Oregon Investment Council

October 30, 2013 - 9:00 AM

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

Keith Larson
Chair

John Skjervem
Chief Investment Officer

Ted Wheeler
State Treasurer

OREGON INVESTMENT COUNCIL

Meetings Begin at 9:00 am

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

2013 Schedule

Wednesday, October 30, 2013

Wednesday, December 4, 2013

2014 Schedule

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

October 30, 2013
9:00 AM

PERS Headquarters
11410 S.W. 68th Parkway
Tigard, Oregon

Time	A. Action Items	Presenter	Tab
9:00-9:05	**1. Review & Approval of Minutes** September 25, 2013 Regular Meeting	**Keith Larson** *OIC Chair*	**1**
	Committee Reports	**John Skjervem** *Chief Investment Officer*	
9:05-9:55	**2. AQR Style Premia Fund** *OPERF Alternative Portfolio*	**Mike Mueller** *Deputy Chief Investment Officer* **Cliff Asness** *Managing & Founding Principal, AQR* **Gregor Andrade** *Principal, AQR* **John Meier** *Strategic Investment Solutions*	**2**
9:55-10:40	**3. U.S. Equity Risk Premia Strategy** *OPERF Public Equity*	**Mike Viteri** *Senior Investment Officer* **Karl Cheng** *Investment Officer* **Raman Subramanian** *Executive Director, Head of Americas Index Applied Research, MSCI* **John Meier**	**3**
10:40-10:50	**--------------------- BREAK ---------------------**		
10:50-11:15	**4. CEM Annual Cost Study for OPERF**	**Mike Mueller** **Bruce Hopkins** *Vice President, CEM*	**4**

11:15-11:30	**5.**	**OST Annual Internal Audit Update**	**Byron Williams, CPA** *Chief Audit Executive*	**5**
11:30-11:50	**6.**	**Common School Fund** *Annual Review*	**Mike Mueller** **John Meier**	**6**
11:50-12:15	**7.**	**Investment Beliefs Project**	**Allan Emkin** *Pension Consulting Alliance* **John Skjervem**	**7**
12:15-12:40	**8.**	**OIC Policy Updates** *Annual Review*	**Mike Mueller**	**8**

B. Information Items

12:40-12:45	**9.**	**Asset Allocations & NAV Updates** a. Oregon Public Employees Retirement Fund b. SAIF Corporation c. Common School Fund d. HiEd Pooled Endowment Fund	**John Skjervem**	**9**
12:45-12:50	**10.**	**Calendar — Future Agenda Items**	**John Skjervem**	**10**
	11.	**Other Items**	**Council** **Staff** **Consultants**	

C. Public Comment Invited

15 Minutes

TAB 1 – REVIEW & APPROVAL OF MINUTES

September 25, 2013 Regular Meeting

OST Committee Reports – Verbal

JOHN D. SKJERVEM
CHIEF INVESTMENT OFFICER
INVESTMENT DIVISION

PHONE 503-378-4111
FAX 503-378-6772

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

OREGON INVESTMENT COUNCIL
SEPTEMBER 25, 2013
MEETING MINUTES

Members Present:	Rukaiyah Adams, Paul Cleary, Katy Durant, Keith Larson, Dick Solomon, Ted Wheeler
Staff Present:	Darren Bond, Tony Breault, Karl Cheng, Garrett Cudahey, Jay Fewel, Sam Green, John Hershey, Brooks Hogle, Julie Jackson, Mary Krehbiel, Carmen Leiva, Perrin Lim, Tom Lofton, Ben Mahon, Mike Mueller, Tom Rinehart, Priyanka Shukla, James Sinks, John Skjervem, Michael Viteri, Byron Williams
Consultants Present:	Tom Martin (TorreyCove); Jonathan Brody and John Meier (SIS); Alan Emkin, Christy Fields, John Linder and David Gluckman (PCA)
Legal Counsel Present:	Dee Carlson and Deena Bothello, Oregon Department of Justice

The September 25, 2013 OIC meeting was called to order at 9:02 am by Keith Larson, Chair.

I. 9:02 am Review and Approval of Minutes

MOTION: Mr. Solomon moved approval of the July 31, 2013 meeting minutes. Ms. Durant seconded the motion, which then passed by a 4/0 vote (Treasurer Wheeler was absent for the vote).

II. 9:04 am RS Global Natural Resources Strategy – OPERF Alternatives Portfolio

John Hershey, Senior Investment Officer introduced MacKenzie Davis, Co-Manager of RS Investments. RS Investments manages approximately $24 billion across its various funds, including approximately $6.9 billion of assets under management (AUM) by its natural resources team. RS is reserving the Strategy's limited, remaining capacity for existing clients before closing it to new capital, most likely at the end of this year. RS is also an existing relationship as OPERF committed $50 million in August 2012 to the firm's Natural Gas strategy.

Treasurer Wheeler expressed concern about natural resource investments in general and issues associated with "fracking" in particular. Staff and SIS recommended a $200 million commitment to the RS Global Natural Resources Strategy, subject to the satisfactory negotiation of terms and conditions and completion of all requisite documentation by DOJ legal counsel working in concert with OST staff.

MOTION: Mr. Solomon moved approval of the staff recommendation. Ms. Durant seconded the motion, which then passed by a vote of 4/1 (Treasurer Wheeler voted no).

III. **10:15 am Lone Star Real Estate Fund III, L.P. – OPERF Real Estate Portfolio**

Tony Breault, Senior Real Estate Investment Officer introduced Andre Collin, Senior Managing Director and Nick Beevers, Managing Director with Lone Star. The Fund has a target size of $6.0 billion and will focus on distressed debt and equity investments in multifamily and commercial real estate assets. The Fund's geographic weightings are expected to be 40 percent in the U.S., 40 percent in Europe and 20 percent in Japan. Lone Star's Real Estate Fund (LSREF) series, in which OPERF is invested in LSREF I & II, is separate from the firm's other investment funds (the LS Fund series) which focus on distressed loans and securities, including single family residential, corporate and consumer debt.

The Opportunistic sub-portfolio within OPERF's real estate investment program has a cash adjusted 32.8 percent weighting at August 31, 2013 versus a target weighting of 30% (with a bandwidth allowance up to 40 percent). Staff and consultant believe that Lone Star's long and successful track record merits investment at this time to take advantage of current dislocations in the firm's target markets.

Staff recommended a $300 million commitment to Lone Star Real Estate Fund III, L.P. on behalf of OPERF, subject to the satisfactory negotiation of terms and conditions and completion of all requisite documentation by DOJ legal counsel working in concert with OST staff.

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

IV. **10:52 am OPERF Real Estate Portfolio Review**

Tony Breault, Senior Real Estate Investment Officer, and Christy Fields and David Gluckman of PCA presented an overview of the OPERF real estate portfolio and its current construction. Their remarks also included a review of both recent and historical portfolio performance as well as commentary on current and future market conditions and trends. Mr. Breault went through the upcoming initiatives for the next year, which include the following:

- Hiring an additional investment officer and analyst;
- Dashboard/Portfolio modeling for staff analytics;
- Valuations;
- REIT review;
- Value-add focus with strategic partners; and
- An increased emphasis on separate accounts.

V. **11:47 am OPERF Public Equity Portfolio Review**

Michael Viteri, Senior Investment Officer, and Ben Mahon, Investment Officer started the review by presenting two recommendations. The first one proposed updating OIC Public Equity Policies 4.05.01 and 4.05.02 to codify existing practices and clarify staff's ability to rebalance between and among various Public Equity strategies. In General Policy and Procedure 04.01.18 - Public Employees Retirement Fund Rebalancing Policy, rebalancing between asset classes ensures that the OPERF portfolio's overall asset allocation does not drift significantly from its stipulated strategic targets. However, this policy does not explicitly address *how* staff can and should rebalance between and among managers and sub asset classes.

The most common catalyst for rebalancing has historically occurred when staff raises cash for pension payments or private market capital calls. However, over the last 12 months, there has been no need to raise cash from public market allocations (and therefore no opportunity to rebalance) due to the large cash inflows associated with OPERF's many private market (specifically, Private Equity and Real Estate) realizations.

The proposed language change inserted into (P&P 04.05.01 – Strategic Role of Public Equity Securities within OPERF, Appendix A), delegates to staff the authority to rebalance between and among managers, with CIO approval and quarterly notification to the OIC.

The second proposed policy recommendation codifies Public Equity manager termination practices. In order to minimize adverse impacts to a manager's reputation and on-going investment operations due to a recommended termination, staff has historically given asset managers the opportunity to resign from their OST/OPERF mandates. Although staff is sensitive to a manager's on-going business viability, the main motivation for this approach has been to ensure that the OST/OPERF portfolio is not adversely affected by news of the manager termination.

The proposed policy change (P&P 04.05.02 – Selecting and Terminating Investment Management Firms) delegates to staff the authority to terminate any public equity manager, with CIO approval and quarterly notification to the OIC.

MOTION:

- Staff and SIS recommended adoption of changes to Public Equity OIC Policies 04.05.01 and 04.05.02. Ms. Durant moved approval of the staff recommendation. Mr. Solomon seconded the motion, which then passed by a vote of 5/0.

The William Blair Emerging Markets Small Cap strategy was launched in the fourth quarter of 2011. The strategy is designed to capture a broader array of small and micro-cap opportunities with more limited liquidity than the flagship Emerging Markets Core strategy.

The Emerging Markets Small Cap strategy is managed by the same team, with the same philosophy and process as the existing emerging markets separate account, but will primarily concentrate on stocks with market capitalizations below $3 billion. Similar to the core emerging markets strategy, William Blair has assigned a conservative capacity objective to the Fund, targeting $750 million in total capacity. After strong interest from existing clients, the strategy will close by the end of the year.

MOTION:

- Staff and SIS recommended a $100 million allocation to the William Blair Emerging Markets Small Cap strategy and corresponding amendments to OIC policy 04-05-01. Mr. Solomon moved approval of the staff recommendation. Ms. Durant seconded the motion, which then passed by a vote of 5/0.

VI. <u>12:11 pm OIC Investment Beliefs Project</u>

John Skjervem, CIO and Allan Emkin with PCA gave an update on the Investment Beliefs Project. OIC members asked for more time to review the proposed belief statements and that a "policy hierarchy" be developed to synchronize the proposed beliefs statements with existing policy and procedure documentation.

Mr. Emkin reported that in addition to responding this particular request, next steps with the beliefs project would include a review and discussion of key, non-consensus issues including divestment initiatives, shareholder activism and environmental, social and governance (ESG) factor considerations.

12:46 pm State Accident Insurance Fund – Policy Revisions

Mike Mueller, Deputy CIO presented a recommendation for select revisions to SAIF investment policy which included changes to Policies 4.09.01 through 4.09.04 and authorization to implement these changes over a reasonable time period.

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

VII. 12:52 pm Asset Allocations and NAV Updates

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

VIII. 12:53 pm Calendar – Future Agenda Items

Mr. Skjervem presented the proposed 2014 OIC meeting schedule.

MOTION: Mr. Solomon moved approval of the 2014 meeting dates. Ms. Durant seconded the motion, which then passed by a vote of 5/0.

IX. 12:54 pm Other Business

None

12:55 pm Public Comments

Linda Burgin of SEIU thanked the Council for its efforts on behalf of OPERF beneficiaries and expressed concerns about the OIC's approval of a commitment to the RS Global Natural Resources Strategy.

Mr. Larson adjourned the meeting at 12:57 pm.

Respectfully submitted,

Julie Jackson

Julie Jackson
Executive Support Specialist

TAB 2 – AQR STYLE PREMIA FUND

AQR Style Premia Fund

Purpose
Staff recommends approval of a commitment to the AQR Style Premia Fund ("SPF") in the amount of $200 million for the OPERF Alternatives Portfolio.

Background
In January 2011, the OIC approved the creation of an Alternatives Portfolio comprised of approximately 80% real assets (e.g., infrastructure, natural resources, etc.) and 20% real return (i.e., hedge fund) strategies. In June of this year, the target Alternatives allocation was increased from 5 percent to 10 percent of the total OPERF portfolio. In the fourth quarter of 2011, the OIC committed $100 million to the AQR Delta Fund (a liquid form of hedge fund beta strategies). The proposed SPF investment would continue to expand the real return (hedge fund) portion of the OPERF Alternatives Portfolio.

<u>Strategy</u>
SPF allocates to specific investment styles ("factors") which historically have been the source of excess returns. These factors and corresponding excess returns have also been both persistent and pervasive (i.e., they manifest across multiple asset classes, sectors and geographies). Based on empirical research (much of it authored by the firm's principals), stringent back testing and insights from behavioral finance, SPF is designed to "harvest" excess returns from the following four, key factors applied to various liquid and transparent investment types (i.e., stocks, futures, swaps and currency forwards): 1) Value -- the tendency for relatively cheap assets to outperform relatively expensive ones; 2) Momentum --: the tendency for an asset's recent, relative performance (positive or negative) to continue in the near future; 3) Carry -- the tendency for higher-yielding assets to generate higher returns relative to lower-yielding assets; and 4) Defensive -- the tendency for lower risk (i.e., lower volatility) and higher-quality assets to generate higher risk-adjusted returns.

By combining a diverse set of strategies (similar to, but different from the Delta Fund strategies), AQR builds a portfolio in SPF comprised of these four, key factors that is largely uncorrelated to public stock and bond markets. The result is a composite portfolio with a higher risk-adjusted return (as measured by and reflected in a favorable Sharpe ratio) which makes SPF a valuable diversifier to a portfolio such as OPERF's with otherwise large, long-only public market allocations.

<u>Pros</u>
Trusted partner. As an existing manager of approximately $1.1 billion of OPERF's public equity portfolio and approximately $106 million of its alternatives portfolio, AQR represents a high-conviction manager with whom OST and the OIC have enjoyed a successful, productive relationship. The SPF strategy will expand that relationship to include access to another differentiated return stream that should well complement the overall OPERF portfolio's return

objective and risk constraints. For example, the correlation between AQR's Delta Fund and SPF, based on hypothetical monthly returns, is a low 0.4.

Attractive performance. Since inception in the fall of 2012, SPF has returned approximately 13 percent (annualized), net of standard AQR fees. This recent, short-term success exceeds the strategy's expected long-term return of cash + 8 percent and also easily beats the Alternative Portfolio's hurdle of CPI + 4 percent. Back-tested SPF results have demonstrated outstanding risk-adjusted returns. When future return expectations are relatively low, implementing a long/short portfolio with low correlation to public (especially equity) markets can help bolster returns, regardless of the broader market direction.

Uncorrelated returns. While difficult to find, truly uncorrelated returns (i.e., uncorrelated relative to the existing portfolio's other, conventional asset class allocations) provide valuable diversification benefits. Accordingly, a commitment to the SPF strategy is intended to improve the risk-adjusted return of the total OPERF portfolio (albeit in a minor way) while adding diversification and incremental improvements to downside risk.

Attractive terms and conditions. As a result of its significant OST/OIC partnership to date, AQR has provided OPERF with "relationship" terms, based on performance thresholds that are particularly attractive. Further details can be found in the confidential consultant report.

Excellent transparency, cost effectiveness and liquidity. Unlike many hedge fund managers, AQR provides OPERF and its other investors complete position-level transparency into the SPF portfolio. In addition, the SPF strategy provides excellent liquidity as OPERF can redeem its investment monthly upon 30 days prior notice. Shorter-term liquidity is also available, with some restrictions. Before SPF portfolio positions are traded, these positions are aggregated within the SPF portfolio, with offsetting positions netted out, resulting in lower trading costs and improved capacity utilization.

<u>Cons</u>

Significant assets under management. AQR's assets under management (AUM) have grown significantly over the past several years. Currently, AQR manages approximately $90 billion of assets, including $49 billion in alternative strategies. This growth and significant AUM profile have the potential to put a strain on the firm's existing investment team and internal infrastructure. [Mitigant: As an existing manager, Staff has been tracking AQR's growth and level of supporting resources, the latter of which have been increased meaningfully this year already; moreover, the fund management process at AQR is very scalable. Additionally, AUM in SPF is approximately $460 million, prior to any OIC commitment.]

Continued efficacy of style/factor premia in general and within certain asset classes in particular. Ideally, the SPF strategy would seek an equal weighting across the various style premia. However, the current investment "tools" for implementing the carry and defensive styles are more limited, reducing their current weightings in SPF. Additionally, with broader market acceptance and commercialization of the supporting empirical research, one needs to consider a possible degradation of these factors or "alternative betas." [Mitigant: Broad implementation of this investment approach is still in its early days, and AQR has structured a portfolio not dependent on any individual style or factor. Additionally, each style/factor is not simply an observable pattern, but rather has a well-documented, fundamental basis in behavioral finance.]

Significant Use of Leverage & Shorting. To achieve the strategy's target volatility and factor exposures, AQR does apply leverage and shorting. Of note, managers will typically net long and short positions, whereas AQR explicitly acknowledges its total notional exposure. Without the use of leverage, and due to the diversifying nature of the underlying strategies, the volatility of the portfolio would only be 2-3 percent. [Mitigant: SPF invests only in highly liquid instruments and markets and maintains high levels of cash. For example, cash levels within SPF have been 50-65 percent since inception. AQR has a history of robust risk control systems which when applied to SPF would seek to systemically de-lever the portfolio as its volatility increases.]

<u>Conclusion</u>
Risk premia strategies can offer an excellent source of diversification to an otherwise heavily-weighted, long-only equity and bond portfolio. AQR is a significant, trusted investment partner, and with SPF provides another attractive way for OPERF to access a diverse set of style/factor premia in a liquid, cost-effective strategy.

Recommendation
Staff and SIS recommend a $200 million commitment to the AQR Style Premia Fund, subject to the negotiation of the requisite legal documents with staff working in concert with Department of Justice personnel.

TAB 3 – U.S. EQUITY RISK PREMIA STRATEGY

Public Equities
Domestic Equity – Risk Premia Portfolio
STAFF RECOMENDATION

Purpose

Staff and SIS recommend funding a $500 million internally-managed Risk Premia strategy within the OPERF Domestic Equity Portfolio.

Executive Summary

Excess returns from traditional discretionary active management in large domestic public equities have been difficult to achieve over the past 35 years. In this highly efficiently priced segment of the market, staff proposes to systematically tilt the portfolio (at very low cost) towards the factor exposures of value, momentum and quality. These risk exposures have been persistently compensated historically, and furthermore are able to explain much of the outperformance of most active managers over time. Staff believes this method of active risk taking to have a higher probability of long-term success (delivering excess return net of costs) in this asset class, than selection of higher cost discretionary active managers.

Background

Academic research has shown that many components of return that were once considered alpha are now instead recognized as alternative betas commonly referred to as *risk factor premia*. Specifically, this research has determined that excess returns in public equity markets, previously represented as alpha, are more often the result of portfolio exposures to certain risk factors or styles (e.g., value tilts, small cap overweight, etc.). This branch of academic research can be traced backed to the 1960s, while commercial applications (e.g., Value Investing) are evident and efficacious as far back as Benjamin Graham's seminal approach in the 1930s.

The Capital Asset Pricing Model identified one risk factor, ***beta*** (an individual stock's sensitivity or co-movement to the broader market), as the pivotal relationship between a stock's return and the broader market return. Other risk factor premia, including size (e.g., ***small cap*** stocks versus large cap stocks) and value (***cheap*** book-to-market stocks versus expensive book-to-market stocks) were subsequently identified. In the early 1990s, two University of Chicago professors, 2013 Nobel Laureate Eugene Fama and Kenneth French developed a three-factor model (comprised of market or traditional beta, size and value) that demonstrated extraordinarily high explanatory power when applied to the cross-section of expected stock returns. In a 1997 paper, Mark Carhart, who earned his Ph.D at the University of Chicago, added momentum, a quantitative measurement of a stock's recent performance persistence. Carhart then used this expanded four-factor model to explain away the remaining excess returns found in mutual fund performance.

The four-factor model (i.e., beta, size, value and momentum) has evolved to become a standard analysis tool used to determine what portion of a manager's alpha is in fact attributable to either deliberate or unconscious exposures to these discreet risk factors and what portion of the alpha can be attributable to manager skill in the form of active decisions on countries, sectors and/or individual securities. Although risk factor premia have been studied for several decades, leading one to believe that they might be arbitraged away, the returns associated with these factors show remarkable though inconsistent persistence through time.

Over the last few years, new indices have been developed to capture these risk factor exposures that previously had been largely the domain of active management strategies. The result is that investors can now capture risk factor premia through a systematic rules-based process with greater confidence and at much lower costs than traditional active approaches. As part of staff's continuous efforts to identify and investigate new investment opportunities, we have determined that risk factor indices offer a dependable, lower cost alternative to many active funds that otherwise derive excess returns from portfolio construction techniques emphasizing risk factor tilts and exposures.

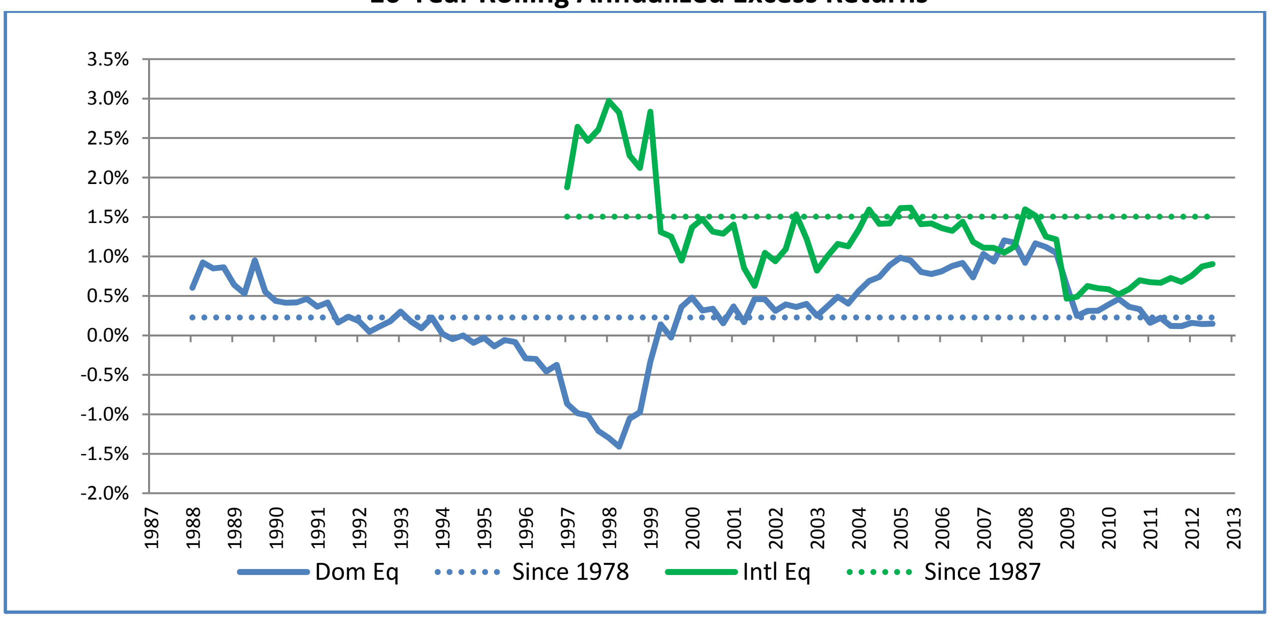
Discussion

Although the Total Public Equity Portfolio has met the OIC policy return objective of 75 basis points of excess return while utilizing only half the policy's 200 bps tracking error allowance, the objective has been achieved, in large part, through the success of the portfolio's International Equity implementation.

Exhibit 1 below shows that between December 1978 (the inception date for the Russell 3000) and June 2013, OPERF's Domestic Equity allocation generated an annualized excess return of 23 basis points over the Russell 3000. The International Equity allocation, on the other hand, produced 150 basis points of annualized excess return, albeit over a shorter time horizon. Although active management in both the Domestic Equity and International Equity portfolios faced unprecedented headwinds during the financial crises that began in 2008, excess returns in the International Equity portfolio have remained more resilient.

Exhibit 1

10-Year Rolling Annualized Excess Returns



Staff is introspective about the alpha generation differences between the Domestic Equity and International Equity portfolios. Given the efficiency of the U.S. Large Cap Equity space (i.e., the difficulty of finding managers that consistently outperform their benchmarks net of fees), a reasonable argument can be made to implement a structure that more effectively allocates capital in this segment of the public equity market.

Opportunity

Pension funds get exposure to public equity markets by assigning particular mandates (e.g., large cap, small cap, growth, value, international, etc.) to managers who, if applying skill in the form of active management, attempt to outperform their respective benchmarks. For large funds, this traditional implementation results in a long roster of external active managers, often with high associated costs. Excess returns produced by these managers are considered alpha. However, empirical studies on mutual funds and a small but growing literature on institutional asset management, have demonstrated that a large portion of what was once considered alpha is now instead recognized as risk factor premia (i.e., return premiums associated with beta, size, value, momentum, etc.). The implication of these findings is that pension funds may also be paying active fees for what are ostensibly common factor risk exposures that can be captured better in passive, systematic strategies at much lower costs.

Over the last few years, index providers such as Russell, FTSE, and MSCI have created new indices to capture many of the risk factor premia embedded in traditional active management strategies. As described earlier, academic research has demonstrated that the explanatory power of these risk factors and their return premiums are robust. Moreover, these results persist through time (going back as far as 1926) and are pervasive across markets (i.e., U.S., International Developed and Emerging). For the period ended December 31, 2012, Exhibit 2 provides an 86-year risk factor performance record using a long-short construct of Carhart's four-factor model (i.e., market, size, value, and momentum).

Exhibit 2

	Theoretical Long-Short Factors			
	Size	**Value**	**Momentum**	**S&P 500***
Return	2.3%	4.0%	6.9%	9.8%
Std Dev	11.5%	12.3%	16.6%	19.1%

*S&P 90 data prior to 1957

Exhibit 3 shows risk factor performance over the same 86-year period using a long-only construct of Carhart's four-factor model in which securities are simply sorted (i.e., big to small, high to low, up to down) on the size, value and momentum factors, respectively. Note the long-only approach produces results which indicate a clear, monotonic relationship between factor exposures and returns (i.e., increased factor exposures correspond to higher excess returns).

Exhibit 3

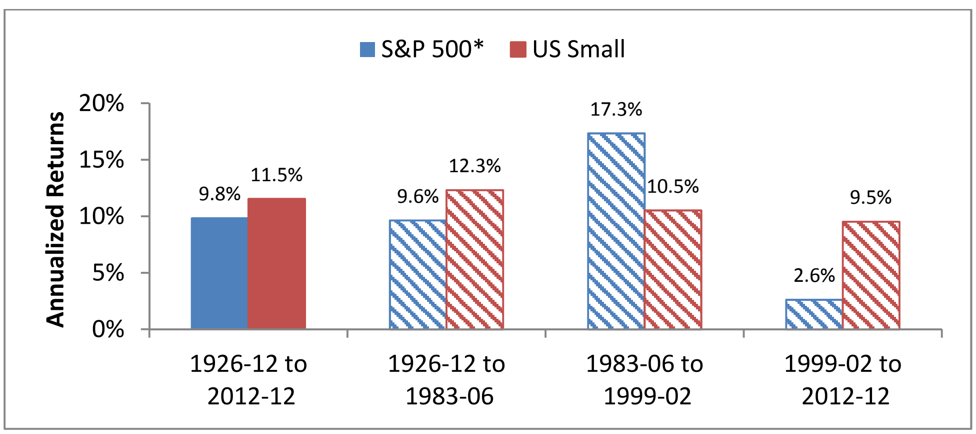
	Size	**Value**	**Momentum**
	(Big)	*(Expensive)*	*(Low)*
Decile 1	9.1%	8.6%	-1.7%
Decile 2	10.4%	9.8%	4.7%
Decile 3	10.9%	9.8%	6.0%
Decile 4	11.5%	9.6%	8.2%
Decile 5	11.8%	10.4%	8.6%
Decile 6	11.6%	10.6%	9.4%
Decile 7	11.8%	10.5%	10.7%
Decile 8	12.0%	12.2%	12.3%
Decile 9	11.3%	12.6%	13.2%
Decile 10	12.8%	12.0%	16.6%
	(Small)	*(Cheap)*	*(High)*

These robust results raise the question as to whether investors should seek excess returns through a manager's active decision-making process or seek excess returns through a strategic allocation to these risk factor premia. With the ability to now gain risk factor exposure through a systematic, rules-based approach with full transparency, staff believes that an internally-managed risk premia strategy would be an appropriate allocation for part of OPERF's Domestic Equity portfolio. Moreover, staff can implement and passively manage these risk factor exposures at a cost structure that is 5% to 10% the cost of traditional active management.

While risk factor tilts in the Public Equity portfolio might appear novel, a small cap tilt has existed in the Domestic Equity portfolio for more than a decade. OST Policy 04.05.01 specifies a "*…double weighting to U.S. small capitalization stocks….*", the original motivation for which was the belief that inefficiencies in U.S. small and micro cap markets provide more fruitful opportunities for active management. However, staff's regression analysis of the Domestic Equity portfolio's 34-year return history using a standard four-factor model reveals that a significant portion of the portfolio's 23 basis points of excess returns comes simply from the portfolio's small cap tilt. That portion of excess returns *not* explained by otherwise passive risk factor tilts was only 11 basis points, or a mere 48 percent of the aggregate "alpha".

Tilting to a single risk factor is not without its risks. For example, and as illustrated in Exhibit 4, a sole and unwavering tilt on small cap would have endured a very long period of underperformance between 1983 to 1999.

Exhibit 4



Source: DFA. US Small is CRSP 6-10 Deciles.
*S&P 90 prior to 1957.

MSCI Risk Premia Indices

Risk factor indices are relatively new offerings by multiple index providers. Staff reviewed and compared various suites of indices currently available. Although there are small nuances between different index providers (e.g., types of fundamental data, constituent weightings, etc.), these indices generally deliver similar risk factor exposures. Staff found MSCI's focus on the balance between factor efficacy and practical "investability" particularly attractive. In addition, the depth of MSCI's research resources, the integration between its index and Barra divisions (staff utilizes BarraOne for public equity portfolio and risk management) and the fact that MSCI currently provides benchmarks for a number of other OPERF strategies made MSCI staff's preferred choice.

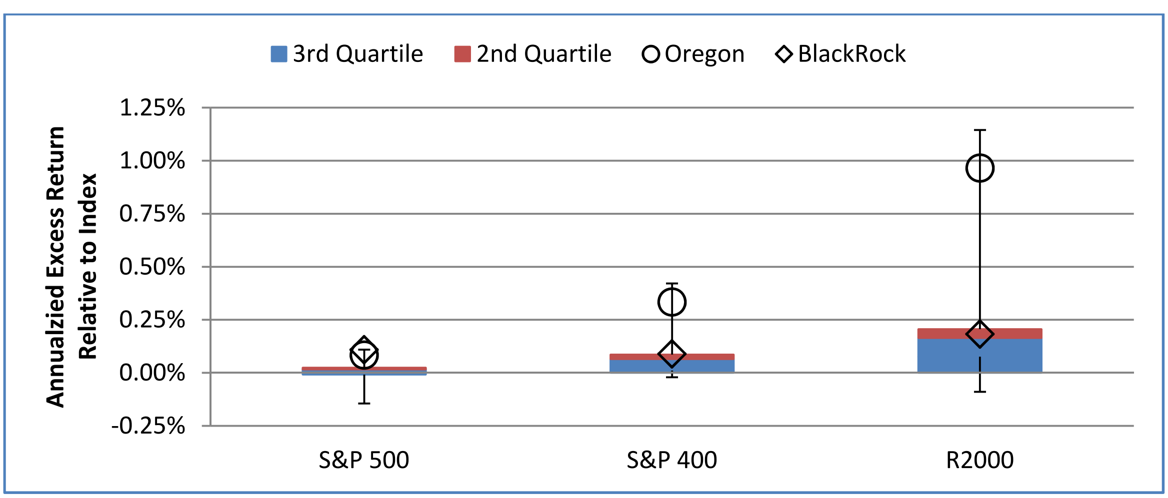
Risk premia strategies can be classified into two broad categories: 1) return-based strategies which tilt towards a specific factor(s) and which aim to achieve superior performance relative to the market; and 2) risk-based strategies which aim to lower risk or improve diversification. Staff proposes to construct a return-based strategy which will have an equal-weighted blending of three specific risk factor exposures: MSCI's USA Momentum, USA Value Weighted and USA Quality indices. Although a good portion of the staff write-up focuses on size, value and momentum, there is also strong academic support for tilting on measurements of "quality", such as return on equity. This type of quality tilt is consistent with what many managers highlight as a desirable attribute they seek to capture in their active methodologies. In addition, a Quality tilt may provide some diversification benefits relative to other specific risk factor exposures as described by MSCI in its accompanying presentation.

Internal Management

Staff has successfully managed select public equity mandates since 2009. As of September 30, 2013, internally-managed public equity AUM totaled approximately $2.8 billion, representing 11 percent of OPERF's $24.1 billion global public equity portfolio. Since inception, all internally managed public equity mandates have outperformed their assigned benchmarks. In addition, and as seen in the following chart created from the ***eVestment*** consulting database (**Exhibit 5**), OPERF's internally managed, passive public equity strategies (S&P 500, S&P 400 and Russell 2000) have performed well in peer group rankings that include other institutional asset managers. Specifically, each of OPERF's internally managed, passive public equity strategies rank in the top quartile of their respective peer group universes. While past performance does not guarantee future results, with the experience embodied in the above-listed results and the processes established to produce those results, staff expects internally-managed strategies to continue to deliver cost-effective, value-accreting performance.

Exhibit 5

Internal Management Peer Comparison



Source: eVestment, gross of fees and through 2013-06. Inception dates correspond to internally managed mandate launches.

Currently, staff time devoted to internal management activities is modest (roughly 10 – 15 percent of total public equity staff time). This efficient use of staff time reflects in part the trading and internal management infrastructure developed for and in support of these efforts as well as other staff-driven improvements to work flow processes such as:

1) introduced BarraOne for equity portfolio and risk management (2008);
2) acquired mid and back-office functionality for equity trading through State Street (2009);
3) implemented pre-trade compliance platform (Bloomberg) staffed by two full-time compliance personnel (2010);
4) developed internal analytics to systematize trade reconciliation process and manage margin flows associated with internal portfolios' futures positions (2012).

In staff's opinion, given the systems, personnel and processes already in place and as described above, the addition of an internally managed Risk Premia portfolio would require little incremental resources.

Issues to Consider

Pros:

- This approach will provide direct exposures to risk factor premia that enjoy abundant and robust empirical support as a persistent source of superior returns relative to the market.
- The proposed blended index is aimed at the most liquid segment of the public equity market (U.S. large cap) and should have little or no market impact in the reallocation of existing mandates.
- Management costs of implementing this strategy will be 5% to 10% of what it will be replacing.
- Staff has high regard for MSCI, a leading provider of indices and risk management systems. As a client of both services, staff should realize some operational synergies in managing a customized MSCI index through the MSCI Barra product, which is currently used for portfolio and risk management on the internal public equity strategies.

Cons:

- Risk factor premia have historically produced **long-term outperformance**, but have also experienced significant, multi-year periods of underperformance. [**Mitigant**: Strong empirical evidence supports both the efficacy of these risk factor premia (i.e., these factors produce a higher mean return relative to market averages) as well as reversions to this higher mean following periods of underperformance. Additionally, the tracking error relative to the Russell 1000 for the proposed blended risk factor index is in-line with that of current "market oriented" strategies.]
- Tilting toward risk premia implies that the OST Public Equity Portfolio will no longer be neutral relative to Value and Growth dimensions per OIC Policy 04.05.01. [**Mitigant**: Portfolio exposures in Public Equity continue to be managed relative to the MSCI ACWI IMI benchmark and through the OIC's 200 basis points annual tracking error objective.]
- This blended index may not deliver the desired levels of exposure to the underlying risk factors. [**Mitigant**: MSCI will provide a customizable index, so staff will regularly evaluate the index construction to ensure it continues to delivers the appropriate blend of both risk factor exposure and investability.]

Recommendation

Subject to the successful negotiation of license terms with MSCI, staff recommends funding a $500 million, internally-managed Risk Premia strategy and amending OIC policy 04-05-01 and 04-05-03 accordingly.

FUNCTION: **Public Equity Investments**
ACTIVITY: **Strategic Role of Public Equity Securities within OPERF**

POLICY: The strategic role of p~~P~~ublicly traded equity securities ~~generally should~~is to provide enhanced returns and diversification to ~~the~~ OPERF. ~~The investable universe of equity securities can be categorized as U.S., non-U.S. developed countries and emerging market countries.~~ The p~~P~~ublic e~~E~~quity ~~Fund~~securities also provide~~s~~ liquidity to OPERF to meet cash flow needs. **Public equity securities ~~should~~ are ~~comprise 38% to 48% of OPERF's total assets, with a strategic target of 43%, based on an~~subject to the ~~overall global equity~~specific, strategic target allocations established ~~in~~ by the OIC Policy in 4.01.18.**

PROCEDURES:

PURPOSE

The purpose of these Public Equity Investment Policies & Strategies is to define the ~~strategic role~~objectives of public equities as an asset class within the Investment Council's general investment policies for the Oregon Public Employees Retirement Fund (OPERF), ~~to set forth specific short-term and long-term policy objectives for this segment of OPERF's investment portfolio,~~ and to outline the strategies for implementing the Investment Council's public equity investment policies.

~~STRATEGIC ROLE~~

~~Publicly traded equity securities generally should provide enhanced returns and diversification to the OPERF. The investable universe of equity securities can be categorized as U.S., non-U.S. developed countries and emerging market countries. The Public Equity Fund also provides liquidity to OPERF to meet cash flow needs.~~

POLICY OBJECTIVES

1. To provide one of the highest expected returns of the OPERF's major asset classes. Over the long-term, the return should exceed inflation by 6.0 percent.

2. To achieve a portfolio return of 0.75 percent or more above the MSCI All Country World Index Investable Market Index (ACWI IMI) (net) over a market cycle of three to five years on a net-of-fee basis.

3. Active risk will be managed to a targeted annualized tracking error of 0.75 to 2.0 percent, relative to the MSCI ACWI IMI (net).

STRATEGIES

1. The public equity portfolio shall be structured on a global basis, seeking to loosely replicate the country and market capitalization characteristics of the world-wide investable stock universe. The investable universe of equity securities can be categorized as U.S., non-U.S. developed countries and emerging market countries.

2. Diversify the asset class of public equities across the stock markets of all investable countries to ensure exposure to a wide range of investment opportunities, and participate broadly in those markets to receive the highest expected rate of return for equities, and to provide risk reduction to the entire equity portfolio. The size of any commitment to an individual investment manager's strategy will be based on the commitment's impact on the overall portfolio, the Investment Council's confidence in the abilities of the manager, the investment style of the manager, and the capacity of the manager to invest and manage such a commitment.

3. Maintain an overall portfolio market capitalization that reflects the MSCI ACWI IMI with a double weighting to U.S. small capitalization stocks, in an effort to enhance return. This tilt is based on the Investment Council's belief that inefficiencies in the small and micro cap markets, relative to the large cap market, through active management, will outperform large cap stocks over the long-term.

4. Invest opportunistically, using innovative investment approaches, within a controlled and defined portfolio allocation. To that end, 130/30 strategies may be implemented with any existing OPERF manager mandate conditional upon consultant and Chief Investment Officer concurrence, such that the implementation of the strategy does not change the managers role within Public Equity. Staff will report any 130/30 implementations to the Council.

5. Enhance returns to OPERF through exposure to active management.

6. Active investment managers are expected to outperform stated benchmarks on an after-fee, risk adjusted basis~~,~~ over a three- to five-year market cycle ~~of three to five years~~ (see Appendix B). Those benchmarks include the passive management alternative. Comparisons against a representative peer group universe will also be considered in evaluating the performance and risk levels of managers.

7. All non-U.S. benchmarks assigned to managers should be unhedged. Managers may be permitted to hedge currency exposure and, in the case of managers whose stated investment approach includes active currency management, may take active currency positions, but all managers are measured against an unhedged benchmark.

8. The Investment Council's selection of active managers will be based upon demonstrated expertise. Active managers will be selected for their demonstrated ability to add value over a passive management alternative and within reasonable risk parameters by using a style

which enables OPERF to meet the strategic target allocations set forth in Appendix A. The management guidelines described in Appendix C will be attached to and incorporated into the Investment Council's contract with every investment manager.

SAMPLE FORMS, DOCUMENTS, OR REPORTS (Attached)

A. Public Equity Strategic Targets (Appendix A)
B. Investment Manager Benchmarks (Appendix B)
C. Management Guidelines (Appendix C)

APPENDIX A

STRATEGIC TARGETS

Subject to periodic review and revision, the Investment Council adopts the following strategic target allocations (all targets are measured relative to the MSCI ACWI IMI):

a. Capitalization exposure similar to stated benchmark;

b. The Investment Council's strategic target allocations represent percentages of OPERF's total public equity portfolio. Each target allocation has an accompanying percentage range. The strategic target allocations and ranges can be summarized as follows:

	Targets	**Ranges**
Active	75%	65% - 85%
Passive	25%	15% - 35%
U.S.	ACWI weight	+/- 10%
Non-U.S.	ACWI weight	+/- 10%
Emerging Markets	ACWI weight	+/- 4%
Growth	50%	40~~45~~% - 60~~55~~%
Value	50%	40~~45~~% - 60~~55~~%
U.S. Small Cap Overweight	100%	0% - 140%

Note: The U.S. small cap overweight is based on the Russell 2000 index weight relative to the Russell 3000 index weight which approximates 8%.

c. The Investment Council will approve target allocations and associated ranges for the various sub-asset classes, at the time of hire. The OPERF public equity portfolio will be monitored quarterly by a report to the Investment Council that includes the target allocation for each category of management style (active/passive and growth/value). The actual percentage market value for each category, compared to its target allocation, will also be included in this report. When a segment falls outside of the established ranges or when manager allocations are considered sub-optimal, staff will transfer assets as deemed appropriate within the target allocations. Staff will have discretion, with CIO approval and quarterly reporting to the OIC, to rebalance between and among managers. The total structural characteristics of the public equity portfolio will be considered at the time of any rebalancing. Re-allocations between asset classes shall be governed by Policy 4.01.18.

APPENDIX B

INVESTMENT MANAGER BENCHMARKS

Manager	Benchmark	Peer Group	Return Objective Over Benchmark Net-of-Fees
U.S. Large Cap:			
Delaware	Russell 1000 Growth	U.S. Large Growth	1.5%
Wells Capital	Russell 1000 Growth	U.S. Large Growth	1.5%
Aronson + Johnson + Ortiz	Russell 1000 Value	U.S. Large Value	1.0%
MFS	Russell 1000 Value	U.S. Large Value	1.0%
PIMCO	Russell 1000	U.S. Large Core	1.0%
Russell/RAFI Fund Index	Russell 1000	U.S. Large Core	1.5%
Risk Premia Strategy	MSCI USA	U.S. Large Core	1.5%
Pyramis	Russell 1000	U.S. Large Core	2.0%
Northern Trust Emerging Mgrs.	Russell 3000	U.S. All Core	1.5%
BGI Russell 1000 Value Index	Russell 1000 Value	U.S. Large Value	N/A
BGI Russell 1000 Growth Index	Russell 1000 Growth	U.S. Large Growth	N/A
S&P 500 Index	S&P 500	U.S. Large Passive	N/A
S&P 400 Index	S&P 400	U.S. Mid Passive	N/A
U.S. Small and SMID Cap			
EAM	Russell Microcap Growth	U.S. Micro Growth	2.5%
Next Century	Russell Microcap Growth	U.S. Micro Growth	2.5%
DFA	Russell Microcap Value	U.S. Micro Value	1.5%
Callan	Russell Microcap Value	U.S. Micro Value	1.5%
Next Century	Russell 2000 Growth	U.S. Small Growth	2.0%
AQR	Russell 2000 Value	U.S. Small Value	1.0%
Boston Company	Russell 2000 Value	U.S. Small Value	1.0%
Wellington	Russell 2000	U.S. Small Core	1.0%
Wanger	Russell 2500	U.S. SMID Core	1.0%
Russell 2000 Synthetic Index	Russell 2000	U.S. Small	0.3%
Non-U.S. Large Cap			
TT International	World x US Std Growth	Non-US Growth	2.0%
Wells Capital CEF	ACWI x US IMI	Non-US Core	2.0%
Lazard CEF	ACWI x US IMI	Non-US Core	2.0%
Walter Scott	World x US Std	Non-US Growth	2.0%
Acadian	ACWI x US IMI Value	Non-US Value	1.7%
Brandes	ACWI x US Std Value	Non-US Value	2.0%
AQR	World x US Std	Non-US Core	2.0%
Arrowstreet	ACWI x US IMI	Non-US Core	2.0%
Lazard	ACWI x US Std	Non-US Core	1.5%
Pyramis Select	ACWI x US Std	Non-US Core	1.0%

Manager	Benchmark	Peer Group	Return Objective Over Benchmark Net-of-Fees
Non-U.S. Large Cap (cont.)			
Northern Trust Emerging Mgrs.	World x US IMI	Non-US Core	1.5%
SSgA World ex-US Index	World x US Std	Non-US Passive	N/A
Non-U.S. Small Cap			
DFA	World x US Sm Cap Val	Non-US Small Value	1.5%
Harris Associates	ACWI x US Sm Cap Val	Non-US Small Value	2.0%
Pyramis Select	World x US Sm Cap	Non-US Small Core	2.0%
Victory Intl	World x US Sm Cap Gr	Non-US Small Growth	2.0%
Emerging Markets			
Arrowstreet	Em Mkts IMI	Emerging Markets	2.0%
DFA	Em Mkts Small Cap	Emerging Markets	1.5%
William Blair	Em Mkts Small Cap	Emerging Markets	2.0%
Genesis	Em Mkts IMI	Emerging Markets	2.0%
William Blair	Em Mkts Std	Emerging Markets	2.0%
BGI Tiered Emerging Markets	Em Mkts Std	Emerging Markets	2.0%
Westwood Global	Em Mkts Std	Emerging Markets	2.5%
Global			
AllianceBernstein Value	ACWI Value Std	Global Value	2.0%

ACWI – MSCI All-Country World Index (U.S. + Non-U.S. Developed + Emerging Markets)
IMI – MSCI IMI Index (Large Cap + Mid Cap + Small Cap)
Std – MSCI Standard Index (Large Cap + Mid Cap)
Sm Cap – MSCI Index (Small Cap)
Em Mkts – MSCI Emerging Markets Index

APPENDIX C

MANAGEMENT GUIDELINES

The following guidelines shall be attached to and incorporated into every separate account contract between the Investment Council and an active investment manager. These guidelines may be modified from time to time as considered necessary by the Chief Investment Officer;~~,~~ however, the assigned benchmark may not be changed without OIC approval:

1. The category of management to which a manager is assigned.

2. A description of the manager's investment style.

3. The manager's specific performance objective, expressed on a relative basis in comparison to an index or a passively managed alternative, as that manager's required excess return. The manager's required excess return will represent the risk-premium associated with this manager's investment style in comparison to the index or passively managed alternative to which the manager is assigned.

4. The expected risk (tracking error) of the portfolio expressed in relationship to the assigned benchmark.

5. Portfolio characteristics which the OIC expects the manager to exhibit on average throughout a market cycle.

6. A list of permissible equity securities in which the manager may invest.

FUNCTION: **Equity Investments**
ACTIVITY: **Internal Equity – Portfolio Objectives & Strategies**

POLICY: **All internal equity investments shall be authorized by a public equity investment officer, authorization shall be documented, and shall be in accordance with portfolio guidelines established by the OIC. Subject to prior notification of the OIC, the Chief Investment Officer has the authority to approve changes to the "Permitted Holdings" section of this policy.**

PURPOSE

The purpose of this policy is to specify the portfolio strategies staff is authorized to manage internally and to define the tolerable risk, performance objectives, and permitted investments.

POLICY OBJECTIVES & STRATEGIES

S&P 500 Index Strategy

1. The objective of the S&P 500 Index portfolio is to closely match the S&P 500 Total Return Index performance through a full replication strategy.
2. The S&P 500 Index Portfolio is expected to outperform the S&P 500 Total Return Index by approximately 5 basis points annualized over a market cycle with an expected tracking error of 10 basis points.

S&P 400 Index Strategy

1. The objective of the S&P 400 Index portfolio is to closely match the S&P 400 Total Return Index performance through a full replication strategy.
2. The S&P 400 Index Portfolio is expected to outperform the S&P 400 Total Return Index by 10 basis points annualized over a market cycle with an expected tracking error below 30 basis points.

Russell 2000 Synthetic Index Strategy

1. The objective of the Russell 2000 Index portfolio is to closely match the Russell 2000 Total Return Index performance through a synthetic replication strategy.
2. The Russell 2000 Index Portfolio is expected to outperform the Russell 2000 Index Total Return Index by 30 basis points annualized over a market cycle with an expected tracking error below 50 basis points.

Tiered Emerging Markets Strategy (TEMS)

1. The objective of the TEMS is to outperform the MSCI Emerging Markets (net) Index through a tiered allocation strategy based upon country weighting. The underlying premise of the model is a framework which allows one to capture the inherent tendency for emerging markets to mean revert. The high volatility of returns and low correlation

between emerging market countries, provides the key ingredients to this type of structured strategy. The strategy is currently implemented using index commingled trust funds and is rebalanced annually by staff, or as needed given additions or deletions to the MSCI EM Index. Given the underlying implementation vehicles are country index funds, the strategy does not utilize any active security selection.

2. The TEMS Portfolio is expected to outperform the MSCI Emerging Markets (net) Index by 200 basis points annualized over a market cycle with an expected tracking error of 400 basis points.

Russell/RAFI Fundamental Large Cap Index Strategy

The objective of the RAFI/Russell 1000 portfolio is to outperform the Russell 1000 Total Return Index by 200 basis points annualized over a market cycle with an expected tracking error below 450 basis points. This portfolio is managed using fundamental factors and will have security weights that are derived from non-price metrics such as sales, earnings, book value, and dividends. A key tenet behind the fundamental strategy is that underlying accounting valuation metrics are objective and less volatile measures of a company's importance in the economy, as opposed to the company's listed market value.~~.~~

US Risk Premia Strategy

The objective of the US Risk Premia portfolio is to outperform the MSCI USA Index by 150 basis points annualized over a market cycle with an expected tracking error below 400 basis points. This portfolio invests in a blend of risk premia indices tilting toward risk/fundamental factors such as momentum, value, and quality. A key tenet behind the risk premia strategy is that systematic tilts toward these factors are rewarded over the long term.

PERMITTED HOLDINGS

S&P 500 Index Strategy

1. Securities contained in the S&P 500 Index.
2. Securities reasonably expected to be part of the S&P 500 Index at some future date.
3. Securities that have recently been a member of the S&P 500 Index.
4. Exchange Traded Funds (ETFs) which replicate the S&P 500 Index such as: iShares S&P 500 Index Fund (Ticker: IVV) or SPDR S&P 500 (Ticker: SPY).
5. S&P 500 Index Futures (Large Contracts and Mini's).
6. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

S&P 400 Index Strategy

1. Securities contained in the S&P 400 Index.
2. Securities reasonably expected to be part of the S&P 400 Index at some future date.
3. Securities that have recently been a member of the S&P 400 Index.
4. Exchange Traded Funds (ETFs) which replicate the S&P 400 Index such as: iShares S&P 400 Index Fund (Ticker: IJH).
5. S&P 400 Index Futures (Large Contracts and Mini's).
6. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

Russell 2000 Synthetic Index Strategy

1. Russell 2000 Index and S&P 600 futures contracts.
2. iShares Russell 2000 Index (Ticker: IWM)
3. U.S. Treasury Bills or other acceptable cash equivalents used for equity futures collateral.
4. Oregon Short Term Fund.
5. PIMCO Enhanced Short Maturity ETF (Ticker: MINT)
6. DFA – One-Year Fixed Income Portfolio I (Ticker: DFIHX)
7. DFA – Two-Year Global Fixed Income Portfolio I (Ticker: DFGFX)

Tiered Emerging Markets Strategy (TEMS)

MSCI Emerging Market & Frontier Market commingled trust funds, exchange traded funds, or equity futures.

Russell/RAFI Fundamental Large Cap Index Strategy

1. Securities contained in the Russell 1000 Index.
2. Securities reasonably expected to be part of the Russell 1000 Index at some future date.
3. Securities that have recently been a member of the Russell 1000 Index.
4. Exchange Traded Funds (ETFs) which replicate the RAFI/Russell 1000.
5. Russell 1000, Russell 2000, S&P 500, S&P 400, S&P 600 S&P 400 Futures contracts.
6. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

US Risk Premia Strategy

1. Securities contained in the MSCI USA Index.
2. Securities reasonably expected to be part of the MSCI USA Index at some future date.
3. Securities that have recently been a member of the MSCI USA Index.
4. Exchange Traded Funds (ETFs) which track closely to either the MSCI USA or to a US Large Cap style/risk premia index.
5. Russell 1000, Russell 2000, S&P 500, S&P 400, S&P 600 S&P 400 Futures contracts.
6. U.S. Treasury Bills or other acceptable cash equivalents utilized for equity futures collateral.

ABSOLUTE RESTRICTIONS

The Internal Public Equity Portfolios may not purchase the following investments or types of investments without the specific advanced approval of the Chief Investment Officer and the Oregon Investment Council:

1. Short sales of securities.
2. Margin purchases or other use of lending or borrowing money or leverage to create positions greater than 100% of the market value of assets under management.
3. Commodities.
4. Non-U.S. dollar denominated fixed income securities issued by entities incorporated or chartered outside of the United States.

PROCEDURES:

All trades are entered into an Order Management System (OMS) such as Bloomberg POMS and are authorized by the signature (electronic or handwritten) of a Public Equity Investment Officer. The Public Equity Investment Officer shall act in accordance with established procedures and internal controls for the operation of the investment program consistent with this policy. The Senior Public Equity Investment Officer will review trades initiated by members of the Public Equity team. The Chief Investment Officer will review trades initiated by the Senior Public Equity Investment Officer.

SAMPLE FORMS, DOCUMENTS, OR REPORTS (Attached): NONE

MSCI A Clear View of Risk and Return

MSCI Indices

Harvesting Risk Premia

Analysis of Risk Premia Indices for the Oregon Investment Council

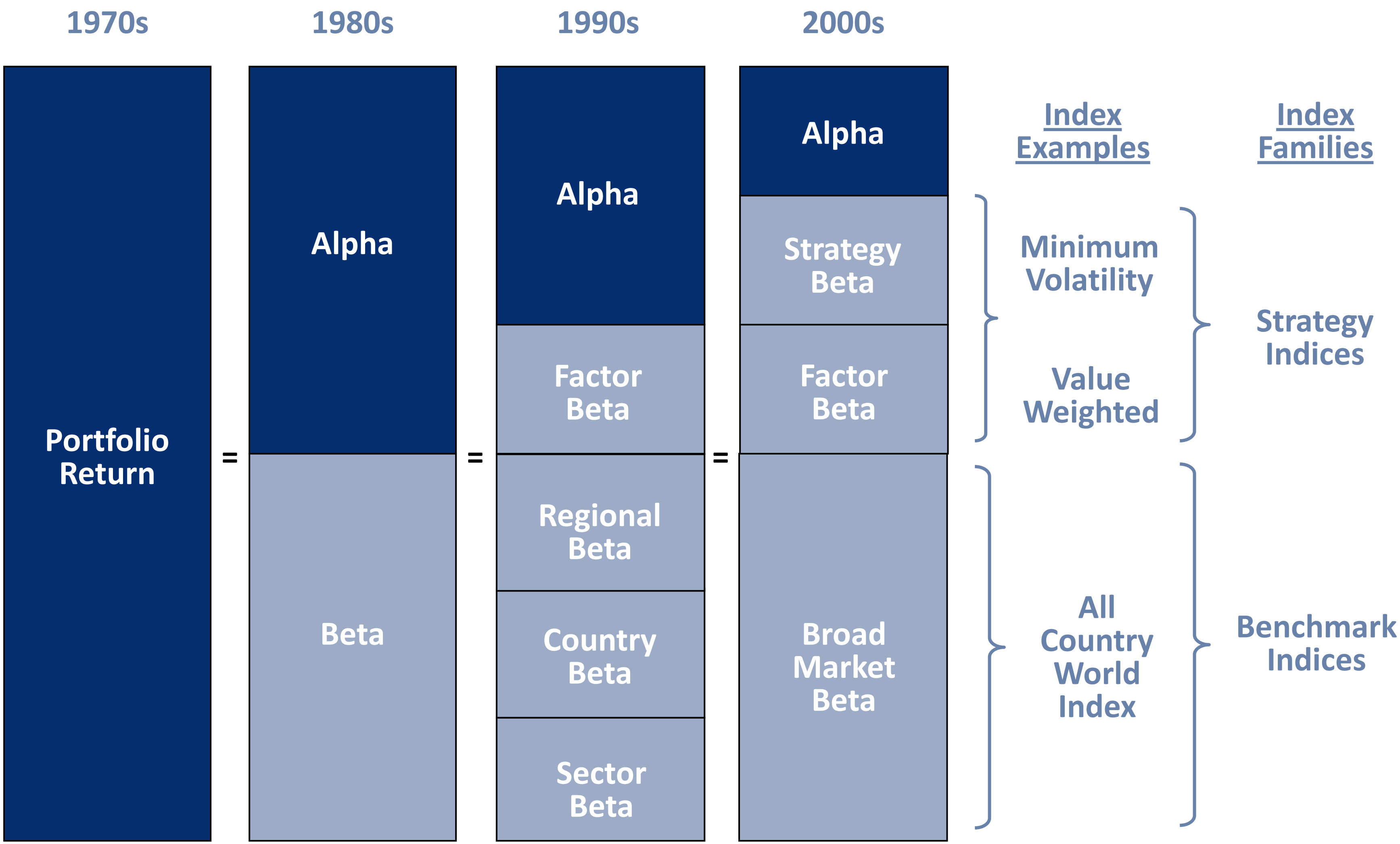
October 2013

Outline

- Motivation and Introduction to Risk Premia
- Risk Premia: From Theory to Implementation
- Key Considerations in Combining Risk Premia Indices
- Historical Simulations and Analysis of MSCI Risk Premia Indices
- Portfolios of MSCI Risk Premia Indices
- Appendix

Motivation and Introduction to Risk Premia

Today's alpha is tomorrow's beta …



Harvesting Risk Premia with MSCI Strategy Indices

- Systematic risk premia such as value or size account for a substantial part of long-term portfolio performance
- In the last few years, new indices have been developed that reflect systematic risk premia, opening up the possibility to capture them through indexation
- These indices retain the **benefits of passive investing** - simplicity, transparency, relatively low cost - and have historically achieved **long-term outperformance**
- Substituting traditional mandates (active or passive) with strategy indices has historically enhanced the long-term risk adjusted performance of sample institutional portfolios

The MSCI Family of Risk Premia Strategy Indices

MSCI Return Based Strategy Indices

MSCI Value Weighted Indices
Weighted according to four fundamental variables (Sales, Earnings, Cash Flow, Book Value)
- Semi-annual rebalancing
- Launched in 2010, index history from 31 December 1976

MSCI Quality Indices
Weights derived from market cap times a quality score based on D/E, ROE, earnings variability
- Semi-annual rebalancing
- Launched in 2012, index history from 31 December 1981 (World) /1998 (EM)

MSCI Momentum Indices
Weights derived from market cap times a momentum score based on short and long term momentum signals
- Semi-annual rebalancing along with conditional rebalancing
- Launched in 2013, index history from 30 November 1995

MSCI High Dividend Yield* Indices
High dividend yield opportunity set within parent index constituents
- Semi-annual rebalancing
- Launched in 2006, index history from 31 May 1995

MSCI Risk Based Strategy Indices

MSCI Minimum Volatility Indices
Constructed using minimum variance optimization
- Semi-annual rebalancing
- Launched in 2008, index history from 31 May 1988

MSCI Risk Weighted Indices
Weights based on the inverse of historical variance
- Semi-annual rebalancing
- Launched in 2011, index history from 31 December 1979

MSCI Equal Weighted Indices
Equal allocation across parent index constituents
- Quarterly rebalancing
- Launched in 2008, index history from 31 May 1988

MSCI Multi-Strategy Indices

MSCI Quality Mix Indices
Combining Quality, Value and Minimum Volatility Strategies with equal weights
- Semi-annual rebalancing
- Launched in 2013, index history from 31 December 1988 (World)/1998(EM)

** On June 3, 2013, MSCI launched enhanced HDY index to incorporate additional screens which exclude stocks based on certain "quality" characteristics and recent 12 month price performance.*

What Causes Risk Premia and How Persistent Are These Effects

- Two theories try to explain the historical performance of risk premia strategies:

1. Systematic Risks	2. Systematic Errors
Certain stocks are highly correlated with the economic cycle and earn a risk premium	Certain stocks may be systematically under priced and subsequently earn high return

- The important question for long term investors considering an allocation to risk premia strategies is not which theory best explains these premia historically, but **whether or not these premia are likely to persist in the future**.
- Both theories attempting to explain historical premia may allow for its future persistence provided the same historical behavior among investors and other agents also persists in the future.

It does not matter if risk premia are caused by **systematic risk** or **systematic error**. Long term investors who can assume economic cycle risks and identify the asset mispricings associated with behavioral biases can continue to **earn one or more risk factor premiums** .

Risk Premia:

From Theory to Implemention

Risk Premia in the Literature

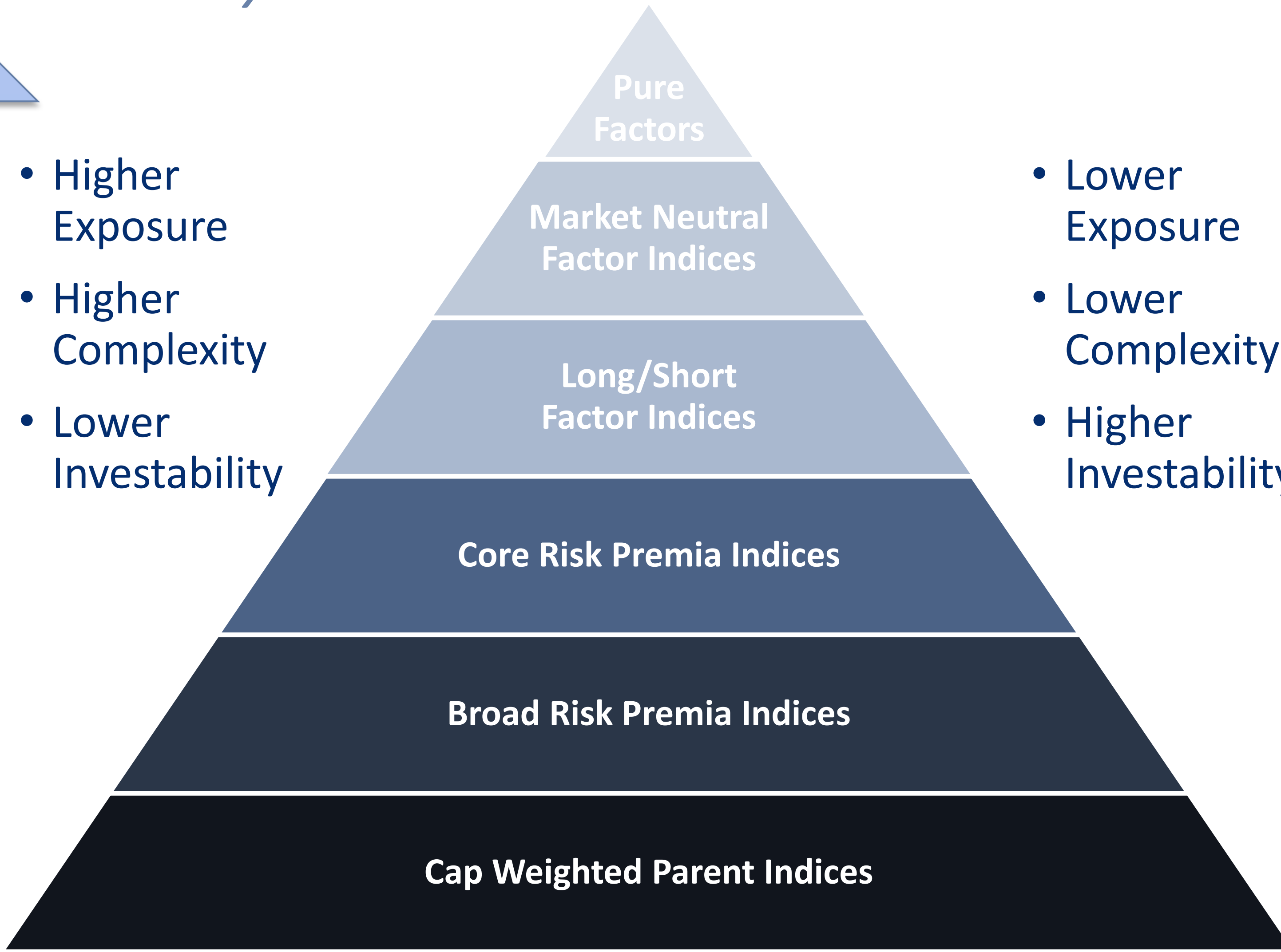
- From CAPM to a broader notion of systematic risk including factors other than market beta
- Multi-factor models can be traced back to as early as the 1970s, although the best known effort in this space is the seminal paper by Eugene Fama and Kenneth French (1993) that explained US equity market returns with three factors:
  - The market factor (i.e., traditional beta), the size factor (large vs. small capitalization stocks) and the value factor (low vs. high book to market stocks). The Fama-French model was further extended by Carhart to include the momentum factor.
- There are two main views on the persistence of returns attributable to these factors, which result from different perspectives of market efficiency:
  - The return premia are attributable to certain, previously unidentified risk factors, hence the additional returns are compensation to investors for bearing these certain, new risks; or
  - Behavioral biases, due to cognitive mistakes and/or emotional vulnerabilities, are the source of market inefficiencies which produce these excess returns.

From Theory to Implementation

- Key assumptions in the construction of risk factors:
  - Long/short portfolios;
  - Monthly rebalancing;
  - Inclusion of small caps and equal weighting within portfolios; and
  - No explicit liquidity or capacity constraints.
- Hence, excess returns documented in most academic studies do not consider several elements of actual implementation: transactions costs; liquidity; investability; and capacity.

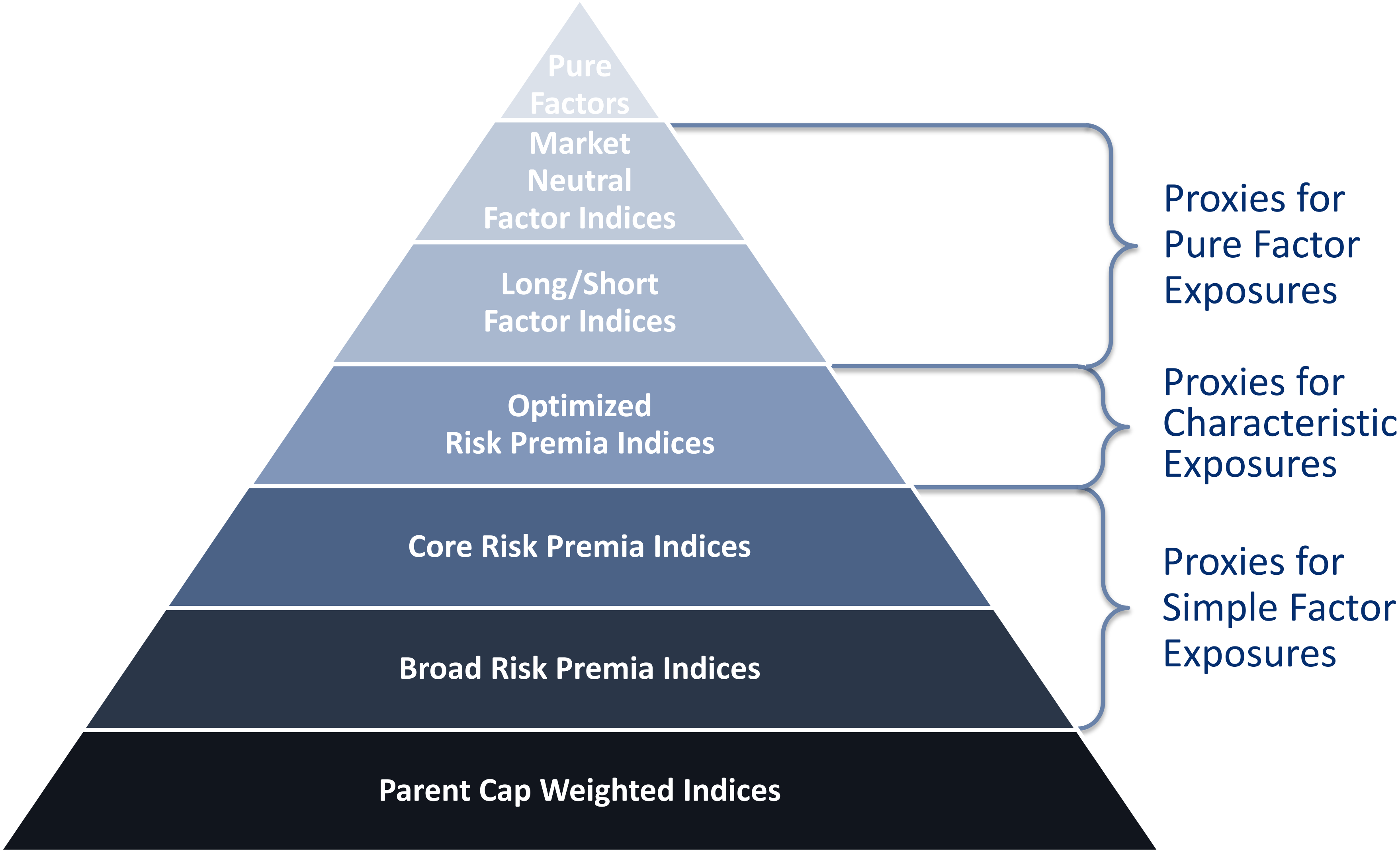
The Pyramid of Beta: *Tradeoffs between Factor Signal Purity and Investability*

- Higher Exposure
- Higher Complexity
- Lower Investability



- Lower Exposure
- Lower Complexity
- Higher Investability

Theoretical Foundations Supporting Risk Premia Strategy Indices



Investability Considerations in Risk Premia Indices

Investability

Degree of Active Tilt

- Active Factor Exposure
- Weight Multiplier
- Maximum Strategy Weight

Capacity

- Stock Ownership (% of full market cap)
- Stock Ownership (% of float market cap)

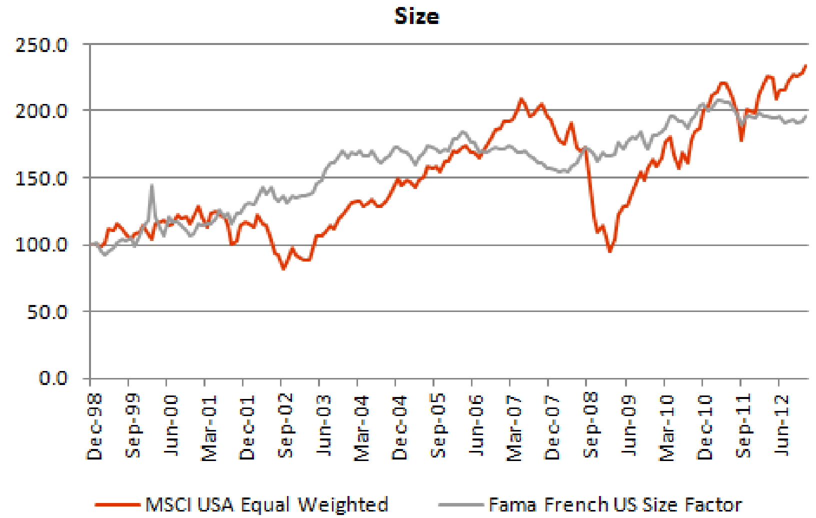
Tradability

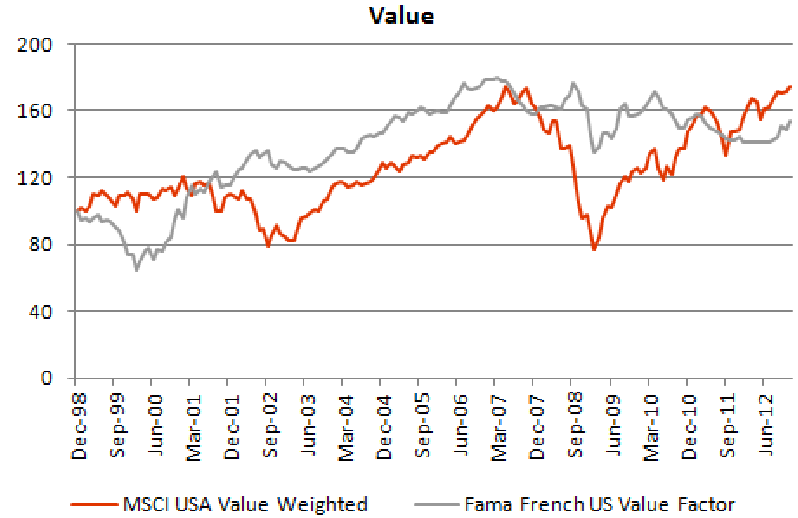
- ATVR
- Average Days to Trade

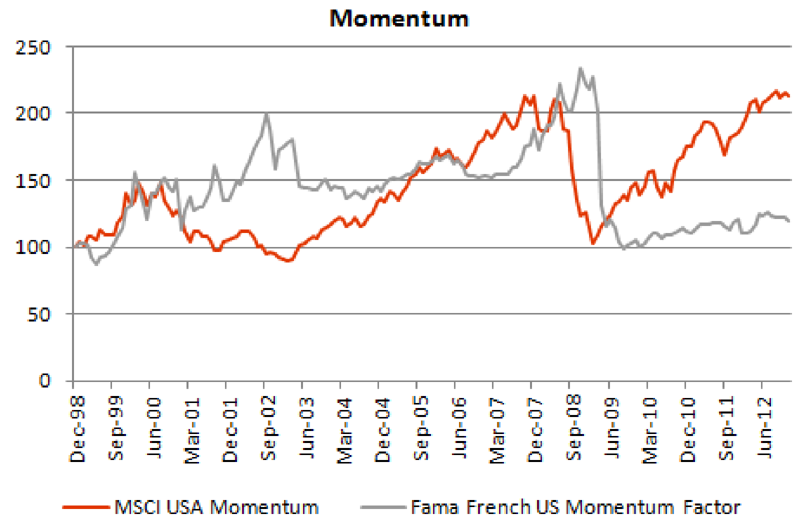
Replication Costs

- Annual One-Way Turnover
- Performance Drag

From Theory to Implementation:
MSCI USA Risk Premia Comparison to Fama-French Factors







Source for Fama-French factors: Kenneth French's website

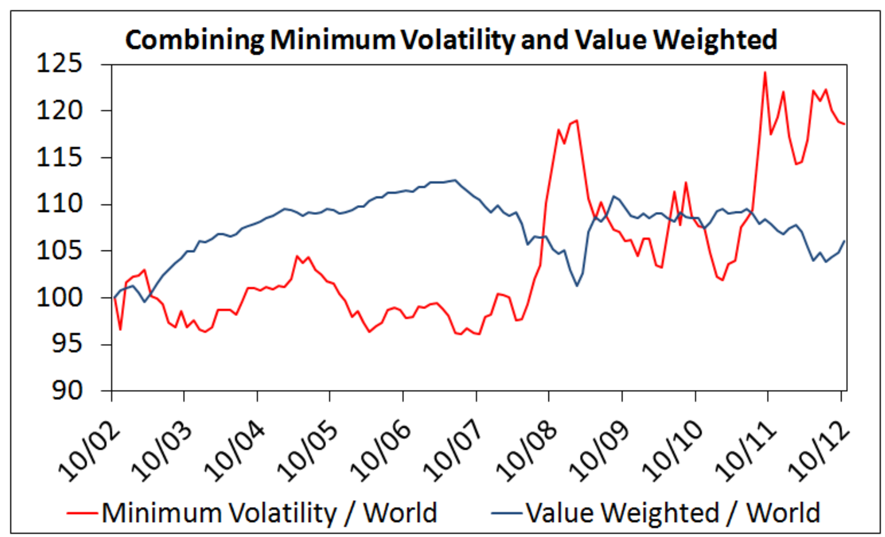
http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html

Combining Risk Premia Indices:

Key Considerations

Important Considerations for Investors Adopting Risk Premia

- Risk premia strategies have historically produced **long-term outperformance** but have also experienced significant, multi-year **periods of underperformance.**
- Investors with allocations to risk premia must have a **strong governance structure** to be able to withstand long periods of poor, relative performance.
- In addition, the investors who desire to adopt risk premia strategies may consider allocations to a portfolio of risk premia, to seek **potential diversification benefits**.



Historical Simulation Requirements

OPERF

- Risk Premia under consideration:
  - Value, Momentum & Quality
- Risk Premia combinations
  - Simple, equal-weighting scheme
- Country: USA
- Currency: USD
- Period of analysis: May 1999 – July 2013

Risk Premia in the Literature

Risk Premia	Description	Highlights
Value	➢Captures the positive link between stocks that have low prices relative to their fundamental value and returns in excess of the capitalization-weighted benchmark.	➢Widely discussed since Graham and Dodd (1934) ➢ Several explanations for the existence of this effect. Value companies may be perceived as riskier companies and therefore should offer some compensation to investors. ➢From a behavioral perspective, the premium may exist as a result of loss aversion and mental accounting biases; see Barberis and Huang (2001).
Momentum	➢Reflects future excess returns to stocks with stronger past performance. In other words, stock prices tend to exhibit trend over certain horizons.	➢The time period over which the returns are calculated usually range from three to twelve months. Typically the last month is dropped to avoid an empirically documented 1-month “reversal” effect. ➢The most widely cited theories are behavioral. For instance, investors, interpret or act on information in a biased way.
Quality	➢Seek to reflect a quality growth investment strategy by targeting stocks with historically high return on equity (ROE), stable year-over-year earnings growth and low financial leverage.	➢Empirical research shows that quality growth stocks historically outperformed the market with relatively low volatility over long time periods (Smith, 2010 and Joyce and Mayer, 2012). ➢Quality growth companies tend to have high ROE, stable earnings and dividends growth that is uncorrelated with the broad business cycle, strong balance sheets, low financial leverage, conservative accounting policies and strong management (Sloan, 1996, Chen and Zhang, 2010).

Analysis of MSCI Risk Premia Indices

MSCI USA Risk Premia Indices: *Returns*

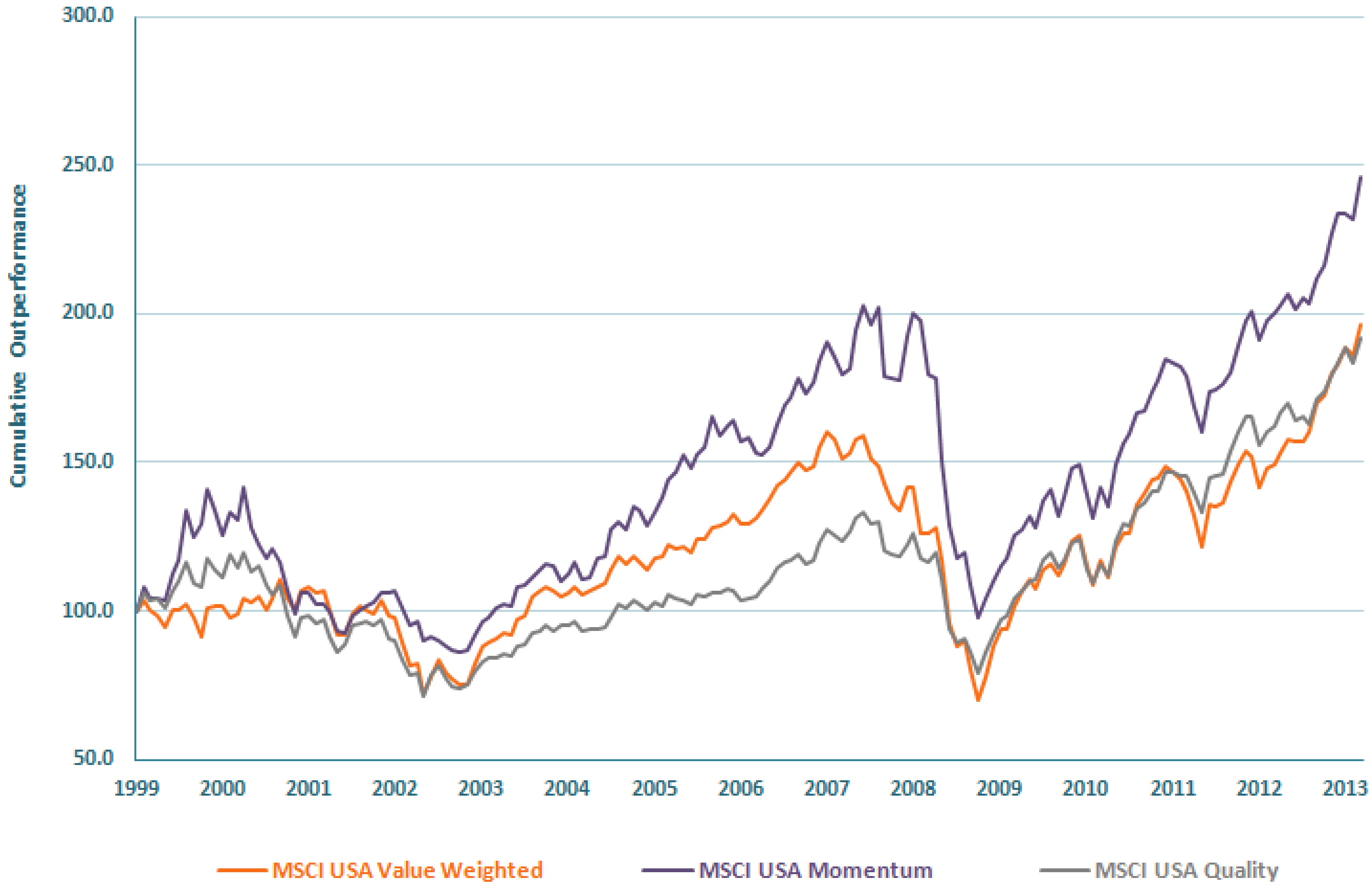
Historical Gross Total Return, USD	MSCI USA	MSCI USA Value Weighted	MSCI USA Momentum	MSCI USA Quality
Total Return (%)	3.6	4.9	6.6	4.7
Subperiods (%)				
May 1999 - Mar 2001	-6.5	0.3	-0.7	-4.7
April 2001 - Nov 2001**	-1.6	-2.5	-0.1	6.6
Dec 2001 - Dec 2007	6.1	7.0	12.5	5.2
Jan 2008 - Jun 2009**	-24.8	-26.6	-30.3	-16.8
Jul 2009 - Jul 2013	18.6	19.9	19.8	17.7
Active Returns (basis points)		130	299	113
Subperiods (basis points)				
May 1999 - Mar 2001		676	581	173
April 2001 - Nov 2001**		-86	151	827
Dec 2001 - Dec 2007		81	639	-97
Jan 2008 - Jun 2009**		-175	-549	808
Jul 2009 - Jul 2013		130	118	-90

* All figures are annualized USD Gross returns

** Business Cycle Contractions (Recessions) as identified by NBER

- Note that there are frequently material differences between back-tested or simulated results and actual results subsequently achieved by an investment strategy.

MSCI USA Risk Premia Indices: *Returns*



MSCI USA Risk Premia Indices: *Key Metrics*

Historical Gross Total Return, USD	MSCI USA	MSCI USA Value Weighted	MSCI USA Momentum	MSCI USA Quality
Total Return* (%)	3.6	4.9	6.6	4.7
Total Risk* (%)	15.8	16.6	16.7	14.3
Return/Risk	0.23	0.29	0.39	0.33
Sharpe Ratio	0.06	0.13	0.23	0.14
Active Return* (%)	0.0	1.3	3.0	1.1
Tracking error* (%)	0.0	4.6	8.7	4.2
Information Ratio	NA	0.28	0.34	0.27
Historical Beta	1.00	1.01	0.90	0.87
Turnover** (%)	3.0	17.3	106.9	24.8
Price to Book***	2.7	2.0	3.5	4.7
Price to Earnings***	19.3	19.9	21.4	17.6
Div. Yield*** (%)	1.8	2.2	1.4	1.7

* Annualized in USD from 31/05/1999 to 31/07/2013

** Average annual one-way index turnover from 31/05/1999 to 31/07/2013

*** Average value from 31/05/1999 to 31/07/2013

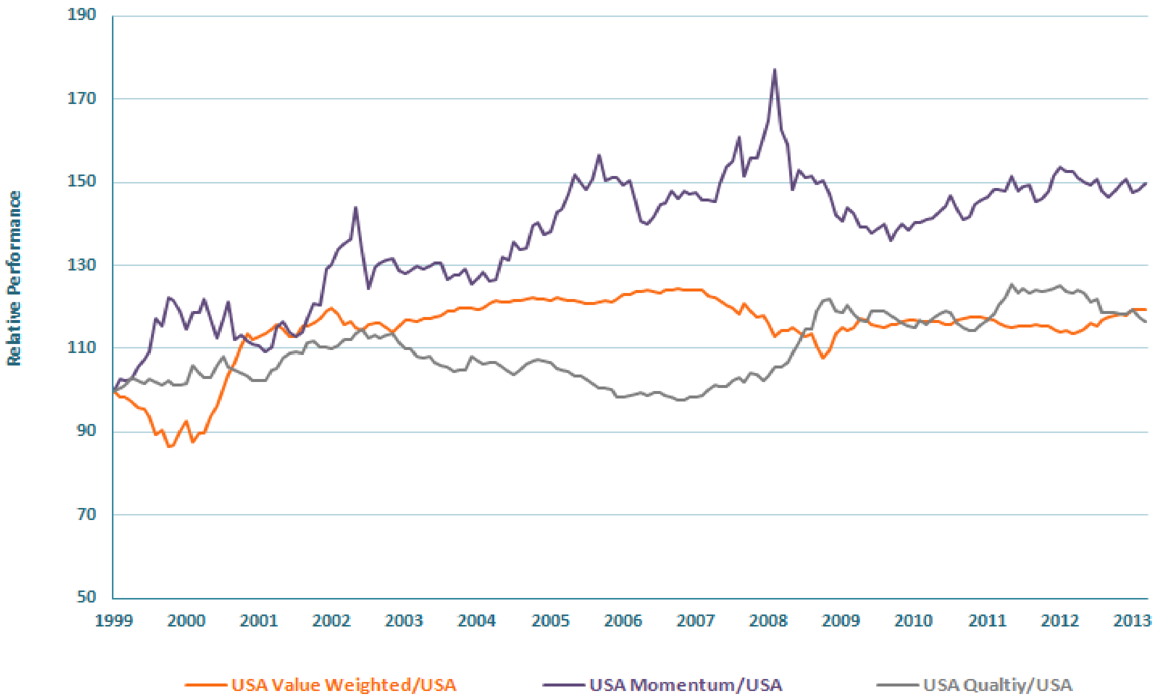
- Note that there are frequently material differences between back-tested or simulated results and actual results subsequently achieved by an investment strategy.

Portfolios of Risk Premia Indices

Risk Premia Portfolios: *Diversification Benefits*

Correlation of Active Returns	MSCI USA Value Weighted	MSCI USA Momentum	MSCI USA Quality
MSCI USA Value Weighted	1		
MSCI USA Momentum	-0.43	1	
MSCI USA Quality	-0.41	0.12	1

May 1999 to July2013, USD Gross Returns



Risk Premia Portfolios: *Methodology Summary*

Parameter	Methodology	Comments
Universe	• Parent index constituents	• Parent indices are used as benchmarks by many institutions. • Derived indices integrate seamlessly with other MSCI indices and benefit from parent index construction rules.
Indices	• MSCI Value-Weighted • MSCI Momentum • MSCI Quality	• Combination of two or more MSCI Risk Premia Indices.
Weighting	• Equal weighting	• Equal weighting reflects no prior view regarding relative performance across the components of the combined index.
Rebalancing	• Semi-annual rebalancing	• Timely data updates, consistent with MSCI rebalancing calendar.

Risk Premia Portfolios: *Key Metrics*

Historical Gross Total Return, USD	MSCI USA	MSCI USA VW 0.5 MOM 0.5	MSCI USA VW 0.33 MOM 0.33 Q 0.33
Total Return* (%)	3.6	5.2	5.2
Total Risk* (%)	15.8	15.9	15.1
Return/Risk	0.23	0.33	0.34
Sharpe Ratio	0.06	0.16	0.16
Active Return* (%)	0.0	1.6	1.6
Tracking error* (%)	0.0	3.8	2.7
Information Ratio	NA	0.43	0.59
Historical Beta	1.00	0.98	0.94
Turnover** (%)	3.0	58.2	43.9
Price to Book***	2.7	2.6	3.1
Price to Earnings***	19.3	20.1	19.2
Div. Yield*** (%)	1.8	1.8	1.8

* Annualized in USD from 31/05/1999 to 31/07/2013

** Average annual one-way index turnover from 31/05/1999 to 31/07/2013

*** Average value from 31/05/1999 to 31/07/2013

VW = Value Weighted, MOM = Momentum, Q = Quality

Risk Premia Portfolios: *Potential Natural Internal Crossing Benefits*

- Combining strategies in a single composite index may reduce turnover:
  - Exploiting natural internal "crossing" opportunities at each rebalancing; and
  - May reduce need to reallocate capital across managers.
- An allocation to two or more strategy indices can be implemented in two ways:
  1. Separate mandates: three different asset managers, three separate strategy indices; or
  2. Combined mandates: single mandate to one manager tracking a combined index.

	Turnover of Risk Premia #1	Turnover of Risk Premia #2	Turnover of Risk Premia #3	Turnover for "Separate" Manager Option Risk Premia	Turnover for "Combined" Manager Option Risk Premia	Reduction in Turnover
USA VW 0.5 MOM 0.5	17.3	106.9		64.2	58.2	6.1
USA VW 0.33 MOM 0.33 Q 0.33	17.3	106.9	24.8	52.2	43.9	8.3

* Average annual one-way index turnover from 31/05/1999 to 31/07/2013

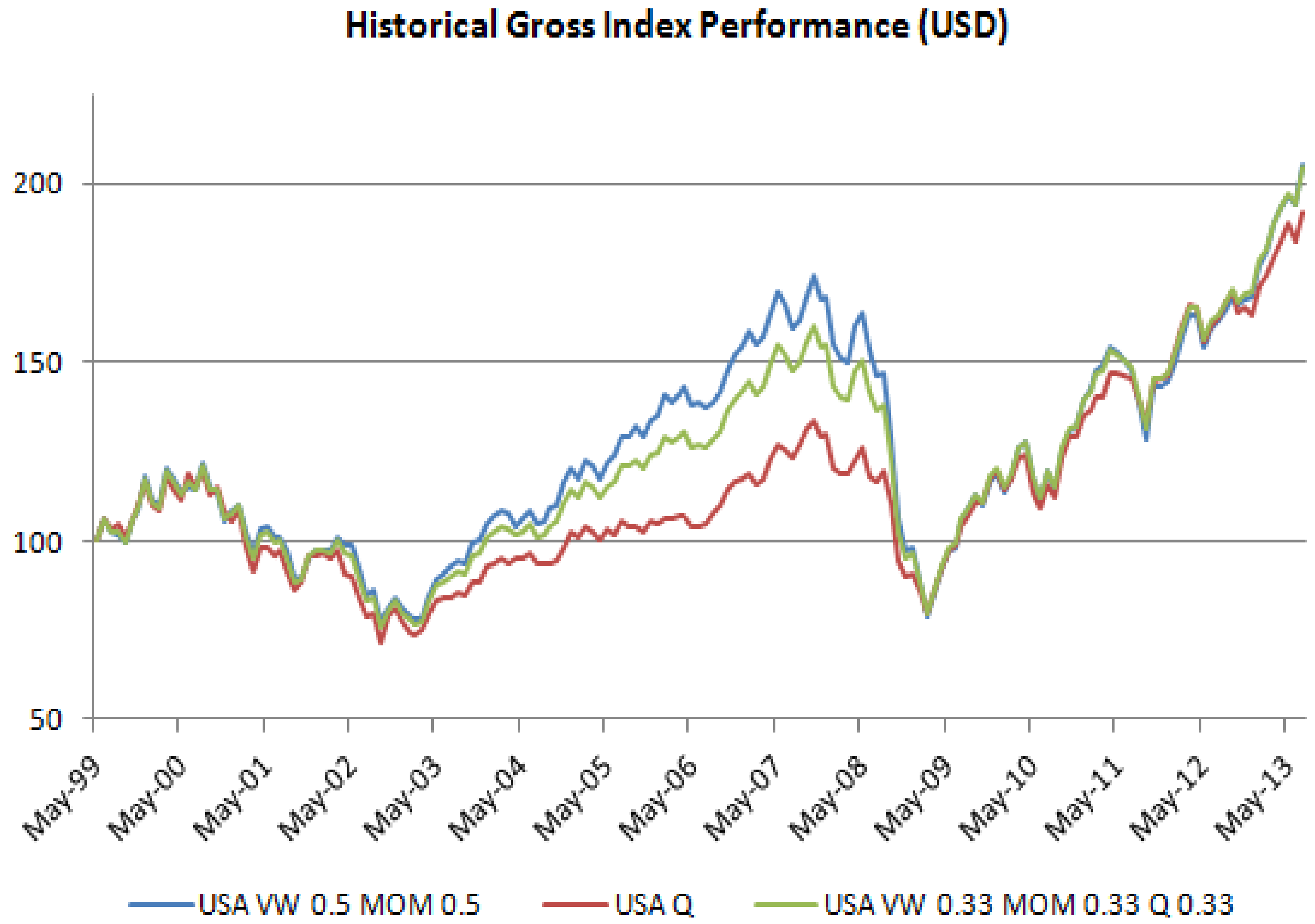
All portfolios are equally weighted.

VW = Value Weighted, MOM = Momentum, Q = Quality

Assumes the investor allocates equally between the underlying risk premia and rebalances back to the target allocation every six months.

Appendix

Composite Performance



Links

- "Harvesting Risk Premia" (2011) by D. Melas, R. Briand, and R. Urwin: http://www.msci.com/resources/research_papers/harvesting_risk_premia_with_strategy_indices.html
- MSCI report for the Ministry of Finance Norway (2013): http://www.regjeringen.no/pages/1934920/harvesting_risk.pdf

The top choice of institutional investors

- Typically pension plans adopt the **highest standards** in index selection
- Over the years, a vast majority of institutional investors consistently **selected MSCI** for international equities
- As a result of the **trust** investors put in MSCI:
  - Close to **$7 trillion** in assets are benchmarked to MSCI indexes[1]
  - **95% of US pension fund assets** invested in international equity are benchmarked to MSCI [2]
  - **94 of top 100** global investment managers are MSCI clients [3]
  - **#1 benchmark provider** of **pan-European** institutional funds[5]

MSCI Index Clients within
Top Global Investment Managers
as of Sep 2012 (3)

100%
of new money
US pensions funds
invested in
core international equities
in Q1 and Q2 2012 were
benchmarked to MSCI [4]

Footnotes in appendix

Building better benchmarks: What matters most to investors and how MSCI does it

- **MSCI puts emphasis on:** ➔ **Leading to MSCI indices being:**

- **Accuracy, timeliness and transparency**
  - Consistent global framework: **no gaps, no overlaps**
  - Timely reflection of market changes
  - Transparent methodology and market classification framework
- **Investability and replicability**
  - Systematic use of buffer zones to reduce turnover
  - Accurate implementation of corporate events
  - Stringent short and long term liquidity measures

1. **Accurate** measures of markets
2. **Fair** benchmarks for managers
3. **Cost effective** solutions for index replication

MSCI 24 Hour Global Client Service

Americas

Americas	1.888.588.4567 (toll free)
Atlanta	+1.404.551.3212
Boston	+1.617.532.0920
Chicago	+1.312.706.4999
Monterrey	+52.81.1253.4020
Montreal	+1.514.847.7506
New York	+1.212.804.3901
San Francisco	+1.415.836.8800
São Paulo	+55.11.3706.1360
Stamford	+1.203.325.5630
Toronto	+1.416.628.1007

Europe, Middle East & Africa

Cape Town	+27.21.673.0100
Frankfurt	+49.69.133.859.00
Geneva	+41.22.817.9777
London	+44.20.7618.2222
Milan	+39.02.5849.0415
Paris	0800.91.59.17 (toll free)

Asia Pacific

China North	10800.852.1032 (toll free)
China South	10800.152.1032 (toll free)
Hong Kong	+852.2844.9333
Seoul	00798.8521.3392 (toll free)
Singapore	800.852.3749 (toll free)
Sydney	+61.2.9033.9333
Tokyo	+81.3.5226.8222

clientservice@msci.com | www.msci.com

Notice and Disclaimer

- This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be reproduced or redisseminated in whole or in part without prior written permission from MSCI.
- The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indices, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.
- The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.
- Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.
- Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.
- None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.
- You cannot invest in an index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any investment or financial product that may be based on or linked to the performance of any MSCI index.
- MSCI's indirect wholly-owned subsidiary Institutional Shareholder Services, Inc. ("ISS") is a Registered Investment Adviser under the Investment Advisers Act of 1940. Except with respect to any applicable products or services from ISS (including applicable products or services from MSCI ESG Research, which are provided by ISS), neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and neither MSCI nor any of its products or services is intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such.
- The MSCI ESG Indices use ratings and other data, analysis and information from MSCI ESG Research. MSCI ESG Research is produced by ISS or its subsidiaries. Issuers mentioned or included in any MSCI ESG Research materials may be a client of MSCI, ISS, or another MSCI subsidiary, or the parent of, or affiliated with, a client of MSCI, ISS, or another MSCI subsidiary, including ISS Corporate Services, Inc., which provides tools and services to issuers. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indices or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body.
- Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD, ISS, FEA, InvestorForce, and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's.

 Apr 2013

TAB 4 – CEM ANNUAL COST STUDY FOR OPERF

CEM Benchmarking, Inc. (CEM)
2012 OPERF Cost Study

Purpose
To present the OPERF investment cost analysis performed by CEM for both the calendar and five-year period ended 31 December 2012.

Background
Beginning in 2003, Treasury staff provided the OIC an independent assessment of the various costs paid for the management of OPERF (e.g., management fees, custody fees, consulting fees, staff costs, etc.), and how those costs (and the resultant performance) compare to other institutional investors.

CEM is recognized as the key, independent, third-party provider of cost analysis to defined benefit and defined contribution plans. Using their unique database, CEM has provided defined benefit fund sponsors with insights into their cost, return, risk and liability performance since 1990. Their database includes 174 U.S. funds (including 59 U.S. public funds), valued at approximately $2.9 trillion.

Similar to previous years' analyses, staff provided CEM with updated OPERF cost and operating data. For the calendar year ended December 31, 2012, OPERF's total investment management costs (including oversight, custodial and other costs) were approximately 78 basis points, up from 69 bps in calendar year 2011.

OPERF's custom peer group for benchmarking purposes is comprised of 18 funds ranging in asset size from $24 billion to $130 billion. In terms of asset size, the median fund in this peer group was $51 billion, and within the peer group, OPERF was the 11th largest fund. Based on CEM's analysis and benchmarking, OPERF's total costs were lower than "expected" by approximately $22 million.

Recommendation
None, information only. Report findings will be presented by CEM.

Oregon Public Employees Retirement Fund
Investment Benchmarking Results
For the 5 year period ending December 2012

Bruce Hopkins
CEM Benchmarking Inc
October 30, 2013

This benchmarking report compares your cost and return performance to CEM's extensive pension database.

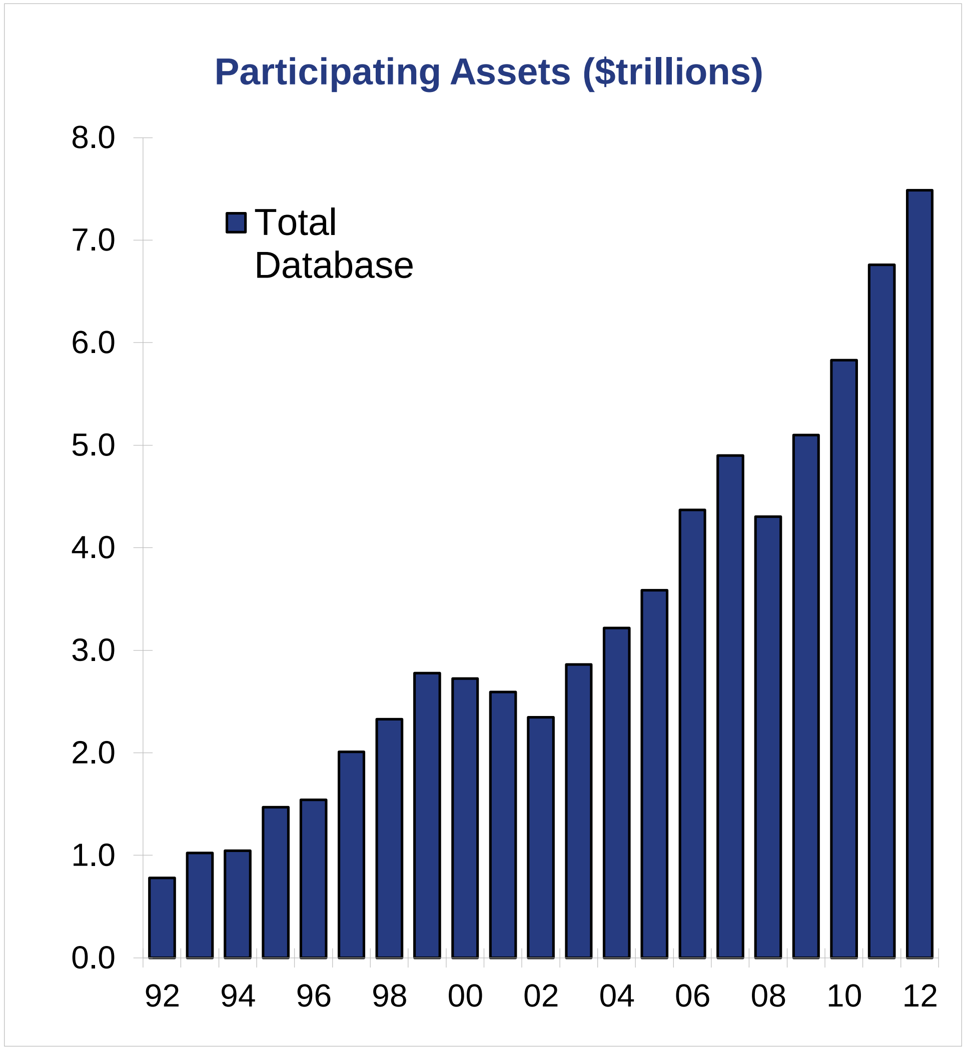
• 174 U.S. pension funds participate with assets totalling $2.9 trillion.

• 75 Canadian funds participate with assets totaling $577 billion.

• 45 European funds participate with aggregate assets of $1.6 trillion. Included are funds from the Netherlands, Norway, Sweden, Finland, Ireland, Denmark and the U.K.

• 5 Asia-Pacific funds participate with aggregate assets of $106 billion. Included are funds from Australia, New Zealand, China and South Korea.

The most meaningful comparisons for your returns and value added are to the 59 funds in the U.S. Public universe.



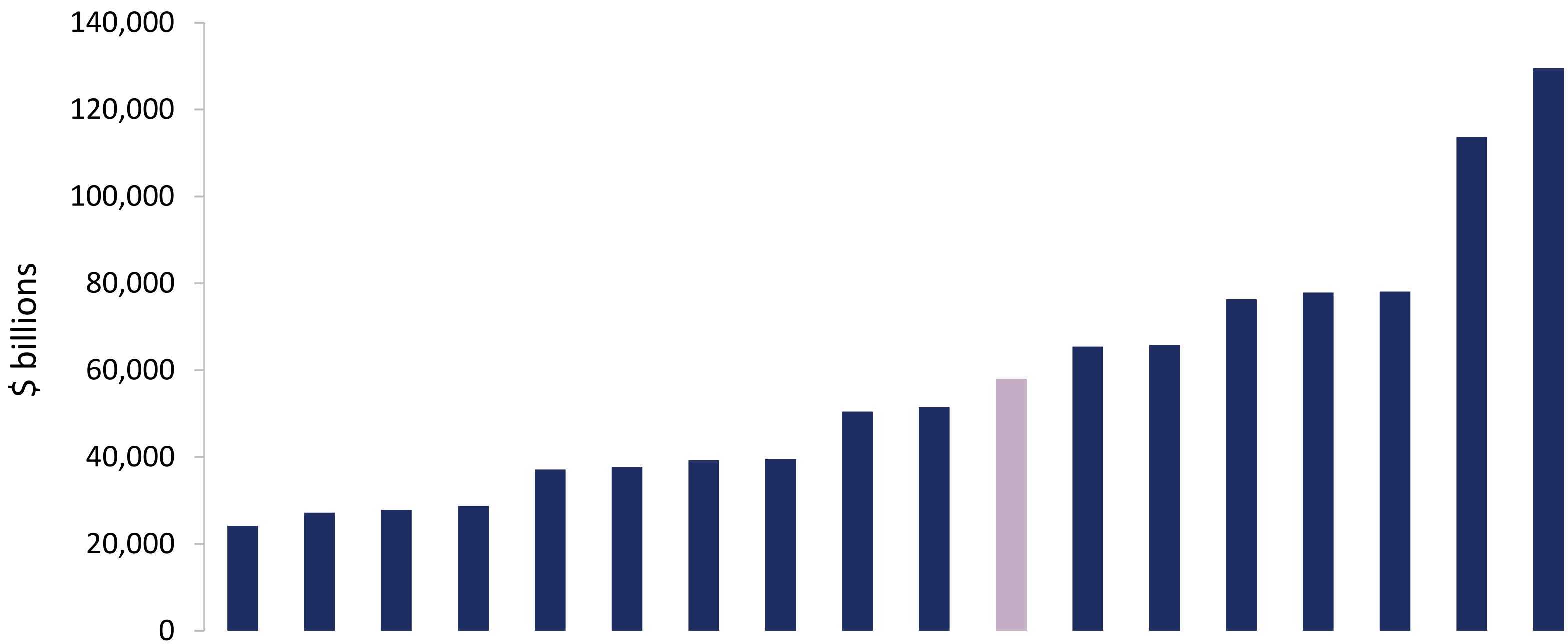
2012 includes an estimate of data not yet in the database

The most valuable comparisons for cost performance are to your custom peer group because size impacts costs.

Custom Peer Group for
Oregon Public Employees Retirement Fund

• 18 U.S. public sponsors from $24 billion to $130 billion

• Median size of $51 billion versus your $58 billion



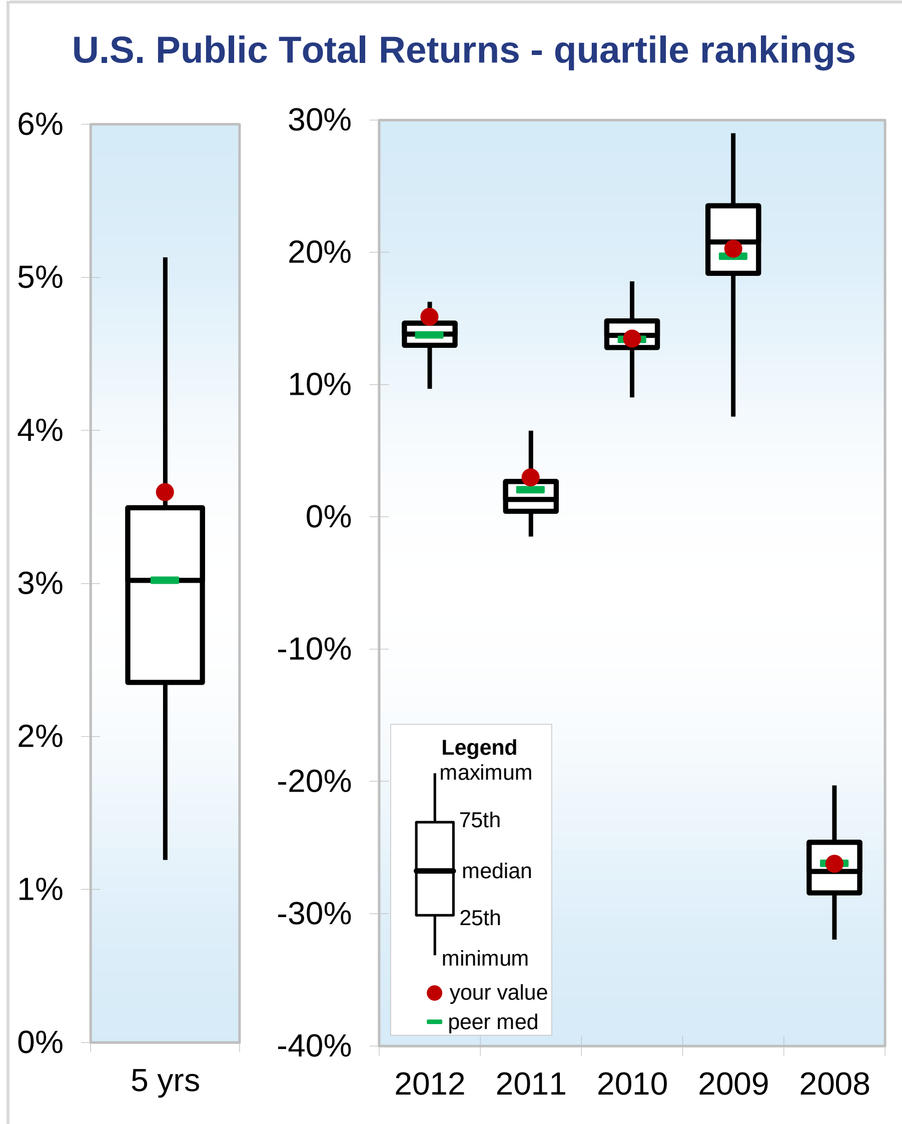
To preserve client confidentiality, given potential access to documents as permitted by the Freedom of Information Act, we do not disclose your peers' names in this document.

What gets measured gets managed, so it is critical that you measure and compare the right things:

1. Policy Return	How did the impact of your policy mix decision compare to other funds?
2. Net Value Added	Are your implementation decisions (i.e., the amount of active versus passive management) adding value?
3. Costs	Are your costs reasonable? Costs matter and can be managed.

Your 5-year total return of 3.6% was above the U.S. Public median of 3.0% and the peer median of 3.0%.

	Your 5-yr
Total Fund Return	3.6%
- Policy Return	3.1%
- Cost	0.8%
= Net Value Added	-0.3%



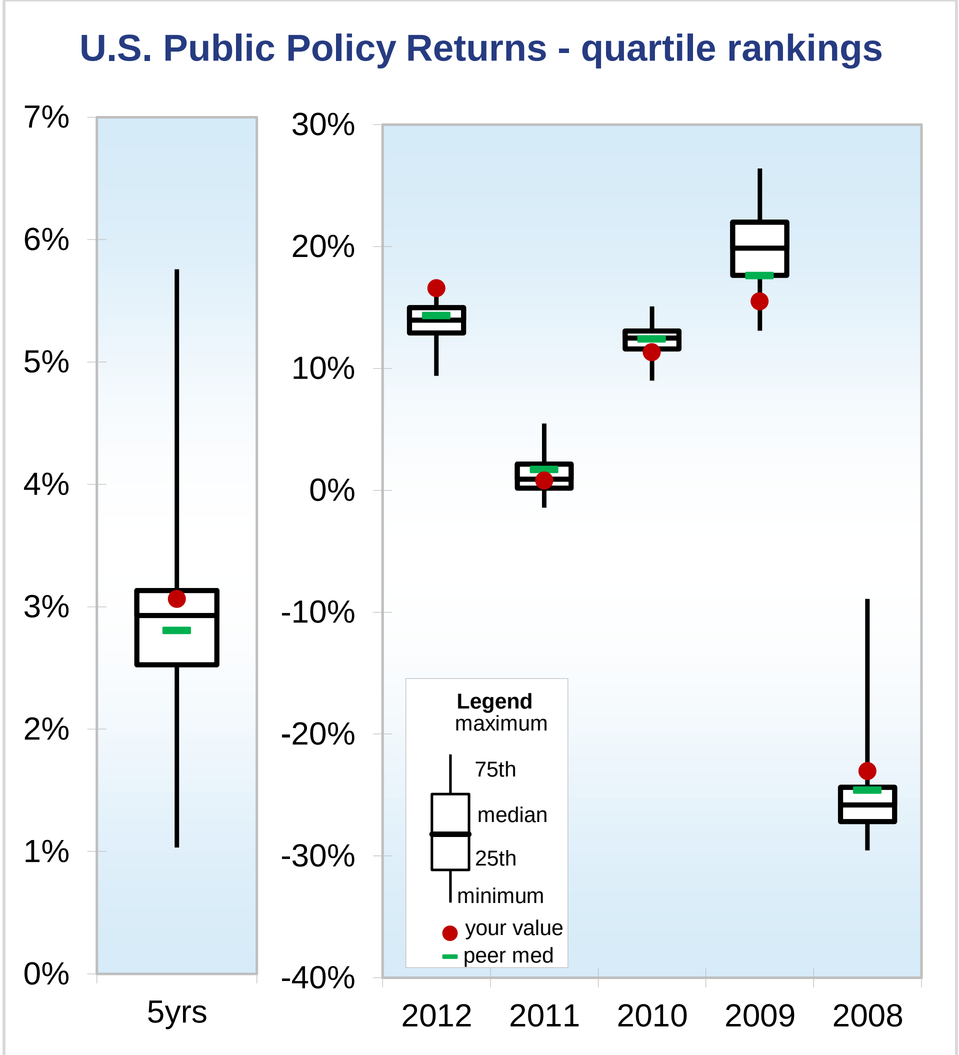
1. Policy Return

Your 5-year policy return of 3.1% was above the U.S. Public median of 2.9% and the peer median of 2.8%.

Your policy return is the return you could have earned passively by indexing your investments according to your policy mix.

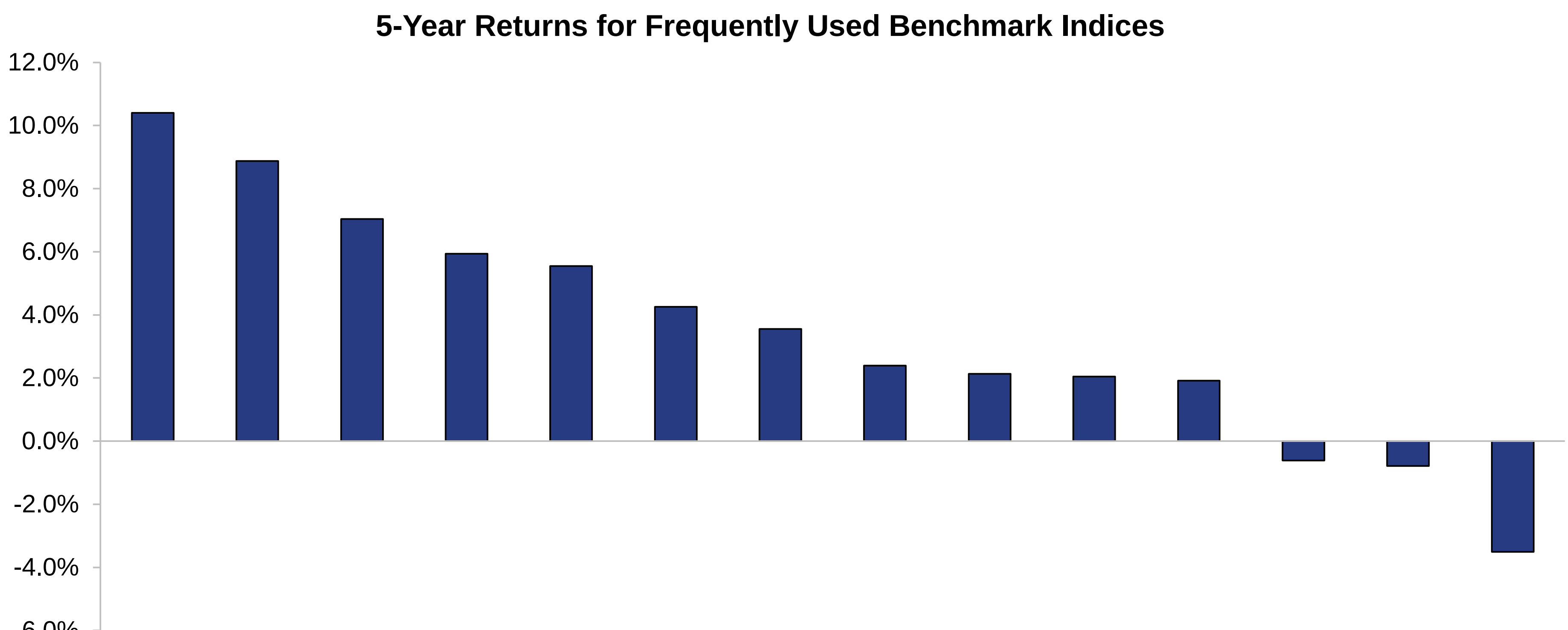
Having a higher or lower relative policy return is not necessarily good or bad. Your policy return reflects your investment policy, which should reflect your:

- Long term capital market expectations
- Liabilities
- Appetite for risk



To enable fairer comparisons, the policy returns of all participants in the U.S. Public universe were adjusted to reflect your benchmarks for private equity. In 2012, the adjustment increased the average U.S. Public policy return by 0.89%.

Differences in policy returns are caused by differences in benchmarks and policy mix. Fixed income outperformed other asset classes for the 5 years ending 2012.



	Barclays High Yield	Barclays Long Bond	Barclays TIPS	Barclays Aggr. Bond	MSCI U.S. REIT	Private Equity[1]	Russell 2000	Hedge Funds[1]	NCREIF	Russell 3000	Russell 1000	MSCI World	MSCI Emerg. Market	MSCI EAFE
US 5yr	10.4%	8.9%	7.0%	5.9%	5.6%	4.3%	3.6%	2.4%	2.1%	2.0%	1.9%	-0.6%	-0.8%	-3.5%

1. The private equity and hedge fund benchmark returns reflect the average benchmark of all U.S. participants. To enable fairer value added comparisons, the private equity benchmarks of all U.S. participants were set to equal your benchmarks.

Your 5-year policy return was above the U.S. Public median primarily because of:

- The positive impact of your higher weight in one of the better performing asset classes of the past 5 years: Private Equity (your 17% 5-year average weight vs. a U.S. average of 7%).

5-Year Average Policy Mix

	Your Fund	Peer Avg.	U.S. Public Avg.
U.S. Stock	3%	27%	29%
ACWIxUS Stock	5%	8%	9%
Global Stock	37%	6%	6%
EAFE/Emerging Stock	0%	9%	10%
Total Stock	45%	51%	53%
U.S. Bonds	24%	19%	21%
Long Bonds	0%	1%	0%
Other Fixed Income	3%	7%	7%
Total Fixed Income	26%	28%	28%
Hedge Funds	0%	2%	3%
Real Estate incl. REITS	11%	9%	7%
Other Real Assets[1]	1%	1%	2%
Private Equity	17%	9%	7%
Total	100%	100%	100%

[1] Other real assets includes commodities, natural resources and infrastructure.

Your policy asset mix has changed over the past 5 years. At the end of 2012 your policy mix compared to your peers and the U.S. Public universe as follows:

Policy Mix	2008	2012		
Asset Class	Your Fund	Your Fund	Peer Avg.	U.S. Public Avg.
U.S. Stock	16%	0%	24%	26%
ACWIxUS Stock	23%	0%	8%	9%
Global Stock	7%	43%	6%	6%
EAFE/Emerging Stock	0%	0%	11%	10%
Total Stock	46%	43%	48%	51%
U.S. Bonds	27%	19%	18%	20%
Long Bonds	0%	0%	1%	0%
Other Fixed Income	0%	6%	9%	8%
Total Fixed Income	27%	25%	27%	28%
Hedge Funds	0%	0%	3%	4%
Real Estate incl. REITS	11%	11%	9%	7%
Other Real Assets[1]	0%	5%	2%	2%
Private Equity	16%	16%	10%	8%
Total	100%	100%	100%	100%

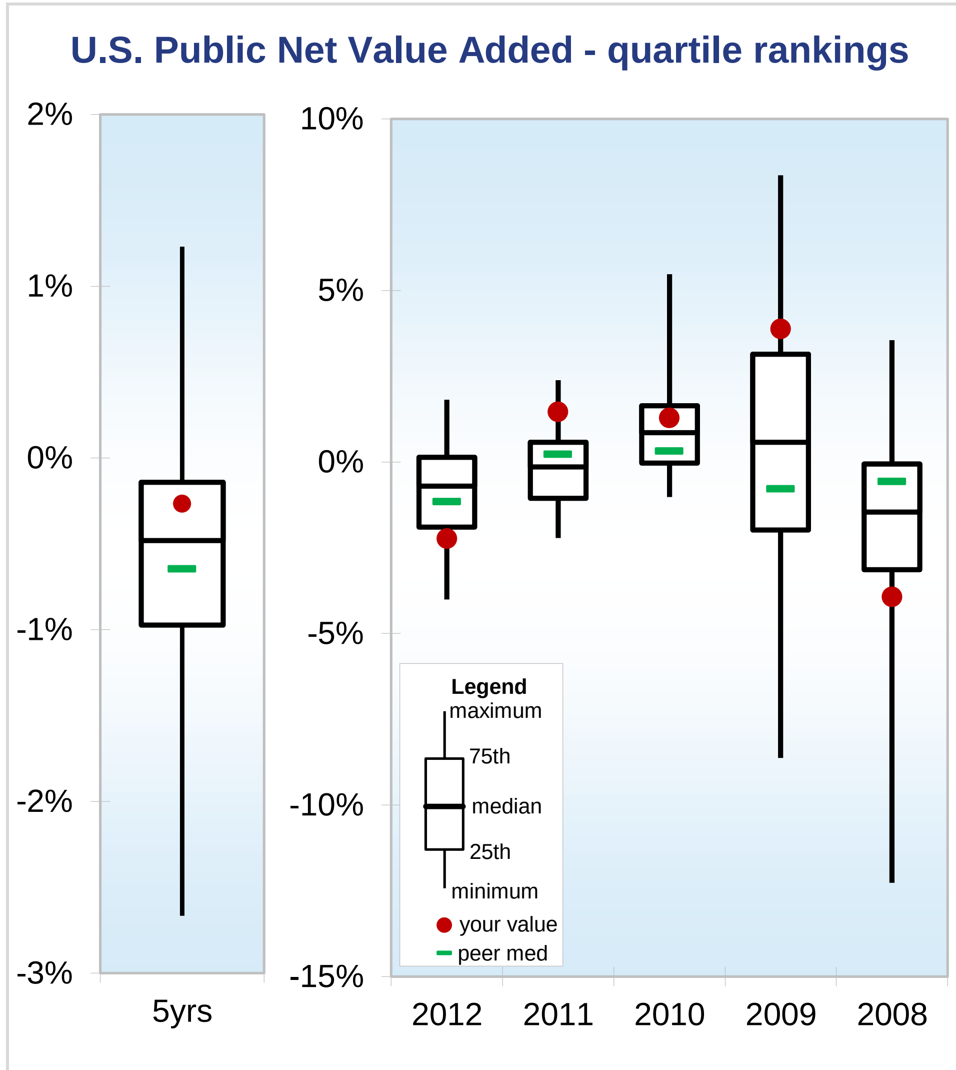
[1] Other real assets includes commodities, natural resources and infrastructure.

2. Net Value Added

Net value added is the component of total return from active management. Your 5-year net value added of -0.3% compares to medians of -0.5% for the U.S. universe and -0.6% for your peers.

Net value added equals total return minus policy return minus costs.

Oregon Public Employees Retirement Fund				
Year	**Total Return**	**Policy Return**	**Cost**	**Net Value Added**
2012	15.1%	16.6%	0.8%	(2.2)%
2011	2.9%	0.8%	0.7%	1.4%
2010	13.5%	11.3%	0.9%	1.3%
2009	20.3%	15.5%	0.9%	3.9%
2008	(26.2)%	(23.0)%	0.7%	(3.9)%
5-year	3.6%	3.1%	0.8%	(0.3)%



3. Costs

Your asset management costs in 2012 were $454.8 million or 78.5 basis points.

Your Investment Management Costs ($000s)

	Internal		External Passive		External Active			
	Passive	Active	Fees	Monitoring & Other	Base Fees	Perform. Fees[3]	Monitoring & Other	Total
U.S. Stock - Broad/All					9,171	2,882	313	12,366
U.S. Stock - Large Cap	53		118	132	8,364		382	9,049
U.S. Stock - Small/Mid Cap	57				5,180		47	5,284
Stock - Emerging		397			9,688		61	10,146
Stock - ACWIxU.S.			454	117	28,115		709	29,395
Stock - Global			407	116	2,922		128	3,572
Fixed Income - U.S.					11,179		582	11,762
Fixed Income - Other					17,551		225	17,776
Cash		145						145
REITs					4,875		17	4,892
Real Estate					12,082		144	12,226
Real Estate - LPs					45,704		893	46,597
Other Real Assets					13,387		532	13,919
Diversified Private Equity					225,271 [2]		2,773	228,044
Diversified Priv. Eq.- Fund of Funds					34,567 [1]		12	34,579
Other Private Equity					12,365 [2]		159	12,523
Overlay Programs					529		76	605
Total investment management costs							78.1bp	452,880

Your Oversight, Custodial and Other Asset Related Costs[4] ($000s)

Oversight of the fund		1,508
Trustee & custodial		100
Audit		188
Other		118
Total oversight, custodial & other costs	0.3bp	1,913

Total asset management costs	78.5bp	454,793

Notes

[1] Includes default for fees paid to underlying partnerships in fund of funds. The default for Diversified Private Equity was 165bps.

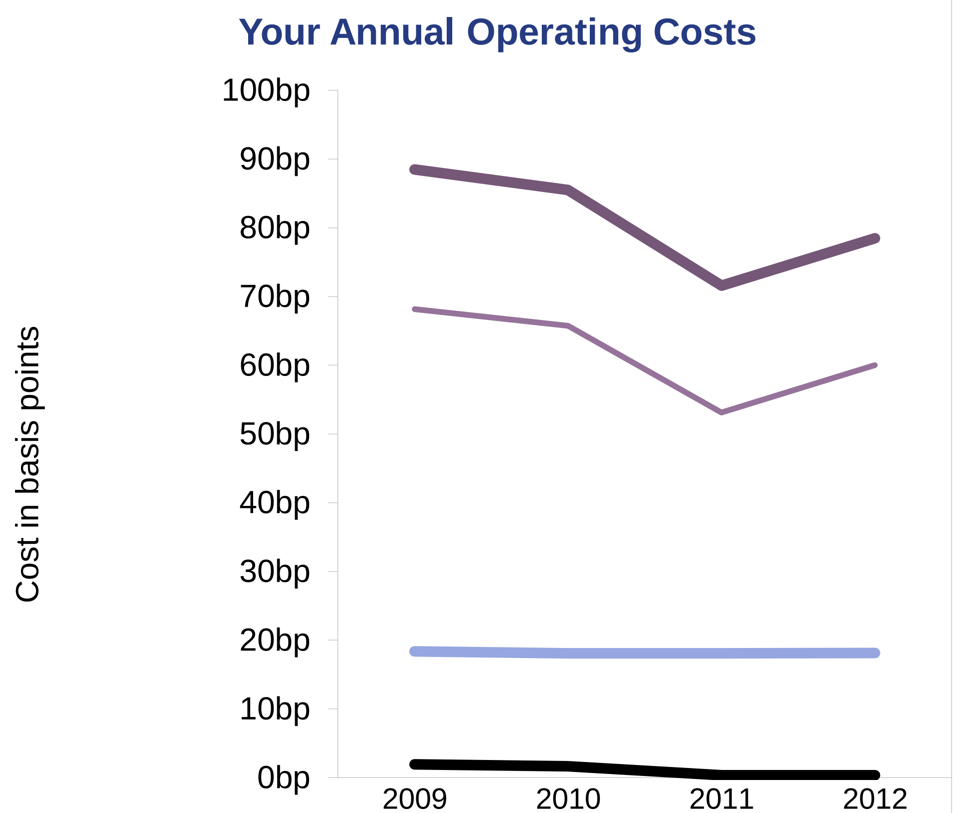
[2] Cost derived from the partnership level detail you provided. Costs are based on partnership contract terms.

[3] Total cost excludes carry/performance fees for real estate, infrastructure, hedge funds, private equity and overlays. Performance fees are included for the public market asset classes.

[4] Excludes non-investment costs, such as PBGC premiums and preparing checks for retirees.

Your costs decreased between 2009 and 2012.

Your reduction in costs is almost entirely due to a reduction in private equity fees. This reduction could reflect a maturing, as opposed to growing, private equity program. The amount on which private equity fees are based is usually the commitment amount during the commitment period and net asset value afterwards.



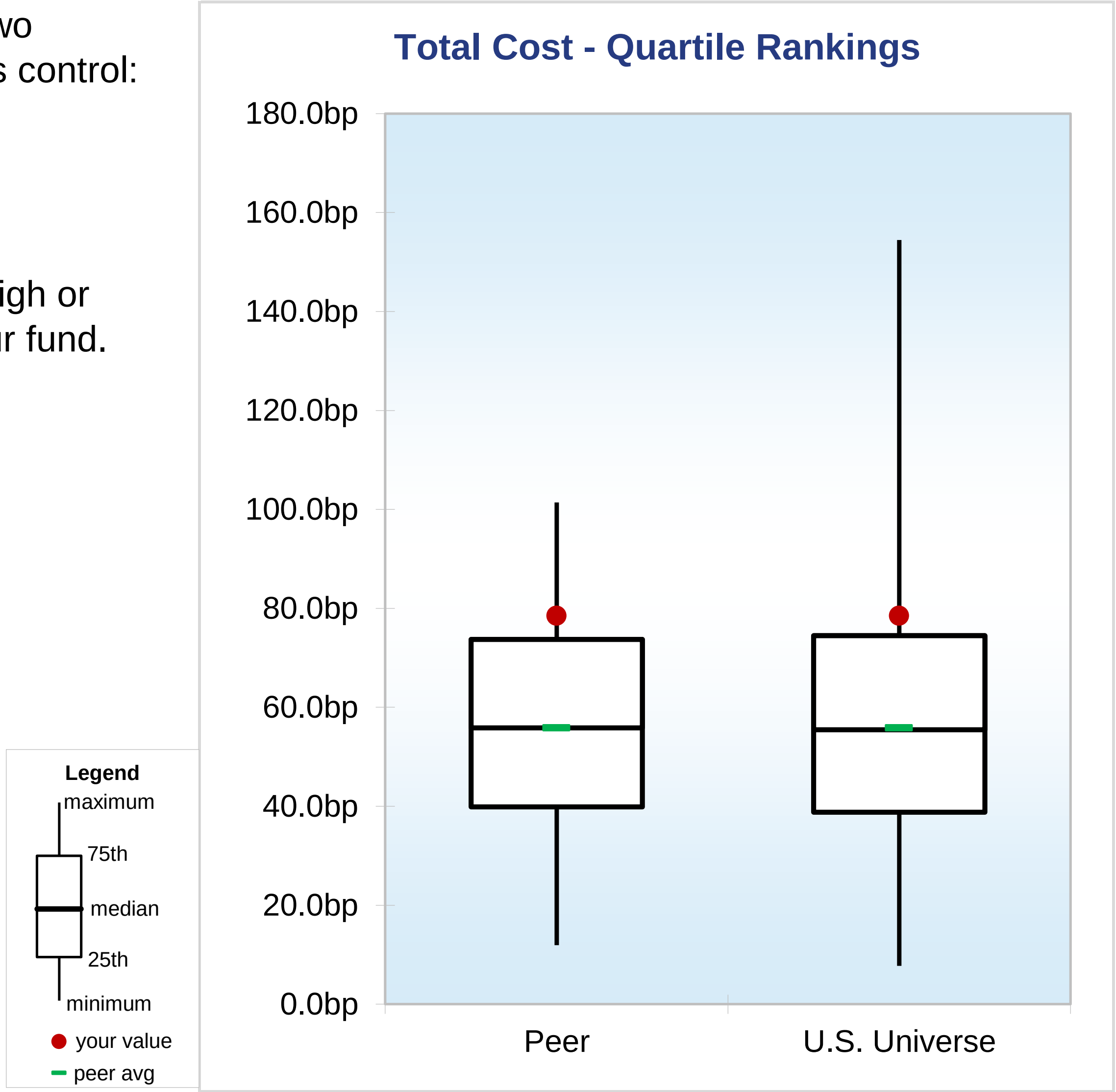
	2009	2010	2011	2012
Public Assets (ex. Hedge funds)	18.4	18.1	18.1	18.1
Private Assets & Hedge Funds	68.2	65.7	53.1	60.0
Oversight	2.0	1.7	0.4	0.3
Total Cost	88.5	85.5	71.6	78.5

Your total cost of 78.5 bps was above the peer average of 55.9 bps.

Differences in total cost are often caused by two factors that are often outside of management's control:

• asset mix and
• fund size.

Therefore, to assess whether your costs are high or low, CEM calculates a benchmark cost for your fund.



Benchmark cost analysis suggests that, after adjusting for fund size and asset mix, your fund was slightly low cost by 3.8 basis points in 2012.

Your benchmark cost is an estimate of what your cost would be given your actual asset mix and the median costs that your peers pay for similar services. It represents the cost your peers would incur if they had your actual asset mix.

Your total cost of 78.5 bp was slightly below your benchmark cost of 82.2 bp. Thus, your cost savings was 3.8 bp.

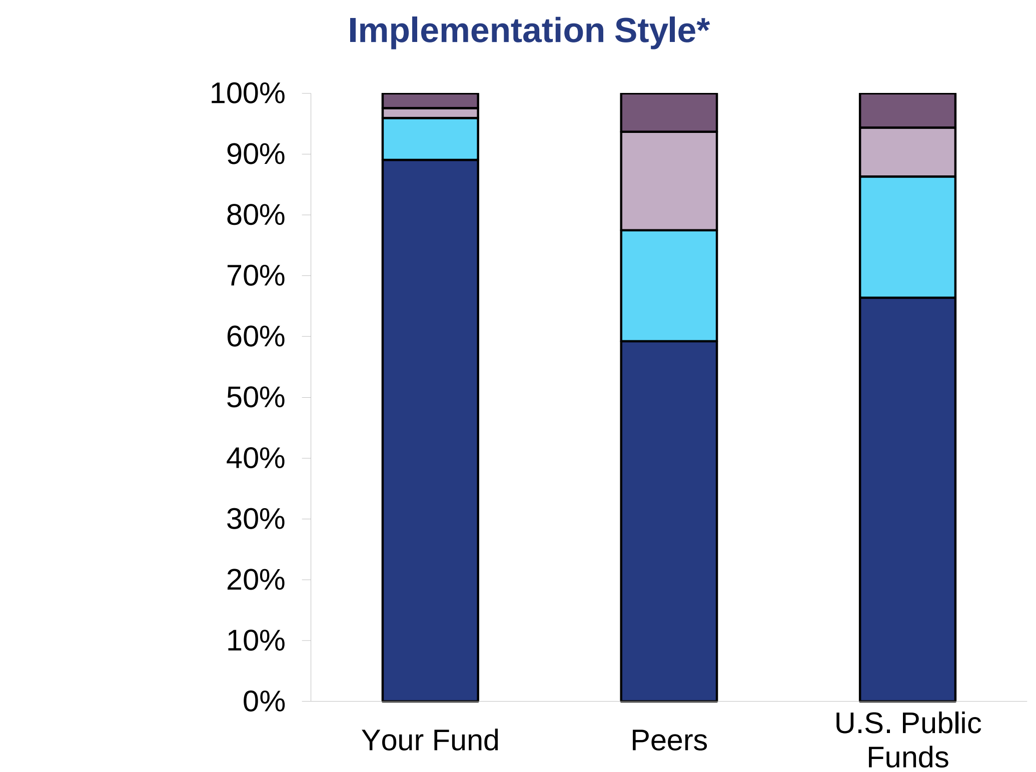
	$000s	basis points
Your actual cost	454,793	78.5 bp
Your benchmark cost	476,622	82.2 bp
Your excess cost	(21,829)	(3.8) bp

Differences in cost performance are often caused by differences in implementation style.

Implementation style is defined as the way in which your fund implements asset allocation. It includes internal, external, active, passive and fund of funds styles.

The greatest cost impact is usually caused by differences in the use of:

- External active management because it tends to be much more expensive than internal or passive management. You used more external active management than your peers (your 89% versus 59% for your peers).
- Within external active holdings, fund of funds usage because it is more expensive than direct fund investment. You had less in fund of funds. Your 7% of real estate and private equity in fund of funds compared to 12% for your peers.



	Your Fund	Peers	U.S. Public Funds
Internal passive	2%	6%	6%
Internal active	2%	16%	8%
External passive	7%	18%	20%
External active	89%	59%	66%

* The graph above does not take into consideration the impact of derivatives.

Differences in implementation style cost you 3.4 bp relative to your peers.

Cost Impact of Differences in Implementation Style						
	Your avg	% External Active				Cost/
	holdings		Peer	More/	Cost[1,2]	(Savings)
Asset class	in $mils	You	average	(less)	premium	in $000s
U.S. Stock - Broad/All	2,686	100.0%	35.1%	64.9%	42.4 bp	7,386
U.S. Stock - Large Cap	5,795	56.5%	27.3%	29.2%	25.5 bp	4,319
U.S. Stock - Small/Mid Cap	1,034	65.7%	63.9%	1.7%	58.3 bp	104
Stock - Emerging	1,611	86.8%	72.4%	14.5%	54.5 bp	1,273
Stock - ACWIxU.S.	8,890	83.2%	69.9%	13.3%	33.4 bp	3,942
Stock - Global	1,531	48.3%	76.4%	(28.1%)	36.3 bp	(1,563)
Fixed Income - U.S.	10,176	100.0%	45.5%	54.5%	12.1 bp	6,727
Fixed Income - Other	3,368	100.0%	92.5%	7.5%	Insufficient	0
REITs	1,405	100.0%	82.8%	17.2%	Insufficient	0
Real Estate ex-REITs	5,365	100.0%	92.9%	7.1%	Insufficient	0
of which Ltd Partnerships represent:		67.9%	42.0%	25.9%	50.3 bp	6,997
Other Real Assets	405	100.0%	100.0%	0.0%		0
Diversified Private Equity	17,907	100.0%	99.6%	0.4%	Insufficient	0
of which Fund of Funds represent:		9.1%	15.4%	(6.3%)	82.9 bp	(9,378)
Other private equity	946	100.0%	93.0%	7.0%	Insufficient	0
Total		89.0%	59.2%	29.8%		19,807
Style impact related to fund of funds in bps (above)						(1.6) bp
External active style impact in bps (above)						5.0 bp
Impact of differences in the use of lower cost styles[3]						(0.1) bp
Cost from your higher use of portfolio level overlays						0.1 bp
Total style impact						3.4 bp

1. The cost premium is the additional cost of external active management relative to the average of other lower cost implementation styles - internal passive, internal active and external passive.
2. A cost premium listed as 'Insufficient' indicates that there was not enough peer data to calculate the premium.
3. The 'Impact of differences in the use of lower cost styles' quantifies the net impact of your relative use of internal passive, internal active and external passive management.

The net impact of differences in external investment management costs saved 6.3 bps.

Impact of Paying More/(Less) for External Investment Management						
	Your avg	Cost in bps			Cost/(Savings)	
	holdings in $mils	Your Fund	Peer median	More/ (Less)	in $000s	in bps on total assets
U.S. Stock - Broad/All - Active	2,686	46.0	43.2	2.9	774	
U.S. Stock - Large Cap - Passive	1,466	1.7	1.0	0.7	105	
U.S. Stock - Large Cap - Active	3,276	26.7	27.8	(1.1)	(367)	
U.S. Stock - Small/Mid Cap - Active	679	77.0	62.3	14.7	998	
Stock - Emerging - Active	1,399	69.7	64.6	5.1	709	
Stock - ACWIxU.S. - Passive	1,497	3.8	4.8	(0.9)	(140)	
Stock - ACWIxU.S. - Active	7,393	39.0	38.1	0.9	650	
Stock - Global - Passive	792	6.6	5.0*	1.6	130	
Stock - Global - Active	739	41.3	41.3	0.0	0	
Fixed Income - U.S. - Active	10,176	11.6	14.6	(3.1)	(3,138)	
Fixed Income - Other - Active	3,368	52.8	60.0*	(7.2)	(2,432)	
REITs - Active	1,405	34.8	41.3	(6.5)	(914)	
Real Estate ex-REITs - Active	1,724	70.9	65.1	5.8	1,002	
Real Estate ex-REITs - Limited Partnership	3,641	128.0	115.4	12.5	4,563	
Other Real Assets - Active	405	343.6	72.8*	270.7	10,968	
Diversified Private Equity - Active	16,280	140.1	165.0	(24.9)	(40,581)	
Diversified Private Equity - Fund of Fund	1,626	212.6	247.9	(35.3)	(5,737)	
Other Private Equity - Active	946	132.4	161.0	(28.7)	(2,711)	
Derivatives/Overlays - Passive Beta	*Notional* 1,500	4.0	6.5*	(2.5)	(373)	
Total external investment management impact					(36,496)	(6.3) bp

*Universe median used as peer data was insufficient.

The net impact of differences in internal investment management costs rounds to 0.0 bps.

Impact of Paying More/(Less) for Internal Investment Management						
	Your avg	Cost in bps			Cost/(Savings)	
	holdings in $mils	Your Fund	Peer median	More/ (Less)	in $000s	in bps on total assets
U.S. Stock - Large Cap - Passive	1,053	0.5	0.3	0.2	20	
U.S. Stock - Small/Mid Cap - Passive	355	1.6	1.7	(0.1)	(3)	
Stock - Emerging - Active	212	18.7	16.5	2.2	47	
Total internal investment management impact					63	0.0 bp

The net impact of differences in oversight, custodial & other costs saved 0.9 bps.

Impact of Differences in Oversight, Custodial & Other Costs						
	Your avg holdings in $mils	Cost in bps			Cost/(Savings)	
		Your Fund	Peer median	More/ (Less)	in $000s	in bps on total assets
Oversight / Consulting / Performance Measurement	57,953	0.3	0.9	(0.6)	(3,663)	
Custodial / trustee	57,953	0.0	0.2	(0.2)	(1,118)	
Audit	57,953	0.0	0.0	(0.0)	(16)	
Other	57,953	0.0	0.1	(0.1)	(397)	
Total impact					(5,194)	(0.9) bp

The result of the Benchmark Cost analysis, which adjusts for asset mix, is that your fund was 3.8 bp low cost.

Where are you high/(low) cost by asset class					
Asset class/category	**Your avg holdings in $000's**	**Due to impl. style $000s**	**Due to paying more/ (less) $000s**	**Total $000s**	**Total bps**
U.S. Stock - Broad/All	2,686	7,386	774	8,160	1.4 bp
U.S. Stock - Large Cap	5,795	3,919	(242)	3,677	0.6 bp
U.S. Stock - Small/Mid Cap	1,034	24	994	1,018	0.2 bp
Stock - Emerging	1,611	1,409	756	2,165	0.4 bp
Stock - ACWIxU.S.	8,890	3,942	510	4,453	0.8 bp
Stock - Global	1,531	(1,563)	130	(1,434)	(0.2) bp
Fixed Income - U.S.	10,176	6,727	(3,138)	3,588	0.6 bp
Fixed Income - Other	3,368	0	(2,432)	(2,432)	(0.4) bp
Cash	723	0	0	0	N/A
REITs	1,405	0	(914)	(914)	(0.2) bp
Real Estate ex-REITs	5,365	6,997	5,565	12,562	2.2 bp
Other Real Assets	405	0	10,968	10,968	1.9 bp
Diversified Private Equity	17,907	(9,378)	(46,319)	(55,696)	(9.6) bp
Other private equity	946	0	(2,711)	(2,711)	(0.5) bp
Overlays		335	(373)	(38)	(0.0) bp
Oversight			(5,194)	(5,194)	(0.9) bp
Total				(21,829)	(3.8) bp

In summary, your fund was slightly low cost primarily due to paying less for similar services.

Reasons for Your Low Cost Status		
	Excess Cost/ (Savings)	
	$000s	bps
1. Higher cost implementation style		
• Lower use of fund of funds	(9,378)	(1.6)
• More external active management and less lower cost passive and internal management	29,184	5.0
• Higher use of overlays	335	0.1
• Other style differences	(345)	(0.1)
	19,797	3.4
2. Paying less than your peers for similar services		
• External investment management costs	(36,496)	(6.3)
• Internal investment management costs	63	0.0
• Oversight, custodial & other costs	(5,194)	(0.9)
	(41,626)	(7.2)
Total savings	(21,829)	(3.8)

In summary:

1. Policy Return

Your 5-year policy return was 3.1%. This was above the U.S. Public median of 2.9% and above the peer median of 2.8%.

2. Value Added

Your 5-year net value added was -0.3%. This was above the U.S. Public median of -0.5% and above the peer median of -0.6%.

3. Costs

Your actual cost of 78.5 bps was below your benchmark cost of 82.2 bps. This suggests that your fund was low cost.

Your fund was slightly low cost primarily due to paying less for similar services.

TAB 5 – OST ANNUAL INTERNAL AUDIT UPDATE

Oregon State Treasury
Internal Audit Services Update

Purpose

To provide the Oregon Investment Council with an update of the investment-related audit engagements completed by OST's Internal Audit Services during the past year.

Background

Every year internal audit services prepares an audit risk assessment over all areas of the Oregon State Treasury. Based on that audit risk assessment, we develop an audit plan and present it to the audit committee for approval. The level of audit work related to investments varies by the year, but typically is a significant portion of our audit plan for the year. The OIC has one member who is asked to sit on the OST audit committee. For most of the past year, Harry Demorest filled that position. Paul Cleary is the current OIC representative on the OST audit committee. The following is a summary of the audit work completed over the last year. Copies of all reports are available upon request.

Internal Audit Services Work Performed

Operational Review

We completed fieldwork on the operational review required under policy 04.01.12. The core of the review was to evaluate investment program governance and operations in the context of the "prudent investor" mandate. The criterion selected for this evaluation was the "Prudent Practices for Investment Stewards" standard developed by Fi360. This standard was developed by Fi360 based on a legal review of standards, regulations, and case law from the Employee Retirement Income Securities Act (ERISA), the Uniform Prudent Investor Act (UPIA) and the Uniform Management of Public Employee Retirement Systems Act (UMPERSA). While not all of these elements are legally binding on OIC and Treasury investment operations, they do provide a framework for the evaluation of management and governance of investment funds. The report was presented to the OIC on January 23rd, 2013, and a workshop session was held on May 29th, 2013 to discuss a number of the findings.

Investment Tax Reclaim Audit

We conducted an audit of the Investment Tax Reclaim program to determine if Treasury had properly filed for and reclaimed all investment tax withholdings available for reclamation from foreign governments under current tax treaties in a timely manner. Our analysis showed that tax reclaims were occurring in a timely manner. We did have one recommendation to staff to improve program oversight. During the engagement, we also determined that based on recent court decisions in the European Union, additional reclaim opportunities existed outside of current tax treaties. Based on that finding, Treasury management retained Deloitte & Touche, LLP to file on approximately $4,000,000 in potential reclaims. Based on a request from the Chief Investment Officer, we also performed limited work around the tax services provided in Taiwan, and had two recommendations to staff to improve the oversight of managers opening direct accounts in foreign markets.

Other Investment-Related Audit Engagements

The Oregon Secretary of State Audits Division issued a management letter addressing their review of internal controls over financial reporting for investments reported by Oregon State Treasury for the year ended June 30, 2012, on January 11, 2013. This report did not have any new findings. The Audits Division also released financial statements for the Oregon Short Term Fund for the year ended June 30, 2013 on August 28, 2013. This report had one material weakness related to financial reporting. The Audits Division contracted with Macias Gini & O'Connell to perform an audit of the Oregon Public Employees Retirement System, including work around investments performed by OST finance division staff. OST staff is continuing to work on resolving the outstanding findings related to financial reporting. No new findings were reported for the year ending June 30, 2012.

Recommendation

None, information only.

TAB 6 – COMMON SCHOOL FUND ANNUAL REVIEW

Oregon Investment Council
Common School Fund
2013 Annual Portfolio Review

Purpose

To provide the Oregon Investment Council an update on the performance, structure, and asset allocation of the Common School Fund for the one year period ended September 30, in accordance with OIC Policy 4.08.07. Also, to seek approval for changes to the public equity manager structure.

CSF Performance

Significant manager line-up changes were approved by the OIC five years ago, and during the succeeding five-year ended September 2013, the fund returned 9.4 percent, on average, which was 90 basis points better than its 8.5 percent policy benchmark. For the 12 month period ended September 30, the CSF returned 14.5 percent.

Five of the seven active equity managers have exceeded their benchmarks over the past five years. Over the past 12 months, six of eight exceeded their benchmarks. All the managers are part of the ongoing due diligence performed by OST staff who together with SIS are now proposing a domestic equity manager change for approval by the OIC.

CSF also has two fixed income managers (Western and Wellington) who employ an active investment strategy that seeks to capitalize on the historical advantage given to market participants taking spread risk. This strategy generally involves underweighting treasury securities, relative to the index, and overweighting corporate debt. Over the past three-, five-, seven- and ten-year periods, both Western and Wellington have exceeded the BC Universal index.

As reflected in the most recent flash report, the seven- and 10-year performance numbers for CSF continue to be impacted by the 2007 and 2008 relative performance, as shown below.

PERIOD	CSF Net Return	Policy Benchmark	Alpha
Calendar Year 2003	24.72	24.09	0.63
Calendar Year 2004	11.73	11.38	0.35
Calendar Year 2005	7.14	6.72	0.42
Calendar Year 2006	15.32	14.45	0.87
Calendar Year 2007	2.77	7.21	(4.44)
Calendar Year 2008	(32.39)	(30.31)	(2.08)
Calendar Year 2009	30.42	27.01	3.41
Calendar Year 2010	12.98	11.37	1.61
Calendar Year 2011	(2.13)	(1.60)	(0.53)
Calendar Year 2012	15.48	15.55	(0.07)
September 2013 YTD	11.45	10.49	0.96

Private Equity

CSF continues to build out its private equity program, now near the 10 percent target allocation, with key OPERF general partners. Total commitments to date are $240 million, with $140 million contributed, through June 30. Performance is too early to be meaningful, but the TVM is currently 1.3, with an IRR of 11.2 percent. General partners represented include Apollo, Oak Hill, KKR, TPG, Warburg Pincus, JP Morgan and Oaktree. Recent commitments made by the OIC include a $25 million commitment to Apollo Investment Fund VIII and a $20 million commitment to Oaktree Opportunities Fund IX.

Asset Allocation

CSF	Policy	Target	$ Thousands	Actual
Domestic Equities	25-35%	30%	$415,964	32.5%
International Equities	25-35%	30%	405,382	31.7%
Private Equity	0-12%	10%	124,355	9.7%
Total Equity	**65-75%**	**70%**	**945,701**	**73.9%**
Fixed Income	**25-35%**	**30%**	**319,243**	**24.9%**
Cash	**0-3%**	**0%**	**15,427**	**1.2%**
TOTAL CSF			**$1,280,371**	**100.0%**

See additional background on the CSF, including distributions made to schools, on the following pages. **Importantly, over $443 million has been distributed to schools over the past 10 years, while the corpus has increased to an all-time high of $1.28 billion (net of contributions).**

Recommended Action

Staff and SIS recommend OIC approval for the public equity manager changes proposed in the attached presentation prepared by SIS.

Additional Background on the Common School Fund

(courtesy of the Department of State Lands)

The act of Congress admitting Oregon to the Union in 1859 granted sections 16 and 36 in every township "for the use of schools." The provision of land for educational purposes was a practical solution for the developing nation that was "land rich, but cash poor."

In Oregon, Congress granted roughly six percent of the new state´s land-nearly 3.4 million acres-for the support of schools. Due to various circumstances, about 700,000 acres remain in state ownership today.

These lands and their mineral and timber resources, as well as other resources under the State Land Board´s jurisdiction (including the submerged and submersible lands underlying the state´s tidal and navigable waterways) are managed "with the object of obtaining the greatest benefit for the people of this state, consistent with the conservation of this resource under sound techniques of land management."

- **Rangelands** are leased to ranchers for grazing sheep and cattle.
- **Forestlands** are managed for timber production.
- **Waterways** are leased for uses such as sand and gravel extraction, houseboats, marinas and log rafts. The rents and royalties received from these activities are deposited in the Common School Fund, a trust fund for the benefit of Oregon´s K-12 public schools.

Other sources of money contributing to the Common School Fund include:

- **Escheats** -- property reverting to the state on an individual´s death because no heir or will exists or can be found;
- **Unclaimed property**, while the agency searches for the rightful owner;
- **Gifts** to the state not designated for some other purpose;
- **Tax revenues** from the production, storage, use, sale or distribution of oil and natural gas; and
- **5% of the proceeds** from the sale of federal lands.

The State Treasurer and the Oregon Investment Council invest the Common School Fund. In recent years, fund values have ranged from $600 million-$1 billion, depending on market conditions.

In addition, the Land Board must consider the issue of "intergenerational equity" in its distribution policies. Fund distributions cannot benefit current students at the disadvantage of future students, or vice-versa.

In early 2005, the State Land Board announced a record $45.6 million distribution of earnings from the Common School Fund to all K-12 public schools and voted to modify the future distribution policy for the fund. The turnaround in the stock market during 2004 created a significant increase in the value of the Common School Fund which reached $1 billion in February 2006.

Changes to Oregon law and the investment policies of the State Land Board beginning in the late 1980s significantly boosted earnings flowing to schools.

A 1988 Constitutional Amendment allowed investment of the Common School Fund in the stock market, subject to a legislatively-established investment cap of 50 percent. The 1997 Legislature increased the cap to 65 percent. That timely shift in strategy has nearly quadrupled the fund value due to growth of the stock market and revenues generated from land management.

In 2009, the State Land Board adopted a distribution policy that distributes 4% of the average balance of the preceding 3 years. If the average balance of the fund has increased by 11% or more, the distribution shall be 5% of the average balance of the preceding 3 years.

Legislation passed in 2005 directed the Oregon Department of Education to send CSF revenues directly to Oregon's 197 K-12 public school districts.

Recent distributions:

2000 - $35.2 million
2001 - $40.8 million
2002 - $15.7 million
2003 - $32.3 million*
2004 - $13.3 million
2005 - $40.2 million
2006 - $45.4 million
2007 - $48.5 million
2008 - $55.4 million
2009 - $40.4 million
2010 - $50.5 million
2011 - $48.8 million
2012 - $48.0 million
2013 - $53.1 million

* Includes a special distribution of $17.7 million comprised of the entire statutory portion of the corpus of the CSF accumulated over 50 years (requested during a special legislative session).

COMMON SCHOOL FUND

ANNUAL REVIEW

OCTOBER 30, 2013

STRATEGIC INVESTMENT SOLUTIONS, INC.

333 Bush Street, Suite 2000
San Francisco, CA 94104
(415) 362-3484

John P. Meier, CFA
Managing Director

Review of CSF

- Performance
  - Total Fund outperforming over 1, 3 and 5 years ending 9/30/13.
  - US Equity, similar to OPERF, has had its challenges.
  - International Equity outperforming over all time periods ending 9/30/13.
  - Private Equity is performing well with performance similar to OPERF PE.
  - Fixed Income is outperforming over time periods two years and beyond.
- Examined modest changes in managers and implementation to improve results.
- Incorporate manager views from recent Public Equity Review.

Asset Allocation

ASSET CLASS	CURRENT TARGET	CURRENT MIX	DIFFERENCE
US EQUITY	30.0%	32.5%	2.5%
INTERNATIONAL EQUITY	30.0%	31.7%	1.7%
PRIVATE EQUITY	10.0%	9.7%	-0.3%
FIXED INCOME	30.0%	24.9%	-5.1%
CASH	0.0%	1.2%	1.2%

- Current Mix within or near tolerance bands.

Recommendations

- Reduce Global Passive Mandate.
  - Take advantage of International portfolio results by reducing effective passive exposure to International Equity.
  - Use proceeds from downsizing to fund fixed income underweight and to rebalance public equity managers.
- Replace Large Cap Growth manager with a higher conviction OPERF Large Cap Growth manager.

Appendix

Public Equity Implementation

	Total Equity	Asset Class	Alternative	Current
S&P 500	14.5%	32.0%	$ 112	$ 101
Wells Capital	0.0%	0.0%	$ -	$ 90
Delaware	11.7%	26.0%	$ 91	$ -
MFS	11.7%	26.0%	$ 91	$ 96
Wanger	3.6%	8.0%	$ 28	$ 28
Boston Co	3.6%	8.0%	$ 28	$ 16
Arrowst Dev. Mkt.	17.6%	39.0%	$ 137	$ 128
Pyramis	17.6%	39.0%	$ 137	$ 119
Genesis	5.0%	11.0%	$ 39	$ 32
Arrowstreet EM	5.0%	11.0%	$ 39	$ 30
ACWI IMI	9.7%	100.0%	$ 75	$ 132
Total	100.0%		$ 775	$ 772

	Target	Alternative
US LG	16.1%	16.7%
US LV	16.1%	15.6%
US MG	6.9%	9.6%
US MV	6.9%	3.4%
US SG	2.0%	1.5%
US SV	2.0%	3.3%
INTL LG	14.2%	14.6%
INTL LV	14.2%	14.6%
INTL MG	3.1%	3.4%
INTL MV	3.1%	3.4%
INTL SG	2.4%	1.5%
INTL SV	2.4%	1.5%
EMMKT	10.7%	11.0%
Lrg/Mid	80.6%	81.2%
% Value	50.0%	47.2%
US/Non US	50.0%	50.0%
Style Risk		0.55%
Active Risk		0.97%
Risk to Bench		1.12%
Alpha		0.71%
IR		0.64

TAB 7 – INVESTMENT BELIEFS PROJECT

MEMORANDUM

Date: October 14, 2013

To: Keith Larson, Chairman, Oregon Investment Council

CC: Ted Wheeler, Richard Solomon, Katy Durant, Rukaiyah Adams, Paul Cleary, John Skjervem, Mike Mueller

From: Allan Emkin (PCA), John Linder (PCA) and Neil Rue (PCA)

RE: Thoughts on Governance Structure and Documentation Hierarchy

---

At the May 29, 2013 Operational Review Workshop, and again at the Oregon Investment Council meeting on September 25, 2013, there was considerable discussion (and perhaps some confusion) concerning who "owns" the investment beliefs we have been engaged to develop in collaboration with OST Investment Division staff. This memo seeks to answer that particular ownership question as well as clarify what we believe to be the optimal governance hierarchy for successful public funds management.

- <u>The Plan Sponsor's Goal</u>, which should guide the OIC's overall management and oversight responsibilities, is to "make the moneys as productive as possible," subject to the standard of judgment and care described in ORS 293.726.

- <u>Investment Beliefs</u> are the domain of the OIC and comprise the foundational investment principles agreed upon and adopted by its members. These beliefs should inform all subsequent policies and procedures.

- <u>Investment Policy</u> should be a) jointly owned by the OIC and the OST and b) represent a logical and more specific extension of the OIC's investment beliefs. Once investment beliefs are agreed on and adopted, policy should be changed, if necessary, to support these beliefs. As some sections of current policy and governance documents may be inconsistent with the proposed set of investment beliefs, policy updates and revisions should be developed by Investment Division staff for subsequent OIC review and approval. Finally, all discretionary implementation authority delegated to Investment Division staff should be explicitly specified in policy.

- <u>Investment Implementation</u> should be owned by Investment Division staff. PCA believes investment implementation should manifest as one or more procedure documents which translate higher-level policy intentions into day-to-day operating guidelines. These procedures should also stipulate the areas and extent to which the OIC has delegated decision-making authority to Investment Division staff. Finally, implementation activities and related procedures should be subject to periodic audits to confirm that such activities and procedures are in fact consistent with and reflective of investment policy.

The hierarchy or framework described above is intended to clarify roles and responsibilities between the OIC and Investment Division staff; moreover, we believe this framework provides important support for an effective yet efficient governance structure. In our view, investment policy is the bridge between the OIC's foundational investment beliefs and staff's regular implementation activities. All existing documents, including those covering OIC governance, objectives and policy, should be reviewed and revised (or eliminated as redundant), to conform with the adopted beliefs. Policy documents should be succinct and high level while implementation procedures should provide more detailed guidance on daily operating activities. This approach would delegate implementation activities to staff provided the procedures guiding such activities are consistent with policy and subject to periodic audit. Accordingly, we recommend that current policy documents be thoroughly reviewed and revised to a) reflect the OIC's investment beliefs when adopted and b) remove any and all implementation language that is better captured and articulated in one or more implementation procedure documents.

DISCLOSURES: This document is provided for informational purposes only. It does not constitute an offer of securities of any of the issuers that may be described herein. Information contained herein may have been provided by third parties, including investment firms providing information on returns and assets under management, and may not have been independently verified. The past performance information contained in this report is not necessarily indicative of future results and there is no assurance that the investment in question will achieve comparable results or that the Firm will be able to implement its investment strategy or achieve its investment objectives. The actual realized value of currently unrealized investments (if any) will depend on a variety of factors, including future operating results, the value of the assets and market conditions at the time of disposition, any related transaction costs and the timing and manner of sale, all of which may differ from the assumptions and circumstances on which any current unrealized valuations are based.

Neither PCA nor PCA's officers, employees or agents, make any representation or warranty, express or implied, in relation to the accuracy or completeness of the information contained in this document or any oral information provided in connection herewith, or any data subsequently generated herefrom, and accept no responsibility, obligation or liability (whether direct or indirect, in contract, tort or otherwise) in relation to any of such information. PCA and PCA's officers, employees and agents expressly disclaim any and all liability that may be based on this document and any errors therein or omissions therefrom. Neither PCA nor any of PCA's officers, employees or agents, make any representation of warranty, express or implied, that any transaction has been or may be effected on the terms or in the manner stated in this document, or as to the achievement or reasonableness of future projections, management targets, estimates, prospects or returns, if any. Any views or terms contained herein are preliminary only, and are based on financial, economic, market and other conditions prevailing as of the date of this document and are therefore subject to change.

The information contained in this report may include forward-looking statements. Forward-looking statements include a number of risks, uncertainties and other factors beyond the control of the Firm, which may result in material differences in actual results, performance or other expectations. The opinions, estimates and analyses reflect PCA's current judgment, which may change in the future.

Any tables, graphs or charts relating to past performance included in this report are intended only to illustrate investment performance for the historical periods shown. Such tables, graphs and charts are not intended to predict future performance and should not be used as the basis for an investment decision.

All trademarks or product names mentioned herein are the property of their respective owners. Indices are unmanaged and one cannot invest directly in an index. The index data provided is on an "as is" basis. In no event shall the index providers or its affiliates have any liability of any kind in connection with the index data or the portfolio described herein. Copying or redistributing the index data is strictly prohibited.

The Russell indices are either registered trademarks or tradenames of Frank Russell Company in the U.S. and/or other countries.

The MSCI indices are trademarks and service marks of MSCI or its subsidiaries.

Standard and Poor's (S&P) is a division of The McGraw-Hill Companies, Inc. S&P indices, including the S&P 500, are a registered trademark of The McGraw-Hill Companies, Inc.

CBOE, not S&P, calculates and disseminates the BXM Index. The CBOE has a business relationship with Standard & Poor's on the BXM. CBOE and Chicago Board Options Exchange are registered trademarks of the CBOE, and SPX, and CBOE S&P 500 BuyWrite Index BXM are servicemarks of the CBOE. The methodology of the CBOE S&P 500 BuyWrite Index is owned by CBOE and may be covered by one or more patents or pending patent applications.

The Barclays Capital indices (formerly known as the Lehman indices) are trademarks of Barclays Capital, Inc.

The Citigroup indices are trademarks of Citicorp or its affiliates.

The Merrill Lynch indices are trademarks of Merrill Lynch & Co. or its affiliates.

INVESTMENT BELIEFS CONSOLIDATED

Oregon Public Employees Retirement Fund

September 2013

AGENDA ITEMS

INVESTMENT BELIEFS SURVEY PROCESS:

- January / February: 1-on-1 and 2-on-1 interviews with Allan Emkin and John Skjervem to elicit OIC member and Staff beliefs, ideas and preferences
- March: Staff and Council answered Preliminary Investment Beliefs Questionnaire
- April: PCA scored survey responses from participants (8 Staff, 6 Council)
- May: PCA ranked investment viewpoint scores
- May 29th Meeting: Investment viewpoint rankings used to form initial basis for a new set of OIC Investment Beliefs that have broad consensus among Staff and Council members

INVESTMENT BELIEFS SURVEY PROCESS: Summary of Preliminary Statements

1. As a long-term investor, OIC should allocate a significant portion of its assets to illiquid, private markets.
2. Return dispersion in private markets is very wide; top quartile manager selection and vintage year diversification are paramount.
3. To exploit market inefficiencies, OIC must be contrarian and innovative in its approach to opportunistic investments.
4. Over the long-term, equity-oriented investments provide reliable return premiums relative to risk-free investments.
5. All fees, commissions, and transaction costs should be diligently monitored and managed in order to maximize net investment returns.
6. The OIC is a policy-setting council that delegates investment management to OST staff and qualified external fiduciaries.
7. Incentive structures should be carefully evaluated to ensure alignment with OIC goals and desired investment outcomes.
8. Adequate and peer-group relative resources are required to successfully compete in world capital markets.
9. Asset allocation among complementary investment classes is the OIC's leading policy decision impacting long-term returns and risk.
10. Certain segments of the capital markets have inefficiencies that can be exploited with active management.
11. The OIC has authority to set and monitor portfolio risk. Both short-term and long-term risks are critical.

REORGANIZATION AND CONSOLIDATION OF PRELIMINARY BELIEF STATEMENTS

- Based upon discussions held during the May 1, 2013 OIC meeting:
  - Statements were reorganized/consolidated under six broad unified beliefs and corresponding sub-beliefs; and
  - Interpretation statements were added to clarify beliefs understanding.

1) THE OIC SETS POLICY AND IS ULTIMATELY RESPONSIBLE FOR THE OST/OPERF INVESTMENT PROGRAM

A. **The OIC is a policy-setting council that delegates investment management to OST staff and qualified external fiduciaries.** The OIC sets strategic policy and tasks both OST staff and external managers with policy implementation.

B. **The OIC has authority to set and monitor portfolio risk. Both short-term and long-term risks are critical.** Portfolio risk is multifaceted. For example, the OIC must weigh the short-term risk of principal loss against the long-term risk of failing to meet return expectations. As part of the risk monitoring process, the OIC should establish a process for identifying extreme price/valuation levels as well as a decision-making protocol when such levels have been reached/breached.

C. **To exploit market inefficiencies, the OIC must be contrarian and innovative in its approach to opportunistic investments.** As part of its short- and long-term risk management efforts, the OIC should prepare for periods of extreme price/valuation levels and/or related financial market dislocations and have the ability and fortitude to act expeditiously during such periods.

1) THE OIC SETS POLICY AND IS ULTIMATELY RESPONSIBLE FOR THE OST/OPERF INVESTMENT PROGRAM (continued)

D. **Incentive structures should be carefully evaluated to ensure proper alignment with OST/OPERF investment objectives.** When applied to staff, evaluation criteria should be based (in large part) on decisions over which staff members have clear authority and control. Furthermore, total portfolio results (in addition to individual asset class returns) should be considered. Finally, the evaluation period should be consistent with an appropriate investment horizon or market cycle.

E. **Adequate resources are required to successfully compete in global capital markets.** Staffing levels and operating budgets should be determined by capability requirements using benchmark assessments of other well respected organizations of similar size and portfolio complexity. The benefits of staff continuity should also be recognized.

2) ASSET ALLOCATION DRIVES RISK AND RETURN

A. Asset allocation is the OIC's primary policy tool for managing the OST/OPERF investment program's long-term risk/return profile.

Decisions regarding strategic asset allocation will have the largest impact on the OST/OPERF investment program's realized return and risk and hence should be made judiciously and receive special emphasis and attention.

The timing and magnitude of projected employer contributions and future benefit payments have significant cash flow implications and thus should receive explicit consideration during the OIC's asset allocation decision-making process.

3) THE EQUITY RISK PREMIUM WILL BE REWARDED

A. **Over the long-term, equity-oriented investments provide reliable return premiums relative to risk-free investments.** Though returns for risk taking are not always monotonic or rewarded consistently over time, bearing equity risk does command a positive expected return provided such risk is reasonably priced.

4) PRIVATE MARKET INVESTMENTS CAN ADD SIGNIFICANT VALUE AND REPRESENT A CORE OST/OIC COMPETENCY

A. **OIC should capitalize on its status as a true, long-term investor by allocating a meaningful portion of OST/OPERF assets to illiquid, private market investments.** Inefficiencies exist in private markets that provide skilled managers with excess return opportunities relative to public market analogues. Private markets may also offer an "illiquidity premium" which the OIC can exploit given its position as a true, long-term investor.

B. **Dispersion in private market investment returns is very wide; accordingly, top quartile manager selection and vintage year diversification are paramount.** Private market investment success is predicated on a) identifying skilled managers and b) developing long-term investment relationships that enable skill to manifest in the form of excess returns. Proper investment pacing including deliberate vintage year diversification is also an integral element of superior private market investment results.

5) CAPITAL MARKETS HAVE INEFFICIENCIES THAT CAN BE EXPLOITED

A. **Inefficiencies that can be exploited by active management may exist in certain segments of the capital markets.** While largely efficient, select segments of the capital markets can sometimes be exploited by skilled active management. The nature (i.e., perceived magnitude and likely duration) of such inefficiencies should inform the proposed active management strategy (e.g., discretionary or systematic).

B. **Passive implementation will outperform the median active manager over time.** In public market asset classes, passive investment management is expected to outperform the median active manager. Accordingly, active management should be a deliberate choice and applied only to those strategies and managers in which the OIC enjoys a high degree of confidence that such active management activities will be sufficiently rewarded on a risk-adjusted basis and net of all fees and related transactions costs.

6) COSTS DIRECTLY IMPACT INVESTMENT RETURNS AND SHOULD BE MONITORED AND MANAGED CAREFULLY

A. **All fees, expenses, commissions and transaction costs should be diligently monitored and managed in order to maximize net investment returns.** While all costs should be monitored and controlled, costs should be evaluated relative to both expected and realized returns.

B. **Incentive structures should be carefully evaluated to ensure proper alignment with OST/OPERF investment objectives.** Fee and incentive structures drive both individual and organizational behavior. These structures (particularly in private market strategies) should be carefully evaluated to ensure that individuals' and/or organizations' goals and incentives are well aligned with the investment objectives established by the OIC.

NEXT STEPS: Exploring Areas of Non-Consensus

- Areas of limited consensus/non-consensus:
  - *Divesture initiatives cannot be implemented without sacrificing investment returns or increasing portfolio risks* -- high degree of variation among OIC members;
  - *Shareholder activism has the potential to improve board and company performance* -- high degree of variation among staff members; and
  - *Environmental, social and governance (ESG) factors impact performance and should be part of the due diligence process* -- high degree of variation among both staff and OIC members.

Disclosures

Pension Consulting Alliance, Inc. (PCA) prepared this document solely for informational purposes. To the extent that market conditions change subsequent to the date of this report, PCA retains the right to change, at any time and without notice, the opinions, forecasts and statements of financial market trends contained herein, but undertake no obligation or responsibility to do so.

Neither PCA nor PCA's officers, employees or agents, make any representation or warranty, express or implied, in relation to the accuracy or completeness of the information contained in this document or any oral information provided in connection herewith, or any data subsequently generated herefrom, and accept no responsibility, obligation or liability (whether direct or indirect, in contract, tort or otherwise) in relation to any of such information. PCA and PCA's officers, employees and agents expressly disclaim any and all liability that may be based on this document and any errors therein or omissions therefrom. Neither PCA nor any of PCA's officers, employees or agents, make any representation or warranty, express or implied, that any transaction has been or may be effected on the terms or in the manner stated in this document, or as to the achievement or reasonableness of future projections, management targets, estimates, prospects or returns, if any. Any views or terms contained herein are preliminary only, and are based on financial, economic, market and other conditions prevailing as of the date of this document and are therefore subject to change. Past performance does not guarantee or predict future performance.

PCA prepared this document and the analyses contained in it based, in part, on certain assumptions and information obtained from sources affiliated with the client, including, without limitation, investment advisors, investment managers, consultants, client staff, outside counsel and third-party providers. PCA's use of such assumptions and information does not imply that PCA independently verified or necessarily agrees with any of such assumptions or information. PCA assumed and relied upon the accuracy and completeness of such assumptions and information for purposes of this document. This information is provided on an "as is" basis and the user of this information assumes the entire risk of any use made of this information.

TAB 8 – OIC POLICY UPDATES

OIC Policy Updates
October 2013

Purpose
To update several OIC Policies to conform policy with OIC actions and practice and to address recent audit and review comments.

Discussion
The following is a brief summary of the proposed policy changes that follow this write-up:

1. 4.00.01: Changes verbiage in policy from "Chairman" to "Chair" to be consistent with other policies.
2. 4.00.02: Defines in policy the responsibilities between OIC and Treasury staff as it pertains to maintaining policies and procedures. Partially addresses audit finding ISS#8. Sets the election of the OIC chair and vice-chair at the end of the meeting before terms begin. Defines role of Chair. Addresses audit finding ISS#2.
3. 4.01.02: Changes policy to explicitly require that managers seek best execution and to require the review or reporting of any soft dollar trading activities. Addresses audit findings ISS#15 and #16.
4. 4.01.15: Updates Sudan and Iran divestment policy, as drafted by DOJ, per changes to ORS 293.814.
5. 4.01.18: Revises policy to acknowledge the periodic asset-liability studies undertaken by the OIC, and outlines the key steps taken. Revises asset allocation policy per recent OIC action. Provides procedure for the updating of expected returns. Addresses audit finding ISS#38.
6. 4.03.01: Defines the strategic role for fixed income for OPERF, and references the strategic target for the asset class back to 4.01.18.
7. 4.03.04: Clarifies responsibility for the compliance program within Treasury and clarifies other policy language.
8. 4.04.01: Same as 6 above, but for real estate asset class.
9. 4.06.01: Same as 6 above, but for private equity.
10. 4.06.02: Adjusts target for alternative investments from 5% to 10% and increases expected implementation period.
11. OIC Summary of Key Investments Duties and Functions: Entire document is deleted. Key language is incorporated in "OIC Statement of Funds Governance" revised below.
12. OIC Statement of Funds Governance: Makes policy applicable to all funds, not just OPERF. Incorporates key language from 11 above. Further clarifies roles of OIC and staff.
13. Investment Objectives and Policy Framework for OPERF: Updates to return expectations as provided by SIS, and asset class targets and ranges. Updates to definitions in the Glossary.
14. OIC Statement of Investment and Management Beliefs: Entirely new document reflecting beliefs approved by OIC at recent meeting.

Recommendation: Approve staff proposed changes outlined above, and as reflected in the attached policies (excerpts provided is some instances).

FUNCTION: **O~~.~~I~~.~~C~~.~~ Section**
ACTIVITY: **Development of the Agenda for OIC Meetings**

POLICY:~~-~~ **An agenda shall be produced for all OIC meetings, by the Office of the State Treasurer, through the Investment Division staff.**

PROCEDURES:

1. The agenda of Oregon Investment Council (OIC) meetings is the responsibility of the Chief Investment Officer, in coordination with the OIC Chair~~man~~ and State~~the~~ Treasurer.

2. Prior to each meeting, the Treasurer, through the OST Investment Division staff, shall recommend to the Chair~~man~~ a suggested agenda. The Chair~~man~~, in coordination with the Treasurer, shall select those items that are to be placed on the agenda.

3. The Treasurer shall produce the agenda established in #2 and mail it to all interested parties along with any pertinent documents or material.

4. Any member of the OIC may at any time request that the Chair~~man~~ place items on the agenda. Council members are encouraged to provide adequate time for matters to be presented to the Chair~~man~~ in order to comply with #2 above.

SAMPLE FORMS, DOCUMENTS, OR REPORTS (Attached):

None

FUNCTION: **O.I.C. Section**
ACTIVITY: **Oregon Investment Council (OIC) and Staff Duties**

POLICY: **The Oregon Investment Council formulates broad policies for the investment and reinvestment of moneys in the investment funds and the acquisition, retention, management and disposition of investments of the investment Funds (Fund or Funds). The Council includes the State Treasurer and four appointees of the Governor. Additionally, the PERS Director sits with the Council, but may not vote. The members of the Council biennially elect a chair and a vice chair from among the four Governor appointed, voting members. The vice chair functions as the chair in the event the chair is unable to fulfill the duties. OIC meetings are conducted according to the rules set forth in sample Form A.**

The OIC is responsible for approving and revising policies. The Chief Investment Officer, working with investment division staff, is responsible for approving and revising procedures.

PROCEDURES:

1. **Staff and Research Support.** Should the OIC wish to investigate or research a matter related to current or potential investment activities, OST Investment Division staff shall provide support and assistance as required.

2. **Record, Transcribe, and Distribute Minutes of OIC Meetings.** A member of the Investment Division staff records and distributes minutes for OIC meetings. Approved minutes, except those taken during executive session, are posted to OST's website. In addition, meetings shall be recorded by audio file.

3. **Draft OIC Resolutions.** The Chief Investment Officer or staff may draft policies or resolutions for OIC action upon request. All advisors of the Council, including but not limited to private investment advisors, staff members of the OST and legal counsel, when practicable, shall submit to the Council for its consideration written recommendations, whenever the advisor provides information to the Council which the advisor believes may require action by the Council. From the written recommendations, OST staff shall have prepared for the Council's consideration appropriate forms of motion. Whenever practicable, OST staff shall review and advise the Council in writing whether proposed Council action concerning investments falls within or outside of existing investment policies and, if within, shall state the policy that is applicable.

4. **Council Elections.** The Council shall select one of its members as chair, for a term and with powers and duties necessary for the performance of the functions of the office as the council determines (ORS 293.711(3)). The Council shall biennially elect a chair, and vice chair, at the ~~first~~ last regular meeting of the Council in each ~~even~~odd-numbered calendar year. A person may not serve as chair of the Council for more than four years in any 12-year period (ORS 293.711(4)). Between biennial elections, with at least one week's notice, a majority of the Council may request an ~~special~~ election, to be held at the next meeting of the Council, to select officers for the unexpired term of a chair or vice chair unable to complete his/her term.

SAMPLE FORMS, DOCUMENTS, OR REPORTS (Attached)

Sample Form A — Rules of Conduct for OIC Meetings

Sample Form A

Rules for Conduct for Oregon Investment Council Meetings

Applicability -of- Rules

1. These rules are applicable to convened business meetings, regular and special, of the Oregon Investment Council.

2. Meetings will be called from time-to-time by the Chairman:

   a. Regular meetings will generally be held eight times per year;

   b. Special meetings and informal meetings will be held as needed;

   c. Meetings may also be held by telephone; and

   d. Meetings in Executive Session shall be held according to Oregon Revised Statutes.

3. **Chair**: The Chair is responsible for coordinating with the CIO to set the agenda of the OIC, in accordance with Policy 4.00.01. Additionally, the Chair shall preside over all regular and special meetings of the OIC. The primary role of the Chair is to help ensure OIC meetings are as efficient and productive as possible, and to facilitate communication among OIC members and between the OIC and the Office of the State Treasurer.

~~3~~4. Notice of meetings will be given in compliance with Oregon Revised Statutes 192.610-690 and cases applicable thereto.

~~4~~5. **Agenda**: -Notice of the meeting shall also contain a copy of the agenda for the meeting setting forth, with reasonable clarity, the matters to be discussed.

~~5~~6. **Quorum:** -Three members are a quorum to take action.

~~6~~7. **Majority -Vote**: -An affirmative vote of three members of the Council is required for the Council to approve resolutions.

~~7~~8. **Conflict -of -Interest**: –Notice of conflict of interest, as defined in Oregon Revised Statutes 244.120 and rules promulgated by the Oregon Government Ethics Commission and this Council, shall be announced prior to taking an action on an issue. Announced conflicts should be recorded as provided in Oregon Revised Statutes 244.130 (See also: 4.00.03). "Take action" means to vote, debate, recommend or discuss.

~~8~~9. **Voting**: -Members, when present, shall vote either aye or nay on an issue, except in the case of a potential conflict of interest. If such a potential conflict of interest exists, the member shall make a declaration of that conflict and may be excused from voting by the body.

~~9~~10. **Record -of -Votes:** –Roll call votes shall be tallied by the Chief Investment Officer through an oral roll call.

~~10~~11. **Recess -or -Adjournment:** -A quorum being present, any meeting of the Council may be recessed or adjourned by a majority vote of the Council or by the Chair of the meeting.

FUNCTION: **General Policies and Procedures**
ACTIVITY: **Investment Trading Authority**

POLICY: **As delegated by the Treasurer, a Senior Investment Officer (including the Chief Investment Officer and the Deputy Chief Investment Officer) has full authority to purchase or sell investments within the asset class for which the investment officer has responsibility, except as otherwise noted in the Policies and Procedures manuals. In exercising this delegated authority, Investment Officers and Investment Division staff are to invest 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. (ORS 293.726)**

In managing funds, Investment Officers shall seek "Best Execution" during the trading process, seeking to maximize the value of the underlying portfolio consistent with its stated investment objectives and any applicable contraints.

Staff shall review external manager use of "soft dollars" on a regular basis and any use of soft dollars by OST investment officers, in the management of internal portfolios, must be reported to the Chief Investment Officer prior to engaging in soft dollar trading activity.

PROCEDURES:

1. **Short-Term Investments.** The Short-Term Investment Officer and Fixed Income Investment Officers may negotiate and execute trades under the general guidance of the Senior Fixed Income Investment Officer. The Investment Analyst may trade under the guidance of the Senior Fixed Income Investment Officer, the Short-Term Investment Officer or the Fixed Income Investment Officer. See also Policy 4.03.02.

2. **Fixed Income Investments.** The Short-Term Investment Officer and the Fixed Income Investment Officer may negotiate and execute trades under the general guidance of the Senior Fixed Income Investment Officer. The Investment Analyst may trade under the specific direction of the Senior Fixed Income Investment Officer or the Short-Term Investment Officer. Such trading will usually be limited to investing in short-term (i.e., 180 days or fewer) securities such as money market instruments or certificates of deposit to adjust for portfolio cash needs or to maintain the portfolio in a fully invested state.

3. **Real Estate Investments.** See Policy 4.04.01.

4. **Equity Investments.** — The Equity Investment Officers may negotiate and execute trades in public equities and public equity futures contracts under the general guidance of the Chief Investment Officer. The Equity Investment Officers may make recommendations and reports to the Council regarding the retention of investment management firms. The OIC maintains the authority to hire and dismiss investment management firms at will. The Equity Investment Officers have authority to review investment management firm transactions for contract compliance and consistency with the philosophy and expertise of those firms.

5. **Private Equity Investments.** See Policy 4.06.01.

6. **Alternative Investments.** See Policy 4.06.02.

7. **OPERF Opportunity Portfolio.** See Policy 4.06.03.

8. In seeking "Best Execution," OST Investment Officers will: (1) determine portfolio trading requirements; (2) select appropriate trading techniques, venues, and agents; (3) control the pace of liquidity, endeavoring to avoid excessive market impact; (4) protect the interests of beneficiaries and the proprietary information of decisions made by investment managers; and (5) monitor the results on a continual basis.

9. Soft Dollar Arrangement refers to an arrangement under which an investment manager (internal or external) obtains products or services, other than execution of securities transactions, from or through a broker in exchange for the investment manager's direction of client transactions to the broker. Explicit goods or services received by OST staff in exchange for such brokerage~~,~~ shall be reported no less than quarterly to the Chief Investment Officer.

SAMPLE FORMS, DOCUMENTS, OR REPORTS (Attached):

None

FUNCTION: **General Policies and Procedures**
ACTIVITY: **Sudan and Iran Divestiture**

BACKGROUND~~POLICY~~:

ORS 293.814 states, in part, that:

~~(1):~~ The Oregon Investment Council and the State Treasurer, in the State Treasurer's role as investment officer for the council, shall act reasonably and in a manner consistent with fiduciary standards, including the provisions of ORS 293.721 and 293.726, to try to ensure that managers who are engaged by the council or the State Treasurer for the active management of investment funds consisting of the Public Employees Retirement Fund referred to in ORS 238.660, through the purchase and sale of publicly traded equities, are not investing in publicly traded equities of any scrutinized company.

[The purchase and sale of publicly traded equities] does not apply to investments indirectly made through index funds, fund of funds or privately placed investments.

It also states, in part, that:

~~(2):~~ Consistent with fiduciary standards, including the provisions of ORS 293.721 and 293.726, the State Treasurer shall adopt a statement of policy that describes a process of engagement with managers who

(a) Are engaged [as part of their active management of Oregon Public Employee Retirement Fund "OPERF" assets] through the purchase and sale of publicly traded equities; and

(b) Have invested such funds in scrutinized companies.

And, it further states, in part, that:

[The above-described policy must require] the State Treasurer, to the extent practicable, to~~shall~~ identify and send a written notice to the managers described ~~in subsection (1) of this section.~~ The notice shall encourage the managers, consistent with fiduciary standards, including the provisions of ORS 293.721 and 293.726, to:

(a) Notify scrutinized companies with which the managers have made investments of the State Treasurer's policy [i.e., Policy 4.01.15]~~this Policy 4.01.15~~; and

(b) Not later than 90 days [from the date of ~~the~~]-giving the notice, end investments in the scrutinized companies and avoid future investments in the scrutinized companies, as long as the managers may do so without monetary loss through reasonable, prudent and productive investments in companies generating returns that are comparable to the returns generated by the scrutinized companies.

DEFINITIONS:

(1) **"Company"** means any sole proprietorship, organization, firm, association, corporation, utility, partnership, venture, public franchise, franchisor, franchisee or its wholly owned subsidiary that exists for profit-making purposes or otherwise to secure economic advantage.

(2) **"Invest"** means to commit funds or other assets to a company. **"Invest"** includes making a loan or other extension of credit to a company, or owning or controlling a share or interest in a company or a bond or other debt instrument issued by a company.

(3) **"Investment"** means the commitment of funds or other assets to a company for an interest in the company. **"Investment"** includes the ownership or control of a share or interest in a company or of a bond or other debt instrument issued by a company.

(4) **"Iran"** means the Islamic Republic of Iran.

(5) **"Scrutinized company"** means any company that currently has an investment: 1) in the Sudan, from which federal law specifically allows public pension plans to divest; or 2) in the energy sector of Iran as described in section 202(c)(1) of the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2010 (P.L. 111-195), as further determined by the United States Department of State.

(6) **"Sudan"** means the Republic of the Sudan and any territory under the administration, legal or illegal, of Sudan, including but not limited to the Darfur region.

CONDITIONS PRECEDENT TO IMPLEMENTATION~~PROCEDURES~~:

~~(1)~~ This policy, including the reporting requirement below, will be implemented when, and if, ~~go into effect if~~ the Legislative Assembly appropriates sufficient moneys to the State Treasurer available for implementation of this policy, not including OPERF assets or ~~other than~~ moneys described by ORS 293.718. ~~or moneys in the Public Employees Retirement Fund, to administer its requirements.~~

POLICY:

(~~2~~1) Identification of Scrutinized Companies:

~~(a)~~ The Treasurer's staff may engage the services of a specialized research firm to identify scrutinized companies, in accordance with Oregon law, based on its~~their~~ professional judgment.

(2) If a research firm is retained:

A) The Treasurer's staff will work with the retained research firm to review and verify a ~~the~~ list of scrutinized companies;~~.~~

B) The Treasurer's staff will~~shall~~ provide external managers with the ~~initial~~ list of scrutinized companies and any updates to the list, as they are identified and verified by the research firm working with the Treasurer's staff and remind them of the fiduciary parameters within which they may take divestment action in accordance with such notice~~retained~~;~~.~~

C) External managers shall advise scrutinized companies that they may comment in writing to the State Treasurer to dispute the identification of the company as a scrutinized company; and~~.~~

D) If the State Treasurer determines that a company is not a scrutinized company, the State Treasurer shall notify the relevant manager of the State Treasurer's determination.

(3) The State Treasurer's staff will continue a dialogue with the OIC's proxy voting agent to ensure that ballot issues related to the disclosure of Sudan investments are properly addressed.

REPORTING:

On or before March 15 of each year, the State Treasurer shall make available on the State Treasurer's website a summary of actions taken during the previous year in accordance with ORS 293.811 to 293.817. The summary shall include a list of identified scrutinized companies.

SAMPLE FORMS, DOCUMENTS, OR REPORTS (Attached):

A. Presidential Executive Order No. 13067: "Blocking Sudanese Government Property and Prohibiting Transactions with Sudan," Signed by President Clinton, November 3, 1997.
B. Overview of U.S. Sudanese Sanctions Regulations, U.S. Department of the Treasury, Office of Foreign Assets Control.

FUNCTION: **General Policies & Procedures**

ACTIVITY: **~~Public Employees Retirement Fund~~OPERF Asset Allocation and Rebalancing Policy**

POLICY: **The Oregon Investment Council (the "OIC~~ouncil~~") 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.**

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 5) a recommended strategic asset allocation and rebalancing framework.

The purpose of rebalancing ~~back to asset class targets~~ is to ensure that the ~~OPERF's~~ actual OPERF asset allocation does not drift significantly from the strategic targets~~asset allocation policy~~ approved by the OIC following the . ~~The strategic asset allocation has been developed after a~~ rigorous asset-liability analysis described above. Moreover, rebalancing ensures that ~~of~~ the return ~~Council's~~ objectives and risk tolerance parameters approved by the OIC . ~~Rebalancing ensures that the Plan's desired strategy and level of risk~~ are consistently and effectively reflected in the management of OPERF assets ~~maintained consistently~~ over time. With OIC oversight, i~~It therefore ensures that major policy decisions of the Council are implemented effectively.~~ Implementing rebalancing actions is~~are~~ the responsibility of ~~the~~ OST s~~S~~taff, although many p~~ with the Council's oversight. P~~rivate market assets ~~equity and certain real estate investments~~ 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 strategy would be to rebalance continually back to the strategic asset allocation. However, rebalancing involves transactions costs such as brokerage and market impact~~other transaction costs~~. As a result, ranges are established around the strategic ~~target~~ asset allocation targets in order to~~hat~~ balance~~s~~ the desirability of achieving ~~being at the~~ target allocations with the various transactions costs associated with these rebalancing activities~~of transactions~~. In addition, t~~T~~he OIC has retained a~~n policy implementation cash~~ overlay manager to both minimize ~~the~~ cash exposures at both the Fund and manager level~~,~~ and ~~to~~ more closely align the Fund's actual asset allocation~~portfolio~~ with its strategic targets~~the policy portfolio~~, generally through the buying and selling of futures contracts to increase or decrease asset class exposures, as necessary.

A breach of any of the established ranges triggers a review and possible rebalancing back to the target allocation with due consideration given to the liquidity of the investments, transaction costs and portfolio structure within asset classes.

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, and if information on market values is available. Rebalancing will take place if the weight to any asset class exceeds the policy range. Staff shall manage liquidity by rebalancing assets between and among managers, as necessary, to meet cash needs of the Fund, and within target weightings assigned t~~for~~ individual managers within an asset class. All physical rebalancings are done in concert with the ~~policy implementation cash~~ overlay manager, described above.

C. Rebalancing should be implemented by the most cost-effective means available. Cash flows into and out of the Fund will 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 of the most appropriate allocation, taking into account the portfolio characteristics, 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~~ouncil~~.

F. For illiquid investments such as private equity, some alternative assets and real estate, the judgment on rebalancing will consider the higher transaction costs and available opportunities, if any.

G. Staff shall ~~will~~ report ~~monthly~~ to the OIC~~ouncil,~~ the actual market valuations versus the target allocations by ~~for~~ asset class monthly as well as any and ~~es. Staff shall report~~ all rebalancing activity ~~to the Council on a~~ quarterly~~ basis~~.

3. ASSET ALLOCATION POLICY TARGETS AND RANGES

Asset Class	Target Allocation	Range
Public Equities	~~43~~37.5%	~~38-48~~32.5-42.5%
Private Equity	~~16~~20%	~~12-20~~16-24%
Total Equity	**~~59~~57.5%**	**~~54-64~~52.5-62.5%**
Fixed Income	~~25~~20%	~~20-30~~15-25%
Real Estate	~~11~~12.5%	~~8-14~~9.5-15.5%
Alternatives	~~5~~10%	0-~~8~~10%
Cash	0%	0-3%
Total Fund	**100%**	

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

FUNCTION: Fixed Income Investments

ACTIVITY: Strategic Role of Fixed Income for OPERF

POLICY: **The strategic role of fixed income investments is to provide diversification to the OPERF portfolio in general and its allocation to equity securities in particular~~, through lower expected return and volatility and a lower correlation to equities~~. Fixed income investments~~securities~~ also provide liquidity to help meet OPERF's~~s to meet~~ cash flow needs. Fixed income investments are ~~should comprise 20% to 30% of OPERF's total assets,~~ subject to the specific~~,~~ strategic target allocations established by the OIC in Policy 4.01.18.**

PROCEDURES:

A. ~~PROCEDURES~~PURPOSE~~:~~

~~**PURPOSE**~~

The purpose of these Fixed Income Investment Policies & Strategies is to a) define the ~~strategic role~~objectives of fixed income as an asset class within the general investment policies established by Oregon Investment Council (OIC)~~'s~~ as part of its governance of ~~general investment policies for~~ the Oregon Employees Retirement Fund (OPERF)~~, to set forth specific short-term and long-term policy objectives for this segment of OPERF's investment portfolio,~~ and b) ~~to~~ outline appropriate~~the~~ strategies for implementing the OI~~nvestment~~ C~~ouncil~~'s fixed income investment policies.

~~**STRATEGIC ROLE**~~

~~The purpose of fixed income investments is to provide diversification to equity securities, through lower expected return and volatility and a low correlation to equities. Fixed income investment should comprise 15% to 25% of OPERF's total assets.~~

B. POLICY OBJECTIVES

1. ~~To a~~Achieve a fixed income portfolio return of 75 basis points or more above the custom policy benchmark, consisting of 40% Barclays Capital U.S. Aggregate Bond Index, 15% S&P/LSTA Leveraged Loan Index, 5% Bank of America Merrill Lynch High Yield Master II Index~~,~~ and 40% Barclays Capital U.S. 1-3 Year Government/Credit Bond Index over a market cycle of three to five years on a net-of-fee basis. The fixed income portfolio is also expected to achieve top quartile ~~peer group~~ performance in a ~~p.~~ Peer group comprised of~~shall consist~~ o~~ther~~f public and corporate pension funds with total assets greater than $1 billion.

2. Limit~~To control~~ fixed income portfolio risk, as measured by standard deviation of returns, to a ~~the~~ level not to exceed that of the custom benchmark~~ or less through diversification of investment approaches~~.

C. STRATEGIES

1. Build and m~~M~~aintain a well-diversified fixed income~~bond~~ portfolio that reflects the general characteristics of the custom benchmark and is~~,~~ managed to maximize total return subject to the risk limitations described directly above~~, that reflects the overall characteristics of the custom benchmark~~.
2. Maintain an average portfolio ~~bond~~ duration ~~level~~ of +/-20% of the benchmark' duration.
3. Invest opportunistically, using innovative investment approaches within a controlled and defined portfolio allocation.
4. Active investment managers are expected to outperform stated benchmarks on an after-fee, risk adjusted basis, over a market cycle of three to five years.
5. The OI~~nvestment~~ C~~ouncil~~'s selection of active managers will be based upon demonstrated expertise as reflected by an~~. Active managers will be selected for their demonstrated~~ ability to add value~~,~~ over a passive management alternative and within reasonable risk parameters.

D. PERMITTED HOLDINGS

The following fixed income securities, individually or in commingled vehicles, may be held outright and under resale agreement:

1. Obligations issued or guaranteed by the U.S. Federal Government, U.S. Federal agencies or U.S. government-sponsored corporations and agencies;~~.~~
2. Obligations of U.S. and non-U.S. corporations such as convertible and non-convertible notes and debentures, preferred stocks, commercial paper, certificates of deposit and bankers acceptances issued by industrial, utility, finance, commercial banking or bank holding company organizations, bank loans, common stock received in connection with the restructuring of corporate debt;~~.~~
3. Mortgage-backed, asset-backed ~~securities~~ and structured securities;~~.~~
4. Obligations, including the securities of emerging market issuers, denominated in U.S. dollars or foreign currencies of international agencies, supranational entities and foreign governments (or their subdivisions or agencies), as well as foreign currency exchange-related securities, warrants and forward contracts;~~.~~
5. Obligations issued or guaranteed by U.S. local, city and state governments and agencies;~~.~~
6. Securities defined under Rule 144A and Commercial Paper defined under Section 4(2) of the Securities Act of 1933;~~.~~

7. Yankee Bonds (dollar denominated sovereign and corporate debt);~~.~~
8. Derivatives including futures, swaps and options contracts and~~.~~
9. Securities eligible for the Short-Term Investment Fund (OSTF).

E. DIVERSIFICATION~~:~~

The portfolio should be adequately diversified to minimize various risks. The following specific limitations reflect, in part, the OIC's current investment philosophy regarding diversification.~~:~~

1. Obligations issued or guaranteed by the U.S. government, U.S. agencies or government sponsored enterprises are eligible, without limit.
2. Obligations of other national governments are limited to 10% per issuer.
3. Private mortgage-backed and asset-backed securities are limited to 10% per issuer, unless the collateral is credit-independent of the issuer and the security's credit enhancement is generated internally, in which case the limit is 25% per issuer.
4. Obligations of other issuers are subject to a 3% per issuer limit excluding investments in commingled vehicles.
5. Not more than 25% of the portfolio may be invested in non-dollar denominated securities.
6. Not more than 25% of the portfolio will be below investment grade (below Baa3/BBB-).
7. No more than 5% of the portfolio will be invested in original futures or swaps margin and option premiums, exclusive of any in-the-money portion of the premiums. Short (sold) options positions will generally be hedged with cash, cash equivalents, current portfolio security holdings~~,~~ or other options or futures positions.

F. ABSOLUTE RESTRICTIONS~~:~~

Investments in the following are prohibited:

1. Short sales of securities;~~.~~
2. Margin purchases or other use of lending or borrowing money or leverage to create positions greater than 100% of the market value of assets under management;~~.~~
3. Commodities or common stocks, unless common stock shares are received due to a restructuring, then shares will be liquidated at the manager's discretion; and~~.~~
4. Securities of the existing investment manager, its parents, custodians or subsidiaries.

FUNCTION: **Intermediate Term Pool Investments**

ACTIVITY: **Portfolio Rules**

SCOPE: **The Oregon Investment Council (OIC) has, with advice from the Treasurer and Oregon State Treasury (OST) investment staff, adopted a policy and specific rules for investing the Oregon Intermediate Term Pool (“OITP” or “Pool”). ~~The policy and~~These rules are included ~~as sample form~~in Appendix A.**

POLICY: **~~The~~ OITP is expected to provide a total return consistent with an investment grade quality, short duration diversified fixed income portfolio. Based upon historical market performance, ~~it is~~expected returns in the OITP are anticipated ~~that returns over extended periods will~~ to be greater ~~in the OITP~~over time than ~~in~~the returns provided by shorter maturity alternatives such as the OSTF portfolio.**

~~This~~ OITP is not structured to provide 100% net asset value (NAV) on each ~~participant’s~~participant’s’ initial ~~investment at all times. Therefore an investor in~~investments therein. Accordingly, OITP participants may ~~lose money~~experience gains or losses on their OITP investments due to changes in market conditions. For consistency with the ~~portfolio’s~~OITP’s total return objective~~,~~ (described below), the value of each participant’s individual investment will be determined ~~on a~~ proportional ~~basis~~ to the ~~net value~~NAV of the entire OITP portfolio.

OBJECTIVE: **The ~~investment~~ objective of ~~the~~ OITP is to maximize total return (i.e., principal *and* income) within the ~~desired~~stipulated risk parameters and ~~fixed income investments~~ subject to the approved securities holdings prescribed in the ~~portfolio~~ OITP investment guidelines~~. Investment management emphasis is placed on maximizing investment value and coupon income.~~ (see Appendix A).**

AUTHORITY: **Subject to the terms and conditions of this policy and under the authority of ORS Chapter 293, the designated ~~Oregon State Treasury (~~OST~~)~~ Fixed Income Investment Officer(s) (“investment staff”) shall have ~~the~~ full discretionary power to direct the investment, exchange, liquidation~~,~~ and reinvestment of OITP assets ~~in the OITP~~. The OIC and ~~Oregon State Treasury expects~~OST expect that ~~OST~~ investment staff will recommend changes to these guidelines at any time that they are viewed to be at variance with the investment objectives or market and economic conditions.**

COMPLIANCE APPLICATION AND PROCEDURES:

~~1) **Compliance Oversight Committee:** The Compliance oversight Committee is responsible for monitoring the OITP portfolio’s compliance with its Guidelines and working with Fixed Income Investment Staff to ensure that non-compliance is~~

~~OFFICE OF THE STATE TREASURER Investment Manual~~
~~Policies and Procedures Activity Reference: 4.03.04~~

~~corrected. The oversight committee for the OITP consists of the persons occupying the following positions:~~

~~1. OST Chief Investment Officer;~~
~~2. Deputy State Treasurer; and~~
~~3. OST Assistant Controller.~~

~~2) **Guideline Compliance Oversight.** The OITP Oversight Committee and designated OST Fixed Income Investment Staff shall receive a Daily Compliance Report produced by the Investment Accounting Division. This report should summarize OITP holdings in sufficient detail to monitor compliance with all guidelines. The Daily Compliance Report should also summarize each Portfolio Guideline as an "Objective," and compare the actual current portfolio to the objectives.~~

OST shall provide an investment compliance program to accomplish the following objectives: a) monitor and evaluate portfolios, asset classes, and other investment funds to determine compliance with OST policies and contractual obligations; b) identify instances of non-compliance and develop appropriate resolution strategies; c) provide relevant compliance information and reports to OST management and the OIC, as appropriate; and d) verify resolution by the appropriate individual or manager within the appropriate time frame.

~~3)~~1) **Correction of Non-Compliance.** If ~~the~~ OITP is found to be out of compliance with one or more adopted ~~portfolio~~investment guidelines or is being managed inconsistently with the ~~portfolio's~~its policy~~, Fixed Income Investment Staff~~ and objectives, investment staff shall bring the OITP portfolio into compliance as soon as is prudently feasible. Actions to bring the portfolio back into compliance~~;~~ and justification for such actions ~~taken to bring~~, including documentation of proposed and actual resolution strategies shall be coordinated with the ~~portfolio into~~OST investment compliance ~~shall be documented by Fixed Income Investment Staff~~program.

~~OFFICE OF THE STATE TREASURER Investment Manual~~
~~Policies and Procedures Activity Reference: 4.03.04~~

Appendices (Attached):

A. Portfolio Rules for the Oregon Intermediate Term Pool

~~OFFICE OF THE STATE TREASURER Investment Manual~~
~~Policies and Procedures Activity Reference: 4.03.04~~

Appendix A:

Portfolio Rules

For The

Oregon Intermediate Term Pool

Amended July 31, 2013

I. Scope

These rules apply to the investment of cash from all eligible and approved participants in~~of~~ the Oregon Intermediate Term Pool ("OITP" or the "Pool"), and ~~.~~ ~~These rules~~ are established under the authority of, and shall not supersede, the requirements established under ORS Chapter 293.

II. Investment Objective

A. The investment objective of ~~the~~ OITP is to maximize total return (i.e., principal *and* income) within the stipulated risk parameters and ~~fixed income investments~~subject to the approved securities holdings prescribed in ~~the portfolio guidelines. Investment management emphasis is placed on maximizing investment value and coupon income~~Section V. below.

III. Standards of Care

A. Prudence: The standard of prudence to be used by Fixed Income Investment Staff ("investment staff") shall be the "prudent investor" standard and shall be applied in the context of managing the aggregate OITP ~~as a whole~~portfolio. 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 the Pool; and~~.~~

(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 the investment Pool's investment portfolio and as a part of an overall investment strategy, which should incorporate risk and return objectives reasonably suitable to the investment Pool.

~~**OFFICE OF THE STATE TREASURER** **Investment Manual**~~
~~**Policies and Procedures** **Activity Reference: 4.03.04**~~

B. Ethics and Conflicts of Interest: Staff 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. ~~Fixed Income~~ Investment ~~Staff~~staff shall, at all times, comply with the State of Oregon Government Standards and Practices code of ethics set forth in ORS 244, as well as all policies of the OST.

C. Delegation of Authority: ~~Fixed Income~~ Investment ~~Staff~~staff 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. Senior Fixed Income Investment Officers 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; and

(3) Understanding and acknowledgement of OITP Portfolio Rules located on the Oregon State Treasury's website.

B. Internal Controls: ~~Fixed Income~~ Investment ~~Officer(s) and designated Fixed Income Investment~~ staff should jointly collaborate to establish and maintain an adequate internal control structure designed to reasonably protect OITP~~the~~ assets ~~of the OITP~~ 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.

~~**OFFICE OF THE STATE TREASURER** **Investment Manual**~~
~~**Policies and Procedures** **Activity Reference: 4.03.04**~~

V. Investment Guidelines

1. Eligible Investments~~: Investments shall be limited to the following:~~
   Investments shall be limited to the following:
   (1) The Oregon Short Term Fund~~;~~ (the "OSTF");
   (2) Obligations issued or guaranteed by the United States (U.S.) Treasury or by U.S. federal agencies and instrumentalities, including inflation-indexed obligations;
   (3) Non-U.S. Government Securities and their Instrumentalities;
      1. Non-U.S. government securities and Instrumentalities must have minimum long-term ratings of AA-, Aa3 or better at the time of purchase and must be rated by at least two Nationally Recognized Statistical Rating Organizations (NRSRO).
   (4) Certificates of deposit;
   (5) Bankers acceptances that are eligible for discount at a U.S. Federal Reserve Bank;
   (6) Corporate debt obligations (e.g., commercial paper, term debt, etc.);
   (7) Taxable and non-taxable municipal debt securities issued by U.S. states or local governments and their agencies, authorities and sponsored enterprises;
   (8) U.S. Agency Mortgage-backed Securities (MBS) which include both pass-through securities and Collateralized Mortgage Obligations (CMO). The weighted average life at purchase shall be 5 years or less~~.~~;
   (9) Commercial Mortgage-backed Securities (CMBS) which must be rated triple-A at the time of purchase and have a weighted average life of 5 years or less;
   (10) Asset-backed securities (ABS) which must be rated triple-A at the time of purchase and have a weighted average life of 5 years or less;
   (11) Repurchase Agreements;
      i. Maximum maturity will be 180 days.
      ii. Counterparties must have a minimum Standard & Poor's or Moody's Investor Services credit rating of "AA" or "Aa2" for maturities one year or longer or "A-1" or "P-1" for maturities less than one year.
      iii. Repurchase Agreements must equal no more than 5% of liabilities of the counterparty.
      iv. No more than 10% of OITP assets shall be placed with the same counterparty for repurchases.
      v. Counterparty must be either a Primary Dealer as recognized by the Federal Reserve Bank or the Oregon State Treasury's custodial agent as non-primary dealer counterparty.
      vi. The counterparty must have a signed repurchase agreement.
      vii. Collateral must be delivered to the Oregon State Treasury's account at its custodian or to an account established for the Oregon State Treasury

~~**OFFICE OF THE STATE TREASURER** **Investment Manual**~~
~~**Policies and Procedures** **Activity Reference: 4.03.04**~~

pursuant to the terms of the specific Repurchase Agreement in the name of the Oregon State Treasury.

viii. Collateral for repurchase agreements may be U.S. Treasury or U.S. Agency Senior Unsubordinated securities only.

ix. The market value of the delivered collateral must be maintained at not less than 102% of the cash invested.

(12) Reverse Repurchase Agreements;

i. Maximum maturity will be 180 days.

ii. Counterparties must have a minimum Standard & Poor's or Moody's Investor Services credit rating at least equivalent to "AA" or "Aa2" for maturities one year or longer or "A-1" or "P-1" for maturities less than one year.

iii. Reverse Repurchase Agreements must equal no more than 5% of liabilities of the counterparty.

iv. No more than 10% of OITP assets shall be placed with the same counterparty for reverse repurchase agreements.

v. Counterparty must be a Primary Dealer as recognized by the Federal Reserve Bank.

vi. The counterparty must have a signed reverse repurchase agreement.

vii. Acceptable reinvestment vehicles include securities that may otherwise be purchased outright.

viii. Securities will be reversed on a fully collateralized basis.

ix. Reverse repurchase investments for interest rate arbitrage shall only be done on a matched book basis.

2. Denomination: All securities will be denominated in ~~US$~~U.S. dollars only.

3. Form: All securities will be non-convertible to equity.

~~3.~~4. Benchmark: The benchmark for the portfolio is the The BofA Merrill Lynch 1-5 Year U.S. Corporate, Government & Mortgage Index.

~~4.~~5. Risk Parameters

(1) Credit Risk~~:~~

i. Investment Rating

Unless noted otherwise, securities must be rated investment grade or higher by a NRSRO at the time of purchase. If a security is rated by more than one NRSRO, the lowest rating is used to determine eligibility.

~~**OFFICE OF THE STATE TREASURER** **Investment Manual**~~
~~**Policies and Procedures** **Activity Reference: 4.03.04**~~

ii. For newly issued 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.

(2) Diversification~~:~~

i. Assets in the account shall be sufficiently diversified by type and maturity to allow for anticipated withdrawals~~;~~.
ii. No more than 3% of the par value of portfolio shall be invested in one security. This restriction does not apply to obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities~~;~~.
iii. No more than 5% of the par value of portfolio shall be invested in the securities of one issuer. This restriction does not apply to obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities~~;~~.
iv. No more than 25% of the portfolio shall be invested in the securities of one sector as defined by the Bloomberg Industry Sector Classification. This restriction does not apply to obligations issued or guaranteed by the U.S. Treasury or by U.S. federal agencies and instrumentalities or to MBS, ABS and CMBS.
v. No more than 25% of the portfolio may be invested in MBS.
vi. No more than 25% of the portfolio may be invested in ABS.
vii. No more than 25% of the portfolio may be invested in CMBS.

(3) Interest-rate Risk~~:~~

i. The portfolio's modified duration shall not exceed 3.0 years; and
ii. The maximum maturity on any allowed investment is constrained as follows:
    1. The maximum stated maturity should not be greater than 10.25 years from the date of settlement unless otherwise noted.
    2. For ABS, MBS and CMBS, weighted average life will be used to measure maturity limitations.

(4) Liquidity~~:~~

i. To insure the flexibility necessary to take defensive action when appropriate, positions should be in issues with sufficient float to facilitate, under most market conditions, prompt sale without severe market effect.

~~OFFICE OF THE STATE TREASURER Investment Manual~~
~~Policies and Procedures Activity Reference: 4.03.04~~

(5) Prohibited Investments:

i. Alt-A, non-agency, sub-prime, limited documentation or other "sub-prime" residential mortgage pools or related securities;
ii. Collateralized Debt Obligations (CDO); and
iii. Collateralized Loan Obligations (CLO).

VI. 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 OITP. Within the securities lending program only, cash collateral may also be reinvested as follows:

(1) Maximum of 15% in ABS 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, fixed rate corporate notes with a maximum final maturity of two years and 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;

(4) All Repurchase Agreements (under the Special Indemnification by State Street clause[1]) must be fully collateralized as determined by State Street and limited to the following collateral sources: U.S. Treasuries, U.S. Treasury STRIPS, Federal Agency Obligations, Corporate securities rated A- or higher, ABS rated A- or higher, Agency MBS pass throughs rated AAA, Commercial Paper rated A-1/P-1 or higher or any combination thereof.[1] For purposes of calculating average credit quality, current ratings of the indemnifier, State Street Corp, will be used; and

[1] 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."

~~OFFICE OF THE STATE TREASURER Investment Manual~~
~~Policies and Procedures Activity Reference: 4.03.04~~

(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. Reverse Repurchase Agreements are prohibited within the securities lending program.

G. 25% of the reinvestment portfolio must mature within 93 days, but up to 50% of the portfolio may mature in over one year.

FUNCTION: Real Estate Investments
ACTIVITY: Acquiring~~e~~ and Managing~~e~~ Equity Real Estate

POLICY: **The strategic role of real estate investments in the Oregon Public Employees Retirement Fund (“OPERF”) is to provide diversification relative to other equity and fixed income investments~~securities~~. Real estate investments are subject to the specific, strategic asset ~~target~~ allocation targets established by the Oregon Investment Council (“OIC”) in Policy 4.01.18.**

I. ~~POLICY~~REAL ESTATE INVESTMENT CLASSIFICATIONS:

OPERF’s real estate asset class consists of three sub-classifications:

- CORE: includes~~sive of~~ equity investments in real properties and investments in private and publicly traded real estate investment trusts;~~,~~
- VALUE ADDED: includes~~ive of~~ equity investments in real properties, investments in commingled fund investment vehicles and private placements; and~~.~~
- OPPORTUNISTIC: includes~~ive of~~ investments in commingled fund investment vehicles and private placements.

On an ongoing basis, the OIC~~ouncil~~ allocates capital to the real estate asset class as part of its~~he~~ periodic asset allocation review.

The OIC shall designate allocation ranges for each sub-classification of the real estate asset class, including an allocation range for REITs within the Core sub-classification and allocation ranges and targets for each property type within the Core component (see Section IV.C). Each OIC-approved real estate investment manager is given discretion to invest, operate, finance and sell direct equity real estate investments within applicable investment guidelines. OPERF invests primarily in direct equity properties with a value greater than $10 million.

II. INVESTMENT APPROACH AND PARAMETERS:

A. Prudent Investor Standard
The selection of real estate investments will be guided by the “prudent investor” standard, embracing the prudent decision making process typically employed by experts in the areas of real estate acquisitions, development, operation, financing, disposition and portfolio management.

B. Diversification Principles
Diversification will be accomplished through the investment of capital among a variety of management organizations, strategies, asset types and sub-markets. The Core portfolio shall be diversified within reasonable tolerance bands with respect to investment strategy, property type,~~s and~~ location~~s,~~ and investment structure, among other factors. _Value Added and Opportunistic investments may not have diversification targets by investment strategy, property type or geographic location. _REIT, Value Added and Opportunistic investments may include ~~global~~ investments outside U.S. borders.

III. CORE, VALUE ADDED AND OPPORTUNISTIC SUB-CLASSIFICATIONS

A. Strategic Objectives
The real estate portfolio will be divided into sub-classifications, the Core portfolio, the Value Added portfolio and the Opportunistic portfolio, based on risk and return characteristics. The strategic objectives of the Core portfolio are to produce stable current income and market level returns commensurate with a low to moderate level of risk. The Opportunistic portfolio is expected to produce higher returns than the Core portfolio and increase the overall performance of the real estate asset class, subject to an incrementally greater amount of risk. The Value Added portfolio is expected to produce returns between Core and Opportunistic portfolios, but may experience greater vacancy or interest rate risk than the Core portfolio.

B.- Allocation of Capital Between Core, Value Added and Opportunistic
The Core portfolio will comprise between 40% and 60%, with a target of 50%, of the total allocation to ~~the~~ real estate ~~asset class~~. The Value Added portfolio will target 20% with a range from 15% to 25%. _The Opportunistic portfolio will be allocated the remaining 20% to 40%, with a target of 30%, of the total real estate allocation ~~to the real estate asset class~~.

Asset Type	Allocation Range	Target
Core Portfolio:	40% to 60%	50%
Core Properties	25% to 35%	30%
REITs	15% to 25%	20%
Value Added	15% to 25%	20%
Opportunistic	20% to 40%	30%

C. Leverage
~~:~~The use of leverage shall be constrained to 60% of the total real estate portfolio (Core Properties, Value Added properties, REITs and Opportunistic investments).

IV. CORE PORTFOLIO

A. Target Return and Benchmark
Core Properties within the Core portfolio have a long term, net-of-fees, real rate of return target of 5% and are expected to produce returns in excess of the market over time, with a commensurate level of risk. Thus, the Core Property performance on a net-of-fee basis is expected to exceed the composite NCREIF Index.

The REIT portfolio has a long term, net-of-fees, real rate of return target of 5% and is expected to produce returns in excess of market level returns over time, with a commensurate level of risk. Thus, the REIT Portfolio performance on a net-of-fee basis is expected to exceed the composite NAREIT Index. REIT investments may include ~~global~~ investments outside the U.S. borders with appropriate global benchmark indices.

B. Core Property Diversification and Allowable Investments
The Core Property portfolio will be well diversified by property type and geography. Generally, investments will be limited to office, retail, industrial and apartment properties, but may include structured investments in alternative types of property with Core type risk and return attributes. Typical Core Properties will exhibit "institutional" qualities such as good ~~being well~~ locationsed within local and regional markets with~~, and be of~~ high quality design and construction. In general, Core Properties will be well occupied, though a limited portion may be invested in properties undergoing redevelopment, new construction or significant re-leasing~~ at any time~~. Proposed acquisitions for the Core Property portfolio requiring more than $100 million of capital from OPERF require the OIC's approval prior to the advancement of non-refundable deposits.

Within the Core Property portfolio, OPERF generally will have the right to: (i) replace or terminate a manager with or without cause; (ii) add or subtract committed capital; and (iii) create and modify investment, operating and financing guidelines pursuant to the terms of an operating agreement.

The REIT portfolio will be well diversified by property type and geography. Generally, investments will be limited to publicly traded real estate investment trusts and real estate operating companies owning office, retail, industrial, healthcare, mobile homes, self storage, hotels, R&D and apartment properties. REIT investments outside U.S. borders shall be limited to 50% of the REIT portfolio.

C. Diversification By Property Type

To reduce risk, the Core Property portfolio will be well diversified by property type. Allocation ranges for the basic property types, to be included in the Core portfolio, are as follows:

Property Type	Allocation Range	Target
Office	20%-45%	30%
Industrial	15%-25%	20%
Retail	20%-30%	25%
Apartments	20%-30%	25%

From time-to-time, the actual allocation to each property type may not fall within the recommended range due to normal acquisition and disposition activity. In addition, changes to the policy target exposures will necessarily take time to implement, given the illiquid nature of real estate. In these instances, adjustments from actual to the prescribed allocation ranges shall be implemented over a reasonable time frame (for example, within a one to three year period, unless otherwise specified) and with ample consideration given to preserving investment returns to OPERF.

D. Leverage

Limited use of leverage is permissible in the Core Property portfolio in an amount up to 50% of the fair market value of the aggregate Core Property portfolio, and up to 75% of the market value on any given property, to enhance investment returns. Sufficient consideration should be given to the impact of debt financing on the risk and return characteristics of the leveraged investments as well as the Core Property portfolio, in total. Use of leverage shall be subject to financing guidelines incorporated into the operating agreement(s) for each Core Property investment manager.

From time to time, Managers may have the opportunity to acquire properties only if underlying property debt is assumed as part of the transaction. Such acquisitions may be pursued occasionally as long as such acquisition does not cause the Manager's portfolio to exceed portfolio leverage limitations, for an extended period of time. From time to time, Managers' portfolios may exceed or fall below leverage limitations as individual leveraged and unleveraged properties are acquired. Mechanisms and time frames to bring property leverage in line with portfolio guidelines~~,~~ and investment objectives~~,~~ must be part of each ventures' operating agreement. Material deviations from leverage guidelines and policy may be resolved either through action by the OIC or the Real Estate Committee.

From time to time, it may be advantageous for a Core Property Manager, Value Added Portfolio Manager or Opportunistic Portfolio Manager (see below) to arrange for the use of a subscription credit facility, collateralized by OPERF's capital commitment. Such capital shall be treated as equity when calculating loan-to-value ratios.

V. VALUE ADDED PORTFOLIO

A. Target Return and Benchmark

The Value Added portfolio will have a long term, net-of-fees, real rate of return target of 6% and is expected to produce returns in excess of the market over time, with a commensurate level of risk. Thus, the Value Added performance on a net-of-fee basis is expected to exceed the composite NCREIF Index by about 100 basis points over a five year period.

B. Value Added Diversification and Allowable Investments

The Value Added portfolio will be well diversified by property type and geography. Investments will include office, retail, industrial and apartment properties, but may target structured investments in alternative types such as hotels, student housing, senior housing, and specialized retail uses. Value Added Properties may exhibit "institutional" qualities such as good ~~being well~~ locations~~ed~~ within local and regional markets with~~, and be of~~ high quality design and construction, but may need redevelopment~~,~~ or significant leasing to achieve stabilized investment value. Value Added investments may include development opportunities with balanced risk/return profiles. Development investment in the Value Added sub-class shall be limited to 35% of capital committed to Value Added at any given time. When a property reaches 85% occupancy, it will cease being included as a development investment in the calculation.

C. Value Added Portfolio Investment Structures

The Value Added Portfolio may contain Direct Investments or Commingled Fund investments with strategies that have higher risk-reward characteristics than permitted within the Core portfolio. The Value Added portfolio may be structured without the control features required in the Core portfolio such as removal of manager without cause or changing investment parameters unilaterally.

D. Leverage

Use of leverage is permissible in the Value Added Portfolio in an amount up to 70% of the fair market value of the aggregate Value Added Portfolio, and up to 80% of cost on any given property prior to stabilization, to enhance investment returns. Sufficient consideration should be given to the impact of debt financing on the risk and return characteristics of the leveraged investments. Use of leverage shall be subject to financing guidelines incorporated into the operating agreement(s) for each Value Added Portfolio investment manager.

From time to time, Managers may have the opportunity to acquire properties only if underlying property debt is assumed as part of the transaction. Such acquisitions may be pursued occasionally as long as such acquisition does not cause the Manager's portfolio to exceed portfolio leverage limitations~~,~~ for an extended period of time. From time to time, Managers' portfolios may exceed or fall below leverage limitations as individual leveraged and unleveraged properties are acquired. Mechanisms and time frames to bring property leverage in line with portfolio guidelines~~,~~ and investment objectives~~,~~ must be part of each ventures' operating agreement.

From time to time, it may be advantageous for a Value Added Manager to arrange for the use of a subscription credit facility, collateralized by OPERF's capital commitment. Such capital shall be treated as equity when calculating loan-to-value ratios.

VI. OPPORTUNISTIC PORTFOLIO

A. ~~A.~~ Target Return and Benchmark

The Opportunistic portfolio has a targeted long term, net-of-fees, real rate of return in excess of 7% and commensurate with the risk profile of the asset or strategy. Within the Opportunistic portfolio, expected returns may vary considerably, based on differences in investment program strategies and structures and the level of risk associated with each program, among other factors. Moderate to high levels of leverage may also be employed by some programs to augment investment performance.

The investments within the Opportunistic portfolio are likely to represent a wide variety of strategies and investment vehicles, and ~~.~~ Opportunistic investment managers generally utilize greater leverage. Opportunistic portfolio performance, on a net-of-fee basis, is expected to exceed the composite NCREIF Index by about 200 basis points over at least a five year time period.

B. -Investment Strategy

Investments with expected returns in excess of the Core portfolio, Core type strategies utilizing greater leverage, and other investments with generally above market risk, will be included in the Opportunistic portfolio. These investments are often found in niche opportunities (e.g., timber, hotels, operating companies, non-performing loan portfolios, and senior or assisted living facilities) or exist because of inefficiencies in the real estate or capital markets. In addition, the Opportunistic portfolio may contain investments in international real estate joint ventures, limited partnerships, public and private REITs~~,~~ and operating companies. Investment strategies for the Opportunistic portfolio will be considered~~haracteristically~~ and classified "opportunistic" based on prevailing market conditions at the time of investment.

VII. REAL ESTATE COMMITTEE

1. The "Real Estate Committee" or "Committee," is a committee of the OST and acts on behalf of, and subject to the review of, the OST. The Committee is comprised of the Deputy State Treasurer, the Senior Real Estate Investment Officer (ex-officio), the Chief Investment Officer~~,~~ and an OIC member invited by the OST to participate on the Committee. The OST will consider input from the OIC~~ouncil~~ in extending such ~~invitationsm~~invitations from time to time. The OST, through the Committee:~~:~~

   a. May invest OPERF amounts up to and including $100 million per investment in first time real estate funds, (whether limited partnerships, private REITs, 501(c) corporations, limited liability companies, group trusts, insurance company separate accounts, or other such commingled private vehicles), and an amount up to and including 200% of the most recent commitment for existing relationships consistent with OIC policies and the following additional constraints.

   b. Approve the termination of separate account mandates and recommend action regarding the enforcement of termination and other provisions for commingled investments.

2. The aggregate amount of OPERF moneys committed by the Real Estate Committee shall not exceed $500 million to first time qualifying funds and $700 million to existing Direct Property investment vehicles or REIT separate accounts, follow-on funds or co-investment opportunities with existing Core, Value Added or Opportunistic managers in any single calendar year. The Committee will not make additional investment commitments with a specific Program manager when the fair market value of current investment commitments with that manager equal or exceed $500 million. However, the OST may obtain specific OIC concurrence for, and thereafter approve, Committee investment commitments in excess of such limit.

3. Decreases in capital allocations to individual Direct Property or REIT managers greater than $100 million, or representing 50% or more of the

capital under management by a specific manager, and decreases in capital allocations, in aggregate, greater than $200 million in any single calendar year, are beyond the authority of the Committee.

4. The Committee will only exercise its investment authority by unanimous vote and acting upon a favorable due diligence determination by the Advisor. Proposed investments may only be considered by the Committee if agreement exists between the Advisor and Staff that the proposed investment is consistent with Program standards. Investment opportunities and proposed Committee commitments are subject to review by the OST, who may choose to refer such opportunities or cancel and refer such proposed commitments to the OIC for review and consideration.

5. Any favorable due diligence determination by the Committee, including the underlying rationale, market conditions and portfolio impact, shall be furnished to both the OST and the OIC as soon as practicable and at least two weeks prior to any final investment commitment. Prior to commitment, if the OST objects to the proposed investment or is advised by any Council member that he or she objects to the proposed investment, the OST will cancel the proposed commitment and determine whether or not, alternatively, to have Staff bring the previously recommended investment to the OIC~~ouncil~~ as an agenda item at a subsequent OIC meeting

6. Any investment commitment made by the Committee shall be reported by Staff to the OIC at a subsequent meeting of the OIC. Staff shall not unreasonably delay any such notice.

VIII. OST STAFF AUTHORITY

Subject to his or her review right, the OST delegates to the Chief Investment Officer, upon a favorable recommendation from both the Senior Real Estate Investment Officer and the Advisor, authority to accomplish the following:

(i) Approve OST administrative activities and guideline exceptions if a plan is established to conform the exceptions [project/investment/fund] to applicable guidelines within a reasonable period of time;~~.~~

(ii) Approve purchase or sale of opportunistic or other fund interests, if such authority lies with the OST by statue or by delegation from the OIC, and~~;~~ review and approve other activities as necessary to further the interests of OPERF~~'s Program,~~ consistent with its objectives and guidelines~~Program standards~~;~~.~~

(iii) Approve increase or decrease exposure to REITs~~,~~ through adjustments to the capital commitments of existing REIT Managers~~;~~ within OIC-~~-~~established ranges;~~.~~

(iv) Approve up to an additional $10 million to an existing investment fund for the following purposes: (1) to recapitalize the fund with additional equity; (2) to acquire all or part of another limited partner's ("LP's") position in an existing investment fund;~~,~~ or~~;~~ (3) to co-invest with the investment fund in a new portfolio investment. Such additional commitments shall be on terms equal to or better than the existing investment fund terms.

Any of the foregoing activities exercised by Staff shall be reported to the OIC at an upcoming meeting, and~~.~~ Staff shall not unreasonably delay such report.

PROCEDURES~~:~~

1. **Selection of Investment Management Firms.** The Chief Investment Officer, Senior Real Estate Investment Officer~~,~~ and Real Estate Investment Officer meet with and obtain information from prospective investment management firms. A consultant or a~~The A~~dvisor (the "Advisor") may be used to assist in evaluating prospective investment management firms;~~,~~ however, the OIC will not delegate its policy or decision-making responsibilities to the Advisor~~the Advisor~~ or others. The OIC selects an investment management firm by majority vote.

2. **Compensation of Investment Management Firms.** Management or performance-based fees shall be negotiated by OST staff in consultation with the Department of Justice and third party legal counsel, as appropriate. Typically, the base fees are set as a percentage of assets managed and performance-based fees are set based upon performance in excess of the NCREIF composite, an alternative appropriate index~~,~~ or a nominal number. Base fees typically vary on a sliding scale inversely with the total value of OPERF assets under management by each firm.

PROCEDURES FOR INVESTMENT FUNDING~~:~~

1. For all existing and future real estate investment relationships, each Manager shall submit a complete listing of the bank account(s) to which OST may wire funds on behalf of the Manager.~~;~~ T~~t~~his list may be included as an exhibit to the partnership or investment management agreement, and~~.~~ OST shall not deviate from these pre-established instructions unless the partner or advisor authorizes such a change in writing.

2. All requests for fundings (e.g., capital calls) must be made pursuant to established OST practices and shall include an authorized signature. Facsimiles and e-mails may be accepted to initiate the fulfillment of funding requests, as long as the bank account information and authorized signature are consistent with the pre-established information in (1), above.

3. Staff shall regularly monitor investments, through the Advisor or other contracted service providers, to ensure that the funding of investment commitments does not exceed the maximum amount authorized by the OIC or the Committee. In monitoring the appropriate funding of investment commitments, the Advisor or other contracted service provider will consider the effect of partnership recycling, temporary bridge financing, and similar provisions included in investment documents executed pursuant to the relevant commitment in ascertaining whether or not funding levels are appropriate. Approved funding amounts may be exceeded by up to five percent, per investment, for emergency funding, changes in foreign currency conversions, manager fees or other funding requirements contained within the operating agreement(s) for each manager.

4. Staff shall verify that the written funding requests are executed by an authorized signer by matching the signature to specimen signatures maintained by OST. Other requests will use an OST prescribed format.

SAMPLE FORMS, DOCUMENTS, OR REPORTS ~~(Attached)~~:

A. Appendix A – Private Partnership Investment Principles

APPENDIX A
PRIVATE PARTNERSHIP INVESTMENT PRINCIPLES

The purpose of this document is to formulate a general view that institutional investors should seek when making private equity and real estate partnership investments. _Private market partnership terms and conditions that have gradually evolved should receive renewed attention in order to better align interests between general partners and limited partners, enhance fund governance~~,~~ and provide greater transparency to investors. -Below is a summary of the issues that we believe will lead to the modification and improvement of specific terms and best practices for new commitments. While there is no panacea for optimal contract terms, these principles should be considered as a guide, and not as absolutes, recognizing that partnership agreements and terms are complex, and must be considered in whole.

Areas for Improvement in Private Partnerships

Alignment of Interests

- The 80/20 profit split in commingled funds works well to align interests, but tighter distribution provisions should become the norm to avoid clawback situations or other forms of "leakage" that allow general partners to earn more than 20% of profits due to the timing of distributions or creative drafting of the partnership agreements.
  - The carry should be on net profits generated after taxes, management fees, transaction costs~~,~~ and all other ancillary expenses, rather than on gross profits.
  - The carry should only be in effect after 100% of capital, net of all fees and expenses, has been returned to the investor who has provided the vast majority of risk capital. However, interim tax distributions can be paid to cover the general partner's tax liabilities. These distributions should be considered advances to the general partner.
  - Each time a carried interest payment is proposed to be made to the general partner or any GP affiliate, the books and records of the partnership shall be audited at partnership expense to confirm the amount of such payment.
  - If clawbacks are required; they should be fully and timely repaid.
- Management fees are intended to cover reasonable operating costs and should not be a material profit-center~~,~~ or ~~a~~ funding source for staff bonuses or business expansion for the firm. Fees should be reduced for all but the most modest funds with larger funds acknowledging economies of scale by taking larger, "standard" fee reductions ~~in "standard" fees, acknowledging economies of scale~~.
  - Larger investors in a fund should receive fee or carry concessions, particularly when the general partner has multiple funds or follow-on funds in the market at the same time.

- The general partner should avoid charging transaction, monitoring ~~fees,~~ and other fees to a deal or portfolio company/investment entity in the fund. In addition, all fees earned by the general partner should offset management fees and partnership expenses during and at the end ~~life of the fund and at the end~~ of the fund's life ~~of the fund~~. Any remainder should be distributed as profit pursuant to the distribution provisions.
  - — Transaction, monitoring and other fees, if charged, should be escrowed against future management fees.
- In no event shall the partnership be required to bear, directly or indirectly expenses of the general partner or manager for entertainment, publicity, fund raising, office space, information technology, employment, personnel or other matters that are generally considered to be corporate overhead. All partnership expenses shall be limited to those third party out-of-pocket expenses reasonably incurred directly in connection with the partnership business.
- The general partner's capital commitment to the fund should reflect a substantial amount of the net worth of the principals making up the general partner and a high percentage of the amount should be contributed in cash.
- Changes in tax law that personally impact members of a general partner should not be passed on to investors in the fund.

Governance

- Recent scandals have again highlighted the need for and the importance of an independent auditor who should be firmly focused on the best interests of the partnership and its limited partners, rather than the interests of the general partner.
  - — The auditor should be an independent, nationally recognized firm and should provide no other services to the general partner, unless explicitly approved by the Advisory Board.
- Because partnership terms are long (e.g., 10-15 years) and withdrawal rights are virtually nonexistent, a majority of outstanding limited partnership ownership interests should be able to effectuate the following, without cause:
  - — Suspend the commitment period;
  - — Terminate the commitment period;
  - — Remove the general partner; and/or
  - — Dissolve the fund.
- General partners should reinforce their duty of care. The "gross negligence, fraud~~,~~ and willful misconduct" indemnification and exculpation standard should be a minimum in terms of what is agreed to by limited partners. Recent efforts by the general partner to: (1) reduce all duties to the fullest extent of the law; (2) demand the waiver of broad

categories of conflicts of interests; and (3) allow it to act in its sole discretion, even where a conflict exists, should be strongly resisted.

- General partners should be required to seek approval of the limited partners to change the investment strategy proposed~~moted~~ when the fund was promoted~~raised~~.

- Advisory Board meeting processes and procedures should be adopted and standardized across the industry to allow this sub-body of the limited partners to more effectively serve its role.

  — All limited partners should receive a list of the names and contact details of Advisory Board members.

  — The Advisory Board should be able to call for a meeting with the general partner at any time.

  — The Advisory Board should be allowed "private time" with the auditor, on at least an annual basis.

  — The Advisory Board should not be asked to approve specific investments and will serve the limited partnership investors best by reviewing audit results~~,~~ and current portfolio holdings ~~updates~~ (including valuation methods)~~,~~ and addressing issues relating to potential conflicts-of-interest.

  — Any significant transaction between multiple funds of the same general partner should be subject to Advisory Board approval. The Advisory Board shall have the right to put particular matters to a vote of all limited partners.

Transparency

- Fee, carry and all other ancillary fee calculations should be transparent and subject to limited partner and independent auditor review in a standardized form.

- All placement agent and fundraising fees should be fully disclosed. The scope of work provided by placement agents should be disclosed. Campaign contributions or other payments made to individuals that may influence the decision-making process should be disclosed.

- Accurate disclosure regarding~~around~~ uses of leverage at both the fund and the investment entity levels should be provided.

- All limited partners should be notified when/if the general partner receives any SEC inquiries or meaningful legal actions.

FUNCTION: **Private Equity & Alternative Investments**
ACTIVITY: **Private Equity Portfolio Standards & Procedures**

POLICY:

I. BACKGROUND

The Oregon State Treasurer ("OST"), to accomplish the prudent and efficient implementation of investment policies established by the Oregon Investment Council ("OIC" or "Council"), has created the Private Equity Investments Program (the "Program") to ~~better~~ participate in attractive long-term investment opportunities for the Oregon Public ~~Employees'~~Employees Retirement Fund ("OPERF" or the "Fund") and to ~~provide diversification to~~better diversify the overall OPERF investment portfolio. To date, Program investments have included participation in diversified strategies including~~:~~ leveraged-buyout limited partnerships, venture capital limited partnerships~~,~~ and other special situation partnerships. ~~The~~ As opportunities become available, OST will be selective and invest ~~such~~ assets~~, as are~~ allocated to this Program prudently~~and~~, productively and in a manner consistent with the Program, OIC policies~~,~~ and applicable law~~, as opportunities become available.~~. Private equity investments are subject to the specific strategic target allocations established by the OIC in Policy 4.01.18.

II. GENERAL POLICY

Program investments provide an appropriate ~~addition~~complement to OPERF's investment portfolio, and are compatible with the general objectives of the Fund, which include:

1. Providing a means to pay benefits to ~~the Fund's~~Fund participants and their beneficiaries~~.~~;
2. Investing to produce a return on investment that is based on levels of liquidity and investment risk that are prudent and reasonable~~.~~;
3. Attaining an adequate real return over the expected rate of inflation~~.~~; and
4. Complying with all applicable laws and regulations concerning the investment of pension assets.

Program investments ~~possess~~are expected to exhibit both a higher degree of risk ~~with~~and a higher return potential than ~~traditional investments. Accordingly, total rates of return are expected to be greater than those that might be obtained from~~ conventional public equity or ~~debt~~fixed income investments. These Program investments~~. They have~~ are also expected to exhibit a ~~low~~lower correlation relative to other ~~investment~~asset classes and should therefore ~~contribute to a reduction of risk and the enhancement of returns on a total portfolio basis, as well as providing portfolio~~provide important diversification benefits to the Fund.

III. OBJECTIVES

A. PROGRAM- INVESTMENT- PERFORMANCE- OBJECTIVE

The performance objective for Program investments is significant long-term net returns to OPERF (e.g., after management fees and general ~~partner's~~partners' carried interest) above a benchmark reflecting public market alternatives or counterparts plus an appropriate premium to compensate for illiquidity, risk and expense. ~~The~~Specifically, the performance objective should exceed a net internal rate of return of the Russell 3000 Index plus 300 basis points, and may vary by the type of investment~~, for example,~~ (e.g., leveraged buyout, venture capital or special situation~~.~~). The performance objective, benchmark and premium will be periodically evaluated by OST staff ("Staff").

B. DIVERSIFICATION

Diversification reduces risk in the Program's investments and the following types of diversification should be considered by Staff, including, but not limited to:

1. Stage - Diversify investments throughout the various financing stages from startup through mezzanine financing to leveraged buyouts and recapitalizations. The targeted exposure ranges for various types of investments are as follows:

Investment Type	Target Allocation
Corporate Finance	**65-85%**
Large Corporate Finance	45-65%
Mid Corporate Finance	–5-25%
Small Corporate Finance	0-10%
Venture Capital	**–5-10%**
Special Situations	**5-15%**
Distressed	–0-10%
Mezzanine	0-~~5~~05%
Secondaries	–0-~~5~~05%
Fund-of-Funds	**—~~5~~05-10%**
Co-Investments	**—0-7.5%**

2. Industry Sectors - Investments will be diversified among industry groupings.

3. Size of Investments - Investments will be diversified among a range of partnerships of varying sizes, generally with a minimum investment size of $75 million ($25 million for venture capital),

and may be as much as 25% of a particular partnership when appropriate. Deviations from these guidelines will be documented and communicated by Staff to the OST and OIC.

4. Geographical - Staff should consider geographical diversification in investment selection; and investments, to the extent appropriate, may be considered that benefit the overall economic health of Oregon, so long as and only if such investments otherwise meet the investment criteria and quality of the Program.

5. Time - Staff will endeavor to invest OPERF assets in a consistent manner over time, unless market conditions appear unfavorable.

C. TOTAL- PORTFOLIO- DIVERSIFICATION

Correlation of the Program's investment return to other asset classes is not high, and the inclusion of Program investments, therefore, provides an added measure of diversification to the Fund.

PROCEDURES:

I. PROCEDURES- AND- STANDARDS

A. DEFINITION OF INVESTMENT UNIVERSE

Staff and the ~~contract~~consultant or advisor selected specifically for Program investments ~~("~~(the "Advisor") will furnish the OST and OIC with an annual statement of the sector and strategy plan for the Program asset class, and a list of potential investment partners that includes associated sector information and strategy. The potential partners list ~~is to~~shall be updated monthly and shall define the population from which private equity investments may be made.

B. GENERAL PROCEDURES

1. Staff, and the Advisor, will screen available investments and designate those that meet the Program's general strategy, selection criteria and performance goals. Staff will coordinate the available investments, whether first identified by Staff, the OIC, the Advisor or otherwise. Staff may reject such proposed investments if they do not meet Program criteria.

2. The Advisor, working in conjunction with Staff, will review the documents pertinent to an investment opportunity, including the offering memorandum, and identify possible issues. The Advisor and Staff may meet with the general partners or sponsors to discuss the investment opportunity.

3. The Advisor will identify to Staff those investment opportunities that it determines best meet the Program's criteria and merit further detailed review.

4. Staff will select those investment opportunities upon which the Advisor will conduct full due diligence. Upon completion of its due diligence, the Advisor will provide a written report containing a summary of the proposed investment including the following information: a description of the general partner's background, historical performance~~,~~ and ~~organization~~organizational profile; the proposed investment strategy; the proposed terms of the investment; the expected rate of return; the merits of the investment; issues and concerns surrounding the investment and how they might be resolved; and issues and provisions that should be subject to negotiation.

5. The Advisor and Staff will discuss the investment opportunity and whether an investment recommendation by Staff is likely, under the circumstances. Presentations and meetings between Staff and the general partners or sponsors will be arranged as necessary to address issues or questions. Unfavorable investment opportunities, as determined by Staff, will not normally be given further consideration, subject to review by the OST.

6. Staff will prepare and submit to the OIC a written recommendation of favorably reviewed proposed investments, and include any recommended contingencies to final investment, unless the proposed investment is processed through the "Private Equity Committee" as outlined below.

7. Appropriate legal counsel (generally the Oregon Attorney General's office, i.e., "DOJ") will be furnished partnership documents for those investments selected by Staff and approved by the Council or processed through the Private Equity Committee. Legal counsel will identify any legal issues and discuss these with Staff.

C. PRIVATE EQUITY COMMITTEE

1. The "Private Equity Committee" or "Committee" is a committee of the OST and acts on behalf of, and subject to the review of the OST. The Private Equity Committee is comprised of~~:~~— the following individuals: the Deputy State Treasurer, the Senior Private Equity Investment Officer (ex-officio), the Chief Investment Officer~~,~~ and an OIC member invited by the OST to participate on the Committee. The OST will consider input from the Council in extending such invitations from time to time. The OST, through the Private Equity Committee, may invest OPERF amounts up to and including $100 million per investment in first time private equity limited partnerships, and an amount up to and including 200% of the most recent commitment for existing relationships, consistent with OIC policies and the following additional constraints.

2. The aggregate amount of OPERF moneys committed by the Private Equity Committee shall not exceed $500 million to first time qualifying funds and $1.0 billion to follow-on qualifying funds, in any single calendar year. However, the OST may obtain

specific OIC concurrence for, and thereafter approve, Committee investment commitments in excess of such limits.

3. The Private Equity Committee will not make additional investment commitments with a specific Program manager when the fair market value of current investment commitments with that manager ~~equal~~equals or ~~exceed~~exceeds $750 million. However, the OST may obtain specific OIC concurrence for, and thereafter approve, Committee investment commitments in excess of such limit.

4. The Private Equity Committee will only exercise its investment authority by unanimous vote and acting upon a favorable due diligence determination by the Advisor. Proposed investments may only be considered by the Private Equity Committee if agreement exists between the Advisor and Staff that the proposed investment is consistent with Program standards including, but not limited to the applicable sector plan and strategy. Investment opportunities and proposed Committee commitments are subject to review by the OST, who may choose to refer such opportunities or cancel and refer such proposed commitments to the OIC for review and consideration.

5. Any favorable due diligence determination by the Private Equity Committee, including the underlying rationale, market conditions and portfolio impact, shall be furnished to both the OST and the OIC as soon as practicable and at least two weeks prior to any final investment commitment. Prior to commitment, if the OST objects to the proposed investment or is advised by any Council member that he or she objects to the proposed investment, the OST will cancel the proposed commitment and determine whether or not, alternatively, to have Staff bring the previously recommended investment to the Council as an agenda item at a subsequent OIC meeting.

6. Any investment commitment made by the Private Equity Committee shall be reported by Staff to the OIC at a subsequent meeting of the OIC. Staff shall not unreasonably delay any such notice.

D. OST STAFF AUTHORITY

Subject to his or her review right, the OST delegates to the Chief Investment Officer, upon a favorable recommendation from both the Senior Private Equity Investment Officer and the Advisor, authority to accomplish the following:

1. Approve OST administrative activities and guideline exceptions if a plan is established to conform the ~~exceptions~~ [project/investment/fund] exceptions to applicable guidelines within a reasonable period of time~~.~~;

2. Approve purchase or sale of fund interests, if such authority lies with the OST by statute or by delegation from the OIC~~; review~~. Review and approve other activities as necessary to further the interests of OPERF's Program portfolio consistent with Program standards~~.~~; and

3. Approve up to an additional $15 million to an existing investment fund for the following purposes: (1) to recapitalize the fund with additional equity; (2) to acquire all or part of another limited partner's ("LP's") position in an existing investment fund~~,~~; or~~;~~ (3) to co-invest with the investment fund in a portfolio investment. Such additional commitments shall be on terms equal to or better than the existing investment fund terms.

Any of the foregoing activities exercised by Staff shall be reported to the OIC at an upcoming meeting. Staff shall not unreasonably delay such report.

E. SELECTION- CRITERIA

1. The Staff, on behalf of the OST and consistent with OIC policies, will generally invest with experienced organizations that have managed prior investments or partnerships. Primary emphasis will be on the quality and experience of the investment sponsor or manager.

2. Additional criteria to be considered may include, but are not necessarily limited to the following:

   a) A well-developed investment focus that meets the Program's objectives and a favorable assessment of the proposed investment's strategy and market conditions;

   b) Relevant investment experience of partners and key staff, individually and as a team, as well as their stability;

   c) Organizational depth and significant time commitment to the partnership's or project's interests;

   d) Well-structured decision-making and transaction execution processes, including:

      - deal flow and initial analysis of portfolio investments~~,~~;
      - pricing, selection and negotiation of portfolio investments~~,~~;
      - financial structuring of portfolio investments~~,~~;
      - management or oversight of portfolio companies~~,~~; and
      - development of exit strategies;

   e) Consideration of relevant issues, such as conflicts of interest and alignment of interests, among others;

f) Experience in, and a demonstrated record of, successful prior investments; and

g) Appropriatc proposed terms and structure for the investment.

F. STANDARDS

1. Types of Allowable Investments

   Any appropriate investment opportunity that has the potential for returns superior to traditional investment opportunities and that is consistent with Program standards and applicable law.

2. Prudent and Productive Investor Standards

   Program standards include the requirement to make and manage investments consistent with OIC and OST policies and other applicable fiduciary standards, including but not limited to ORS 293.721 and 293.726.

3. Negotiated Terms

   Improved investment terms, such as preferred returns, lower fee structures~~,~~ and profit splits~~,~~ should be pursued by Staff as is practical and- prudent.

II. IMPLEMENTATION

A. ADVISOR- AND- OPERF- REQUIREMENTS

The OST, consistent with OIC policies, has elected to manage the Program under a lean-staff/outsourced model. An appropriate number of Staff will be assigned as the workload necessitates, and will manage portfolio planning and construction, the investment decision-making schedule and process, and the advisory contract. A qualified, independent Advisor will be retained by the OIC to facilitate Program investing, and will be delegated substantial duties ~~for:~~such as performing due diligence on investment opportunities, monitoring ~~of~~ Program investments, performing Program analytics~~,~~ and valuation analyses~~,~~ and preparing current and historical performance ~~reporting~~reports. Staff retains the primary responsibility to ensure that Program investments and prospective investments receive appropriate due diligence, monitoring, and valuation analyses. While some of these duties may be delegated to the Advisor, Staff will conduct and document sufficient reviews and tests of the Advisor's work as necessary to conclude that such delegated duties are being consistently and appropriately performed by Advisor.

B. LEGAL- COUNSEL

Relevant legal services will be obtained from the DOJ. However, due to the complex nature of ~~the Program's~~Program investments, collaboration with expert outside legal counsel will be recommended to DOJ when deemed necessary or appropriate by Staff, OST~~,~~ or Council.

C. CONTRACT EXECUTION

1. General Partners of relevant investment funds will be informed by Staff of the Council's or Private Equity Committee's approved commitment reasonably, if not immediately, following the Council or Committee meeting at which the approved commitment is given. All commitments are conditional and subject to the execution of investment documents satisfactory to DOJ, applicable law~~,~~ and other terms and conditions that may be identified.

2. With the possible exception of legally privileged materials, Staff will provide the Advisor with OIC and Committee meeting materials. OIC meeting materials shall include, *inter alia*, the written minutes of the Council's most recent meeting.

3. Staff will provide DOJ, in advance, with OIC and Committee meeting materials and will timely provide DOJ with written verification of investment commitments in conjunction with proposed partnership documentation.

4. The Council's authorized signatory, the Chief Investment Officer (or designee in accordance with OST policy), will ensure legal sufficiency approval has been provided by DOJ, prior to the execution of investment documents.

D. PARTNERSHIP FUNDING

1.– For all existing and future partnership relationships, each general partner shall submit a complete listing of the bank account(s) to which OST may wire funds on behalf of the partnership~~; this~~. This list may be included as an exhibit to the partnership agreement~~–~~, and OST shall not deviate from these pre-established instructions unless the general partner authorizes such a change in writing.

2.– All requests for funding (e.g., capital calls) must be made in writing and shall include an authorized signature. Facsimiles or e-mails may be accepted, if they include an authorized signature and account information previously as authorized ~~per~~above in D.1. ~~above.~~

3. Staff shall regularly monitor investments, through the Advisor or other contracted service providers, to ensure that the funding of investment commitments does not exceed the maximum amount authorized by the OIC or the Private Equity Committee. In monitoring the appropriate funding of investment commitments, the

Advisor or other contracted service provider will consider the effect of partnership recycling, temporary bridge financing~~,~~ and similar provisions included in investment documents executed pursuant to the relevant commitment in ascertaining whether or not funding levels are appropriate.

4. Staff shall verify that an authorized signer executes the written request by matching the signature to specimen signatures maintained by OST.

III. MONITORING

A. REPORTS

~~Reports on~~ Program activity and performance reports prepared by the Advisor will be furnished by it to Staff at least quarterly~~,~~ and annually in an expanded format.

B. ADHERENCE TO STRATEGY

The actual strategy employed by general partners will be judged relative to stated objectives, strategies~~,~~ and industry standards. The Advisor will interact with general partners periodically as necessary to verify adherence.

IV. REVIEW AND MODIFICATION OF INVESTMENT POLICY STATEMENT

The Council and OST may review Program policies –from time to time to determine if modifications are necessary or desirable.

SAMPLE FORMS, DOCUMENTS~~,~~ OR REPORTS

A. Appendix A – Private Partnership Investment Principles
B. Appendix B – Private Equity Investments Valuation Policy

[The balance of this page is intentionally left blank.]

APPENDIX A
PRIVATE PARTNERSHIP INVESTMENT PRINCIPLES

The purpose of this document is to formulate a general view that institutional investors should seek when making private equity and real estate partnership investments. _Private market partnership terms and conditions that have gradually evolved should receive renewed attention in order to better align interests between general partners and limited partners, enhance fund governance~~,~~ and provide greater transparency to investors. Below is a summary of the issues that we believe will lead to the modification and improvement of specific terms and best practices for new commitments. While there is no panacea for optimal contract terms, these principles should be considered as a guide, and not as absolutes, recognizing that partnership agreements and terms are complex, and must be considered in whole.

Areas for Improvement in Private Partnerships

Alignment of Interests

- The 80/20 profit split in commingled funds works well to align interests, but tighter distribution provisions should become the norm to avoid clawback situations or other forms of "leakage" that allow general partners to earn more than 20% of profits due to the timing of distributions or creative drafting of the partnership agreements.

  — The carry should be on net profits generated after taxes, management fees, transaction costs~~,~~ and all other ancillary expenses, rather than on gross profits.

  — A European-style waterfall is preferable. Ideally, the carry should only be in effect after 100% of capital, net of all fees and expenses, has been returned to the investor who has provided the vast majority of risk capital~~.~~ ~~However~~; however, interim tax distributions can be paid to cover the general partner's tax liabilities~~. These~~, and these distributions should be considered advances to the general partner.

  — If clawbacks are required~~;~~, they should be fully and timely repaid. The risk of clawback non-payment should be mitigated through escrow of a portion of the carry distributions, interim look-backs, and/or personal guarantees of the carry-receiving partners.

  — Clawback non-payment should be mitigated through joint-and-several coverage by all members of the GP.

— Carried interest to the GP should not exceed 20%, unless there are overriding economic considerations deemed favorable to the LP.

- Management fees are intended to cover reasonable operating costs and should not be a material profit-center~~,~~ or ~~a~~ funding source for staff bonuses or business expansion for the firm. Fees should be reduced for all but the most modest funds with larger funds acknowledging economies of scale by taking larger reductions in "standard" fees~~, acknowledging economies of scale.~~ .

  — Larger investors in a fund should receive fee or carry concessions, particularly when the general partner has multiple funds or follow-on funds in the market at the same time.

- Ideally, the general partner should avoid charging transaction, monitoring ~~fees,~~ and other fees to a deal or portfolio company/investment entity in the fund. If such fees are earned by the general partner, they should offset management fees and partnership expenses during the life of the fund with a split of no less than 80 percent to the LP.

  — Transaction, monitoring and other fees, if charged, should be escrowed against future management fees, subject to a split of no less than 80 percent to the LP.

- In no event shall the partnership be required to bear, directly or indirectly expenses of the general partner or manager for entertainment, publicity, fund raising, office space, information technology, employment, personnel or other matters that are generally considered to be corporate overhead. All partnership expenses shall be limited to those third party out-of-pocket expenses reasonably incurred directly in connection with the partnership business.

- The general partner's capital commitment to the fund should reflect a substantial amount of the net worth of the principals making up the general partner and a high percentage of the amount should be contributed in cash.

- Changes in tax law that personally impact members of a general partner should not be passed on to investors in the fund.

Governance

- Recent scandals have again highlighted the need for and the importance of an independent auditor who should be firmly focused on the best interests of the partnership and its limited partners, rather than the interests of the general partner.

- The auditor should be an independent, nationally recognized firm and should provide no other services to the general partner, unless explicitly approved by the Advisory Board.

- Because partnership terms are generally long (10-12 years) and withdrawal rights are virtually nonexistent, a super-majority of outstanding limited partnership ownership interests should be able to effectuate the following, without cause:

  - Suspend the commitment period;
  - Terminate the commitment period;
  - Remove the general partner; and/or
  - Dissolve the fund.

- General partners should reinforce their duty of care. The "gross negligence, fraud~~,~~ and willful misconduct" indemnification and exculpation standard should be a minimum in terms of what is agreed to by limited partners. Recent efforts by the general partner to~~:~~ (1) reduce all duties to the fullest extent of the law~~;~~, (2) demand the waiver of broad categories of conflicts of interests~~;~~ and (3) allow it to act in its sole discretion, even where a conflict exists, should be strongly resisted.

- General partners should be required to seek approval of the limited partners to change the investment strategy ~~promoted~~proposed when the fund was ~~raised~~promoted.

- Advisory Board meeting processes and procedures should be adopted and standardized across the industry to allow this sub-body of the limited partners to more effectively serve its role.

  - All limited partners should receive a list of the names and contact details of Advisory Board members.
  - The Advisory Board should be able to call for a meeting with the general partner at any time.
  - The Advisory Board should be allowed "private time" with the auditor, on at least an annual basis, if requested.
  - The Advisory Board should not be asked to approve specific investments, and will serve the limited partnership investors best by reviewing audit results~~,~~ and updated portfolio holdings ~~updates~~ (including valuation methods~~),~~) and addressing issues relating to potential conflicts-of-interest.

— Any significant transaction between multiple funds of the same general partner should be subject to Advisory Board approval. The Advisory Board shall have the right to put particular matters to a vote of all limited partners.

Transparency

- Fee, carry and all other ancillary fee calculations should be transparent and subject to limited partner and independent auditor review in a standardized form.

- All placement agent and fundraising fees should be fully disclosed. The scope of work provided by placement agents should be disclosed. Campaign contributions or other payments made to individuals that may influence the decision-making process should be disclosed.

- Accurate disclosure around uses of leverage at both the fund and the investment entity levels should be provided.

- All limited partners should be notified when/if the general partner receives any SEC inquiries or meaningful legal actions.

Adopted 5/6/09; Revised ~~9/30/09~~ 10/30/13

APPENDIX B
Private Equity Investments Valuation Policy

Public Company Securities

1) Public securities should be valued at the closing price or bid on the last day of the quarter of the performance measurement period.

2) The Advisor will apply a uniform discount to any public security based on the selling restriction level of the security, if any. The maximum discount applied will be 15% in any situation. The discount stipulations are as follows:

   Selling Restrictions:

   Less than 3 months until lock-up period expires: 10% discount

   3 months or greater period of lock-up: 15% discount

3) In the event that two or more general partners hold the same security with identical provisions and structure, but different valuations, Staff and the Advisor will establish the most appropriate valuation.

Non-Public Company Securities

1) Non-publicly traded securities should be valued at fair value. These types of securities are not traded on an active exchange and thus do not have readily determinable market prices established by arm's-length transactions~~ and~~; moreover, there ~~is~~exists no broadly accepted methodology for determining fair value~~;~~, and valuations of such securities may contain subjective elements. Determination of the fair value of such securities should be based on the best available and most applicable valuation metrics that can be obtained. Valuation metrics may differ substantially, depending on the stage, industry, competitive position~~,~~ and geography of the company.

2) General Partners (~~GP's~~GPs) of limited partnerships will determine valuations of investments within their limited partnerships. If negotiated as part of the applicable Limited Partnership Agreement (LPA), these valuations may be reviewed and/or approved by a committee of limited partners (i.e., an Advisory Board, ~~Investor's~~Investors' Committee, etc.) established for the limited partnership.

3) Staff are not typically experts in the valuation of non-public securities, but do have broad experience in private equity investment management~~, and~~; accordingly, Staff will utilize such experience in assessing whether valuations reported by the ~~GP's~~GPs and Advisor are reasonably stated~~,~~ and ~~assessing~~will

assess the risk of material misstatement. Staff will utilize the best available and most applicable information in forming these assessments. Such information may include, but will not be limited to the following:

- Valuation analyses and adjustments performed by the Advisor;
- Audited financial statements of Program limited partnerships;
- GP prepared quarterly and annual limited partnership reports~~.~~;
- Where applicable, limited partner committee reviews/approvals of valuations when Staff serve on such committees; and
- General Staff knowledge of company performance, comparable transactions and valuations, industry trends, market environment~~,~~ and other relevant factors.

If the valuation provided by the GP or Advisor is not ~~US~~U.S. GAAP fair value, Staff may request additional information from the GP or Advisor, if needed, in order to estimate fair value.

4) Staff is responsible for ensuring Program investments are recorded in OST's book of record at fair value~~. This~~, and this responsibility may not be delegated to third parties. To fulfill ~~its~~this particular responsibility~~ for ensuring that Program investments are recorded in OST's book of record at fair value~~, Staff will:

- Maintain an alert and appropriate level of professional skepticism regarding private equity valuations~~.~~;
- Review the Advisor's quarterly report, including limited partnership quarterly summaries which detail valuations and changes thereto~~.~~;
- On an annual basis, meet with the Advisor to update or confirm Staff's understanding of the Advisor's procedures and analyses regarding limited partnership valuation~~.~~;
- To the fullest extent practicable, participate in limited partner committee review and/or approvals of limited partnership valuations if Staff serves on such committee~~.~~;
- Review limited partnership annual reports and audited financial statements~~.~~; and
- On an exception basis, investigate any valuations that are suspect of being other than fair value, and document the results of such investigation and any proposed changes in limited partnership valuation. Such exceptions may include, but are not limited to~~:~~ qualified or adverse audit opinions~~;~~, financial statements prepared on a basis other than ~~US~~U.S. GAAP~~;~~, material adverse subsequent events (i.e., bankruptcy of a company~~);~~), limited partnership valuation policy that is other than fair value~~;~~, and qualitative Staff assessment that a valuation may not reflect fair value.

FUNCTION: **Private Equity & Alternative Investments**
ACTIVITY: **Alternative Investments Portfolio Standards & Procedures**

POLICY:

I. BACKGROUND

The Oregon State Treasurer ("OST"), to accomplish the prudent and efficient implementation of investment policies established by the Oregon Investment Council ("OIC" or "Council"), has created the Alternative Investments Program (the "Program") to participate in attractive long-term investment opportunities for the Oregon Public Employees Retirement Fund ("OPERF" or the "Fund") and to provide diversification to the overall OPERF investment portfolio. To date, Program investments have included participation in diversified strategies including~~:~~ infrastructure limited partnerships, oil and gas limited partnerships, hedge fund partnerships~~,~~ and other special situation partnerships. The allocation to the Program will be targeted at 5 percent of OPERF's total asset value after the initial build-out period which~~, initially,~~ is expected to take three to as many as ten years. ~~The~~ As opportunities become available, OST will be selective and invest ~~such~~ assets~~, as are~~ allocated to this Program prudently~~ and~~, productively and in a manner consistent with the Program, OIC policies~~,~~ and applicable law ~~as opportunities become available~~.

II. GENERAL POLICY

Program investments provide an appropriate ~~addition~~complement to OPERF's investment portfolio, and are compatible with the general objectives of the Fund, which include the following:

1. Providing a means to pay benefits to ~~the Fund's~~Fund participants and their beneficiaries~~.~~;

2. Investing to produce a return on investment that is based on levels of liquidity and investment risk that are prudent and reasonable~~.~~;

3. Attaining an adequate real return over the expected rate of inflation~~.~~; and

4. Complying with all applicable laws and regulations concerning the investment of pension assets.

Program investments ~~possess~~should exhibit a ~~low~~lower correlation relative to other ~~investment~~asset classes and ~~should~~ therefore ~~contribute~~are expected to ~~reduction of risk and the enhancement of returns, on a total portfolio basis, as well as providing portfolio~~provide important diversification benefits to the Fund.

III. OBJECTIVES

A. PROGRAM INVESTMENT PERFORMANCE OBJECTIVE

The performance objective for Program investments is significant long-term net returns to OPERF (e.g., after management fees and general ~~partner's~~partners' carried interest) above a benchmark reflecting the CPI plus an appropriate premium to compensate for illiquidity, risk and expense. ~~The~~Specifically, the performance objective should exceed the CPI plus 400 basis points, and may vary by the type of investment~~, for example,~~ (e.g., infrastructure or timberland~~.~~). The performance objective, benchmark and premium will be periodically evaluated by OST staff ("Staff").

B. DIVERSIFICATION

Diversification reduces risk in the Program's investments and the following types of diversification should be considered, including, but not limited to the following:

1. Strategy - Diversify investments through exposure to a variety of alternative investment strategies, including infrastructure, natural resources (including commodities~~),~~) and absolute return or hedge fund strategies. The targeted exposure ranges for various types of investments are as follows:

Investment Type	**Target Allocation**
Infrastructure	**25-35%**
Natural Resources	**40-50%**
Hedge Funds	**15-25%**
Other	**0-10%**

2. Industry Sectors - Investments will be diversified among industry groupings.

3. Size of Investments - Investments will be diversified among a range of partnerships of varying sizes, generally with a minimum investment size of $25 million~~, and~~ which may ~~be~~comprise as much as 25% of a particular co-mingled partnership when appropriate. Deviations from these guidelines will be documented and communicated by Staff to the OST and OIC.

4. Geographical - Staff should consider geographical diversification in investment selection~~;~~, and investments, to the extent appropriate, may be considered that benefit the overall economic health of Oregon~~,~~ so long as and only if such investments otherwise meet the investment criteria and quality of the Program.

5. Time - Staff will endeavor to invest OPERF assets in a consistent manner over time~~,~~ unless market conditions during any particular time period appear unfavorable.

C. TOTAL- PORTFOLIO- DIVERSIFICATION

The ~~planned~~ correlation of ~~the Program's investment return~~Program investments to other Fund asset classes is ~~not high, and~~expected to be lower so that the inclusion of Program investments~~, therefore, provides~~ is expected to provide an added measure of diversification to ~~the~~overall Fund returns.

PROCEDURES:

I. PROCEDURES- AND- STANDARDS

A. DEFINITION OF INVESTMENT UNIVERSE

Staff and ~~the contract~~any consultant(s) or advisor(s) ~~[if~~ retained~~]~~ (the Advisor) shall furnish the OST and OIC with an annual statement of the sector and strategy plan for the Program.

B. GENERAL PROCEDURES

1. Staff, and the Advisor, will screen available investments and designate those that meet the Program's general strategy, selection criteria and performance goals. Staff will coordinate the available investments, whether first identified by Staff, the OIC, the Advisor or otherwise. Staff may reject such proposed investments if they do not meet Program criteria.

2. The Advisor, working in conjunction with Staff, will review the documents pertinent to an investment opportunity, including the offering memorandum, and identify possible issues. The Advisor and Staff may meet with the general partners, sponsors~~,~~ or investment managers to discuss the investment opportunity.

3. The Advisor will identify to Staff those investment opportunities that it determines best meet the Program's criteria and merit further detailed review.

4. Staff will select those investment opportunities upon which the Advisor will conduct full due diligence. Upon completion of its due diligence, the Advisor will provide a written report containing a summary of the proposed investment including the following information: a description of the general partner's background, historical performance~~,~~ and ~~organization~~organizational profile; the proposed investment strategy; the proposed terms of the investment; the expected rate of return; the merits of the investment; issues and concerns surrounding the investment and how they might be resolved; and issues and provisions that should be subject to negotiation.

5. The Advisor and Staff will discuss the investment opportunity and whether an investment recommendation by Staff ~~is likely~~, under the circumstances, is likely. Presentations and meetings between Staff and the general partners or sponsors will be arranged as necessary to address issues or questions. ~~Unfavorable~~Subject to OST review, unfavorable

investment opportunities, as determined by Staff, will not normally be given further -consideration~~, subject to review by the OST~~.

6. Appropriate legal counsel (generally the Oregon Attorney General's office, i.e., "DOJ") will be furnished partnership documents for those investments selected by Staff and approved by the Council or ~~process~~processed through the Alternative Portfolio Committee._ Legal counsel will identify any legal issues and discuss these with Staff.

C. ALTERNATIVE PORTFOLIO COMMITTEE

1. The "Alternative Portfolio Committee," or "Committee" is a committee of the OST and acts on behalf of~~,~~ and subject to the review of ~~the~~ OST. _The Committee is comprised of the following individuals: the Deputy State Treasurer~~,~~; the Senior Alternative Investment Officer (ex-officio~~),~~); the Chief Investment Officer~~,~~; and an OIC member invited by ~~the~~ OST to participate on the Committee. The OST will consider input from the Council in extending such invitations, from time to time. The OST, through the Committee, may invest OPERF amounts up to and including $100 million per investment in first-time limited partnerships or investment managers, and an amount up to and including 200% of the most recent commitment for existing relationships, consistent with OIC policies and the following, additional constraints~~.~~:

2. The aggregate amount of OPERF moneys committed by the Alternative Portfolio Committee shall not exceed $500 million to first-time qualifying funds and $700 million to follow-on qualifying funds, in any single calendar year, without the approval of the OIC. _The Committee will not make additional investment commitments with a specific Program manager when the fair market value of current investment commitments with that manager ~~equal~~equals or ~~exceed~~exceeds $500 million~~. However~~; however, the OST may obtain specific OIC concurrence for, and thereafter approve, Committee investment commitments in excess of such limit.

3. The Alternative Equity Committee will only exercise its investment authority by unanimous vote and acting upon a favorable due diligence determination by an Advisor. Proposed investments may only be considered by the Committee if agreement exists between the Advisor and Staff that the proposed investment is consistent with Program standards. Investment opportunities and proposed Committee commitments are subject to review by the OST, who may choose to refer such opportunities or cancel and refer such proposed commitments to the OIC for review and consideration.

4. Any favorable due diligence determination by the Committee, including the underlying rationale, market conditions and portfolio impact, shall be furnished to both the OST and the OIC as soon as practicable in connection with any investment that is likely to be made through the Committee and at least two weeks prior to any final investment commitment. _Prior to

commitment, if the OST objects to the proposed investment or is advised by any Council member that he or she objects to the proposed investment, the OST will cancel the proposed commitment and determine whether or not, alternatively, to have Staff bring the previously recommended investment to the Council at a subsequent OIC meeting.

5. Any investment commitment made by the Alternative Portfolio Committee shall be reported by Staff to the OIC at a subsequent meeting of the OIC~~.~~, and Staff shall not unreasonably delay any such notice.

D. OST STAFF AUTHORITY

Subject to his or her review right, the OST delegates to the Chief Investment Officer, upon a favorable recommendation from both the Senior Alternatives Investment Officer and the Advisor authority to accomplish the following:

1. Approve OST administrative activities and guideline exceptions if a plan is established to conform the ~~exception~~ [project/investment/fund] exception to applicable guidelines within a reasonable period of time.

2. Approve purchase or sale of fund interests, if such authority lies with the OST by statue or by delegation from the OIC~~;~~, and review and approve other activities as necessary to further the interests of ~~OPERF's~~the Program~~,~~ consistent with ~~Programs~~its standards~~.~~; and

3. Approve up to an additional $15 million to an existing investment fund for the following purposes: (1) to recapitalize the fund with additional equity; (2) to acquire all or part of another limited partner's ("LP's") position in an existing investment fund; or (3) to co-invest with the investment fund in a portfolio investment. Such additional commitments shall be on terms equal to or better than the existing investment fund terms.

Any of the foregoing activities exercised by Staff shall be reported to the OIC at an upcoming meeting~~.~~, and Staff shall not unreasonable delay such report.

E. SELECTION- CRITERIA

1. The Staff, on behalf of the OST and consistent with OIC policies, will generally invest with experienced organizations that have managed prior investments or partnerships. Primary emphasis will be on the quality and experience of the investment sponsor or manager.

2. Additional criteria to be considered may include, but are not necessarily limited to:

   a) A well-developed investment ~~focus that meets~~thesis consistent with the Program's objectives and a favorable assessment of both the proposed investment's strategy and prevailing market conditions;

b) Relevant investment experience of partners and key staff, individually and as a team, as well as ~~their~~the relative stability thereof;

c) Organizational depth and significant time commitment to the partnership's or project's interests;

d) Well-structured decision-__making and transaction execution processes~~,~~ including:

- deal flow and initial analysis of portfolio investments~~,~~;
- pricing, selection and negotiation of portfolio investments~~,~~;
- financial structuring of portfolio investments~~,~~;
- management or oversight of portfolio companies~~,~~; and
- development of exit strategies~~;~~.

e) Consideration of relevant issues, such as conflicts of interest and alignment of interests, among others;

f) Experience in, and a demonstrated record of, successful prior investments;

g) Appropriate proposed terms and structure for the investment.

F. STANDARDS

1. Types of Allowable Investments

Any appropriate investment opportunity that has the potential for returns superior to traditional investment opportunities and that is consistent with Program standards and applicable law.

2. Prudent and Productive Investor Standards

Program standards include the requirement to make and manage investments consistent with OIC and OST policies and other applicable fiduciary standards~~,~~ including but not limited to ORS 293.721 and 293.726.

3. Negotiated Terms

Improved investment terms, such as preferred returns, lower fee structures, and profit splits, should be pursued by Staff as is practical and prudent..

II. IMPLEMENTATION

A. ADVISOR- AND- OPERF- REQUIREMENTS

The OST, consistent with OIC policies, has elected to manage the Program under a lean-staff/outsourced model. An appropriate number of Staff will be assigned as the workload necessitates, and will manage portfolio planning and construction, the investment decision-making schedule and process~~,~~ and the

~~advisory~~Advisor contract. A qualified, independent Advisor may be retained by the OIC to facilitate Program investing, and will be delegated substantial duties for~~:~~ performing due diligence on investment opportunities, monitoring ~~of~~ Program investments, performing Program analytics~~,~~ and valuation analyses~~, and~~ and preparing current and historical performance reporting. Staff retains the primary responsibility to ensure that Program investments and prospective investments receive appropriate due diligence, monitoring~~,~~ and valuation analyses. While some of these duties may be delegated to the Advisor, Staff will conduct and document sufficient reviews and tests of the Advisor's work, as necessary, to conclude that such delegated duties are being consistently and appropriately performed by Advisor.

B. LEGAL- COUNSEL

Relevant legal services will be obtained from the DOJ. However, due to the complex nature of the Program's investments, collaboration with expert outside legal counsel will be recommended to DOJ when deemed necessary or appropriate by Staff, OST~~,~~ or Council.

C. CONTRACT EXECUTION

1. General Partners of relevant investment funds will be informed by Staff of the Council's or Committee's approved commitment reasonably, if not immediately, following the Council or Committee meeting at which the approved commitment is given. All commitments are conditional and subject to the execution of investment documents satisfactory to DOJ, applicable law~~,~~ and other terms and conditions that may be identified.

2. With the possible exception of legally privileged materials, Staff will provide the Advisor with OIC and Committee meeting materials. OIC meeting materials shall include, *inter alia*, the written minutes of the Council's most recent meeting.

3. Staff will provide DOJ, in advance, with OIC and Committee meeting materials and will timely provide DOJ with written verification of investment commitments in conjunction with proposed partnership documentation.

4. The Council's authorized signatory, the Chief Investment Officer (or designee in accordance with OST policy), will ensure legal sufficiency approval has been provided by DOJ, prior to the execution of investment documents.

D. PARTNERSHIP FUNDING

1.– For all existing and future partnership relationships, each general partner shall submit a complete listing of the bank account(s) to which OST may wire funds on behalf of the investment manager~~;~~, and this list may be included as an exhibit to the investment management agreement. OST shall not deviate from these pre-established instructions unless the general partner~~,~~ or investment management firm~~,~~ authorizes such a change in writing.

2.~~–~~ All requests for funding (e.g., capital calls) must be made in writing and shall include an authorized signature. Facsimiles or e-mails may be accepted, if they include an authorized signature and account information as previously authorized ~~per~~above in D.1.~~-above.~~

3. Staff shall regularly monitor investments, through the Advisor or other contracted service providers, to ensure that the funding of investment commitments does not exceed the maximum amount authorized by the OIC or the Private Equity Committee. In monitoring the appropriate funding of investment commitments, the Advisor or other contracted service provider will consider the effect of partnership recycling, temporary bridge financing~~,~~ and similar provisions included in investment documents executed pursuant to the relevant commitment in ascertaining whether or not funding levels are appropriate.

4. Staff shall verify that an authorized signer executes the written request by matching the signature to specimen signatures maintained by OST.

III. MONITORING

A. REPORTS

Reports on Program activity and performance prepared by the Advisor ~~[if retained], ~~will be furnished by it to Staff at least quarterly~~,~~ and annually in an expanded format.

B. ADHERENCE TO STRATEGY

The actual strategy employed by general partners or investment managers will be judged relative to stated objectives, strategies~~,~~ and industry standards. The Advisor will interact with general partners or investment managers periodically as necessary to verify adherence.

IV. REVIEW AND MODIFICATION OF INVESTMENT POLICY STATEMENT

The Council and OST may review Program policies from time to time to determine if modifications are necessary or desirable.

SAMPLE FORMS, DOCUMENTS~~,~~ OR REPORTS

A. Appendix A – Private Partnership Investment Principles
B. Appendix B – Alternative Investments Valuation Policy

APPENDIX A
PRIVATE PARTNERSHIP INVESTMENT PRINCIPLES

The purpose of this document is to formulate a general view that institutional investors should seek when making private equity and real estate partnership investments. _Private market partnership terms and conditions that have gradually evolved should receive renewed attention in order to better align interests between general partners and limited partners, enhance fund governance~~,~~ and provide greater transparency to investors.- Below is a summary of the issues that we believe will lead to the modification and improvement of specific terms and best practices for new commitments. While there is no panacea for optimal contract terms, these principles should be considered as a guide, and not as absolutes, recognizing that partnership agreements and terms are complex, and must be considered in whole.

Areas for Improvement in Private Partnerships

Alignment of Interests

- The 80/20 profit split in commingled funds works well to align interests, but tighter distribution provisions should become the norm to avoid clawback situations or other forms of "leakage" that allow general partners to earn more than 20% of profits due to the timing of distributions or creative drafting of the partnership agreements.

  — The carry should be on net profits generated after taxes, management fees, transaction costs~~,~~ and all other ancillary expenses, rather than on gross profits.

  — A European-style waterfall is preferable. Ideally, the carry should only be in effect after 100% of capital, net of all fees and expenses, has been returned to the investor who has provided the vast majority of risk capital~~. However~~; however, interim tax distributions can be paid to cover the general partner's tax liabilities~~.~~ ~~These~~, and these distributions should be considered advances to the general partner.

  — If clawbacks are required~~;~~, they should be fully and timely repaid. The risk of clawback non-payment should be mitigated through escrow of a portion of the carry distributions, interim look-backs, and/or personal guarantees of the carry-receiving partners.

  — Clawback non-payment should be mitigated through joint-and-several coverage by all members of the GP.

— Carried interest to the GP should not exceed 20%, unless there are overriding economic considerations deemed favorable to the LP.

- Management fees are intended to cover reasonable operating costs and should not be a material profit-center~~,~~ or ~~a~~ funding source for staff bonuses or business expansion for the firm. Fees should be reduced for all but the most modest funds with larger funds acknowledging economies of scale by taking larger reductions in "standard" fees~~,~~ ~~acknowledging economies of scale.~~ .

  — Larger investors in a fund should receive fee or carry concessions, particularly when the general partner has multiple funds or follow-on funds in the market at the same time.

- Ideally, the general partner should avoid charging transaction, monitoring ~~fees,~~ and other fees to a deal or portfolio company/investment entity in the fund. If such fees are earned by the general partner, they should offset management fees and partnership expenses during the life of the fund with a split of no less than 80 percent to the LP.

  — Transaction, monitoring and other fees, if charged, should be escrowed against future management fees, subject to a split of no less than 80 percent to the LP.

- In no event shall the partnership be required to bear, directly or indirectly expenses of the general partner or manager for entertainment, publicity, fund raising, office space, information technology, employment, personnel or other matters that are generally considered to be corporate overhead. All partnership expenses shall be limited to those third party out-of-pocket expenses reasonably incurred directly in connection with the partnership business.

- The general partner's capital commitment to the fund should reflect a substantial amount of the net worth of the principals making up the general partner and a high percentage of the amount should be contributed in cash.

- Changes in tax law that personally impact members of a general partner should not be passed on to investors in the fund.

Governance

- Recent scandals have again highlighted the need for and the importance of an independent auditor who should be firmly focused on the best interests of the partnership and its limited partners, rather than the interests of the general partner.

  — The auditor should be an independent, nationally recognized firm and should provide no other services to the general partner, unless explicitly approved by the Advisory Board.

- Because partnership terms are generally long (10-12 years) and withdrawal rights are virtually nonexistent, a super-majority of outstanding limited partnership ownership interests should be able to effectuate the following, without cause:

  — Suspend the commitment period;

  — Terminate the commitment period;

  — Remove the general partner; and/or

  — Dissolve the fund.

- General partners should reinforce their duty of care. The "gross negligence, fraud~~,~~ and willful misconduct" indemnification and exculpation standard should be a minimum in terms of what is agreed to by limited partners. Recent efforts by the general partner to~~:~~ (1) reduce all duties to the fullest extent of the law~~;~~, (2) demand the waiver of broad categories of conflicts of interests~~;~~ and (3) allow it to act in its sole discretion, even where a conflict exists, should be strongly resisted.

- General partners should be required to seek approval of the limited partners to change the investment strategy ~~promoted~~proposed when the fund was ~~raised~~promoted.

- Advisory Board meeting processes and procedures should be adopted and standardized across the industry to allow this sub-body of the limited partners to more effectively serve its role.

  — All limited partners should receive a list of the names and contact details of Advisory Board members.

  — The Advisory Board should be able to call for a meeting with the general partner at any time.

  — The Advisory Board should be allowed "private time" with the auditor, on at least an annual basis, if requested.

  — The Advisory Board should not be asked to approve specific investments, and will serve the limited partnership investors best by reviewing audit results~~,~~ and updated portfolio holdings ~~updates~~ (including valuation methods~~),~~) and addressing issues relating to potential conflicts-of-interest.

  — Any significant transaction between multiple funds of the same general partner should be subject to Advisory Board approval. The Advisory Board shall have the right to put particular matters to a vote of all limited partners.

Transparency

- Fee, carry and all other ancillary fee calculations should be transparent and subject to limited partner and independent auditor review in a standardized form.

- All placement agent and fundraising fees should be fully disclosed. The scope of work provided by placement agents should be disclosed. Campaign contributions or other payments made to individuals that may influence the decision-making process should be disclosed.

- Accurate disclosure around uses of leverage at both the fund and the investment entity levels should be provided.

- All limited partners should be notified when/if the general partner receives any SEC inquiries or meaningful legal actions.

Adopted 5/6/09; Revised ~~9/30/09~~10/30/13

APPENDIX B
Alternative Investments Valuation Policy

Public Company Securities

1) Public securities should be valued at the closing price or bid on the last day of the quarter of the performance measurement period.

2) The Advisor will apply a uniform discount to any public security based on the selling restriction level of the security, if any. The maximum discount applied will be 15% in any situation. The discount stipulations are as follows:

   Selling Restrictions:

   Less than 3 months until lock-up period expires: 10% discount

   3 months or greater period of lock-up: 15% discount

3) In the event that two or more general partners hold the same security with identical provisions and structure, but different valuations, Staff and the Advisor will establish the most appropriate valuation.

Non-Public Company Securities

1) Non-publicly traded securities should be valued at fair value. These types of securities are not traded on an active exchange and thus do not have readily determinable market prices established by arm's-length transactions~~ and~~; moreover, there ~~is~~exists no broadly accepted methodology for determining fair value~~;~~, and valuations of such securities may contain subjective elements. Determination of the fair value of such securities should be based on the best available and most applicable valuation metrics that can be obtained. Valuation metrics may differ substantially, depending on the stage, industry, competitive position~~,~~ and geography of the company.

2) General Partners (~~GP's~~GPs) of limited partnerships will determine valuations of investments within their limited partnerships. If negotiated as part of the applicable Limited Partnership Agreement (LPA), these valuations may be reviewed and/or approved by a committee of limited partners (i.e., an Advisory Board, ~~Investor's~~Investors' Committee, etc.) established for the limited partnership.

3) Staff are not typically experts in the valuation of non-public securities, but do have broad experience in private equity investment management~~, and~~; accordingly, Staff will utilize such experience in assessing whether valuations reported by the ~~GP's~~GPs and Advisor are reasonably stated~~,~~ and ~~assessing~~will assess the risk of material misstatement. Staff will utilize the best available and most applicable information in forming these assessments. Such information may include, but will not be limited to the following:

- Valuation analyses and adjustments performed by the Advisor;
- Audited financial statements of Program limited partnerships;
- GP prepared quarterly and annual limited partnership reports~~.~~;
- Where applicable, limited partner committee reviews/approvals of valuations when Staff serve on such committees; and
- General Staff knowledge of company performance, comparable transactions and valuations, industry trends, market environment~~,~~ and other relevant factors.

If the valuation provided by the GP or Advisor is not ~~US~~U.S. GAAP fair value, Staff may request additional information from the GP or Advisor, if needed, in order to estimate fair value.

4) Staff is responsible for ensuring Program investments are recorded in OST's book of record at fair value~~. This~~, and this responsibility may not be delegated to third parties. To fulfill ~~its~~this particular responsibility ~~for ensuring that Program investments are recorded in OST's book of record at fair value~~, Staff will:

   - Maintain an ~~altert~~alert and appropriate level of professional skepticism regarding~~,~~ private equity valuations~~.~~;
   - Review the Advisor's quarterly report, including limited partnership quarterly summaries which detail valuations and changes thereto~~.~~;
   - On an annual basis, meet with the Advisor to update or confirm Staff's understanding of the Advisor's procedures and analyses regarding limited partnership valuation~~.~~;
   - To the fullest extent practicable, participate in limited partner committee review and/or approvals of limited partnership valuations if Staff serves on such committee~~.~~;
   - Review limited partnership annual reports and audited financial statements~~.~~; and
   - On an exception basis, investigate any valuations that are suspect of being other than fair value, and document the results of such investigation and any proposed changes in limited partnership valuation. Such exceptions may include, but are not limited to~~:~~ qualified or adverse audit opinions~~;~~, financial statements prepared on a basis other than ~~US~~U.S. GAAP~~;~~, material adverse subsequent events (i.e., bankruptcy of a company~~);~~), limited partnership valuation policy that is other than fair value~~;~~, and qualitative Staff assessment that a valuation may not reflect fair value.

~~OREGON INVESTMENT COUNCIL~~

~~Summary of Key Investment Duties and Functions~~

~~Oregon Investment Council (OIC) duties include, but are not limited to:~~

~~(a) Establishing investment objectives;~~

~~(b) Approving key investment policies, including asset allocation, asset class strategies and performance evaluation criteria;~~

~~(c) Ensuring that the investment activities under the purview of the OIC are conducted in an efficient, effective, and prudent manner.~~

~~(d) Delegating to the State Treasurer, investment managers, consultants and other agents the responsibility for implementing specified policies; and,~~

~~(e) Monitoring staff, investment managers, consultants and other agents to determine that investments are made in accordance with approved policies and to evaluate their performance against established criteria.~~

~~OIC functions include, but are not limited to:~~

~~(a) Coordination with the Oregon Public Employees' Retirement System, State Accident Insurance Fund, Department of State Lands, Board of Higher Education, and other agencies, on matters of joint concern.~~

~~(b) Definition of investments consistent with statutory authority contained in ORS 293.~~

~~(c) Approval of due diligence processes.~~

~~(d) Receipt and review of periodic reports from staff, consultants, investment managers and other experts.~~

~~(e) Action on matters resulting from (d).~~

~~(f) Action on legislative and or regulatory matters that impact the investment portfolio or decision-making process.~~

~~(g) Oversight and management of legal matters that impact the investment portfolio or decision-making process, which are not otherwise reserved by the Department of Justice.~~

~~(h) Making recommendations to the Treasurer on staffing plans, incentive compensation, and the budget for all investment activities under the purview of the OIC.~~

~~(i) Approving all major personal service and consulting contracts related to investment activities under the purview of the OIC.~~

~~(j) Adopting best and responsible practices and innovations for the OIC, from the investment management community, when making and implementing policy.~~

~~Adopted: February 27, 2002 Revised: January 18, 2006 Reviewed: April 27, 2012~~

Oregon Investment Council

Statement

of

Investment and Management Beliefs

Adopted: October 30, 2013

Contents

Preamble

This Statement of Investment and Management Beliefs enumerates fundamental investment and management principles that guide the Oregon Investment Council ("council" or "OIC) in performing its fiduciary and statutory obligations of establishing policies for the investment and management of "investment funds" as defined in 293.701(2). The Oregon State Treasurer, largely through the Investment Division of the Office of the State Treasurer ("Treasurer" or "OST"), provides staff support for the council and, as the statutorily designated "investment officer" for the council (together with such other persons determined by the council to be qualified to conduct investment and management functions on its behalf), invests and manages in accordance with council policy those moneys made available by the council for such purposes. The Treasurer may adopt additional policies governing its investment and management functions. The OIC and OST recognize their respective authority to establish and implement such policies is grounded in and bounded by those fiduciary and statutory foundations to their authority, which essentially charge them with exercising a duty of exclusive loyalty to beneficiaries of investment funds in efficiently making related moneys as productive as possible in keeping with applicable standards of prudent judgment and care. Accordingly, the following statement and accompanying OIC policies are intended to be in harmony with and promote the fulfillment of such obligations.

1.) THE OIC SETS POLICY AND IS ULTIMATELY RESPONSIBLE FOR THE INVESTMENT PROGRAM

A. The OIC is a policy-setting council that largely delegates investment management to the OST and qualified external fiduciaries.
   - The OIC sets strategic policy and largely tasks both the OST staff and external managers with policy implementation.

B. The OIC has authority to set and monitor portfolio risk. Both short-term and long-term risks are critical.
   - Portfolio risk is multifaceted. For example, the OIC must weigh the short-term risk of principal loss against the long-term risk of failing to meet return expectations. As part of the risk monitoring process, the OIC should establish a process for identifying extreme price/valuation levels as well as a decision-making protocol when such levels have been reached/breached.

C. To exploit market inefficiencies, the OIC must be contrarian and innovative in its approach to opportunistic investments.
   - As part of its short- and long-term risk management efforts, the OIC should prepare for periods of extreme price/valuation levels and/or related financial market dislocations and have the ability and fortitude to act expeditiously during such periods.

D. Incentive structures should be carefully evaluated to ensure proper alignment with investment objectives.
   - When applied to the OST, evaluation criteria should be based (in large part) on decisions over which OST staff members have clear authority and control. Furthermore, total portfolio results (in addition to individual asset class returns) should be considered. Finally, the evaluation period should be consistent with an appropriate investment horizon or market cycle.

E. Adequate resources are required to successfully compete in global capital markets.
   - OST staffing levels and operating budgets should be determined by capability requirements using benchmark assessments of other well respected organizations of similar size and portfolio complexity. The benefits of OST staff continuity should also be recognized.

2.) ASSET ALLOCATION DRIVES RISK AND RETURN

A. Asset allocation is the OIC's primary policy tool for managing the investment program's long-term risk/return profile.
   - Decisions regarding strategic asset allocation will have the largest impact on the investment program's realized return and risk and hence should be made judiciously and receive special emphasis and attention.

3.) THE EQUITY RISK PREMIUM WILL BE REWARDED

A. Over the long-term, equity-oriented investments provide reliable return premiums relative to risk-free investments.
   - Though returns for risk taking are not always monotonic or rewarded consistently over time, bearing equity risk does command a positive expected return provided such risk is reasonably priced.

4.) PRIVATE MARKET INVESTMENTS CAN ADD SIGNIFICANT VALUE AND REPRESENT A CORE OST/OIC COMPETENCY

A. OIC should, where applicable, capitalize on its status as a true, long-term investor by allocating a meaningful portion of appropriate assets to illiquid, private market investments.
   - Inefficiencies exist in private markets that provide skilled managers with excess return opportunities relative to public market analogues. Private markets may also offer an "illiquidity premium" that the OIC can exploit given its position as a true, long-term investor.

B. Dispersion in private market investment returns is very wide. Accordingly, top quartile manager selection and vintage year diversification are paramount.
   - Private market investment success is predicated on a) identifying skilled managers and b) developing long-term investment relationships that enable skill to manifest in the form of excess returns.
   - Proper investment pacing, including deliberate vintage year diversification, is also an integral element of superior private market investment results.

5.) CAPITAL MARKETS HAVE INEFFICIENCIES THAT CAN BE EXPLOITED

A. Inefficiencies that can be exploited by active management may exist in certain segments of the capital markets.
   - While largely efficient, select segments of the capital markets can sometimes be exploited by skilled active management.
   - The nature (i.e., perceived magnitude and likely duration) of such inefficiencies should inform the proposed active management strategy (e.g., discretionary or systematic).

B. Passive investment management in public markets will outperform the median active manager in public markets over time.
   - In public market asset classes, passive investment management is expected to outperform the median active manager. Accordingly, active management should be a deliberate choice and applied only to those public investment strategies and managers in which the OIC enjoys a high degree of confidence that such active management activities will be sufficiently rewarded on a risk-adjusted basis and net of all fees and related transactions costs.

6.) COSTS DIRECTLY IMPACT INVESTMENT RETURNS AND SHOULD BE MONITORED AND MANAGED CAREFULLY

A. All fees, expenses, commissions, and transaction costs should be diligently monitored and managed in order to maximize net investment returns.
   - While all costs should be monitored and controlled, costs should be evaluated relative to both expected and realized returns.

B. Incentive structures should be carefully evaluated to ensure proper alignment with investment program objectives.
   - Fee and incentive structures drive both individual and organizational behavior. These structures (particularly in private market strategies) should be carefully evaluated to ensure that goals and incentives of investment professionals are well aligned with program investment objectives and corresponding policies.

Oregon Investment Council

Statement
of
Funds Governance
~~for the~~
~~Oregon Public Employees Retirement Fund~~

Adopted: February 27, 2002
Revised: April 28, 2004; January 18, 2006; May 31, 2006; July 29, 2009; April 25, 2012; October 30, 2013

Contents

Terms highlighted in *italics* are explained in the glossary.

1.0 Purpose

1.1 This ~~s~~Statement of Funds Governance (this “Statement”) summarizes the governance structure (the “Investment Program”) established by the *Oregon Investment Council* (the “Council” or “OIC”) to ensure the prudent, effective and efficient investment and management of the ~~assets~~ investment funds enumerated in ORS 293.701(2).~~of the *Oregon Public Employees Retirement Fund (OPERF)*.~~

1.2 The Council approved this governance structure after careful consideration of alternative approaches to governing a very large and growing pension fund as well as other significant investment funds within an increasingly complex financial and investment environment.

1.3 This~~e~~ Statement has been prepared and maintained with five audiences in mind: 1) incumbent, new and prospective Council members; 2) ~~Treasury staff; 3) OPERF~~ active and retired members of the Oregon Public Employee’s Retirement System (“PERS”), which is funded from the Oregon Public Employees’ Retirement Fund (“OPERF”), and beneficiares of other investment~~state~~ funds; 3~~4~~) the Oregon Legislative Assembly ~~State Legislature~~ and Governor; ~~and 5~~4) the Oregon State Treasurer, acting as the statutory investment officer through relevant staff (“Treasurer” or “OST”; and 5) other qualified persons~~agents~~ engaged by the Council to invest or manage ~~and administer OPERF~~ assets of investment funds ~~assets~~.

1.4 The Statement summarizes more detailed policies and procedures documents prepared and maintained by the OST~~Treasury staff,~~ and numerous other documents that govern the day-to-day management of assets of investment funds.~~OPERF assets.~~

1.5 The Council regularly assesses the continued suitability of its~~the~~ ~~OPERF~~Investment Program~~ governance structure~~, initiates changes as necessary, and updates this Statement accordingly.

2.0 Guiding Principles

2.1 Three principles guided the Council’s development of the ~~OPERF~~ Investment Program~~governance structure~~:

(a) To fulfill its role as primary *governing fiduciary* for the investment and management of the investments funds, the Council retains ultimate responsibility for ~~i~~Investment Program decisions. In accordance with ORS 293.721, the general duty of the Council “is to make [investment funds]~~the~~ moneys as productive as possible,” subject to the standard of judgment and care owing under its fiduciary obligations, inclusive of such statutory mandates as found in ORS 293.726. ~~In a~~Additionally, assets of ~~the “. . . assets of [~~OPERF~~]~~ and the Industrial Accident Fund are trust funds with dedicated purposes, the assests of which cannot be diverted even by legislative enactment, let alone by Council policy, and to the beneficiaries of which the Council owes an exclusive duty of loyalty. *See, e.g., ORS 238.660(2)*.~~may not be diverted or otherwise put to any use that is not for the exclusive benefit of members and their beneficiaries” (ORS 238.660(2)).~~

(b) To ensure ~~OPERF~~ that investment funds assets are prudently, profitably, and efficiently managed on a day-to-day basis, the Council has chosen to delegate the investment and management ~~and implementation~~ of specified assets ~~Council investment policies~~ to the OST and other qualified professionals who, in turn, are subject to corresponding fiduciary obligations.~~*managing and operating fiduciaries.*~~ Such delegation is consistent with ORS 293.726(4)(b), which states that the Council must "act with prudence in deciding whether and how to delegate authority and in the selection and supervision of agents." Council delegates are expected to have the training, expertise, experience, tools and time to cost-effectively implement Council policies.

(c) To ensure effective oversight of delegates, the Council requires timely performance reports that reveal if delegates have complied with their fiduciary duties, including with respect to expressed mandates and guidelines, and indicate how assets under their care have performed relative to established *investment objectives*.

3.0 ~~Investment~~ Decisions Retained by the Council

3.1 The Council retains direct approval of~~es~~ the following determinations: ~~investment policies~~:

(a) Total fund investment objectives and asset class benchmarks;

(b) Investment policies, including the t~~T~~arget asset allocation policies~~y~~;

(c) Asset mix policy re-balancing ranges;

(d) Asset class strategies and any structural tilts;

(e) Active management exposure within each asset class;

(f) Manager structure within each asset class; and,

(g) Retaining~~, terminating and replacing~~ investment managers within each asset class, excluding the delegation provided for in 3.3 to 3.5 below.

3.2 Before approving or amending policy decisions, the Council seeks advice, guidance and recommendations from the OST~~Treasury staff~~, Council-retained investment consultants, investment managers and other experts or sources as considered prudent by the Council.

3.3 Private equity investment commitments in first-time funds exceeding $100 million, or exceeding 200% increases in follow-on partnerships, must be brought to the Council for approval.

3.4 Real estate investment commitments in first-time funds exceeding $100 million, or exceeding 200% increases in follow-on partnerships or core managers, must be brought to the Council for approval.

3.5 Opportunity Portfolio or Alternative Investment commitments in first-time funds exceeding $~~50~~ 100 million, or exceeding 200% increases in follow-on investments, must be brought to the Council for approval.

~~3.5~~3.6 OIC functions include, but are not limited to:

a) Coordination with the PERS Board~~Oregon Public Employees' Retirement System~~, State Accident Insurance Fund Corporation ("SAIF"), Department of State Lands, Board of Higher Education, and other agencies, on matters of joint concern.

b) Approval of its due~~-~~-diligence processes.

c) Receipt and review of periodic reports from the OST~~staff~~, consultants, investment managers and other experts.

d) General policy and governance~~Action~~ on matters resulting from (c).

e) Response to ~~Action on~~ legislative and or regulatory action ~~matters~~ that impacts ~~the~~ its policies~~investment portfolio or decision-making process~~.

f) Coordination with ~~Oversight and management of legal matters that impact the investment portfolio or decision-making process, which are not otherwise reserved by~~ the Oregon Department of Justice on its representation with respect to litigation and general protocols concerning the Investment Program.~~Department of Justice.~~

g) Coordination with ~~Making recommendations to~~ the Treasurer with respect to the Investment Program, including but not limited to ~~on~~ OST staffing plans, incentive compensation, and the budget for all investment activities under the purview of the OIC.

h) Approving all major personal service and consulting contracts related to investment activities under the purview of the OIC.

4.0 Investment Decisions Delegated to Treasury Staff

4.1 The Council has delegated to qualified Treasury staff the following investment management and implementation decisions:

(a) Re-balancing of total fund, asset class and manager exposures to ensure ~~OPERF~~ assets are within the total fund, asset class strategy and manager structure guidelines approved by the Council. ~~Re-balancing activity is included as an information item in the Treasury staff's monthly report to the Council.~~

(b) Recommending retaining~~, terminating and replacing~~ investment managers within each asset class. Before recommending a manager change, Treasury staff will satisfy the Council that the manager change is supported by a satisfactory level of analysis and due diligence. ~~This will include: documenting the reasons for the manager change, a list of the managers considered, the expected improvement in performance attributable to the change, how the manager complements the existing portfolio, verification that the change complies with the asset class strategy and manager structure approved by the Council, and access to all supporting working papers and reports. One or more Council members may elect to work with Treasury staff when manager issues are being examined.~~

~~(b)~~(c) Terminating investment managers.

(d) The Equity Investment Officers may negotiate and execute trades in public equities and public equity futures contracts under the general guidance of the Chief Investment Officer for specific strategies defined in OIC Policy.

~~(c)~~(e) The Fixed Income Investment Officers may negotiate and execute trades in fixed income securities under the general guidance of the Chief Investment Officer for specific strategies defined in OIC Policy.

~~(d)~~(f) Preparing, negotiating and executing investment manager mandates, guidelines and fee agreements.

~~(e)~~(g) Overseeing individual investment managers to ensure their portfolios comply with their respective portfolio mandates and guidelines.

~~(f)~~(h) Providing oversight of the master custodian to ensure that the Fund's rights to pursue securities class action litigation are appropriately protected.

4.2 In making these decisions, Treasury staff seeks the advice, guidance and recommendations from Council-retained investment consultants, investment managers and other experts and sources as considered prudent by Treasury Staff.

5.0 Investment Decisions Delegated to Investment Professionals

5.1 The Council has delegated to qualified investment managers the buying and selling of individual securities and/or other investments authorized under the portfolio management guidelines approved by the Council.

5.2 The Council has delegated to a qualified independent third-party the voting of shareholder proxies that accompany the securities and/or investments held by the portfolio with oversight by Treasury staff and in accordance with Council voting guidelines.

6.0 Effective Council Oversight

6.1 The Council approves the criteria for monitoring and evaluating the impact of different investment decisions on total fund, asset class, and manager level performance. Performance is monitored and evaluated with respect to investment risks taken, and investment returns earned.

6.2 The Council monitors staff, investment managers, consultants and other agents to determine that investments are made in accordance with approved policies and to evaluate their performance against established criteria.

6.3 The Council seeks to ensure that the investment activies under its purview are conducted in an efficient, effective, and prudent manner and in accordance with approved policies and procedures.

6.4 The Council seeks best and responsible practices and innovations, from the investment management community, when making and implementing policy.

~~6.1~~6.5 Investment *risks* are monitored and evaluated quarterly by comparing total fund, asset class and manager holdings to the risk characteristics of suitable *benchmarks*. Additionally, the tracking error of the public asset classes and the total fund is monitored and reported to the Council, quarterly.

~~6.2~~6.6 Investment *returns* are monitored monthly, and evaluated quarterly by comparing total fund, asset class and manager level returns against suitable benchmarks. Quarterly attribution reports identify the impact that Council, Treasury staff, and investment manager decisions have had on total fund, asset class and manager level returns over different time horizons.

~~6.3~~6.7 Before approving or amending the criteria for monitoring and evaluating investment decisions, the Council seeks advice, guidance and recommendations from Treasury staff, Council-retained investment consultants, investment managers and other experts and sources as considered prudent by the Council.

Glossary

Benchmark: A standard by which investment performance can be measured and evaluated. For example, the performance of US equity managers is often measured and evaluated relative to the benchmark performance of the Russell 3000 Index.
Governing, managing and operating fiduciaries. Terminology increasingly used in the pension field to distinguish between the governance, management and operations functions in a pension fund. The governance function is mission choice, funding and investment policy decisions, organizational design decisions, the monitoring of organizational effectiveness, and communication of results to stakeholders. This is the domain of governing fiduciaries. Management acts as advisors to the governing fiduciaries, devises strategies for achieving the fund mission and implementing the policies in a cost-effective manner, and organizes and monitors fund operations. This is the domain of managing fiduciaries. Finally, fund operations in the form of portfolio management, risk monitoring, and information system management and reporting are delegated to operating fiduciaries either inside or outside the pension fund organization. See Ambachtsheer, K. P. and D. Don Ezra, Pension Fund Excellence, Wiley, 1998, "Mapping the Road to Excellence", chapter 3.
Investment Objectives: The investment objectives of OPERF are summarized in the Statement of Investment Objectives and Policy Framework for the Oregon Public Employees Retirement Fund.
Oregon Investment Council (OIC): Oregon Revised Statute (ORS) 293.706 establishes the OIC, which consists of five voting members, four of whom are subject to Senate confirmation (the Treasurer serves by position, and is not subject to confirmation). The members appointed by the Governor must be qualified by training and experience in the field of investment or finance. In addition, the Director of the Public Employees Retirement System is an ex-officio member of the OIC. ORS 293.721 and 293.726 establish the investment objectives and standard of judgment and care for the OIC: Moneys in the investment funds shall be invested and reinvested to achieve the investment objective of the investment funds, which is to make the moneys as productive as possible, subject to the prudent investor standard.
Oregon Public Employees Retirement Fund (OPERF): Holds the assets of beneficiaries of the Oregon Public Employees Retirement System (PERS). PERS is a statewide-defined benefit retirement plan for units of state government, political subdivisions, community colleges, and school districts. PERS is administered under ORS chapters 237, 238, 238A, and applicable provisions of the Internal Revenue Code by the Public Employees Retirement Board (PERB). Participation by state government units, school districts, and community colleges is mandatory. Participation by most political subdivisions is optional but irrevocable if elected. All system assets accumulated for the payment of benefits may legally be used to pay benefits to any of the plan members or beneficiaries of the system. PERS is responsible for administrating the management of the plan's liability and participant benefits.

Return: The gain or loss in value of an investment over a given period of time, expressed as a percentage of the original amount invested. For example, an initial investment of $100 that grows to $105 over one year has earned a 5% return.
Risk: A statistical measure of the possibility of losing or not gaining value. May also be expressed as the probability of not achieving an expected outcome.
Tracking Error: When using an indexing or any other benchmarking strategy the amount by which the performance of the portfolio differed from that of the benchmark. In reality, no indexing strategy can perfectly match the performance of the index or benchmark, and the tracking error quantifies the degree to which the strategy differed from the index or benchmark. Usually defined as the standard deviation of returns relative to a pre-specified benchmark.

- end -

Oregon Investment Council

Statement
of
Investment Objectives and Policy Framework
for the
Oregon Public Employees Retirement Fund

Adopted: February 27, 2002

Revised: July 28, 2004, April 27, 2005, May 18, 2005, January 18, 2006, July 6, 2006, January 31, 2007, September 26, 2007, January 30, 2008, April 29, 2009, May 27, 2009, April 28, 2010, December 1, 2010, April 27, 2011, April 25, 2012, October 30, 2013

Contents

Terms explained in the glossary are *italicized* when they first appear in this document.

1.0 Purpose

1.1 This Statement of Investment Objectives and Policy Framework (the "Statement") summarizes the philosophy, objectives and policies approved by the *Oregon Investment Council* (the "Council") for the investment of the assets of the *Oregon Public Employees Retirement Fund* ("OPERF").

1.2 The Council approved these objectives and framework after careful consideration of OPERF benefit provisions, and the implications of alternative objectives and policies.

1.3 The Statement has been prepared with five audiences in mind: incumbent, new and prospective Council members; Treasury staff; OPERF active and retired members; Oregon State Legislature and Governor; and agents engaged by the Council to manage and administer Fund assets.

1.4 The Statement summarizes more detailed policies and procedures documents prepared and maintained by the staff of the *Office of the State Treasurer*, and numerous other documents that govern the day-to-day management of OPERF assets including agent agreements, individual investment manager mandates, and limited partnership documents.

1.5 The Council regularly assesses the continued suitability of the approved investment objectives and policies, initiates change as necessary, and updates these documents accordingly.

2.0 Investment Objective

2.1 Subject to ORS 293.721 and 293.726, the investment objective for the *Regular Account* is earning, over moving twenty-year periods, an annualized *return* that exceeds the *actuarial discount rate* (ADR), approved by the Public Employees Retirement Board (PERB) to value OPERF liabilities. ~~Eight percent is the current actuarial discount rate.~~

2.2 The Council believes, based on the assumptions herein, that the investment policies summarized in this document will provide the highest probability of achieving this objective, at a level of *risk* that is acceptable to active and retired OPERF members. The Council evaluates risk in terms of the probability of not achieving the ADR over a twenty-year time horizon.

2.3 Historically, members were allowed to direct up to 75% of their contributions to the *Variable Account*. No new contributions are being made to this fund. The investment objective of the Variable Account is to perform in line with *MSCI All Country World Index*.

2.4 The Council has established investment objectives for individual asset classes~~, including that asset class to which members can direct their contributions. Individual asset class objectives~~ that are also summarized in this Statement.

3.0 Policy Asset Mix, Risk Diversification and Return Expectations

3.1 After careful consideration of the investment objective, *liability* structure, *funded status* and liquidity needs of OPERF, and the return, risk and *risk-diversifying* characteristics of different asset classes, the Council approved for the OPERF Regular Account the asset mix policy presented in Exhibit 1. The exhibit also summarizes the Council's total fund asset mix policy and active management return expectations.

3.2 ~~Fifty-nine~~ 57.5 percent of OPERF is targeted for investment in *equities*, inclusive of *private equity*. Equity investments have provided the highest returns over long time periods, but can produce low and even negative returns over shorter time periods.

3.3 The risk of low returns over shorter time periods makes 100% equity policies unsuitable for most pension funds, including OPERF. By investing across multiple equity asset classes, and in lower return but less risky *fixed-income* and *real estate*, the Council is managing and diversifying the fund's overall risk exposure.

3.4 Exposures to selected asset classes are maintained within the re-balancing ranges specified in Exhibit 1.

3.5 With an ~~8.4~~7.6% expected annual return, there is an estimated 50% probability of the fund earning an annualized return that equals or exceeds the ~~current 8.0%~~ actuarial discount rate over a 20 year horizon or, approximately, the next two to three market cycles.

Exhibit 1: Policy Mix and Return Expectations for OPERF Regular Account

Asset Class	Target Allocation (%)	Re-balancing Range (%)	Expected Annual Policy Return[1, 2] (%)	Expected Annual Active Management Return (net of fees) (%)	Expected Annual Total Return (%)
Public Equities	~~43~~37.5	~~38~~32.5-~~48~~42.5	~~8.5~~7.9	0.75	~~9.3~~8.6
Private Equity	~~16~~20	~~12~~16-~~20~~24	10.~~7~~2	0.~~8~~7	~~11.5~~10.9
Total Equity	~~59~~57.5	~~54~~52.5-~~64~~62.5			
Fixed Income	~~25~~20	~~20~~15-~~30~~25	~~4~~2.3	0.~~75~~35	~~5.0~~2.6
Real Estate	~~11~~12.5	~~8~~9.5-~~14~~15.5	7.~~6~~1	0.75	~~8.4~~7.8
Alternatives	~~5~~10	0-~~8~~10	6.4	~~1.3~~0.5	~~7.7~~6.9
Total Fund	100		7.0~~6~~	0.~~8~~6	~~8.4~~7.6

1. Based on capital market forecasts developed by the Council's investment consultant, SIS, for the next two to three market cycles.

2. Total Fund expected returns are simply the weighted averages of the asset class returns. The geometric mean return of the policy portfolio is 7.9%.

3.6 The 7.~~5~~0% expected annual asset mix policy return was developed with reference to the observed long-term relationships among major asset classes, adjusted by current market conditions. The Council believes this return expectation is reasonable, but recognizes that over shorter time periods actual mix policy returns can deviate significantly from this expectation – both positively and negatively.

3.7 US equity, non-US equity, and fixed-income asset classes are managed using both passive and active management strategies. Active management of public market securities and real estate assets is expected to earn 0.~~8~~7% per annum of additional returns over moving five-year periods. The Council recognizes that unsuccessful active management can reduce total fund returns.

3.8 The OIC has provided for up to 3.0% of total plan assets to be invested in an *Opportunity Portfolio* to provide enhanced returns and diversification to OPERF. Investments are expected to be a combination of both shorter-term (1-3 years) and longer-term holdings. This allocation will not result in any of the previously established strategic asset allocation targets falling outside their ranges. No strategic target is established for the Portfolio since, by definition, investments will be pursued only on an opportunistic basis, unless changed by the OIC.

3.9 Cash is invested in the *Oregon Short Term Fund* and is kept at a minimum level, but sufficient to cover the short-term cash flow needs of OPERF.

3.10 In an effort to minimize cash exposure at both the fund and manager level, the OIC has retained a policy implementation overlay manager to more closely align the actual portfolio with the policy portfolio, generally through the buying and selling of futures contracts to increase or decrease asset class exposures, as necessary.

3.11 The Council shall review, at least biennially, its expectations for asset class and active management performance, and assess how the updated expectations affect the probability that the Regular Account will achieve the investment objective.

4.0 Passive and Active Management

4.1 Passive management uses lower cost *index funds* to access the return streams available from the world's capital markets. Active management tries to earn higher returns than those available from index funds by making value-adding security selection and asset mix timing decisions.

4.2 The Council uses passive management to control costs, evaluate active management strategies, capture exposure to the more *efficient markets*, manage the risk of under-performance and facilitate re-balancing to policy asset mix. Exchange traded *real estate investment trusts (REITS)* may also be used to maintain the Fund's asset class exposures within the specified policy ranges.

4.3 The Council approves the active management of fund assets when available investment strategies offer sufficiently high expected incremental returns, net of fees, to compensate for the risk of under-performance, and when the magnitude of potential under-performance can be estimated, monitored and managed.

4.4 The Council must accept active management of those asset classes for which there is no passive management alternative, in particular, real estate and private equity.

4.5 The Council prefers active management strategies that emphasize security selection decisions rather than asset mix timing decisions. General investor experience and surveys of academic and professional studies indicate that security selection decisions are more likely to earn above index returns than asset mix timing decisions.

4.6 At the aggregate level of the Regular Account, active management strategies authorized by the Council are expected to **add 0.~~8~~6% of annualized excess return**, net of fees, over moving five-year periods. **Active risk of the Regular Account is managed to a targeted annualized *tracking error* of 2 to 3 percent, relative to the policy benchmark.**

5.0 Public Equity Strategy

5.1 Public equity is managed with the objective of earning at least **75 *basis points*** in annualized net excess return above the *MSCI All Country World Investable Market Index* (ACWI IMI – net) (unhedged) over moving five-year periods. **Active risk is managed to a targeted annualized tracking error of 0.75 to 2.0 percent, relative to the above benchmark.**

5.2 Key elements of the strategy:

(a) 25% of assets are targeted for passive management, primarily in the large and mid capitalization *sectors* of the market, which are believed to be more efficiently valued.

(b) Maintain a double weighting to U.S. small capitalization stocks, in an effort to enhance return. This tilt is based on the Investment Council’s belief that inefficiencies in the small and micro cap markets, relative to the large cap market, through active management, will outperform large cap stocks over the long-term.

(c) Multiple specialist active managers with risk diversifying complementary investment styles are employed. For example, managers that focus on either growth or value stocks and managers that focus on large or small capitalization stocks. This produces more consistent excess returns and reduces the fund’s exposure to any single investment organization.

(d) The Fund maximizes exposure to security selection based investment decisions by maintaining aggregate exposures to *value* and *growth* stocks, economic sectors and *market capitalizations* relative to their *benchmark exposures*, adjusted for the strategic small cap overweight.

(e) Active management exposure is higher for non-US equity because the Council believes the non-US markets provide more opportunities for skilled managers to earn incremental returns.

(f) Managers with skills in security selection and country allocation are utilized. These decisions have been shown to be the principal sources of the excess return in non-US equity portfolios. Managers who have demonstrated ability to add value through currency management are permitted to do so.

(g) Aggregate exposures to countries, economic sectors, equity management styles and market capitalization are monitored and managed relative to their benchmark exposures.

6.0 Fixed Income Strategy

6.1 Fixed income is being managed with the objective of earning ~~75~~ **35 basis points** in annualized net excess returns above a blended benchmark of ~~60~~40% *Barclays ~~Capital~~ U.S. ~~Universal~~ Aggregate ~~Bond~~ Index*, 40% Barclays U.S. 1-3 Year Government/Credit Index~~10% *JP Morgan Emerging Markets Bond Index Global*~~, ~~20~~15% *S&P/LSTA Leveraged Loan Index*, and ~~10~~5% *Bank of America Merrill Lynch High Yield Master II Index* over moving five-year periods (Note: final benchmark to be phased in over implementation period). **Active risk is managed to a targeted annualized tracking error of 1 to 2 percent, relative to the above benchmark.**

6.2 Key elements of the strategy:

(a) At least 95% of fixed income is actively managed because active fixed income management is generally more cost effective than active equity management. Excess returns are more likely because many investors hold fixed income to meet regulatory and liability matching objectives, and are not total return investors. This produces systematic mis-pricings of fixed-income securities that skilled investment managers can exploit. Also, fixed income management fees are much lower than active equity management fees.

(b) Multiple active generalist managers will be used for a majority of the fixed income asset class, rather than multiple sector specialists as in the US equity market. The OIC may supplement this strategy with specialist fixed income managers as warranted. Fixed income manager structures generally have little impact on total Fund risk because of overall lower allocations to the asset class and the low tracking errors. The asset class tracking error is diversified into insignificance at the total Fund level.

(c) Managers are selected for their skills in issue selection, credit analysis, sector allocations and duration management.

(d) Aggregate exposures to duration, credit and sectors are monitored and managed relative to corresponding exposures in the asset class benchmark.

7.0 Real Estate Strategy

7.1 Real estate investments are being managed with the objective of earning at least **75 basis points** in annualized net excess returns above the *NCREIF Index* over moving five-year periods. Because 80% of the real estate investments are traded infrequently, risk budget concepts are not applicable.

7.2 Key elements of the strategy:

(a) Real Estate is 100% actively managed because index funds replicating the real estate broad market are not available.

(b) *Core property investments* represent 30% of the real estate portfolio, with a range of 25% to 35%. Specialist managers are utilized. Risk is diversified by investing across the major property types: offices, apartments, retail and industrial, but may include structured investments in alternative types of property with Core type risk and return attributes.

(c) Exchange traded real estate investment trusts (REITs) represent 20% of the real estate portfolio, with a range of 15% to 25%. Active management will include style and capitalization specialists, as well as broad market managers. Up to 50% of the REIT exposure may be invested in markets outside the United States.

(d) *Value Added* investments represent 20% of the real estate portfolio, with a range of 15% to 25%. Investments may include direct property types listed above, as well as structured investments in alternative property types. Risk is diversified by property type and geography.

(e) *Opportunistic real estate* investments represent 30% of the real estate portfolio, with a range of 20% to 40%. Investment strategies will be characterized as "opportunistic" based on the market conditions prevailing at the time of investment.

(f) The Fund may also participate in *co-investment* opportunities within the real estate asset class.

8.0 Private Equity Strategy

8.1 Private equity is being managed with the objective of earning at least **300 basis points** net excess return above the Russell 3000 Index over very long time horizons, typically moving 10-year periods. Because private equity investments are traded infrequently, risk budget concepts are not applicable.

8.2 Key elements of the strategy:

(a) Private Equity is 100% actively managed because index funds of private equity are not available.

(b) Asset class risk is diversified by investing across different private equity fund types: *venture capital*, *leverage buyouts*, *mezzanine debt*, *distressed debt*, *sector funds*, *secondaries* and *fund-of-funds*.

(c) Asset class risk is further diversified by investing across *vintage years*, industry sectors, investment size, development stage and geography.

(d) Private equity programs are managed by general partners with good deal flow, specialized areas of expertise, established or promising net of fees track records, and fully disclosed and verifiable management procedures.

(e) The Fund will participate in co-investment opportunities in the private equity asset class.

9.0 Alternatives Portfolio Strategy

9.1 Alternatives investments are being managed with the objective of earning at least **400 basis points** in annualized net excess returns above the *CPI* over moving ten-year periods. Because 80% of the alternative investments are traded infrequently, risk budget concepts are not applicable.

9.2 Key elements of the target strategy:

(a) Alternatives are 100% actively managed because index funds replicating the broad alternatives market are not available.

(b) *Infrastructure investments* represent 30% of the target alternatives portfolio, with a range of 25% to 35%. Specialist managers are utilized. Risk is diversified by investing across the major infrastructure types, investment size and geographies: energy infrastructure, transportation, ports, and water; mid sized and large capitalization; domestic and international.

(c) *Natural Resources investments* represent 45% of the target alternatives portfolio, with a range of 40% to 50%. Risk is diversified by investing across the major sectors: oil and gas, agriculture land, timberland, mining, and commodities. Specialist managers are across both active and passive strategies and domestic and international markets.

(d) *Hedge Fund investments* represent 20% of the target alternatives portfolio, with a range of 15% to 25%. Investments may include relative value, macro, arbitrage, and long short equity strategies. Risk is diversified by investing across strategies and managers.

(e) *Other* investments may represent 5% of the target alternatives portfolio, with a range of 0% to 10%. Investment strategies will be characterized as "other" based on the strategy and market at the time of investment.

(f) The Fund may also participate in *co-investment* opportunities within the alternatives asset class.

10.0 Performance Monitoring and Evaluation

10.1 The Council and its agents use a variety of compliance verification and performance measurement tools to monitor, measure and evaluate how well OPERF assets are being managed. Monitoring, reporting and evaluation frequencies range from hourly, to daily, to weekly, to monthly, to quarterly, to annually.

10.2 The Council has developed a performance monitoring and evaluation system that answers two fundamental fiduciary questions:

- Are Fund assets being prudently managed? More specifically, are assets being managed in accordance with established laws, policies and procedures, and are individual investment managers in compliance with their mandates?
- Are Fund assets being profitably managed? More specifically, has performance affected benefit security, has capital market risk been rewarded and has active management risk been rewarded?

10.3 When a breach of policies, procedures or portfolio mandates is reported or detected, the Council requires a supporting report explaining how the breach was discovered, the reasons for the breach, actions taken to rectify the breach, and steps taken to mitigate future occurrences.

10.4 One of the many reports used by the Council to monitor and evaluate performance of the Regular Account indicates if the Regular Account has exceeded the ~~8.0%~~ (ADR) return over moving five-year periods. Additionally, reports quantify if the fund was rewarded for investing in higher return but more risky equity investments over the same period, and if active management has added or subtracted returns, net of fees.

10.5 The reporting described in this section gives the Council a consolidated or "big picture" view of the performance of the Regular Account. This is the first level of a comprehensive four-level performance report used by the Council to monitor and evaluate performance over different time horizons. Level two examines Regular Account performance excluding hard-to-price illiquid assets such as real estate and private equities. Level three examines the performance of the Regular Account's five individual asset class strategies: US equity, non-US equity, fixed income, real estate and private equity. Level four examines the performance of individual managers within each of the asset class strategies. The four-level reporting structure allows the Council to "drill down" to the level of detail that is needed to identify potential performance problems, and take corrective action as may be required.

- end -

Glossary

Actuarial Discount Rate (ADR): The interest rate used to calculate the present value of a defined benefit plan's future obligations and determine the size of the state's annual contribution to the plan. The OPERS ADR is currently 8.0% and will move to 7.75%, effective January 1, 2014.

Alternative Investments: Investments that are considered non-traditional or emerging investment types. Presently, the following investment types are considered alternative investments: hedge funds, infrastructure, ~~timber~~natural resources, and other commodities.

Asset Class: A collection of securities that have conceptually similar claims on income streams and have returns that are highly correlated with each other. Most frequently referenced publicly traded asset classes include US equities, US debt and US cash.

Bank of America Merrill Lynch U.S. High Yield Master II Index: HY Master II Index (market value of $1.235+ trillion with ~~over 2,000~~ 2,193 issues at ~~March 31, 2012~~September 30, 2013) constituents are capitalization-weighted based on their current amount outstanding times the market price plus accrued interest. The Index tracks the performance of US dollar-denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch) at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum outstanding of $100 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the US and Western Europe (the FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden). ~~Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch) and an investment grade rated country of risk (based on an average of Moody's, S&P and Fitch foreign currency long term sovereign debt ratings).~~

Barclays ~~Capital~~ U.S. ~~Universal~~ Aggregate ~~Bond~~ Index: The Aggregate Index (market value of approximately $16.719 trillion, with 8,518 issues, at September 30, 2013), represents securities that are SEC-registered, taxable, and dollar denominated. The index covers the U.S. investment grade fixed rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. The Aggregate Index was officially launched by the former Lehman Brothers on January 1, 1976. Index constituents:

- Must have at least one year to final maturity regardless of call features.
- Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch.
- Must be fixed rate, although can carry a coupon that steps up or changes according to a predetermined schedule.
- Must be dollar-denominated and non-convertible.
- Must be publicly issued. However, 144A securities with Registration Rights and Reg-S issues are included.

~~The Universal Index (market value of approximately $18.7 trillion, with over 12,000 issues, at March 31, 2012), like the Barclays Capital US Aggregate Index, is modular and combines the Aggregate Index with the following capitalization weighted Barclays fixed income indices: the US Corporate Index, Investment Grade 144A Index, the Eurodollar Index, the US Emerging Markets Index, and the non-ERISA eligible portion of the CMBS Index, including the CMBS High Yield Index. Municipal debt, private placements, and non-dollar denominated issues are excluded from the Universal Index. The only constituent of the index that includes floating rate debt is the Emerging Markets Index. The Aggregate represents approximately 86% of the Universal Index. However, the Universal captures an additional, approximately, $2.6 trillion in US dollar denominated fixed income. The Universal Index was officially launched by the former Lehman Brothers on January 1, 1999.~~

Barclays U.S. 1-3 Year Government/Credit Index: The 1-3 Year Gov/Credit Index (market value of approximately $3.852 trillion, with 1,460 issues, at September 30, 2013), includes treasuries (i.e., public obligations of the U.S. Treasury that have remaining maturities of more than one year) and agencies (i.e., publicly issued debt of U.S. Government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. Government), publicly issued U.S. corporate and foreign debentures and secured notes that meet specified maturity, liquidity, and quality requirements. The 1-3 Year Gov/Credit Index is a component of the Barclays Aggregate Index and was officially launched by the former Lehman Brothers on January 1, 1976. Index constituents:

- Must be a U.S. Government or Investment Grade Credit security.
- Must have at least one year to final maturity regardless of call features.
- Must have at least $250 million par amount outstanding.
- Must be rated investment-grade (Baa3/BBB- or higher) by at least two of the following ratings agencies: Moody's, S&P, Fitch.
- Must be fixed rate, although it can carry a coupon that steps up or changes according to a predetermined schedule.
- Must be dollar-denominated and non-convertible.
- Must be publicly issued.

Basis Point: One basis point is 0.01%. One hundred basis points equals one percentage point.

Benchmark: A standard by which investment performance can be measured and evaluated. For example, the performance of US equity managers is often measured and evaluated relative to the benchmark performance of the Russell 3000 Index.

Benchmark Exposures: The proportion to which a given stock or investment characteristic is represented in an investment benchmark, such as the Russell 3000 Index of US companies. Allows investors to measure the extent to which their portfolio is over or under exposed to a given stock, or investment characteristic such as market capitalization.

Co-investment: Although used loosely to describe any two parties that invest alongside each other in the same company, this term has a special meaning in relation to limited partners in a fund. By having co-investment rights, a limited partner in a fund can invest directly in a company also backed by the fund managers itself. In this way, the limited partner ends up with two separate stakes in the company: one, indirectly, through the private equity fund to which the limited partner has contributed; another, through its direct investment, generally under better investment terms.

Core Property Investments: Real estate investment strategies which exhibit "institutional" qualities, such as being well located within local and regional markets, well occupied, and of high quality design and construction.

Credit: The measure of an organization's ability to re-pay borrowed money. Used most often in the managing fixed income portfolios. Organizations with the highest credit rating, those most likely to re-pay money they have borrowed, are assigned a AAA credit rating.

Distressed Debt: A private equity investment strategy that involves purchasing discounted bonds of a financially distressed firm. Distressed debt investors frequently convert their holdings into equity and become actively involved with the management of the distressed firm.

Duration: A financial measure used by investors to estimate the price sensitivity of a fixed-income security to a change in interest rates. For example, if interest rates increase by 1 percentage point, a bond with a 5-year duration will decline in price by 5 percent.

Efficient Markets: A market in which security prices rapidly reflect all information about securities and, by implication, active managers find it more difficult to pick stocks that consistently beat the performance of an index fund.

Equities: Investments that represent ownership in a company and therefore a proportional share of company profits.

Fixed-Income: Debt obligations of corporations and governments that specify how money previously borrowed is to be repaid. Typically, money is repaid by a series of semi-annual interest payments of fixed amounts, and final repayment of principal.

Funded Status: A comparison of plan assets with the plan liability (e.g. the projected benefit obligation (PBO)). When plan assets are greater than the PBO, the plan is overfunded. If plan assets are less than the PBO, the plan is underfunded and the state has a net liability position with respect to its pension plan.

Fund-of-funds: a fund that invests primarily in other private equity funds rather than operating firms, often organized by an investment advisor or investment bank.

Growth Stock: Stocks that exhibited faster-than-average earnings growth over the last few years and is expected to continue to do so into the near future. Growth stocks usually have high price-to-earnings ratios, high price-to-book ratios and low dividend yields.

Hedged: A term applied to a portfolio of non-domestic stocks or bonds that is unaffected by changes in the relative value of the domestic and foreign currencies. Forward currency contracts are typically used to hedge a portfolio against currency risk.

Index Fund: A portfolio management strategy that seeks to match the composition and performance of a selected market index, such as the Russell 3000.

~~*JP Morgan Emerging Markets Bond Index Global:* The EMBI Global Index (market value of approximately $493 billion with 296 issues at March 31, 2012) tracks total returns for US dollar-denominated debt instruments issued by emerging market sovereign and quasi-sovereign entities: Brady bonds, loans, Eurobonds. The methodology is designed to distribute the weights of each country within the Index by limiting the weights of countries with higher debt outstanding and reallocating this excess to countries with lower debt outstanding.~~

Leverage Buyouts (LBO): The acquisition of a firm or business unit, typically in a mature industry, with a considerable amount of debt. The debt is then repaid according to a strict schedule that absorbs most of the firm's cash flow.

Liability: A claim on assets by individuals or companies. In a pension context, liabilities represent the claim on fund assets by active and retired members of the pension plan.

MSCI All Country World Investable Market Index (ACWI-IMI): A free float-adjusted market capitalization index that is designed to measure equity market performance in the global developed and emerging markets, by capturing up to 99% of the developed and emerging investable market universe, covering over 9,000 securities. As of ~~April~~ September ~~2012~~ 2013 the MSCI ACWI-IMI consisted of 45 country indices comprising 24 developed and 21 emerging market country indices. The developed market country indices included are: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom and the United States. The emerging market country indices included are: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Morocco, Peru, Philippines, Poland, Russia, South Africa, Taiwan, Thailand, and Turkey.

MSCI ACWI Ex US: The same as the MSCI ACWI, except that stocks in the United States are not included.

MSCI World Ex US Index: A free float-adjusted market capitalization index that is designed to measure global developed market equity performance, excluding the United States. As of ~~April 2012~~September 2013 the MSCI World Ex US Index consisted of the following 23 developed market country indices: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.

Market Capitalization: The value of a corporation as determined by multiplying the price of its shares by the number of shares outstanding. Investors often use market capitalization as an indicator of portfolio risk or volatility. In general, smaller capitalized companies are more volatile or risky than larger capitalized companies.

Mezzanine: Either a private equity financing undertaken shortly before an initial public offering, or an investment that employs subordinated debt that has fewer privileges than bank debt but more than equity and often has attached warrants.

NCREIF Index: The National Council of Real Estate Investment Fiduciaries (NCREIF) is an association of institutional real estate professionals who share a common interest in their industry. The NCREIF Property Index (NPI) is a quarterly time series composite total rate of return measure of investment performance of a very large pool of individual commercial real estate properties acquired in the private market for investment purposes only. All properties in the NPI have been acquired, at least in part, on behalf of tax-exempt institutional investors - the great majority being pension funds. As such, all properties are held in a fiduciary environment. The qualifications for inclusion in the NPI are:

- Operating properties only
- Property types - apartments, hotels, industrial properties, office buildings, and retail only
- Can be wholly owned or in a joint venture structure.
- Investment returns are reported on a non-leveraged basis. While there are properties in the NPI that have leverage, returns are reported to NCREIF as if there is no leverage
- Must be owned/controlled by a qualified tax-exempt institutional investor or its designated agent
- Existing properties only (no development projects)

Office of the State Treasurer: Headed by the State Treasurer as the chief financial officer for the state, the Office of the State Treasurer is responsible for managing the day to day investment operations of the state pension fund (and other funds), issuing all state debt, and serving as the central bank for state agencies. Within the Office of the State Treasurer, the Investment Division also manages the investment programs for the state's deferred compensation plan and college savings plan, and serves as staff to the Oregon Investment Council.

Opportunistic Real Estate Investments: Higher risk but higher expected return real estate investments that are usually very illiquid, not currently income-producing and are often distressed purchases and/or highly leveraged.

Opportunity Portfolio: Non-traditional and/or concentrated investment strategies that may provide diversification and return potential outside of the OIC formally approved asset classes. The Portfolio may be populated with innovative investment approaches across a wide range of investment opportunities with no limitation as to asset classes or strategies that may be used. The Opportunity Portfolio investment program seeks to achieve its investment objective by investing in strategies that fall outside the OIC's previously identified asset classes because of the expected time horizon, tactical nature of the investment, or some other unique aspects which must be clearly defined in the written recommendation provided to the OIC.

Oregon Investment Council (OIC): Oregon Revised Statute (ORS) 293.706 establishes the OIC, which consists of five voting members, four of whom are appointed by the Governor and subject to Senate confirmation (the Treasurer serves by position, and is not subject to confirmation). The members appointed by the Governor must be qualified by training and experience in the field of investment or finance.In addition, the Director of the Public Employees Retirement System is an ex-officio member of the OIC. ORS 293.721 and 293.726 establish the investment objectives and standard of judgment and care for the OIC: Moneys in the investment funds shall be invested and reinvested to achieve the investment objective of the investment funds, which is to make the moneys as productive as possible, subject to the prudent investor standard.

Oregon Public Employees Retirement Fund (OPERF): Holds the assets of beneficiaries of the Oregon Public Employees Retirement System (PERS). PERS is a statewide-defined benefit retirement plan for units of state government, political subdivisions, community colleges, and school districts. PERS is administered under ORS chapters 237, 238, 238A, and applicable provisions of the Internal Revenue Code by the Public Employees Retirement Board (PERB). Participation by state government units, school districts, and community colleges is mandatory. Participation by most political subdivisions is optional but irrevocable if elected. All system assets accumulated for the payment of benefits may legally be used to pay benefits to any of the plan members or beneficiaries of the system. PERS is responsible for administrating the management of the plan's liability and participant benefits.

Oregon Short Term Fund (OSTF): The state's commingled cash investment pool managed internally by Treasury staff. The OSTF includes all excess state agency cash, as required by law, as well as cash invested by local governments on a discretionary basis. The OSTF is invested in accordance with investment guidelines recommended by the state's Oregon Short Term Fund Board and approved by the OIC.

Overweight: A stock, sector or capitalization exposure that is higher than the corresponding exposure in a given asset class benchmark, such as the Russell 3000 Index.

Private Equity: Venture Economics (VE) uses the term to describe the universe of all venture investing, buyout investing and mezzanine investing. Fund of fund investing and secondaries are also included in this broadest term. VE is not using the term to include angel investors or business angels, real estate investments or other investing scenarios outside of the public market. See also *Alternative Investments*.

Real Estate: Investments in land and/or buildings.

Real Estate Investment Trusts (REIT): A real estate portfolio managed by an investment company for the benefit of the trust unit holders. Most REIT units are exchange traded.

Regular Account: That portion of the Oregon Public Employees Retirement Fund that excludes the Variable Account. A diversified investment portfolio, with an OIC established asset allocation. Tier One member funds in the regular account are guaranteed a minimum rate of return based on the long-term interest rate used by the actuary. The rate is currently 8 percent per year. Tier Two member funds in the regular account have no guaranteed rate of return. Tier Two regular accounts receive whatever is available for distribution.

Return: The gain or loss in value of an investment over a given period to time expressed as a percentage of the original amount invested. For example, an initial investment of $100 that grows to $105 over one year has earned a 5% return.

Risk: A statistical measure of the possibility of losing or not gaining value. May also be expressed as the probability of not achieving an expected outcome.

Risk-diversifying: Reducing risk without reducing expected returns by combining assets with returns that move in opposite directions over a given time period thereby reducing the total portfolio risk. A decline in the price of one asset is offset by the increase in the price of another asset in the portfolio. In laypersons term's, this is often described as putting your eggs into more than one basket.

Russell 3000 Index: Measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

S&P/LSTA Leveraged Loan Index: The S&P/LSTA Leveraged Loan Index (market value of approximately $~~470~~ 622 billion with ~~over 900~~ 791 issuers comprised of 1,012facilities at ~~March 31, 2011~~September 30, 2013) mirrors the market-weighted performance of the largest institutional leveraged loans based upon market weightings, spreads and interest payments. Facilities are eligible for inclusion in the index if they are senior secured institutional term loans with a minimum initial spread of 125 basis points and term of one year. Facilities are retired from the index when there is no bid posted on the facility for at least 12 successive weeks or when the loan is repaid.

Secondaries: The buying and selling of pre-existing limited partnership commitments to private equity funds.

Sector: A particular group of stocks or bonds that usually characterize a given industry or economic activity. For example, "pharmaceuticals" is the name given to stocks of companies researching, manufacturing and selling over-the-counter and prescription medicines. "Corporates" is the name given to fixed-income instruments issued by private and public companies.

Sector Funds: A pooled investment product with investments that focus on a particular industry or economic activity. For example, pooled funds that invest principally in technology stocks would be termed a technology sector fund.

Tracking Error: When using an indexing or any other benchmarking strategy the amount by which the performance of the portfolio differed from that of the benchmark. In reality, no indexing strategy can perfectly match the performance of the index or benchmark, and the tracking error quantifies the degree to which the strategy differed from the index or benchmark. Usually defined as the standard deviation of returns relative to a pre-specified benchmark.

Unhedged: A term applied to a portfolio of non-domestic stocks or bonds that is affected by the changes in the value of domestic and foreign currencies.

Value Added: As used in real estate, may include office, retail, industrial and apartment properties, but may target structured investments in alternative property types such as hotels, student housing, senior housing, and specialized retail uses. The Value Added portfolio is expected to produce returns between Core and Opportunistic portfolios but may experience greater vacancy or interest rate risk than the Core portfolio. Value Added properties may exhibit "institutional" qualities such as being well located within local and regional markets, and be of high quality design and construction but may need redevelopment, or significant leasing to achieve stabilized investment value. Value Added investments may include development opportunities with balanced risk/return profiles.

Value Stock: Stocks that appear to be undervalued for reasons other that low potential earnings growth. Value stocks usually have low price-to-earnings ratios, low price-to-book ratios and a high dividend yield.

Variable Account: The Variable Annuity Program allowed active members to place a portion of their yearly employee contributions exclusively within a domestic equity portfolio. No contributions were allowed after December 31, 2003. Active members who participated in the Variable Program had part of their member account balance in the regular account and part in the variable account. Unless a member elected to participate in the Variable Program, all of the member's employee contributions went into the regular account. This "primary" election allowed members to place 25 percent, 50 percent, or 75 percent of their employee contributions in the variable account. Variable account balances increase or decrease depending on the performance of the variable fund; accounts are credited for whatever is available for distribution, whether it is a gain or a loss. The OIC only sets asset allocation policy at the Regular Account level, since the OIC cannot control historical employee directed investment options.

Venture Capital: Independently managed, dedicated pools of capital that focus on equity or equity-linked investments in privately held, high growth companies. Outside of the United States, the term venture capital is used as a synonym for all types of alternative or private equity.

Vintage Year: The group of funds whose first closing occurred in the same year. For example, venture capital funds of vintage year 1995 were closed to additional investors in 1995.

- end -

TAB 9 – ASSET ALLOCATIONS and NET ASSET VALUE UPDATES

Asset Allocations at September 30, 2013

OPERF	Policy	Target[1]	Regular Account $ Thousands	Regular Account Pre-Overlay	Regular Account Overlay	Regular Account Net Position	Regular Account Actual	Variable Fund $ Thousands	Total Fund $ Thousands
Public Equity	32.5-42.5%	37.5%	25,757,074	40.0%	(85,523)	25,671,551	39.8%	796,490	26,468,041
Private Equity	16-24%	20.0%	14,000,802	21.7%		14,000,802	21.7%		14,000,802
Total Equity	**52.5-62.5%**	**57.5%**	**39,757,876**	**61.7%**	**(85,523)**	**39,672,353**	**61.6%**		**40,468,843**
Opportunity Portfolio			811,321	1.3%		811,321	1.3%		811,321
Fixed Income	**15-25%**	**20.0%**	**14,164,946**	**22.0%**	**1,710,935**	**15,875,881**	24.6%		**15,875,881**
Real Estate	**9.5-15.5%**	**12.5%**	**7,462,242**	**11.6%**	**(4,400)**	**7,457,842**	11.6%		**7,457,842**
Alternative Investments	**0-10%**	**10.0%**	**628,177**	**1.0%**		**628,177**	1.0%		**628,177**
Cash*	**0-3%**	**0.0%**	**1,624,759**	**2.5%**	**(1,621,012)**	**3,747**	0.0%	9,298	**13,045**
TOTAL OPERF		**100%**	**$ 64,449,321**	**100.0%**	**$ -**	**$ 64,449,321**	**100.0%**	**$ 805,788**	**$ 65,255,109**

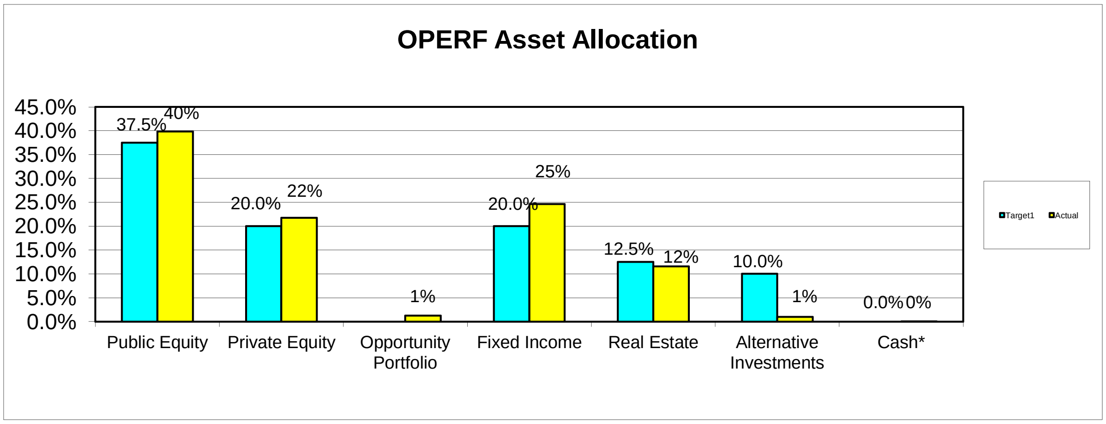
[1]Targets established in June 2013. Interim policy benchmark consists of: 41.5% MSCI ACWI Net, 23.5% Custom FI Benchmark, 20% Russell 3000+300bps (1 quarter lagged), 12.5% NCREIF (1 quarter lagged), & 2.5% CPI+400bps.

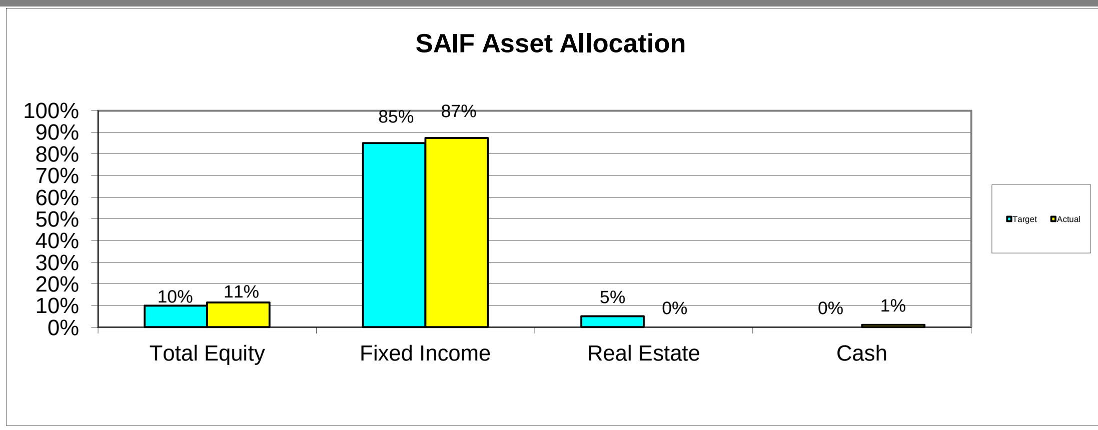
*Includes cash held in the policy implementation overlay program.

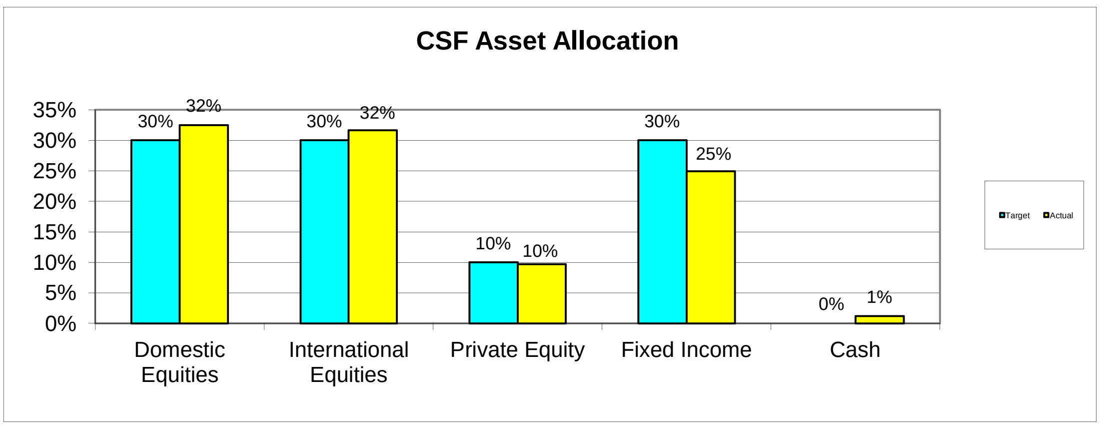
SAIF	Policy	Target	$ Thousands	Actual
Total Equity	**7-13%**	**10.0%**	**511,298**	**11.5%**
Fixed Income	**80-90%**	**85.0%**	**3,895,779**	**87.4%**
Real Estate	**0-7%**	**5.0%**	**0**	**0.0%**
Cash	**0-3%**	**0%**	**48,817**	**1.1%**
TOTAL SAIF		**95%**	**$4,455,894**	**100.0%**

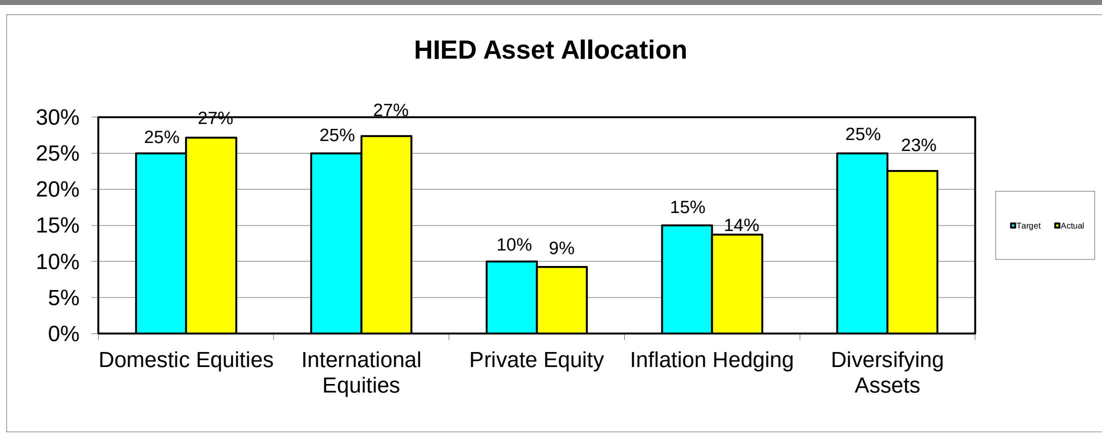
CSF	Policy	Target	$ Thousands	Actual
Domestic Equities	25-35%	30%	$415,964	32.5%
International Equities	25-35%	30%	405,382	31.7%
Private Equity	0-12%	10%	124,355	9.7%
Total Equity	**65-75%**	**70%**	**945,701**	**73.9%**
Fixed Income	**25-35%**	**30%**	**319,243**	**24.9%**
Cash	**0-3%**	**0%**	**15,427**	**1.2%**
TOTAL CSF			**$1,280,371**	**100.0%**

HIED	Policy	Target	$ Thousands	Actual
Domestic Equities	20-30%	25%	$19,442	27.2%
International Equities	20-30%	25%	19,588	27.4%
Private Equity	0-15%	10%	6,613	9.2%
Growth Assets	**50-75%**	**60%**	**45,643**	**63.8%**
Real Estate	0-10%	7.5%	5,362	7.5%
TIPS	0-10%	7.5%	4,457	6.2%
Inflation Hedging	**7-20%**	**15%**	**9,819**	**13.7%**
Fixed Income	20-30%	25%	15,423	21.5%
Cash	0-3%	0%	707	1.0%
Diversifying Assets	**20-30`%**	**25%**	**16,130**	**22.5%**
TOTAL HIED			**$71,592**	**100.0%**

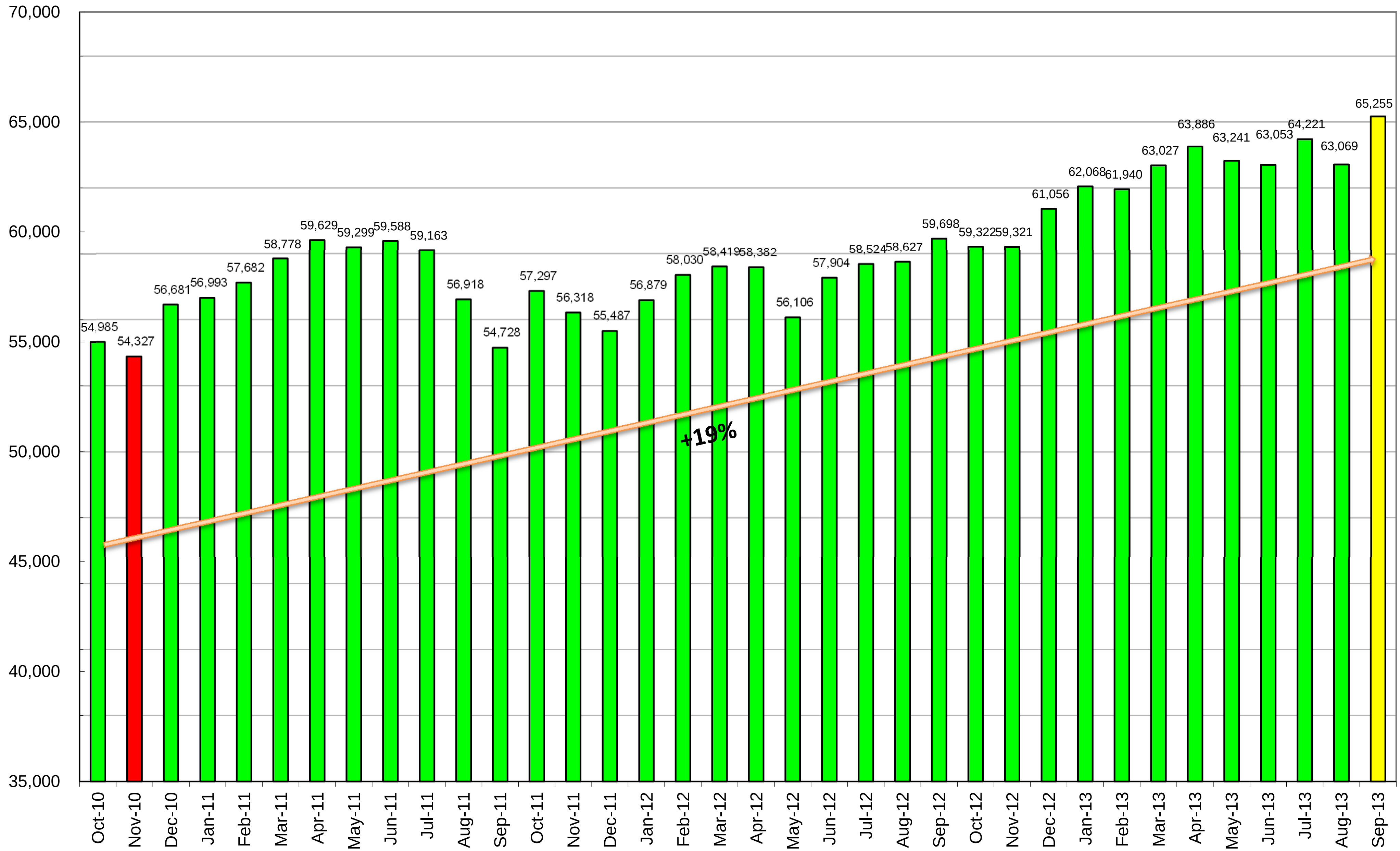

OPERF Asset Allocation
45.0%
40.0%
35.0%
30.0%
25.0%
20.0%
15.0%
10.0%
5.0%
0.0%
37.5%
40%
20.0%
22%
1%
20.0%
25%
12.5%
12%
10.0%
1%
0.0%
0%
Public Equity
Private Equity
Opportunity Portfolio
Fixed Income
Real Estate
Alternative Investments
Cash*
Target1
Actual

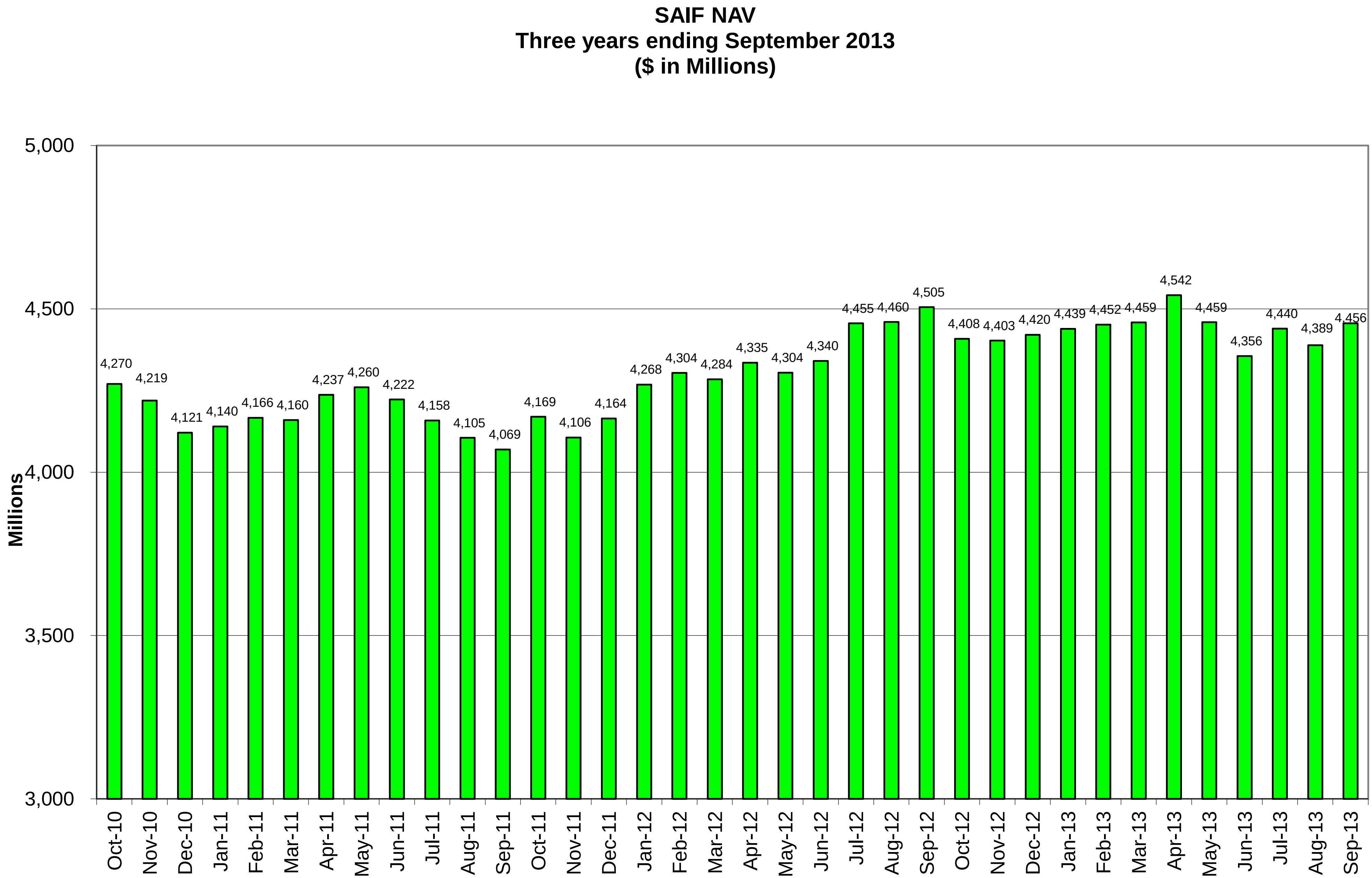

SAIF Asset Allocation
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
10%
11%
85%
87%
5%
0%
0%
1%
Total Equity
Fixed Income
Real Estate
Cash
Target
Actual

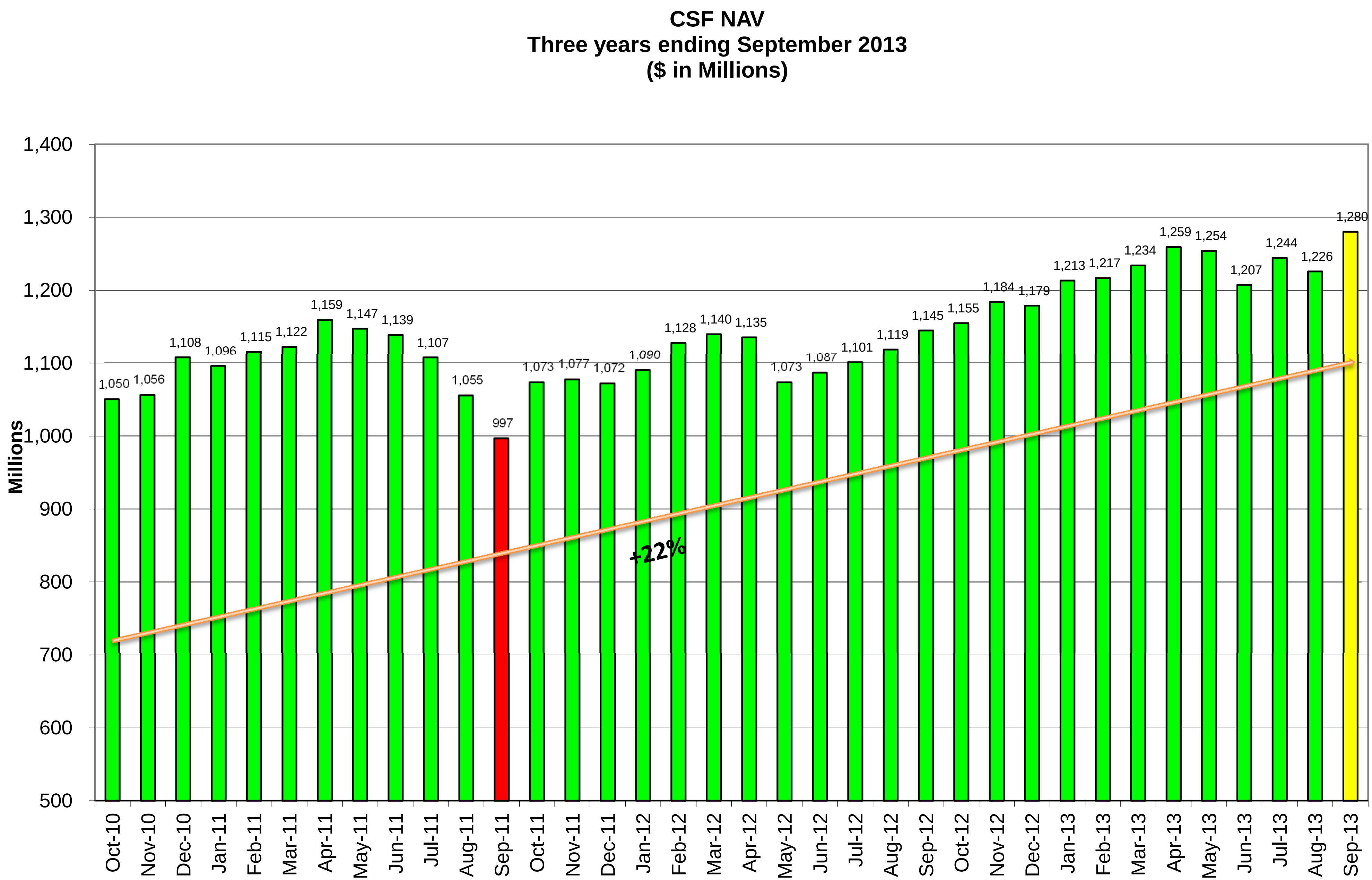

CSF Asset Allocation
35%
30%
25%
20%
15%
10%
5%
0%
30%
32%
30%
32%
10%
10%
30%
25%
0%
1%
Domestic Equities
International Equities
Private Equity
Fixed Income
Cash
Target
Actual


HIED Asset Allocation
30%
25%
20%
15%
10%
5%
0%
25%
27%
25%
27%
10%
9%
15%
14%
25%
23%
Domestic Equities
International Equities
Private Equity
Inflation Hedging
Diversifying Assets
Target
Actual

OPERF NAV
Three years ending September 2013
($ in Millions)




SAIF NAV
Three years ending September 2013
($ in Millions)
Millions
5,000
4,500
4,000
3,500
3,000
4,270
4,219
4,121
4,140
4,166
4,160
4,237
4,260
4,222
4,158
4,105
4,069
4,169
4,106
4,164
4,268
4,304
4,284
4,335
4,304
4,340
4,455
4,460
4,505
4,408
4,403
4,420
4,439
4,452
4,459
4,542
4,459
4,356
4,440
4,389
4,456
Oct-10
Nov-10
Dec-10
Jan-11
Feb-11
Mar-11
Apr-11
May-11
Jun-11
Jul-11
Aug-11
Sep-11
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
Aug-13
Sep-13


CSF NAV
Three years ending September 2013
($ in Millions)
Millions
1,400
1,300
1,200
1,100
1,000
900
800
700
600
500
1,050
1,056
1,108
1,096
1,115
1,122
1,159
1,147
1,139
1,107
1,055
997
1,073
1,077
1,072
1,090
1,128
1,140
1,135
1,073
1,087
1,101
1,119
1,145
1,155
1,184
1,179
1,213
1,217
1,234
1,259
1,254
1,207
1,244
1,226
1,280
+22%
Oct-10
Nov-10
Dec-10
Jan-11
Feb-11
Mar-11
Apr-11
May-11
Jun-11
Jul-11
Aug-11
Sep-11
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12
Sep-12
Oct-12
Nov-12
Dec-12
Jan-13
Feb-13
Mar-13
Apr-13
May-13
Jun-13
Jul-13
Aug-13
Sep-13

TAB 10 – CALENDAR – FUTURE AGENDA ITEMS

2013/14 OIC Forward Agenda Topics

December 4:	Alternative Portfolio Investment (2) OPERF Real Estate Investment OPERF Opportunity Portfolio Review HIED Annual Review OPERF 3rd Quarter Performance Review

2014

January TBD:	OIC General Consultant Recommendation
January 29:	Investment Beliefs: Areas of non-consensus Annual Placement Agent Report OPERF Private Equity Investment
March 5:	OPERF Private Equity Review & 2014 Plan OPERF 4th Quarter Performance Review OIC Policy and OST Procedure Updates
April 30:	Securities Lending Review DOJ Litigation Update
May 28:	OPERF Alternative Portfolio Review OPERF Policy Implementation Overlay Review OPERF 1st Quarter Performance Review
July 30:	OPERF Public Equity Review SAIF Annual Review
September 24:	OPERF Real Estate Review OIC Annual Policy Updates
November 5:	CSF Annual Review CEM Benchmarking Report Internal Audit Report
December 3:	OPERF Opportunity Portfolio Review HIED Annual Review OPERF 3rd Quarter Performance Review