  
State Treasurer

# OREGON INVESTMENT COUNCIL

## 2013 Meeting Schedule

Meetings Begin at 9:00 am  
*at*  
PERS Headquarters Building  
11410 SW 68<sup>th</sup> Parkway  
Tigard, OR 97223

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January 23, 2013

February 20, 2013

May 1, 2013

May 29, 2013

June 26, 2013

July 31, 2013

September 25, 2013

October 30, 2013

December 10, 2013



# OREGON INVESTMENT COUNCIL

## Agenda

May 29, 2013  
9:00 AM

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

<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> May 1, 2013 Regular Meeting  OST Committee Actions	<b>Keith Larson</b> <i>OIC Chair</i>  <b>John Skjervem</b> <i>CIO</i>	1
9:05-9:35	2. <b>KKR North America Fund XI</b> <i>OPERF Private Equity</i>	<b>Jay Fewel</b> <i>Senior Investment Officer</i> <b>George Roberts</b> <i>Co-Chairman &amp; Co-CEO</i> <b>Mike Michelson</b> <i>Member &amp; Co-Head of North America Private Equity</i> <b>David Fann</b> <i>TorreyCove Capital Partners</i>	2
9:35-10:20	3. <b>Solera Capital Partners II</b> <i>OPERF Private Equity</i>	<b>Jay Fewel</b> <i>Senior Investment Officer</i> <b>Molly Ashby</b> <i>Chairman &amp; CEO</i> <b>Tom Martin</b> <i>TorreyCove Capital Partners</i>	3
10:20-10:30	----- <b>BREAK</b> -----		

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Keith Larson  
Chair

Dick Solomon  
Vice-Chair

Rukaiyah Adams  
Member

Katy Durant  
Member

Ted Wheeler  
State Treasurer

Paul Cleary  
PERS Director

<u>Time</u>		<u>Presenter</u>	<u>Tab</u>
10:30-11:15	4. <b>Amstar</b> <i>OPERF Real Estate</i>	<b>Tony Breault</b> <i>Interim Senior Investment Officer</i> <b>Gabe Finke</b> <i>General Partner &amp; CEO</i> <b>Rob Toomey</b> <i>Managing Director</i> <b>Nori Gerardo Lietz</b> <i>Arete Capital</i>	4
11:15-11:30	5. <b>OIC Real Estate Consultant Recommendation</b>	<b>Tony Breault</b>	5
11:30-12:00	6. <b>OPERF Alternative Portfolio Annual Review</b>	<b>John Hershey</b> <i>Senior Investment Officer</i>	6
<b><u>B. Information Items</u></b>			
12:00-12:15	7. <b>OPERF 1<sup>st</sup> Quarter Performance Update</b>	<b>John Meier</b> <i>Strategic Investment Solutions</i>	7
12:15-12:20	8. <b>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>	8
	9. <b>Calendar — Future Agenda Items</b>		9
	10. <b>Other Items</b>	<b>Council Staff Consultants</b>	
<b><u>C. Public Comment Invited</u></b> 15 Minutes			

TAB 1 – REVIEW & APPROVAL OF MINUTES

May 1, 2013 Regular Meeting

OST Committee Actions – Verbal Report



**STATE OF OREGON**  
**OFFICE OF THE STATE TREASURER**

350 WINTER STREET NE, SUITE 100  
SALEM, OREGON 97301-3896

OREGON INVESTMENT COUNCIL  
MAY 1, 2013  
MEETING MINUTES

Members Present: Paul Cleary, Katy Durant, Keith Larson, Dick Solomon, Ted Wheeler

Staff Present: Darren Bond, Tony Breault, Garrett Cudahey, Jay Fewel, Andy Hayes, John Hershey, Brooks Hogle, Julie Jackson, Mary Krehbiel, Perrin Lim, Tom Lofton, Mike Mueller, Tom Rinehart, James Sinks, John Skjervem, Michael Viteri

Consultants Present: David Fann, Jeff Goldberger and Tom Martin (TorreyCove); John Meier and Deb Gallegos (SIS); Alan Emkin, Christy Fields, David Glickman, John Linder and Mike Moy (PCA), Nori Gerardo Lietz (Arete)

Legal Counsel Present: Deena Bothello, Fred Boss, Dee Carlson and Jennifer Peet (Oregon Department of Justice)

The May 1, 2013 OIC meeting was called to order at 9:02 a.m. by Keith Larson, Chair. Mr. Larson shared that since the previous meeting in February, member Harry Demorest had retired from the OIC. Mr. Larson thanked Mr. Demorest for his many years of dedicated service and then welcomed new OIC member Rukaiyah Adams.

**I. 9:03 am Review and Approval of Minutes**

**MOTION:** Treasurer Wheeler moved approval of the February 20, 2013 meeting minutes. Mr. Solomon seconded the motion, which was then passed by a vote of 4/0.

John Skjervem, Chief Investment Officer, informed members of the following actions taken by the private equity committee since the last OIC meeting:

**April 29, 2013 Private Equity Committee Commitment Approvals**

CVC European Equity Partners Fund VI, LP	\$200 Million
Morgan Stanley Private Equity Asia IV, LP	\$75 Million
Vista Foundation Fund II, LP	\$75 Million

**II. 9:05 am Apollo Fund VIII – OPERF Private Equity**

Jay Fewel, Senior Investment Officer, introduced Leon Black, Chairman, CEO and Director of Apollo Global Management (AGM) and Stephanie Drescher, Investor Relations for AGM. Staff recommended a \$300 million OPERF commitment and a \$25 million Common School Fund commitment to Apollo Investment Fund VIII, L.P., a \$12 billion target fund (no hard cap), which will continue Apollo's strategy of

opportunistic equity and debt investments across a range of industries. Fund VIII will target opportunistic buyouts, corporate carve-out transactions and distressed investments, depending on the prevailing market environment, and AGM expects to invest a significant majority of Fund VIII in North America. OPERF is already invested in AGM's two most recent funds.

**MOTION:** Staff recommended that the OIC authorize a \$300 million commitment to Apollo Investment Fund VIII, L.P., on behalf of OPERF, and \$25 million on behalf of the Common School Fund, subject to satisfactory negotiation of terms and conditions, and completion of requisite documentation by DOJ legal counsel working in concert with OST staff. This recommendation is also contingent upon a 100 percent transaction fee offset.

Mr. Solomon moved approval of the staff recommendation. Treasurer Wheeler seconded the motion, which then passed by a vote of 4/0.

### **III. 10:07 am Lone Star Fund VIII – OPERF Real Estate**

Tony Breault, Interim Senior Investment Officer, introduced John Grayken, Founder and Chairman of Lone Star, who then made a presentation to the OIC. Staff recommended a \$300 million commitment to Lone Star Fund VIII, L.P. which represents a continuation of the fund series Lone Star has used to invest globally in distressed debt, distressed real estate and real estate entities such as banks and finance companies where real estate can be acquired opportunistically.

Lone Star Fund VIII has a \$5.0 billion hard cap target and will be used to invest in distressed investments in loans and securities, including single family residential, corporate and consumer debt products, as well as financially-oriented and asset-rich operating companies. Fund VIII's geographic weightings, based on currently prevailing global investment opportunities, are projected to be 40% in the U.S., 40% in Europe and 20% in Japan. Lone Star's Real Estate Fund (LSREF) series, of which OPERF is invested in LSREF I & II, are a separate fund series offered by Lone Star and focus more specifically on multi-family and commercial real estate assets. While the two previous funds, LS Fund VII and LSREF II, were raised in parallel, the capital deployment of LS Fund VII has exceeded that of LSREF II, hence the anticipated capital raise for a future LSREF III will occur once its predecessor fund has deployed its remaining capital.

Treasurer Wheeler expressed concern over leadership succession planning and the absence of an executable key man provision.

**MOTION:** Staff recommended that the OIC authorize a \$300 million commitment to Lone Star Fund VIII, L.P., on behalf of OPERF, subject to the satisfactory negotiation of terms and conditions, and completion of requisite documentation by DOJ legal counsel working in concert with OST staff.

Ms. Durant made a motion for approval of a \$300 million commitment. Mr. Solomon seconded the motion. There was further discussion and Ms. Durant made a motion to amend the staff recommendation by increasing the proposed commitment to \$400 million. Mr. Solomon seconded the motion to amend. Ms. Durant then moved to change the approval amount up to \$400 million, and Mr. Solomon again provided a second to her motion.

Ms. Durant's motion included a Fund VIII commitment provision of UP TO \$400 million, on behalf of OPERF and subject to the satisfactory negotiation of terms and conditions, and completion of requisite documentation by DOJ legal counsel working in concert with OST staff. The motion passed by a vote of 3/1 with Treasurer Wheeler casting a dissenting vote.

**IV. 11:15 am Blackstone Tactical Opportunities Fund -- OPERF Opportunity Portfolio**

Staff recommended approval of a commitment to the Blackstone Tactical Opportunities-O L.P. (the Blackstone "TO Fund") in the amount of \$250 million for the OPERF Opportunity Portfolio. The TO Fund will seek a mix of investment opportunities with one or more of the following attributes: 1) Opportunistic -- comprised of cyclical or event driven investments with current income but substantial capital appreciation potential, though unpredictable rebound timing; 2) Low Correlation Yield -- comprised of investments with high current cash yields, real and structured assets and non-performing debt; and 3) High Returning Equity -- comprised of non-traditional assets, structured products and non-control (minority) positions. In general, these three opportunity sets will have high IRR potential, but lower multiples on invested capital than traditional private equity strategies. The blended target gross return across TO Fund strategies is expected to be in the mid-teens.

Blackstone offers one of the most comprehensive investment platforms of any alternatives investment manager, and a strategic relationship with Blackstone (and through the TO Fund) should enable greater and timelier access to attractive, opportunistic investments that OPERF might otherwise miss.

**MOTION:** Staff recommended a \$250 million commitment to Blackstone Tactical Opportunities-O L.P., subject to the satisfactory negotiation of terms and conditions, and completion of requisite documentation by DOJ legal counsel working in concert with OST staff. Treasurer Wheeler moved approval, and Mr. Solomon provided a second. The motion passed by a vote of 4/0.

**V. 12:02 pm Litigation Update**

Fred Boss, Chief Counsel with the Department of Justice gave an informational update on ongoing and active litigation.

**VI. 12:08 pm Asset Allocations and NAV Updates**

John Skjervem reviewed asset allocations and NAV's across OST-managed accounts for the period ended March 31, 2013.

**VII. 12:09 pm Calendar -- Future Agenda Items**

Mr. Skjervem presented a revised schedule of future agenda topics.

**VIII. 12:09 pm Other Business**

No other business was discussed.

**12:10 pm Public Comments**

Alyssa Giachine with "United Here" provided testimony on select OPERF investments initiated by private equity managers Apollo Global Management and Texas Pacific Group.

Mr. Larson adjourned the meeting at at 12:18 pm.

Respectfully submitted,



Julie Jackson  
Executive Support Specialist

TAB 2 – KKR NORTH AMERICA FUND XI  
EXEMPT MATERIALS SENT UNDER SEPARATE COVER

TAB 3 – SOLERA CAPITAL PARTNERS II

# OPERF Private Equity

## Solera Partners II, L.P.

### **Purpose**

Staff recommends a \$50 million commitment to Solera Partners II, L.P. (“the Fund” or “Fund II”), a \$350 million target (\$500 million hard cap) fund, which will continue Solera’s private equity strategy focused on emerging growth companies in industries with attractive, long-term prospects. The Fund will target small buyouts and growth equity investments of \$10-\$50 million in companies with enterprise values of less than \$100 million. Solera expects to invest a significant majority of the Fund in the United States. OPERF and the OIC committed \$50 million to Solera’s debut fund.

### **Background**

Solera Capital was founded in 1999 by Molly Ashby, Mary Hennessy-Jones, Lori Koffman and Karen Mills. The Firm raised its first fund (“Fund I”), with capital commitments of \$245 million, between 2000 and 2002. Since its founding, Solera has grown to eleven investment professionals, including seven “partner level” professionals. Throughout its history, the Firm has had a relatively high turnover rate, particularly at senior levels. However, the investment team appears to have stabilized in recent years, under the leadership of Ms. Ashby. When the global financial crisis hit in 2008, Solera raised a small annex fund to make follow-on investments in Fund I portfolio companies and help them weather the resulting economic downturn. OPERF did not participate in the annex fund.

### **Strategy**

Solera’s investment strategy is sector agnostic. The Firm seeks to identify and target opportunities in sectors, or sub-sectors, which are undergoing change and provide above average growth prospects. Examples of these types of changes/trends that Solera targeted in Fund I, include the following:

- The demographic shift and growth of the U.S. Hispanic population;
- The trend toward organic and healthier foods and snacks;
- The demand for environmentally responsible products; and
- The growth in “affordable luxury” purchases by aspirational consumers.

Potential deals within the targeted sectors/subsectors are sourced from financial intermediaries, as well as from the Solera team’s extensive personal networks. Solera will seek small, dynamic companies with exceptional growth potential, and with proven products/services that benefit from targeted changes/trends. Such smaller companies often need operational assistance and support as they plan and execute a growth strategy, including enhancements to the management team, better information and control systems, and an efficient capital structure. Post-acquisition, the Solera deal team works closely with management, refining a growth strategy and initiating operational improvements. Solera

has established an “Operating Council” of experienced entrepreneurs and senior executives who assist Solera professionals in these efforts. The Firm’s part-time Operating Executives both invest in the Fund, and receive a portion of the Fund’s carried interest, to properly align their incentives.

Such smaller companies typically have more volatility in their operating results, and a need to reinvest free cash flow into their growth strategies. Therefore, Solera is very conservative in its use of leverage in transactions, and depending on the circumstances, may not use leverage at all.

## Team

As noted above, after some significant turnover early in the Firm’s life, Solera’s team of senior investment professionals appears to have solidified over the past several years, and includes:

<u>Name</u>	<u>Title</u>	<u>Years w/Firm</u>	<u>Prior Experience</u>
Molly Ashby	CEO	12	JP Morgan
Mary Hennessy-Jones	President	12	JP Morgan, Allied Capital
Julie Klapstein	Man. Dir.	12	Phycom Corp, GTE Health
Alison Catchpole	Man. Dir.	6	Invesco, PWC
Dana Correale	Man. Dir.	7	Credit Suisse
Lisa Loscalzo	Man. Dir.	3	The Little Clinic, Kindred Health
Lauren Larsen	Man. Dir.	4	Activision, Electronic Arts

These senior professionals are supported by four junior investment professionals, consisting of one Principal, and three Associates.

Carried interest is allocated to all investment professionals, with approximately 20 percent earmarked for the Firm’s seven Operating Executives. Management fees from Fund I have been insufficient to fully pay the Firm’s expenses, therefore founder Molly Ashby does not take a salary from Solera, but receives the largest allocation of carried interest.

## Track Record

The OIC committed \$50 million to Fund I in 2002, the results for which (as of March 31, 2013) are as follows:

<u>Fund</u>	<u>Vintage</u>	<u>Net IRR</u>	<u>Net TVM</u>	<u>IRR Quartile</u>	<u>TVM Quartile</u>
I	2000	10.2%	1.9x	Second	First

It should be noted that Fund I was a highly concentrated portfolio, investing in only five portfolio companies, primarily a function of that fund’s limited capital raise. Two companies had to survive two recessions during the Fund I holding period. Most of Fund I’s performance can be attributed to one key

success: Annie's (organic foods and snacks) which had a successful initial public offering in 2012. The stock has performed well in the public markets since then, and this investment has a 5.3x total value multiple, over half of which has been realized.

### **Portfolio Fit and Commitment Sizing**

Solera Capital's strategy is unique in the OPERF portfolio, and not duplicated by other OPERF managers. OPERF is currently under-exposed to both small buyouts and growth equity, and a commitment to this Fund would increase portfolio diversification.

Staff's \$50 million commitment recommendation is consistent with the 2013 Private Equity Plan discussed with the OIC in early 2013.

### **Placement Agents**

Solera has hired Denning & Company to assist with fundraising, but staff has had no contact with any placement agent regarding this potential commitment, and instead has dealt directly with Solera personnel.

### **Private Partnership Investment Principles**

Staff has reviewed Solera's responses to the OIC Private Partnership Investment Principles, noting the Fund's terms and conditions conform with a majority of the Principles. During negotiations, Staff will focus on the following items:

- Obtaining an 8 percent preferred return;
- Lowering and simplifying the post-investment period management fee; and
- Improving governance rights provisions.

### **Recommendation**

Staff recommends that the OIC authorize a \$50 million commitment to Solera Partners II, L.P., on behalf of OPERF, subject to satisfactory negotiation of terms and conditions, and completion of the requisite documentation by DOJ legal counsel working in concert with OST staff.



## MEMORANDUM

**TO:** Oregon Public Employees Retirement Fund ("OPERF")  
**FROM:** TorreyCove Capital Partners ("TorreyCove")  
**DATE:** May 15, 2013  
**RE:** Solera Partners II, L.P. (the "Fund")

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### Strategy:

The Fund will make control equity investments in emerging growth companies in industries with compelling long-term prospects. The Fund will target 10 to 12 investments of between \$10.0 million and \$50.0 million in companies valued at less than \$100.0 million. Solera's investment strategy is predicated on identifying sectors and sub-sectors that are undergoing major changes or demographic shifts. These changes can be caused by anything from new disruptive technologies to shifting demographics. The Firm believes that they have the ability to identify and take advantage of these dislocations, particularly when it comes to businesses targeting women and the millennial generation. Geographically, the Fund will invest almost exclusively in the United States.

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

### Allocation:

A new commitment to the Fund would be allocated 100.0% to the Small Corporate Finance investment sub-sector and will further be categorized as a Domestic investment. As of December 31, 2012, OPERF's allocation to Small 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 December 31, 2012	Target	FMV	FMV + Unfunded
Small Corporate Finance	0-10%	2.2%	2.1%

### 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 considers a commitment of \$50.0 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;
- (3) Satisfactory continuation and finalization of due diligence;
- (4) No material changes to the investment opportunity as presented;
- (5) Confidentiality maintained regarding the commitment of OPERF to the Partnership until such time as all the preceding conditions are met;
- (6) The inclusion of an 8.0% preferred return in the Fund terms; and
- (7) The Fund holding a 1<sup>st</sup> close of no less than \$200.0 million in Commitments.

TAB 4 – AMSTAR

## OPERF Real Estate

### Amstar Value-Add Separate Account

#### **Purpose**

Staff recommends a \$200 million commitment to a value-add separate account joint venture (the “Separate Account”) to be managed by Amstar Advisers, LLC (“Amstar”). This Separate Account will be established for continuing Amstar’s successful 26-year investment history primarily in multifamily and office assets within multiple U.S. markets.

#### **Investment Opportunity**

The Separate Account will consist of a \$200 million capital commitment from OPERF to be invested alongside the European family office that founded Amstar in 1987. Investments in the Separate Account are anticipated to be structured at an equity ratio of approximately 60:40, respectively, between OPERF and the family office with an additional \$2 million co-investment from Amstar principals. The Separate Account will seek to continue Amstar’s 26-year track record of acquiring equity real estate investments in both primary and select secondary markets throughout the U.S. with a net return objective of 11-14%. The main investment strategies for the Separate Account will include: (1) “Restore to Core” of office properties in supply-constrained markets with long-term growth potential; (2) “Develop to Core” of multifamily properties in markets with strong demographic support and job growth. At this juncture in the real estate market cycle, select opportunities for development of core multifamily properties are providing greater yields than equity acquisitions of existing product. It is anticipated that this strategy could shift to value-add acquisitions once supply of existing multifamily stock and new deliveries is in balance with demand fundamentals. A secondary focus of the Separate Account will include opportunistic investments in Class A and B industrial and retail properties and select one-off investments in value-add hotels.

The Separate Account is proposed to include an investment period of up to 36 months, with an evergreen term, and recyclable distributions (‘Return on’ and ‘Return of’ OPERF capital recallable as future unfunded commitments), all of which is consistent with the other OPERF real estate separate account structures, including standard OPERF termination provisions. Additionally, portfolio-level debt within this Separate Account will not exceed 55% loan-to-value (LTV) and 60% LTV at the property-level.

## **History/Team**

Amstar was formed in 1987 as the captive real estate manager for the European family office's allocation to the private U.S. real estate market. This has been an evergreen structure, owned by the family office, successfully investing in multiple real estate asset classes with a value-add/opportunistic focus in various U.S. markets over the past 26 years. In 2010, when the family office's allocation to U.S. real estate had exceeded its target allocation, Amstar initiated dialogue with different institutional capital partners, resulting in the formation of a \$200 million separate account with San Diego County (SDCERA). Amstar also has two commingled fund vehicles specializing on development projects within the European and Asian real estate markets.

Headquartered in Denver, CO, the Amstar team includes over 80 personnel as well as a recently opened office in London to service the European fund operations and capital partners. The Amstar organization is led by Gabe Finke as CEO, who has over 26 years of real estate experience throughout the U.S. and Europe. Mr. Finke joined Amstar as CEO in 2003 after previously working for The Carlyle Group and, prior to that, working as SVP and Head of European Development for ProLogis.

## **Portfolio Fit**

The Value Added sub-portfolio within OPERF's real estate investments had an 18.8% weighting at December 31, 2012 versus a target weighting of 20%. Given the investment focus, target markets, and return profile characteristics, this proposed separate account will have minimal overlap, if any, with existing joint ventures and commingled funds structures within the OPERF real estate portfolio.

## **Issues to consider**

### **General Partner Concentration**

Given Amstar's potential to seek additional separate account relationships, and its current separate account with SDCERA, the opportunity for strategies to overlap and conflicts to arise from multiple capital sources competing for the same transaction could potentially occur. However, this is presently mitigated by the fully-deployed nature of the SDCERA account and Amstar has stated they do not anticipate sourcing additional clients during the initial investment period of the Separate Account with OPERF. Additionally, document provisions within the Separate Account will include a mandate for a standard rotational policy for any current or future clients with potentially overlapping investment strategies.

### **Litigation**

There is currently no active litigation between Amstar and other entities with the exception of an investment-level legal dispute, for a nominal amount, within Amstar's insurance limits and with minimal risk of exposure to the firm.

### **Placement Agents**

No placement agents were engaged with respect to this Separate Account nor did OPERF have any contact with the placement agents in connection with the structuring of this Separate Account.

**Private Partnership Investment Principles**

As a separate account structure, all terms and conditions with Amstar will be fully compliant with the OIC's Private Partnership Principles.

**Recommendation**

Staff recommends that the OIC authorize a \$200 million commitment to Amstar Advisers on behalf of OPERF, subject to the satisfactory negotiation of terms and conditions, and completion of the requisite legal documents by DOJ legal counsel working in concert with OST staff.

TAB 5 – OIC REAL ESTATE  
CONSULTANT RECOMMENDATION

## **Oregon Investment Council OIC Real Estate Consultant**

### **Purpose**

The incumbent, Areté Capital, has a contract expiring June 30, 2013. The selection committee for the real estate consultant search is recommending a new contract with Pension Consulting Alliance, Inc. (“PCA”) commencing July 1, 2013.

### **Background**

At the request of the Council in early 2011, staff engaged in a solicitation of specialist consulting services for the real estate portfolio. The Requests for Information (“RFI”) were released on June 1, 2011 with responses due on August 1, 2011. Nine firms responded to, and met the minimum qualifications outlined in, the RFI for real estate.

The nine firms submitting proposals for real estate services were:

1. Callan Associates
2. Courtland Partners
3. Real Assets Portfolio Management
4. PCA
5. The Townsend Group
6. Areté Capital
7. Ennis Knupp & Associates
8. Mercer Consulting
9. R.V. Kuhns & Associates

Four staff members independently scored the responses provided. The criteria used for scoring each consultant’s submissions included: staffing capabilities and experience, range of services offered/provided, investment selection and due diligence processes, performance monitoring and analysis, private real estate and public REIT manager selection experience, client reporting and recommendation proficiencies. At that time, three firms were short-listed as finalist candidates and onsite due diligence was conducted with each of the firms in September and October of 2011. At the direction of the Oregon Investment Council in December 2011, due to the departure of the Chief Investment Officer in November 2011, the decision to select a real estate consultant was placed on hold pending the hiring of a new Chief Investment Officer.

On January 23, 2013, the Oregon Investment Council directed staff to re-interview each of the three short-listed consultant firms, selected from the 2011 RFI process, with a finalist to be recommended to the Oregon Investment Council on May 29, 2013. A new selection committee was then formed, consisting of three members of Staff (the CIO, Real Estate SIO, and Alternative Portfolio SIO) and one Oregon Investment Council member, Katy Durant.

In April 2013, the following three finalist firms were interviewed, with Pension Consulting Alliance selected for recommendation to the OIC:

1. PCA
2. The Townsend Group
3. Courtland Partners

**Staff Recommendation**

Based on the interviews and follow up with each of the three finalist firms, including additional negotiations on terms, it is recommended that the OIC engage Pension Consulting Alliance, Inc. for the real estate consulting mandate.

In accordance with OIC Policy 4.01.13, staff is recommending, subject to a legal review by the Department of Justice:

1. An initial contract term of three years, ending June 30, 2016.
2. The contract shall contain a “no cause” termination clause with a maximum 90-day notice period.
3. Upon approval by the OIC, prior to the initial contract term expiration, the contracts may be extended “no more than twice and limited to a final expiration date that is no more than four years beyond the original expiration.”

**FUNCTION: General Policies and Procedures**

**ACTIVITY: Consulting Contracts**

**POLICY: All consultants of the Council, including but not limited to, full-service consultants as well as specific asset class advisors (e.g. real estate, alternative equities) shall be engaged by the Council through a form of written contract. These contracts shall have specified expiration dates, termination clauses and renewal/extension terms. Before the end of the contract term (including any renewals or extensions granted) a formal “request for proposal” (RFP) process shall be undertaken by Staff for the purpose of identifying new candidates, upgraded services, competitive pricing and any other information considered relevant to Staff and the Council.**

**PROCEDURES:**

1. Consulting contracts shall be negotiated and executed in compliance with Council policy 4.01.10.
2. Consulting contracts shall expire on a date not to exceed three years from the effective date of the contract.
3. Consulting contracts shall include a “no-cause” termination clause with a maximum 90 day notice period.
4. It is the policy of the Council to continuously review all contractors.
5. Consulting contracts may be renewed or extended beyond the original expiration date no more than twice and limited to a final expiration date that is no more than four years beyond the original expiration.
6. Upon the final expiration of the original contract, or whenever directed by the Council, staff shall undertake and complete an RFP process which shall include the following:
  - a. Identification of those potential candidates who may reasonably be believed to perform those services under examination;
  - b. Directing of an RFP which shall include, but not be limited to:
    1. Description of services requested;
    2. Description of the potential or preliminary standards required by the Council of the candidates; and
    3. Request for pricing or fee schedule information.
7. Consultants under contract to the Council shall disclose, in written investment recommendations to the Council, any contact the Consultant’s staff had with Placement Agents for the firm being recommended.

**DEFINITIONS:**

“**Placement Agent**” includes any third party, whether or not affiliated with an investment manager, investment advisory firm, or a general partnership, that is a party to an agreement or arrangement (whether oral or written) with an investment manager, investment advisory firm, or a general partnership for the direct or indirect payment of a Placement Fee in connection with an OIC investment.

“**Placement Fee**” includes any compensation or payment, directly or indirectly, of a commission, finder’s fee, or any other consideration or benefit to be paid to a Placement Agent.

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



# Oregon Public Employees Retirement Fund

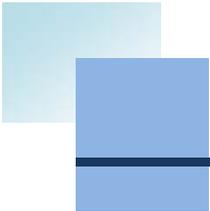
## Real Estate Consulting Presentation

**Allan Emkin, Managing Director, Founder**

**Christy Fields, Managing Director, Practice Group Leader, Proposed Co-Lead Consultant**

**David Glickman, Managing Director, Proposed Co-Lead Consultant**

**Dillon Lorda, Senior Vice President**



# Introduction to Pension Consulting Alliance

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**Pension Consulting Alliance, Inc. (PCA)** is a boutique consulting firm that provides a comprehensive range of services to clients across all major asset classes. Our clients include several of the largest plan sponsors in the United States. In total, our 33 clients represent approximately \$980 billion in plan sponsor investment assets.

Founded in 1988, PCA is built on the philosophy that consulting is a problem-solving process, not a commodity. We design our services to meet the client's specific needs in a cost effective manner. PCA generates all of its revenue from a single source of business – investment consulting services. The firm does not engage in other business services that might raise conflicts of interest.

Over time, PCA has structured itself as a firm of senior consultants that is supported by several specialist consulting firms representing a variety of unique disciplines. Through these alliances, PCA retrieves any necessary specialist resources from experts and tailors the consulting product to the specific needs of each client.

PCA ranked in the Top 10 by Pension and Investments (2011). PCA is highly appreciated for its ability to provide proactive advice and advise on long-term asset allocation, and has high credibility with the investment committee with particular strength in understanding of client goals and objectives according to Greenwich Associates (Evaluations by U.S. Institutional Investors 2010).

# PCA Attributes

- PCA's only business is non-discretionary investment consulting
  - Conflict-free recommendations – no revenue from investment fund activities
  - Represents only institutional investors, never investment advisors
  - Senior professionals serve as your fiduciary
  - Limited number of clients to ensure highest level of customized service
  - Employee-owned; no “parent company” or “equity investor” distractions

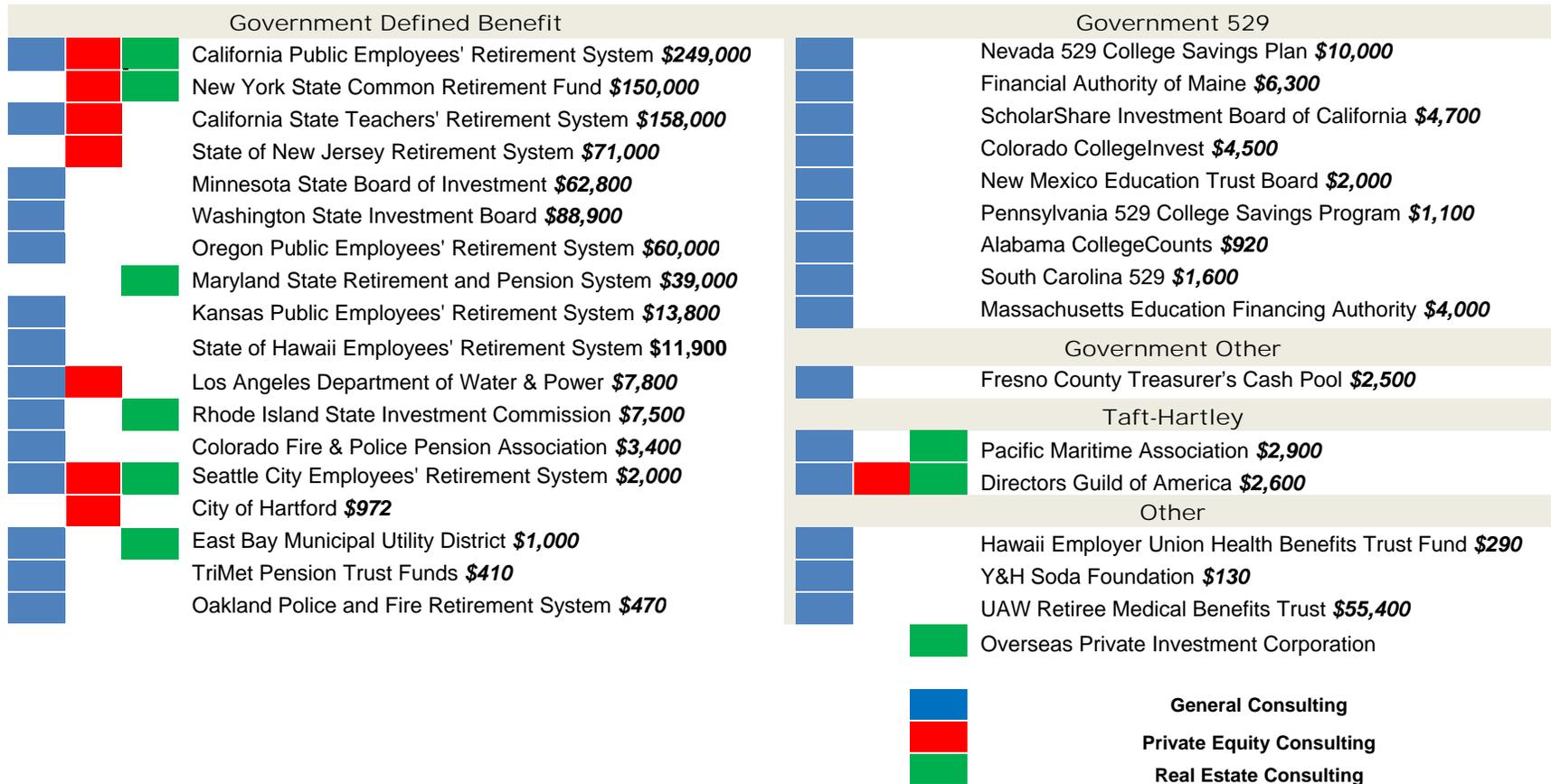


 PCA Office Locations

# PCA Clients

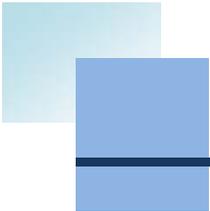
## PCA Advises approximately \$1 Trillion of Institutional Assets

PCA clients by plan type with consulting mandate and assets advised (in \$M)



- PCA's client base emphasizes large public pension plans
  - Services customized to meet each client's specific needs

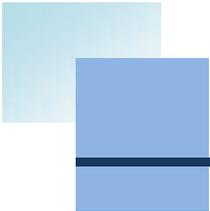
(values as of 12/31/12)



# PCA Real Estate

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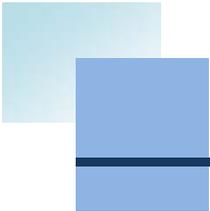
- PCA avoids conflicts of interest by only generating revenue from advice given to plan sponsors; no revenue is generated from fund management or investment managers.
- PCA offers customized real estate solutions for its clients, not off the shelf solutions.
- PCA Real Estate is a strong team with differentiated industry experience.
- PCA Real Estate believes:
  - Real Estate can perform a variety of roles in a portfolio, including: Total Return, Current Income, Inflation Protection, Diversification, Lower Correlation to Public Equities.
  - As a smaller percentage of portfolio assets, the context of real estate investing is to enhance the overall portfolio's risk adjusted performance.



# Experience, Capacity, and Attention

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- The Real Estate team has in-depth, broad ranging experience, including development, real estate private equity advisory, REITs, fund-of-funds, and consulting services, both domestically and internationally.
  - PCA has experienced investment professionals to service OPERF.
- PCA Real Estate is on a controlled growth plan and will maintain a maximum lead consultant-to-client ratio of 1:3.
  - PCA Real Estate's two senior members will co-lead the OPERF relationship.
  - PCA is currently the Real Estate Board Consultant for:
    - California Public Employees' Retirement System (CalPERS);
    - Maryland State Retirement and Pension System (MSRPS);
    - Seattle City Employees Retirement System (SCERS); and
    - Rhode Island State Investment Commission (RISIC).
- PCA has deep familiarity with OPERF's overall portfolio and organizational needs and objectives.



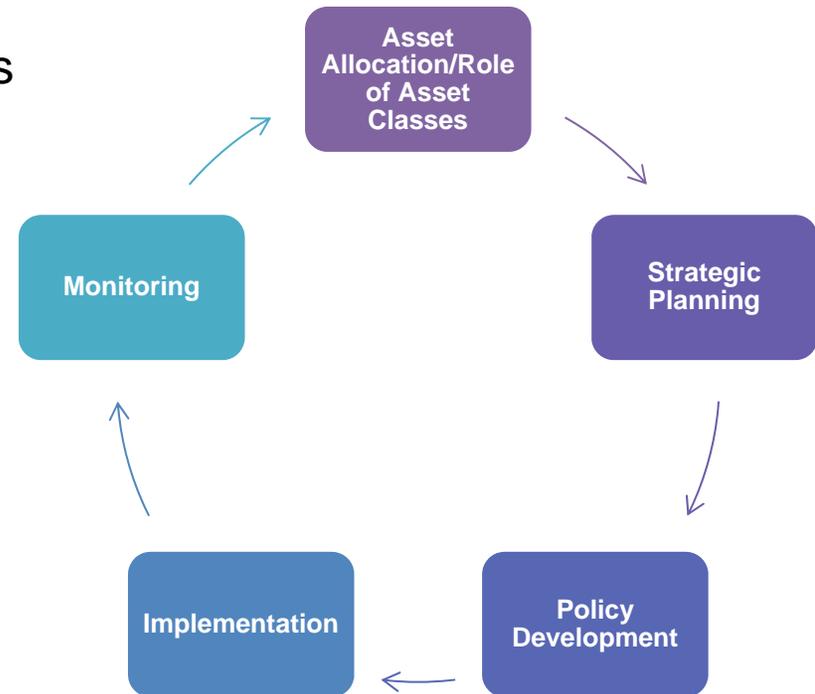
# Scope of Services

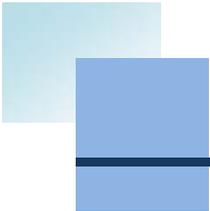
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- PCA's Real Estate consulting services in support of Staff include, but are not limited to:
  - Independent thinking;
  - Development of investment objectives, policy and strategy;
  - Institutional memory;
  - Strategic planning;
  - Risk assessment and monitoring;
  - Research;
  - Access to investment opportunities;
  - Manager due diligence;
  - Market and product assessments;
  - Fee analysis and negotiation;
  - Portfolio management, oversight and monitoring;
  - Performance reporting; and
  - Special projects.

# Consulting

- PCA's philosophy is that risk management and mitigation strategies for each asset class are best when integrated within the context of the overall portfolio.
- We believe functional integration creates added value.
- Utilizing investment consultants across each major consulting function improves efficiency and institutional knowledge over time.

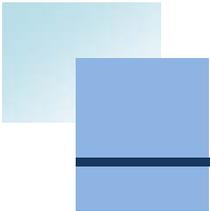




# Scope of Services

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- The following is a sample of services PCA provides to its clients:
  - Attend Staff and Investment Committee meetings to contribute to the System's decision making and ensure compliance with investment policies and delegated authority;
  - Participate actively in the asset allocation process, and specifically, in the development of capital market assumptions for real estate in context with the overall portfolio;
  - Participate actively in the development of general alignment and governance principles, including representing clients on funds' Advisory Committees, opining on partnership amendments, and validating incentive fees;
  - Perform special projects at clients' discretion, including development of internal procedures manual, development and implementation of emerging manager investment program, development of responsible contractor program policy; and
  - Report quarterly on the performance and composition of the real estate portfolio with respect to risk classifications, policy compliance, manager updates, and fees.



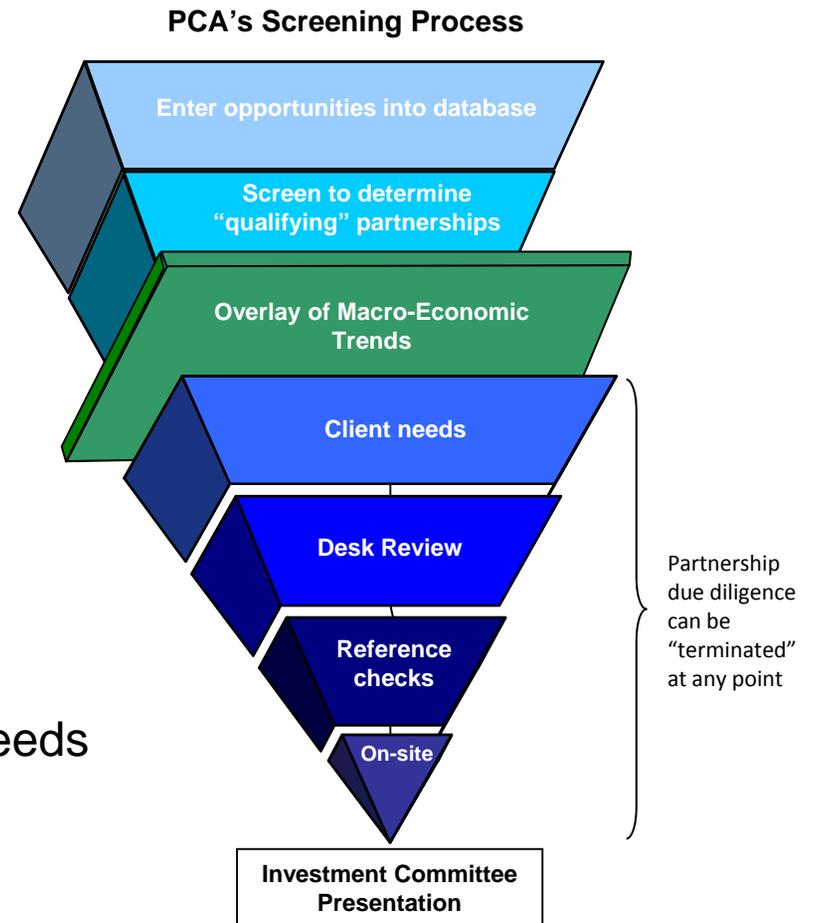
# Fiduciary Project Activity

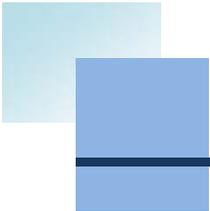
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- Over the past four years, PCA's project activity has included:
  - Reviewing nearly 40 separate account and commingled partnerships;
  - Overseeing the transfer of approximately \$10 billion of real estate from misaligned, terminated investment managers to long-term strategic managers;
  - Performing detailed investment-level and partnership underwriting to assist with restructurings;
  - Providing new investment recommendations, including Emerging Manager searches;
  - Pursuing secondary market opportunities;
  - Creating and overseeing the implementation of a portfolio deleveraging/de-risking plan; and
  - Developing policy to enforce Responsible Contracting.

# Manager Selection

- Broad coverage of real estate opportunities:
  - “Open door” policy for manager meetings
  - Proactive exploration of investment strategies
- Continuous partnership screening:
  - Incorporates PCA’s “macro” view on the marketplace
  - Complemented by “bottom-up” partnership selection
  - Emphasizes strong management teams with appropriate investment experience
- Interactive process that is focused on client needs
  - Can utilize a “phased” approach
  - PCA will recommend with conviction





# Summary

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- PCA would appreciate the opportunity to serve OPERF.
- PCA has:
  - A unique and highly experienced Real Estate team;
  - No conflicts of interest;
  - Interdisciplinary collaborative thinking;
  - Strong, informed opinions;
  - A consulting approach tailored to specific client needs; and
  - Long-term knowledge of OPERF's investment objectives.
- PCA will work hard to assist OPERF in executing its vision for real estate investments.
- Thank you for your time and consideration.

# Biographies



**Allan Emkin**  
**Founder & Managing Director**  
**Los Angeles, CA**

Allan Emkin founded Pension Consulting Alliance, Inc. in 1988, with offices in Los Angeles, New York City, and Portland, Oregon.

Long a member of the consulting community, Mr. Emkin has twenty-five years of general consulting experience emphasizing public plan administration and investment policy, as well as international, global, and real estate investments.

Mr. Emkin was a Vice President at Wilshire Associates before forming PCA in 1988. Prior to his work in the consulting field, Mr. Emkin worked in the California Governor's office in the Pension Investment Unit. Before joining the Brown administration, he was a registered lobbyist for ten years specializing in affordable housing and other matters affecting low-income families.

Mr. Emkin is a frequent speaker at various conferences and educational seminars and has long standing relationships with Liberty Hill Foundation in Santa Monica, California as well as The Labor and Worklife Program at Harvard University.



**Christy Fields**  
**Managing Director, Board Member**  
**Portland, OR**

Ms. Fields rejoined PCA in 2007 as Managing Director of Real Estate Consulting Services. Ms. Fields has extensive experience in structuring and analyzing real estate transactions, developing investment strategy, analyzing manager fees and performance, evaluating manager reporting practices, and supervising and negotiating workouts.

Previously, Ms. Fields spent four years at Westwood Consulting Group, where she was dedicated to the CalSTRS' and CalPERS' real estate portfolios. Prior to Westwood, Ms. Fields spent five years with PCA's prior real estate consulting practice, working closely with clients including the Kansas Public Employees' Retirement System, Oregon Public Employees Retirement Fund, the Western Conference of Teamsters, and the UFCW. Earlier in her career, Ms. Fields was a Senior Consultant with PriceWaterhouseCoopers' Real Estate Consulting Services Group where she specialized in real estate investment analysis, lease negotiations, property and small business appraisal, property-level acquisition due diligence, and tourism and master planning studies. While at PwC, Ms. Fields was actively involved in several large RTC restructurings, including the 1,000+ asset Circle K portfolio.

Ms. Fields received her Bachelor of Arts from Cornell University's School of Hotel Administration and her Masters in Business Administration from Yale University's School of Management.

# Biographies



**David Glickman**  
**Managing Director**  
**Carmel, CA**

Mr. Glickman joined PCA in 2009. He has more than 40 years of institutional investing experience in the U.S. and Europe, with an emphasis on commercial real estate debt and equity for pension and retirement system clients. He founded Ambassador Capital Management, Inc., a registered investment advisor in 1999, specializing in publicly traded real estate related securities.

From 2001-2005, Mr. Glickman was a Partner and Investment Committee Member of Apollo Real Estate Advisors, a sponsor of opportunistic comingled funds. From 1998-99, he was Vice Chairman of Advisory Research, Inc., a registered investment advisor specializing in small cap value equity stocks and taxable and tax-exempt fixed income securities. From 1994-98, he was Chairman, CEO and CIO of Ambassador Apartments, Inc. (NYSE: AAH), a public, value-added REIT, whose IPO he led and which merged with AIMCO (NYSE:AIV) in 1998. From 1972-92, he was Executive Vice President and Member of the Board of Directors and Investment Committee of Heitman Financial, and President of Heitman Advisory Corporation, a Registered Investment Advisor, specializing in core real estate asset management for institutional investors in separate accounts and comingled funds.

Mr. Glickman is a Guest Lecturer in Real Estate at the Kellogg School of Management at Northwestern University. He is an Illinois and Nevada licensed real estate broker, a former Director/Trustee of the National Multifamily Housing Council, Pension Real Estate Association, NAREIT, F.W. Parker School, and the Menomonee Boys and Girls Club. He is also on the Advisory Board of Institutional Real Estate, Inc.

Mr. Glickman received his Bachelor of Arts in English from the University of Illinois-Chicago.



**Dillon Lorda**  
**Senior Vice President**  
**Portland, OR**

Mr. Lorda joined PCA in 2008 and covers Real Estate. Mr. Lorda has acquisitions and investment experience covering all real estate asset classes in Mexico and the United States.

Prior to joining PCA, Mr. Lorda worked as a development associate for Del Mar Development in Los Cabos, Mexico. He was responsible for all aspects of development Mr. Lorda covered hospitality, urban infill, and master planned communities in the US and Mexico. Prior to joining Del Mar Development, Mr. Lorda worked at Time Equities, Inc. on an acquisitions team with a focus on residential and retail properties in the New York metropolitan area.

Previously Mr. Lorda spent six years in international agricultural trading with Bunge Global Markets and ED & F Man. He was directly responsible for managing logistics operations in the Caribbean and Europe. Mr. Lorda traded in South America, Asia, and the Middle East.

Mr. Lorda earned a Bachelor of Arts from Hamilton College and a Masters of Real Estate Finance from New York University.

# Biographies



**Lindsey Sugar**  
**Senior Vice President**  
**Los Angeles, CA**

Ms. Sugar joined PCA in 2008 as Senior Analyst of Real Estate Consulting Services. Ms. Sugar has worked in the investment real estate industry for the past ten years.

Prior to PCA, Ms. Sugar was an Investment Associate at Arch Street Capital Advisors, a private equity company, in Greenwich, CT. Her responsibilities included analyzing real estate portfolios and development opportunities for acquisition, supervising due diligence, structuring transactions, and providing asset management services. Previously, Ms. Sugar worked as a Leasing Analyst for Foot Locker Realty, Inc., in New York. While at Foot Locker, Ms. Sugar oversaw the integration of Footaction stores into the Foot Locker portfolio, negotiated leases with the three largest retail investment managers in the United States, and supervised special projects for the CFO. Prior to Foot Locker, Ms. Sugar was an Investment Analyst in the New York office of Norgo Group Inc., a privately held real estate investment company with a focus on opportunistic transactions in New York and Chicago. Ms. Sugar assisted with acquisition due diligence, financial analysis, and asset management.

Ms. Sugar holds a Bachelor of Arts from the University of Chicago and a Masters of Real Estate Finance from New York University.



**Austin Carmichael**  
**Vice President**  
**Portland, OR**

Mr. Carmichael re-joined PCA in January 2010 as a Vice President of Real Estate Consulting Services.

Prior to joining PCA, Mr. Carmichael served as an Assistant Vice President at Partners Group, an alternative asset manager, from 2007-2009. At Partners Group, Mr. Carmichael served within the private real estate group and his primary responsibilities included client portfolio management, investment monitoring, market research and due diligence on new investment opportunities.

From 2005-2007, Mr. Carmichael served as a Senior Investment Analyst with PCA. In this capacity, Mr. Carmichael performed due diligence on real estate opportunities, conducted investment and market research, and oversaw reporting for leading institutional investors.

Prior to that, Mr. Carmichael worked for Morgan Stanley for four years. His responsibilities included providing investment advice, managing client relationships, and conducting research. He worked for retail clients primarily in traditional investments and ensured clients maintained balanced portfolios.

Mr. Carmichael received a degree in English Literature from Seattle Pacific University and also holds a MBA from the University of Oregon.

TAB 6 – OPERF ALTERNATIVE PORTFOLIO ANNUAL REVIEW



# OPERF Alternatives Portfolio 2013 Plan and Review

John Hershey, Senior Alternatives Investment Officer

May 29, 2013

# Table of Contents

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- I. Objectives
  
- II. 2012-2013 YTD Review
  - New investments
  - Cash flows
  - Portfolio snap shot
  - Performance
  - Active funds review
  
- III. Strategy review
  - Sub-asset classes
    - Illiquid Strategies
    - Liquid Strategies
  
- IV. Other issues
  - Staff resources
  - Consultant
  - Reporting
  - Co-investment strategy

# Alternatives Portfolio Objectives

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## Alternatives Portfolio Objectives:

- Seek “real assets” and “real return” strategies
- Source of diversification for OPERF
- Less correlated returns, diversifying risk premias
- Seek hedges against inflation
- Benchmark: CPI + 4%

## Strategies of interest/target allocation:

		<u>% OPERF</u>
▪ Infrastructure	30%	1.50%
▪ Natural resources		
Oil and gas	15.0%	.75
Metals and Mining	7.5%	.375
Water, Agriculture and Timberland	7.5%	.375
Liquid Commodities / Natural Resources	<u>15.0%</u>	.75
	45%	
▪ Hedge funds	20%	1.00
▪ Other	<u>5%</u>	<u>.25</u>
	100%	5.00%

# New investments/pipeline 2012 / 2013

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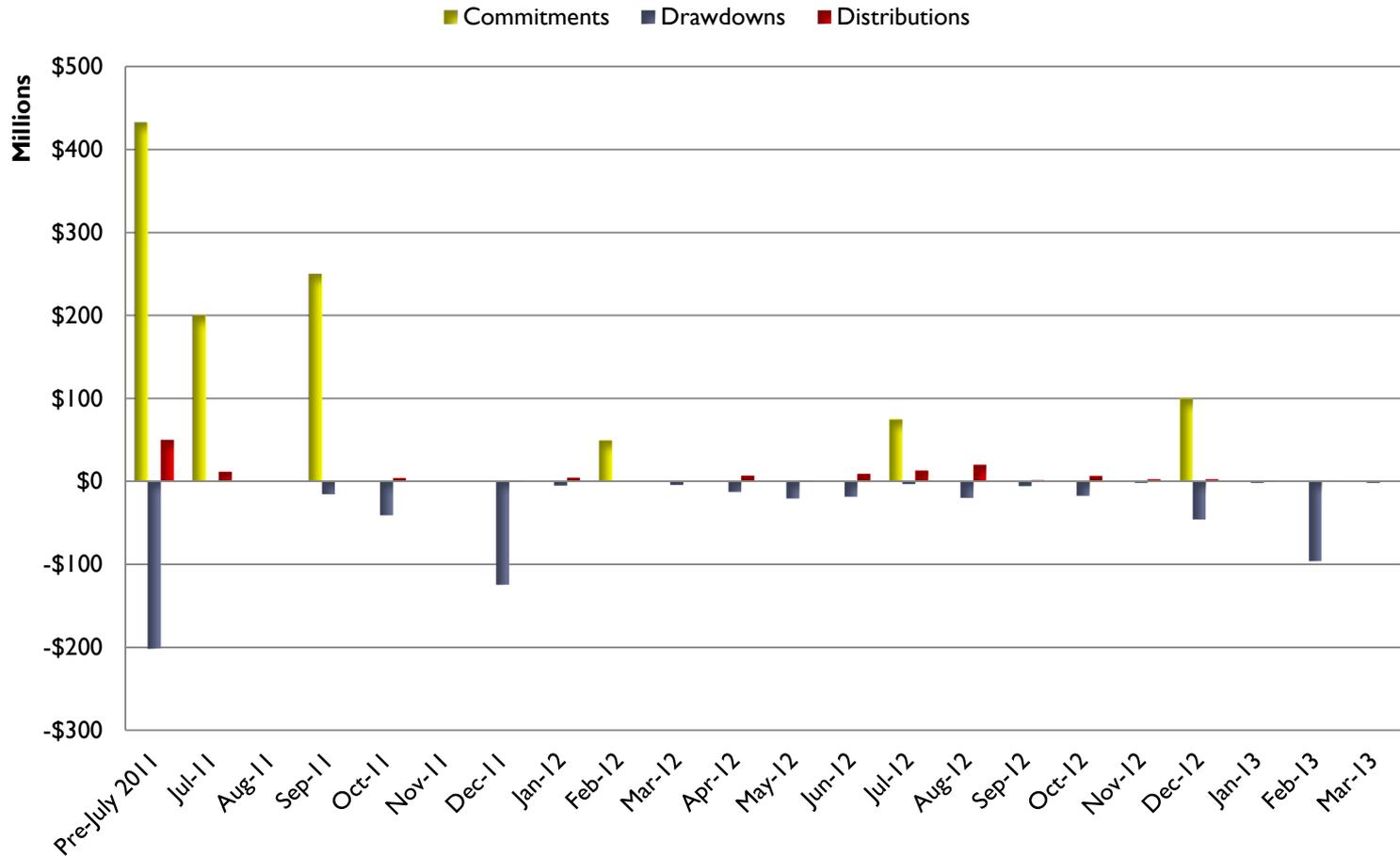
## New Investments (commitments):

- 2012 (commitment dates)
  - Reservoir Strategic Partners (\$50mm – January)
  - Red Kite Finance Fund II (\$75mm – July)
  - Stonepeak Infrastructure Fund (\$100mm – December)

## Potential Investments:

- 2013 Pipeline
  - Natural Resources (private markets)
  - Natural Resources (liquid equities)
  - Hedge Fund (liquid diversifying risk premia)
  - Energy (private markets)
  - Infrastructure (EM private markets)

# Commitments and cash flows



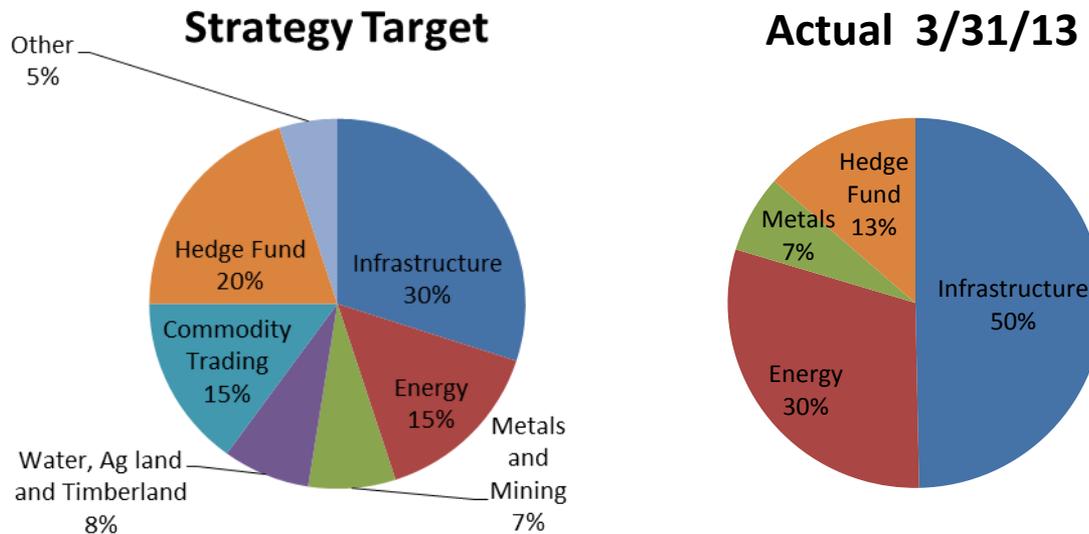
# Portfolio (FMV @ 03/31/13)

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Fund	FMV (\$ mm)	Strategy
Sheridan Production Partners I	\$89.3	Energy
Alinda Fund II	\$127.2	Infrastructure
Sheridan Production Partners II	\$116.6	Energy
NGP X	\$27.4	Energy
Highstar Capital IV	\$34.4	Infrastructure
GIP II	\$36.3	Infrastructure
AQR Delta	\$105.3	Hedge Fund
Reservoir Special Partners	\$24.9	Hedge Fund
RK Finance	\$16.8	Mining
Stonepeak Infrastructure	\$16.0	Infrastructure
<b>Total</b>	<b>\$594.3</b>	

# Portfolio Snapshot (Strategy)

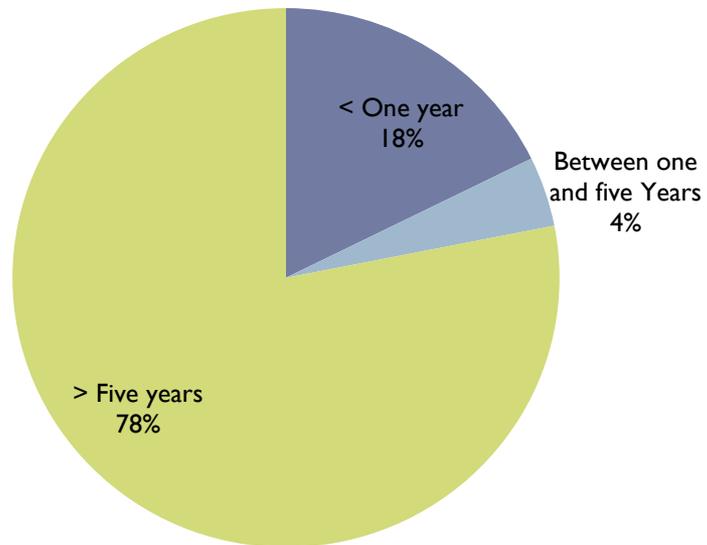
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# Portfolio Snapshot (Liquidity)

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## Portfolio Liquidity 3/31/13



# Change in NAV in millions (12 Months Since 3/31/12)

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NAV (Mar 31, 2012)	\$388.6
Plus contributions	247.9
Minus distributions	(65.8)
Plus unrealized appreciation	23.5
NAV (Mar 31, 2013)	\$594.3

# Active funds review

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## Sheridan Production Partners L.P. I

<b>Strategy</b>	Oil and gas exploration and production
<b>Performance</b>	16.6% gross IRR, 13.6% net IRR since inception (Q2/2007)
<b>Outlook</b>	7.7% current yield; target total return 13-15%

## Alinda Infrastructure Fund II

<b>Strategy</b>	Infrastructure (value add)
<b>Performance</b>	14% gross IRR, 5% net IRR since inception (Q3/2008)
<b>Outlook</b>	7.6% current yield; target total return 15-20%

# Active funds review

---

## **Sheridan Production Partners II L.P.**

<b>Strategy</b>	Oil and gas exploration and production
<b>Performance</b>	NM; still in J-curve (launched Q3/2010)
<b>Outlook</b>	9% current yield; target total return 13-15%

## **NGP X L.P.**

<b>Strategy</b>	Oil and gas exploration and production
<b>Performance</b>	27% gross IRR, 9% net IRR since inception (Q3/2011)
<b>Outlook</b>	target total return 15-20%

# Active funds review

---

## Highstar Capital IV L.P.

<b>Strategy</b>	Infrastructure (value add + opportunistic)
<b>Performance</b>	16.2% gross and 1.7% net IRR since inception (Q3/2011); still in J-curve
<b>Outlook</b>	target total return 13-15%

## GIP II

<b>Strategy</b>	Infrastructure (value-add)
<b>Performance</b>	59% gross IRR, 34% net IRR since inception (Q4/2011)
<b>Outlook</b>	target total return 13-15%

# Active funds review

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<b>AQR Delta Fund</b>	
<b>Strategy</b>	Hedge Fund (multi-strategy)
<b>Performance</b>	7.8% gross return; 6.3% net return since inception (Q1/2012)
<b>Outlook</b>	target total return Libor + 4-6%

<b>Reservoir Strategic Partners</b>	
<b>Strategy</b>	Hedge Fund seeding fund
<b>Performance</b>	0.2% net IRR since inception (Q1/2012); still in J-curve
<b>Outlook</b>	target total return Libor + 6-8%

# Active funds review

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<b>RK Finance</b>	
<b>Strategy</b>	Mining debt
<b>Performance</b>	NM; (launched Q3'2012)
<b>Outlook</b>	target total return 15-20%

<b>Stonepeak Infrastructure L.P.</b>	
<b>Strategy</b>	Infrastructure (value add)
<b>Performance</b>	NM; (launched Q1'2013)
<b>Outlook</b>	Target ~ 8% current yield; total return 13-15%

# Alternatives Portfolio Pacing

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## ➤ Progress-to-date

- \$213.5mm NAV transferred at launch date (7/11)
- Committed \$675 million over past two years, \$1.1 billion cumulatively

## ➤ 2013 Budget

- \$300-\$600 in commitments
- Implies total commitments of \$1.4 – 1.7 billion by year end
- Expected NAV should be between \$800 million – \$1.1 billion by year end
- Expected percent of OPERF should be between 1.3% and 1.8% by year end
- Implies 25-35% of the way towards 5% target allocation by year end

## ➤ Longer term pacing

- Staff has been measured, given entry point risk, research, education and resources required
- At current pace, will not reach target allocation for several years
- Awaiting investment beliefs project guidance and potential impact to currently configured program
- Can deploy “liquid strategies” such as hedge funds and commodities more quickly than “illiquid strategies” such as infrastructure and private natural resources (oil & gas, metals and mining, agriculture and timberland)

# Alternatives Portfolio strategy review

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## ➤ Illiquid (“private market”) strategies:

### **Infrastructure**

- Essential, relatively inelastic demand assets
  - Midstream energy (pipelines, transmission)
  - Contracted power generation
  - Transportation (airports, ports, toll roads, bridges)
- Core, value add, opportunistic stages
- Target portfolio ~ 30% of Alternatives Portfolio or ~ \$1 billion in NAV
- Current commitments of \$550mm (Alinda II, Highstar IV, GIP II and Stonepeak)
- Wide target return range on underlying assets (8-18%) depending on type, stage and leverage
  - Target total net return of 6-15%
  - Current return a significant component of total return
- Concerns
  - Fees, particularly on committed capital
  - Will realized returns meet expectations?
  - Shortage of experienced managers gives fee leverage to established GPs
  - Entry point risk driven by investor interest
  - Shortage of Public Private Partnerships in U.S.
  - Ability to co-investment, which could be most cost effective way of reducing fees

# Alternatives Portfolio strategy review

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➤ Illiquid (“private market”) strategies:

## **Oil and Gas**

- Proved Developed Producing wells
- Proved Undeveloped wells
- Probable Undeveloped wells
- Target portfolio ~10-15% of Alternatives Portfolio or ~ \$500mm NAV
- Current commitments of \$332mm (Sheridan Productions I and II, NGP X)
- Target return on underlying assets of 10-13%
  - Target total net return of 10-18%, depending on stage and leverage
  - Current return a significant component of total return
- Concerns
  - Fees, particularly on committed capital
  - Entry point risk driven by increased investor demand
  - Ability to co-investment, which could be most cost effective way of reducing fees
  - Technology dislocations (can affect supply and therefore commodity price)
  - Leverage (bank borrowing base depends on commodity price “strip”)
  - Environmental (water and chemical use for unconventional drilling techniques – e.g., “fracking”)

# Alternatives Portfolio strategy review

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➤ Illiquid (“private market”) strategies:

## **Metals and mining**

- Market segments: precious, base, energy, bulk and industrial metals
- Investment stages: feasibility stage, project finance, off-takes, equity in producing mines
- Target portfolio ~ 5-10% of Alternatives Portfolio or ~ \$250mm in NAV
- Have committed to RK Finance Fund II (\$75mm)
- Target total net return of 10-20%, depending on stage and leverage
- Concerns
  - Entry point risk driven by investor interest in real assets
  - Competing capital from Toronto Stock Exchange, other investors
  - Ability to co-investment, which could be most cost effective way of reducing fees
  - Shortage of experienced managers, particularly in later stages
  - Global demand shifts (emerging market demand, particularly China)
  - Counterparty risk (on debt and off-take transactions)

# Alternatives Portfolio strategy review

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➤ Illiquid (“private market”) strategies:

## **Water, Agriculture and Timberland**

- Market segments: water rights, row crops, permanent crops, mature groves, plantations
- Target portfolio ~ 5-10% of Alternatives Portfolio or ~ \$250 in NAV
- No current commitments
- Ben Mahon leading the research effort
- Target total net return of 5-12%, depending on stage and leverage
- Concerns
  - Entry point risk driven by investor interest in real assets
  - High levels of current commodity prices (soy and corn)
  - Few transactions being done; could indicate a seller’s market
  - Ability to co-investment, which could be most cost effective way of reducing fees
  - Shortage of experienced managers, particularly in Water and Agriculture

# Alternatives Portfolio strategy review

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➤ Liquid (“capital markets”) strategies:

## **Commodity/Natural Resource Strategies**

- Trading strategies: passive index, active management, absolute return, listed equities
- Strategies expressed through futures contracts, equities
- Target portfolio ~ 10-15% of Alternatives Portfolio or ~ \$500mm in NAV
- No current commitments, but expect to bring a recommendation in 2H'13
- Target total net return of 6-10%
- Concerns
  - Volatility
  - Open interest (inflow of index funds)
  - Index construction
  - Limited number of institutional long-only managers
  - Many specialized managers
  - Contango (negative “carry”) markets
  - Underlying emerging market demand (drives spot prices)
  - Correlation with existing assets

# Alternatives Portfolio strategy review

---

➤ Liquid (“capital markets”) strategies:

## **Hedge Fund Strategies**

- Focused on diversifying risk premia using hedge fund techniques (i.e., value, carry, momentum, etc.)
- Trading strategies:
  - Multi-strategy
  - Long-short equity
  - Relative Value, Arbitrage, Event driven
  - Global macro, Managed Futures
- Target portfolio ~ 20% of Alternatives Portfolio or ~ \$750mm in NAV
- Current commitments (AQR, Reservoir)
- Target total net return of Libor plus 4-6%
- Concerns
  - Fees, headline risk, business/operational risk
  - Sourcing truly complementary strategies
  - Alignment of interests, transparency, custody
  - Risk management
  - Realization of low correlations

# Alternatives Portfolio strategy review

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## ➤ Other Issues

- Staff resources
  - Need additional junior investment officer and analyst
- Consultant
  - Consideration of a single consultant vs. roster of consultants (given breadth of program)
  - Timing (waiting for completion of Real Estate and Generalist searches)
- Reporting
  - State Street (Alpha Frontier in beta – see next slide for screen shot)
  - TorreyCove (initiating quarterly reporting, beginning Q2 2013)
- Co-investment approach
  - Consideration of internally managed co-investment vs. outsourced co-investment

# Alternatives Portfolio monitoring

Alpha Frontier reporting tool in beta from State Street

OREGON

Dashboard General Info Tools Analytics Reports

OST Alternative Portfolio From: To: 3/31/2013 Key: Real | Proxy | Future Trade

Benchmark: S&P 500 MAR: 0% Riskfree rate: 4% Return Type: Derived (Historical) Refresh Options

Fund Name	Strategy	Current Nav	Current Shares	Market Value	Market Value Weighting	Owr
Alinda Infrastructure Fund II, L.P.	Infrastructure (100%)	1,115.6419	114,022.39791	127,208,159.00	21.41%	
AQR Delta Fund II, L.P.	Hedge Funds (100%)	1,052.8275	100,000.00000	105,282,748.00	17.72%	
Global Infrastructure Partners II-A1, L.P.	Infrastructure (100%)	1,120.6629	32,422.73937	36,334,960.73	6.11%	
Highstar Capital IV	Infrastructure (100%)	933.0629	36,889.31040	34,420,047.00	5.79%	
NGP Natural Resources X, LP	Natural Resources (100%)	874.3721	31,338.55067	27,401,555.00	4.61%	
Reservoir Strategic Partners Fund, L.P.	Hedge Funds (100%)	987.9850	25,212.56150	24,909,633.00	4.19%	
RK Mine Finance (Master) Fund II LP		904.1962	18,540.01911	16,763,814.81	2.82%	
Sheridan Production Partners I-B, L.P.	Natural Resources (100%)	1,900.1151	46,989.25824	89,285,000.00	15.02%	
Sheridan Production Partners II-B, L.P.	Natural Resources (100%)	202.9294	574,630.89660	116,609,500.00	19.62%	
Stonepeak Infrastructure Fund LP		1,000.0000	16,046.47900	16,046,479.00	2.70%	
<b>Summary</b>		N/A	996,092.21280	594,261,896.54	100.00%	
<b>Cash Balance</b>		N/A	0.00000	0.00	0.00%	
<b>Non HedgeFunds</b>		N/A	0.00000	0.00	0.00%	
<b>Total Portfolio Valuation</b>		N/A	996,092.21280	594,261,896.54	0.00%	

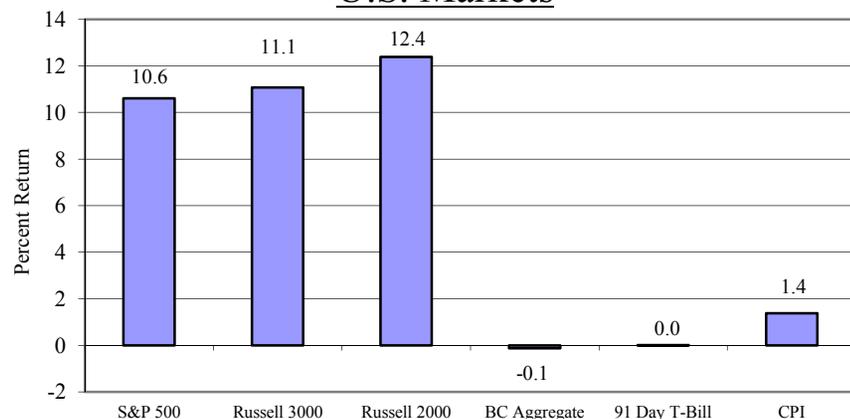
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TAB 7 – OPERF 1<sup>ST</sup> QUARTER PERFORMANCE UPDATE

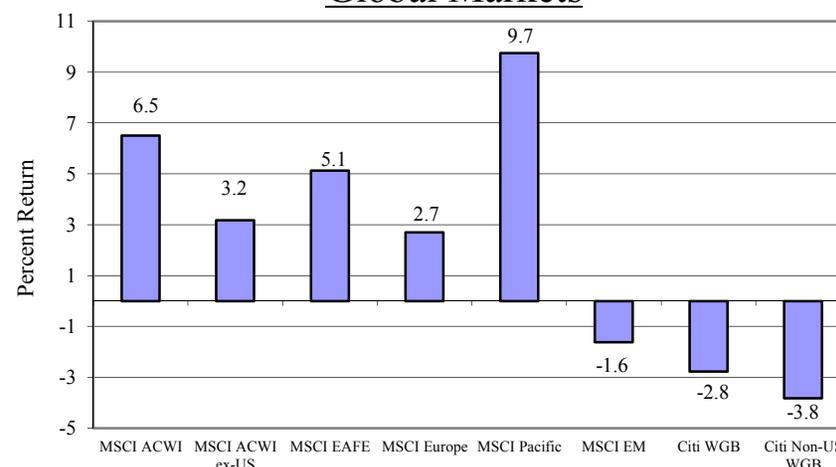
# Capital Markets Review

Q1 2013

## U.S. Markets



## Global Markets



### General Comments

Equity markets began the year on a positive note as concerns surrounding the US fiscal cliff dissipated after Congress agreed on a package of tax increases that proved less severe than originally proposed. In the US, the S&P 500 index rose 10.6% in the quarter. In Europe, Italian elections and the Cyprus *bail-in* led to a decline in sentiment for the euro and to higher spreads for Spanish sovereign debt, given the banking problems in Spain. The euro fell 2.6% against the dollar in the first quarter. Elsewhere, the Bank of Japan (BoJ) increased its inflation target to 2% and expectations that new BoJ governor Haruhiko Kuroda would move to ease further were surpassed. These moves helped to boost Japanese equities 11.7% in the quarter, while the yen fell 7.9% against the dollar. With the uncertainty in Europe potentially spreading abroad, emerging market equities lagged returns in the developed markets.

A recent Labor Department report shows the US unemployment rate experienced little change from the end of December to March at 7.6%. Total nonfarm employment increased by an average of just over 200,000 jobs per month from January to March on a seasonally adjusted basis. A preliminary release of Real GDP growth showed that it increased 2.5% in the first quarter, following a final 0.4% increase for the fourth quarter of 2012. The Consumer Price (all items) Index decreased 0.2% in March after rising 0.7% in February on the heels of the gasoline and energy indices, which also fell in March after rising sharply in February. Over the last 12 months, the all-items index increased by 1.5%.

Given improved investor confidence, safe-haven demand was subdued; Treasuries declined by about 0.2% in the quarter. Meanwhile, in the currency markets, European political uncertainty and Bank of Japan easing led to a quarterly increase in the trade-weighted U.S. dollar index of 4.3%.

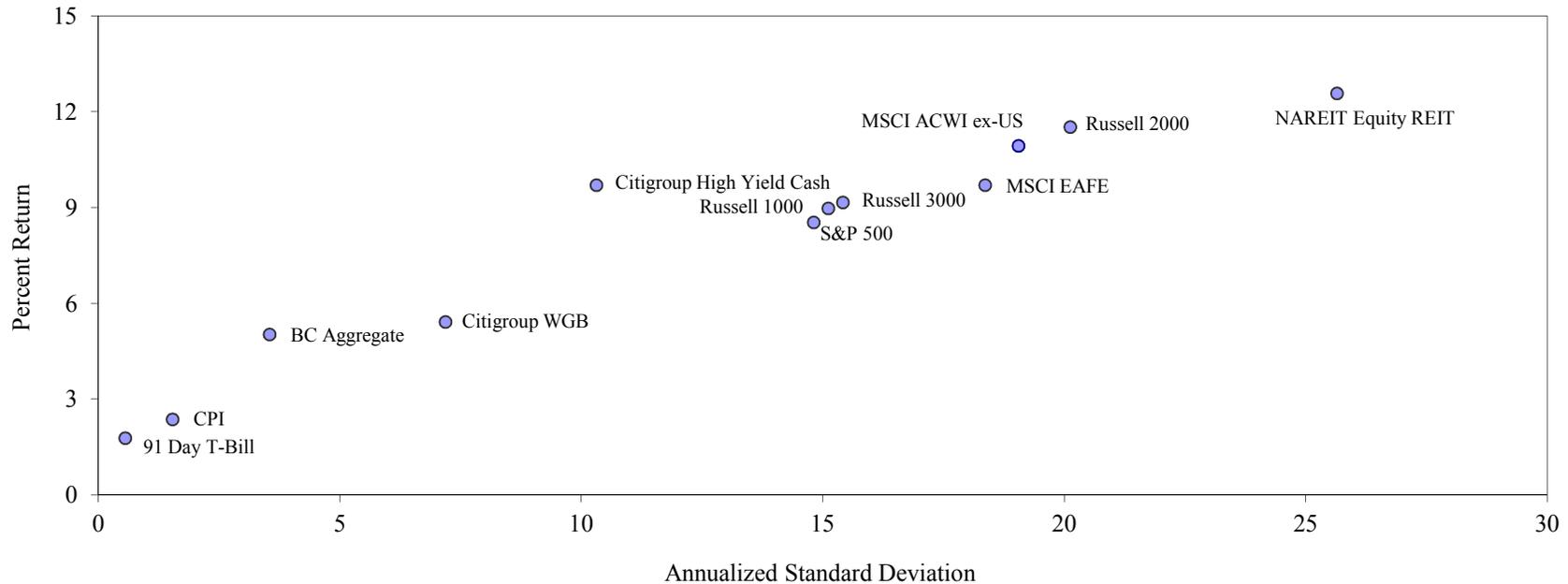
As a result of declining confidence in the North American and European regions, the Global ICI fell 3.4 points to 88.0 in March, remaining well below the neutral level of 100. The decrease in confidence was most pronounced in North America, where institutional investors' appetite for equities fell 4.2 points to 95.5. The State Street Investor Confidence Index® (ICI) measures risk appetite by analyzing buying and selling patterns of institutional investors.

# Capital Markets Review

Q1 2013

Total Returns in US\$								
	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	20 Years	10 Year Std. Dev.
91 Day T-Bill	0.02	0.02	0.12	0.11	0.35	1.77	3.19	0.56
BC Aggregate	-0.12	-0.12	3.77	5.52	5.47	5.02	6.12	3.55
Citigroup High Yield Cash	2.78	2.78	12.53	11.12	11.06	9.69	8.15	10.32
Citigroup World Gov't Bond	-2.77	-2.77	-0.67	3.86	2.77	5.42	5.91	7.19
S&P 500	10.61	10.61	13.96	12.67	5.81	8.53	8.53	14.82
Russell 3000	11.07	11.07	14.56	12.97	6.32	9.15	8.66	15.42
Russell 1000	10.96	10.96	14.43	12.93	6.15	8.97	8.69	15.12
Russell 2000	12.39	12.39	16.30	13.45	8.24	11.52	8.84	20.13
MSCI ACWI ex-US	3.17	3.17	8.36	4.41	-0.39	10.93		19.06
MSCI EAFE	5.13	5.13	11.25	5.00	-0.89	9.69	5.75	18.37
MSCI Emerging Markets	-1.62	-1.62	1.96	3.27	1.09	17.05		24.08
Nareit Equity REIT	8.10	8.10	17.11	17.68	7.10	12.57	10.50	25.65
CPI	1.38	1.38	1.47	2.27	1.74	2.37	2.45	1.54

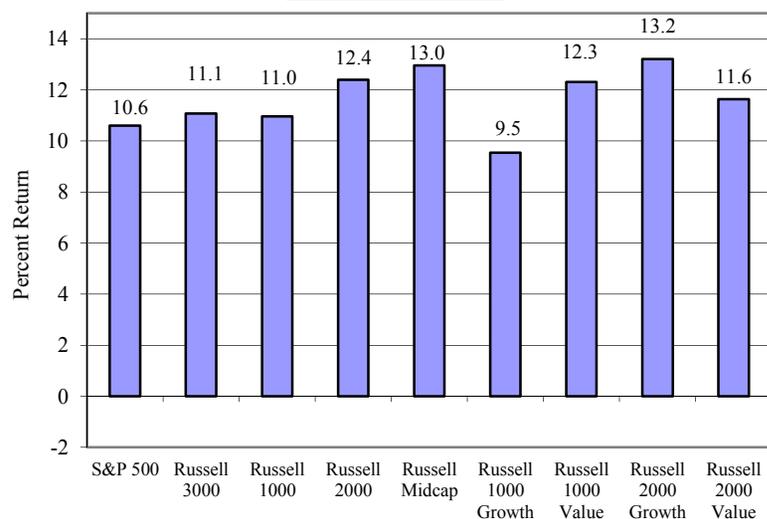
## Risk vs. Return - 10 Years



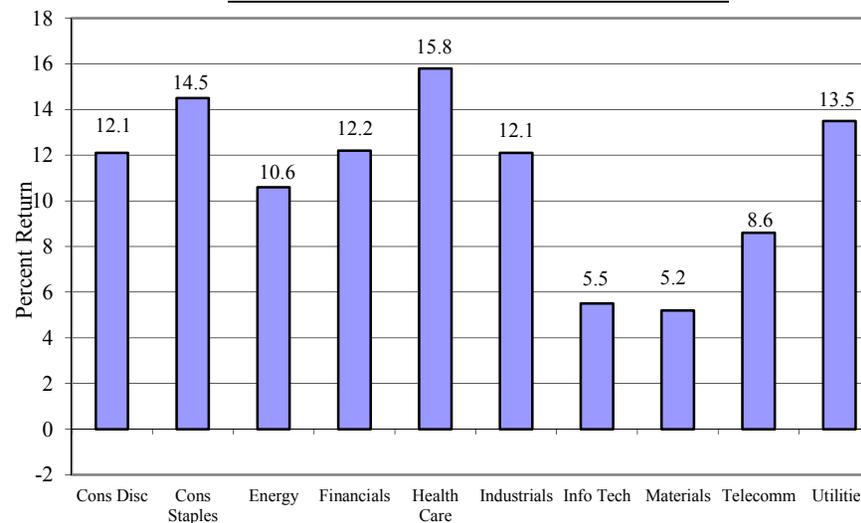
# U.S. Equity Market Review

Q1 2013

U.S. Markets



Economic Sector Performance



## U. S. Equity Market

U.S. Equity markets rallied after concerns over the fiscal cliff, the US sequestration and talk of a potential transition to a period of less Federal Reserve easing failed to diminish U.S. equity investors' optimism. Stronger economic data, including higher than expected February non-farm payrolls, also helped boost investors' appetite for smaller stocks.

With optimism on the rise, domestic investor inflows into US equity funds accelerated during the first three months of the year following a several-quarter long stretch of mostly outflows. Against this backdrop, the Russell 1000 Index returned nearly 11.0%, while mid and small caps performed even better, with the Russell Midcap and Russell 2000 posting gains in the 12.0% to 13.0% range. Overall, the Russell 3000 index returned 11.1% during the quarter while its yearly return was 14.6%.

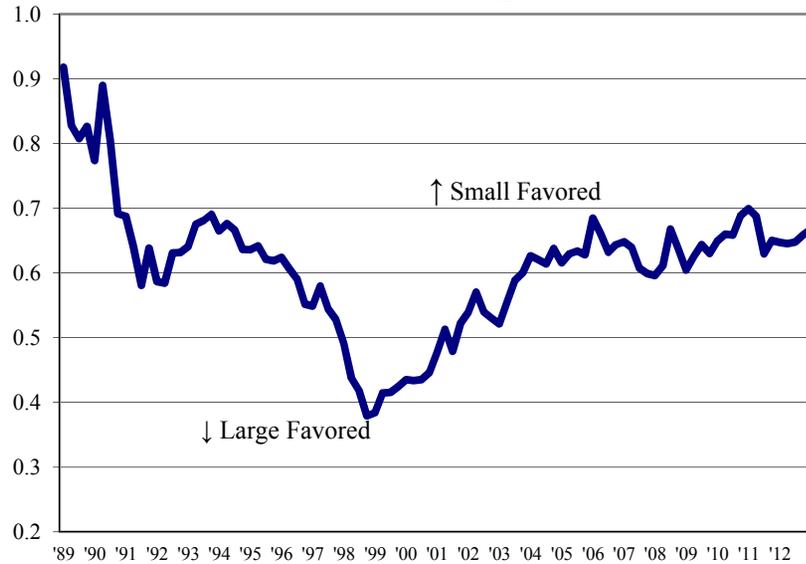
For large and midcap stocks, value indices outperformed growth indices in the quarter, due in part to strong relative performance from financials (a heavily weighted sector in value indices) and lagging results from technology (heavily weighted in growth indices). In the small cap arena, growth outperformed value.

Continued quantitative easing throughout the developed world and improved U.S. growth prospects helped boost the performance of sectors across the board; the healthcare sector returned 15.8% in the first quarter, while Utilities gained 13.5% and industrial stocks rose 12.1%. Information Technology and Materials lagged behind in the quarter with returns of 5.5% and 5.2%, respectively. For the year ended March 31, Health Care and Telecom Services were the top performing sectors, while Information Technology was actually negative for the year at -0.4%.

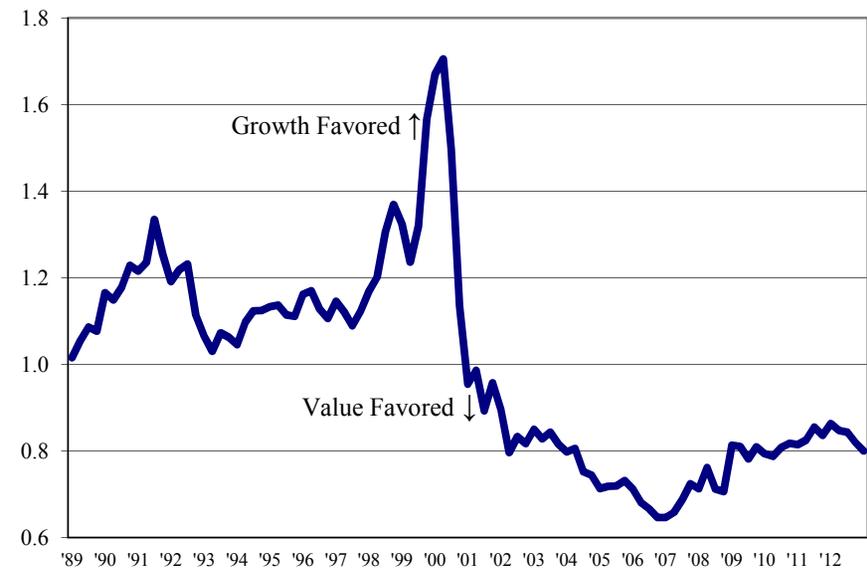
# U.S. Equity Market Review

Q1 2013

Small vs. Large



Growth vs. Value

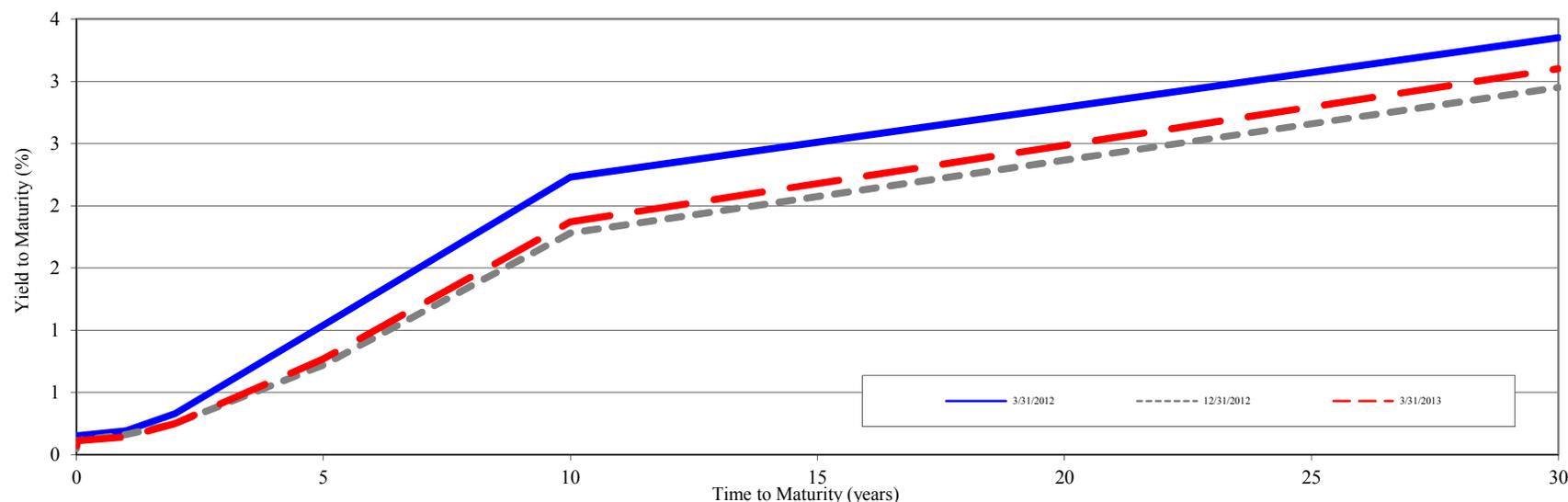


Total Returns	Quarter	Year	1	3	5	10	20
		to Date	Year	Years	Years	Years	Years
S&P 500	10.61	10.61	13.96	12.67	5.81	8.53	8.53
Russell 3000	11.07	11.07	14.56	12.97	6.32	9.15	8.66
Russell 1000	10.96	10.96	14.43	12.93	6.15	8.97	8.69
Russell 2000	12.39	12.39	16.30	13.45	8.24	11.52	8.84
Russell Midcap	12.96	12.96	17.30	14.62	8.37	12.27	10.66
Russell 1000 Growth	9.54	9.54	10.09	13.06	7.30	8.62	7.65
Russell 1000 Value	12.31	12.31	18.77	12.74	4.85	9.18	9.21
Russell 2000 Growth	13.21	13.21	14.52	14.75	9.04	11.61	6.91
Russell 2000 Value	11.63	11.63	18.09	12.12	7.29	11.29	10.27

# U.S. Fixed Income Market Review

Q1 2013

## Treasury Yield Curve



### U. S. Fixed Income Market

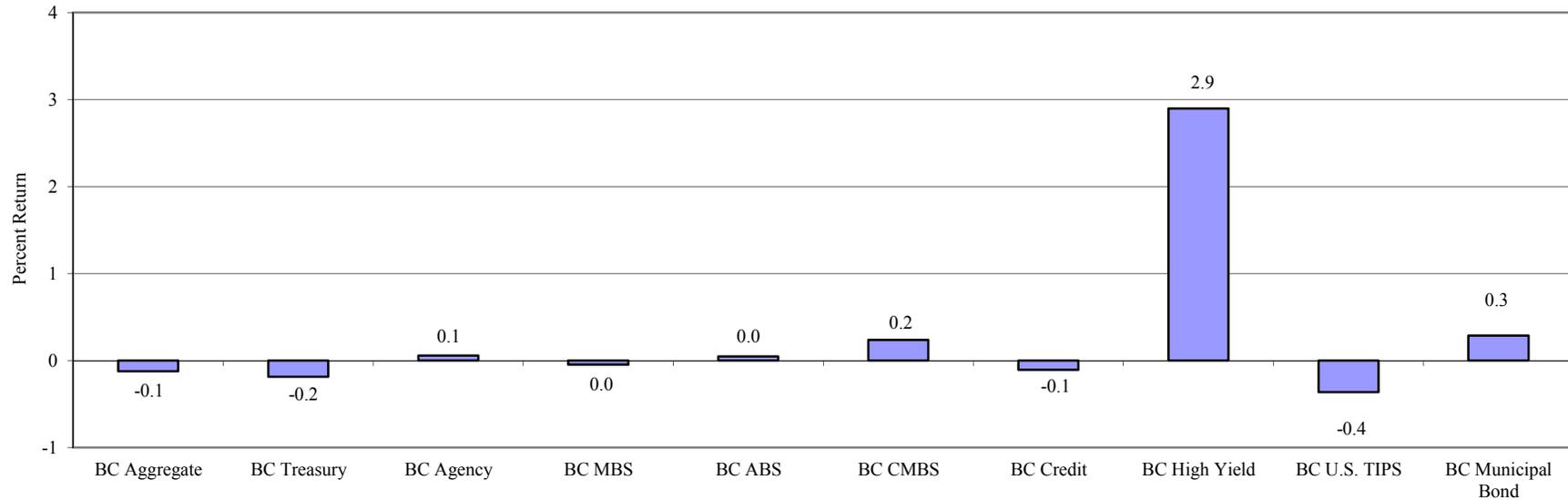
The first quarter of 2013 turned out pretty much as expected - a low volatility environment with the level of bond yields and credit spreads remaining relatively stable. The year started off with investors putting behind fears over fiscal matters and European markets. Cash seemed to come in off the sidelines, with strong inflows into fixed income funds. As the quarter wore on, however, Europe turned more worrisome and the outlook for growth diminished everywhere except in the US. For US investors, the dollar rallied and *risk on* bets paid off in equities, US high yield bonds, bank loans, and emerging market corporates. Investment grade sector returns generally included only modest increases and a few small declines. Similarly, US Governments showed small gains for short-to-intermediate notes and outright losses for longer bonds. With improvements in the labor and housing markets, investors debated the possibility that the Federal Reserve might end its extraordinarily loose monetary policy sooner than previously expected, putting upward pressure on US Treasury yields. However, continued turmoil in Europe dampened the move, reminding investors that US Treasuries still have the perceived safe haven appeal, albeit with stingy yields. The yield on the benchmark 10-year Treasury began the quarter at 1.76% but ended it at 1.84%, after hitting an intra-quarter high of 2.06% in mid-March. Overall, the U.S. yield curve steepened on a quarterly basis with thirty-year yields rising 15 basis points during the quarter.

Agency-backed mortgage securities were flat in the quarter with MBS lagging and CMBS eking out a small gain as the grab for yield and improving commercial real estate fundamentals continued to draw in buyers. In the US investment grade corporate market, spreads were relatively tight, generating a return slightly better than Treasuries. Lower quality (BBB-rated) bonds performed the best. Financials continued their dominance with gains of 0.9% for the quarter compared to losses of 0.7% for industrials. With a gain of 2.9%, the US high yield market was one of the best-performing sectors in the fixed income universe. Despite investor caution regarding tight valuations on high yield offerings, demand remained strong. Similarly, high yield bank loans generated attractive returns, albeit lower than the performance of high yield bonds. Investors were drawn to the relative safety of loans, given their senior position in the capital structure, yet ample yield relative to other sectors. New issuance surged as issuers refinanced into lower-rate debt, but the supply was easily absorbed by record inflows into bank loan mutual funds and ETFs.

# U.S. Fixed Income Market Review

Q1 2013

## U.S. Bond Sector Performance



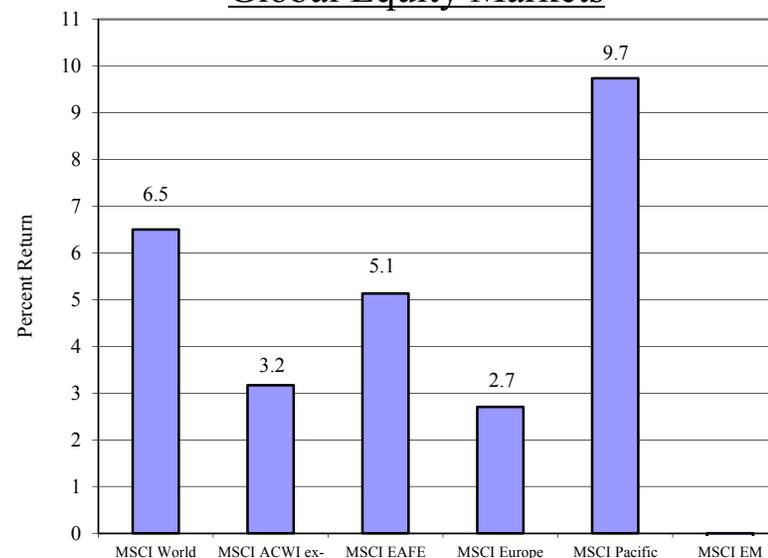
Total Returns	Quarter	Year	1	3	5	10	20
		to Date	Year	Years	Years	Years	Years
BC Aggregate	-0.12	-0.12	3.77	5.52	5.47	5.02	6.12
BC Treasury	-0.19	-0.19	3.14	5.39	4.45	4.63	5.89
BC Agency	0.06	0.06	2.26	3.42	3.75	4.12	5.69
BC MBS	-0.05	-0.05	1.97	4.17	5.15	4.98	6.01
BC ABS	0.05	0.05	2.85	4.13	5.08	3.78	5.37
BC CMBS	0.24	0.24	6.58	9.20	7.88	5.36	
BC Credit	-0.11	-0.11	7.47	8.12	7.88	6.05	6.78
BC High Yield	2.90	2.90	13.15	11.29	11.66	10.06	
BC U.S. TIPS	-0.36	-0.36	5.68	8.57	5.89	6.32	
BC Municipal Bond	0.29	0.29	5.25	6.23	6.10	5.01	5.73

# Global Equity Market Review

Q1 2013

Total Net Returns in US\$			1	3	5	10	20
	Quarter	CYTD	Year	Years	Years	Years	Years
MSCI World	6.50	6.50	10.55	7.78	2.06	9.36	
MSCI ACWI ex-US	3.17	3.17	8.36	4.41	-0.39	10.93	
MSCI EAFE	5.13	5.13	11.25	5.00	-0.89	9.69	5.75
MSCI EAFE Hedged	9.56	9.56	16.89	4.70	1.27	8.08	5.64
MSCI Europe	2.71	2.71	10.56	4.80	-2.08	9.72	7.97
MSCI Pacific	9.74	9.74	12.85	5.72	1.85	9.64	2.85
MSCI Emerging Markets	-1.62	-1.62	1.96	3.27	1.09	17.05	
MSCI UK	2.48	2.48	9.75	7.99	0.70	9.30	7.56
MSCI Japan	11.63	11.63	8.54	3.35	-0.52	6.96	0.76

Global Equity Markets



## Non-US Equity Markets

Global equities tended to lag the US in the first quarter. The MSCI All Country World Index ex US posted a gain of only 3.2% (in US-dollar terms), and emerging markets, as measured by the MSCI Emerging Markets Index, actually fell 1.6% in the quarter.

Boosting sentiment was increased monetary policy in Japan, which helped the MSCI EAFE index to a 5.2% increase in the quarter. Also in Japan, the nomination of the dovish Hiruhiko Kuroda as Bank of Japan Governor and a weaker yen increased appetite for equities in Japan, where stocks rose 11.7% in the quarter. In the Eurozone, Europe ex-UK equities increased 3.0% in the quarter as the ECB's OMT program offset Italian political uncertainty and the Cyprus *bail-in*.

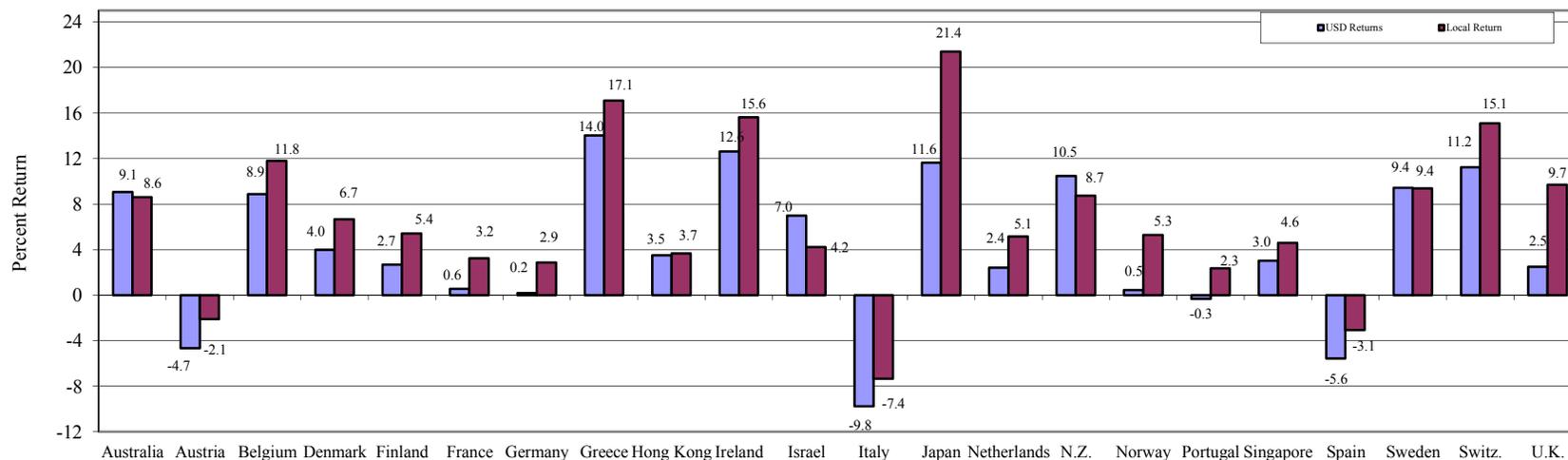
Emerging market equities underperformed in the first quarter as developed market growth concerns permeated the emerging markets. Value stocks in emerging markets underperformed, falling 2.4% in the quarter. On a regional basis, Latin America outperformed, rising 0.9% in the first quarter, perhaps driven by the region's exposure to higher growth in the U.S. South African equities fell 8.9% on a quarterly basis, driven by concerns regarding strikes in the mining sector and the country's exposure to Europe. And emerging market nations such as the BRIC countries (Brazil, Russia, India and China) saw their markets struggle with potentially slower growth, higher inflation or both.

In the currency markets, the euro fell 2.6% against the dollar in the quarter as political uncertainty came to the fore of investors' minds. As mentioned above, dovish monetary policy in Japan led to continued declines in the yen, which fell 7.9% against the dollar in the first quarter. The U.S. dollar trade-weighted index, which measures the dollar's movement against a basket of currencies, rose 4.3% in the quarter.

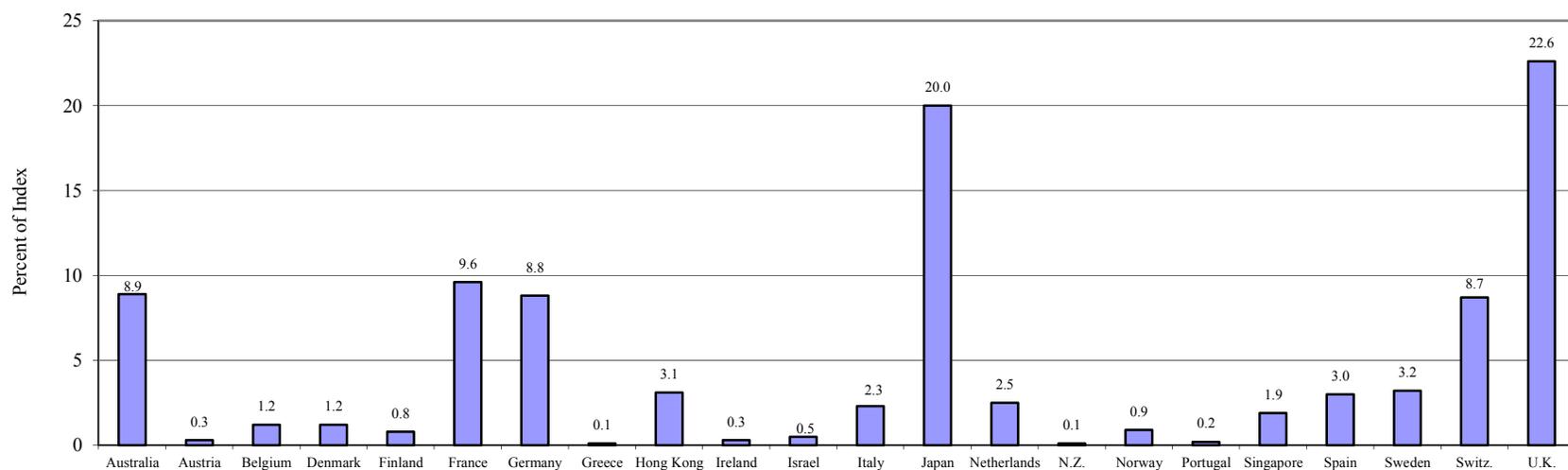
# Global Equity Market Review

Q1 2013

## MSCI EAFE Country Returns



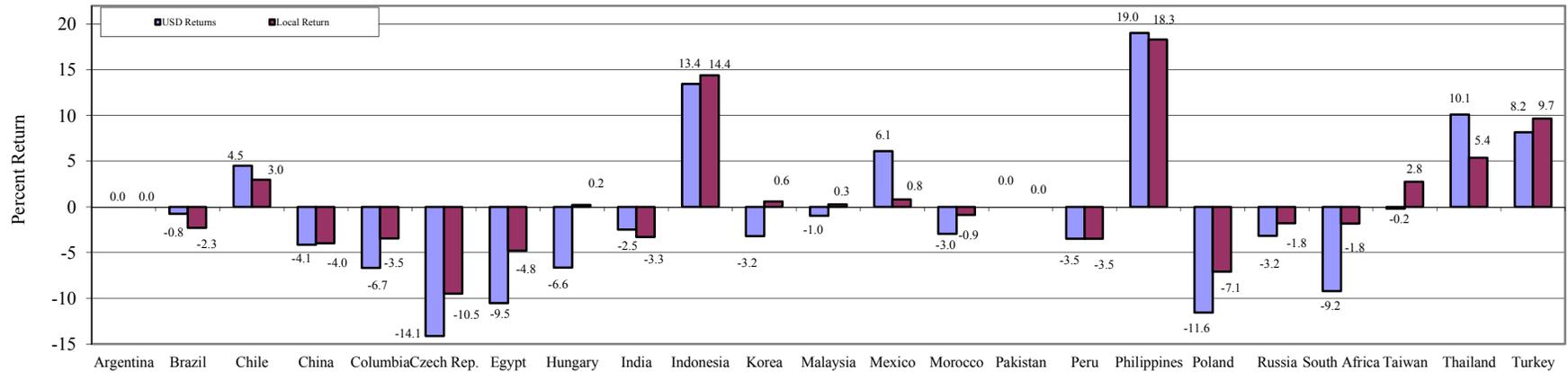
## MSCI EAFE Country Weights



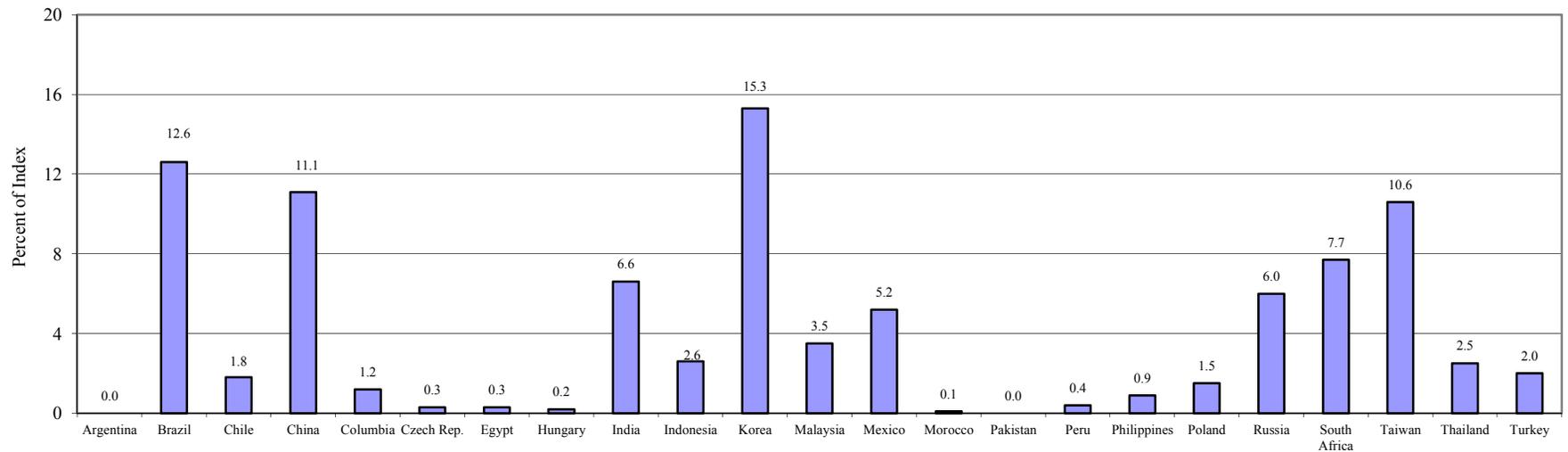
# Global Equity Market Review

Q1 2013

## MSCI Emerging Markets Country Returns



## MSCI Emerging Markets Country Weights



## OIC Regular Account Performance Report

Net of Fees

Periods Ending March 31, 2013

	3 Year %	5 Year %	7 Year %	10 Year %
<b>Have Returns affected benefit security?</b>				
1. Total Regular Account	10.21	4.67	5.35	9.39
2. Actuarial Discount Rate	8.00	8.00	8.00	8.00
3. Out/Under Performance (1 - 2)	2.21	(3.33)	(2.65)	1.39
<b>Has plan been rewarded for capital market risk?</b>				
4. Policy Return	9.61	4.75	5.60	9.03
5. Minimum Risk/High Cost Policy of 91-Day T-Bills	0.11	0.35	1.63	1.77
6. Impact of Asset Mix Policy (4 - 5)	9.49	4.40	3.97	7.26
<b>Has plan been rewarded for active management risk?</b>				
7. Net Active Management Effect (1 -4)	0.60	(0.08)	(0.25)	0.36

# State of Oregon

## Total Fund Summary

### Quarter Ending March 31, 2013

**Total Fund:**

The Total Regular Account rose 4.40% in the first quarter of 2013, significantly outperforming its benchmark, the OPERF Policy Benchmark by 84 BP's. For the year ended March 31, 2013, the Regular Account gained 11.77%, to lead the benchmark by 54 BP's. When compared with its Wilshire TUCS peer group of all public funds greater than \$1B (page 15), the Plan slipped to the 72<sup>nd</sup> percentile for the quarter, but remained at the third percentile for the year ended March 31.

**Key Factors Contributing to Performance:**

The Total Plan Attribution for the first quarter (page 16) shows that Selection in Private Equity (+ 45 BP's), Public Equity (+ 39 BP's) and Real Estate (+ 30 BP's) were the primary drivers, respectively, of the positive net performance in the quarter. The underweight in Public Equity (allocation) detracted from the performance by 27 BP's, while the overweight in Private Equity subtracted 18 BP's. For the trailing twelve month, Selection in Public Equity (+ 56 BP's), Real Estate (+ 48 BP's) and in Fixed Income (+35 BP's) were the chief contributors to the excess return, while Private Equity Selection subtracted 139 BP's.

With a return of 11.08% in the quarter, the Domestic Equity portfolio edged out its benchmark, the Russell 3000 Index, by one basis point, which placed it at the 41<sup>st</sup> percentile of the TUCS' rankings of US Equity pools of Public Funds greater than \$1B. For the trailing twelve months, the portfolio underperformed the benchmark by 81 BP's with a return of 13.76%. The portfolio was ranked squarely at the median return of the peer group (50<sup>th</sup> percentile) for this period.

The International Equity portfolio performed well in the quarter, topping its benchmark, the MSCI ACWI ex US IMI (net) Index, by 94 BP's, with a return of 4.51%. It was not alone, however, as the performance placed the portfolio at the 35<sup>th</sup> percentile against its peers in the TUCS' International Equity pools of Public Funds. For the year ended March 31, the portfolio remained in double figures, returning 10.47% to better the benchmark by 186 BP's and finish at the 38<sup>th</sup> percentile in the peer group.

The PERS Total Fixed Income portfolio returned 79 BP's in the quarter to once again outperform its benchmark, the Custom Fixed Income Benchmark (see footnote, Page 13) by 27 BP's. This also led to 31<sup>st</sup> percentile ranking for the portfolio in its peer group, TUCS' US Fixed Income Pools of Public Funds > \$1B. For the trailing twelve months, the portfolio earned a return of 7.83%, topping the benchmark by 108 BP's, and placing it at 21<sup>st</sup> percentile of its peer group for the period.

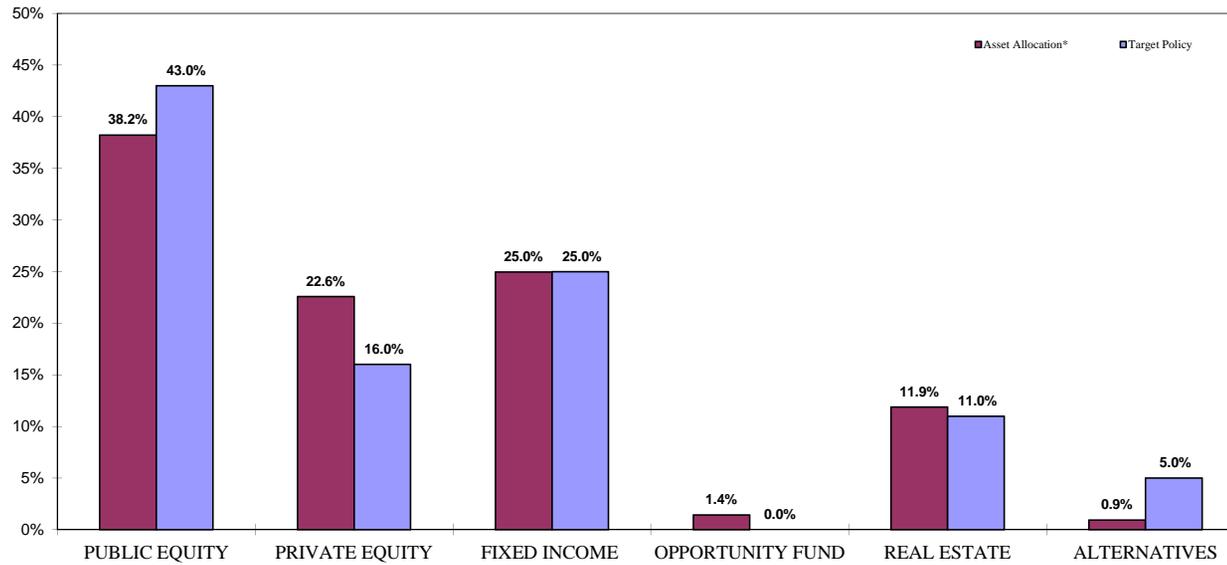
Among the non-marketable holdings, the Private Equity portfolio continued to perform well, outperforming its public equity benchmark (1-quarter lagged Russell 3000 Index plus 300 BP's) by 200 BP's in the quarter. When compared against its peers (TUCS' Total Private Equity Returns of Public Plans > \$1B), the portfolio placed at the 40<sup>th</sup> percentile. For the year ended March 31, the portfolio returned 14.05% to place at the 22<sup>nd</sup> percentile. Meanwhile, the Real Estate portfolio returned 5.09% in the quarter, doubling the benchmark, the NCREIF Property Index (1-quarter lag), return of 2.54%, and placing at the fifth percentile among TUCS' US Real Estate investment pools. For the trailing twelve months, the portfolio rose 14.90% to continue its outperformance of the benchmark by 435 BP's and to place the portfolio at the 18<sup>th</sup> percentile in the peer group.

TUCS Universe: Public Funds \$1 Billion or Larger (rankings based on gross returns)

Private Equity returns, other than year end, are reported Net of fees in the TUCS Universe

**State of Oregon**  
**Total Regular Account Asset Allocation**  
**As of March 31, 2013**

Asset Allocation (% Percent) vs. Target Policy



WEIGHTS				
	Asset Allocation*	Target Policy	Difference	Median (TUCS) Public Fund > \$1 B Universe
PUBLIC EQUITY	38.2%	43.0%	-4.8%	55.6%
PRIVATE EQUITY	22.6%	16.0%	6.6%	8.1%
FIXED INCOME	25.0%	25.0%	0.0%	22.9%
OPPORTUNITY FUND	1.4%	0.0%	1.4%	N/A
REAL ESTATE	11.9%	11.0%	0.9%	3.3%
ALTERNATIVES	0.9%	5.0%	-4.1%	N/A
CASH	0.0%	0.0%	0.0%	3.6%
TOTAL PLAN	100.0%	100.0%	0.0%	

\*Asset class allocations reflect the impact of the overlay program.

**State Of Oregon**  
**Total Fund Return Table**  
**Rates Of Return**  
**Periods Ending March 31, 2013**

	Market Value \$(M)	Current Quarter	YTD	1 Year	3 Years	5 Years	7 Years	10 Years	Inception to Date	Inception Date
<b>FUNDS</b>										
TOTAL REGULAR ACCOUNT	\$62,178,931	4.40	4.40	11.77	10.21	4.67	5.35	9.39	7.44	07/01/1997
<i>OPERF POLICY BENCHMARK</i>		3.56	3.56	11.24	9.61	4.75	5.60	9.03		
PUBLIC FUNDS > \$1 BILLION RANK*		72	72	3	10	51	26	8		
PUBLIC FUNDS > \$10 BILLION RANK*		67	67	5	10	44	22	5		
TOTAL DOMESTIC EQUITY	\$10,795,313	11.08	11.08	13.76	12.96	6.33	4.79	9.30	10.01	04/01/1971
<i>RUSSELL 3000</i>		11.07	11.07	14.56	12.97	6.32	5.14	9.15		
US EQUITY POOLS*		41	41	50	12	21	37	18		
TOTAL INTERNATIONAL EQUITY	\$11,776,023	4.51	4.51	10.47	6.14	1.52	3.92	12.28	10.93	04/01/1985
<i>OREGON MSCI ACWI EX US IMI NET</i>		3.57	3.57	8.62	4.71	0.07	3.10	11.41		
INTERNATIONAL EQUITY POOLS*		35	35	38	14	17	18	18		
TOTAL GLOBAL EQUITY	\$735,201	9.28	9.28	9.15	4.37	-1.68			-2.16	03/01/2007
<i>OREGON MSCI ACWI VALUE NET INDEX</i>		6.42	6.42	11.27	6.76	1.48				
TOTAL FIXED INCOME	\$14,298,595	0.79	0.79	7.83	8.04	8.25	7.36	6.79	8.43	01/01/1988
<i>CUSTOM FIXED INCOME BENCHMARK</i>		0.52	0.52	6.76	6.37	6.04	6.22	5.47		
US FIXED INCOME POOLS*		31	31	21	25	15	15	12		
TOTAL REAL ESTATE <sup>1</sup>	\$7,402,164	5.09	5.09	14.90	14.31	0.60	3.90	10.79	10.15	12/01/1996
<i>NCREIF PROPERTY ONE QTR LAG</i>		2.54	2.54	10.54	12.63	2.13	5.97	8.44		
REAL ESTATE POOLS*		5	5	18	31	33	15	1		
TOTAL PRIVATE EQUITY <sup>2</sup>	\$14,078,707	2.99	2.99	14.05	13.06	5.59	9.54	13.64	10.95	07/01/1997
<i>RUSSELL 3000 + 300 BPS QTR LAG</i>		0.99	0.99	19.86	14.51	5.92	8.01	11.61		
US PRIVATE EQUITY*		40	40	22	43	28	29	18		
TOTAL OPPORTUNITY PORTFOLIO	\$891,514	3.98	3.98	15.38	11.69	7.89			6.30	09/01/2006
<i>RUSSELL 3000</i>		11.07	11.07	14.56	12.97	6.32				
<i>CPI + 5%</i>		2.62	2.62	6.54	7.37	6.82				
ALTERNATIVES PORTFOLIO	\$591,301	2.48	2.48	1.41					1.86	07/01/2011
<i>CPI + 4%</i>		2.38	2.38	2.38						
OST SHORT TERM FUND - PERS	\$1,161,791	0.19	0.19	1.03	0.81	1.09	2.25	2.23	3.96	12/01/1989
<i>91 DAY T-BILL</i>		0.02	0.02	0.12	0.11	0.35	1.63	1.77		

<sup>1</sup>Publicly traded real estate securities are current quarter; all others are 1 quarter lagged

<sup>2</sup>Private Equity returns lagged one quarter

<sup>3</sup>Prior to 2/28/2011, Index is Oregon Custom FI 90/10 Benchmark (90% BC U.S. Universal/10% SSB Non-US World Govt. Bond Hedged Index). From 3/1/2011 to current, Index is Oregon Custom FI Benchmark (60% BC US Universal Index, 20% S&P/LSTA Leveraged Loan Index, 10% JMP EMBI Global Index, and 10% BofA ML High Yield Master II Index).

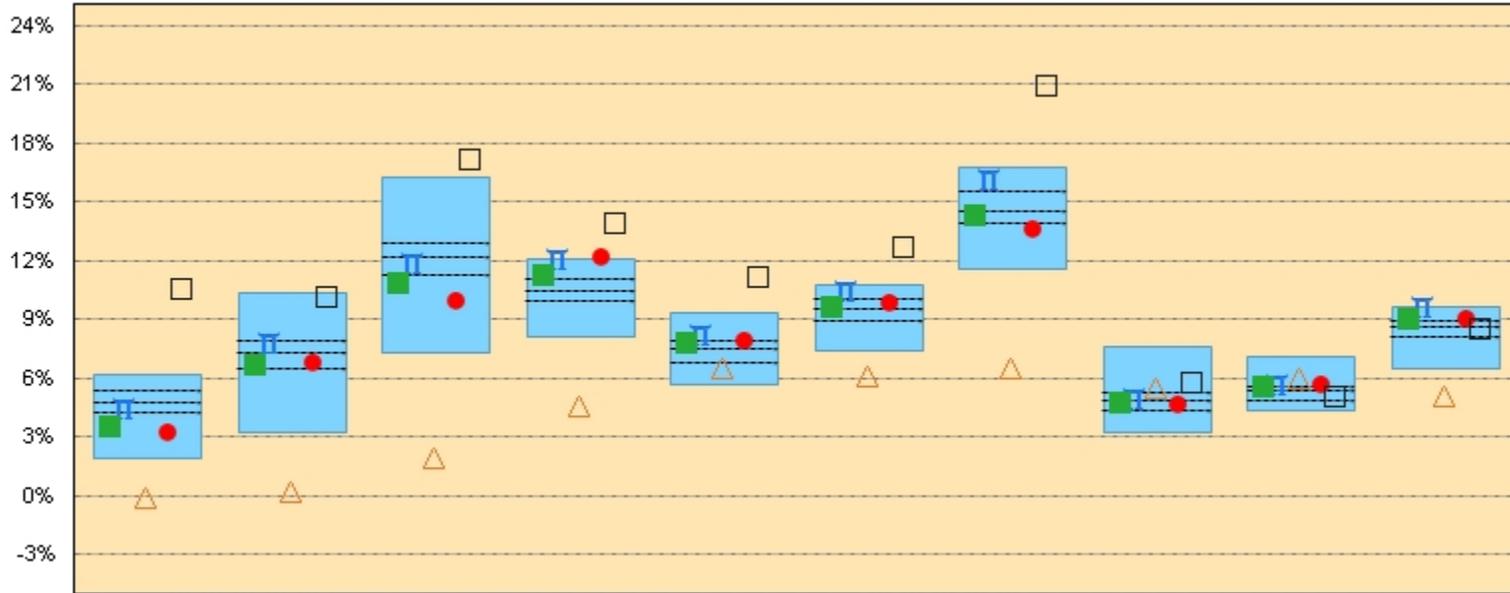
\*Ranking source: TUCS Universe, based on gross returns

Private Equity returns, other than year end, are reported Net of fees in the TUCS Universe

Assets not listed above include a total of \$301.330 invested in the Overlay, Total Closed Global Equity, Transition Account, Transitional Managers, Shott Capital, and Fixed Income Transition Account.

# State of Oregon Performance Comparison

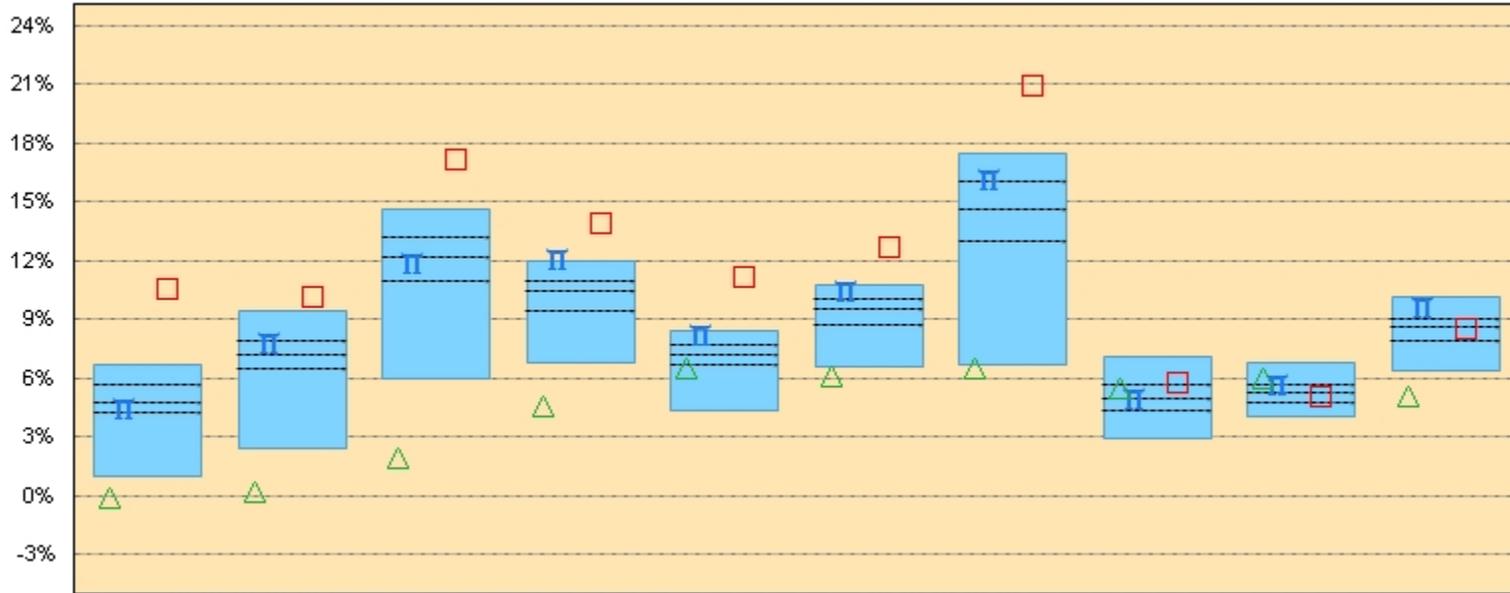
Total Returns of Public Funds > \$10 Billion  
Cumulative Periods Ending : March 31, 2013



Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	6.14	10.33	16.28	12.06	9.35	10.75	16.79	7.65	7.13	9.67
25th	5.38	7.87	12.89	11.11	7.91	10.03	15.54	5.27	5.62	8.92
50th	4.76	7.28	12.15	10.50	7.50	9.50	14.50	4.85	5.35	8.62
75th	4.21	6.53	11.27	9.90	6.79	8.89	13.93	4.33	4.89	8.16
95th	1.94	3.19	7.34	8.16	5.63	7.37	11.61	3.26	4.36	6.46
<b>No. Of Obs</b>	<b>43</b>	<b>43</b>	<b>42</b>	<b>42</b>	<b>42</b>	<b>39</b>	<b>38</b>	<b>38</b>	<b>38</b>	<b>36</b>
<b>II Total Regular Account</b>	4.46 (67)	7.77 (27)	11.87 (62)	12.06 (5)	8.19 (12)	10.48 (10)	16.20 (15)	4.94 (44)	5.63 (22)	9.67 (5)
<b>● Actual Allocation Retu</b>	3.24 (94)	6.80 (70)	9.90 (91)	12.16 (1)	7.90 (25)	9.85 (37)	13.62 (77)	4.67 (55)	5.65 (20)	9.05 (14)
<b>■ OPERF Policy Benchmark</b>	3.56 (89)	6.73 (72)	10.83 (87)	11.24 (14)	7.78 (30)	9.61 (45)	14.37 (52)	4.75 (52)	5.60 (25)	9.04 (14)
<b>□ S&amp;P 500</b>	10.61 (1)	10.19 (5)	17.18 (1)	13.95 (1)	11.21 (1)	12.67 (1)	20.97 (1)	5.81 (15)	5.02 (72)	8.53 (55)
<b>△ Barclays Govt/Credit</b>	-0.16 (100)	0.21 (100)	1.94 (100)	4.56 (100)	6.52 (87)	6.10 (100)	6.45 (100)	5.50 (22)	6.03 (13)	5.06 (100)

# State of Oregon Performance Comparison

Total Returns of Master Trusts - Public : Plans > \$1 Billion  
Cumulative Periods Ending : March 31, 2013



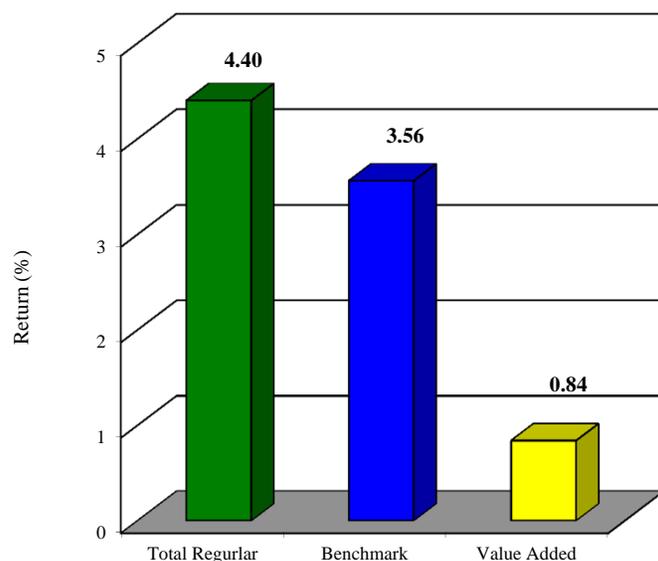
Percentile Rankings	1 Qtr	2 Qtrs	3 Qtrs	1 Year	2 Years	3 Years	4 Years	5 Years	7 Years	10 Years
5th	6.69	9.41	14.60	11.94	8.39	10.75	17.50	7.08	6.81	10.19
25th	5.64	7.90	13.18	10.99	7.74	10.05	16.00	5.66	5.68	9.05
50th	4.81	7.21	12.15	10.42	7.16	9.57	14.62	4.96	5.30	8.59
75th	4.30	6.51	10.92	9.39	6.69	8.76	12.96	4.33	4.79	7.88
95th	0.99	2.43	6.00	6.76	4.31	6.63	6.70	2.97	4.03	6.37
<b>No. Of Obs</b>	<b>74</b>	<b>73</b>	<b>72</b>	<b>71</b>	<b>69</b>	<b>64</b>	<b>63</b>	<b>63</b>	<b>61</b>	<b>56</b>
<b>Total Regular Account</b>	4.46 (72)	7.77 (29)	11.87 (56)	12.06 (3)	8.19 (8)	10.48 (10)	16.20 (21)	4.94 (51)	5.63 (26)	9.67 (8)
<b>S&amp;P 500</b>	10.61 (1)	10.19 (2)	17.18 (1)	13.95 (1)	11.21 (1)	12.67 (1)	20.97 (1)	5.81 (20)	5.02 (68)	8.53 (51)
<b>Barclays Govt/Credit</b>	-0.16 (100)	0.21 (99)	1.94 (97)	4.56 (96)	6.52 (81)	6.10 (95)	6.45 (95)	5.50 (31)	6.03 (15)	5.06 (97)

# Total Plan Attribution

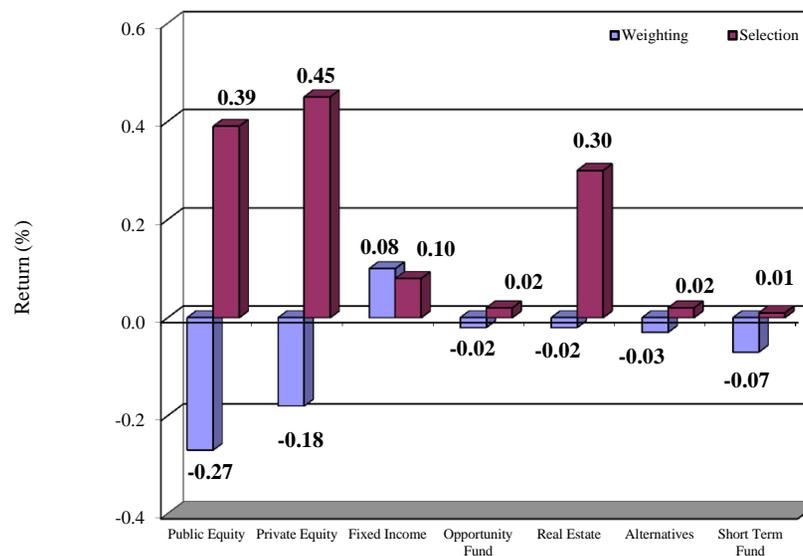
## Regular Account

December 31, 2012 - March 31, 2013

**Return vs. Benchmark**



**Value Added Attribution**



	WEIGHTS			RETURNS			VALUE ADDED		
	Portfolio*	Benchmark**	Difference	Portfolio***	Benchmark	Difference	Weighting	Selection	Timing
Public Equity	36.04	46.00	-9.96	7.63	6.50	1.13	-0.27	0.39	
Private Equity	23.44	16.00	7.44	2.99	0.99	2.00	-0.18	0.45	
Fixed Income	23.79	27.00	-3.21	0.89	0.52	0.37	0.10	0.08	
Opportunity Fund	1.62	0.00	1.62	3.98	2.62	1.36	-0.02	0.02	
Real Estate	12.20	11.00	1.20	5.09	2.54	2.55	-0.02	0.30	
Alternatives	0.76	0.00	0.76	2.48	2.94	-0.46	-0.03	0.02	
Short Term Fund	2.14	0.00	2.14	0.29	0.02	0.27	-0.07	0.01	
<b>Total Regular Account</b>	<b>100.00</b>	<b>100.00</b>	<b>0.00</b>	<b>4.40</b>	<b>3.56</b>	<b>0.84</b>	<b>-0.49</b>	<b>1.28</b>	<b>0.02</b>

\* Weights of Portfolios based on beginning of period valuations.

\*\* Weights of Benchmarks based on Average weights over entire period.

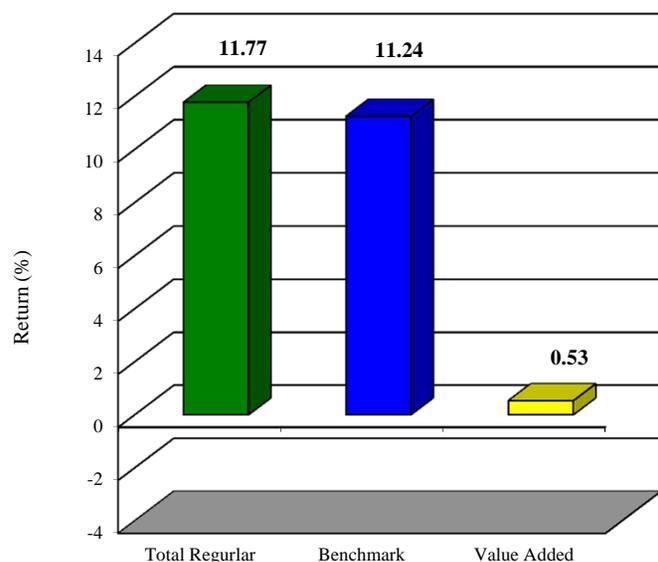
\*\*\* Asset Class Returns reflect the impact of the overlay program.

# Total Plan Attribution

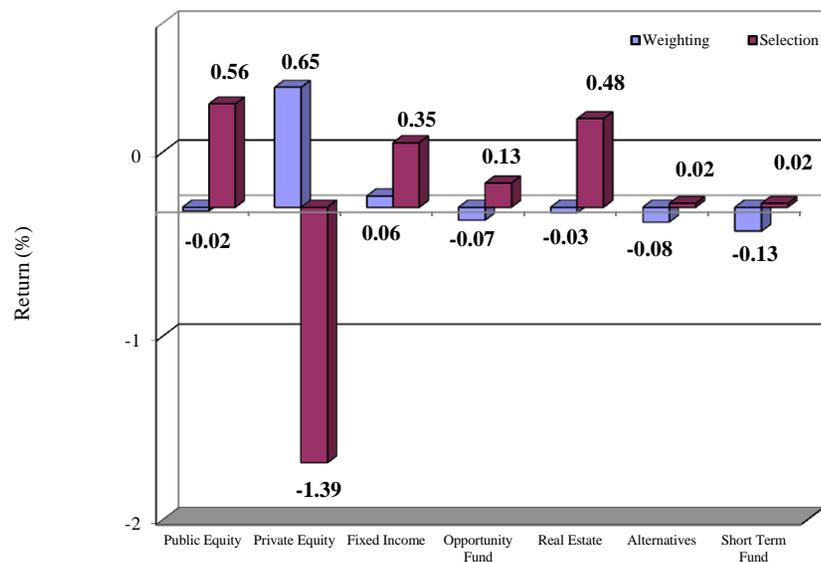
## Regular Account

March 31, 2012 - March 31, 2013

**Return vs. Benchmark**



**Value Added Attribution**



	WEIGHTS			RETURNS			VALUE ADDED		
	Portfolio*	Benchmark**	Difference	Portfolio***	Benchmark	Difference	Weighting	Selection	Timing
Public Equity	38.08	46.00	-7.92	12.26	10.55	1.71	-0.02	0.56	
Private Equity	23.99	16.00	7.99	14.05	19.86	-5.81	0.65	-1.39	
Fixed Income	23.15	27.00	-3.85	8.29	6.76	1.53	0.06	0.35	
Opportunity Fund	1.69	0.00	1.69	15.38	6.54	8.84	-0.07	0.13	
Real Estate	11.44	11.00	0.44	14.90	10.54	4.36	-0.03	0.48	
Alternatives	0.66	0.00	0.66	1.41	5.53	-4.12	-0.08	0.02	
Short Term Fund	0.98	0.00	0.98	1.50	0.12	1.38	-0.13	0.02	
<b>Total Regular Account</b>	<b>100.00</b>	<b>100.00</b>	<b>0.00</b>	<b>11.77</b>	<b>11.24</b>	<b>0.53</b>	<b>0.38</b>	<b>0.16</b>	<b>-0.06</b>

\* Weights of Portfolios based on beginning of period valuations.

\*\* Weights of Benchmarks based on Average weights over entire period.

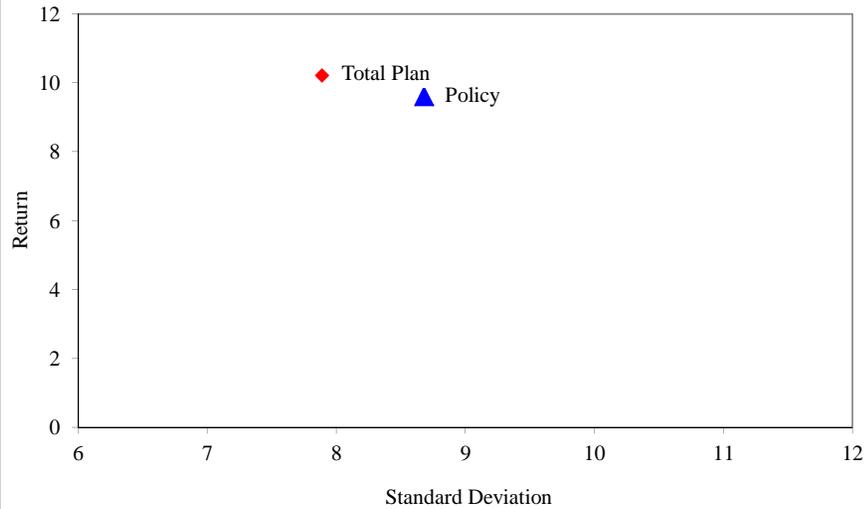
\*\*\* Asset Class Returns reflect the impact of the overlay program.

# Total Regular Account

## Total Risk vs. Return (OPERF Policy)

### As of March 31, 2013

#### 3 Year Risk Analysis



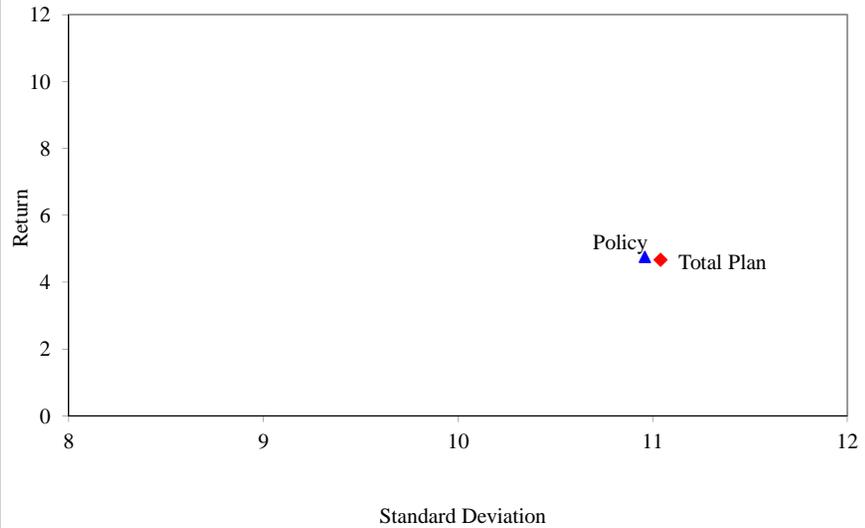
#### Risk Information

Portfolio Return	10.21
Benchmark Return	9.61
Return Difference	0.60
Portfolio Standard Deviation	7.89
Benchmark Standard Deviation	8.68
Tracking Error	1.92

#### Risk Statistics

Historic Beta	0.89
R-Squared	0.96
Jensens Alpha	1.67
Sharpe Ratio	1.28
Treynor Ratio	11.37
Information Ratio	0.31

#### 5 Year Risk Analysis



#### Risk Information

Portfolio Return	4.67
Benchmark Return	4.75
Return Difference	-0.08
Portfolio Standard Deviation	11.04
Benchmark Standard Deviation	10.96
Tracking Error	2.52

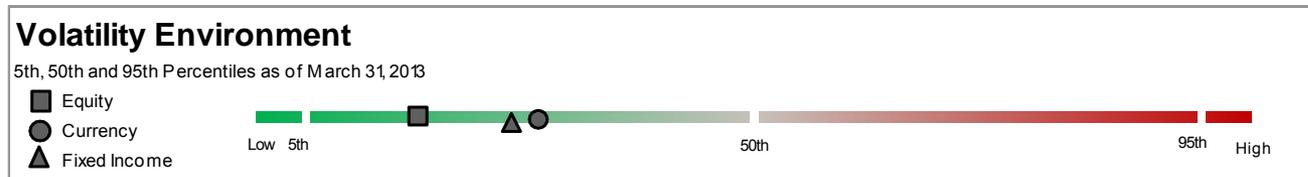
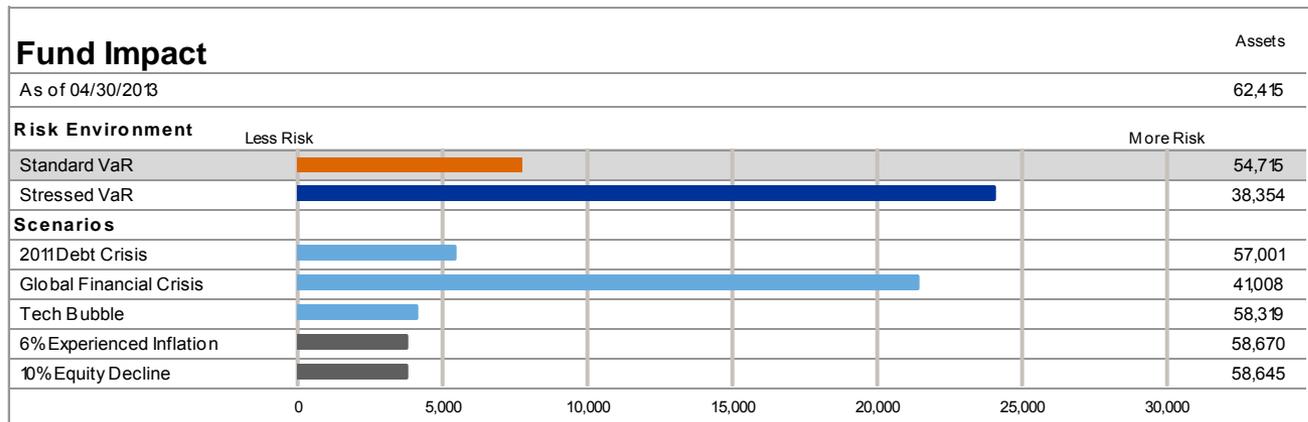
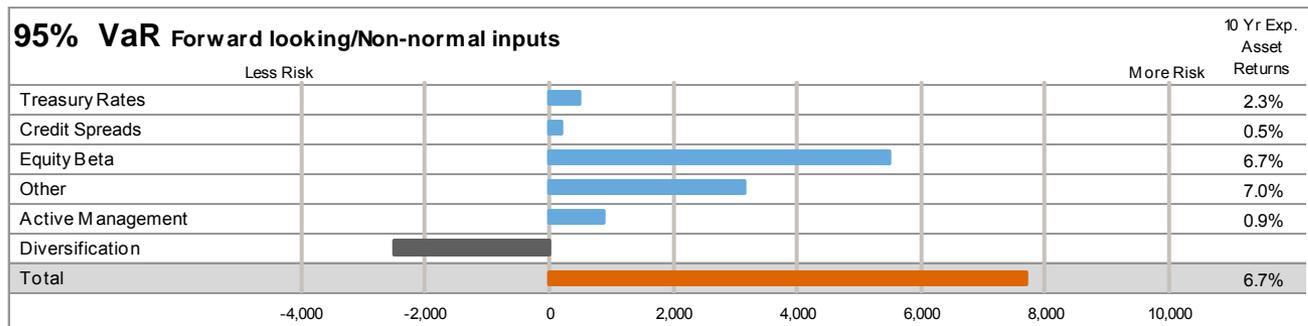
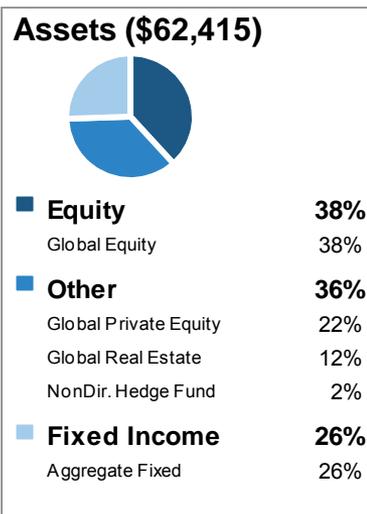
#### Risk Statistics

Historic Beta	0.98
R-Squared	0.95
Jensens Alpha	0.00
Sharpe Ratio	0.39
Treynor Ratio	4.40
Information Ratio	-0.03

# Asset Only Summary Risk Analysis

Oregon

As of April 30, 2013



Sources: The above analysis is based primarily on Russell's Capital Markets Forecasts and data from Bloomberg and FactSet. Please see Important Information at the end of this report for additional details on the analysis provided.

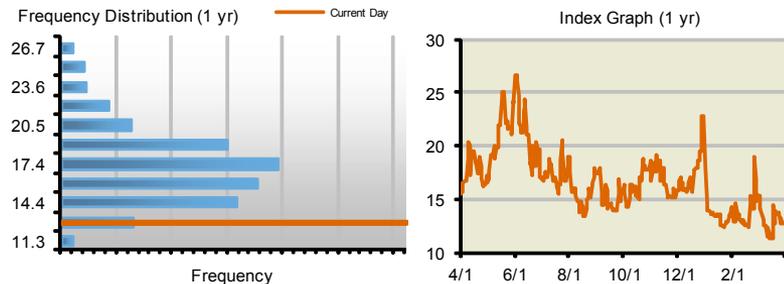
# Current Risk Environment

as of 31-Mar-2013

## Equity Volatility

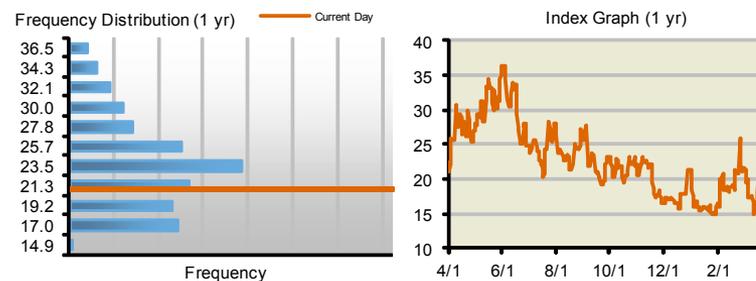
### SPX Volatility

Current	1 Day	1 Week	1 Month	1 Year
<b>12.70</b>	0.0%	-6.4%	-18.1%	-23.5%



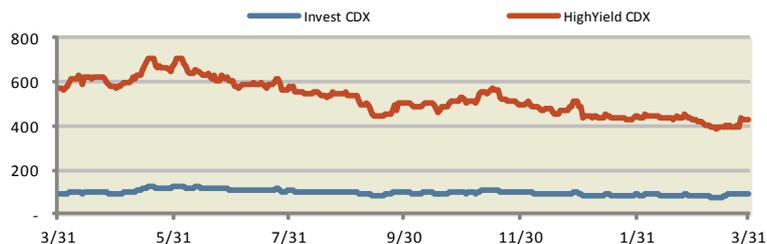
### EuroStoxx Volatility

Current	1 Day	1 Week	1 Month	1 Year
<b>20.89</b>	0.0%	-1.8%	-0.5%	-8.4%

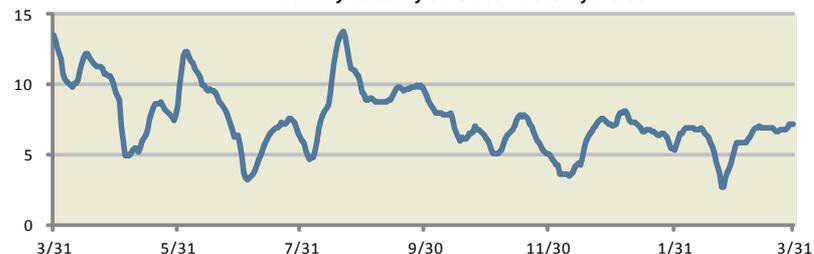


## Fixed Income Spreads

### Investment Grade and High Yield (spreads)

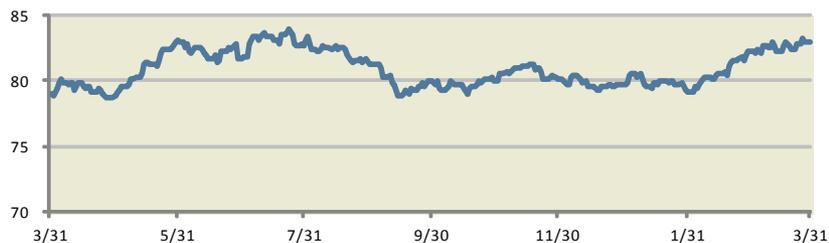


### Monthly Volatility of 10-Year Treasury Yields

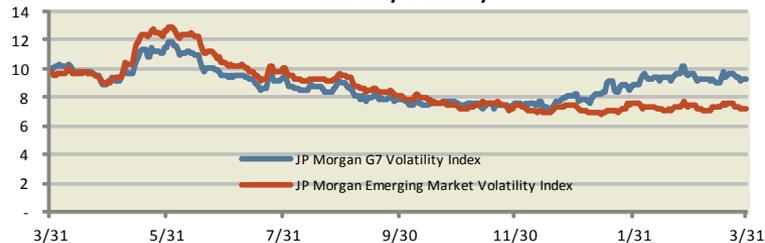


## Currency Risk

### Dollar Index



### Currency Volatility



Sources: The above analysis is based on data provided by Russell and <sup>20</sup>Bloomberg.  
Please see Important Information at the end of this report for additional details on the analysis provided.

# Important Information

- All values are estimates and should not be relied upon for any regulatory or financial filing.
  - Asset values are based on actual market values where available, and are otherwise estimated.
  - The alpha and tracking error assumptions used in this analysis are based on published expectations for the Russell funds in the portfolio. For investments outside of Russell funds, estimates are based on the Russell alpha assumptions for the asset class/strategy or they have been provided by the client.
- Value at Risk (VaR) calculation and decomposition is calculated following industry standards.
  - 95% VaR represents the 1 in 20 downside Value at Risk on a forward-looking, one-year basis.
  - 95% VaR calculations are based on return, standard deviations, and correlations which are generated from a non-normal asset class return distributions with fat tails as represented by Russell's capital market forecasts.
  - VaR is calculated independently for individual components, with a diversification component balancing to total VaR.
  - Active management is defined as the difference between the actual allocation and policy weights, combined with alpha and tracking error expectations for active managers.
- 10-Year Expected Return is the expected return for each asset component (Russell's capital market forecasts).
- The Stressed VaR scenario ("2XVol/  $\rho=1.0$ ") assumes standard deviations are 2 times Russell's current forecast. Correlations between asset classes are assumed to be 1.0.
- Scenario calculations are based on actual events defined as follows: Tech Bubble (March 24, 2000 through April 4, 2001), Global Financial Crisis (June 8, 2008 through March 9, 2009), 2011 Debt Crisis (April 11, 2011 through October 3, 2011).
- The volatility environment is represented as follows:
  - Equities – The average value of the VIX index over the previous month plotted against its historical range (January 1990 to present).
  - Fixed Income – The standard deviation of the yield on the 10-yr US Treasury over the previous month plotted against its historic range (January 1990 to present).
  - Currency – The average standard deviation of the JP Morgan G7 Currency Volatility Index over the previous month plotted against its historic range (June 1992 to present).

V2.2.0008

# Important Information

Nothing contained in this material is intended to constitute legal, tax, securities, or investment advice, nor an opinion regarding the appropriateness of any investment, nor a solicitation of any type. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

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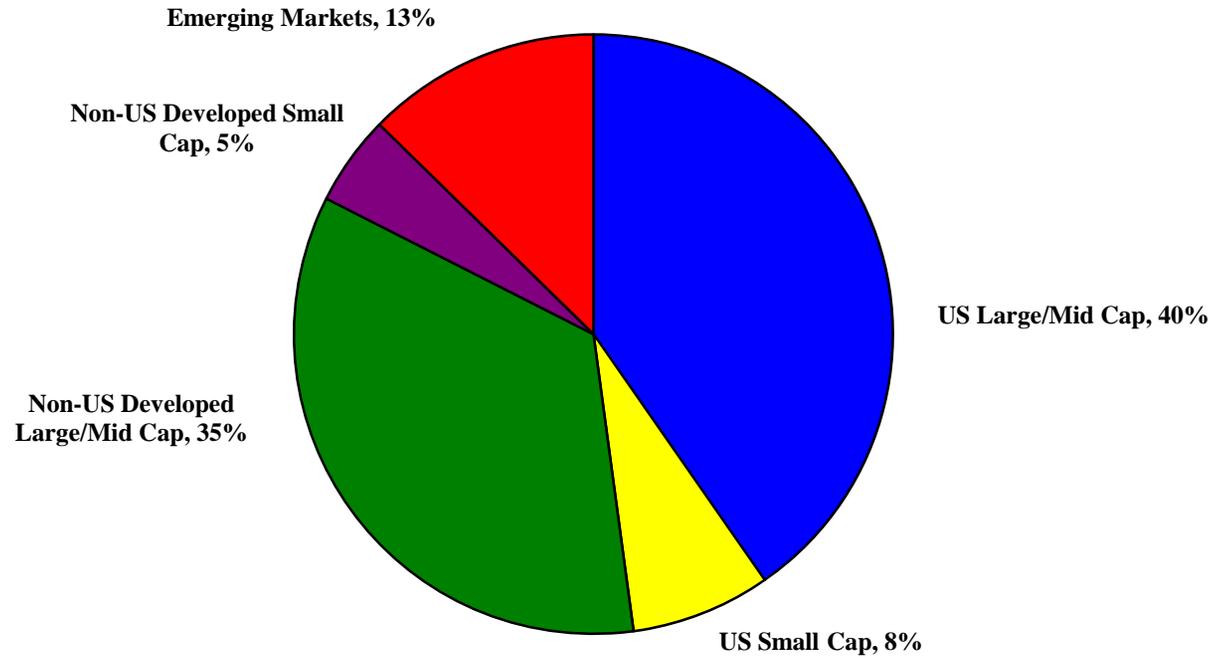
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USI-12545-12-13

# State of Oregon

## Public Equity Regional Allocation\*

As of March 31, 2013



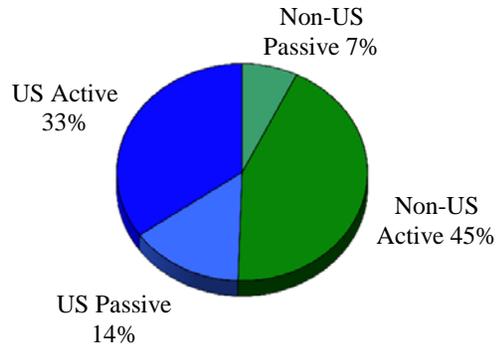
<u>Target</u>	
US Large/Mid:	41%
US Small:	7%
Non-US Developed Large/Mid:	35%
Non-US Developed Small:	5%
Emerging Markets:	12%

\* Based on SIS's analysis of historical manager holdings for market capitalization and style characteristics.

# State of Oregon

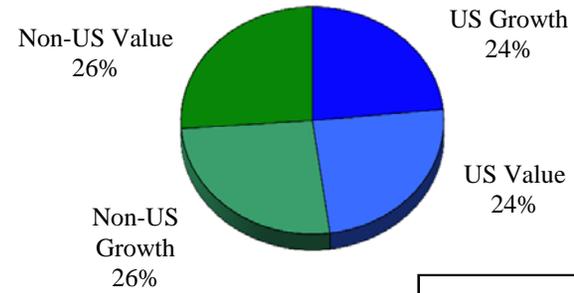
## Public Sector Manager Allocation as of March 31, 2013

**Active vs. Passive**



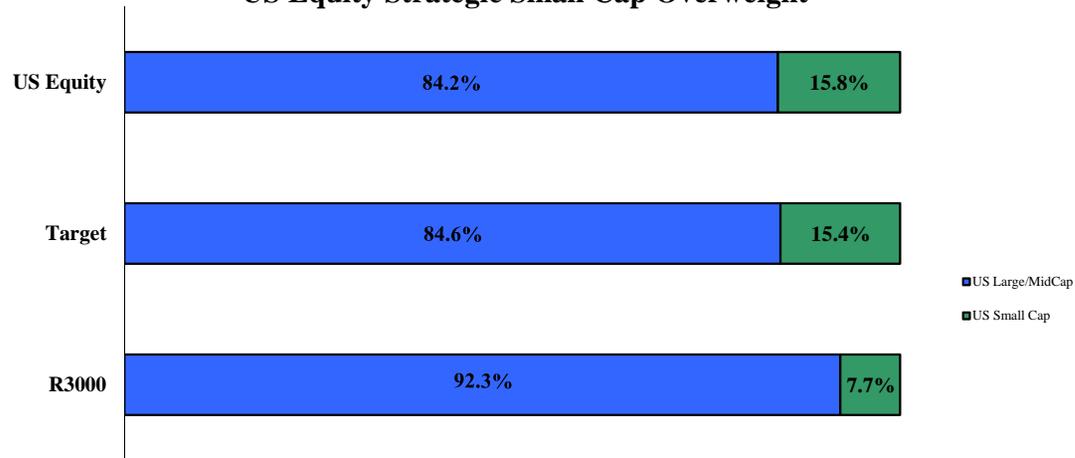
Target	
Active:	75%
Passive:	25%

**Value vs. Growth**



Target	
Growth:	50%
Value:	50%

**US Equity Strategic Small Cap Overweight**



Target: 100% Overweight of Russell 2000 as a Percent of Russell 3000

Figures May not sum to 100% due to rounding.

**Total Public Equity**  
**Individual Manager Allocations**  
As of March 31, 2013

Manager	Market Value (\$M)	Current % of Equities
<b>Total Domestic Equity</b>		
<b>U.S. Large Cap:</b>	<b>8,605,244</b>	<b>36.9%</b>
Aronson+Johnson+Ortiz	877,645	3.8%
Blackrock Russell 1000 Growth	982,402	4.2%
Blackrock Russell 1000 Value	661,468	2.8%
Delaware	557,497	2.4%
MFS	873,467	3.7%
Northern Trust	654,017	2.8%
PIMCO	613,406	2.6%
Russell Fundamental	690,946	3.0%
Pyramis US Core	356,215	1.5%
S&P 400 Index	284,269	1.2%
S&P 500 Index	1,312,490	5.6%
Wells Capital Select	741,422	3.2%

<b>U.S. Small and SMID Cap:</b>	<b>2,190,046</b>	<b>9.4%</b>
AQR	199,573	0.9%
DFA microcap value	149,934	0.6%
Boston Company	230,975	1.0%
Eudaimonia	118,620	0.5%
Next Century Micro	127,582	0.5%
Next Century Small	117,699	0.5%
R2000 Synthetic	176,430	0.8%
Wanger	725,991	3.1%
Wellington	343,244	1.5%

<b>Passive</b>	5,085,591	21.8%
<b>Active</b>	18,220,943	78.2%

<b>Total Equities*</b>	<b>23,306,538</b>	<b>100.0%</b>
------------------------	-------------------	---------------

Manager	Market Value (\$M)	Current % of Equities
<b>Total Non-US Equity</b>		
<b>Non-U.S. Large Cap:</b>	<b>9,030,091</b>	<b>38.7%</b>
Acadian	798,390	3.4%
AQR (Non-US LC)	913,354	3.9%
Arrowstreet	1,135,407	4.9%
Brandes	716,857	3.1%
Lazard	832,548	3.6%
Northern Trust (Non-US)	246,387	1.1%
Pyramis Global Advisors	1,038,117	4.5%
SSgA	1,668,533	7.2%
TT International	574,136	2.5%
UBS	417,093	1.8%
Walter Scott	689,270	3.0%

<b>Non-U.S. Small Cap:</b>	<b>934,157</b>	<b>4.0%</b>
DFA	211,483	0.9%
Harris	230,467	1.0%
Pyramis Select (Non-US Smcap)	298,822	1.3%
Victory	193,385	0.8%

<b>Emerging Markets:</b>	<b>1,811,774</b>	<b>7.8%</b>
Arrowstreet (EM)	462,094	2.0%
Blackrock TEMs	229,155	1.0%
DFA SC	124,313	0.5%
Genesis	645,225	2.8%
Westwood	148,742	0.6%
William Blair	202,246	0.9%

<b>Global:</b>	<b>735,201</b>	<b>3.2%</b>
AllianceBernstein GSV	735,201	3.2%

\* Includes \$25 in other Equity assets not listed above

## State of Oregon

### Total Active Domestic Equity Characteristics Summary First Quarter 2013

#### Top 10 Holdings

	Mkt. Value (\$M)	% of Portfolio
EXXON MOBIL CORP COMMON STOCK NPV	112,570	1.4
APPLE INC COMMON STOCK NPV	82,000	1.0
PFIZER INC COMMON STOCK USD.05	78,640	1.0
JPMORGAN CHASE + CO COMMON STOCK USD1.	73,160	0.9
GOOGLE INC CL A COMMON STOCK USD.001	68,160	0.8
CHEVRON CORP COMMON STOCK USD.75	66,440	0.8
QUALCOMM INC COMMON STOCK USD.0001	62,990	0.8
VISA INC CLASS A SHARES COMMON STOCK USD	59,270	0.7
CROWN CASTLE INTL CORP COMMON STOCK USD.	57,450	0.7
ALLERGAN INC COMMON STOCK USD.01	47,420	0.6

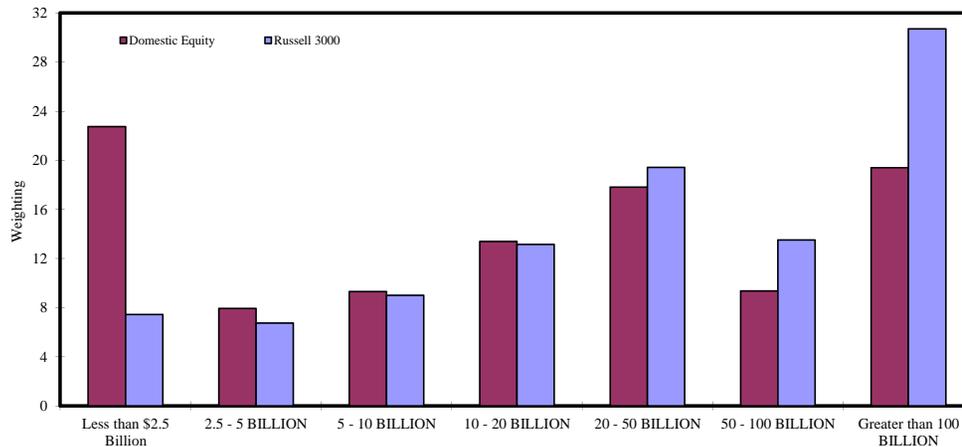
#### Characteristics

	Domestic Equity	Russell 3000
P/E Ratio	20.5	18.9
P/B Ratio	4.0	3.6
5 Year EPS Growth (%)	13.4	11.0
Market Cap - cap wtd (\$MM)	55.7	85.6
Dividend Yield (%)	1.5	2.0

#### Risk Statistics

	3 Year	5 Year
Portfolio Return	12.84	6.25
Benchmark Return	12.97	6.32
Portfolio Standard Deviation	16.78	20.89
Benchmark Standard Deviation	15.66	19.66
Tracking Error	1.95	2.45
Historic Beta	1.07	1.06
R-Squared	0.99	0.99
Jensen's Alpha	-0.98	-0.40
Sharpe Ratio	0.76	0.28
Information Ratio	-0.07	-0.03

#### Market Capitalization



#### Market Capitalization

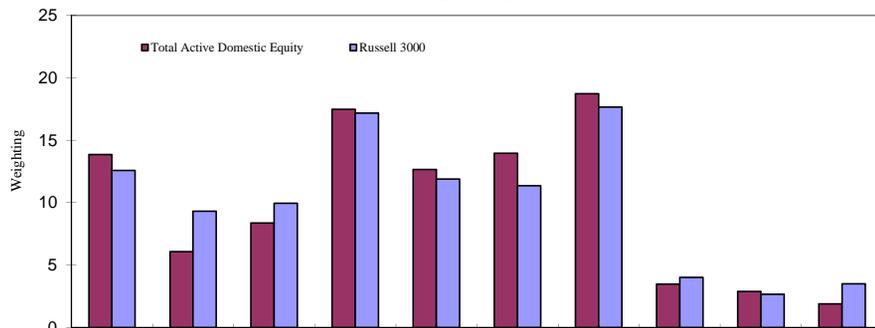
	Domestic Equity	Russell 3000
Less than \$2.5 Billion	22.7	7.5
2.5 - 5 BILLION	8.0	6.8
5 - 10 BILLION	9.3	9.0
10 - 20 BILLION	13.4	13.1
20 - 50 BILLION	17.8	19.4
50 - 100 BILLION	9.4	13.5
Greater than 100 BILLION	19.4	30.7

## State of Oregon

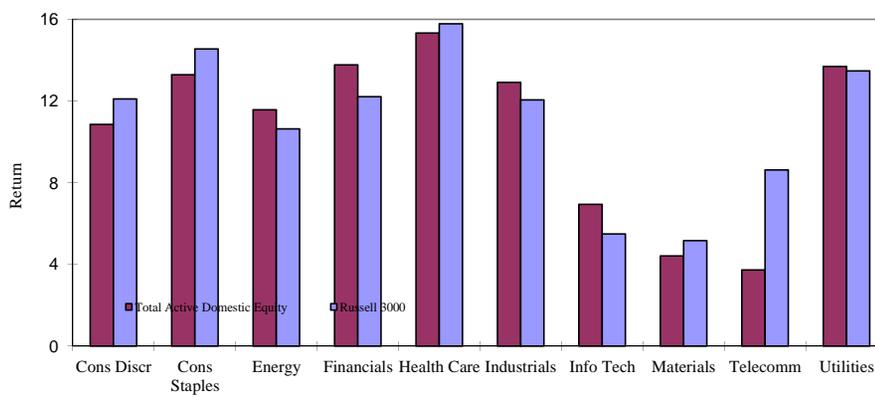
### Total Active Domestic Equity Sector Attribution

#### First Quarter 2013

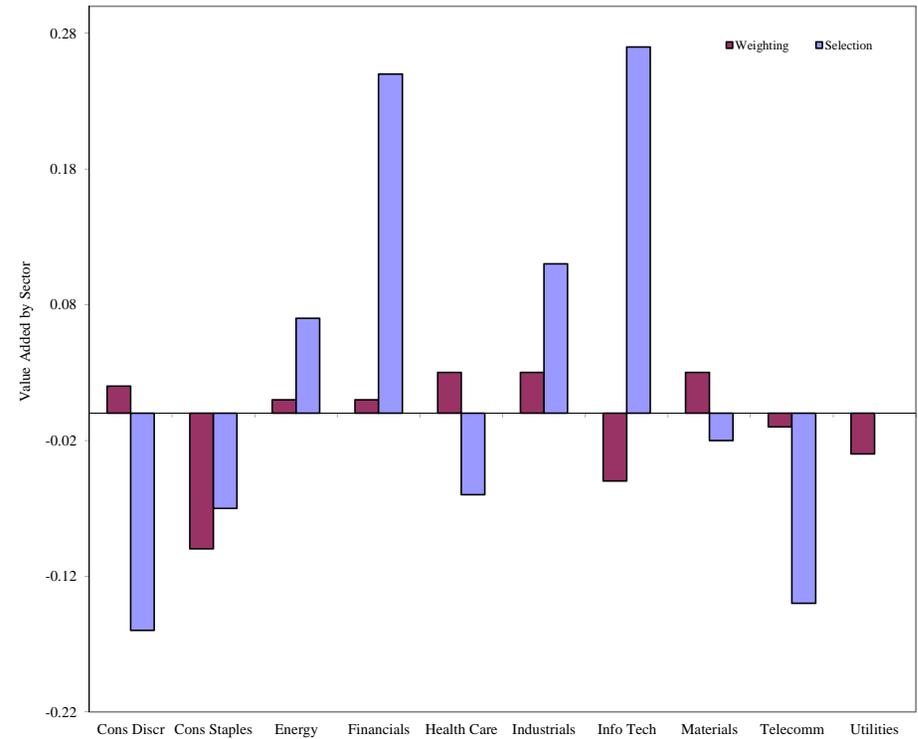
#### Weighting



#### Return



#### Value Added



	BEGINNING WEIGHTS			RETURNS			VALUE ADDED		
	Total Active	Russell	Difference	Total Active	Russell	Difference	Allocation	Selection	Timing
	Dom Equity*	3000		Dom Equity	3000		Allocation	Selection	Timing
Consumer Discretionary	13.9	12.6	1.3	10.9	12.1	-1.1	0.0	-0.2	
Consumer Staples	6.1	9.3	-3.2	13.3	14.6	-1.1	-0.1	-0.1	
Energy	8.4	9.9	-1.6	11.6	10.6	0.9	0.0	0.1	
Financials	17.5	17.2	0.3	13.8	12.2	1.4	0.0	0.3	
Health Care	12.7	11.9	0.8	15.3	15.8	-0.4	0.0	-0.1	
Industrials	14.0	11.3	2.6	12.9	12.1	0.8	0.0	0.1	
Info Technology	18.7	17.6	1.1	6.9	5.5	1.4	-0.1	0.3	
Materials	3.5	4.0	-0.5	4.4	5.2	-0.7	0.0	0.0	
Telecommunication	2.9	2.7	0.2	3.7	8.6	-4.5	0.0	-0.1	
Utilities	1.9	3.5	-1.6	13.7	13.5	0.2	0.0	0.0	
<b>Total Fund</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>11.4</b>	<b>11.1</b>	<b>0.3</b>	<b>-0.1</b>	<b>0.3</b>	<b>0.1</b>

Note: Attribution is based on the invested portfolio's gross performance returns at the security level. Weighting is based on beginning of period holdings.

\*Excludes 1.3% in Cash Equivalent, Commingled Funds, Private Placement, Real Estate, & Rights/Warrants investments.

# State of Oregon

## International Equity Attribution Summary

### First Quarter 2013

#### Top Ten Holdings

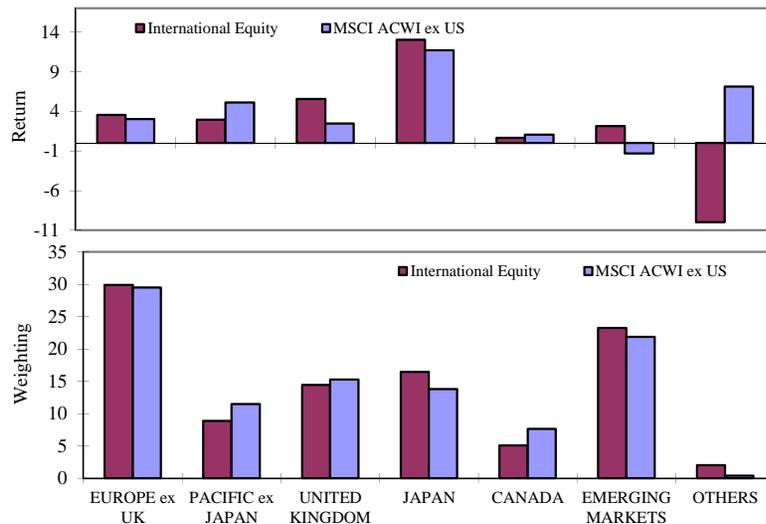
	Mkt. Value (\$M)	% of Portfolio
NESTLE SA REG COMMON STOCK CHF.1	94,200	0.8
SAMSUNG ELECTRONICS CO LTD COMMON S	93,010	0.8
NOVARTIS AG REG COMMON STOCK CHF.5	79,330	0.7
TOYOTA MOTOR CORP COMMON STOCK	65,200	0.6
SANOFI COMMON STOCK EUR2.	64,430	0.6
NOVO NORDISK A/S B COMMON STOCK DKK1	58,120	0.5
ROCHE HOLDING AG GENUSSCHEIN COMMON	57,600	0.5
BAYER AG REG COMMON STOCK NPV	53,730	0.5
GLAXOSMITHKLINE PLC COMMON STOCK GB	52,550	0.5
BRITISH AMERICAN TOBACCO PLC COMMON	52,210	0.5

\*Excludes holdings of funds or ETF's

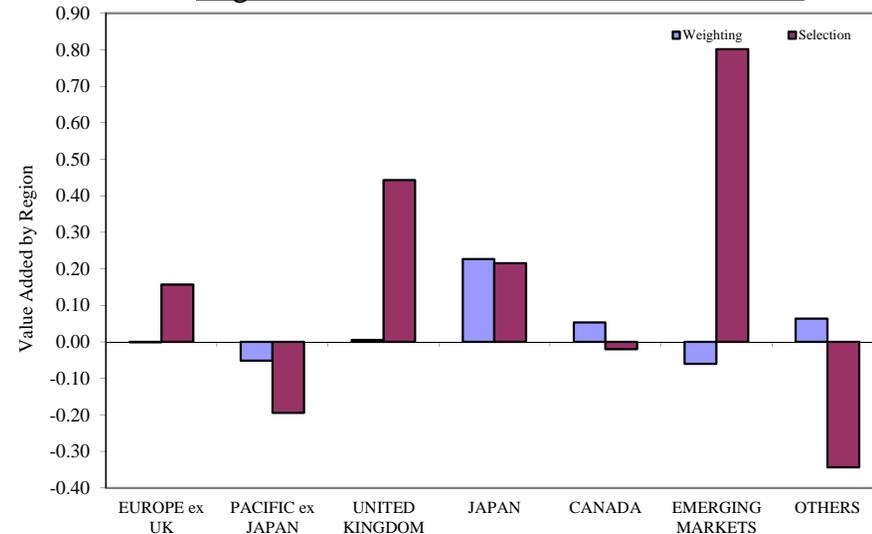
#### Market Capitalization

	International Equity	MSCI AC WORLD ex US
Less than 2.5 BILLION	12.7	1.8
2.5 - 5 BILLION	10.9	6.5
5 - 10 BILLION	13.1	14.1
10 - 20 BILLION	15.6	17.0
20 - 50 BILLION	21.8	26.4
50 - 100 BILLION	15.4	19.7
Greater than 100 BILLION	10.5	14.5

#### Regional Attribution vs. MSCI ACWI ex US



#### Regional Attribution vs. MSCI ACWI ex US



Note: Attribution is based on the invested portfolio's gross performance returns at the security level. Weighting is based on beginning of period holdings.

# State of Oregon

## International Equity Attribution Summary

### First Quarter 2013

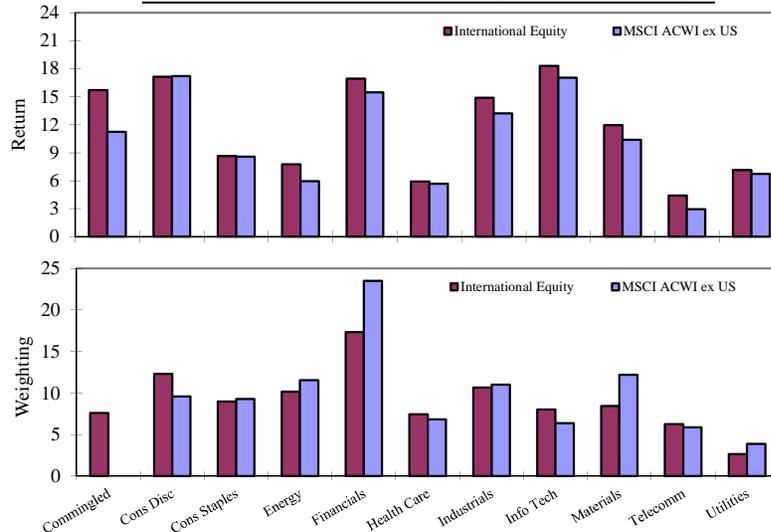
#### Risk Statistics

	3 Year	5 Year
Portfolio Return	6.14	1.52
Benchmark Return	4.71	0.07
Portfolio Standard Deviation	18.92	23.38
Benchmark Standard Deviation	19.10	24.08
Tracking Error	1.06	1.49
Historic Beta	0.99	0.97
R-Squared	1.00	1.00
Jensen's Alpha	1.49	1.45
Sharpe Ratio	0.32	0.05
Information Ratio	1.36	0.98

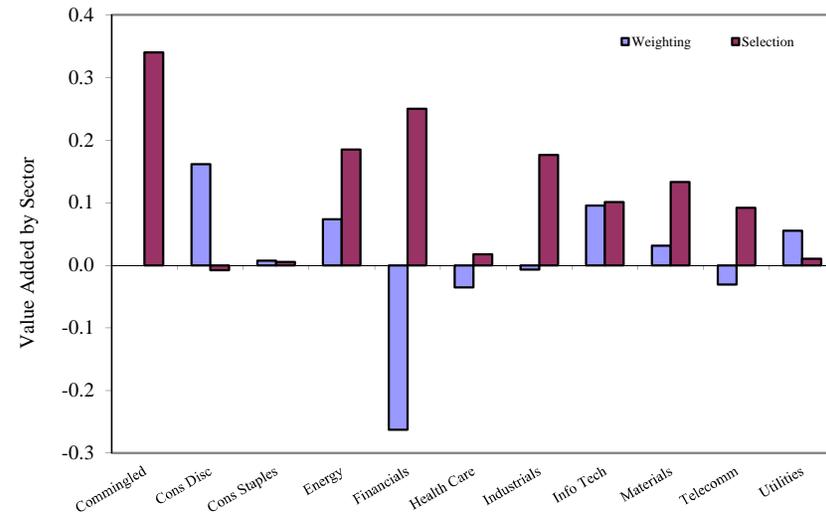
#### Characteristics

	International Equity	MSCI AC WORLD ex US
P/E Ratio	15.3	16.5
P/B Ratio	2.8	2.8
5 Year EPS Growth (%)	7.4	6.5
Market Cap - cap weighted (\$B)	39.0	49.6
Dividend Yield (%)	2.8	3.2

#### Sector Attribution vs. MSCI ACWI ex US



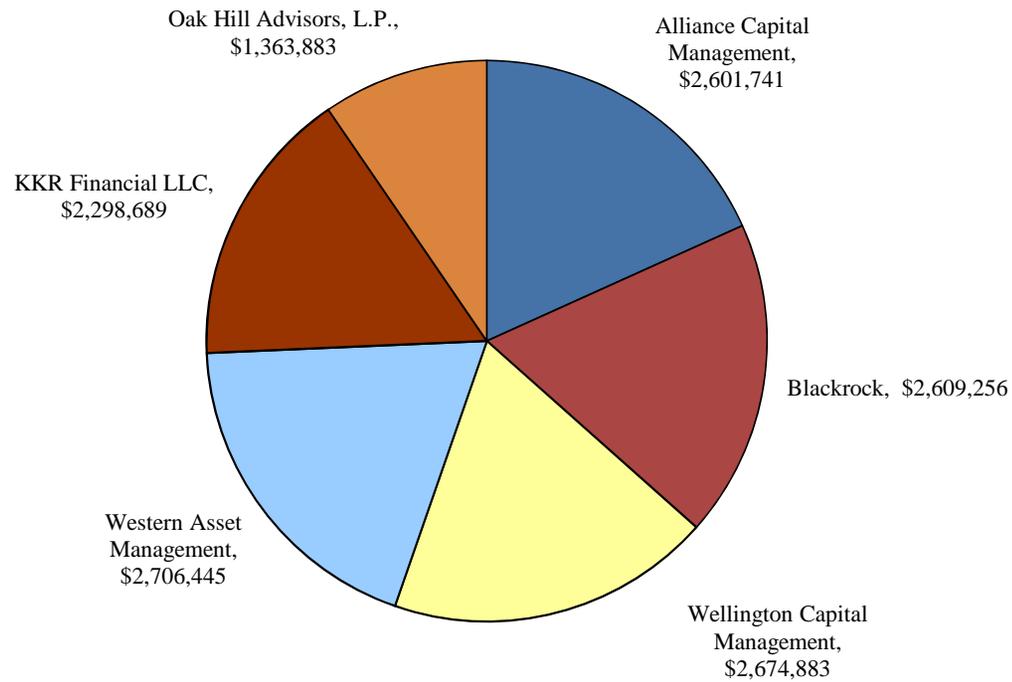
#### Sector Attribution vs. MSCI ACWI ex US



Note: All risk statistics are based on net performance returns and attribution is based on gross performance returns at the security level. Weighting is based on beginning of period holdings.

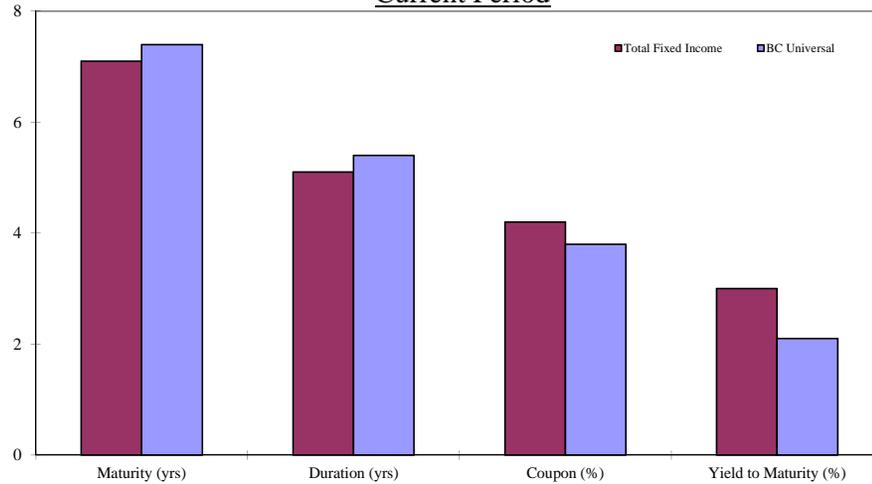
**Total Fixed Income**  
**Individual Manager Allocation**  
**As of March 31, 2013**

<u>Portfolio</u>	<u>\$M</u>	<u>% Allocation</u>
<b>External Fixed Income</b>		
Alliance Capital Management	\$ 2,601,741	18.3%
Blackrock	\$ 2,609,256	18.3%
Wellington Capital Management	\$ 2,674,883	18.8%
Western Asset Management	\$ 2,706,445	19.0%
KKR Financial LLC	\$ 2,298,689	16.1%
Oak Hill Advisors, L.P.	\$ 1,363,883	9.6%
<b>Total Fixed Income</b>	<b>\$ 14,254,897</b>	



**State of Oregon**  
**Fixed Income Characteristics Summary**  
**First Quarter 2013**

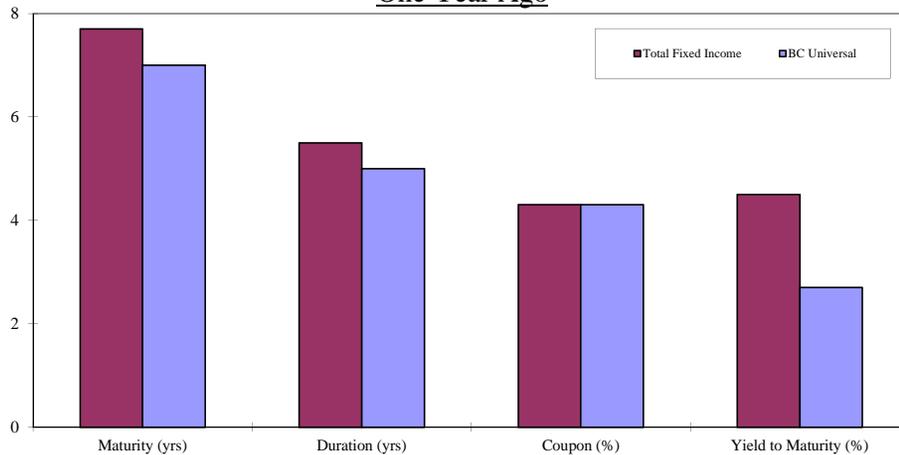
Current Period



Characteristics

Characteristics	3/31/13		3/30/12	
	Portfolio	BC Universal	Portfolio	BC Universal
Maturity (yrs)	7.1	7.4	7.7	7.0
Duration (yrs)	5.1	5.4	5.5	5.0
Coupon (%)	4.2	3.8	4.3	4.3
Yield to Maturity (%)	3.0	2.1	4.5	2.7
Moody's Quality Rating	A-3	A-1	A-2	AA-3
S&P Quality Rating	A-	A+	A-	AA-

One Year Ago

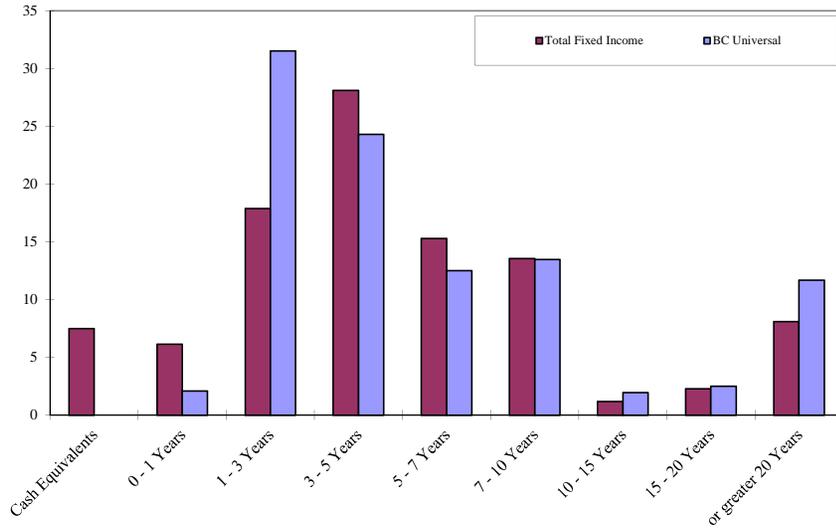


Risk Statistics

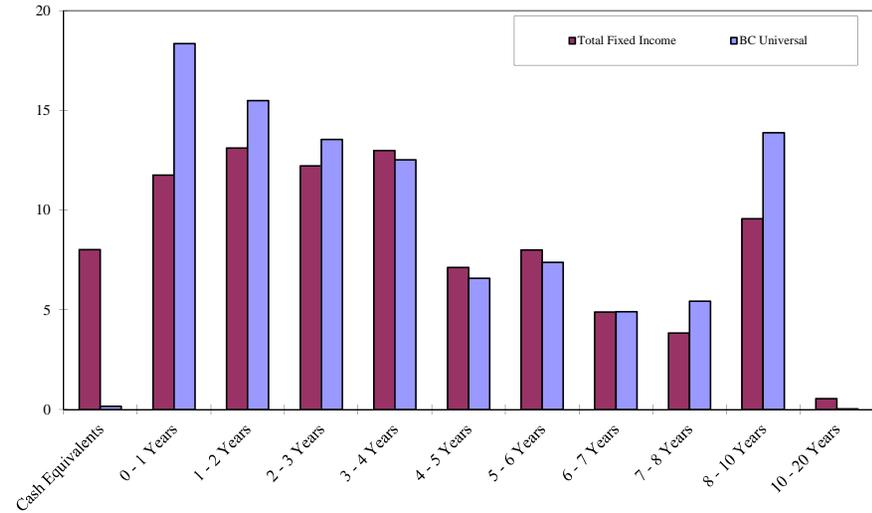
	3 Year	5 Year
Portfolio Return	8.04	8.25
Benchmark Return	6.37	6.04
Portfolio Standard Deviation	2.61	5.68
Benchmark Standard Deviation	2.50	3.59
Tracking Error	1.41	4.11
Historic Beta	0.89	1.12
R-Squared	0.72	0.50
Jensen's Alpha	2.38	1.53
Sharpe Ratio	3.03	1.39
Information Ratio	1.19	0.54

**State of Oregon**  
 Fixed Income Characteristics Detail  
 First Quarter 2013

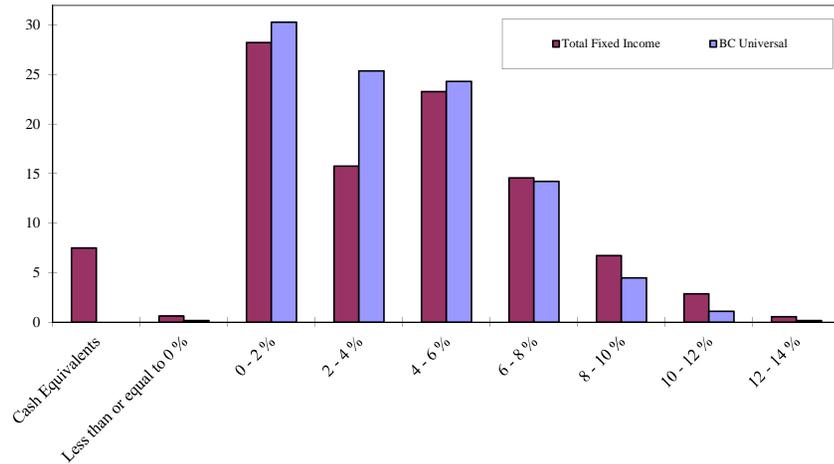
Maturity Range Weights



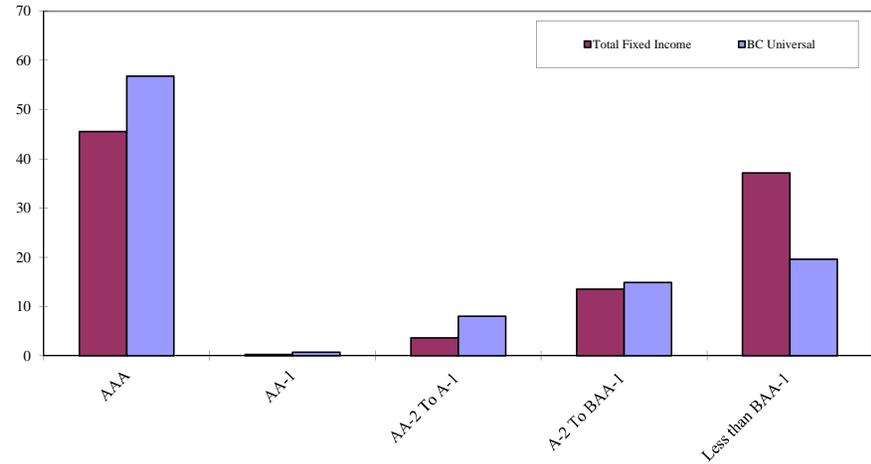
Duration Range Weights



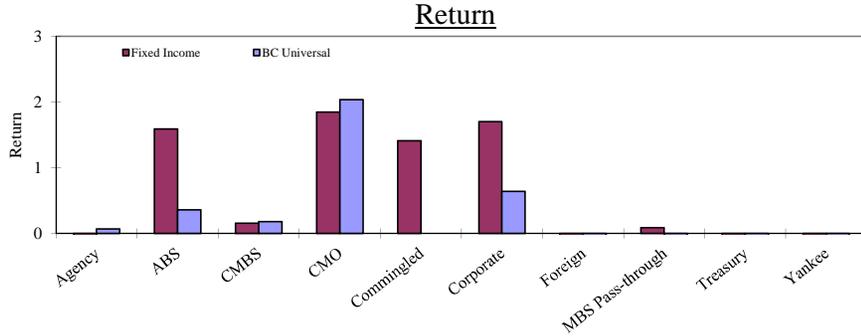
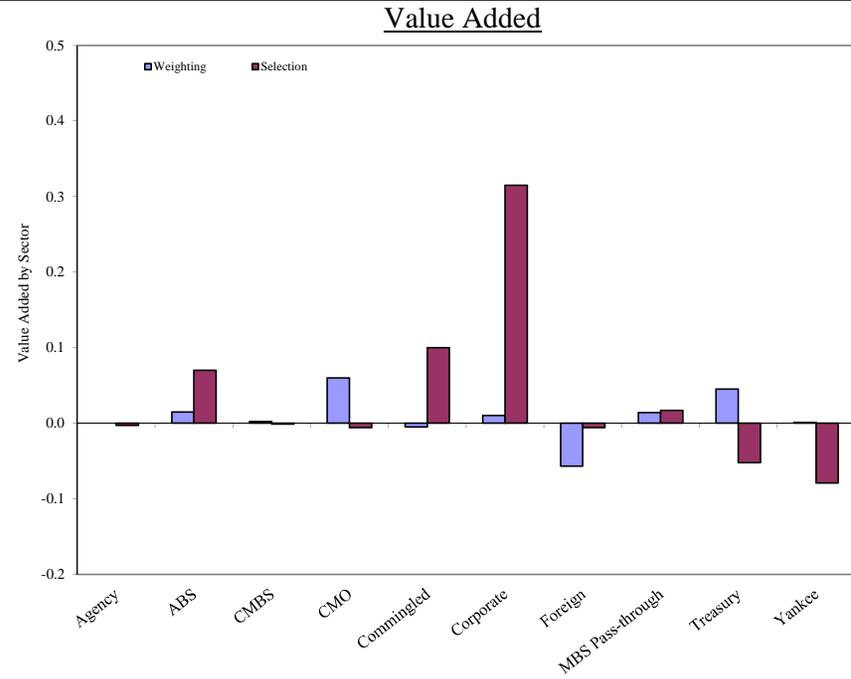
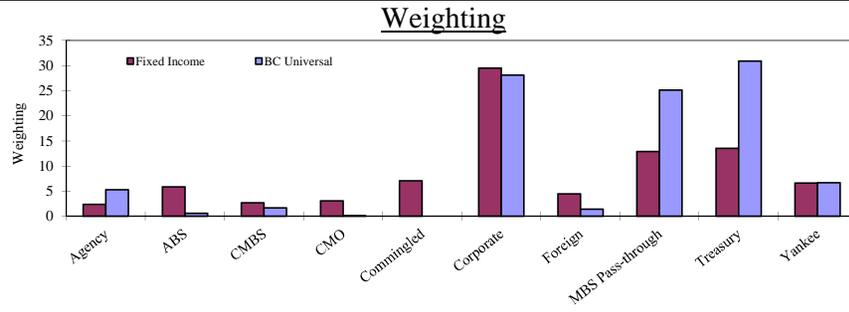
Coupon Range Weights



Moody's Rating Weights



**State of Oregon**  
Fixed Income Sector Attribution  
First Quarter 2013



	BEGINNING WEIGHTS			RETURNS			VALUE ADDED		
	Total Fixed Income*	BC Universal	Difference	Total Fixed Income*	BC Universal	Difference	Weighting	Selection	Timing
AGENCY	2.3	5.3	-2.9	-0.1	0.1	-0.1	0.0	0.0	-
ASSET BACKED	5.8	0.6	5.3	1.6	0.4	1.2	0.0	0.1	-
CMBS	2.6	1.6	1.0	0.2	0.2	0.0	0.0	0.0	-
CMO	3.0	0.0	3.0	1.8	2.0	-0.2	0.1	0.0	-
COMMINGLED FUND	7.0	0.0	7.0	1.4	-	-	0.0	0.1	-
CORPORATE	29.5	28.1	1.4	1.7	0.6	1.1	0.0	0.3	-
FOREIGN	4.5	1.4	3.1	-2.1	-1.9	-0.2	-0.1	0.0	-
MORTGAGE PASS-THROUGH	12.9	25.1	-12.3	0.1	0.0	0.1	0.0	0.0	-
US TREASURY	13.5	30.9	-17.4	-0.6	-0.2	-0.4	0.0	-0.1	-
YANKEE	6.6	6.7	-0.1	-1.5	-0.3	-1.2	0.0	-0.1	-
<b>TOTAL</b>	<b>100.0</b>	<b>100.0</b>	<b>0.0</b>	<b>0.6</b>	<b>0.1</b>	<b>0.5</b>	<b>0.1</b>	<b>0.5</b>	<b>-0.1</b>

Note: Attribution is based on the invested portfolio's gross performance returns at the security level. Weighting is based on beginning of period holdings.

\*Excludes 0.2% in Euros, Convertibles, Preferred Stock, Miscellaneous and Swap-related investments.

## REAL ESTATE PORTFOLIO SUMMARY

Real Estate Portfolio and Investment-level data are provided below for period ended December 31, 2012. Portfolio refers to all real estate Investments held by OPERF, which is referred to herein as the Fund.

OPERF REAL ESTATE PORTFOLIO SUMMARY	
December 31, 2012	
<b>Current Portfolio Net Asset Value</b>	<b>\$7.477 billion</b> 12.03% of Total Fund (\$62.2B)
<b>Current Unfunded Investment Commitments</b>	<b>\$2.017 billion</b>
<b>Total Portfolio NAV plus Unfunded Commitments</b>	<b>\$9.494 billion</b> 15.27% of Total Fund
<b>Target Allocation to Real Estate</b>	<b>\$6.840 billion</b> 11.00% of Total Fund
<b>Total Number of Investments</b>	<b>80</b>

SUMMARY OF PORTFOLIO INVESTMENT NET RETURNS				
Investment	Qtr	1-Yr.	3-Yr.	5-Yr.
<b>Private Real Estate</b>				
Direct Core	7.94%	17.27%	18.38%	1.33%
Opportunistic	4.67%	13.70%	10.07%	-1.24%
Value Added	3.97%	12.85%	13.86%	-9.49%
<b>Total Private Real Estate</b>	<b>5.51%</b>	<b>14.61%</b>	<b>13.61%</b>	<b>-1.20%</b>
<b>Public Real Estate</b>				
Domestic REIT Portfolio	2.79%	19.93%	21.68%	5.46%
Global REIT Portfolio	10.19%	41.35%	9.71%	-1.35%
<b>Total Portfolio Return</b>	<b>5.41%</b>	<b>16.71%</b>	<b>14.48%</b>	<b>0.32%</b>
NCREIF Index	2.54%	10.54%	12.63%	2.13%
NAREIT Index	3.11%	19.70%	18.37%	5.74%
EPRA/NAREIT Global (ex-US) Index	8.52%	38.57%	38.57%	10.82%

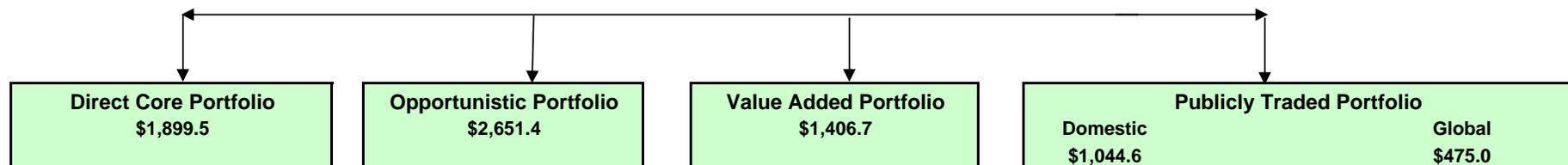
Note: Time weighted returns by category and for the portfolio include all historical investments converted by the Private Edge Group (i.e. exited investments and managers).

EXECUTIVE SUMMARY

PORTFOLIO NET RETURNS BY COMPONENT  
Portfolio Net Asset Value (\$M)

**Total Real Estate**  
**\$7,477.0**

One year return 16.71%  
NCREIF Index 10.54%



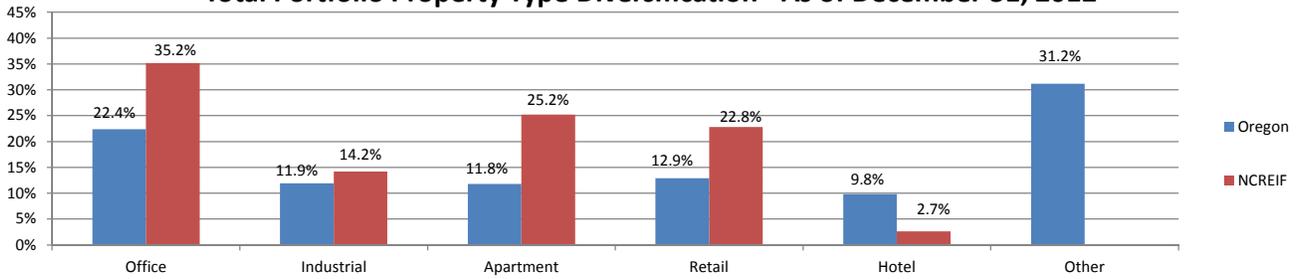
Component	Value (\$M)	% of total portfolio	One year return	NCREIF Index	Component	Value (\$M)	% of total portfolio	One year return	NCREIF Index
Direct Core Portfolio	\$1,899.5	25.40%	17.27%	10.54%	Domestic	\$1,044.6	13.97%	19.93%	19.70%
Opportunistic Portfolio	\$2,651.4	35.47%	13.70%	10.54%	Global	\$475.0	6.34%	41.35%	38.57%
Value Added Portfolio	\$1,406.7	18.81%	12.85%	10.54%					
Publicly Traded Portfolio	\$1,044.6								

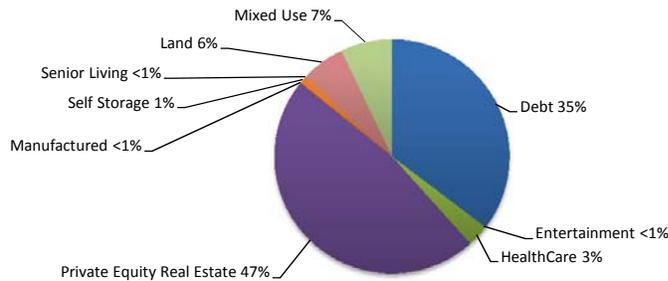
Component	Assets
Direct Core Portfolio	Clarion (Office) Clarion Office Properties Talmage Separate Account Lincoln (Industrial) Regency Retail Partners I (Retail) Regency Retail Partners II (Retail) RREEF America II Windsor Columbia Realty Fund Regency Cameron (Non Mandate) Lincoln (Non Mandate)
Opportunistic Portfolio	Aetos Capital Asia II & III - B AG Asia Realty Fund II, L.P. Canyon Johnson Urban Fund III Blackstone Partners VI, VII Brazil Real Estate Opportunities II Europe Fund III Fortress Fund II - V Fortress Residential Inv. Deutschland GI Partners Fund II & III GSR3LP Hampstead Fund I - III Heritage Fields Capital IL & FS India Realty Fund I & II Lion Mexico Fund Lone Star Opportunity Fund III - VII Lone Star Real Estate Fund I & II OCM RE Oppo Fund A, LP Rockpoint Real Estate Fund I - IV Starwood Cap Hospitality Fund II Global Starwood Hospitality Fund SH Group I, LP Starwood Hospitality Fund Co-Inv. Westbrook Real Estate Fund I - IV
Value Added Portfolio	Alpha Asia Macro Trends I & II Beacon Capital Strategic Partners VI, LP Buchanan Fund V CBRE US Value Fund 5 & 6 Guggenheim III Hines U.S. Office Value Added II Keystone Industrial Fund I KTR Industrial Fund II Lionstone CFO One Lionstone CFO One (Non Mandate) Pac Trust Prologis Global Investment Ventures Rockpoint Finance Fund Rockwood Real Estate VII & VIII Vornado Capital Partners L.P. Waterton Residential Property Venture XI Western National Realty II & Co-Invest II Windsor Realty VII
Publicly Traded Portfolio	<b>Domestic REITS</b> Cohen & Steers Columbia Woodbourne LaSalle REIT  <b>Global REITS</b> European Investors Morgan Stanley

PORTFOLIO COMPOSITION REVIEW (% of Total Portfolio FMV)

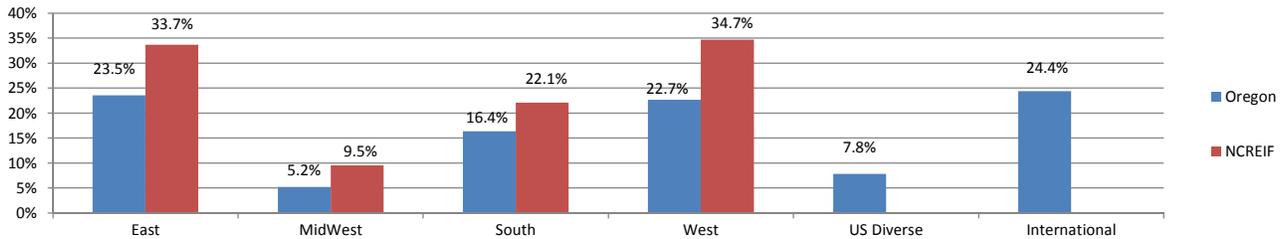
Total Portfolio Property Type Diversification - As of December 31, 2012



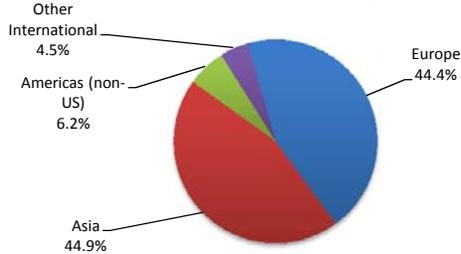
Property Type - % of "Other"



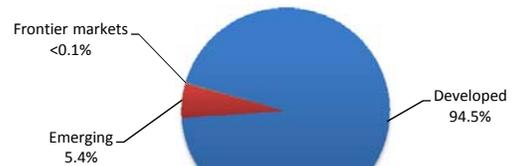
Total Portfolio Geographic Diversification- As of December 31, 2012



International by Region



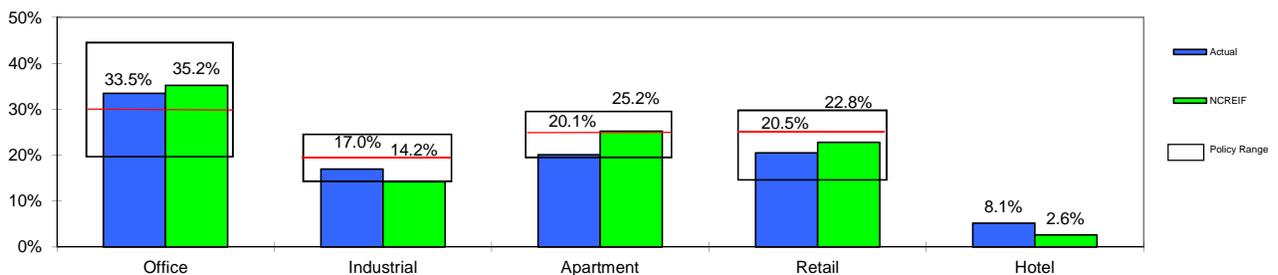
International by Market Risk\*



\*Based on MSCI Market Classification by Country

The PrivateEdge Group

Core Portfolio Property Type Diversification - As of December 31, 2012



# Executive Summary

## OPERF Alternative Investment Program (“the Program”)

### PRIVATE EQUITY POLICY

The program was formally started in 1981. The target private equity allocation is 16.0% of total pension assets with a range of + / - 400 basis points. As of December 31, 2012, private equity represented 23.7% of total pension assets, a 93 basis points decrease from the prior quarter.

### PERFORMANCE OBJECTIVE

The Program’s objective is to create significant long-term net returns to OPERF. As of December 31, 2012, the Program has achieved a total return of 15.8% since inception.

AS OF 31 DEC 2012	3 YEAR	7 YEAR	10 YEAR	20 YEAR	SINCE INCEPTION
<b>Program IRR</b>	13.3%	9.5%	14.2%	12.7%	15.8%
<b>Russell 3000 (+ 300 bps) **</b>	14.8%	8.0%	11.7%	12.4%	15.0%
<i>Value Added</i>	-1.4%	1.4%	2.5%	0.2%	0.8%

\*\* Data is a dollar-weighted Long-Nickels calculation of quarterly changes in the Russell 3000 index plus 300 basis points.

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Figures may not foot due to rounding.

### PEER BENCHMARK

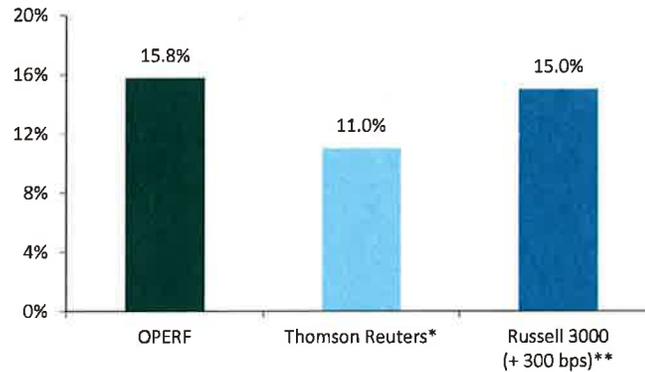
Prior quarter is presented based on quarter lag of benchmark data.

AS OF 30 SEP 2012	3 YEAR	10 YEAR	20 YEAR	SINCE INCEPTION
<b>Program IRR</b>	14.0%	13.5%	12.7%	15.8%
<b>Thomson Reuters *</b>	9.7%	9.3%	10.8%	11.0%
<i>Value Added</i>	4.3%	4.2%	1.9%	4.8%

\* Thomson Reuters Pooled IRR: All Private Equity Funds as of September 30, 2012.

**PROGRAM IRR vs. SELECTED BENCHMARKS**

**Net Returns since Inception**



\*See prior page for footnote  
 \*\*See prior page for footnote

**INVESTMENT PACING**

The annual level of commitments is reviewed regularly with Staff and the Oregon Investment Council (“OIC”). Based on the desire to continue to build a well-diversified portfolio and support OPERF’s core relationships, TorreyCove’s preliminary annual pacing analysis, completed in December 2012, recommended that OPERF commit up to \$2.0 billion in 2013 pending the completion of due diligence, OIC approval, and successful legal negotiations.

**PORTFOLIO EXPOSURE**

**Exposure % by Investment Type & Geography**

Figures may not foot due to rounding

INVESTMENT TYPE	TARGET ALLOCATION	FMV	UNFUNDED	TOTAL EXPOSURE
Corporate Finance	65%-85%	71%	65%	69%
Growth	5%-10%	1%	0%	1%
Venture Capital	0%-5%	5%	4%	5%
Special Situations	5%-15%	12%	13%	12%
Fund-of-Funds	0%-5%	7%	11%	9%
Co-Investments	0%-7.5%	4%	6%	5%
<b>Total:</b>		<b>100%</b>	<b>100%</b>	<b>100%</b>
<i>North America</i>	<i>70%-100%</i>	<i>70%</i>	<i>65%</i>	<i>68%</i>
<i>Global</i>	<i>10%-20%</i>	<i>14%</i>	<i>15%</i>	<i>14%</i>
<i>International</i>	<i>5%-15%</i>	<i>16%</i>	<i>20%</i>	<i>17%</i>

**RECENT PROGRAM DEVELOPMENTS**

- During the quarter, the OIC authorized \$250 million of new commitments for the Program to three private equity funds.
- During the quarter, the Program was net cash-flow positive by \$812 million. Compared to the fourth quarter of 2011, contributions decreased 28.4% and distributions increased 106.2%.

**MARKET COMMENTARY**

The gradual stabilization of developed markets was bolstered by strong equity and credit markets. The S&P returned 16% and German DAX returned 29% during 2012<sup>1</sup>. Bottoming interest rates have heated the high yield market, leading to increased risk appetite as investors hunt for yield. With falling debt costs, buyout firms are using more leverage on deals and average debt multiples have approached pre-crisis levels. Meanwhile, emerging equity markets performed well, a trend that is likely to continue in 2013.

Most agree the worst of the post-crisis recovery has passed, but the path ahead may be rough. The IMF predicts global growth of 3.3% and 4.0% in 2013 and 2014, respectively, but growth varies greatly by country or region. During 2012, government spending, inventory investments, and residential investments factored into U.S. GDP growth of 2.2%<sup>2</sup>. Further, U.S. inflation slowed to 1.7% in 2012 due particularly to energy index prices<sup>3</sup>. Looking ahead to 2013, household formation, homebuilder equities, and house prices are on the rise and should be a driving force in 2013, along with decreasing unemployment levels. The Federal Reserve committed to \$40 billion and \$45 billion of monthly purchases of MBS and long-term Treasuries, respectively, until unemployment drops further.

In the Eurozone, GDP decreased 0.6% during 2012, and is likely to experience turbulence in 2013 due to political and fiscal challenges<sup>2</sup>. The EU's annual inflation rate was a comparable 2.3% as of December 2012, down from 3.0% in 2011<sup>4</sup>. Europe reported unemployment of 11.8% in November 2012, up from 10.6% in 2011, mainly due to persistently high rates in Spain and Greece<sup>4</sup>. While Europe's economy is expected to improve to -0.3% from -0.6%, this will depend on financial stability and political efficiency, which as noted, may present challenges<sup>2</sup>. The European Central Bank did, however, establish an open-ended bond purchase program in order to appease its troubled nations.

Emerging markets in aggregate are expected to grow 5.5% in 2013<sup>2</sup>. In Asia, China's GDP grew 7.8% during 2012, and the annualized inflation rate was 2.5% as of December 2012, down from 2011's 4.1%. China's growth is believed to be shifting downward relative to previous years because of less aggressive actions from the authorities to boost growth<sup>2,5</sup>. However, the PBOC made an effort to become more flexible, recently enacting new short-term liquidity measures. While China's GDP will be expanding faster than many other markets, this will require shifting their economy towards private consumption. Asia continues to experience low unemployment rates; China and Japan are reporting highs of 4.1% while South Korea is the lowest at 3.8%<sup>6</sup>.

Specific to private equity, throughout 2012 fundraising was at its strongest levels relative to the past few years, driven by U.S. and European buyout funds. Venture capital fundraising was flat, and Asia declined while the Rest of World remained at approximately the same level as in the prior year. Private equity debt strategies such as mezzanine and credit were popular given investor's quest for yield as noted above. Generally, there is a

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<sup>1</sup> Bloomberg

<sup>2</sup> IMF

<sup>3</sup> Bureau of Labor Statistics

<sup>4</sup> Eurostat

<sup>5</sup> National Bureau of Statistics China

<sup>6</sup> Trading Economics

dichotomy in the market, with certain strategies and top-performing managers raising capital quickly, and most others seeing a continuation of extended fundraising timeframes. With public markets continuing to rise during the first quarter of 2013, expanding allocations, strong distributions during 2012, and a persistent low-interest rate environment, many limited partners are planning on increasing their exposure to alternatives during 2013. Refer to the Market Overview Section for further market statistics.

## Portfolio Summary

### Portfolio Review

#### THREE NEW FUND COMMITMENTS

During the quarter, OPERF closed on \$275 million in commitments to four new funds. Please see Activity Detail (page 6) for more details and for other recent commitment activity.

#### CONTRIBUTIONS INCREASED

Contributions increased by 40.1% from the prior quarter's \$447 million. Contributions were 8.6% of unfunded commitments at the beginning of the quarter and 20.5% higher than the most recent four-quarter average of \$520 million.

#### DISTRIBUTIONS INCREASED

Distributions escalated 119.7% from the prior quarter marking a new all-time peak for the Program, 73.4% higher than the prior all-time peak of \$830 million during the first quarter of 2011. Quarterly distributions were 9.7% of the quarter's opening balance and were 73.7% higher than the most recent four-quarter average, which now stands at \$828 million.

#### PORTFOLIO GAINS

The Portfolio appreciated by \$526 million, net of cash flows, during the quarter, representing a 3.4% appreciation from the prior quarter. The quarterly appreciation caused the Program's long-term historical IRR since inception to remain unchanged.

#### WEIGHTED AVERAGE AGE UP

Based on the remaining value of all underlying funds, the weighted average age of the Portfolio was 6.0 years as of December 31, 2012, representing a 0.6% increase from the prior quarter. The relatively mature age of the Program is expected to result in a gradual increase of positive net cash flows in the coming years.

### Portfolio Activity

\$ Million | Figures may not foot due to rounding

	2011	2012			
	Q4	Q1	Q2	Q3	Q4
Starting Valuation	\$13,243	\$13,892	\$14,645	\$14,528	\$14,899
Contributions	\$874	\$398	\$608	\$447	\$626
Distributions	(\$698)	(\$431)	(\$789)	(\$655)	(\$1,439)
Appreciation/(Depreciation)	\$473	\$785	\$65	\$579	\$526
Ending Valuation	\$13,892	\$14,645	\$14,528	\$14,899	\$14,612
Unfunded Commitments	\$7,768	\$7,158	\$7,700	\$7,501	\$7,029
IRR Since Inception	15.8%	15.9%	15.8%	15.8%	15.8%
Weighted Avg. Age of Portfolio (yrs)	5.7	5.9	5.8	6.0	6.0

## Program Summary

### Active, Exited and Overall Program Performance

\$ Million | Figures may not foot due to rounding

	September 30, 2012	December 31, 2012
Total Pension Assets *	\$60,313	\$61,575
Allocation to Private Equity: (Target 16.0% +/- 4.0%)	24.7%	23.7%
<b>ACTIVE</b>		
# of Partnerships	201	205
Capital Committed	\$26,407	\$26,682
Cash Contributed	\$21,960	\$22,546
Recallable Return of Capital	\$2,591	\$2,655
Cash Distributed (Other) <sup>1</sup>	\$12,172	\$13,489
Estimated FMV	\$14,862	\$14,612
Total Value (Excl. Recallable ROC)	\$27,034	\$28,102
Total Value Multiple <sup>2</sup>	1.40x	1.41x
IRR Since Inception	10.6%	10.7%
<b>EXITED</b>		
# of Partnerships	49	49
Capital Committed	\$4,739	\$4,739
Cash Contributed	\$5,915	\$5,897
Recallable Return of Capital	\$1,052	\$1,052
Cash Distributed (Other) <sup>1</sup>	\$10,135	\$10,129
Estimated FMV**	\$11	\$0
Total Value (Excl. Recallable ROC)	\$10,146	\$10,129
Total Value Multiple <sup>2</sup>	2.09x	2.09x
IRR Since Inception	17.9%	17.9%
<b>OVERALL</b>		
Portfolio Multiple <sup>2</sup>	1.53x	1.55x
IRR	15.8%	15.8%

\* Total Pension Assets updated to incorporate actual Private Equity portfolio values at each quarter end.

\*\* Includes escrows of exited deals.

1) Includes all non-recallable distributions

2) Total Value Multiple is calculated net of recallable return of capital ("ROC"). In practice, both total distributions and contributions are reduced by the amount of recallable ROC in the numerator and denominator of the calculation, respectively.

- As of quarter-end OPERF has contributed \$28.4 billion, funding approximately 90.5% of aggregate capital commitments made since inception. Approximately \$7.0 billion of capital commitments remain outstanding.
- Since inception, a total of approximately \$23.6 billion has been distributed to the OPERF.
- OPERF's private equity allocation by market value is above its 16% target as a result of significant draw downs during the 2007 - 2010 period and the scarcity of distributions as firms avoided sales at the bottom of the market. The result was significant expansion of average holding periods. Private equity funds have sought to support the most promising of their existing portfolio companies in a volatile economic environment by making follow-on investments to supply working capital or expand market share by purchasing competitors at attractive prices. However, the quarterly cash flow chart on the next page shows a shift starting in 2012 to distributions outweighing contributions. As such private equity as a percentage of the total portfolio decreased this quarter.

## Activity Detail

### Recent Investment Activity

INVESTMENT NAME	DATE AUTHORIZED	DATE CLOSED	AMOUNT COMMITTED
Crescent Mezzanine Partners Fund VI	6/27/2012	10/15/2012	\$75 million
Advent International GPE VII-C	9/26/2012	10/31/2012	\$50 million
Pine Brook Capital Partners II	9/26/2012	11/14/2012	\$75 million
Nordic Capital Fund VIII	10/22/2012	11/9/2012	\$75 million
A&M Capital Partners	12/5/2012	4/17/2013	\$100 million
CDH Fund V	12/13/2012	2/8/2013	\$75 million
<b><u>Subsequent Activity:</u></b>			
Riverside Capital Appreciation Fund VI	1/23/2013	5/8/2013	\$75 million
RRJ Capital	2/28/2013	3/29/2013	\$75 million
CVC Capital Partners Fund VI	4/29/2013	N/A	\$200 million
Morgan Stanley Private Equity Asia IV	4/29/2013	N/A	\$75 million
Vista Foundation Fund II	4/29/2013	N/A	\$75 million
Apollo Investment Fund VIII	5/1/2013	N/A	\$250 million

## *Glossary*

### **Variance Analysis Reports**

These reports provide an analysis of the difference between the portfolio and the benchmark returns in terms of sector exposure. The incremental return is attributed to over-or under-weighting and selection within the sector.

*For each sector, the beginning of the period weighting is used for both the portfolio and the benchmark. Returns are time-weighted for periods longer than one month. For periods of more than one month, the monthly calculations are geometrically linked over the indicated time period.*

### **WEIGHTING**

Measures the portion of the portfolio return that can be attributed to over/underweighting sectors/countries relative to the benchmark. Positive weighting occurs if the fund was overweighted in sectors/countries that performed well or underweighted in sectors/countries that did not perform well.

$$\text{Sector weighting} = [ \text{benchmark return}_{(\text{sector})} - \text{benchmark return}_{(\text{total})} ] \times [ \text{portfolio beginning weight}_{(\text{sector})} - \text{benchmark beginning weight}_{(\text{sector})} ] / 100$$

### **SELECTION**

Measures the portion of the portfolio return that can be attributed to the selection of securities within a sector/country relative to the benchmark. Positive selection occurs if the portfolio's sector/country return is greater than the benchmark sector/country return.

$$\text{Sector selection} = [ \text{portfolio return}_{(\text{sector})} - \text{benchmark return}_{(\text{sector})} ] \times [ \text{portfolio beginning weight}_{(\text{sector})} ] / 100$$

### **TIMING**

This is the value required to make the sum of weighting + selection + timing = the total variance between the portfolio and the benchmark. This is a result of attribution being based on beginning weights and the portfolio shifting weights throughout the month.

**TAB 8 – ASSET ALLOCATIONS & NAV UPDATES**

### Asset Allocations at April 30, 2013

Regular Account								Variable Fund	Total Fund
OPERF	Policy	Target	\$ Thousands	Pre-Overlay	Overlay	Net Position	Actual	\$ Thousands	\$ Thousands
Public Equity	38-48%	43%	24,001,213	38.1%		24,133,388	38.3%	799,980	24,933,368
Private Equity	12-20%	16%	13,825,310	21.9%	132,175	13,825,310	21.9%		13,825,310
<b>Total Equity</b>	<b>54-64%</b>	<b>59%</b>	<b>37,826,523</b>	<b>60.0%</b>		<b>37,958,698</b>	<b>60.2%</b>		<b>38,758,678</b>
Opportunity Portfolio			899,294	1.4%		899,294	1.4%		899,294
<b>Fixed Income</b>	<b>20-30%</b>	<b>25%</b>	<b>14,484,096</b>	<b>23.0%</b>	<b>1,452,181</b>	<b>15,936,277</b>	<b>25.3%</b>		<b>15,936,277</b>
<b>Real Estate</b>	<b>8-14%</b>	<b>11%</b>	<b>7,607,796</b>	<b>12.1%</b>	<b>(3,300)</b>	<b>7,604,496</b>	<b>12.1%</b>		<b>7,604,496</b>
<b>Alternative Investments</b>	<b>0-8%</b>	<b>5%</b>	<b>592,453</b>	<b>0.9%</b>		<b>592,453</b>	<b>0.9%</b>		<b>592,453</b>
<b>Cash*</b>	<b>0-3%</b>	<b>0%</b>	<b>1,609,862</b>	<b>2.6%</b>	<b>(1,581,056)</b>	<b>28,806</b>	<b>0.0%</b>	66,189	<b>94,995</b>
<b>TOTAL OPERF</b>		<b>100%</b>	<b>\$ 63,020,024</b>	<b>100.0%</b>	<b>\$ -</b>	<b>\$ 63,020,024</b>	<b>100.0%</b>	<b>\$ 866,169</b>	<b>\$ 63,886,193</b>

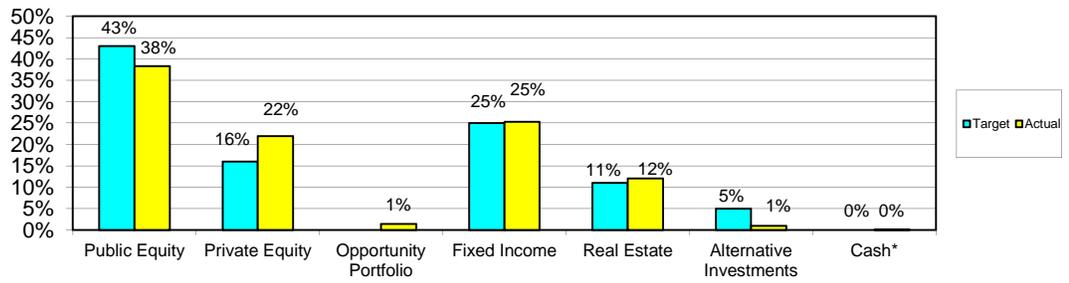
\*Includes cash held in the policy implementation overlay program.

SAIF	Policy	Target	\$ Thousands	Actual
<b>Total Equity</b>	<b>7-13%</b>	<b>10.0%</b>	<b>486,173</b>	<b>10.7%</b>
<b>Fixed Income</b>	<b>87-93%</b>	<b>90.0%</b>	<b>4,017,620</b>	<b>88.5%</b>
<b>Cash</b>	<b>0-3%</b>	<b>0%</b>	<b>37,792</b>	<b>0.8%</b>
<b>TOTAL SAIF</b>		<b>100%</b>	<b>\$4,541,585</b>	<b>100.0%</b>

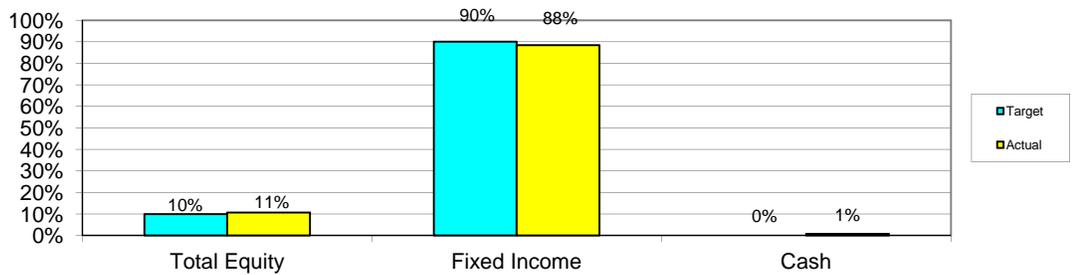
CSF	Policy	Target	\$ Thousands	Actual
Domestic Equities	25-35%	30%	\$389,676	30.9%
International Equities	25-35%	30%	395,116	31.4%
Private Equity	0-12%	10%	118,847	9.4%
<b>Total Equity</b>	<b>65-75%</b>	<b>70%</b>	<b>903,639</b>	<b>71.8%</b>
<b>Fixed Income</b>	<b>25-35%</b>	<b>30%</b>	<b>349,015</b>	<b>27.7%</b>
<b>Cash</b>	<b>0-3%</b>	<b>0%</b>	<b>6,515</b>	<b>0.5%</b>
<b>TOTAL CSF</b>			<b>\$1,259,169</b>	<b>100.0%</b>

HIED	Policy	Target	\$ Thousands	Actual
Domestic Equities	20-30%	25%	\$19,840	27.7%
International Equities	20-30%	25%	18,517	25.9%
Private Equity	0-15%	10%	6,397	8.9%
<b>Growth Assets</b>	<b>50-75%</b>	<b>60%</b>	<b>44,754</b>	<b>62.6%</b>
Real Estate	0-10%	7.5%	4,988	7.0%
TIPS	0-10%	7.5%	4,803	6.7%
<b>Inflation Hedging</b>	<b>7-20%</b>	<b>15%</b>	<b>9,791</b>	<b>13.7%</b>
Fixed Income	20-30%	25%	15,914	22.3%
Cash	0-3%	0%	1,040	1.5%
<b>Diversifying Assets</b>	<b>20-30 %</b>	<b>25%</b>	<b>16,954</b>	<b>23.7%</b>
<b>TOTAL HIED</b>			<b>\$71,499</b>	<b>100.0%</b>

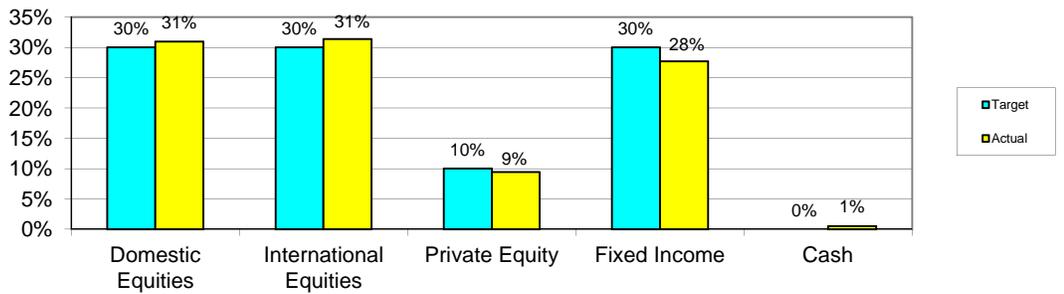
### OPERF Asset Allocation



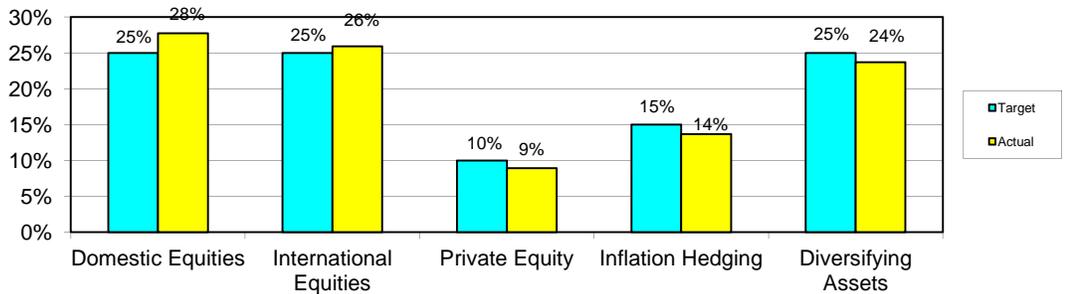
### SAIF Asset Allocation



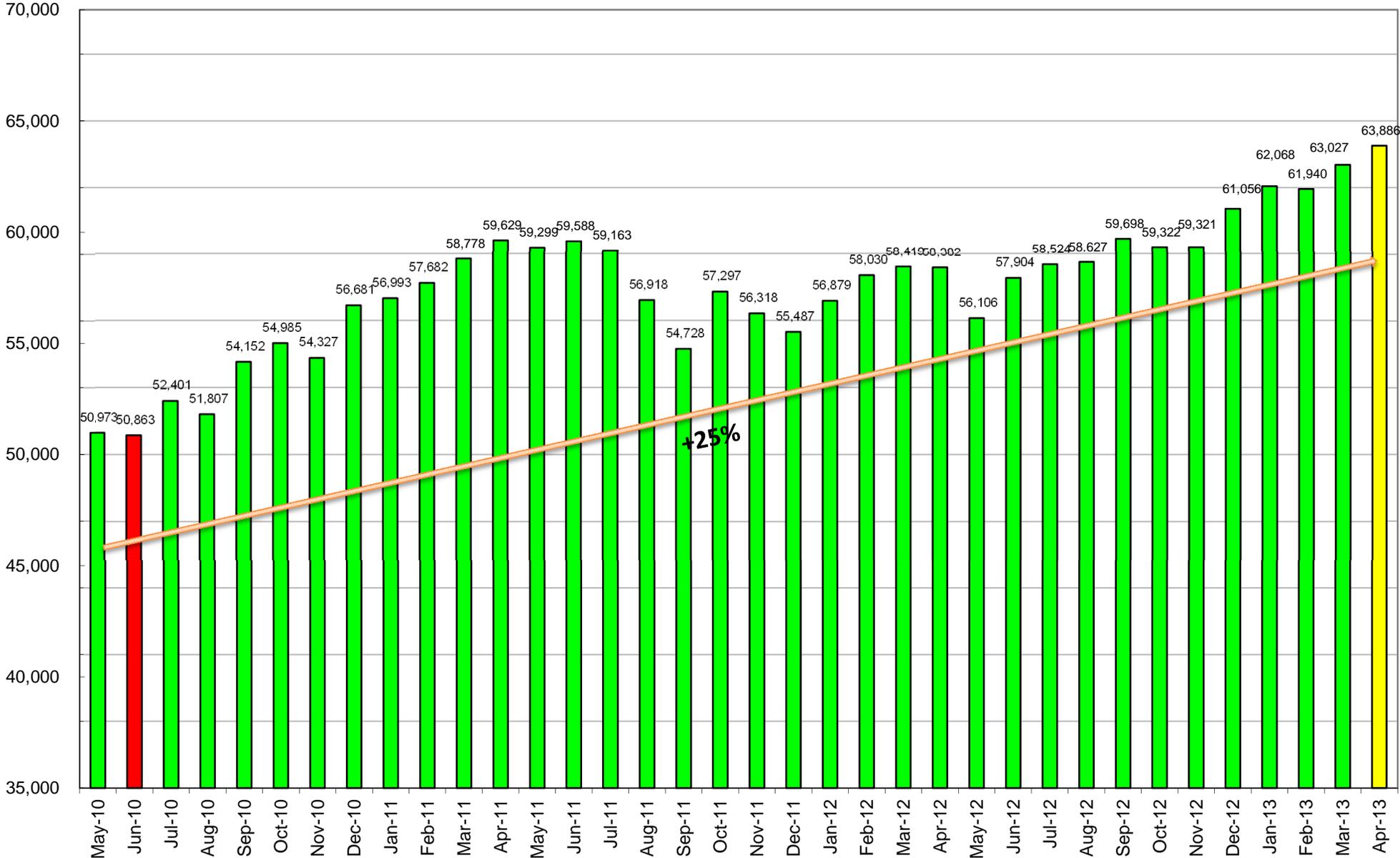
### CSF Asset Allocation



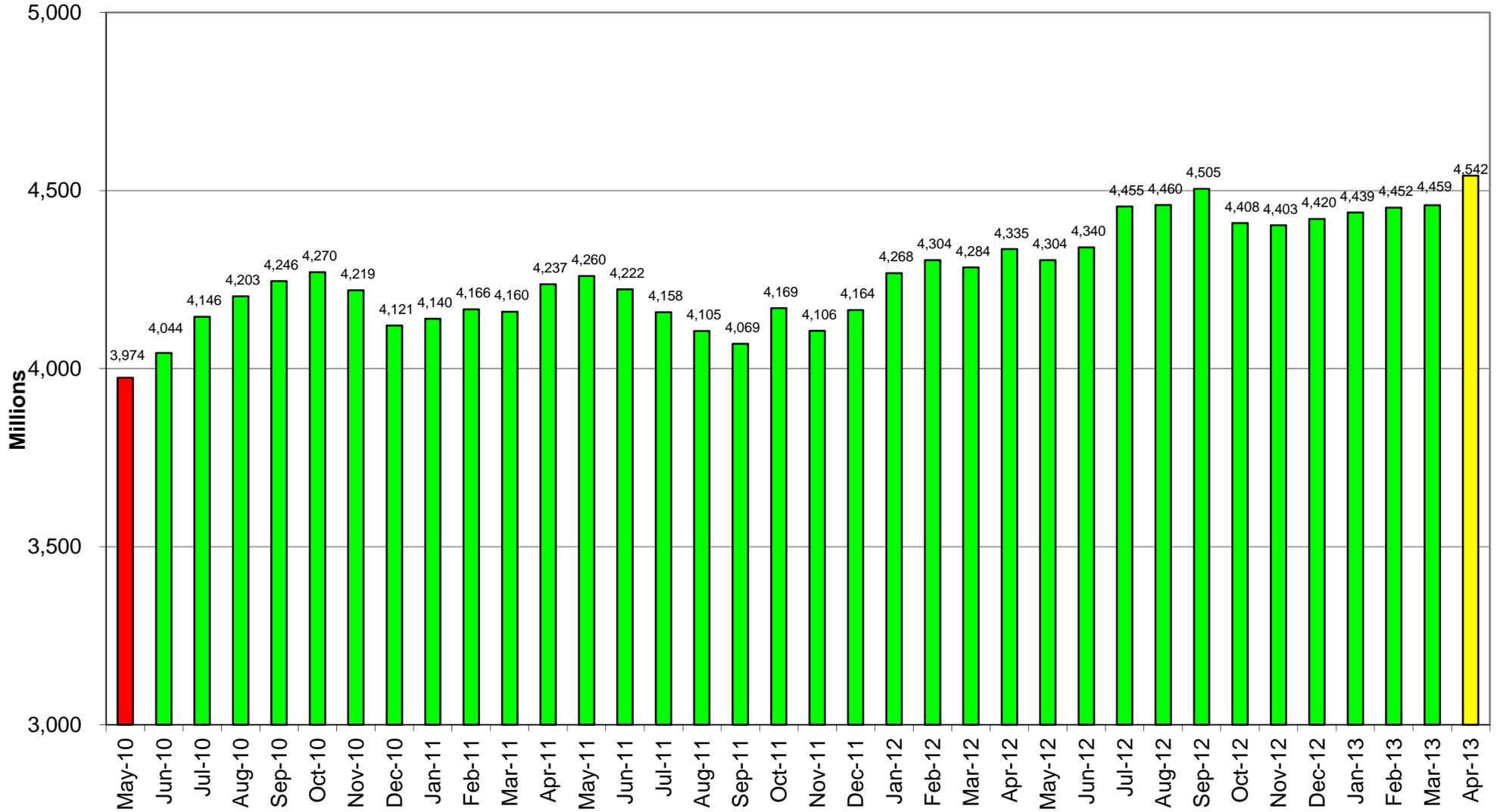
### HIED Asset Allocation



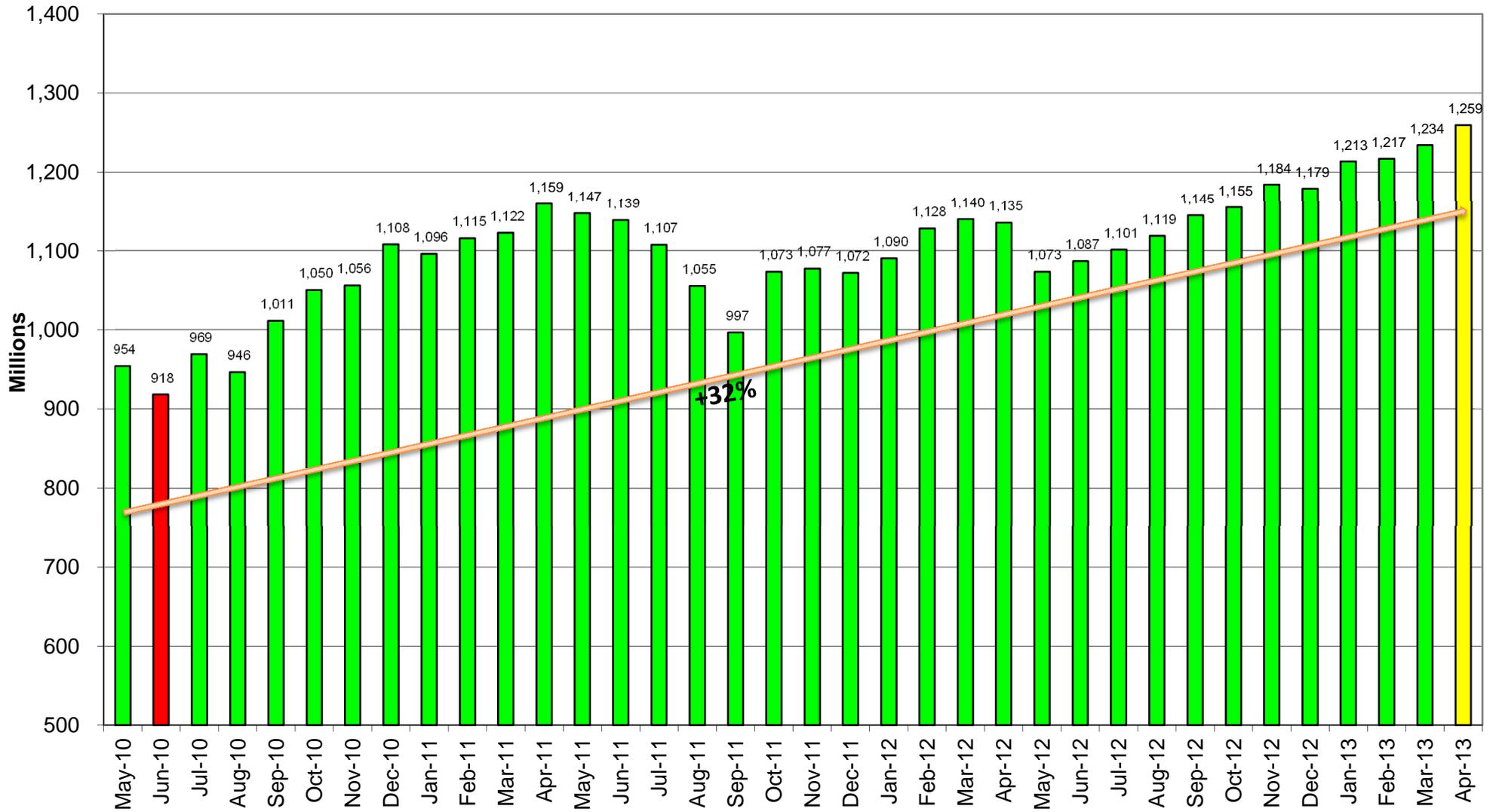
**OPERF NAV**  
**Three years ending April 2013**  
**(\$ in Millions)**



**SAIF NAV**  
**Three years ending April 2013**  
**(\$ in Millions)**



**CSF NAV**  
**Three years ending April 2013**  
**(\$ in Millions)**



TAB 9 – CALENDAR – FUTURE AGENDA ITEMS

## **2013 OIC Forward Agenda Topics**

- June 26:** Asset/Liability Study  
OPERF Real Estate  
OPERF Public Equity  
OPERF Policy Implementation Overlay Review  
OPERF Fixed Income Portfolio Review
- July 31:** OPERF Real Estate Portfolio Review  
OPERF Alternatives  
SAIF Annual Review  
Annual OIC Policy Review & Update
- September 25:** OSTF Annual Review  
OITP Annual Review  
OPERF Public Equity Review
- October 30:** Common School Fund Review  
CEM Benchmarking Report  
OIC General Consultant Recommendation  
Internal Audit Report
- December 10:** OPERF Opportunity Portfolio Review  
HIED Annual Review  
OPERF 3<sup>rd</sup> Quarter Performance Review