
Oregon Investment Council

**April 30, 2014
9:00 AM**

**PERS Headquarters
11410 S.W. 68th Parkway
Tigard, OR 97223**



Dick Solomon
Chair

John Skjervem
Chief Investment Officer

Ted Wheeler
State Treasurer

OREGON INVESTMENT COUNCIL

2014 Schedule

Meetings Begin at 9:00 am

PERS Headquarters Building
11410 S.W. 68th Parkway
Tigard, OR 97223

Wednesday, January 29, 2014

Wednesday, March 5, 2014

Wednesday, April 30, 2014

Wednesday, May 28, 2014

Wednesday, July 30, 2014

Wednesday, September 24, 2014

Wednesday, November 5, 2014

Wednesday, December 3, 2014



OREGON INVESTMENT COUNCIL

Agenda

April 30, 2014
9:00 AM

PERS Headquarters
11410 S.W. 68th Parkway
Tigard, OR 97223

<u>Time</u>	<u>A. Action Items</u>	<u>Presenter</u>	<u>Tab</u>
9:00-9:05	1. Review & Approval of Minutes March 5, 2014 Regular Meeting	Dick Solomon <i>OIC Chair</i>	1
	Committee Reports	John Skjervem <i>Chief Investment Officer</i>	
9:05-9:50	2. The Energy & Minerals Group Fund III, LP <i>OPERF Alternatives Portfolio</i>	John Hershey <i>Director</i> Ben Mahon <i>Investment Officer</i> John Raymond <i>CEO & Managing Partner, EMG</i> Tom Martin <i>TorreyCove Capital Partners</i>	2
9:50-10:30	3. Warburg Pincus Energy Fund <i>OPERF Private Equity</i>	Sam Green <i>Investment Officer</i> Peter Kagan <i>Managing Director</i> Steve Schneider <i>Managing Director</i> Tom Martin	3
10:30-10:45	----- BREAK -----		

TAB 1 – REVIEW & APPROVAL OF MINUTES

April 30, 2014 Regular Meeting

OST Committee Reports – Verbal



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

OREGON INVESTMENT COUNCIL
MARCH 5, 2014
MEETING MINUTES

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

Staff Present: Anthony Breault, Austin Carmichael, Karl Cheng, Garrett Cudahey, Sam Green, Andy Hayes, John Hershey, Brooks Hogle, Perrin Lim, Tom Lofton, Ben Mahon, Mike Mueller, Tom Rinehart, Priyanka Shukla, James Sinks, John Skjervem, Michael Viteri, Michelle Winegar

Consultants Present: David Fann and Tom Martin (TorreyCove); Alan Emkin, David Glickman, John Linder and Mike Moy (PCA); Jim Callahan, Uvan Tseng

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

The March 5, 2014 OIC meeting was called to order at 9:01 am by Dick Solomon, Chair.

I. 9:01 am Review and Approval of Minutes

MOTION: Treasurer Wheeler moved approval of the January 29, 2014 meeting minutes. Ms. Durant seconded the motion, which then passed by a 5/0 vote.

9:02AM COMMITTEE REPORTS

John Skjervem, CIO gave an update on committee actions taken since the January 29, 2014 OIC Meeting:

Private Equity Committee

None

Alternatives Portfolio Committee – February 13, 2014:

The Forest Company Limited	\$100 Million
NGP Agribusiness Follow-On Fund LP	\$100 Million
Alterna Capital Assets Fund II, LP	\$100 Million

Opportunity Portfolio Committee

None

Real Estate Committee – February 25, 2014:

DivcoWest Fund IV REIT, L.P.	\$100 Million
Waterton Residential Fund XII, L.P.	\$100 Million
Talmage Total Return Partners, LLC	\$100 Million

II. 9:03am International Micro Cap Recommendation

Within the OPERF International Equity Portfolio, staff and Callan recommend hiring Dimensional Fund Advisors (DFA) and EAM Investors (EAM) for micro-cap value and micro-cap growth mandates, respectively.

International equity micro-cap represents a unique segment of public equity markets with characteristics such as lower market capitalization, reduced liquidity and higher volatility compared to large, mid and small cap stocks. Micro-cap exposures should realize differentiated performance and provide broader opportunities for portfolio diversification. Micro-cap securities also tend to be underfollowed and under-researched by institutional investors.

Staff believes the OPERF International Equity portfolio can capture excess returns, net of fees, through well-designed strategies focused on investments in international micro-cap stocks.

MOTION: Treasurer Wheeler moved approval of the staff recommendation. Ms. Durant seconded the motion, which passed by a vote of 5/0.

III. 10:03am OPERF Private Equity Review & 2014 Plan

Sam Green, David Fann and Tom Martin presented the OPERF Private Equity Review & 2014 Plan.

IV. 10:58am Proxy Voting Annual Review

Bob McCormick from Glass Lewis & Co. presented an annual review and update on proxy voting issues.

V. 11:24am OIC Policy Updates

Mike Mueller, Perrin Lim and John Hershey presented a review of and recommended updates to several specific OIC policies.

MOTION: Chair Richard Solomon moved approval of staff's policy update recommendations. Keith Larson seconded the motion, which passed by a vote of 5/0.

VI. 11:31am Information Items

PCA's Allan Emkin reviewed the OPERF 4th Quarter and calendar year 2013 performance report.

VII. 11:43am Asset Allocations & NAV Updates

John Skjervem reviewed asset allocations and NAVs across various OST-managed accounts including the Oregon Public Employees Retirement Fund, SAIF Corporation, Common School Fund and Higher Education Pooled Endowment Fund for the period ending December 31, 2013.

11:45 Calendar – Future Agenda Items

John Skjervem reviewed the forward calendar and currently planned OIC meeting agendas.

11:45 Other Items

None

11:45am Public Comment

Bill Parrish, Independent Investor and Advisor, commented on Proxy impact.

Mr. Solomon adjourned the meeting at 11:48am.

Respectfully submitted,

Michelle Winegar
Executive Assistant

TAB 2 – THE ENERGY & MINERALS GROUP FUND III, LP

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The Energy & Minerals Group Fund III, L.P.

Purpose

Staff and TorreyCove recommend approval of a \$200 million commitment to The Energy & Minerals Group Fund III, L.P. (the "Fund") for the OPERF Alternatives Portfolio, subject to satisfactory completion of all legal negotiations with Staff working in concert with Department of Justice personnel.

Background

The Energy & Minerals Group ("EMG") was established in 2006 by John Raymond and John Calvert to pursue a broad natural resources investment mandate. In aggregate and since the firm's inception, EMG has managed, invested and committed over \$6.7 billion in the natural resources industry. This fund will be EMG's third fund offering since 2006. The Fund is targeting a \$2.5 billion (with a maximum cap of \$4.0 billion) raise with a mid-teens net return target. In addition to a 2% GP commitment to the Fund, management is expected to make sizeable co-invest commitments too.

Discussion/investment considerations

EMG intends to invest Fund capital across the entire energy value chain and all facets of the minerals and metals industry. The firm will focus in North America and Australia and will typically target equity investments ranging between \$150 million to \$400 million. In order to generate what EMG believes are the most attractive risk-adjusted returns, the firm relies on capital allocation flexibility, utilizing an investment strategy with "three dimensional" diversification (i.e., geography, commodity and business function), which allows EMG to adapt to the investment landscape. EMG will target portfolio companies with the following three key characteristics: 1) low cost sources of supply and/or production; 2) high-quality products; and 3) strategic proximal locations. EMG pushes its portfolio companies to develop "franchise" businesses which are positioned to achieve meaningful growth during its ownership period.

Attributes:

- *Experienced team and proprietary deal flow.* Each of the Firm's senior investment professionals has extensive experience investing in and/or operating natural resources assets. Notably, John Raymond, Chief Executive Officer of EMG, has substantial operating experience in the natural resources industry having served in various executive roles throughout his career. Lee Raymond, retired Chairman and CEO of ExxonMobil (and John's father) will also serve on the investment committee. Staff believes EMG's deep industry relationships and network provide ongoing and differentiated access to a) attractive deal flow (of note, all of the firm's Fund I and Fund II investments were sourced and negotiated on an exclusive basis) and b) highly accomplished management teams.
- *Global demand.* Long-term global macroeconomic fundamentals emphasize the need for significant investments in energy and materials. Global energy demand is driven by developing countries and is projected to increase by 1.5% per year between 2010 and 2040. In addition, there is significant demand growth expected for the key steel industry inputs (iron ore, metallurgical coal and manganese) primarily due to the urbanization of many developing countries.
- *Strong track record.* As of September 30, 2013, Fund I has generated a 2.1x net multiple and a 24.5% net IRR and has distributed 80% of total contributed capital back to its investors. As of September 30, 2013, Fund II has invested \$1.85 billion in ten platform companies, and while still in its J-curve phase, Fund II has generated a 27.4% gross IRR and an 11.9% net IRR.
- *Flexible and diversified exposure.* EMG is not solely focused on any one sub-sector of the industry in any one region (e.g., North American upstream oil and gas) and therefore can

allocate capital to what the firm believes are the most attractive risk-adjusted opportunities across the natural resources industry. EMG aims to achieve a balanced portfolio through both diversification of commodity and business function. Although the firm is focused on North America and Australia, its current fund exposures are diversified across the globe.

Concerns:

- *Dependence on key personnel.* The success or failure of the program will be highly dependent on John Raymond's investment experience, management relationships and industry network. [Mitigant: Staff assesses his departure odds as low. Additionally, Mr. Raymond has invested a substantial portion of his liquid net worth into the strategy].
- *Sector volatility.* The financial performance of the Fund may be influenced by commodity prices, which are impacted by a variety of factors. [Mitigant: EMG believes its ability to generate returns without reliance on high or increasing commodity prices has been demonstrated throughout the life of Fund I, a period in which most major commodities have decreased in value and experienced significant volatility. In addition, the Fund's diversified asset holdings should provide some level of protection as end-use product variety can smooth otherwise cyclical price fluctuations.]
- *Competitive market for investment opportunities.* There has been strong interest from institutional investors in real assets, including energy and materials strategies. Increased demand for natural resource assets could bid up acquisition prices and hurt future returns. [Mitigant: Staff has confidence in EMG's financial discipline and expertise in acquiring, managing and monetizing natural resources assets.]
- *Regulatory risk.* The legal and regulatory environment worldwide for the natural resources industry is evolving and changes may have an adverse effect on the Fund's ability to pursue its investment strategy. [Mitigant: All investments in the global natural resources industry are subject to the aforementioned risks. Staff finds the risk/reward tradeoff to be reasonable and supported by a) the team's experience as operators, b) the Fund's asset diversification and c) the Fund's specific focus on countries with strong and stable legal systems.]
- *Partnership with American Energy Partners.* The Fund has partnered with American Energy Partners, a firm founded and led by Aubrey McClendon, founder and former CEO of Chesapeake Energy. Mr. McClendon attracted considerable attention and criticism for his outspoken opinions and actions while at Chesapeake. [Mitigant: Staff has confidence in EMG's ability to effectively structure and manage portfolio company relationships and believes incentives are aligned to ensure proper oversight and governance.]

Terms

The Fund's terms include a management fee on committed capital with a standard carry and preferred return. The Fund has a five-year investment period and a ten-year term with two one-year extensions. All portfolio company fees are offset 100% against management fees. Finally, EMG retained Credit Suisse as its placement agent, with whom OST staff has had contact.

Conclusion

The Alternatives Portfolio is targeting a 10-20% allocation (approximately \$650 million - \$1.3 billion at current OPERF NAV) to oil and gas investments and a 5-10% allocation (approximately \$325 million - \$650 million) to metals and mining investments. To date, OPERF has made \$275 million in aggregate commitments to these sectors. EMG would represent a complementary strategy as Staff seeks to build out its natural resources allocation.

Staff believes EMG represents an opportunity to invest with a high conviction manager in an attractive sector. Natural resource represents one of the largest and most capital intensive industries in the world, with global economic and population growth underpinning positive demand dynamics. EMG is a focused investor with a deep network of relationships, experience and expertise across the entire energy, metals and mining value chain. Due to its team's extensive experience operating assets, EMG has the in-house ability to approach due diligence through the "lens" of an operator, which Staff believes results in a strong emphasis on risk identification, management and mitigation.



MEMORANDUM

TO: Oregon Public Employees Retirement Fund ("OPERF")
FROM: TorreyCove Capital Partners ("TorreyCove")
DATE: April 21, 2014
RE: The Energy & Minerals Group Fund III, L.P. ("Fund III" or the "Fund")

Strategy:

The investment strategy of Fund III will be consistent with that of Funds I and II. The investment scope is rather broad across the entire energy value chain and spectrum of steel industry inputs, platinum group metals, and base metals. The team will take a top down approach to identify the most favorable sub-sectors to invest. Under the current macroeconomic environment and industry dynamics, Energy & Minerals Group ("EMG") has identified the following sub sectors to be most compelling: 1) upstream and midstream energy companies, and 2) the value chain of steel industry inputs.

The Firm will focus on investment opportunities that do not rely on high or rising commodity prices to generate returns and are integral to existing and growing markets. The Firm seeks to identify investments that have the following characteristics:

- 1) Low cost sources of supply and/or production – EMG targets businesses with low cost sources of supply and/or production. Such businesses will be able to efficiently compete through various macro-economic cycles.
- 2) High quality commodity based products – EMG targets companies with high quality commodity based products in order to maximize margins and achieve superior profitability.
- 3) Strategic proximal locations – EMG also targets companies that are strategically located near their direct end users or key export points in order to have the ability to deliver the respective products to market on a cost competitive basis.

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

Conclusion:

The Fund offers OPERF an opportunity to participate in a differentiated portfolio of private investments with relatively attractive overall terms. TorreyCove's review of the General Partner and the proposed Fund indicates that the potential returns available justify the risks associated with an investment in the Fund. TorreyCove recommends that OPERF consider a commitment of \$200 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;



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CAPITAL PARTNERS

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

TAB 3 – WARBURG PINCUS ENERGY FUND

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Warburg Pincus Energy, L.P.

Purpose

Subject to satisfactory negotiation of the requisite legal documents with Staff working in concert with Department of Justice personnel, Staff recommends approval of an up to \$150 million commitment to Warburg Pincus Energy, L.P. (the “Fund”) for the OPERF Private Equity Portfolio. This commitment would be a continuation of an existing OPERF relationship.

Background

Warburg Pincus (“Warburg” or the “Firm”) was founded in 1966, and has grown to be one of the largest pure-play private equity firms in the world. Since inception, the Firm has grown to approximately 450 employees, including 170 investment professionals, 60 of which are at the Managing Director (partner) level, and with offices around the world. Warburg has historically focused on growth investments in five core sectors: energy; healthcare; technology, media and telecom; financial services; and consumer/industrial services. The Firm began targeting energy investments in 1987, and since then has invested over \$9.0 billion in more than 50 energy investments. Warburg has 21 investment professionals, including six Managing Directors, dedicated to executing their energy strategy. This long tenure, extensive track record and large team rank the Firm among the leaders in energy-focused private equity investing.

Prior energy investments were made out of the Firm’s global, diversified private equity funds. Warburg believes the opportunities arising from the recent unconventional oil and gas plays far exceed the amount of capital it can earmark for energy investments from their current global fund. Accordingly, the Firm is raising this stand-alone energy fund to invest in future energy investments alongside its global fund, on a 50/50 pro rata basis. OPERF has committed to two previous Warburg Pincus global funds, with commitments of \$200 million to Fund IX in 2005, and \$400 million to Fund X in 2007.

Strategy

Warburg expects the Fund will be diversified both geographically and across several sub-sectors of the energy industry. The Firm considers exploration and production (E&P) of North American unconventional oil and gas the best current opportunity, and thus expects this area to receive the greatest investment focus and capital allocation. Secondary areas of emphasis include highly-targeted North American mid-stream development, global oilfield services, global power and opportunistic mining and metals investments.

For most E&P investments, the Firm utilizes a platform/line-of-equity structure. Rather than acquiring existing companies, Warburg brings together and backs a talented management team and forms a new company to pursue an E&P strategy. For example, Warburg backed Lisa Stewart and the Sheridan Production Partners fund which resides in OPERF’s Alternatives Portfolio.

The Firm typically will make an equity commitment to the new company, but similar to a line-of-credit, it will be funded in tranches, only upon the company’s successful completion of pre-negotiated milestones. Warburg believes this line-of-equity structure provides better management team alignment and motivation as well as reduced investment risk as less capital is invested in companies that underperform early or fail to meet prescribed milestones. For all types of investments, the Firm typically uses either no leverage, or very conservative levels, and where possible tries to hedge commodity price risk. Warburg focuses on generating private equity level returns through operating improvements, attractive follow-on

investments, superior management performance and multiple expansion generated by either increased scale and/or de-risked assets or reserves.

Issues to Consider

Attributes:

- *Strong investment performance.* Since 1998, previous Warburg funds have made 60 energy investments which generated an aggregate net IRR of 20.5%, and an aggregate net value multiple of 2.2x. Energy investments made prior to 1998, while successful, are not considered representative of the Fund's current strategy, as they focused on smaller transactions, and energy-related venture capital investments. Inclusive of the pre-1998 investments, the aggregate net IRR is 17.4%.
- *Large opportunity.* The unconventional energy revolution occurring in North America is in its early innings, and the amount of capital needed is very large across both upstream and downstream opportunities, estimated at over \$100 billion over the next five years alone.
- *Sector expertise and sourcing capability.* Warburg, alongside Encap and Yorktown, represents one of the oldest and most experienced energy private equity practices. Its senior investment team has a long tenure in the energy industry, and has built broad and deep networks which generate deal flow and proprietary opportunities with outstanding energy management teams and operators.
- *Portfolio Fit.* One of the objectives arising from the 2014 Private Equity planning session was to increase OPERF's exposure to energy-related strategies. This commitment to the Fund is one of two planned energy-related investments in 2014 and will represent a core relationship within the energy sector of OPERF's private equity portfolio.
- *Existing relationship.* OPERF has an existing relationship with Warburg, having committed to two of the Firm's global funds. The Firm has been a good partner in terms of reporting, communications and responsiveness.

Concerns:

- *Potential headline risk.* The Fund will be pursuing a strategy that focuses on exploration and production of unconventional oil and gas, as well as mid-stream investments in hydrocarbon transportation and storage facilities. Inherent in this strategy, there are environmental and safety risks in both horizontal drilling and pipeline and storage facilities operations. [Mitigant: While accidents can and do happen, Warburg had demonstrated a deep commitment to environmental sustainability, social responsibility and corporate governance (ESG) principles as evidenced by the Firm adoption of the Private Equity Growth Capital Council's *Guidelines for Responsible Investment*. Moreover, the Firm has made significant contributions to The Nature Conservancy's efforts to protect the Flathead River basin as an environmental mitigation offset to its other energy-related investment activities.]
- *Regulatory Risk.* Many Fund investments are expected to be subject to regulatory oversight or approval. Certain potential regulatory activities, such as a ban on horizontal drilling on federal land, an offshore drilling moratorium or revocation of a pipeline permit could negatively impact the Fund's investment performance. [Mitigant: The Firm will mitigate such risks by building a well-diversified investment portfolio.]

Terms

The Fund includes a lower than market management fee, a standard carry, but no preferred return. Note: none of Warburg's prior funds, including those OPERF has invested in have had a preferred return; instead, Warburg charges a lower than market management fee to economically offset the lack of a

preferred return. All transaction and monitoring fees are subject to a 100% management fee offset. Finally, no placement agent had contact with Staff in connection with this offering.

Conclusion

Warburg Pincus Energy, L.P. represents an attractive opportunity to increase OPERF's exposure to energy-related private equity investments with an existing, high-performing sector expert, and would, in staff's opinion, fit well within the OPERF private equity portfolio.



MEMORANDUM

TO: Oregon Public Employees Retirement Fund ("OPERF")
FROM: TorreyCove Capital Partners ("TorreyCove")
DATE: April 21, 2014
RE: Warburg Pincus Energy, L.P.

Strategy:

The Fund will invest on a side-by-side basis with Warburg's Global Funds most likely on a 50 / 50 basis in energy and energy-related opportunities. Targeted investments will include companies or projects that are involved throughout the energy value chain including exploration, production, development, extraction, processing, transportation, refining, storage, distribution, marketing and/or trading of natural resources used to produce energy, other natural resources and commodities other than oil and gas, electrical power, and renewable energy resources, including power generation from these alternative sources. While the Fund will be flexible in its approach to transaction structure, Warburg tends to invest in start-up and growth-oriented transactions. The Fund will also pursue investments related to energy services such as companies or projects that serve one or more entities engaged in one or more business as previously described. The Fund is expected to primarily focus on opportunities in the upstream sector while investments in natural resource mining, electric power generation, and renewable energy development will be no more than 25% of the Fund. The Fund will look to invest in 12 to 18 companies ranging on average from \$25 million to \$250 million. The Fund is targeting gross returns of 25% and 3.0x invested capital.

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

Allocation:

A new commitment to the Fund would be allocated 100% to the Medium Corporate Finance investment sub-sector and will further be categorized as International investment. As of the September 30, 2013 report, OPERF's allocation to Medium Corporate Finance is listed in the table below. It is important to note that since allocation is based on fair market value, a commitment to the Fund would not have an immediate impact on OPERF's current portfolio allocation. Commitments to the Fund are complementary to OPERF's existing fund commitments and provide the overall portfolio with a further degree of diversification.

As of September 30, 2013	Target	FMV	FMV + Unfunded
Medium Corporate Finance	5-25%	20.6%	21.0%

Conclusion:

The Fund offers OPERF an opportunity to participate in a differentiated portfolio of private equity investments with relatively attractive overall terms. TorreyCove's review of the General Partner and the proposed Fund indicates that the potential returns available justify the risks associated with an investment in the Fund. TorreyCove recommends that OPERF consider a commitment of up to \$200 million to the Fund. TorreyCove's recommendation is contingent upon the following:



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- (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; and
- (5) Confidentiality maintained regarding the commitment of OPERF to the Partnership until such time as all the preceding conditions are met.

TAB 4 – SECURITIES LENDING UPDATE

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Annual Securities Lending Review

April 30, 2014

Purpose

To provide the OIC an update and review of the securities lending program in place for OPERF, OSTF and other state agency funds.

Background

In accordance with OIC policy 4.01.20 (attached), the investment division may lend securities through an agent lender. The Oregon State Treasury has participated in securities lending arrangements dating back decades. The relationship with State Street Bank began in 1997. Over the past 17 years, OIC-managed accounts have benefited from over \$390 million in net earnings from securities lending.

The OIC was provided an update on securities lending last February. Over the past year, the legacy assets of the separately managed account have been further reduced from approximately \$160 million to approximately \$124 million (total cash collateral is approximately \$2.7 billion in OPERF and \$1B in OSTF and other state agency funds as of March 31, 2014).

Effective January 2014, OST further revised the reinvestment guidelines of the cash collateral managed by State Street. Key changes included: 1) the same reinvestment guidelines now apply to OPERF and other state fund collateral investments; 2) maturity distribution guidelines match those required for the OSTF; 3) corporate debt investments must now match OSTF guidelines; and 4) repurchase agreements may only be collateralized by U.S. Treasury or U.S. Government Agency securities.

See attached revisions made to the OSTF Portfolio Rules to reflect the above changes. Consistent with OIC Policy 4.01.20, the OSTF Board was apprised of the additional constraints at their January 9th meeting. For other than the legacy assets, State Street has reported full compliance with the revised guidelines, effective March 31, 2014.

Discussion

Steve Meier and Johnson Shum will provide the OIC an update on the cash management market and the securities lending market, respectively, with a focus on the two main accounts managed by State Street on behalf of OPERF and other state agency funds, including the OSTF.

FUNCTION: General Policies and Procedures
ACTIVITY: Securities Lending

POLICY: OPERF, SAIF, the CSF, the Oregon Short-term Fund and other funds under the purview of the Oregon Investment Council may lend securities through the OST's lending agent.

PROCEDURES:

1. Recognizing that a lending agent can provide an incremental return to the portfolio by lending securities held:
 - a. The agent shall reinvest cash collateral received in instruments with a risk and return consistent with reinvestment guidelines approved by the Chief Investment Officer;
 - b. Acceptable collateral investments shall be documented with the agent in advance of any lending;
 - c. Collateral reinvestment guidelines for the Oregon Short Term Fund shall be brought to the Oregon Short Term Fund Board, prior to approval by the Chief Investment Officer; and
 - d. Changes to securities lending reinvestment guidelines shall be reported to the Oregon Investment Council, at its next regular meeting, following the change.
2. OST staff shall ensure that securities loaned do not compromise the managers' ability to liquidate positions when necessary.
3. OST Investment Accounting staff shall ensure that securities lending income is properly credited to portfolio accounts.

SAMPLE FORMS, DOCUMENTS OR REPORTS (Attached):

None

FUNCTION: Short Term Investments
ACTIVITY: Portfolio Rules

POLICY: The Oregon Investment Council has, with advice from the Treasurer, from OST investment staff, and from the Oregon Short Term Fund Board, adopted specific rules for investing the Oregon Short Term Fund (OSTF). These rules are included as sample form A.

PROCEDURES:

1. **Verify Compliance With Portfolio Rules.** The Senior Fixed Income Investment Officer and Investment Officer(s) receive an Oregon Short Term Fund Daily Compliance Report. This report summarizes OSTF holdings by type of investment (asset allocation), by investment issuer, by time until investment maturity, and by investment quality (rating). The Daily Compliance Report also summarizes each Portfolio Rule as an "Objective," and compares the actual current portfolio to the objectives. The OSTF staff reviews this report, daily, to ensure compliance with portfolio rules.
2. **Oversight of Compliance.** The Deputy State Treasurer, Chief Investment Officer, Chief Audit Executive, Risk & Compliance Officer, and Investment Accounting staff receive and review this same report daily. For meetings at which the OSTF is discussed, the Oregon Short Term Fund Board and the Oregon Investment Council receive and review the compliance report.
3. **Correction of Non-Compliance.** If the OSTF is found to be out of compliance with one or more adopted portfolio rules, the Senior Fixed Income Investment Officer or Investment Officer(s) shall sell (or purchase) the securities necessary to bring about compliance as soon as is prudently feasible.

SAMPLE FORMS, DOCUMENTS, OR REPORTS (Attached):

- A. Oregon Short Term Fund Portfolio Rules

Sample Form A

Oregon Short Term Fund Portfolio Rules

These are the most current Portfolio Rules for the Oregon Short Term Fund which have been adopted by the Oregon Investment Council.

Portfolio Rules For The Oregon Short Term Fund

~~Amended April 25, 2012~~ Revised January 2014

I. Scope

These rules apply to the investment of cash from all state and eligible local government participants of the Oregon Short Term Fund (“OSTF”). These rules are established under the authority of, and shall not supersede the requirements established under, ORS Chapter 293.

II. Investment Objectives

The primary objectives of investment activities, in priority order, shall be preservation of principal, liquidity, and yield.

- A. Preservation of Principal: Safety is the foremost objective of the OSTF rules. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective will be to mitigate credit risk and interest rate risk (see specific guidelines below).
- B. Liquidity: The OSTF shall remain sufficiently liquid to meet all state agency and local government operating requirements that may be reasonably anticipated. This is accomplished by structuring the OSTF so that securities mature concurrent with cash needs to meet anticipated demands. Furthermore, since all possible cash demands cannot be anticipated, the OSTF should consist largely of securities with active secondary or resale markets.
- C. Yield: The OSTF shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is of secondary importance compared to the safety and liquidity objectives described above. The majority of the OSTF is limited to highly rated/low risk securities in anticipation of earning a fair return relative to the risk being assumed.

III. Standards of Care¹

- A. Prudence: The standard of prudence to be used by investment officers shall be the “prudent investor” standard and shall be applied in the context of managing the OSTF as a whole. Pursuant to ORS Chapter 293.726:

- (1) The investment funds shall be invested and the investments of those funds managed as a prudent investor would do, under the circumstances then prevailing and in light of the purposes, terms, distribution requirements and laws governing each investment fund.
 - (2) The standard stated in subsection (1) of this section requires the exercise of reasonable care, skill and caution, and is to be applied to investments not in isolation but in the context of each investment fund's investment portfolio and as a part of an overall investment strategy, which should incorporate risk and return objectives reasonably suitable to the particular investment fund.
- B. Ethics and Conflicts of Interest: Officers involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. Officers and employees shall, at all times, comply with the State of Oregon Government Standards and Practices code of ethics set forth in ORS Chapter 244, as well as all policies of the OST.
- C. Delegation of Authority: The Senior Investment Officer and Investment Officer(s) (or the Investment Analyst acting under the direction of the Investment Officers) shall act in accordance with established written procedures and internal controls for the operation of the investment program consistent with these Portfolio Rules. No person may engage in an investment transaction except as provided under the terms of these Portfolio Rules and the procedures established by OST staff. The Senior Investment Officer and Investment Officer(s) are jointly responsible for all transactions undertaken, and shall establish a reasonable system of controls to regulate the activities of subordinate employees.

IV. Safekeeping and Custody

- A. Authorized Financial Dealers and Institutions: All financial institutions and broker/dealers who desire to become qualified for investment transactions must supply, as appropriate:
- (1) Audited financial statements
 - (2) Licensing Representation form provided by OST
 - (3) Understanding and acknowledgement of OSTF Portfolio Rules located at <http://www.ost.state.or.us/About/Investment/>
- B. Internal Controls: The Senior Investment Officer and Investment Officer(s) jointly collaborate to establish and maintain an adequate internal control structure designed to reasonably protect the assets of the OSTF from loss, theft or misuse.

- C. Delivery vs. Payment: All trades where applicable will be executed by delivery vs. payment (DVP) to ensure that securities are deposited in an eligible financial institution prior to the release of funds.
- D. Safekeeping: Securities will be held by a third-party custodian as evidenced by safekeeping receipts.

V. Maturity Distribution of Portfolio

- A. 50% of the portfolio must mature within 93 days.
- B. A maximum of 25% of the portfolio may mature over one year.
- C. No investment may mature in over 3 years as measured from settlement date. The OSTF Daily Compliance Report adheres to trade date accounting, thus creating potential short term exceptions on the Daily Compliance Report when a “new issue” 3-year security is purchased. Any such securities will be disclosed on the Daily Compliance Report, when purchased.
- D. For securities that have been called by the issuer, the effective call date will be used as a proxy for the maturity date.
- E. For securities with a put option, the date upon which the put option is fully exercisable for a value of at least 100% of the investment’s par or face amount will be used as a proxy for the maturity date.
- F. For variable rate securities, the period remaining to the next reset date will be used as a proxy for the maturity date.

VI. Diversification and Limitations of Portfolio

- A. Eligible Securities:
 - (1) U.S. Treasury Securities
 - a. 100% of the portfolio may be in U.S. Treasury securities.
 - (2) Senior unsecured debt obligations guaranteed by the Federal Deposit Insurance Corporation (FDIC) under the Temporary Liquidity Guarantee Program (TLGP); Eligible TLGP debt obligations carry the full faith and credit of the United States.
 - a. 50% maximum of portfolio per FDIC-guarantee exposure.
 - (3) U.S. Government Agency Securities
 - a. 100% of the portfolio may be in U.S. Government Agency securities.
 - b. 33% maximum of portfolio per agency issuer.

- For newly issued Agency securities, and absent assigned ratings, “expected ratings” may be used as a proxy for assigned ratings for not more than 30 business days after the anticipated settlement date.
- (4) Foreign Government Securities and their Instrumentalities
- a. 25% maximum of portfolio in foreign government securities and their instrumentalities.
 - b. 10% maximum of portfolio per issuer.
 - c. Foreign government securities must have minimum long-term ratings of AA-, Aa3, or AA-, or better, by Standard & Poor’s, Moody’s Investors Services, or Fitch Ratings, respectively, at the time of purchase.
- (5) Corporate Indebtedness
- a. 50% maximum of portfolio in corporate indebtedness.
 - b. 5% maximum of portfolio per issuer in commercial paper and corporate notes.
 - c. Commercial Paper (CP) must have top-tier short term ratings by at least two of the following nationally recognized statistical rating organizations (NRSRO) at the time of purchase (Standard & Poor’s = minimum A-1, Moody’s Investors Services = minimum P-1, Fitch Ratings = minimum F1).
 - d. Corporate notes must have minimum long-term ratings of A-, A3, or A-, or better, by Standard & Poor’s, Moody’s Investors Services, or Fitch Ratings, respectively, at the time of purchase.
 - For newly issued corporate securities, and absent assigned ratings, “expected ratings” may be used as a proxy for actual ratings for not more than 30 business days after the anticipated settlement date.
 - e. 25% maximum of portfolio in total foreign exposure (government and corporate indebtedness)
- (6) Negotiable Certificates of Deposit (NCD’s)
- a. 20% maximum of portfolio in NCD’s.
 - b. 5% maximum of portfolio per issuer in domestic bank NCD’s.
 - c. NCD’s must have minimum ratings of AA-, Aa3, or AA-, or better, by Standard & Poor’s, Moody’s Investors Services, or Fitch Ratings, respectively, at the time of purchase.
- (7) Bankers' Acceptances (BA’s)
- a. 20% maximum of portfolio in BA’s.
 - b. 5% maximum of portfolio per issuer in domestic bank BA’s
 - c. BA’s must have minimum ratings of AA-, Aa3, or AA-, or better, by Standard & Poor’s, Moody’s Investors Services, or Fitch Ratings, respectively, at the time of purchase.

- (8) Time Certificates of Deposit (TCD's)
 - a. 20% maximum of portfolio in TCD's.
 - b. Permitted TCD's will be limited to qualified depositories as defined in ORS Chapter 295.005.
 - c. Maximum TCD exposure per depository must be no more than 5% of the bank's total deposits, or \$100,000, whichever is greater. Maximum credit union exposure per depository shall be \$100,000.

- (9) Municipal Debt
 - a. Municipal debt obligations (agencies, instrumentalities, and political subdivisions) that have long-term ratings of AA-, Aa3 or AA-, or better, or are rated in the highest category for short-term municipal debt by Standard & Poor's, Moody's Investors Services, or Fitch Ratings, respectively, at the time of purchase.
 - b. Commercial Paper (CP) must have top-tier short term ratings by at least two of the following nationally recognized statistical rating organizations (NRSRO) at the time of purchase (Standard & Poor's = minimum A-1; Moody's Investors Services = minimum P-1/MIG1/VMIG1, Fitch Ratings = minimum F1).

- (10) Repurchase Agreements
 - a. Maximum maturity will be 90 days.
 - b. Net capital of counterparty must be greater than \$100 million.
 - c. Repurchase Agreements must equal no more than 2% of liabilities of the counterparty.
 - d. No more than 5% of OSTF assets shall be placed with the same counterparty for repurchases.
 - e. Counterparty must be a Primary Dealer as recognized by the Federal Reserve Bank. The only exception is OST's custodial agent as a non-primary dealer counterparty.
 - f. The counterparty must have a signed repurchase agreement.
 - g. Collateral must be delivered to the OST's account at its custodian or to an account established for the OST pursuant to the terms of the specific Repurchase Agreement in the name of the Office of the State Treasurer.
 - h. Collateral for repurchase agreements may be U.S. Treasury or U.S. Agency Discount and Coupon securities only. Collateral must have a final maturity of three years or less. The market value of the delivered collateral must be maintained at not less than 102% of the cash invested.

- (11) Reverse Repurchase Agreements
 - a. Maximum maturity will be 90 days.
 - b. Net capital of counterparty must be greater than \$100 million.

- c. Reverse Repurchase Agreements must equal no more than 2% of liabilities of the counterparty.
 - d. No more than 5% of OSTF assets shall be placed with the same counterparty for reverse repurchase agreements.
 - e. Counterparty must be a Primary Dealer as recognized by the Federal Reserve Bank.
 - f. The counterparty must have a signed repurchase agreement.
 - g. Acceptable reinvestment vehicles include securities that may otherwise be purchased outright.
 - h. Securities will be reversed on a fully collateralized basis.
 - i. Reverse repurchase investments for interest rate arbitrage shall only be done on a matched book basis.
- B. All portfolio investments will be denominated in US\$ only.
- C. 10% maximum of portfolio per issuer on all securities and support commitments with the exception of U.S. Treasury (100% maximum) and Government Agency securities (33% per issuer).
- D. Securities that have been downgraded to below the minimum ratings will be sold or held at the Senior Investment Officer's (SIO) discretion. In the absence of the SIO, or if the SIO is inaccessible, Investment Officer(s) will have discretion to sell or hold the downgraded securities. Such securities will be disclosed in the OSTF Daily Compliance Report and actively monitored by OST staff. The Senior Investment Officer, or the Investment Officer(s), is responsible for bringing the OSTF back into compliance as soon as is practicable.
- E. A single rating will be determined for each investment based on the methodology:
- To determine rating for each investment:
- i. When three NRSROs rate an issue, a median rating is used to determine eligibility by dropping the highest and/or lowest rating.
 - ii. When a rating from only two NRSROs is available, the lower ("most conservative") of the two is used.
 - iii. When a rating from only one NRSRO is available, that rating is used.

To determine average rating for each security, a numeric value will be assigned to each nationally recognized statistical rating organization's (NRSRO) rating based the following scheme:

Value	Moody's Ratings		S&P Ratings		Fitch Ratings	
	Long Term	Short Term	Long Term	Short Term	Long Term	Short Term
1	US Treasury		US Treasury		US Treasury	
1	Agency		Agency		Agency	
1	Aaa		AAA		AAA	
2	Aa1		AA+		AA+	
3	Aa2		AA		AA	
4	Aa3	P-1 ²	AA-	A-1+	AA-	F-1+
5	A1	P-1	A+	A-1	A+	F-1
6	A2		A		A	
7	A3	P-2	A-	A-2	A-	F-2
8	Baa1		BBB+		BBB+	
9	Baa2		BBB		BBB	
10	Baa3		BBB-		BBB-	

F. The target weighted average credit quality of the portfolio shall be < 3.50).

G. No commitments to buy or sell securities may be made more than 14 business days prior to the anticipated settlement date, or receive a fee other than interest for future deliveries.

VII. Securities Lending for Reinvestment of Cash Collateral

A. Acceptable reinvestment vehicles include securities that may otherwise be purchased outright in accordance with the Portfolio Rules for the Oregon Short Term Fund (Sections VI). Within the securities lending program only, cash collateral may also be reinvested in:

- (1) Maximum of 15% in asset backed securities rated AAA/Aaa, limited to auto loan and credit card issues with an average life of three years or less.
- ~~(2) Maximum of 25% in A, or higher, rated corporate floating rate notes with a maximum final maturity of three years, and fixed rate corporate notes with a maximum final maturity of two years; up to 65% maximum in corporate indebtedness including commercial paper.~~
- (3) Repurchase agreements collateralized by U.S. Treasury or U.S. Government Agency securities with a maximum original maturity of 30 years. No more than 25% of assets shall be placed with the same counterparty. Repurchase agreements may also be placed with the Federal Reserve Bank's Repo facility.
- ~~(4) All Repurchase Agreements (under the Special Indemnification by State Street clause) must be fully collateralized by collateral, determined by State Street in its discretion, limited to the following: U.S. Treasuries, U.S. Treasury STRIPS, Federal Agency Obligations, Corporate securities rated A or higher, Asset-Backed Securities rated A or higher, Agency MBS pass throughs rated AAA, Commercial Paper rated A-1/P-1 or higher, or~~

~~any combination thereof.³ For purposes of calculating average credit quality, current ratings of the indemnifier, State Street Corp, will be used.
(5) The target weighted average credit quality shall be < 3.8 by Standard & Poor's or Moody's Investors Services.~~

- B. Net capital of lending counterparty must be over \$100 million.
- C. Securities will only be loaned on a fully collateralized basis.
- D. Lending counterparty must be a Primary Dealer as recognized by the Federal Reserve Bank, and have a signed master securities lending agreement.
- E. The market value of the delivered collateral must be maintained at not less than 102% of the market value of the securities loaned.
- F. Notwithstanding Section VI.A.11 hereof, Reverse Repurchase Agreements are prohibited within the securities lending program.
- ~~G. 25% of the reinvestment portfolio must mature within 93 days; up to 50% of the portfolio may mature in over one year.~~

¹ As part of OST cash management policies, the State Treasurer may establish interfund loans or lines of credit to state agencies experiencing short-term, transitory cash imbalances created in the conduct of legislatively approved agency activities. All requests will be in writing with supporting documentation and will be signed by the agency head in addition to governing board or commission approval, where applicable, and subject to final approval by OST management. OST has determined that, at the time of the advance, a maximum of 1.5% of monies held in the OSTF will be available per state agency, with the exception of the General Fund, which will be limited to 10.0% of monies in the OSTF. All state agencies receiving interfund loans provide compensation to the OSTF at generally the higher of: (1) the spread of the three year average yield of the Merrill Lynch U.S. Corporate & Government, 1-3 Years, AA Rated and Above Index over the U.S. Treasury 2 Year Note plus an illiquidity premium of 50 basis points, or (2) the statutory minimum rate outlined in ORS 293.220.

² Unlike S&P, Moody's does not differentiate short term ratings with a plus (+), which indicates that the obligor's capacity to meet its financial commitment on these obligations is extremely strong. As such, in terms of average credit quality valuation, Moody's short term ratings/valuations will correspond to the lowest S&P short term ratings/valuations.

~~³ Special Indemnification of Client By State Street: Notwithstanding any provision herein to the contrary, if the value of the Liquidation Proceeds under Reverse Transactions (entered into between State Street (as agent for the Client) and a counterparty in respect of whom an event of default has occurred under the agreement governing such Reverse Transactions) is less than the cash to be delivered by that counterparty under such Reverse Transactions on the date of close out of the same, State Street shall indemnify the Client for any such difference. The term "Liquidation Proceeds" means the market value of the securities used to collateralize the Reverse Transaction(s) on the date that State Street takes action with respect to such securities under the applicable agreement. The term "Reverse Transactions" means each transaction entered into between the Client and a counterparty (through the agency of State Street) under the terms of an agreement pursuant to which the counterparty initially transfers securities to the Client and the Client transfers cash to the counterparty. All of such Reverse Transactions will be entered into in connection with the investment of cash Collateral received from Borrowers in connection with Loans hereunder."~~

Oregon Investment Council

April 30, 2014

Steven R. Meier CFA, FRM
EVP & CIO Global Fixed Income, Currency & Cash

Matthew J. Steinaway, CFA
SMD Global Head of Cash Management



This material is solely for the private use of Oregon Investment Council and is not intended for public dissemination.

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1. US Cash Management Overview

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3. Portfolio Overview

Appendix A: Important Disclosures

Appendix B: Biographies

US Cash Management Overview

Fixed Income, Cash and Currency Organization

Steve Meier, CFA, FRM

**Global CIO, Fixed Income,
Cash and Currency (FICC)**

Matt Steinaway, CFA

**Global Head of
Cash Management**

BOSTON

Jeff St. Peters
Todd Bean, CFA
Charles Byrne, CFA
Kevin Coffey
Thomas Connelley, CFA
Sean Dillon
Robert Jackson
Tim Lund
Thomas J. Motley, CFA
Maria Pino, CFA
Robert Wagner

LONDON

Mihaly Domjan, CFA
Michel Bermils
Richard James Darby-Dowman
Joseph Gillingwater
Natalie Jackson
Nick Pidgeon

SYDNEY

Simon Mullumbly, CFA
Brett Purkiss

Brian Kinney

**Global Head of Passive
Fixed Income**

BOSTON

Patrick Bresnehan, CFA
Michael Brunell, CFA
Peter Breault, CFA
Marc DiCosimo, CFA
Christopher DiStefano
Christian Hoffmann, CFA
Mahesh Jayakumar, CFA, FRM
John Keller, CFA**
Kyle Kelly, CFA, FRM
Sean Lussier
Joanna Mauro
Frank Miethe
Cynthia Moy
Michael Przygoda, CFA
Karen Tsang

LONDON

Stephen Yeats, CFA*
Hassan Dhanji
Paul Brown
Nicholas Fischer
Victoria Husemeyer
Abhishek Kumar, CFA
Zhen Li
Iwan Marais
John Philpot
Peter Spano, CFA

SINGAPORE

Kheng-Siang Ng, CFA, CAIA
Ross Bolton (Sydney)
Esther Koon, CFA

TOKYO

Peter Morgan
Yuki Nozawa

**Collin Crownover,
PhD**

**Global Head of
Currency**

BOSTON

Mark Abbott
Sophia Ferguson
Aaron Hurd
Richard Munclinger***
Ritirupa Samanta, PhD** ***
Rajni Tyagi, PhD***
Han Wang***
James Wittebol

LONDON

Lawrence Dryden
Marcus Fernandes
Anthony Kemple
Vinay Patel
Monica Valverde

SYDNEY

Simon Sukhaseume
Andrew Grillo
James Park

TOKYO

Kensuke Niihara
Takaaki Ido

Cathy Powers, CFA

**Global Head of Rates
and Sector Strategy**

BOSTON

Richard Arnott
Jay Ladieu
Matthew Pappas
Suzanne Schwartz

LONDON

Robert Golcher
David Furey
Brendan Lardner
Ling Luo, CFA
Barry McAndrew, CFA

Pia McCusker

**Global Head of
Credit Research**

BOSTON

Mi Lin Chen
Peter Hajjar
Diane Hanley
Michael Madden, FRM
Attilio Qualtieri

LONDON

Perry Siriyyatom

Charles Moon

**Global Head of
High Yield**

BOSTON

James Callahan, CFA, CPA
Tim Cronin, CFA
Christopher Ingel
Lin Liu, CFA
David Lynch, CFA
Kali Ramachandran, CFA, CPA

**Global Portfolio
Strategists**

Louis Basque, CFA
Andrew Goodale
Antoine Lesne
Niall O'Leary
Junichi Takahashi, CMA, CFA

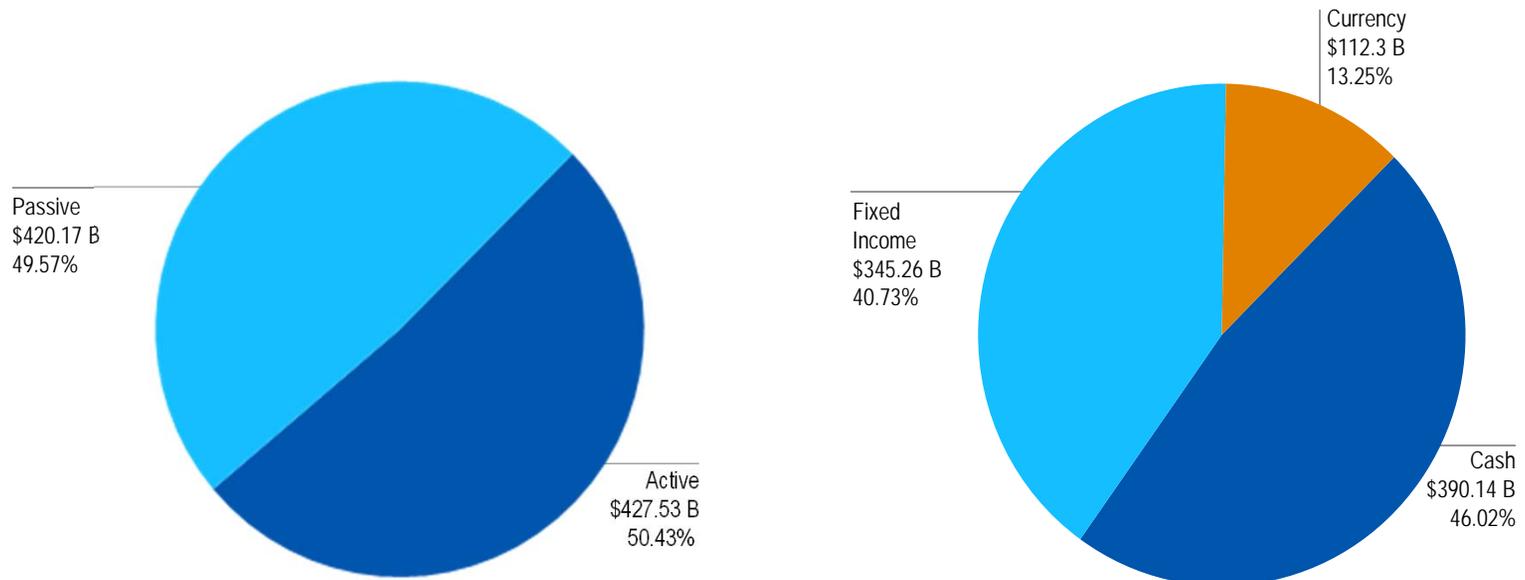
Portfolio Specialists

Read Burns
Rupert Cadbury

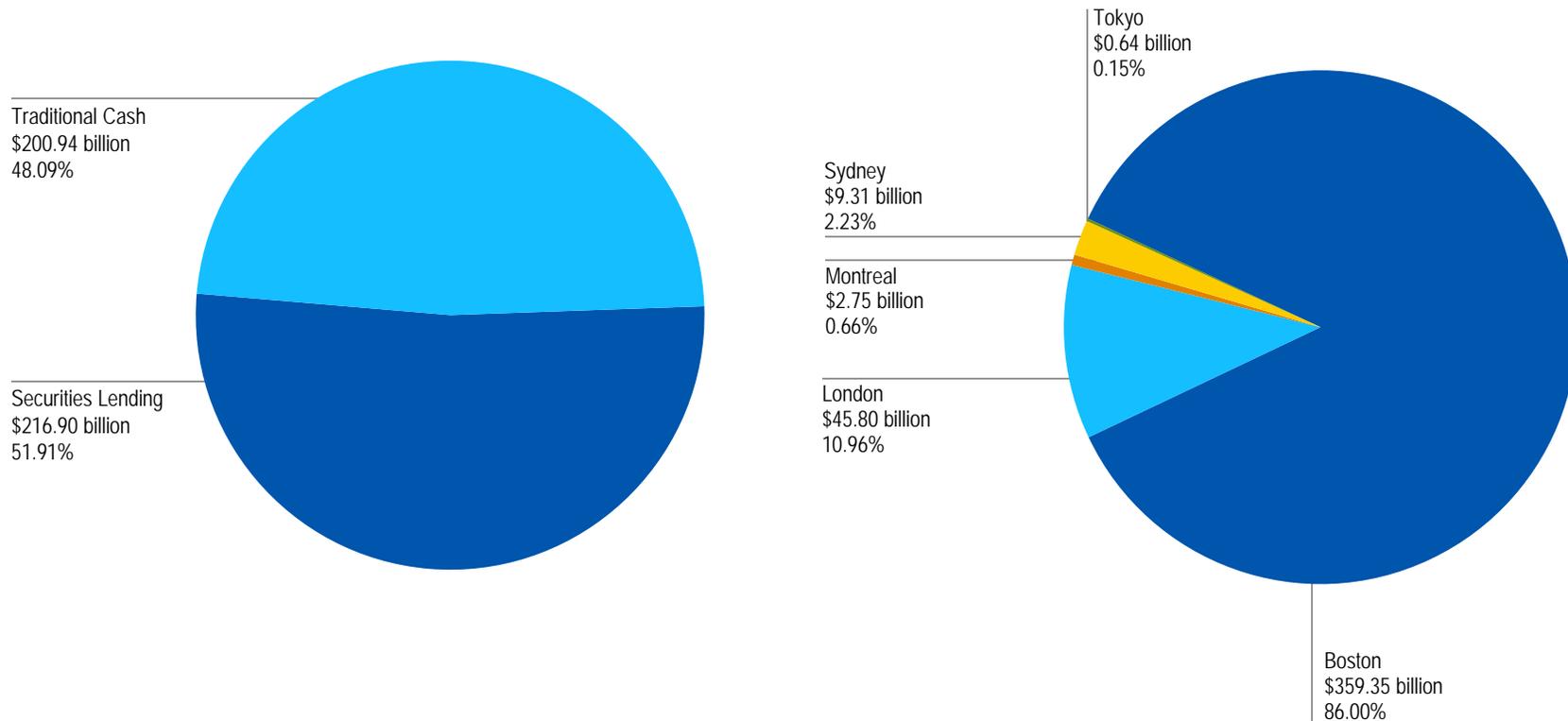
As of March 31, 2014. * Matrix reporting to Mihaly Domjan. ** Matrix reporting to CIO ***FICC Research

Combined Passive and Active Leadership

\$847.7 Billion in Global Fixed Income, Cash, and Currency Assets, As of December 31, 2013



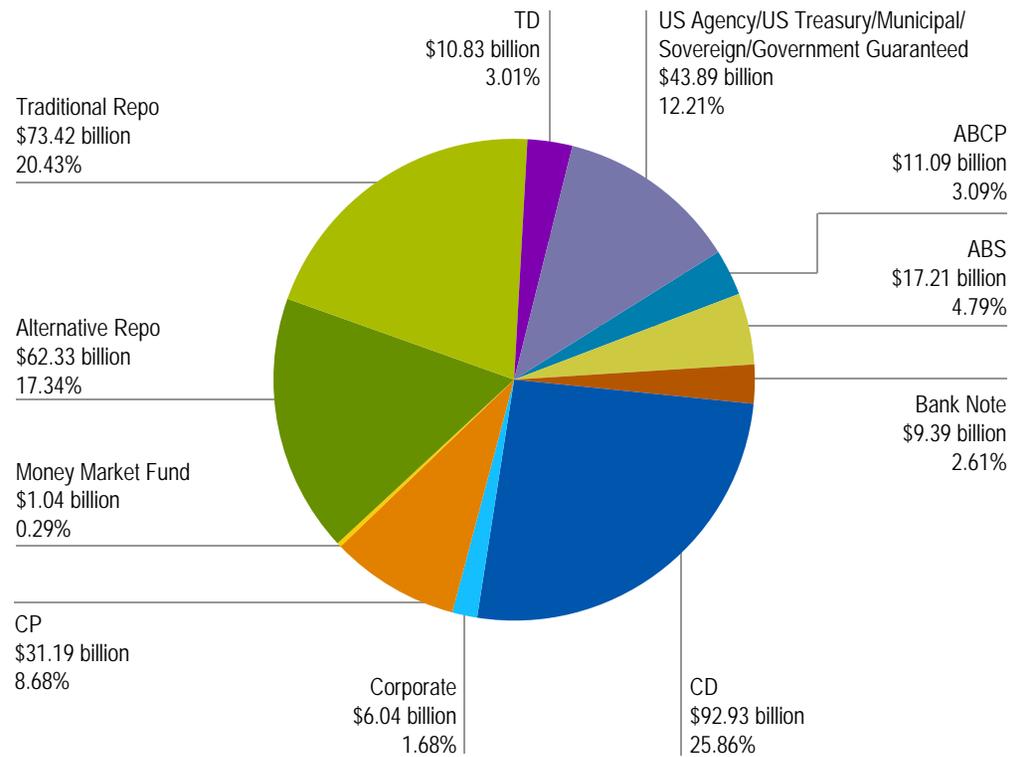
\$417.84 Billion* in Global Cash Assets As of March 31, 2014



Investing involves risk including the risk of loss of principal.
 * Includes Cash and Lending. All umbrella funds and as of funds assets have been removed from the calculations. Global Fixed Income assets under management include those Strategies managed by SSgA's Asset Allocation Team. All calculations are unaudited.
 Numbers are based on Par Value of the underlying securities (converted to USD)
 Numbers do not include Fund of Fund positions in SSgA managed money market funds
 Source: SSgA Assets Under Management reporting system

US Cash Management AUM by Security Type

\$359.35 Billion AUM by Security Type
As of March 31, 2014



Market Update

General Economic Update/Outlook

General themes 2014

- Global growth inches higher
- Inflation contained (at low levels)
- Monetary policy remains very accommodative
- Fixed Income in transition...yields grind higher

Central Bank Support Abounds

Central Bank policy response...extraordinarily accommodative

- US (near) zero rate policy here for now but...
 - Continued US Fed QE Tapering haunting markets
 - Began Q1 2014...QE now at \$55 billion per month
 - At current pace, done tapering Dec/Q4
 - Timing data dependent...but high hurdle to change existing tapering pace
 - Accommodation removal + uncertainty = Volatility! Fed managing expectations
 - Investors responding...reducing duration
 - Lower-for-longer now in question...forward guidance adjustment offered by Yellen
 - Lower-for-longer still likely!
 - First rate hike...July 2015?
 - Dec 15th Fed Funds Futures contract pricing in 82bpts

Cash Market Update

Low rate dance continues

- Painfully low global official rates for foreseeable future
 - US, UK, EU, Canada, Japan, Australia
 - ECB operationally prepared for negative Deposit rate
- In US, QE double-whammy...increased cash, decreased collateral
- USTs, “traditional” collateral repo...the “pain trade”
- Investor flows steady...increased comfort with non-gov-only (i.e. Credit) funds
- Liability/extension activities challenging for investors...Shadow Banking system contracts
 - Liquidity increasingly important, but either expensive or unavailable
- YC well anchored at the short-end
 - Most yield curves pancake-flat or inverted
- 1–3 year issuance still healthy, yields attractive relative to \$-mkts
- Floaters preferred to fixed rate (just in case)
- Diversification away from Bank/financial issuers desired...
 - But product is limited and expensive (even though longer-term corporate bond issuance hit records in 2013)

Source: SSgA
Past performance is not a guarantee of future results
As of December 31, 2013

GCB-0450

Cash Market Update (Continued)

Low rate dance continues

- Regulatory change in the air...
 - Capital buffers, redemption restrictions, market-value accounting?
 - Change may not be all bad
- Repurchase Agreement activity diminished
 - Less leverage, lower inventories, smaller Matched-Books
 - Deposit-based funding, unsecured debt, liability extension
 - Repurchase Agreement availability down across collateral types
 - Preference for longer-term funding, extendibles
- Shadow Banking contraction challenging investors
- Fed's Full Allotment, Fixed Rate Repo
 - Setting a floor for short-term rates
 - New tool for monetary policy implementation
 - Beta test very successful...extended in January

Current Portfolio Positioning

- New Portfolio Guidelines implemented 1 Jan 14
- Continued focus on liquidity
 - On-hand liquidity high
 - 40% 1 week liquidity for Oregon Short Term Fund (“OSTF”)
 - 39% 1 week liquidity State of Oregon Perf (“SOP”)
 - Focus on overnight repurchase agreements
 - Focus on shorter dated fixed paper 1–120day
- Focus on portfolio Quality
 - REPO a core holding — collateralized/secured product diversification benefits
 - US treasury and agency collateral only
 - Focus on adding high quality short dated bank paper
- With new guidelines, starting to add US Agency Paper
 - OSTF has 6%–7%
 - SOP has 12%–13%
- Continue to manage interest rate sensitivity despite low rate environment
 - Focus on adding floating rate paper in 1 to 2 year space
 - Structured product- Credit Card ABS and Auto Loan paper
 - Corporate and Bank Paper
 - Portfolio WAMs defensive at 31 days OSTF & 30 days SOP

Portfolio Overview

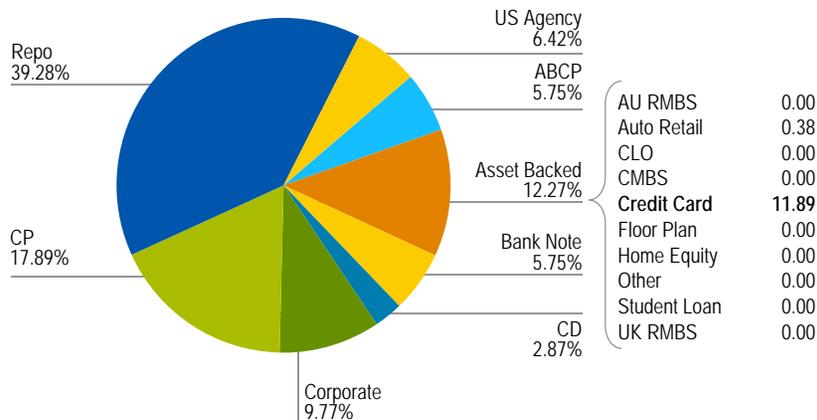
Oregon Short Term Fund

FC91 — Oregon Short Term Fund Summary Characteristics

As of March 31, 2014	
1-Day Yield (360 Basis)	0.19%
Shares Outstanding	1,156,702,350.98
Floating Rate %	41.18
% Foreign Issuers	16.66
WAM	31.44
WAM to Call	31.44
Call versus Mat Spread	—
% Callables	1.73%
Avg Life — Expected Maturity	159.75
Fund Price as of 3/31/2014	100.0163
Number of Holdings	65

Credit Quality Breakdown	
LONG-TERM RATINGS	% OF FUND
AAA	11.50
AA	15.04
A	3.35
BBB+	—
BBB	—
BBB-	—
BB+	—
BB	—
BB-	—
SHORT-TERM RATINGS	% OF FUND
A-1+/P-1	20.48
A-1/P-1	48.86
SPLIT	—
OTHER	0.78

Floating Index Breakdown	% of Fund
FED FUNDS	—
1MO LIBOR	20.97
3 MOS LIBOR	20.21
PRIME	—
Reset Buckets	% of Fund
Next Business Day	1.92
2–7 Days	2.87
8–31 Days	25.86
1–2 Months	3.35
2–3 Months	7.19
Maturity Buckets	% of Fund
Next Business Day	39.28
1 WEEK LIQUIDITY	40.04
2–30 Days Liquidity	3.07
31–60 Days Liquidity	4.50
61–90 Days Liquidity	3.83
90 DAY LIQUIDITY	50.68
91–120 Days Liquidity	6.13
121–150 Days Liquidity	5.27
151–180 Days Liquidity	3.17
181–270 Days Liquidity	6.23
271–360 Days Liquidity	12.05
12–15 Month Liquidity	8.53
15–18 Month Liquidity	1.63
18–21 Month Liquidity	3.74
21–24 Month Liquidity	0.96
Greater than 2 Year Liquidity	1.63
Repo Collateral	% of Fund
Treasuries	34.49
Agencies	4.79
Agency MBS	—
Money Markets	—
Corporates	—
Asset-Backed	—
Equities	—

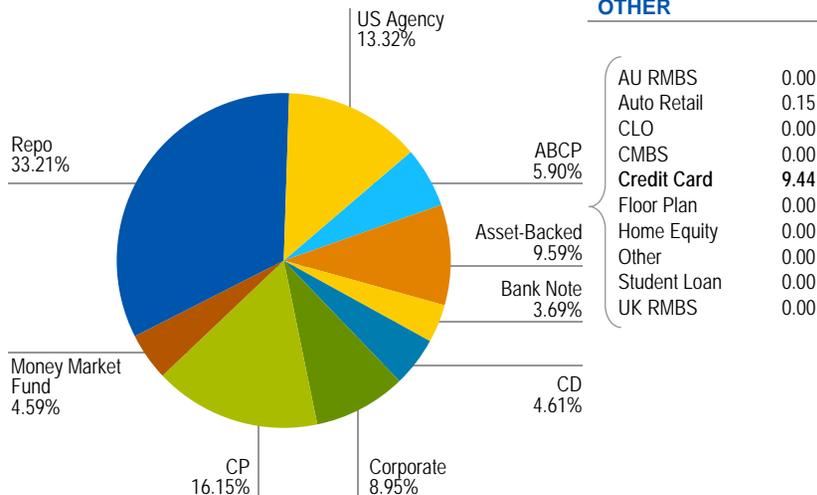


The fund does not hold any SIV's, CDO's, or Extendible Liquidity Note securities. Ratings are Standard and Poor's. The designation "Other" under Credit Quality Breakdown also includes "unrated" data as well refers to Long Term Ratings below BB— and Short Term Ratings below A-1/P-1. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. **This material is for SSgA Client use only.** All data sourced by SSgA unless stated otherwise. Past performance is not a guarantee of future results. This material is for your private information. The views expressed are the views of State Street Global Advisors only through the period noted herein and are subject to change based on market and other conditions. Sector information/security type is an internal characterization created and applied by SSgA analysts for internal surveillance based on market convention and security characteristics. Sector information/security type designations may vary according to analyst or security characteristics, and they should not be construed as formal statements or interpretations of asset classes or sectors. All views may be impacted by the present market environment and risks including downgrades, extension risk, volatility, deviations from expected performance or other risks. This information is based on our internal research and third party sources. We make no representations or assurances that the information is complete or accurate, or that the underlying securities will perform as originally anticipated. The information we provide does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. We encourage you to consult your tax or financial advisor. All material has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy of, nor liability for, decisions based on such information. This document contains certain statements that may be deemed forward-looking statements. These statements are based on certain assumptions and analyses made by SSgA in light of its experience and perception of historical trends, current conditions, expected future developments and other factors it believes appropriate in the circumstances. All information is subject to change without notice.

State Of Oregon Perf

FC5L — State Of Oregon Perf Summary Characteristics

As of March 31, 2014	
1-Day Yield (360 Basis)	0.17%
Shares Outstanding	2,754,870,579.61
Floating Rate %	36.76
% Foreign Issuers	14.26
WAM	30.78
WAM to Call	30.78
Call versus Mat Spread	—
% Callables	—
Avg Life — Expected Maturity	160.32
Fund Price as of 3/31/2014	99.8837
Number of Holdings	73



Credit Quality Breakdown	
LONG-TERM RATINGS	% OF FUND
AAA	9.10
AA	13.37
A	2.95
BBB+	—
BBB	—
BBB-	—
BB+	—
BB	—
BB-	—
SHORT-TERM RATINGS	% OF FUND
A-1+/P-1	26.70
A-1/P-1	42.80
SPLIT	—
OTHER	5.08

Floating Index Breakdown		% of Fund
FED FUNDS		—
1MO LIBOR		19.90
3 MOS LIBOR		16.86
PRIME		—
Reset Buckets		% of Fund
Next Business Day		1.85
2–7 Days		4.06
8–31 Days		23.04
1–2 Months		1.62
2–3 Months		6.20
Maturity Buckets		% of Fund
Next Business Day		37.79
1 WEEK LIQUIDITY		39.64
2–30 Days Liquidity		7.49
31–60 Days Liquidity		5.35
61–90 Days Liquidity		4.08
90 DAY LIQUIDITY		54.71
91–120 Days Liquidity		7.79
121–150 Days Liquidity		3.98
151–180 Days Liquidity		2.26
181–270 Days Liquidity		4.52
271–360 Days Liquidity		12.88
12–15 Month Liquidity		6.37
15–18 Month Liquidity		1.51
18–21 Month Liquidity		3.28
21–24 Month Liquidity		0.74
Greater than 2 Year Liquidity		1.96
Repo Collateral		% of Fund
Treasuries		27.38
Agencies		5.83
Agency MBS		—
Money Markets		—
Corporates		—
Asset-Backed		—
Equities		—

The fund does not hold any SIV's, CDO's, or Extendible Liquidity Note securities. Ratings are Standard and Poor's. The designation "Other" under Credit Quality Breakdown also includes "unrated" data as well refers to Long Term Ratings below BB— and Short Term Ratings below A-1/P-1. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. **This material is for SSgA Client use only.** All data sourced by SSgA unless stated otherwise. Past performance is not a guarantee of future results. This material is for your private information. The views expressed are the views of State Street Global Advisors only through the period noted herein and are subject to change based on market and other conditions. Sector information/security type is an internal characterization created and applied by SSgA analysts for internal surveillance based on market convention and security characteristics. Sector information/security type designations may vary according to analyst or security characteristics, and they should not be construed as formal statements or interpretations of asset classes or sectors. All views may be impacted by the present market environment and risks including downgrades, extension risk, volatility, deviations from expected performance or other risks. This information is based on our internal research and third party sources. We make no representations or assurances that the information is complete or accurate, or that the underlying securities will perform as originally anticipated. The information we provide does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. We encourage you to consult your tax or financial advisor. All material has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy of, nor liability for, decisions based on such information. This document contains certain statements that may be deemed forward-looking statements. These statements are based on certain assumptions and analyses made by SSgA in light of its experience and perception of historical trends, current conditions, expected future developments and other factors it believes appropriate in the circumstances. All information is subject to change without notice.

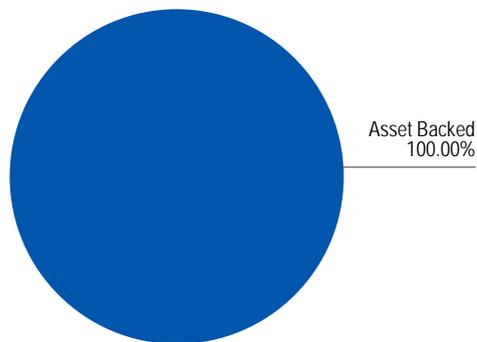
Oregon Perf Legacy

FC5N — Oregon Perf Legacy Summary Characteristics

As of March 31, 2014	
1-Day Yield (360 Basis)	0.43%
Shares Outstanding	124,425,608.99
Floating Rate %	100.00
% Foreign Issuers	76.65
WAM	41.65
WAM to Call	41.65
Call versus Mat Spread	—
% Callables	—
Avg Life — Expected Maturity	2,042.15
Fund Price as of 3/31/2014	97.1361
Number of Holdings	32

Credit Quality Breakdown	
LONG-TERM RATINGS	% OF FUND
AAA	17.53
AA	22.75
A	52.76
BBB+	—
BBB	2.73
BBB-	—
BB+	—
BB	—
BB-	—
SHORT-TERM RATINGS	% OF FUND
A-1+/P-1	—
A-1/P-1	—
SPLIT	—
OTHER	4.23

Floating Index Breakdown	% of Fund
FED FUNDS	—
1MO LIBOR	26.59
3 MOS LIBOR	73.41
PRIME	—
Reset Buckets	% of Fund
Next Business Day	—
2–7 Days	—
8–31 Days	59.20
1–2 Months	10.41
2–3 Months	30.38
Maturity Buckets	% of Fund
Next Business Day	—
1 WEEK LIQUIDITY	—
2–30 Days Liquidity	—
31–60 Days Liquidity	0.26
61–90 Days Liquidity	—
90 DAY LIQUIDITY	0.26
91–120 Days Liquidity	—
121–150 Days Liquidity	—
151–180 Days Liquidity	—
181–270 Days Liquidity	—
271–360 Days Liquidity	1.56
12–15 Month Liquidity	4.13
15–18 Month Liquidity	0.33
18–21 Month Liquidity	0.89
21–24 Month Liquidity	23.53
Greater than 2 Year Liquidity	69.30
Repo Collateral	% of Fund
Treasuries	—
Agencies	—
Agency MBS	—
Money Markets	—
Corporates	—
Asset-Backed	—
Equities	—



AU RMBS	17.53
Auto Retail	0.00
CLO	0.00
CMBS	1.56
Credit Card	0.00
Floor Plan	0.00
Home Equity	4.23
Other	0.00
Student Loan	17.56
UK RMBS	59.11

The fund does not hold any SIV's, CDO's, or Extendible Liquidity Note securities. Ratings are Standard and Poor's. The designation "Other" under Credit Quality Breakdown also includes "unrated" data as well refers to Long Term Ratings below BB— and Short Term Ratings below A-1/P-1. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. **This material is for SSgA Client use only.** All data sourced by SSgA unless stated otherwise. Past performance is not a guarantee of future results. This material is for your private information. The views expressed are the views of State Street Global Advisors only through the period noted herein and are subject to change based on market and other conditions. Sector information/security type is an internal characterization created and applied by SSgA analysts for internal surveillance based on market convention and security characteristics. Sector information/security type designations may vary according to analyst or security characteristics, and they should not be construed as formal statements or interpretations of asset classes or sectors. All views may be impacted by the present market environment and risks including downgrades, extension risk, volatility, deviations from expected performance or other risks. This information is based on our internal research and third party sources. We make no representations or assurances that the information is complete or accurate, or that the underlying securities will perform as originally anticipated. The information we provide does not constitute investment advice and it should not be relied on as such. It should not be considered a solicitation to buy or an offer to sell a security. It does not take into account any investor's particular investment objectives, strategies, tax status or investment horizon. We encourage you to consult your tax or financial advisor. All material has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. There is no representation or warranty as to the current accuracy of, nor liability for, decisions based on such information. This document contains certain statements that may be deemed forward-looking statements. These statements are based on certain assumptions and analyses made by SSgA in light of its experience and perception of historical trends, current conditions, expected future developments and other factors it believes appropriate in the circumstances. All information is subject to change without notice.

Appendix A: Important Disclosures

Important Disclosures

The views expressed in this material are the views of the SSgA Global Cash Team through the period ended March 31, 2014 and are subject to change based on market and other conditions. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected.

Investing in foreign domiciled securities may involve risk of capital loss from unfavorable fluctuation in currency values, withholding taxes, from differences in generally accepted accounting principles or from economic or political instability in other nations.

Investments in emerging or developing markets may be more volatile and less liquid than investing in developed markets and may involve exposure to economic structures that are generally less diverse and mature and to political systems which have less stability than those of more developed countries.

Currency Risk is a form of risk that arises from the change in price of one currency against another. Whenever investors or companies have assets or business operations across national borders, they face currency risk if their positions are not hedged.

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Investing involves risk including the risk of loss of principal.

Investments in asset backed and mortgage backed securities are subject to prepayment risk which can limit the potential for gain during a declining interest rate environment and increases the potential for loss in a rising interest rate environment.

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Web: www.ssga.com

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Tracking No: GCB-0450

Expiration date: 4/30/2015

Appendix B: Biographies

Biographies



Steven R. Meier, CFA, FRM

Steven is an Executive Vice President of State Street Global Advisors and is the CIO of Global Fixed Income, Currency and Cash. Steven, who joined SSgA in 2003, has more than 30 years of experience in the global cash and fixed income markets. Previously, he was SSgA's CIO of Global Cash.

Prior to joining SSgA, Steven was a Senior Managing Director in State Street's Global Markets group responsible for developing its global fixed income business. He also served as Chief Operating Officer of State Street's electronic bond trading subsidiary, Advanced Auctions LLC, and was a member of its European subsidiary's Board of Directors. He received extensive capital markets experience and held senior positions in trading and investment banking in New York and London while working for Merrill Lynch and Credit Suisse First Boston for nearly 12 years. He also served on TradeWeb LLC's Executive Board while head of CSFB's global electronic trading unit. In addition, he was a senior global bond Portfolio Manager with Oppenheimer Capital and member of its Fixed Income Strategy Group.

Steven is a member of SSgA's Senior Leadership Team (SLT) and Investment Committee. He has earned the Chartered Financial Analyst designation, is a certified Financial Risk Manager (FRM), a member of the Boston Security Analysts Society, the Association for Investment Management and Research (AIMR) and the Global Association of Risk Professionals (GARP).

He holds a BBA from Hofstra University, an MBA from Indiana University's Graduate School of Business and an Advanced Certificate of Investment Management from the London Business School.

Biographies



Matthew J. Steinaway, CFA

Matt is a Senior Managing Director and the Global Head of Cash Management. Matt, joined SSgA in June 2003, and has over 19 years of credit and investments experience.

Previously, Matt was Head of Global Cash Credit Research for State Street Global Advisors where he led a team of credit analysts who provided global research coverage of the investment-grade corporate and asset-backed markets. He also leads FICC's investment technology and infrastructure building efforts.

Matt has a BA in Philosophy from Saint Anselm College, graduated with an MBA from Bentley College and has earned the Chartered Financial Analyst designation.

Oregon State Treasury

Presentation to the Oregon Investment Council

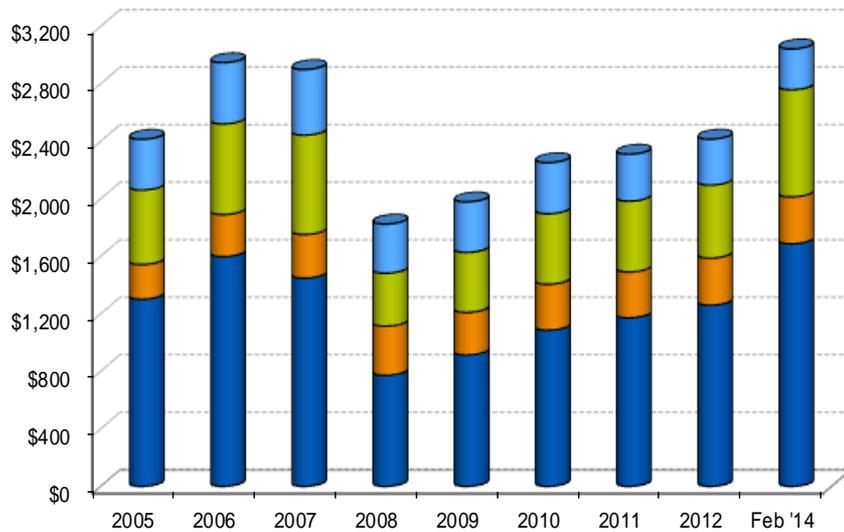
April 30, 2014

Johnson Shum

State Street Historical Program Balances

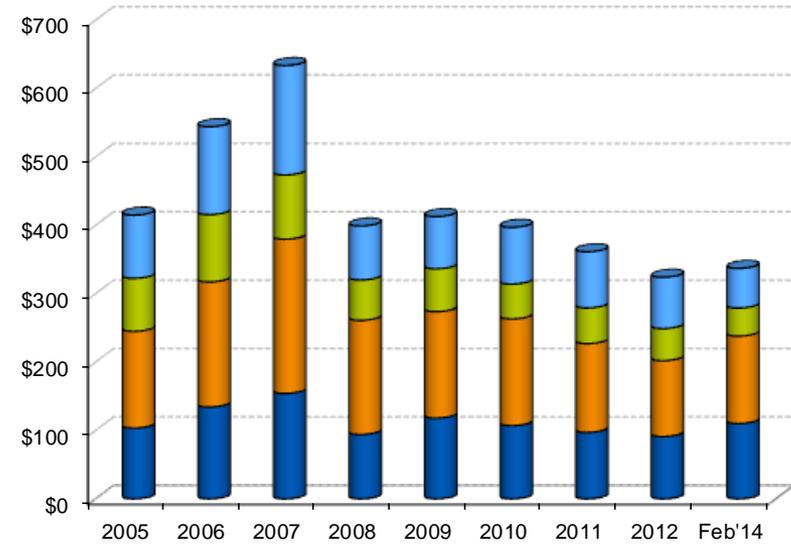
Lendable Assets

\$ Billions

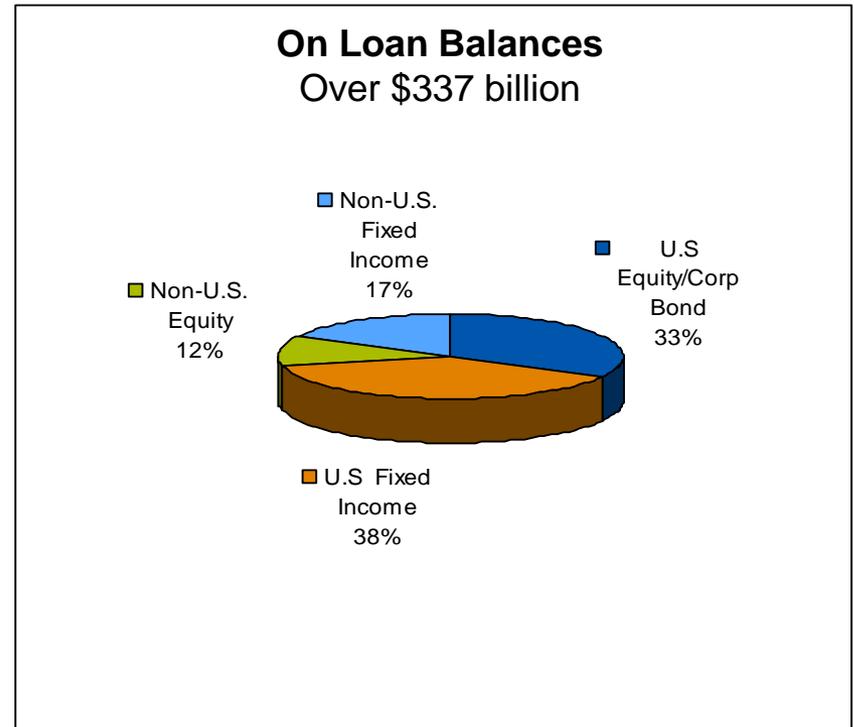
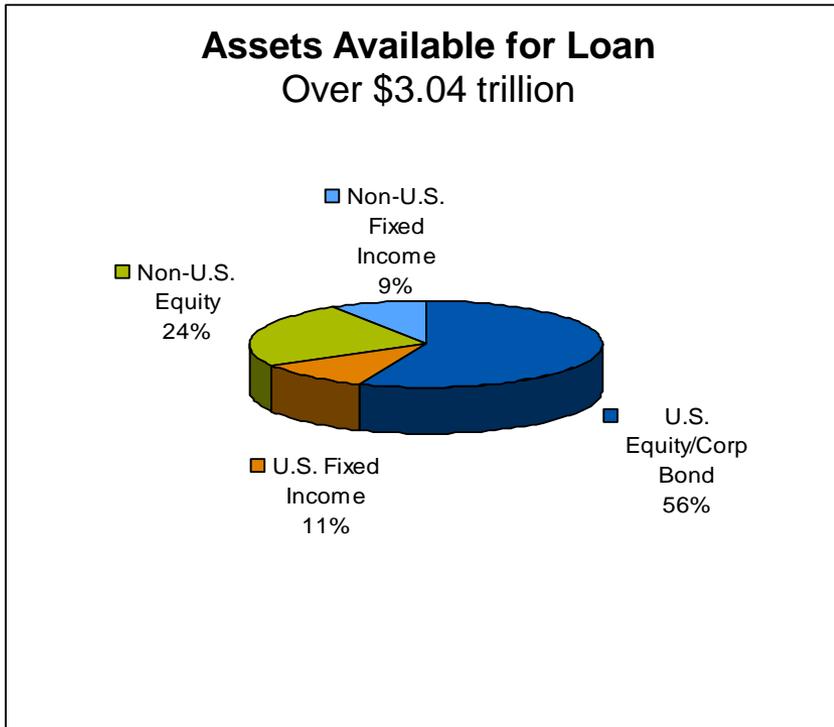


Total on Loan

\$ Billions



State Street Program Balances



Organization and Industry Experience

- Approximately 311 active agency and principal clients worldwide
- Approximately 131 borrower relationships
- Lending across more than 30 international markets
- 10 regional locations with 5 trading desks and 3 full service operations centers
- Approximately 215 employees dedicated specifically to securities lending activities

The Americas

- **Boston, Massachusetts**
(World Headquarters)
- Los Angeles, California
- Toronto, Ontario

- Full Service Center
- Relationship Management Office
- Relationship Management and Trading Office
- Relationship Management and Operations

Europe/Middle-East/Africa

- Dublin, Ireland
- Frankfurt, Germany
- **London, England**

Asia/Pacific

- Hong Kong, China
- **Sydney, Australia**
- **Tokyo, Japan**
- Singapore, Singapore

Program Summary

- Earnings Overview
 - \$350.76M* in securities lending revenue for Oregon State Treasury since 2001
- Cash Collateral
 - Separate accounts for Oregon PERF and Oregon Short -Term Fund managed by SSgA with custom investment guidelines (last changed January 1, 2014)
- Approved Borrowers
 - Oregon PERF – State Street approved Borrowers list
 - Oregon Non - PERF - Fed Primary Dealers list
- Program Parameters
 - Limits
 - 20% per Borrower
- Borrower Default Indemnification

Performance Summary – Oregon Total Program

The State of Oregon - All Assets	2011	2012	2013	Jan-Mar 2014
Average Lendables (\$)	35,727,731,695	36,398,040,284	42,299,213,445	44,741,251,504
Average On-Loan Balance(\$)	6,334,332,325	4,594,674,219	4,293,581,321	4,874,930,064
Average Utilization (%)	17.7%	12.6%	10.2%	10.9%
Earnings by Program				
US Equity & Corporate Bond (\$)	9,059,498	9,746,318	7,124,380	1,664,864
US Government (\$)	3,730,323	2,215,834	2,021,586	769,582
Non-US Equity (\$)	7,798,589	7,177,957	6,616,827	858,318
Non-US Fixed (\$)	92,685	151,417	184,900	13,669
Total (\$)	20,681,095	19,291,527	15,947,694	3,306,433
Components of Spread - Cash				
Demand Spread (bps)	24.36	36.30	36.88	27.93
Reinvestment Spread (bps)	17.36	18.90	12.73	9.29
Total Spread (bps)	41.71	55.20	49.61	37.22
Non-Cash Demand Spreads	32.05	34.74	25.96	18.45
Return on Lendables (bps)	5.79	5.30	3.77	2.96

- Oregon PERF 2013 earnings \$14,027,182 vs. \$16,904,613 in 2012
- Oregon Non-PERF 2013 earnings \$1,920,511 vs. \$2,386,913 in 2012

Performance Summary – Oregon PER Funds

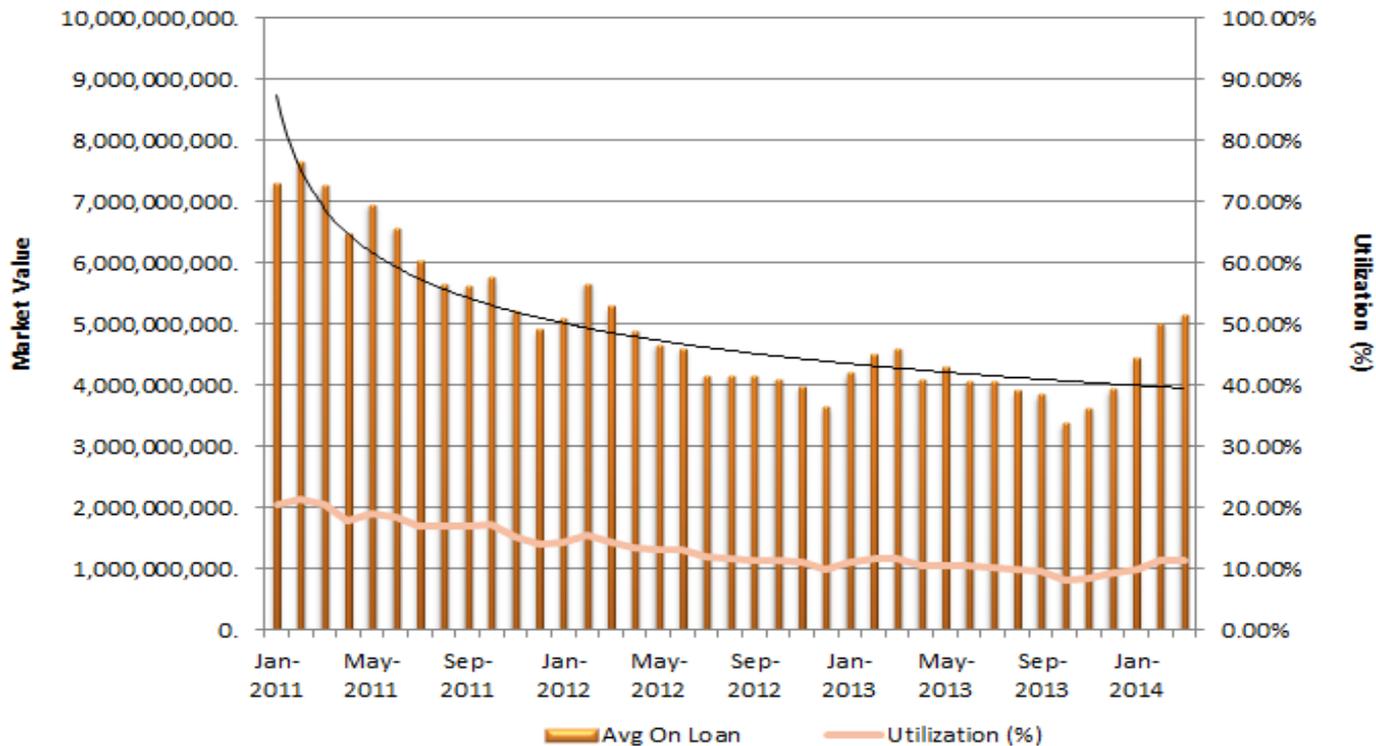
The State of Oregon - PERs	2011	2012	2013	Jan-Mar 2014
Average Lendables (\$)	22,745,399,841	22,521,907,986	26,965,868,075	27,989,277,901
Average On-Loan Balance(\$)	3,496,776,771	3,149,453,781	3,153,322,243	3,530,892,186
Average Utilization (%)	15.4%	14.0%	11.7%	12.6%
Earnings by Program				
US Equity & Corporate Bond (\$)	8,209,585	8,928,230	6,545,401	1,539,800
US Government (\$)	1,115,085	863,101	972,882	453,347
Non-US Equity (\$)	7,596,156	6,961,865	6,323,999	825,120
Non-US Fixed (\$)	92,685	151,417	184,900	13,669
Total (\$)	17,013,511	16,904,613	14,027,182	2,831,936
Components of Spread - Cash				
Demand Spread (bps)	44.28	52.18	47.29	35.14
Reinvestment Spread (bps)	17.73	19.20	13.00	8.40
Total Spread (bps)	62.01	71.38	60.29	43.54
Non-Cash Demand Spreads	37.71	37.47	29.07	22.86
Return on Lendables (bps)	7.48	7.51	5.20	4.05

Performance Summary – Oregon Non-PER Funds

The State of Oregon - Non-PERs	2011	2012	2013	Jan-Mar 2014
Average Lendables (\$)	12,982,331,853	13,876,132,298	15,333,345,370	16,751,973,603
Average On-Loan Balance(\$)	2,837,555,554	1,445,220,438	1,140,259,078	1,344,037,878
Average Utilization (%)	21.9%	10.4%	7.4%	8.0%
Earnings by Program				
US Equity & Corporate Bond (\$)	849,913	818,088	578,979	125,064
US Government (\$)	2,615,238	1,352,734	1,048,704	316,235
Non-US Equity (\$)	202,433	216,092	292,828	33,199
Total (\$)	3,667,584	2,386,913	1,920,511	474,497
Components of Spread - Cash				
Demand Spread (bps)	-0.20	1.69	8.09	9.00
Reinvestment Spread (bps)	16.89	18.26	11.99	11.63
Total Spread (bps)	16.69	19.95	20.09	20.62
Non-Cash Demand Spreads	8.85	15.38	9.87	7.82
Return on Lendables (bps)	2.83	1.72	1.25	1.13

Performance Summary

Oregon Historical Loan Balances and Utilization

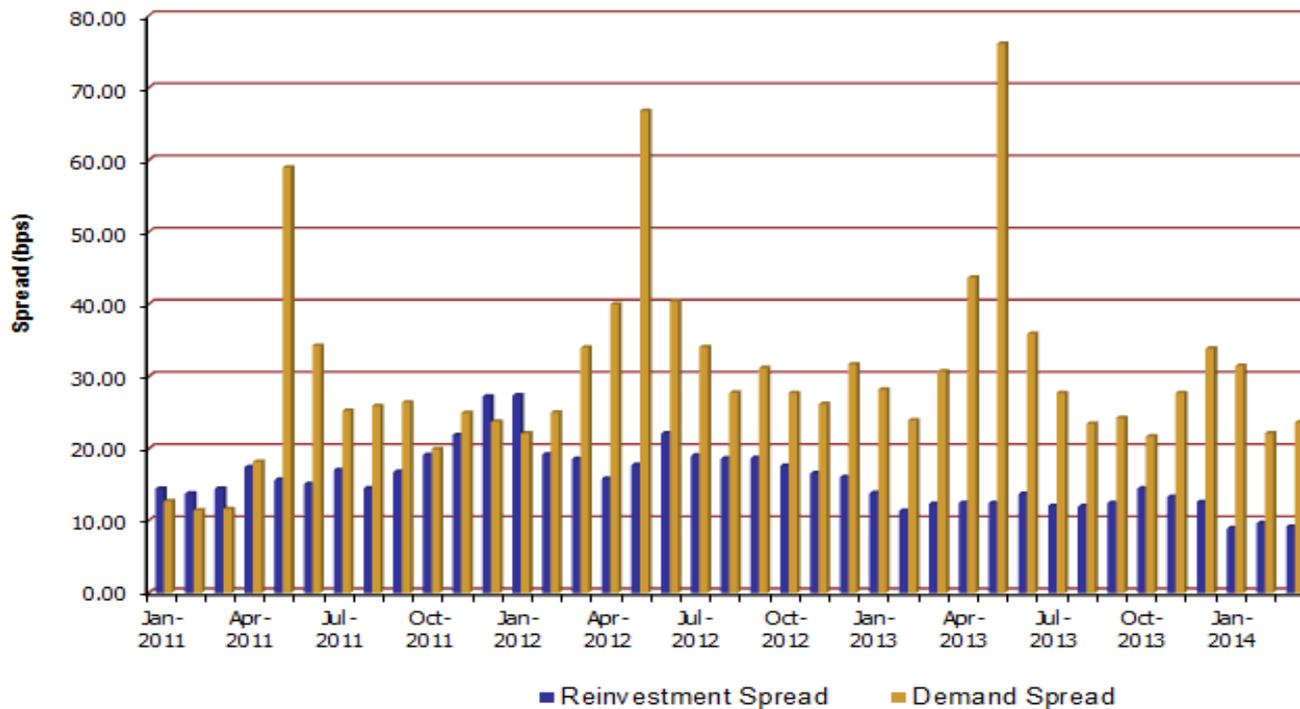


Source: my.statestreet.com
 Performance data shown represents past performance and is not a guarantee of future results

Currency reflected is U.S. dollars

Program Summary

Performance Summary – Historical Spreads



Source: my.statestreet.com
 Performance data shown represents past performance and is not a guarantee of future results

Top 10 Borrowers Summary – March 31st, 2014

Borrower Org Legal Name	Cash Dly Collateral Amount Base	Non-Cash Dly Collateral Amount Base	Dly Mkt Value on Loan Base	% of Total
THE NOMURA GROUP	118,172,709	702,032,893	803,589,939	15.05%
THE CITIGROUP GROUP	651,566,399	157,008,560	790,257,404	14.80%
THE BANK OF AMERICA GROUP	412,223,306	254,885,825	651,480,065	12.20%
THE GOLDMAN SACHS GROUP	583,898,607	6,294,859	577,147,034	10.81%
THE MORGAN STANLEY GROUP	290,845,083	87,076,818	366,851,521	6.87%
THE DEUTSCHE BANK GROUP	358,415,366	3,229,951	354,306,753	6.63%
THE J.P. MORGAN CHASE GROUP	194,357,954	57,259,953	244,594,914	4.58%
THE CREDIT SUISSE GROUP	153,531,382	89,843,393	236,173,767	4.42%
THE HSBC GROUP	227,611,146	13,525,960	235,895,666	4.42%
THE BARCLAYS GROUP	194,715,749	10,998,417	201,406,418	3.77%
ALL OTHER BORROWERS	724,025,422	174,222,848	878,322,535	16.45%
GRAND TOTAL:	3,909,363,122	1,556,379,476	5,340,026,017	100.00%

- Oregon PERF \$2,752,791,978 cash collateral invested in OPERF separate account vs. \$767,207,653 in non-cash collateral
- Oregon Non-PERF \$1,156,571,143 cash collateral invested in OSTF separate account vs. \$789,171,821 in non-cash collateral

Biography



Johnson Shum

Johnson is a vice president and relationship manager in State Street's Securities Finance division. He is responsible for the overall service delivery and satisfaction for strategic lending customers. He also acts as the point of contact and advocate for Securities Finance-related matters.

Prior to assuming his current role, Mr. Shum worked at Brown Brothers Harriman & Co.'s securities lending group as a product development manager. He was responsible for the development of new products to expand their securities lending capabilities. Previously, he worked as a client services and relationship manager servicing mutual fund clients at The Bank of New York.

Mr. Shum has more than 18 years experience in the financial services industry, specifically in client services and product management. He holds a Bachelor of Arts degree in international business from the State University of New York at Buffalo.

State Street provides experienced securities lending capabilities and supplies liquidity across more than 30 markets, worldwide, via Securities Finance offices and trading desks located throughout the Americas, Europe/Middle-East/Africa and Asia/Pacific regions.

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Clients should be aware of the risks of participating in securities lending, which may include counterparty, collateral, investment loss, tax and accounting risks. A securities lending program description and risks statement is available.

Past performance is no guarantee of future results.

This document has not been prepared in accordance with the legal requirements designed to promote the independence of investment research and is not subject to any prohibition on dealing ahead of investment research.

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TAB 5 – OPERF POLICY IMPLEMENTATION
OVERLAY REVIEW

OPERF Policy Implementation Overlay Manager Annual Update

Purpose

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

Background

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

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

As of March 31, 2014, the OPERF overlay program was long \$1.3 billion in fixed income contracts and long \$294 million in global equity contracts for a total notional exposure of \$1.6 billion.

Staff Recommendation

None, information only.

FUNCTION: General Policies & Procedures

ACTIVITY: OPERF Asset Allocation and Rebalancing Policy

POLICY: The Oregon Investment Council (the "OIC") establishes asset allocation targets and ranges for the Oregon Public Employees Retirement Fund (OPERF), at the asset class level. On an ongoing basis, Oregon State Treasury (OST) staff must address how the asset allocation will be maintained given cash flows and market movement.

The OIC undertakes an asset-liability study of the portfolio every three to five years, or more frequently, if desired. Asset-liability studies shall include the following components, for consideration by the OIC: 1) Asset class capital market assumptions including expected returns, volatilities and correlations; 2) Optimization of various asset mixes using various portfolio modeling/construction techniques; 3) Scenario and risk contribution analysis; 4) Liability analysis; 5) Pension surplus/cost analysis; and 6) a recommended strategic asset allocation and rebalancing framework.

The purpose of rebalancing is to ensure that the actual OPERF asset allocation does not drift significantly from the strategic targets approved by the OIC following the rigorous asset-liability analysis described above. Moreover, rebalancing ensures that the return objectives and risk tolerance parameters approved by the OIC are consistently and effectively reflected in the management of OPERF assets over time. With OIC oversight, implementing rebalancing actions is the responsibility of OST staff, although many private market assets are illiquid and therefore not subject to staff's short-term rebalancing endeavors.

PROCEDURES:

1. BACKGROUND

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

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

2. IMPLEMENTATION

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

3. ASSET ALLOCATION POLICY TARGETS AND RANGES

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

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

4. ASSET ALLOCATION EXPECTED RETURNS

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

SAMPLE FORMS, DOCUMENTS OR REPORTS (Attached):

None

State of Oregon

Russell Overlay Update

Steve Cauble – Regional Director

Philip Lee, CFA – Portfolio manager

Greg Nordquist, CFA – Director, Overlay Strategies

APRIL 30, 2014

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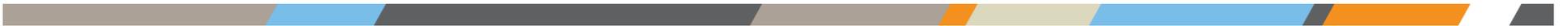
Date of first use: April 2014

RIS RC: 2255

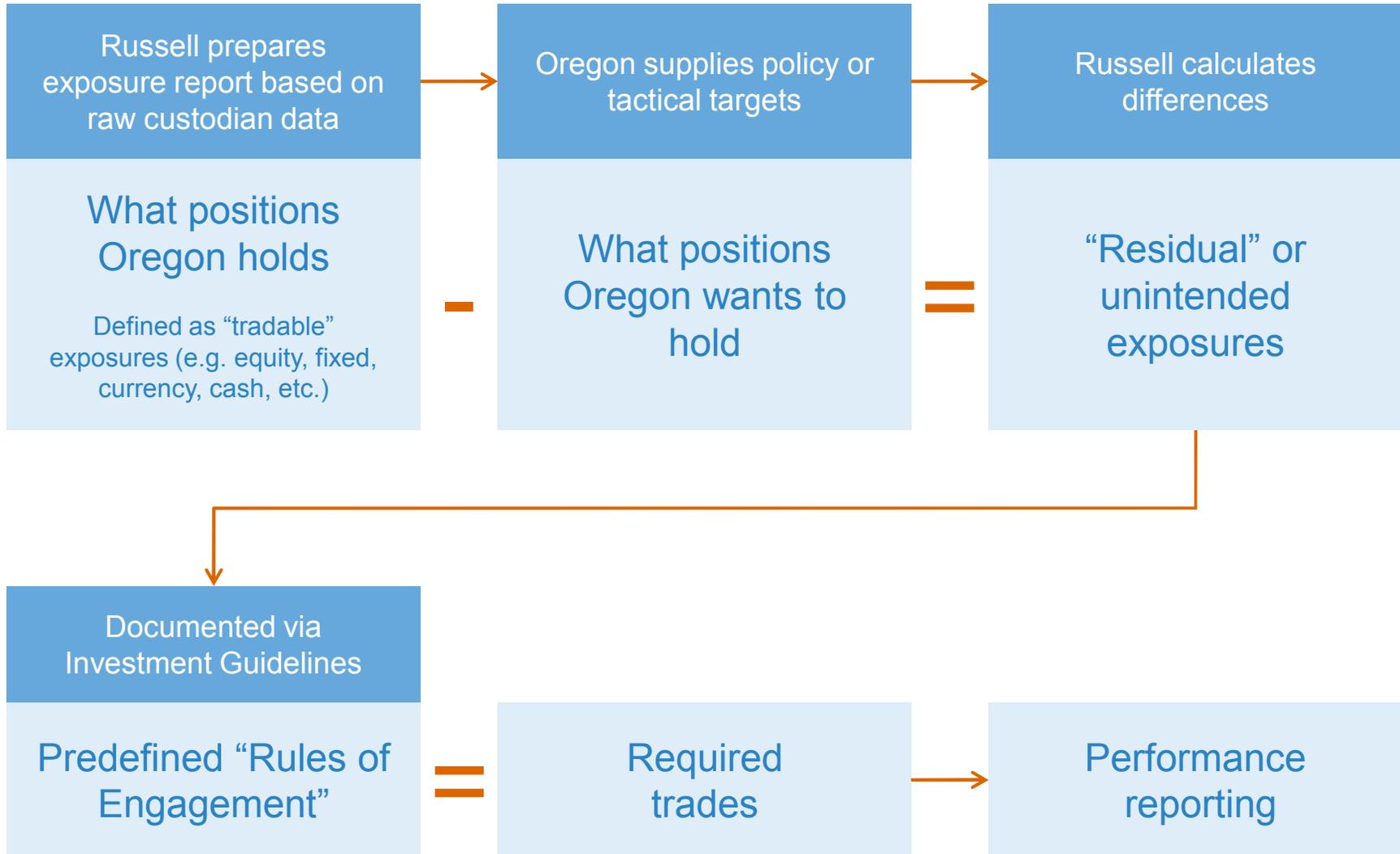
Contents

- › Overview
- › Performance update
 - › April 2013 to March 2014
 - › Long term performance
- › Appendix

Overlay update



Investment process

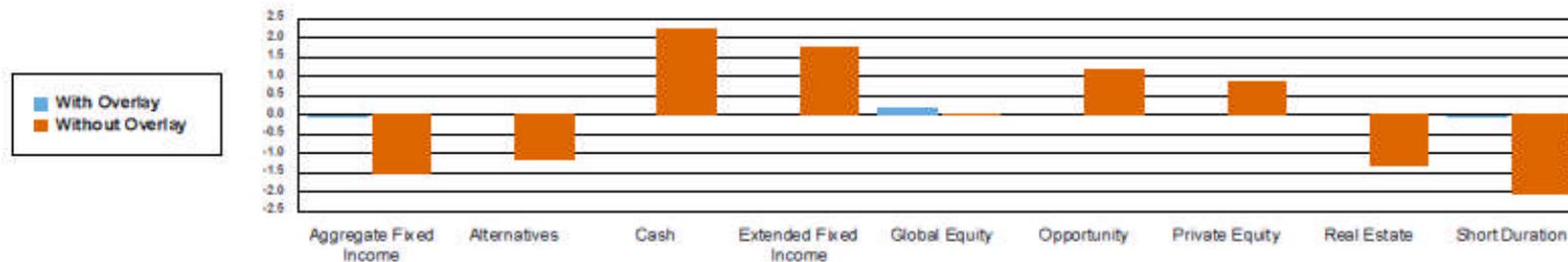


For illustrative purposes only.

Asset Summary

Asset Class	Physical Exposure		Synthetic Exposure		Net Position		Overlay Target		Policy Target	
	Value	%	Value	%	Value	%	Value	%	Value	%
Total Market Value	66,507.5	100.0%	0.0	0.0%	66,507.5	100.0%	66,507.5	100.0%	66,507.5	100.00%
Cash	1,477.1	2.2%	-1,469.7	-2.2%	7.4	0.0%	7.4	0.0%	0.0	0.00%
Cash	1,477.1	2.2%	-1,469.7	-2.2%	7.4	0.0%	7.4	0.0%	0.0	0.00%
Equity	41,467.2	62.3%	149.5	0.2%	41,616.7	62.6%	41,512.4	62.4%	40,902.0	61.50%
Global Equity	27,609.3	41.5%	149.5	0.2%	27,758.8	41.7%	27,654.5	41.6%	27,600.5	41.50%
Private Equity	13,857.9	20.8%	0.0	0.0%	13,857.9	20.8%	13,857.9	20.8%	13,301.5	20.00%
Fixed	14,438.0	21.7%	1,320.2	2.0%	15,758.2	23.7%	15,862.5	23.9%	15,629.3	23.50%
Short Duration	4,898.1	7.4%	830.6	1.2%	5,728.7	8.6%	5,780.8	8.7%	6,251.7	9.40%
Extended Fixed Income	4,300.8	6.5%	0.0	0.0%	4,300.8	6.5%	4,300.8	6.5%	3,125.9	4.70%
Aggregate Fixed Income	5,239.1	7.9%	489.6	0.7%	5,728.7	8.6%	5,780.8	8.7%	6,251.7	9.40%
Other	9,125.2	13.7%	0.0	0.0%	9,125.2	13.7%	9,125.2	13.7%	9,976.2	15.00%
Opportunity	784.0	1.2%	0.0	0.0%	784.0	1.2%	784.0	1.2%	0.1	0.00%
Alternatives	888.2	1.3%	0.0	0.0%	888.2	1.3%	888.2	1.3%	1,662.7	2.50%
Real Estate	7,453.0	11.2%	0.0	0.0%	7,453.0	11.2%	7,453.0	11.2%	8,313.4	12.50%

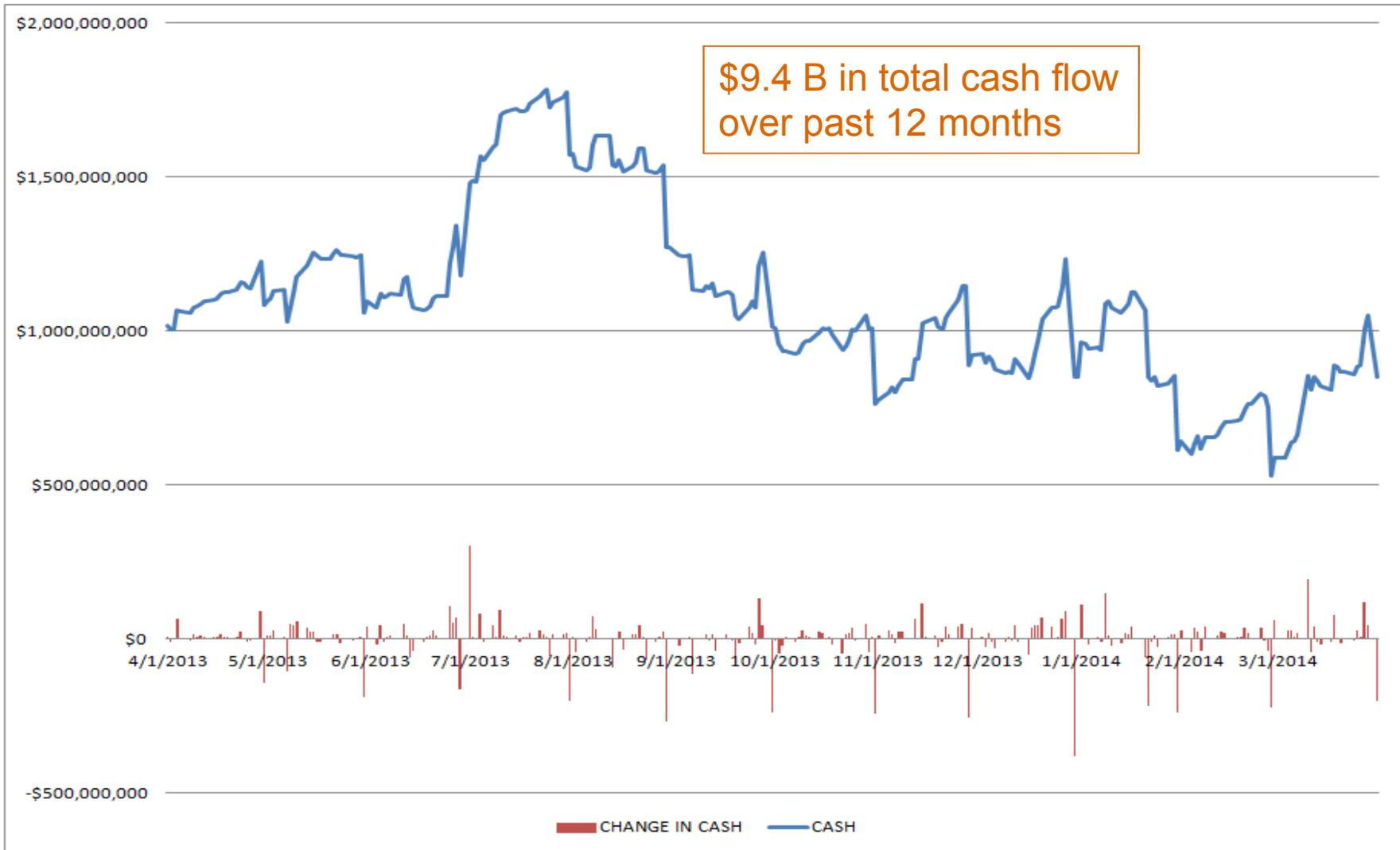
Deviations from Target Allocation



Past performance is not a guarantee of future results.

599G Cash Account

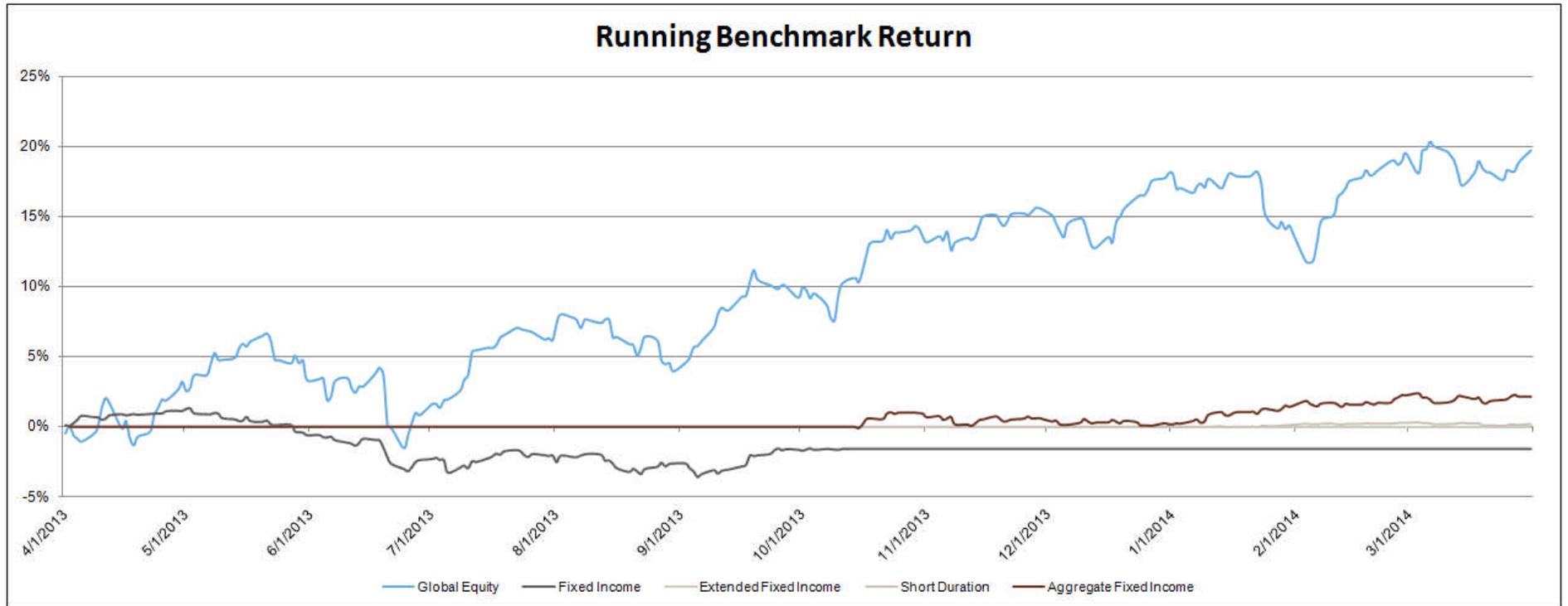
Daily change in cash



Past performance is not a guarantee of future results.

Benchmark returns

April-01 2013 to March-31 2014



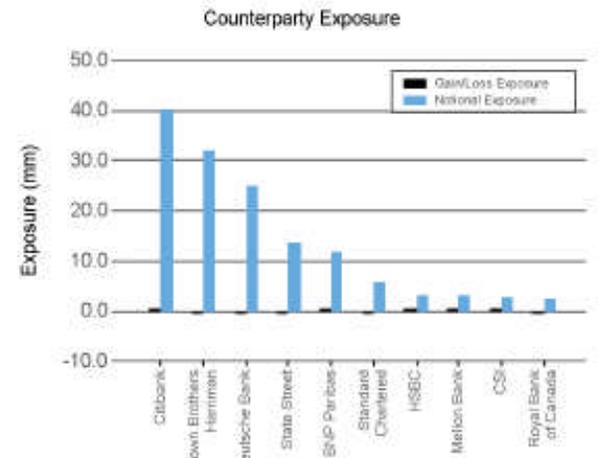
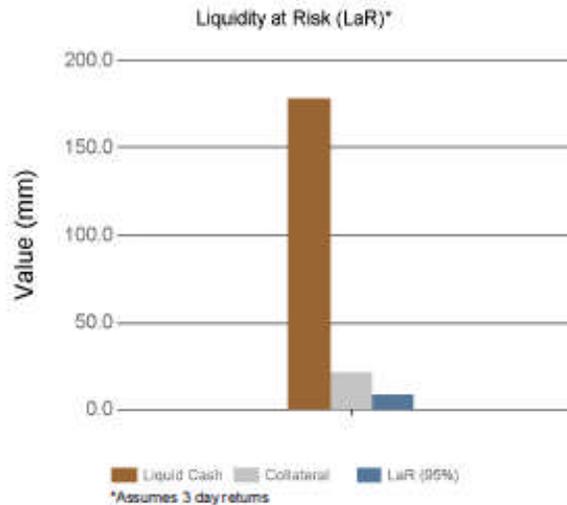
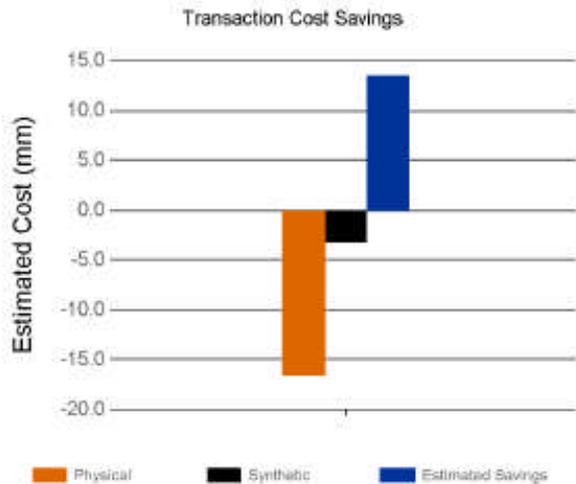
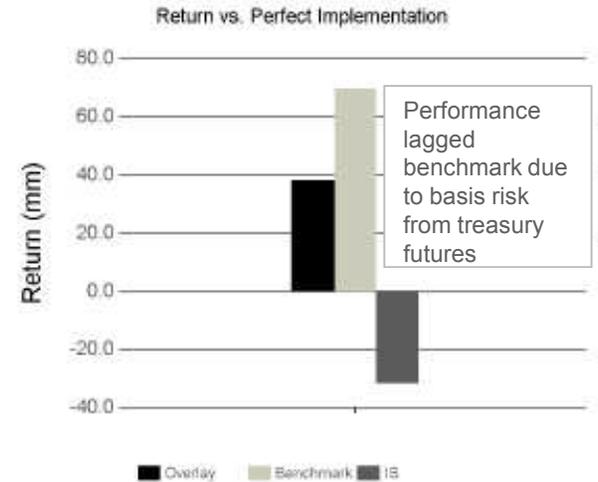
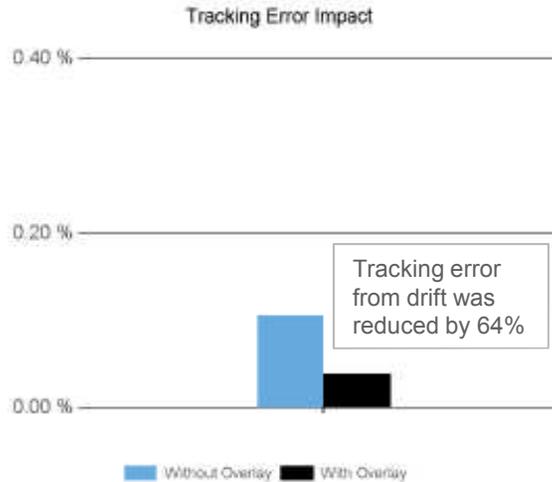
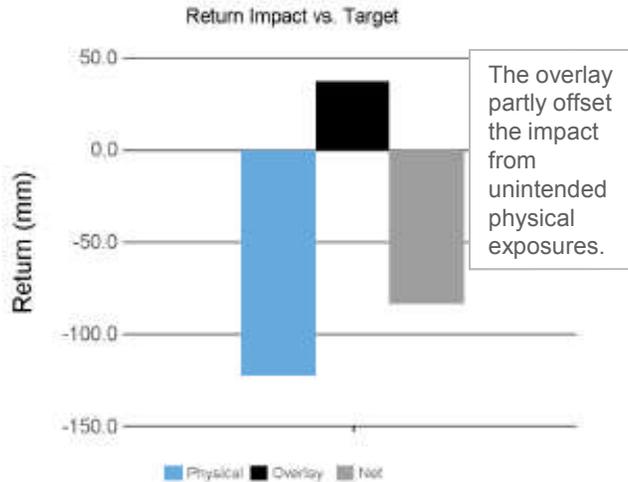
Past performance is not a guarantee of future results. Indexes and/or benchmarks are unmanaged and cannot be invested in directly.

Oregon overlay highlights

<u>What</u>	→	<u>Why</u>	→	<u>Results</u>
<ul style="list-style-type: none"> › Overlay frictional cash with underweight asset class 		<ul style="list-style-type: none"> › Capture risk premium of policy over cash › Reduce tracking error from unintended exposures 		<ul style="list-style-type: none"> › Cumulative Returns (port/bench) › 1 year +\$38 mm (+6 bps/+11 bps) › 5 years + \$1,213 mm (+51/+51) › ITD 10/2005 -\$141 mm (-1/-2)
<ul style="list-style-type: none"> › Long/short for deviations outside predetermined ranges (+/-2%) <ul style="list-style-type: none"> › Extreme market moves or tactical shifts 		<ul style="list-style-type: none"> › Reduce tracking error from unintended exposures (<i>offset to physical</i>) › Reduce transaction costs (<i>trade physicals as a last line of defense</i>) 		<ul style="list-style-type: none"> › Risk › TE from unintended exposures decreased by <ul style="list-style-type: none"> › ~64% last 1 year › ~72% last 5 years
<ul style="list-style-type: none"> › Raise cash opportunistically <ul style="list-style-type: none"> › Piggyback on other cash flows › Conditional crosses 		<ul style="list-style-type: none"> › Reduce transaction costs › Reduced administrative burden 		<ul style="list-style-type: none"> › Transaction Costs › Savings by equitizing and rebalancing with futures versus physicals: <ul style="list-style-type: none"> › \$13 mm last 1 year › \$72 mm last 5 years

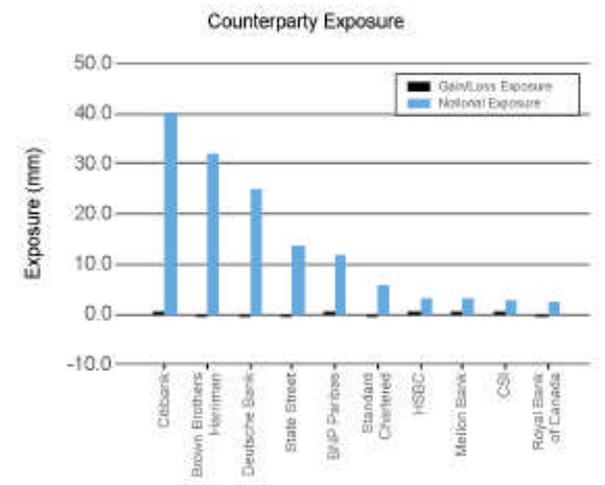
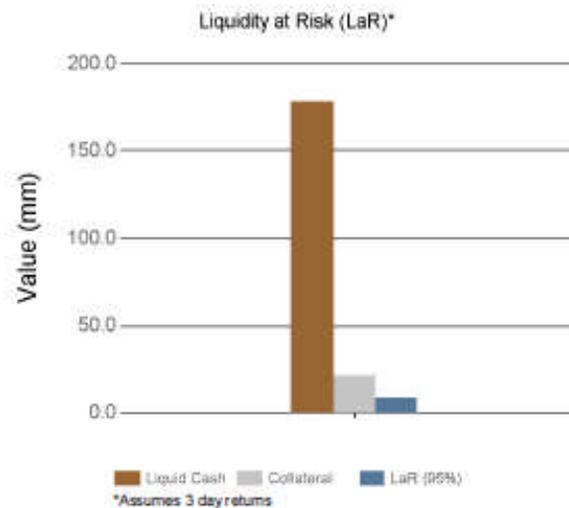
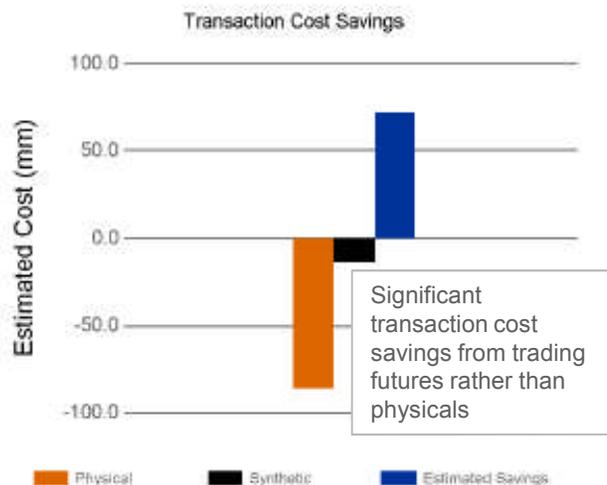
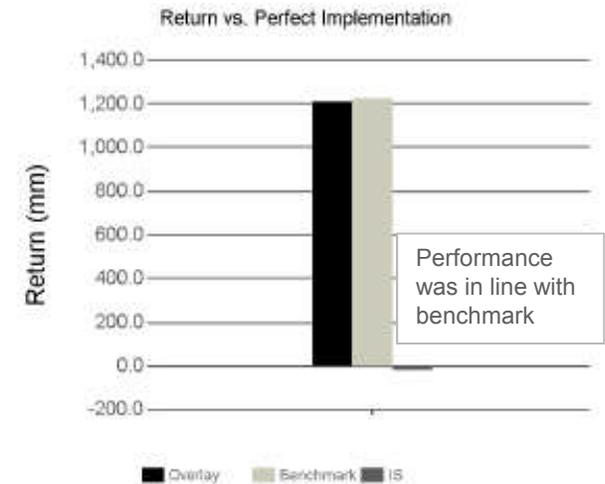
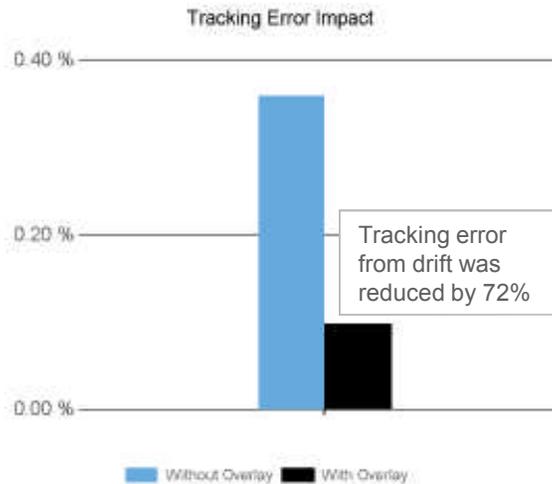
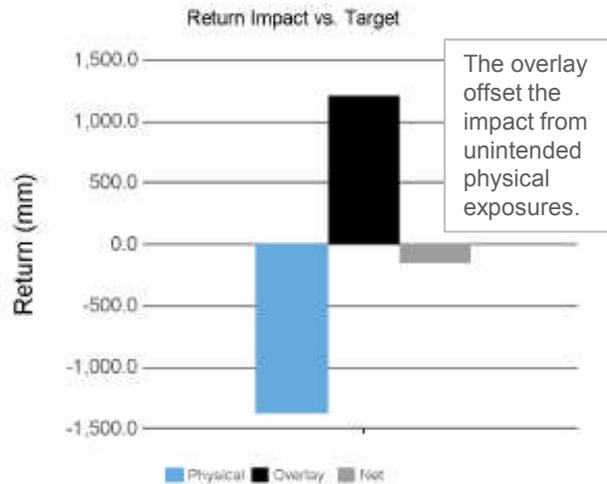
These costs assume one-way trading cost plus one quarterly roll. Indexes are unmanaged and cannot be invested in directly. For illustrative purposes only.

Overlay Highlights - Oregon



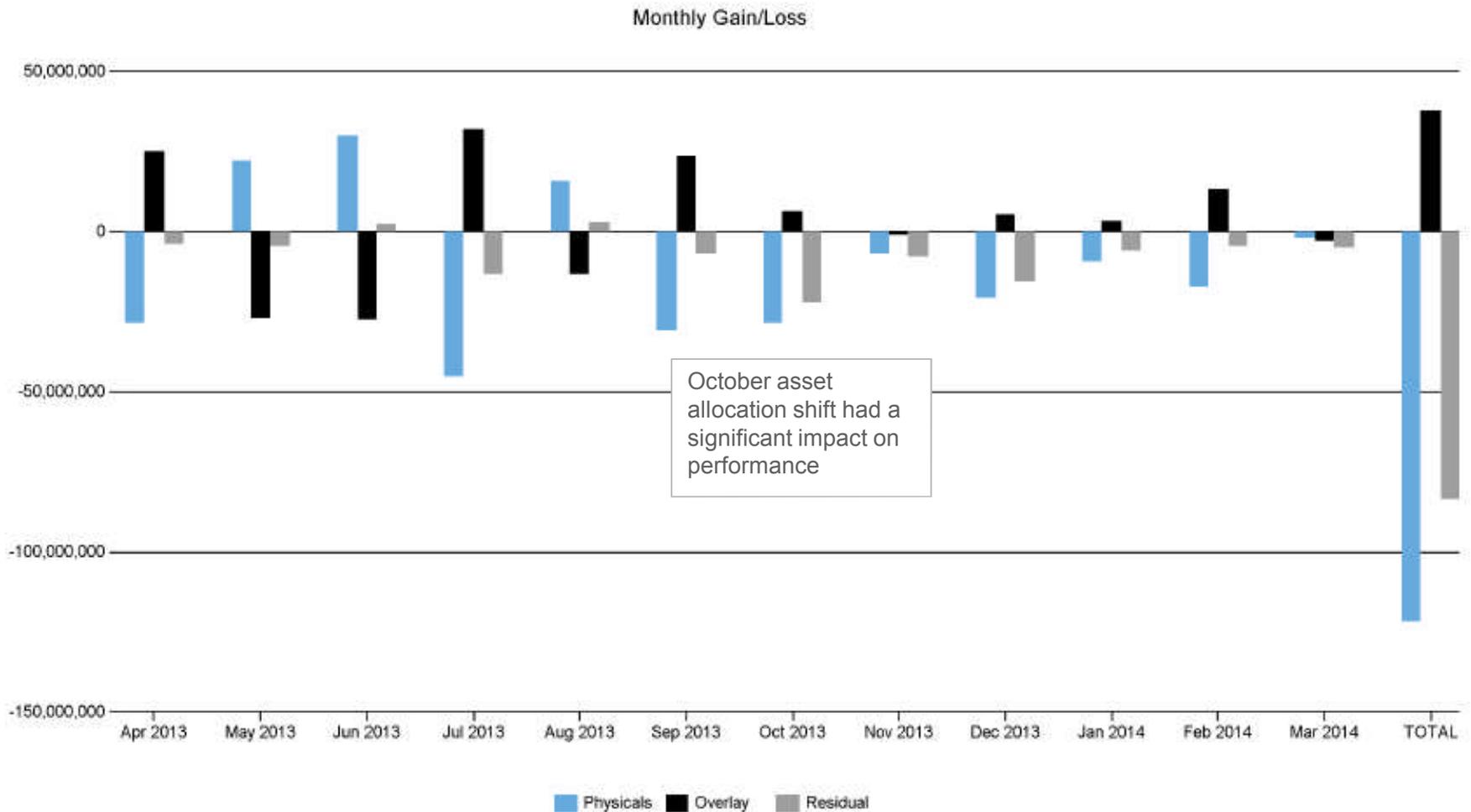
Past performance is not a guarantee of future results.

Overlay Highlights - Oregon



Past performance is not a guarantee of future results.

Return Impact vs. Physical Portfolio

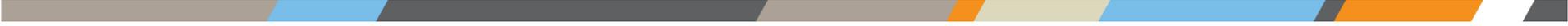


Past performance is not a guarantee of future results.

Overlay exposure management trends

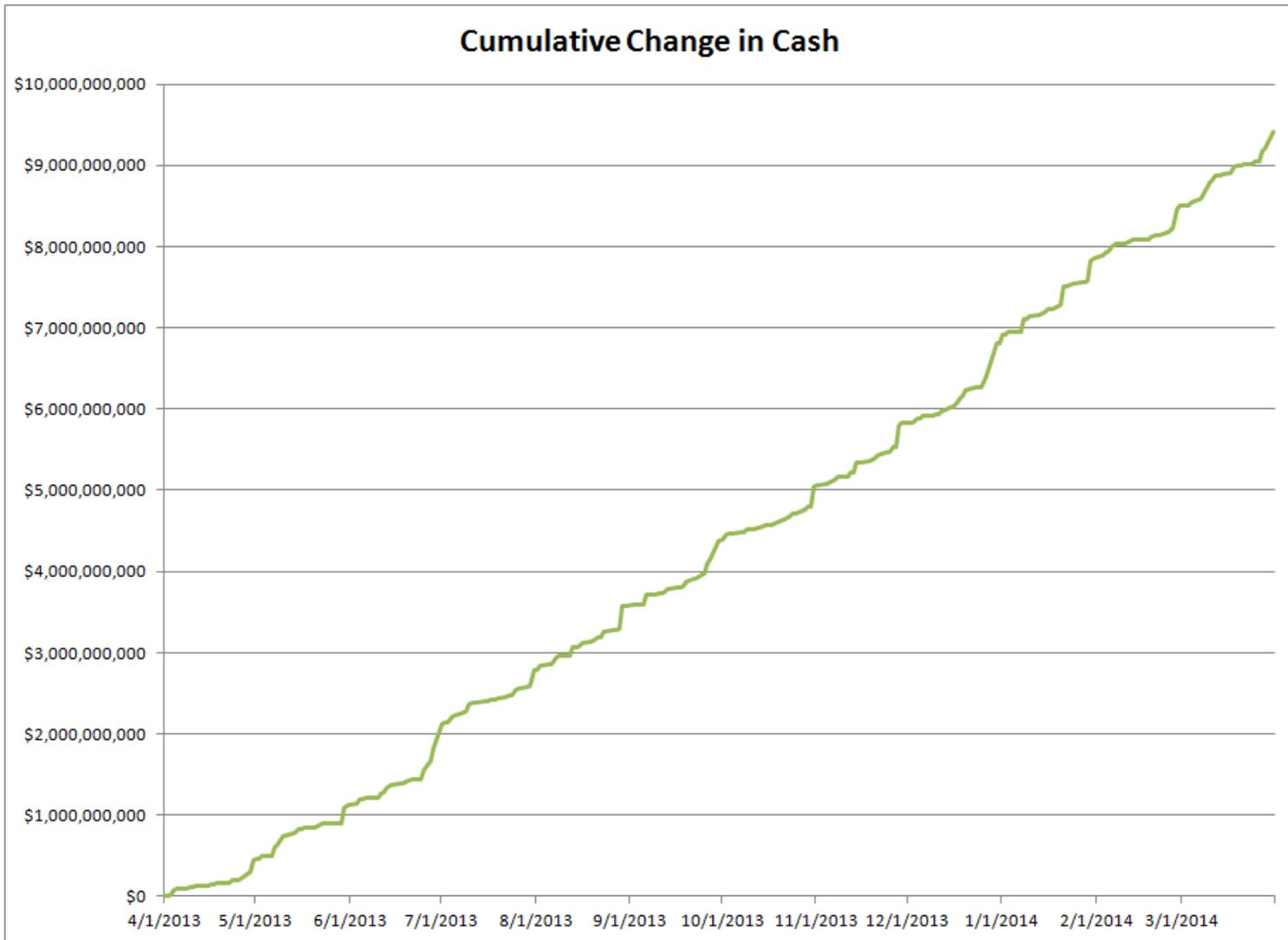
- › Asset allocation shifts
 - › De-risking, re-risking and broader global diversification
 - › Overlay used to shift allocation in line with policy in a timely manner
 - › Physical portfolio restructure follows
- › Renewed interest in the basics
 - › Liquidity management and rebalancing
- › Volatility management / Downside Protection
 - › Options-based hedging
 - › Opportunistic protection and systematic (call overwriting)
- › Tactical tilting
 - › Client directed within overlay portfolio
 - › Russell strategists signals - Enhanced Asset Allocation

Appendix



599G Cash Account

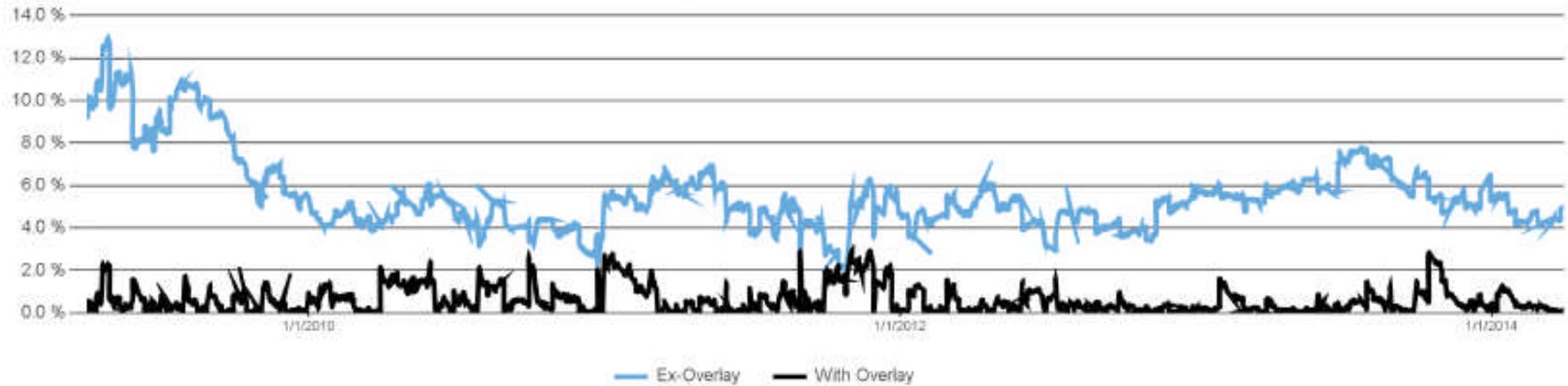
Cumulative change in cash



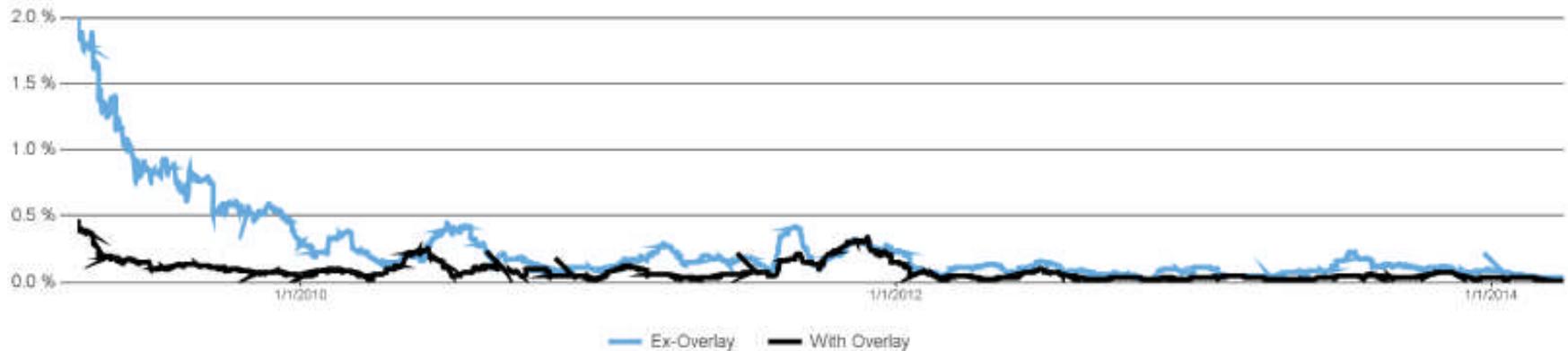
Past performance is not a guarantee of future results.

Total Fund Risk Management

Daily Absolute Deviation



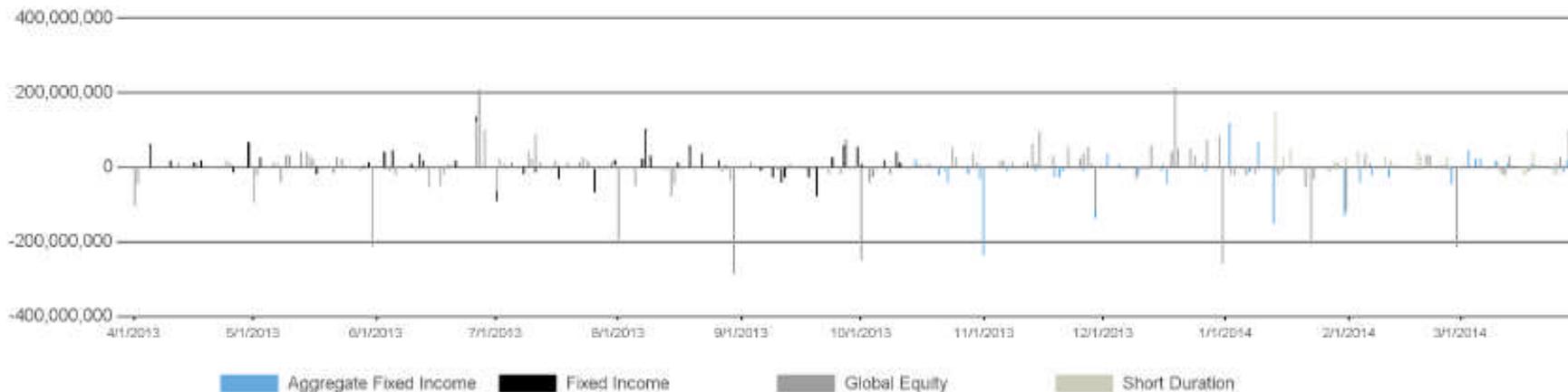
Rolling 20-Day Tracking Error



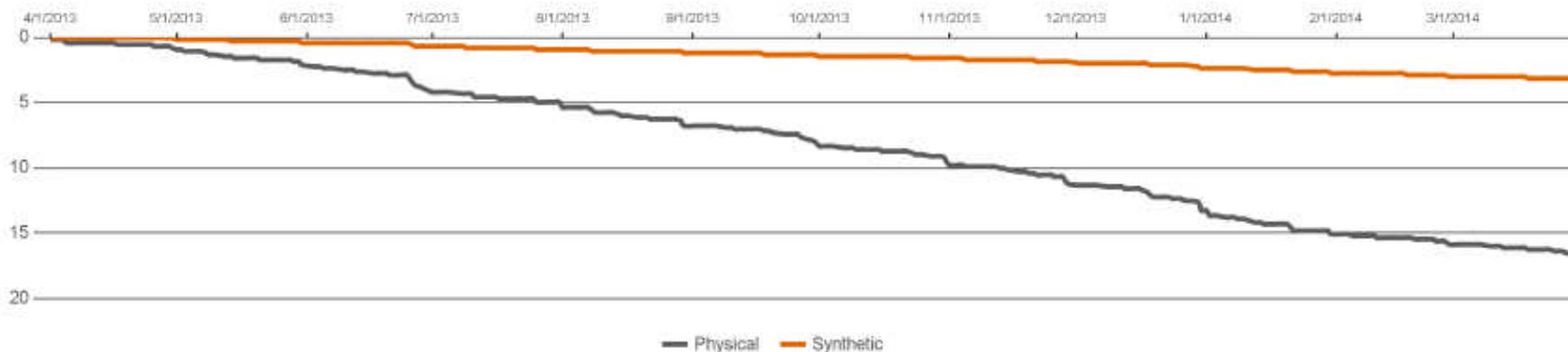
Past performance is not a guarantee of future results.

Transaction Cost Savings

Daily Traded Flows



Estimated Transaction Costs

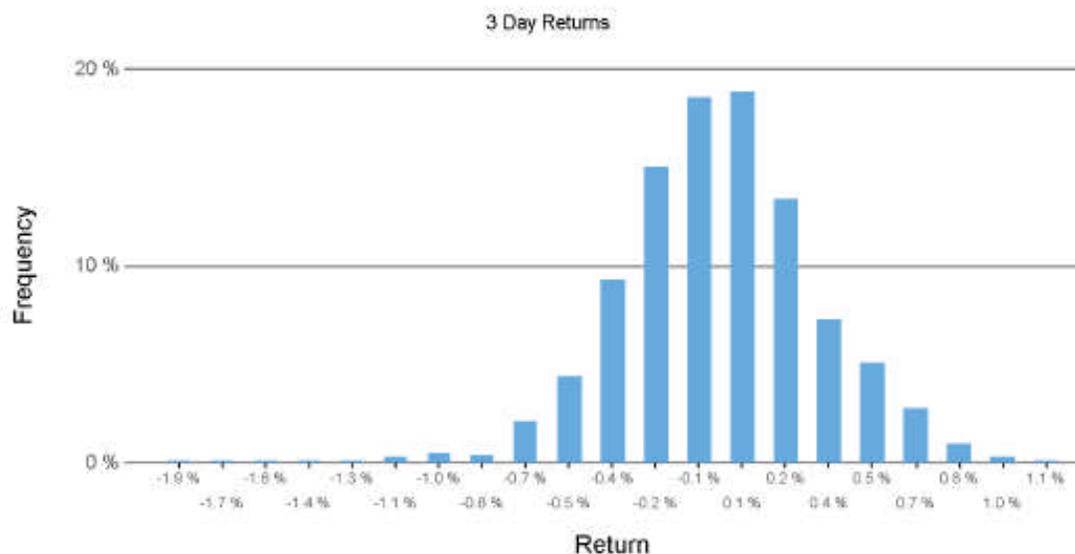


Past performance is not a guarantee of future results.

Liquidity at Risk

Account Cash	
Margin Cash	199,482,005
Security Collateral	0
Cash Collateral	21,377,000
Unrealized G/L	47,210
Liquid Cash	178,057,796

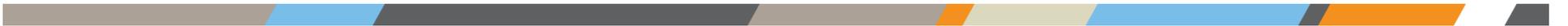
Drawdown Analysis	
Liquidity at Risk	9,139,225
Max Drawdown	30,769,025
Times Below 0	0



Asset Class	Notional	Volatility	LaR
Global Equity	294,500,731	17.7 %	9,359,737
Short Duration	836,752,688	4.1 %	6,129,232
Aggregate Fixed Income	524,132,516	4.1 %	3,839,282
Total:	1,655,385,934		

Security Type	Notional	Volatility	LaR
Futures	1,655,385,934	2.9 %	8,590,625
Currency	125,783,930	6.9 %	1,561,371
Total:	1,781,169,864		

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TAB 6 – LITIGATION UPDATE – Verbal Update Only

April 30, 2014 Regular Meeting

Subject to a possible Executive Session pursuant
to ORS 192.660(2)(f) & (h)

TAB 7 – ASSET ALLOCATIONS & NAV UPDATES

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Asset Allocations at March 31, 2014

Regular Account								Variable Fund	Total Fund
OPERF	Policy	Target ¹	\$ Thousands	Pre-Overlay	Overlay	Net Position	Actual	\$ Thousands	\$ Thousands
Public Equity	32.5-42.5%	37.5%	28,094,899	41.1%	(125,999)	27,968,900	40.9%	816,533	28,785,433
Private Equity	16-24%	20.0%	14,746,682	21.6%		14,746,682	21.6%		14,746,682
Total Equity	52.5-62.5%	57.5%	42,841,581	62.7%	(125,999)	42,715,582	62.5%		43,532,115
Opportunity Portfolio			851,423	1.2%		851,423	1.2%		851,423
Fixed Income	15-25%	20.0%	14,553,937	21.3%	1,360,885	15,914,822	23.3%		15,914,822
Real Estate	9.5-15.5%	12.5%	7,748,456	11.3%	(8,000)	7,740,456	11.3%		7,740,456
Alternative Investments	0-10%	10.0%	1,089,413	1.6%		1,089,413	1.6%		1,089,413
Cash*	0-3%	0.0%	1,247,410	1.8%	(1,226,886)	20,524	0.0%	6,326	26,850
TOTAL OPERF		100%	\$ 68,332,220	100.0%	\$ -	\$ 68,332,220	100.0%	\$ 822,859	\$ 69,155,079

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

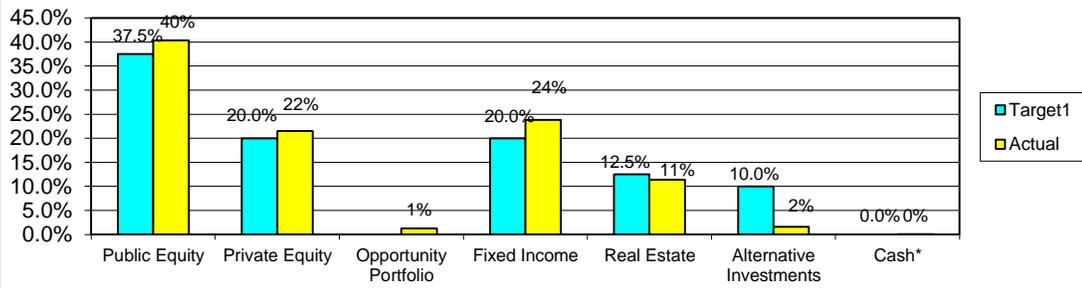
*Includes cash held in the policy implementation overlay program.

SAIF	Policy	Target	\$ Thousands	Actual
Total Equity	7-13%	10.0%	492,556	10.9%
Fixed Income	80-90%	85.0%	4,002,980	88.3%
Real Estate	0-7%	5.0%	0	0.0%
Cash	0-3%	0%	36,324	0.8%
TOTAL SAIF		95%	\$4,531,860	100.0%

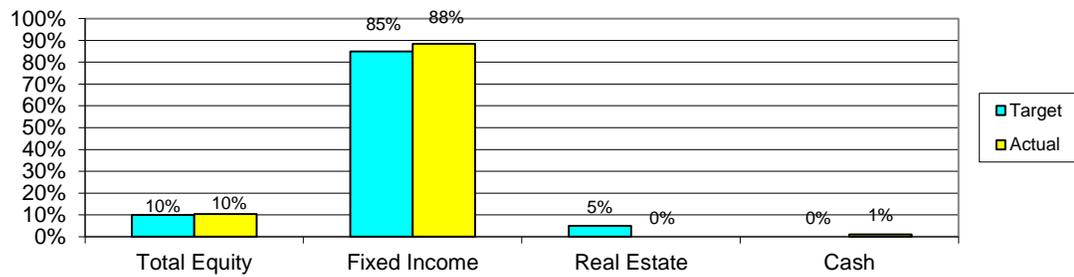
CSF	Policy	Target	\$ Thousands	Actual
Domestic Equities	25-35%	30%	\$431,503	31.0%
International Equities	25-35%	30%	400,716	28.8%
Private Equity	0-12%	10%	139,515	10.0%
Total Equity	65-75%	70%	971,734	69.9%
Fixed Income	25-35%	30%	395,764	28.5%
Cash	0-3%	0%	23,447	1.7%
TOTAL CSF			\$1,390,945	100.0%

HIED	Policy	Target	\$ Thousands	Actual
Domestic Equities	20-30%	25%	\$21,627	28.0%
International Equities	20-30%	25%	21,492	27.9%
Private Equity	0-15%	10%	6,815	8.8%
Growth Assets	50-75%	60%	49,934	64.7%
Real Estate	0-10%	7.5%	5,622	7.3%
TIPS	0-10%	7.5%	4,450	5.8%
Inflation Hedging	7-20%	15%	10,072	13.1%
Fixed Income	20-30%	25%	15,918	20.6%
Cash	0-3%	0%	1,218	1.6%
Diversifying Assets	20-30%	25%	17,136	22.2%
TOTAL HIED			\$77,142	100.0%

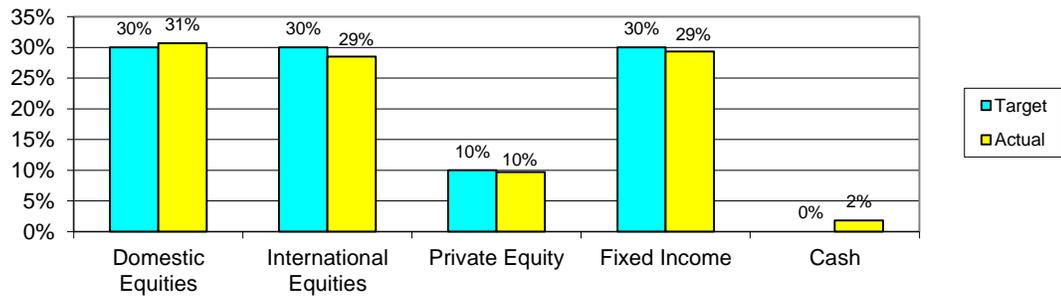
OPERF Asset Allocation



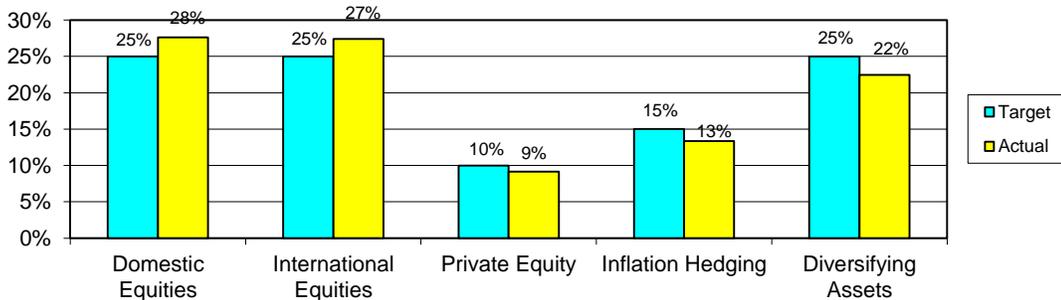
SAIF Asset Allocation



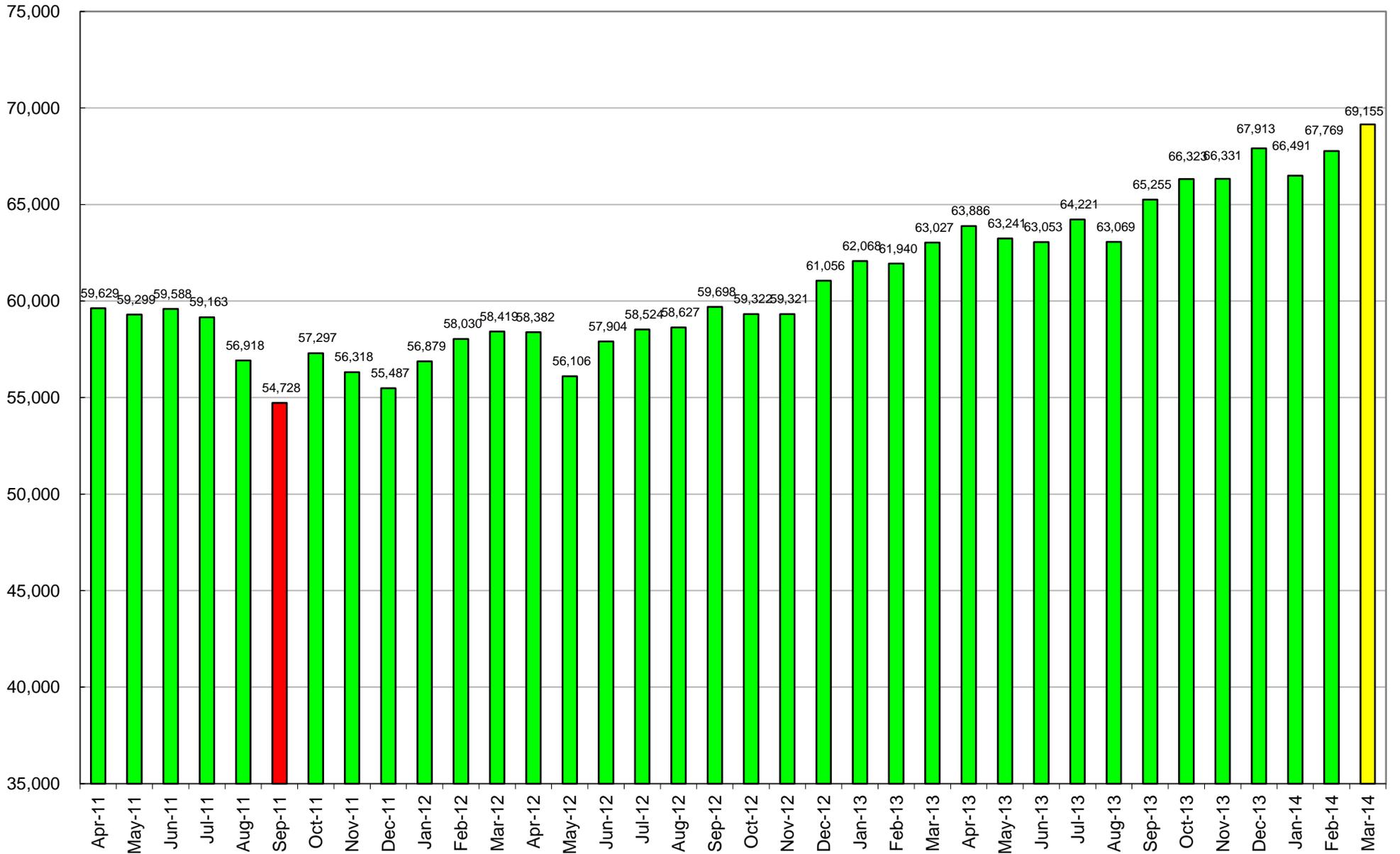
CSF Asset Allocation



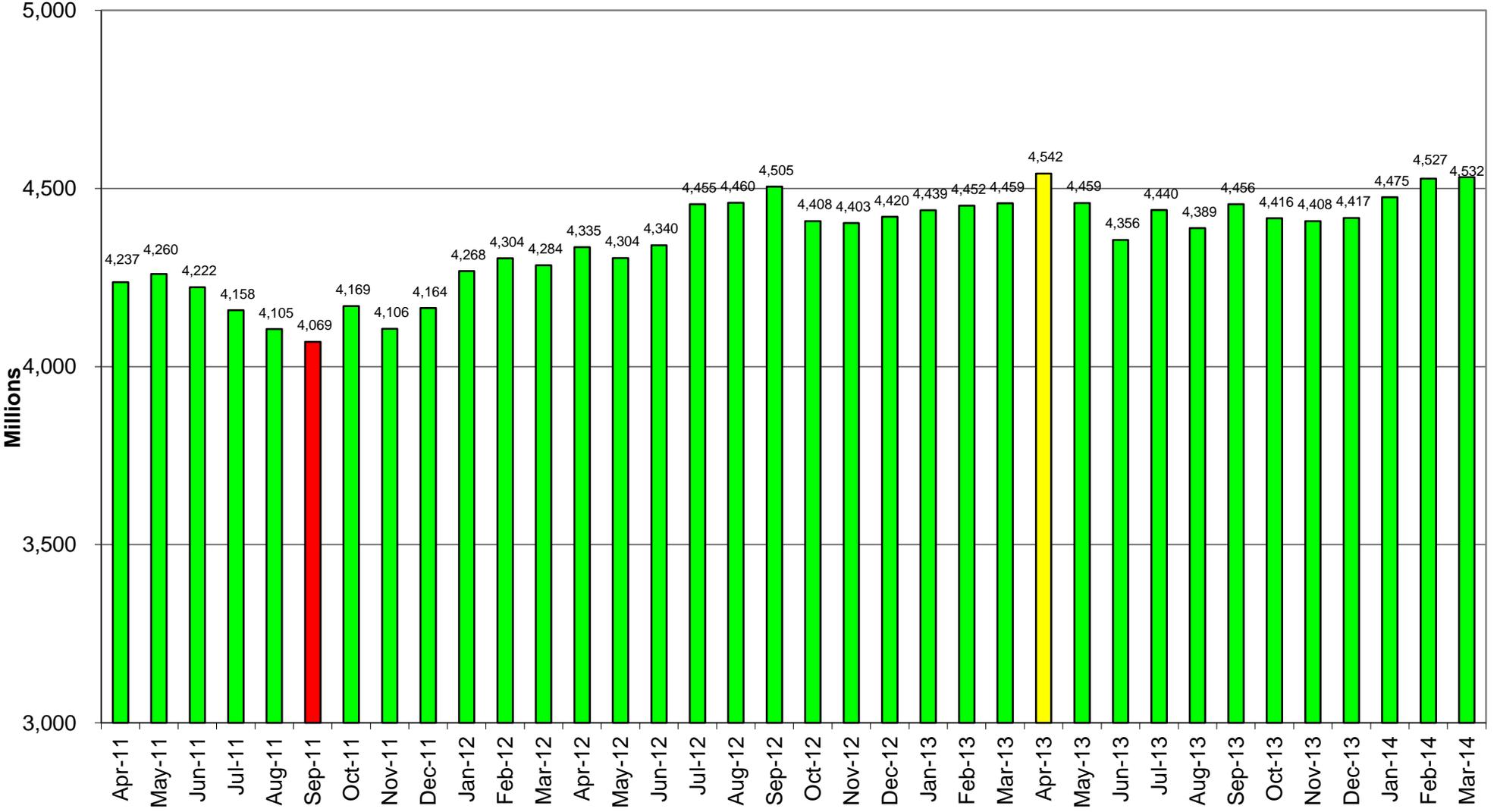
HIED Asset Allocation



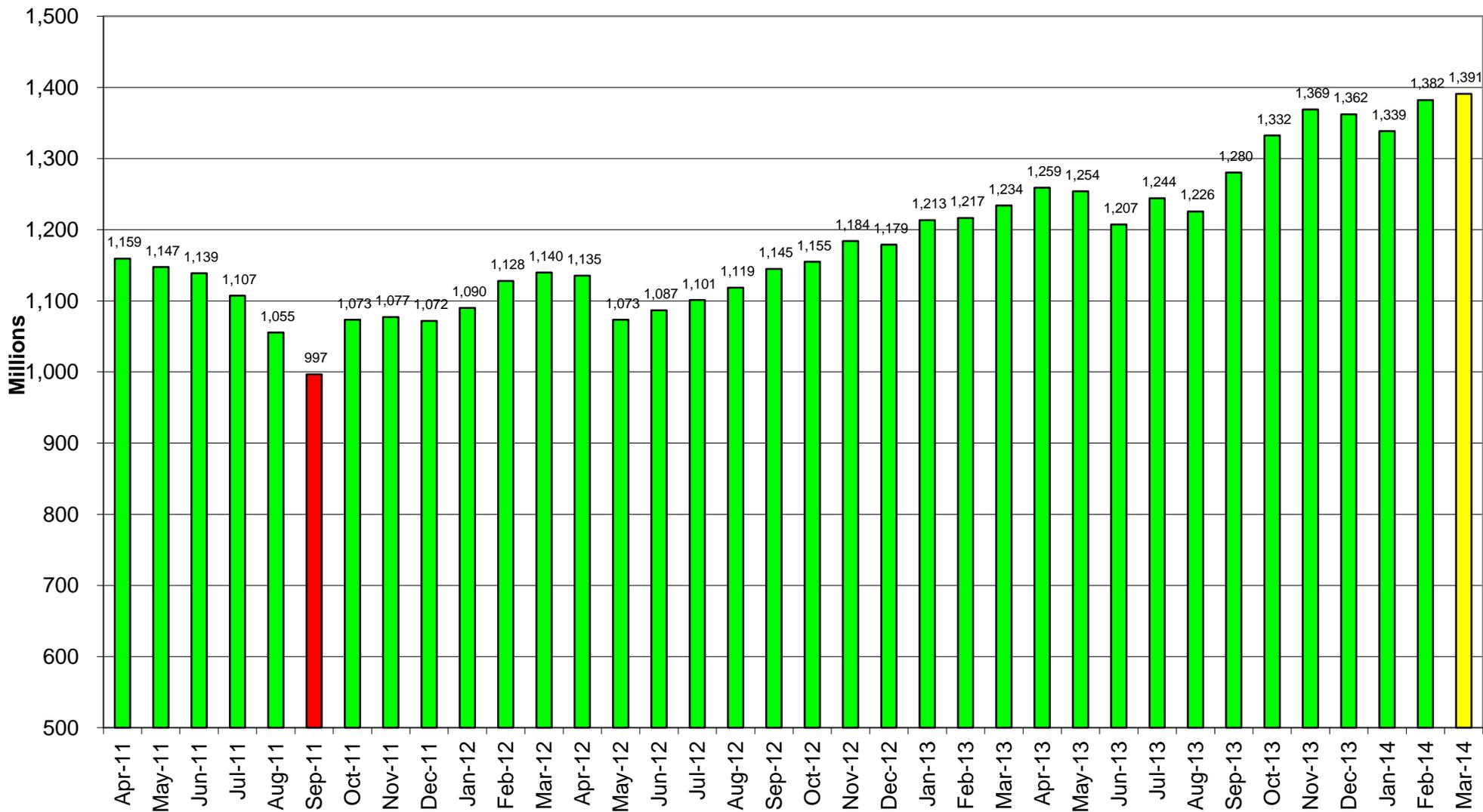
OPERF NAV
Three years ending March 2014
(\$ in Millions)



SAIF NAV
Three years ending March 2014
(\$ in Millions)



CSF NAV
Three years ending March 2014
(\$ in Millions)



TAB 8 – CALENDAR/FUTURE AGENDA ITEMS

2014 OIC Forward Agenda Topics

May 28: OPERF Real Estate Investment
OSGP Review
OPERF 1st Quarter Performance Review
Afternoon ESG Workshop

July 30: OPERF Alternative Investments(2)
OPERF Public Equity Review
OITP Review
OSTF Annual Review
SAIF Annual Review

September 24: Updated OPERF A/L Study
OPERF Real Estate Review
OPERF Fixed Income Review
OIC Annual Policy Updates

November 5: CSF Annual Review
OPERF Alternative Portfolio Review
CEM Benchmarking Report
Internal Audit Report

December 3: OPERF Opportunity Portfolio Review
HIED Annual Review
OPERF 3rd Quarter Performance Review