
Oregon Investment Council

May 26, 2010 - 9:00 AM

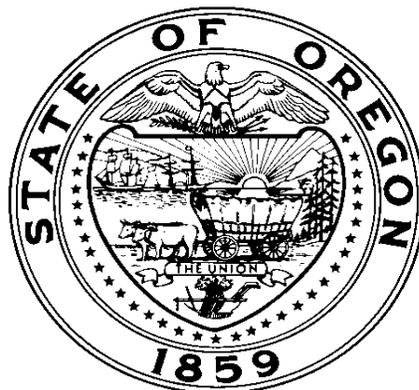
**PERS Headquarters
11410 S.W. 68th Parkway
Tigard, OR 97223**

**Oregon
Investment
Council**

**Harry Demorest
Chair**

**Office of The
State Treasurer
Ted Wheeler
State Treasurer**

**Ronald Schmitz
Chief Investment Officer**



OREGON INVESTMENT COUNCIL

2010 Meeting Schedule

Meetings Begin at 9:00 am

at

PERS Headquarters Building
11410 SW 68th Parkway
Tigard, OR 97223

January 27, 2010

February 24, 2010

April 28, 2010

May 26, 2010

July 28, 2010

September 29, 2010

October 27, 2010

December 1, 2010



OREGON INVESTMENT COUNCIL

Agenda

May 26, 2010
9:00 AM

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

<u>Time</u>	<u>A. Action Items</u>	<u>Presenter</u>	<u>Tab</u>
9:00-9:05	1. Review & Approval of Minutes April 28, 2010 Regular Meeting	Ron Schmitz <i>Chief Investment Officer</i>	1
9:05-9:20	2. Litigation Update – Executive Session <i>Possible executive session is being held pursuant to ORS 192.660(2)(h)</i>	Fred Boss <i>Chief Counsel, Civil Enforcement</i>	2
9:20-10:00	3. Securities Lending Cash Management	Mike Mueller <i>Deputy Chief Investment Officer</i> Steve Meier <i>Executive VP & Global Cash CIO, State Street</i> Obie Knapp <i>Vice President, State Street Securities Finance</i> Johnson Shum <i>Vice President, SSgA</i>	3
10:00-10:30	4. Policy Implementation Overlay <i>Russell Implementation Services</i>	Mike Mueller Greg Nordquist <i>Senior Portfolio Manager</i> Sylvia Perek <i>Portfolio Manager</i>	4
10:30-10:45	-----BREAK-----		
10:45-12:00	5. OPERF Asset Liability Study <i>Joint Meeting with OPERS Board</i>	Mike Beasley John Meier <i>Strategic Investment Solutions</i> Lou Kingsland, Jr. <i>SIS Strategic Advisor</i>	5

Harry Demorest
Chair

Keith Larson
Vice-Chair

Ted Wheeler
State Treasurer

Katy Durant
Member

Richard Solomon
Member

Paul Cleary
PERS Director
(Ex-officio)

B. Information Items

12:00-12:15	6. Asset Allocations & NAV Updates	Ron Schmitz	6
	a. Oregon Public Employees Retirement Fund		
	b. SAIF Corporation		
	c. Common School Fund		
	d. HIED Pooled Endowment Fund		
	7. Calendar—Future Agenda Items	Ron Schmitz	7
	8. Other Items	Council Staff Consultants	

C. Public Comment Invited

15 Minutes

TAB 1 – REVIEW & APPROVAL OF MINUTES

April 28, 2010 Regular Meeting



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

OREGON INVESTMENT COUNCIL
APRIL 28, 2010
MEETING MINUTES

Members Present: Paul Cleary, Harry Demorest, Katy Durant, Dick Solomon,
Treasurer Ted Wheeler

Member on Phone: Keith Larson

Staff Present: Andrea Belz, Darren Bond, Tony Breault, Brad Child, Jay Fewel,
Wendy Finley, Sam Green, Ellen Hanby, Andy Hayes, John
Hershey, Brooks Hogle, Julie Jackson, Jeff Keto, Perrin Lim,
Tom Lofton, Mike Mueller, Kevin Nordhill, Jen Peet, Jo Recht,
Tom Rinehart, Ron Schmitz, James Sinks

Consultants Present: Allan Emkin and John Linder (PCA), Mike Beasley and John
Meier (SIS), David Fann and Sundeep Rana (PCG), Nori
Gerardo Lietz (Partners Group)

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

The OIC meeting was called to order at 9:00 am by Harry Demorest, Chair.

I. 9:00 a.m.: Review and Approval of Minutes

MOTION: Mr. Demorest brought approval of the February 24 and April 8, 2010 OIC minutes to the table. Mr. Solomon moved to approve the minutes. The motion was seconded by Ms. Durant and passed by a vote of 4/0 (Mr. Larson was not present for the vote).

II. 9:01 a.m.: OPERF Asset/Liability Study

Mike Beasley and John Meier of Strategic Investment Solutions (SIS) provided an update on the asset/liability study. This was an informational topic only that was mainly focused on the asset side and the various levels of allocation for each asset class. The specific areas that were modeled

were correlations, risk, and returns. There was a brief question and answer period following the presentation.

9:20 am: Mr. Larson dialed in to the meeting.

ACTION: Staff will send around the Scenario Analysis Assumption to the PERS Board for their input.

ACTION: SIS will provide the OIC with a full set of assumptions regarding the Capital Markets outlook.

ACTION: Create alternative scenarios for the Opportunity Portfolio with different risk/return parameters and to look at leveraged portfolio options.

9:53 a.m.: Harry Demorest, OIC Chair read a prepared statement regarding the recent Oregonian coverage of Oregon State Treasury travel (see attached).

III. 10:04 a.m.: Oaktree Capital Management-OPERF and CSF Private Equity

Jay Fewel, Sr. Investment Officer and David Fann with Pacific Corporate Group gave a brief introduction about the Oaktree Capital Management (OCM) Opportunities Fund VIII. Staff recommended a commitment of \$100 million by OPERF and \$25 million by the Common School Fund (CSF) to OCM Opportunities Fund VIII, LP (\$50 million to Fund A and \$50 million to Fund B for OPERF and \$12.5 million to Fund A and \$12.5 million to Fund B for the Common School Fund). This commitment was originally proposed to be made through the Private Equity Committee, at its January 25, 2010 meeting. Due to an objection by a member of the OIC, this recommendation was pulled from that agenda, and was reintroduced to the full OIC following modification of some terms. Said commitment is subject to the satisfactory negotiation of the requisite legal documents by legal counsel working in concert with OST Staff and PCG.

ACTION: Mr. Solomon moved to approve the staff recommendation. Treasurer Wheeler seconded the motion. The motion was passed by a vote of 5/0.

IV. 10:06 a.m.: Aquiline Capital Partners-OPERF Private Equity

Mr. Fewel introduced Jeff Greenberg, Chief Executive Officer, and Geoff Kalish, Founder and Principal with Aquiline Capital Partners, LLC. Aquiline Capital Partners LLC is forming Aquiline Financial Services Fund II, L.P. to pursue a range of privately negotiated equity and equity-related investments within the financial services industry, across North America and Europe. They anticipate making 10 to 15 investments (ranging from \$100 million to \$400 million of equity) while focusing on corporate divestitures, public and private company buyouts, corporate restructurings, and, opportunistically, growth or start-up capital investments.

This commitment was originally proposed to be made through the Private Equity Committee, at its January 25, 2010 meeting. Due to an objection by a member of the OIC, this recommendation was pulled from that agenda, and was reintroduced to the full OIC. Said commitment is subject to the satisfactory negotiation of the requisite legal documents by legal counsel working in concert with OST Staff and PCG.

Staff recommended a commitment of \$100 million to Aquiline Financial Services Fund II, L.P. Said commitment is subject to the satisfactory negotiation of the requisite legal documents by legal counsel working in concert with OST Staff and PCG.

There was a brief question and answer period following the presentation.

ACTION: Mr. Solomon moved to approve the staff recommendation, with the addition of a review by staff of the fund's budget. Mr. Larson seconded the motion. The motion was passed by a vote of 4/1 with Ms. Durant voting no.

V. 11:17 a.m.: Vornado Capital Partners LP-OPERF Real Estate

S. Bradford Child, Senior Real Estate Investment Officer and Nori Gerardo Lietz with Partners Group introduced Michael Fascitelli, President/CEO and Michelle Fellman, Executive Vice President of Vornado Capital Partners. The Fund targets \$1 billion in total equity capital for investment in high quality office and urban retail in major metropolitan cities such as New York City and Washington D.C. The proposed fund will be "value-added" in nature with a target gross IRR return of 15 to 20 percent. Vornado is a large, successful public REIT with a market capitalization of almost \$14 billion. Their assets are prime office and retail in major markets such as New York City and Washington DC. The company is vertically integrated with staff experienced in: real estate acquisitions, property management, development and re-development of existing properties. Most of the senior investment team has worked together for over 12 years. Vornado will invest 20 percent of the equity in the Fund up to \$200 million. During its investment period, the Fund will be the primary acquisition vehicle for the REIT, providing a strong alignment of interests. Vornado believes that the next few years will offer an exceptional opportunity to invest in quality real estate investments as current owners and lenders address the property re-pricing of the recent past. Some of these opportunities may be of a size that exceeds Vornado's REIT resources. The Fund will provide Vornado with a platform to pursue large, high quality investments for the benefit of both the REIT and the other Fund investors. Vornado's in-house capabilities to lease, manage and remodel buildings will be beneficial in both the acquisition and turn-around of properties that may have been under-managed by prior distressed owners.

Staff recommended approval of a \$100 million commitment to Vornado Capital Partners, L.P. subject to negotiation of the required legal documents, working in concert with the Department of Justice.

There was a brief question and answer period following the presentation.

ACTION: Ms. Durant moved to approve the staff recommendation. Treasurer Wheeler seconded the motion. The motion was passed by a vote of 5/0.

VI. 12:13 p.m.: Oregon Short Term Fund-Annual Review and Policy Updates

Perrin Lim, Senior Investment Officer gave an overview of policy 4.02.03 updates for the Oregon Short Term Fund. They include the following:

1. 4.02.03: Section VI-A-1a,b,c adds US\$ denominated foreign government securities and instrumentalities rated a minimum AA-, Aa3, or AA- at the time of purchase and subject to 25% maximum.
2. 4.02.03: Section VI-A-5b,e allows domestic and foreign corporate indebtedness subject to 25% maximum in total foreign (corporate and government).
3. 4.02.03: Section VI-A-5d allows corporate notes with minimum long-term ratings of A-, A3, or A- at the time of purchase
4. 4.02.03: Section VI-A-9 adds municipal debt obligations with minimum long-term ratings of AA-, Aa3, or AA-, or are rated in the highest category for short-term municipal debt at the time of purchase.

Staff recommended the OIC approve the revised Oregon Short-Term Fund Portfolio Rules, Policy 4.02.03, as approved by the Oregon Short-Term Fund Board on January 26, 2010.

ACTION: Ms. Durant moved to approve the staff recommendation. Mr. Solomon seconded the motion. The motion was passed by a vote of 5/0.

VII. 12:25 p.m.: OST Intermediate Term Bond Fund

Perrin Lim and Tom Lofton presented to the Council the OST Intermediate Term Bond Fund. The purpose of the presentation was to obtain approval from the OIC to implement and operate a fixed income investment pool named the "Oregon Intermediate Term Pool" (OITP).

Certain state agencies and state sponsored entities have monies available to invest on a longer term basis than the Oregon Short-Term Fund (OSTF) rules allows. Currently, the investment options available to most state entities are restricted by Oregon Revised Statutes (ORS) and governed by the OIC. Except in specific and limited circumstances provided by ORS, the only investment vehicle available for state agencies and sponsored entities is the Oregon Short Term Fund.

The Oregon Intermediate Term Pool (OITP) will provide certain state-owned and sponsored entities the opportunity to place funds, not needed for short-term cash needs, in a vehicle that is able to accept greater market risk, within certain parameters, in order to achieve improved investment returns.

Staff expects to have the necessary administrative needs completed for OITP to become operational on July 1, 2010. Process mapping, responsibility assignment, and compliance and control procedures have been established. In addition, the OITP Policies and Guidelines, Prospectus, and administrative processes have been reviewed by internal audit staff. Pending OIC approval of OITP's implementation, OST Investment Accounting staff and Fixed Income Investment Staff will begin testing administrative and compliance procedures in May and June. Fixed Income Staff will also reach out to eligible state agencies to inform them of OITP.

Staff recommended that the OIC approve the implementation and operation of the Oregon Intermediate Term Pool and approve the OITP Policies and Procedures.

ACTION: Mr. Solomon moved to approve the staff recommendation. Ms. Durant seconded the motion. The motion passed by a vote of 5/0.

VIII. 12:40 p.m. OIC Annual Policy Update:

Mike Mueller, Deputy CIO presented updates on several OIC Policies based on statutory changes and to conform policy with practice (where appropriate). Staff recommended approval of OIC policies and procedures, as part of an annual "housekeeping" update (some key updates are listed below):

1. 4.01.01: Adds foreign holdings consistent with OSTF investment guidelines revisions from today.
2. 4.01.05: Strikes language for a reporting process that is not yet active.
3. 4.01.14: Strengthens language and reporting of losses, sets up reserve procedures for the OSTF—codifies current practice.
4. 4.01.19: Clarifies the procedures related to due diligence, implementation, funding, and monitoring for the Opportunity Portfolio for consistency with the private equity policy.
5. 4.04.01: Clarifies use of "direct" and "core."

6. 4.07.05: Updates manager name changes and adds LifePath Funds in Appendix.
7. Investment Objectives and Policy Framework for OPERF: Updates to reflect policy changes and definitions-change the review term from periodically to biennially.

ACTION: Mr. Solomon moved to approve the staff recommendation. Ms. Durant seconded the motion. The motion passed by a vote of 5/0.

IX. 12:43 p.m. Litigation Update

This agenda item was moved to the next meeting on May 26.

X. 12:43 p.m.: Asset Allocation and NAV Updates

Mr. Schmitz reviewed the Asset Allocations and NAV's for the period ended March 31, 2010. All asset classes are within their allocation ranges.

XI. 12:44 p.m.: Calendar – Future Agenda Items

Mr. Schmitz highlighted future agenda topics.

XII. 12:45 p.m.: Other Business

There was no other business discussed.

12:45 p.m.: Public Comments

Terry Scannell provided comments regarding the recent Oregonian coverage of the Oregon State Treasury travel policies.

The meeting adjourned at 12:55 p.m.

Respectfully submitted,



Julie Jackson
Executive Support Specialist

Harry Demorest, Chair, Oregon Investment Council

Comments Regarding Oregonian Coverage of OST Staff Travel

April 28, 2010

Before we move on to the next agenda item, I am going to exercise my prerogative as Chair and make a few comments about the Oregonian's reporting on the investment staff's travel expenses. I do so even though it's a violation of a long term belief to never pick a fight with someone who buys ink by the barrel. I also want to make clear that my comments are my own personally. I have not discussed them with any other council member and as such they should not be perceived as the view of the council.

First let me say in my four plus years on the council I have found the Oregonian reporting has been fair and balanced. Their recent coverage of staff travel is not. They may have been influenced by their recent training program on watch dog reporting, or as one blogger put it, "It's just a silly article losing sight of the forest for the trees to sell extra papers." They even went so far as to show a picture of Phil Mickelson playing golf at Pebble Beach, when they had been told that no Investment staff had played golf there.

The Investment Division is employed by the Treasurer but they serve the Council. Our primary concerns are superior investment results on a cost effective basis. On both counts, their results have been outstanding. Almost as a concession, buried in one paragraph in the middle of the initial story, the Oregonian reported, and I quote: "Trade magazines and industry associations do laud Oregon's public-investment performance as best in class." Best in class. "Returns from the pension funds investment in private partnerships in particular have been strong over time." Now I saw a nice headline there...Best in Class...unfortunately the Oregonian didn't. In fact, to say our private investments have been strong over time is an understatement. For almost every time period, private investments have substantially outperformed public investments. To make clear what I mean by substantial, several billion over the last ten years and certainly much more if you go back to the 80's when the council first directed funds into private investments.¹ These are direct savings to Oregon taxpayers, and I mention this because the total focus of the articles dealt with travel monitoring private investments.

The second metric that is important to the council is cost. Again the investment staff is an excellent performer, when it comes to overall cost compared to a universe of pension funds. The council annually receives a report from an independent firm which shows that last year our total investment cost was

¹ In the meeting, an amount of \$2.5 billion was inadvertently presented as an annual number. The error was due to a miscommunication between staff and the Chair. This figure was from private equity over the ten year period. An additional amount of more than \$1.5 billion of value added comes from private real estate holdings over the ten years. While a regrettable error, this does not alter the fact that private investments have brought tremendous value to OPERF.

0.74 percent. Three quarters of one percent. That's below our peers that also have significant private equity in their portfolios, some of those peers which chose to be quoted in the article.

However, the most outrageous insinuation is that a "cozy relationship" with our investment partners colors our staff's recommendations and monitoring of investments. That's insulting and stupid. The evidence to prove the Oregonian's claim would be poor investment results or investments we didn't make that were superior but didn't offer the same conferences. The evidence is quite the contrary. If I personally had found that our staff was not attending partner conferences or participating in limited partner committees, or staying in their rooms instead of playing golf with one of our general partners, I would be upset that we weren't performing our duties. As a check, we have consultants that review every investment before it comes to the council. And by the way, the council itself hasn't been bashful in questioning or turning down staff recommendations. But perhaps the most important factor is that, up to 30 percent of the staff's compensation is determined by investment results. Does any reasonable person think that our staff would risk that for a fancy dinner?

Finally, I am not immune to the public perception created by these articles. I believe we have been caught up in current anti-Wall Street sentiment. I support, not that he needs it, our new Treasurer's review of travel policies. No matter what Ted chooses to do, the council will continue to insist that the investment staff not let up on their very heavy travel schedules (over 500,000 miles annually and 400 days away from home) to monitor and seek out the best private investments for our fund. They deserve the public's appreciation.

TAB 2 – LITIGATION UPDATE

Executive session may be held pursuant to

ORS 192.660(2)(h)

TAB 3 – SECURITIES LENDING CASH MANAGEMENT

Securities Lending Cash Collateral Discussion

Purpose

To discuss the cash collateral reinvestment pools managed by State Street Global Advisors, for the securities lending programs.

Background

During the February 2010 annual review of the securities lending program with State Street Bank, the OIC requested a discussion dedicated to the reinvestment of the cash collateral.

As previously reported, the Oregon State Treasury has participated in securities lending arrangements dating back decades. The most recent relationship, with State Street Bank, began in May 1997. Over the past 13 years, OIC managed accounts have benefited from over \$316 million in net earnings from securities lending. Year-to-date, net earnings to OPERF and other funds have averaged about \$2 million per month. Not only do the underlying funds benefit from the income derived from securities lending, but total plan costs for custody and related services are kept down, since a portion of the revenue from securities lending is retained by the bank. Earnings are not guaranteed and are a function of: market demand for securities, the Oregon portfolio “supply,” as well as the reinvestment risk taken with the cash collateral. Today’s discussion is primarily focused on the last factor.

Discussion

Steve Meier, Obie Knapp, and Johnson Shum will provide the OIC a presentation on the topic requested.

Oregon Investment Council

May 26, 2010

Steven R. Meier, CFA, FRM

Executive Vice President and Chief Investment Officer, Global Cash

Contents

1. US Cash Management Overview

2. Portfolio Overview

Appendix A: Biography

US Cash Management Overview

Investing involves risk including the risk of loss of principal.



Experienced, Dedicated Global Team

Global Cash

Steven Meier, CFA, FRM 26 years
Chief Investment Officer, EVP experience

London/GBP, EUR

yrs exp

Mihaly Domjan, CFA Managing Director, Head, European Cash Management	14
Leonie Clark	15
Joe Gillingwater	12
Joanna Mauro	10
Neil Hutchison, CFA	11
Nick Pidgeon	22
Gregor Harwell, CFA	7
Alice Chan	8
Jennifer Hole, CFA*	8

Paris/EUR

Benjamin Platret	9
Joffrey Ricome	8

Sydney/AUD NZD

Ross Bolton	28
Simon Mullumby, CFA	14

Boston/USD

yrs exp

Thomas J. Motley, CFA Managing Director, Head, US Cash Management	30
Thomas Connelley, CFA	19
Sean Dillon	16
Charles Byrne, CFA	12
Robert Jackson	19
Maria Pino, CFA	29
Jeff St. Peters, MDR	20
Sean Lussier	10
Andrew Goodale*	16
Todd Bean, CFA	11

Montreal/CAD

Louis Basque, CFA	17
Claudio Ferri	9
Jean Gauthier, CFA	18
Christian Hoffman	6

Administrative Support

Leigh Dalton, Executive Assistant
 Christina Mucci, Executive Assistant

Data Management/IT

Robert Wagner

Global Credit Research (Multicurrency)

yrs exp

Matthew Steinaway, CFA, Senior Managing Director and Deputy Head of Global Cash	15
Elizabeth Mingle	9
Unsecured/Corporate	
Michael Madden, FRM (London)	6
Attilio Quattieri (Boston)	5
Asset Backed	
Pia McCusker, MDR (Boston)	9
Peter Hajjar (Boston)	9
Mi Lin Chen (Boston)	4
Qi Guan, CFA (Boston)	5
Site Analyst	
Omar Slim, CFA (Montreal)	5
Victor Grigore, CFA	4

Tokyo/JPY

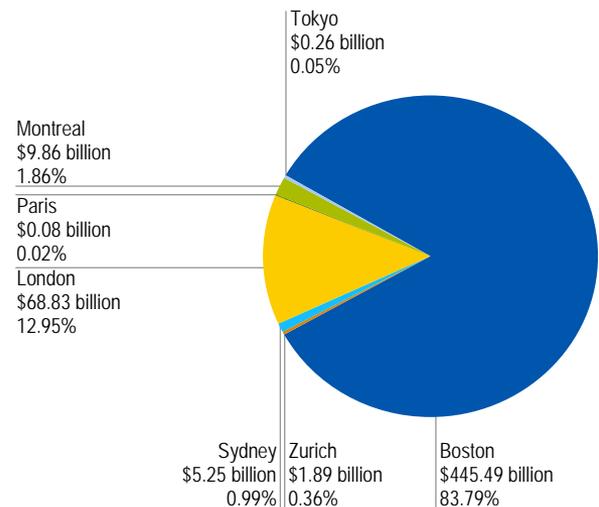
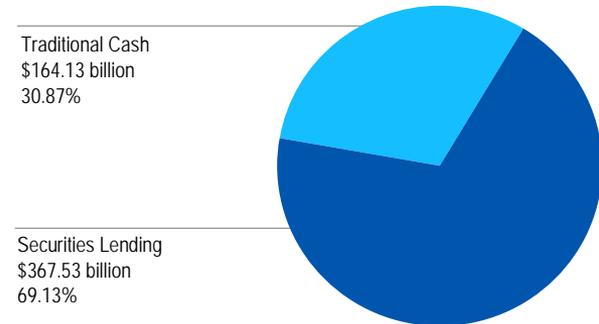
Peter Morgan	20
Ramon Maronilla, CFA (Hong Kong)	15

SSgA AUM and Competitive Advantages

As one of the world's largest Cash managers, SSgA is able to provide the following benefits to our clients:

- Priority treatment from dealers
 - Information flow
 - Access to product
- Price breaks for large tickets
 - Complete flow-through to clients
- First look at new structures
- Access to liquidity
- Well known by issuers
 - Reverse inquiry
- Well known by rating agencies
- Access to company management
 - Conformity with Regulation FD

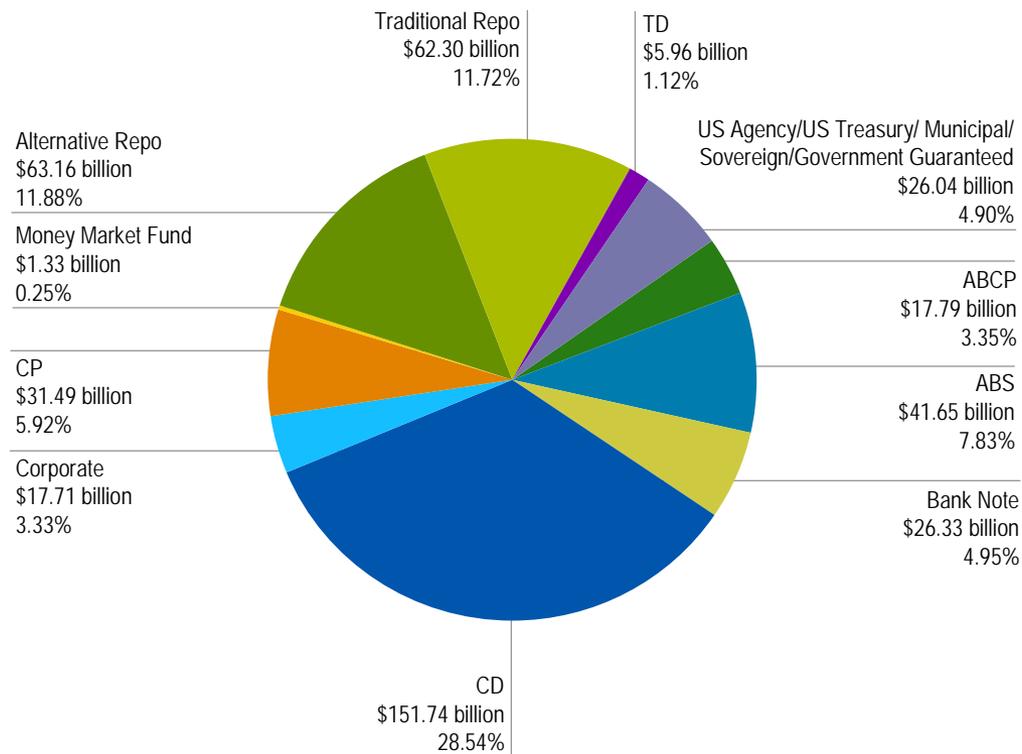
\$531.66 Billion* in Global Cash Assets
As of April 30, 2010



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

US Cash Management AUM by Security Type

\$445.49 Billion AUM by Security Type
As of April 30, 2010



US Cash Management Aggregate ABS Allocation

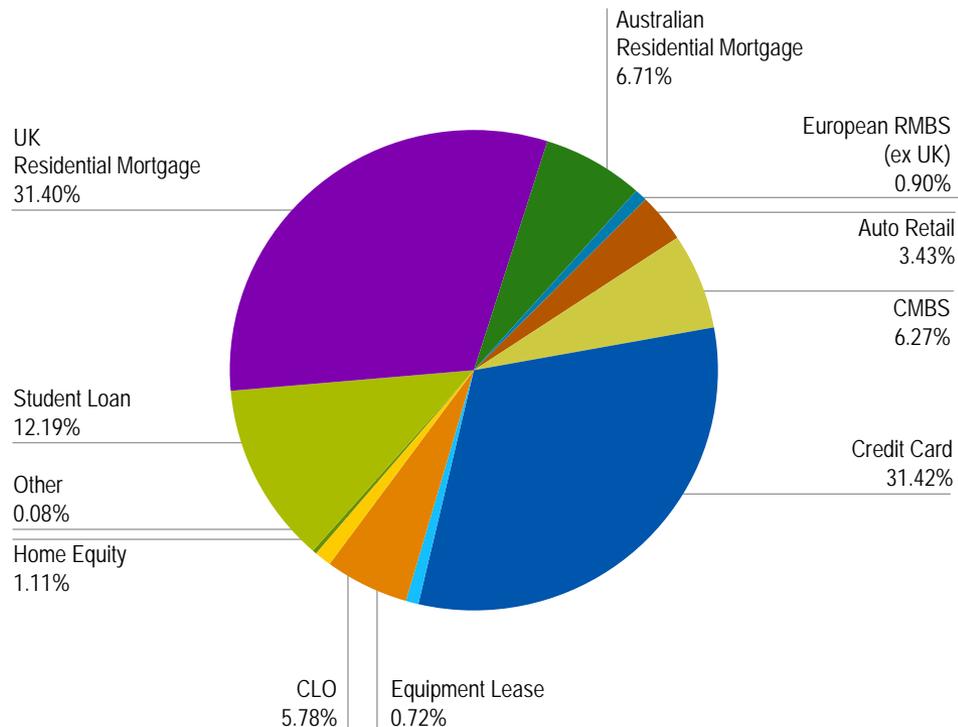
	ABS Credit Quality
AAA	91.01%
AA	2.28
A	3.09
BBB	0.83
BB	1.18
B	0.14
CCC	0.22
NA	1.25
Total	100.00%

*Home Equity Sub-sector Allocation of Total ABS		
	\$ USD	% of ABS
HELOC	263.41	0.64%
HEQ (Alt A)	111.03	0.27
HEQ (2nd Lien)	—	0.00
HEQ (Sub-prime)	86.23	0.21
Total	\$460.67 Million	1.11%

WAL Per Region	
Boston	1.72 Yrs

Monoline Exposure		
	\$ USD	% of ABS
Boston	1.134	2.74%

\$44.50 Billion Aggregate ABS Allocation As of April 30, 2010



Allocations are as of the date indicated, are subject to change, and should not be relied upon as current thereafter.

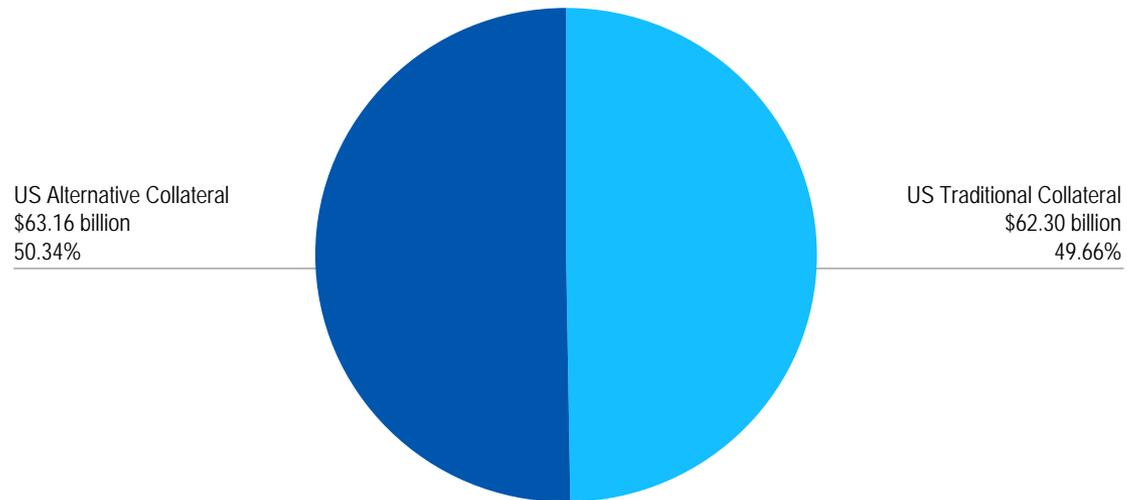
Ratings are Standard and Poor's

Numbers are in billions and are in USD. Numbers do not include Legacy assets

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

US Cash Management Repurchase Agreements Outstanding

\$125.45 Billion US Repurchase Agreements Outstanding As of April 30, 2010



US Cash Management Team

US Portfolio Management Team Members

Name	Position	Years of Experience
Steven Meier, CFA, FRM	Global Cash CIO	26
Thomas Motley, CFA	Head, US Cash Management	29
Todd Bean	Portfolio Manager	10
Charles Byrne, CFA	Portfolio Manager	11
Thomas Connelley, CFA	Senior Portfolio Manager	18
Sean Dillon	Senior Portfolio Manager	18
Andrew Goodale	Senior Product Engineer	16
Robert Jackson	Senior Portfolio Manager	18
Sean Lussier	Portfolio Manager	9
Elizabeth Mingle	Senior Portfolio Manager	9
Maria Pino, CFA	Senior Portfolio Manager	28
Jeff St. Peters	Senior Portfolio Manager	19

Cash Management Resources

Credit Research

Risk Management

Compliance

Trading and Liquidity

- Experienced portfolio management team averaging 19 years of experience
- Asset class/sector specialization

Global Cash Investment Management

Core Objectives

- Through active management, portfolios seek to achieve safety of principal, daily liquidity and a high relative yield by investing in diverse instruments

Advantages

- Disciplined investment process
- Experienced, dedicated team
 - Asset-class focus
 - Commitment of resources
 - Career destination
- Long history of managing structured investments
- Dedicated credit support and discipline
- AUM size
 - One of the world's largest cash managers
- Strong risk management

Goal

- Seeks consistently strong risk-adjusted performance

Global Cash Investment Process

- Decision making process emphasizes team structure
 - Idea generation across global sites
- Portfolio managers collaborate on investment strategy
- Top down investment approach begins with macro economic view
 - Implications for monetary policy
- Yield curve and forward curves evaluated to position portfolios opportunistically
- Securities selection based on relative value assessment
- Credit and research groups essential to our risk-management investment philosophy
 - In-depth approved list of issuers
 - Real-time position monitoring

Experienced, Dedicated Global Cash Team

- Highly qualified professionals
 - Experience
 - Performance history
 - Dedication to excellence in investment management
- Team orientation
 - Collaboration of ideas/opinions
 - Balanced views
 - Significant bench-strength
 - Professional development of staff
- Portfolio generalists/sector specialists

- Multiple layers of risk management
 - Dedicated Risk Managers
 - Global credit analysis
 - Independent Compliance staff
 - Portfolio Managers
 - Investment guidelines
- Focus on risk-managed strategies
 - Core component of SSgA's culture
- Extensive use of technology
 - Bloomberg TOMS
 - Pre/post-trade compliance
 - Proprietary spread sheets/risk analytics
 - Portia accounting system
- For cash investments, strict adherence to credit approved list

US Cash Investment Universe

US Treasury Issues

US Agency Issues (Fixed, Floating, Callable)

Corporate Debt Obligations (CP, MTNs, FRNs, Bank Notes)

Time Deposits

Certificates of Deposit (Euro, Yankee, Domestic)

Bankers Acceptances

Supranational and Sovereign Debt

Asset-backed Trusts (Asset-Backed Commercial Paper)

Repurchase Agreements (Traditional/Non-traditional GC)

Money-market Mutual Funds/Commingled Pools

Asset-backed Securities (Term Tranches)

Mortgage-backed Securities (REMICs, CMOs)

Commercial MBS (Conduit and Large Loan Deals)

Fixed and Floating-rate Obligations

Other (PNs, XPNs, Master Notes, Extendible Notes, etc.)

Considerations/Inputs for Global Cash Decision Making

- Economic Conditions/Trends
- Federal Reserve Policy/Administered Rates
- FOMC meetings
- FED rhetoric
- Economic developments
- Shape of the Short-term Yield Curve
- Credit Spreads
- Liquidity Conditions
- Cash Flows
- Optionality
- Structure
- Issuer/Counterparty Default Risk
- Market Technicals
- Other

Economic Overview

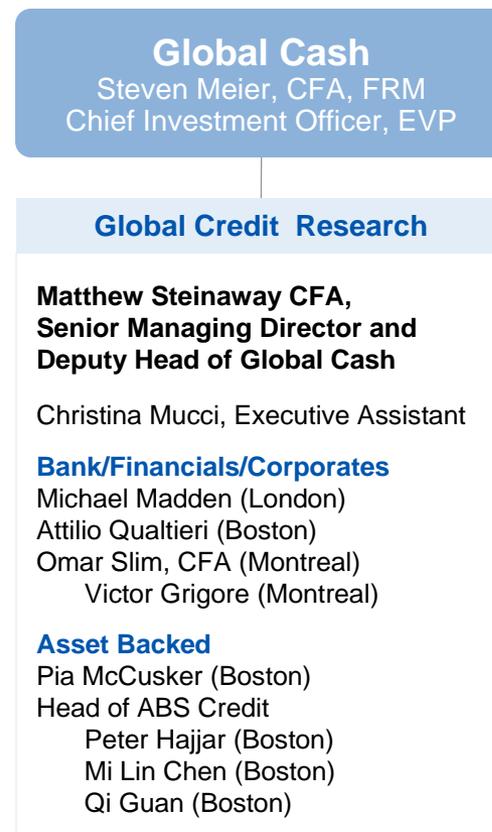
- Recession is over, but a very gradual pace of improvement has been seen
- Employment showing early signs of improvement. Unemployment rate was 9.9% in April 2010.
 - Unemployment insurance initial claims rose to 444,000 in the week ended May 1st
- Federal Open Market Committee (FOMC) minutes of the April 28th meeting show that members anticipate a moderate recovery and that “the labor market [is] continuing to improve.”
- Monetary policy has continued to target a range of 0 to 25 basis points. Target reaffirmed at March FOMC meeting.
- GDP revised down to 5.6% in 4Q2009; slower growth seen in the first half of 2010 as inventory replenishment slows
- Core inflation appears stable, comfortably below Fed’s 2.0% target
 - Core PCE 1.3% (February y/y)
- Treasury and Fed discuss unwinding of massive stimulus activities; new banking/financial sector regulations continue to be debated in Congress
- Purchasing managers indexes (PMI) show activity increasing worldwide, albeit moderately outside US. Headline PMI rose in US to 55.4, the highest level since May 2006.

The views expressed in this material are the views of SSgA through the period ended May 1, 2010 and are subject to change based on market and other conditions. The information provided does not constitute investment advice and it should not be relied on as such. All material has been obtained from sources believed to be reliable, but its accuracy is not guaranteed. This document contains certain statements that may be deemed forward-looking statements. Please note that any such statements are not guarantees of any future performance and actual results or developments may differ materially from those projected. Past performance is not a guarantee of future results.

Source: SSgA, Bloomberg

Team structure

- Ten analysts exclusively supporting Global Cash*
- Global research platform with analysts located in three sites — Boston, London, and Montreal
- Significant scope and scale
 - As of April 30, 2010 over \$531 billion of assets under review



Key operating tenants of Global Cash research

- Risk managed environment
 - Focus on preservation of client capital
 - Approved list methodology
 - “Signature” work flow process
 - Extensive disclosure requirements
- Transparency of process
 - Written documentation for all credit decisions
 - Extensive surveillance tools
 - Intranet distribution of all credit opinions
- Dedicated resources
 - Ten analysts deployed exclusively to the cash effort
 - Proprietary technology development including Credit Views, a credit library, work flow management and limit monitoring tool
 - Extensive investment in third-party data and modeling tools, including Intex, TREPP, and Bloomberg

Cash research process

- Separation of risk management and credit research
 - Credit research approves cash entities within limits established by SSgA Risk Management
- Signature approval process required for risk exposures
- Transparent, formal communication
 - Approved lists for securities purchases
 - Credit research library
- Strong oversight and controls
 - Formal surveillance process
 - Violation tracking
 - Ongoing rating updates
 - Formal credit documentation requirements
 - Continuous exposure monitoring

Competitive advantages of our distinct structure

- Independent, fundamental research process
 - Fundamentally-driven credit process supported by experienced research analysts
- Breadth and depth of credit research experience
 - Maintain market leading positions in a number of asset classes
 - Active in cash credit markets for over 15 years*
- Potential benefits of scale
 - Access to issuers' senior management as well as sell-side and rating agency analysts, research, and models
- Proprietary credit management systems built specifically for credit research
 - Ongoing investment in data and decision making tools
 - Credit management systems link PMs and analysts worldwide on a real-time basis

Credit market overview — key issues for 2010 and beyond

Questions remain regarding:

- Global Financial Institutions funding mix
 - What is the fate of securitization?
 - How will the regulatory issues be resolved? Tensions being created by new and sometimes contradictory regulations.
- The input of new capital rules on the financial markets
 - New capital rules for financial institutions
 - Exchange requirements of OTC transactions
- The treatment of senior unsecured and secured creditors in a bank failure
 - Will the market reprice bank risk?
 - Will increased risk in the IG bank sector force consolidation of liquidity providers?
- Finally, how will this all end?
 - Support and liquidity withdrawal will be meaningful
 - Select asset classes have not been repaired yet
 - Are the markets too early and too uniform in pricing the expected recover?

- Captures all credit reports and increases transparency of credit process

Credit View : Family Notes and Analysis

Family Notes and Analysis for BankAmerica - Bank					
As Of Date	Research / Note On	Name	Research / Note Type	Comments	Author
02/09/2010 07:51:25	Family	BankAmerica - Bank	REQUEST	BankAmerica - Bank Family - Research Approval Request Approved ...More	Matthew Steinaway
02/09/2010 07:51:25	Family	BankAmerica - Bank	Earnings Call	Please see earnings call for 4Q09 ...More	Attilio Qualtieri
12/14/2009 11:13:21	Region	North America	Sector Research	JP Morgan - US Year Ahead 2010 - December 2009 ...More	Christina Mucci
12/03/2009 08:27:47	Family	BankAmerica - Bank	Credit Opinion	Please see write-up on BAC's repayment of TARP. ...More	Attilio Qualtieri
12/01/2009 09:53:17	Family	BankAmerica - Bank	REQUEST	BankAmerica - Bank Family - Asset Limit (Add/Change) Approved ...More	Matthew Steinaway
11/03/2009 06:43:31	Family	BankAmerica - Bank	REQUEST	BankAmerica - Bank Family - Research Approval Request Approved ...More	Matthew Steinaway
11/03/2009 06:43:31	Family	BankAmerica - Bank	Earnings Call	Bank of America's earnings were mixed in the third quarter, with the company reporting a loss of ~\$1 billion. Results, however, included a flurry of one-time items, including a \$2.6 bi ...More	Attilio Qualtieri
07/24/2009 10:03:02	Family	BankAmerica - Bank			
07/24/2009 10:03:02	Family	BankAmerica - Bank			
07/13/2009 17:13:16	Industry	Banks & Finance			
05/14/2009 09:50:26	Issuer	Bank of America/Lon			
05/14/2009 09:50:15	Issuer	Bank of America/Lon			
05/13/2009 10:35:32	Issuer	Bank of America NT & CA			
05/13/2009 10:35:22	Issuer	Fleet National Bank			
05/13/2009 10:35:11	Issuer	BankBoston NA			
05/12/2009 08:33:43	Family	BankAmerica - Bank			
05/12/2009 08:33:27	Family	BankAmerica - Bank			
05/12/2009 08:32:33	Issuer	Bank of America/Lon			
05/12/2009 08:31:51	Issuer	Bank of America/Lon			
05/12/2009 08:31:40	Issuer	Bank of America NT & CA			

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Global Credit Research

STATE STREET GLOBAL ADVISORS | SSGA

Global Credit Research

Bank of America
Credit Analysis

Family Name BankAmerica - Bank
BankAmerica - HoldCo

Reporting Period: 4Q09
Report Type Earnings Call

Maturity Restriction Bank → MR
HoldCo → MR
Stabilizing

Credit Trend

Analyst Ext. Attilio J. Qualtieri
617-664-6202

Earnings Call Summary
Bank of America reported a net loss of \$194 million in 4Q09, although the loss to common shareholders including the TARP repayment charge was closer to \$5.2 billion. Included in results were \$1.6 billion of charges related to credit spread tightening on Merrill Lynch liabilities (fair value option), \$1 billion of marks on legacy assets, and a \$1.1 billion gain from BAC's BlackRock stake within equity investment income. Overall, the company's revenue fell by 3.6% QoQ to \$25.4 billion. Although credit costs continue to be elevated (ate into 40% of total revenue in both 4Q09 and FY09), there were some positive trends that emerged in the period including the first QoQ decline in net charge-offs since 1Q06 and a slowdown in NPA growth and consumer delinquencies.

Profitability
Fully taxable-equivalent net interest income was up 1.2% QoQ but down 11% YoY to \$11.9 billion as the NIM rose by 1bp to 2.62% and offset a 2.6% decline in average loans and leases outstanding. Although loans were down, overall earning assets were up by 1% QoQ as the decline in loans was largely offset by higher debt security balances and repo assets. The cost of interest bearing liabilities declined during the quarter to 1.42% from 1.70%, while average earning asset yield fell to 3.96% from 4.19%. The sustainability of this NIM improvement is in question going forward

Cash Management Objectives

1 **Safety:
Principal Preservation**

2 **Liquidity**

3 **Relative Return**

SSgA Value Added

Experienced Portfolio Management

- Seasoned team of 34 portfolio managers

Comprehensive Credit Analysis

- Dedicated team of ten specialized Global Cash credit analysts

Size

- \$531.66 billion global cash assets

History

- Providing successful cash management for over 30 years

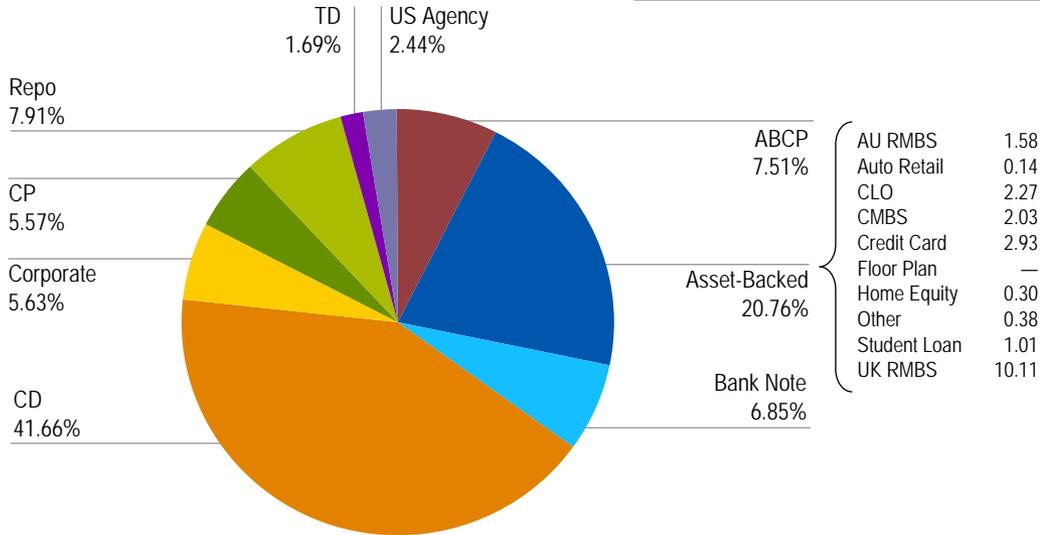
Portfolio Overview

Quality Investment Fund D

FC14 — Quality D Summary Characteristics

As of April 30, 2010

1-Day Yield (360 Basis)	0.33%
Shares Outstanding	48,310,869,245.67
Floating Rate %	49.84
% Foreign Issuers	35.42
WAM	31.70
WAM to Call	31.70
Call v. Mat Spread	—
% Callables	0.00%
Avg Life -Expected Maturity	227.74
Fund Price as of 04/30/10	99.1634



Credit Quality Breakdown

LONG-TERM RATINGS	% OF FUND
AAA	20.44
AA	10.98
A	7.73
BBB+	—
BBB	0.21
BBB-	—
BB+	0.32
BB	—
BB-	—
SHORT-TERM RATINGS	% OF FUND
A-1+/P-1	42.26
A-1/P-1	18.06
SPLIT	—
Other	---

Floating Index Breakdown

Floating Index Breakdown	% of Fund
FED FUNDS	—
1MO LIBOR	25.43
3 MOS LIBOR	24.41
PRIME	—

Reset Buckets

Reset Buckets	% of Fund
Next Business Day	1.22
2-7 Days	4.76
8-31 Days	28.03
1-2 Months	5.58
2-3 Months	10.26

Maturity Buckets

Maturity Buckets	% of Fund
Next Business Day	8.56
1 WEEK LIQUIDITY	19.51
2-30 Days Liquidity	24.92
31-60 Days Liquidity	16.35
61-90 Days Liquidity	6.59
90 DAY LIQUIDITY	56.43
91-120 Days Liquidity	2.47
121-150 Days Liquidity	0.33
151-180 Days Liquidity	1.33
181-270 Days Liquidity	6.58
271-360 Days Liquidity	11.46
12-15 Month Liquidity	2.57
15-18 Month Liquidity	7.67
18-21 Month Liquidity	2.86
21-24 month Liquidity	1.76
Greater than 2 Year Liquidity	6.55

Repo Collateral

Repo Collateral	% of Fund
Treasuries	3.22
Agencies	2.30
Agency MBS	1.94
Money Markets	0.45
Corporates	—
Asset-Backed	—
Equities	—

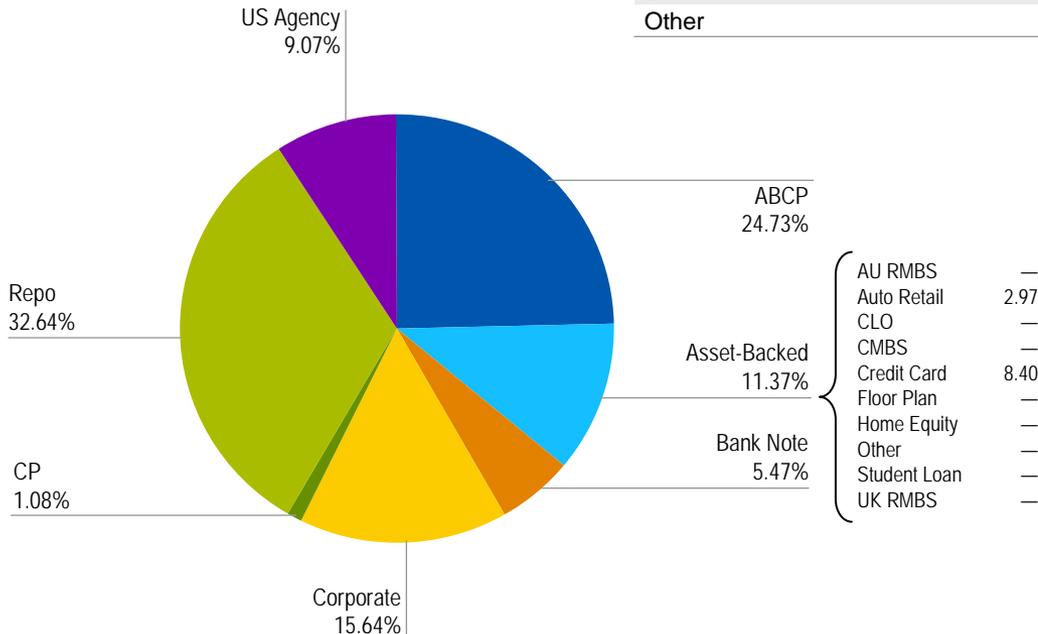
The fund does not hold any SIV's, CDO's, or Extendible Liquidity Note securities. Ratings are Standard and Poor's. Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. This material is for SSgA Client use only. All data sourced by SSgA unless stated otherwise. Past performance is not a guarantee of future results.

Oregon Short Term Fund

FC91 — Oregon Short Term Summary Characteristics

As of April 30, 2010

1-Day Yield (360 Basis)	0.31%
Shares Outstanding	4,628,952,778.77
Floating Rate %	42.91
% Foreign Issuers	—
WAM	24.26
WAM to Call	24.26
Call v. Mat Spread	—
% Callables	0.00%
Avg Life -Expected Maturity	114.88
Fund Price as of 04/30/10	99.9499



Credit Quality Breakdown	
LONG-TERM RATINGS	% OF FUND
AAA	22.60
AA	8.43
A	8.90
BBB+	—
BBB	—
BBB-	—
BB+	—
BB	—
BB-	—
SHORT-TERM RATINGS	% OF FUND
A-1+/P-1	30.60
A-1/P-1	29.46
SPLIT	—
Other	—

Floating Index Breakdown	% of Fund
FED FUNDS	2.98
1MO LIBOR	20.27
3 MOS LIBOR	19.66
PRIME	—
Reset Buckets	% of Fund
Next Business Day	5.14
2-7 Days	2.74
8-31 Days	24.31
1-2 Months	7.67
2-3 Months	3.05
Maturity Buckets	% of Fund
Next Business Day	27.50
1 WEEK LIQUIDITY	34.19
2-30 Days Liquidity	17.87
31-60 Days Liquidity	10.76
61-90 Days Liquidity	17.28
90 DAY LIQUIDITY	73.40
91-120 Days Liquidity	2.81
121-150 Days Liquidity	1.51
151-180 Days Liquidity	1.66
181-270 Days Liquidity	3.60
271-360 Days Liquidity	4.30
12-15 Month Liquidity	2.51
15-18 Month Liquidity	8.55
18-21 Month Liquidity	—
21-24 month Liquidity	1.02
Greater than 2 Year Liquidity	0.65
Repo Collateral	% of Fund
Treasuries	7.27
Agencies	—
Agency MBS	20.22
Money Markets	—
Corporates	—
Asset-Backed	5.14
Equities	—

*No SIV, No CDO, No Extendible Liquidity Note. Ratings are Standard and Poor's Characteristics are as of the date indicated, are subject to change, and should not be relied upon as current thereafter. This material is for SSgA Client use only. All data sourced by SSgA unless stated otherwise. Past performance is not a guarantee of future results.

Appendix A: Biography



Steven R. Meier, CFA, FRM

Steven is an Executive Vice President of State Street Global Advisors and is the Global Cash CIO. Steven, who joined SSgA in 2003, has more than 26 years of experience in the global cash and fixed income markets. Previously, he headed the firm's North American Cash and Securities Lending Cash Collateral portfolio management activities.

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

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

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

Securities Finance Performance Review

Johnson Shum
Obie Knapp, CFA

Performance Summary – Oregon Total Program

<i>The State of Oregon - All Assets</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>Jan-Apr 2009</i>	<i>Jan-Apr 2010</i>	<i>% Change</i>
Average Lendables (\$)	41,513,487,335	35,489,748,601	30,195,377,375	26,457,026,842	32,429,013,985	22.57%
Average On-Loan Balance(\$)	11,649,165,519	10,928,576,214	10,592,111,641	8,977,671,280	10,379,240,245	15.61%
Average Utilization (%)	28.1%	30.8%	35.1%	33.9%	32.0%	-5.68%
Earnings by Program						
US Equity & Corporate Bond (\$)	13,233,972	26,441,130	15,498,863	6,518,352	3,380,490	-48.14%
US Government (\$)	13,211,630	41,582,090	15,243,538	7,935,875	2,079,563	-73.80%
Non-US Equity (\$)	12,677,085	23,414,006	16,326,931	6,994,075	2,129,951	-69.55%
Non-US Fixed (\$)	513,426	467,882	136,073	65,411	19,791	-69.74%
Total (\$)	39,636,113	91,905,107	47,205,405	21,513,713	7,609,795	-64.63%
Components of Spread						
Demand Spread (bps)	24.08	15.76	7.20	2.29	9.41	311.47%
Reinvestment Spread (bps)	18.71	91.61	47.96	78.99	15.22	-80.73%
Total Spread (bps)	42.79	107.37	55.17	81.27	24.62	-69.70%
Return on Lendables (bps)	11.27	25.90	15.63	24.39	7.04	-71.14%

Source: SL PerformanceReporter ®

Performance data shown represents past performance and is not a guarantee of future results

Currency reflected is U.S. dollars

Performance Summary – Oregon PER Funds

<i>The State of Oregon - PERs</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>Jan-Apr 2009</i>	<i>Jan-Apr 2010</i>	<i>% Change</i>
Average Lendables (\$)	31,750,582,419	24,119,726,432	18,938,947,525	15,434,049,322	21,160,726,523	37.10%
Average On-Loan Balance(\$)	7,150,163,205	5,919,127,237	5,919,722,057	5,250,193,278	6,011,252,524	14.50%
Average Utilization (%)	22.5%	24.5%	31.3%	34.0%	28.4%	-16.49%
Earnings by Program						
US Equity & Corporate Bond (\$)	12,922,331	25,145,780	14,499,098	6,061,781	3,133,585	-48.31%
US Government (\$)	4,238,961	12,305,749	4,071,137	1,920,615	855,380	-55.46%
Non-US Equity (\$)	12,652,825	23,117,486	15,974,800	6,839,076	2,036,918	-70.22%
Non-US Fixed (\$)	513,426	467,882	136,073	65,411	19,791	-69.74%
Total (\$)	30,327,542	61,036,896	34,681,108	14,886,882	6,045,674	-59.39%
Components of Spread - QD						
Demand Spread (bps)	34.83	26.78	18.10	12.50	16.30	30.38%
Reinvestment Spread (bps)	20.06	110.75	56.42	89.61	17.68	-80.27%
Total Spread (bps)	54.89	137.53	74.52	102.11	33.98	-66.72%
Return on Lendables (bps)	11.27	25.31	18.31	28.94	8.57	-70.38%

Source: SL PerformanceReporter®

Performance data shown represents past performance and is not a guarantee of future results

Currency reflected is U.S. dollars

Performance Summary – Oregon Non-PER Funds

<i>The State of Oregon - Non-PERs</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>Jan-Apr 2009</i>	<i>Jan-Apr 2010</i>	<i>% Change</i>
Average Lendables (\$)	9,762,904,916	11,370,022,169	11,256,429,850	11,022,977,520	11,268,287,462	2.23%
Average On-Loan Balance(\$)	4,499,002,314	5,009,448,977	4,672,389,584	3,727,478,002	4,367,987,721	17.18%
Average Utilization (%)	46.1%	44.1%	41.5%	33.8%	38.8%	14.63%
Earnings by Program						
US Equity & Corporate Bond (\$)	311,642	1,295,350	999,765	456,571	246,905	-45.92%
US Government (\$)	8,972,669	29,276,341	11,172,401	6,015,261	1,224,183	-79.65%
Non-US Equity (\$)	24,260	296,520	352,131	154,999	93,034	-39.98%
Total (\$)	9,308,570	30,868,212	12,524,297	6,626,831	1,564,122	-76.40%
Components of Spread - STIF						
Demand Spread (bps)	7.00	2.73	(6.60)	(12.10)	(0.03)	-99.76%
Reinvestment Spread (bps)	16.56	69.00	37.25	64.03	11.83	-81.53%
Total Spread (bps)	23.56	71.73	30.65	51.93	11.80	-77.28%
Return on Lendables (bps)	11.25	27.15	11.13	18.04	4.16	-76.91%

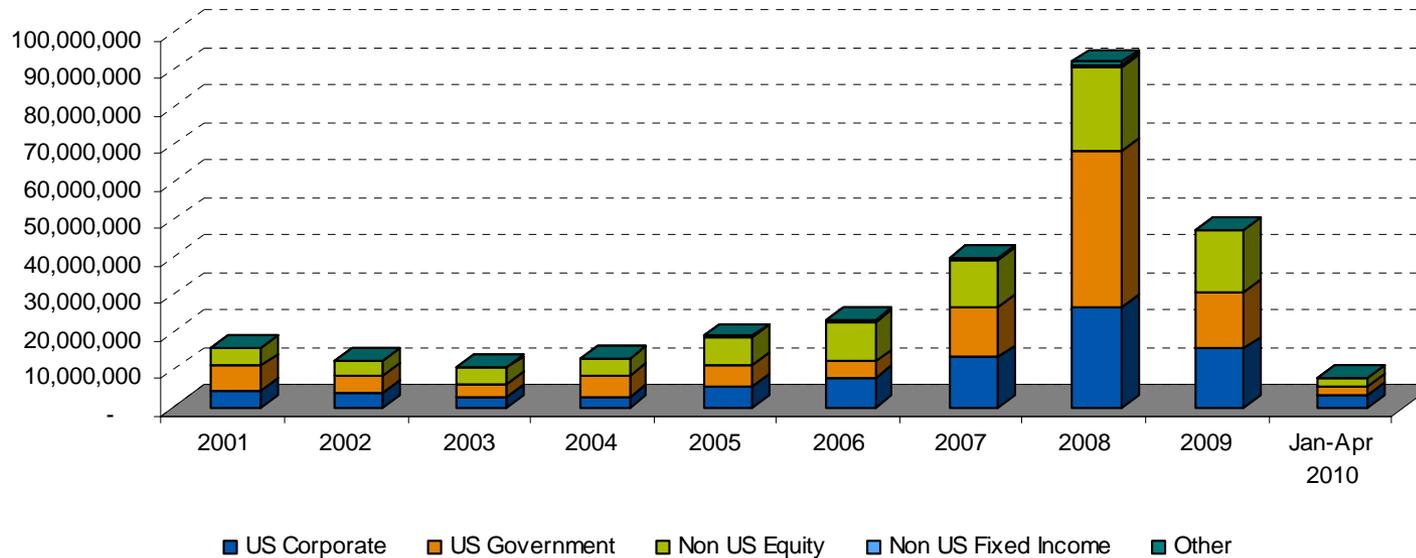
Source: SL PerformanceReporter®

Performance data shown represents past performance and is not a guarantee of future results

Currency reflected is U.S. dollars

Performance Summary

Oregon Historical Earnings - Calendar Year



Source: SL PerformanceReporter®

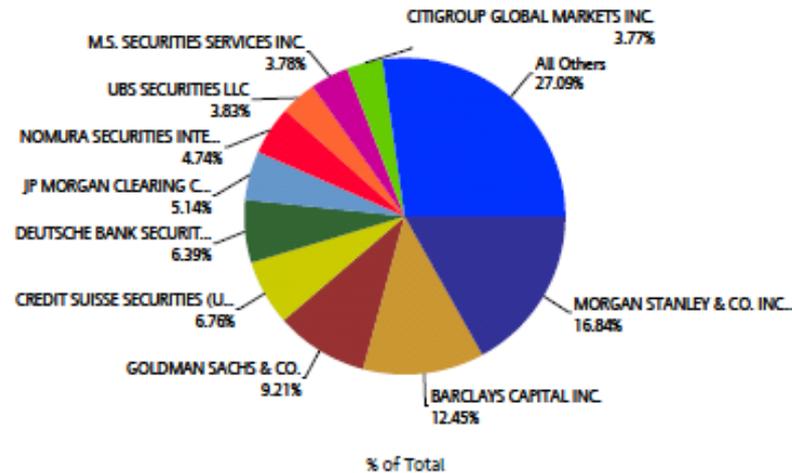
Performance data shown represents past performance and is not a guarantee of future results

Currency reflected is U.S. dollars

Borrower Exposure Summary – All Assets

Borrower Entity Legal Name	Cash Dly Collateral Amount Base	Non-Cash Dly Collateral Amount Base	Dly Mkt Value on Loan Base	% of Total
MORGAN STANLEY & CO. INCORPORATED	1,926,130,360.59	12,065.90	1,884,305,750.75	16.84%
BARCLAYS CAPITAL INC.	1,426,649,988.50	0.00	1,393,179,856.42	12.45%
GOLDMAN SACHS & CO.	1,065,071,317.70	5,052,649.15	1,030,356,505.19	9.21%
CREDIT SUISSE SECURITIES (USA) LLC	775,402,721.45	5,020,571.65	756,420,114.20	6.76%
DEUTSCHE BANK SECURITIES INC.	731,303,691.45	3,872,551.20	715,332,209.53	6.39%
JP MORGAN CLEARING CORP.	601,870,063.85	0.00	575,677,677.69	5.14%
NOMURA SECURITIES INTERNATIONAL, INC.	513,373,835.00	28,118,452.50	530,167,870.51	4.74%
UBS SECURITIES LLC	444,184,137.10	0.00	428,374,956.97	3.83%
M.S. SECURITIES SERVICES INC.	442,541,436.75	0.00	422,461,659.86	3.78%
CITIGROUP GLOBAL MARKETS INC.	435,744,299.60	587,604.85	422,253,432.77	3.77%
ALL OTHER BORROWERS	2,532,028,377.75	599,363,530.46	3,031,446,866.02	27.09%
	10,894,300,229.74	642,027,425.71	11,189,976,899.91	100.00%

Top 10 by Borrower Entity



TAB 4 – POLICY IMPLEMENTATION OVERLAY

OPERF Policy Implementation Overlay Manager Update

Purpose

To provide the OIC an update on the OPERF Policy Implementation Overlay program, provided by Russell Securities.

Background

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

In September 2005, the OIC retained Russell Securities to implement a more thoughtful overlay program that does more than blindly "equitize" excess manager cash. Through this daily effort, Russell monitors excess manager cash, cash held by the fund to meet benefit payments, and the current allocation of the fund to the OIC established strategic asset allocation targets. They then trade equity and fixed income futures to better align the fund's overall asset allocation. The OIC receives a monthly update on the overlay exposures in the asset allocation portion of the monthly agenda materials.

As of March month end, OPERF has \$24 million in fixed income contracts and \$1.084 billion in global equity contracts, for a total notional exposure of \$1.1 billion.

Last February, Russell Securities provided the OIC a presentation on the mechanics of the program, and the performance to date. Today's presentation is an update on the program.

Staff Recommendation

None. Information only.

Russell Overlay Update

State of Oregon

Greg Nordquist, CFA - Senior Portfolio Manager
Sylvia Perek – Portfolio Manager

May 26, 2010

Important information

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Unless otherwise noted, source for the data in this presentation is Russell Implementation Services Inc.

This material is a product of Russell Implementation Services Inc., a registered investment advisor and broker-dealer, member FINRA, SIPC

Date of first use: May 2010

RIS RC: 0801

Agenda

- **Current assignment**
 - What and why
 - 2009-2010 results

Oregon overlay highlights

What

- Overlay frictional cash with underweight asset class

- Long/short for deviations outside predetermined ranges (+/-0.5% to +/-1%)
 - Extreme market moves or tactical shifts
 - Expanded to +/-2% during 10/08

- Raise cash opportunistically
 - Piggyback on other cash flows
 - Conditional crosses

Why

- Capture risk premium of policy over cash
- Reduce tracking error from unintended exposures

- Reduce tracking error from unintended exposures (*offset to physical*)
- Reduce transaction costs (*trade physicals as a last line of defense*)

- Reduce transaction costs
- Reduced administrative burden

Results (1/1/09 to 4/30/10)

YEAR	CASH EQ	REBAL	TOTAL
2009	415.83	163.54	579.37
2010	25.99	14.33	40.32

Risk

- TE from unintended exposures decreased by 80% on average

Transaction Costs *

- Savings by equitizing and rebalancing with futures versus physicals: \$17 million on \$10.6 billion traded

Physical trading cost assumptions: US Equity at 11 bps, International equity at 23 bps, global equity at 14 bps and US Fixed income at 25 bps.

Futures trading cost assumptions: US Equity at 2.7 bps, International equity at 6.5 bps, global equity 5.5 bps and US Fixed income at 1.5 bps.

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

Daily process

Every day is a closed loop

Overlay Services Team (Portfolio Management)

- Download custodian/manager data.
- Reconcile previous day's account movements and instruct margin wires.
- Acct for significant cash flows real time.
- Calculate trade date cash & asset allocation
- Run alerts to identify tradable differences between actual and target (includes 1st guideline check).
- Instruct required trades

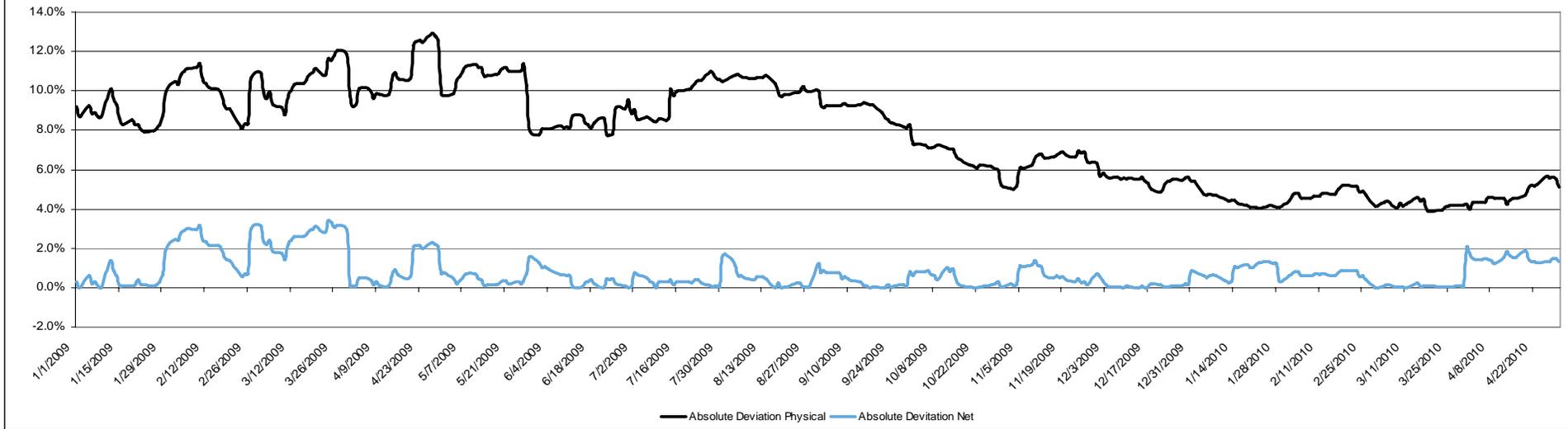
Overlay Services Team (Risk Controls)

- Confirm trades executed as instructed and send trade tickets.
- Second guideline check.
- Instruct add'l trades associated with new manager fundings, intra-day cash flows, etc.
- Monitor collateral and margin buffer.
- Monthly performance reporting and evaluation (inc. working with 3rd party performance measurement providers).

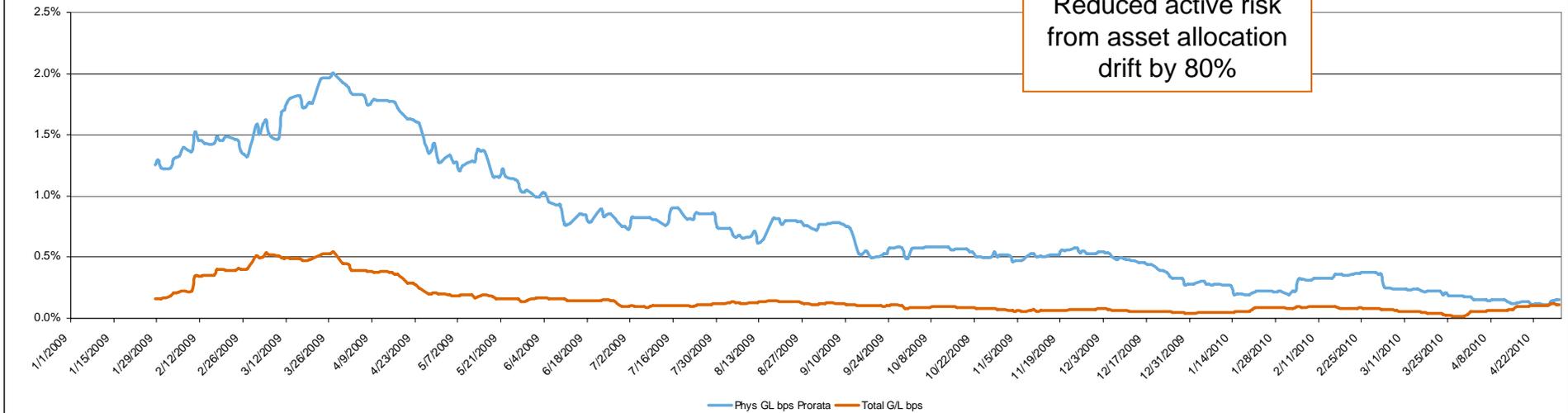
Trading Desk

- Double check trade instructions.
- Execute trades.
- Research and recommend synthetic baskets.
- Roll futures contracts and collateral.

Daily Abs Deviation Combined

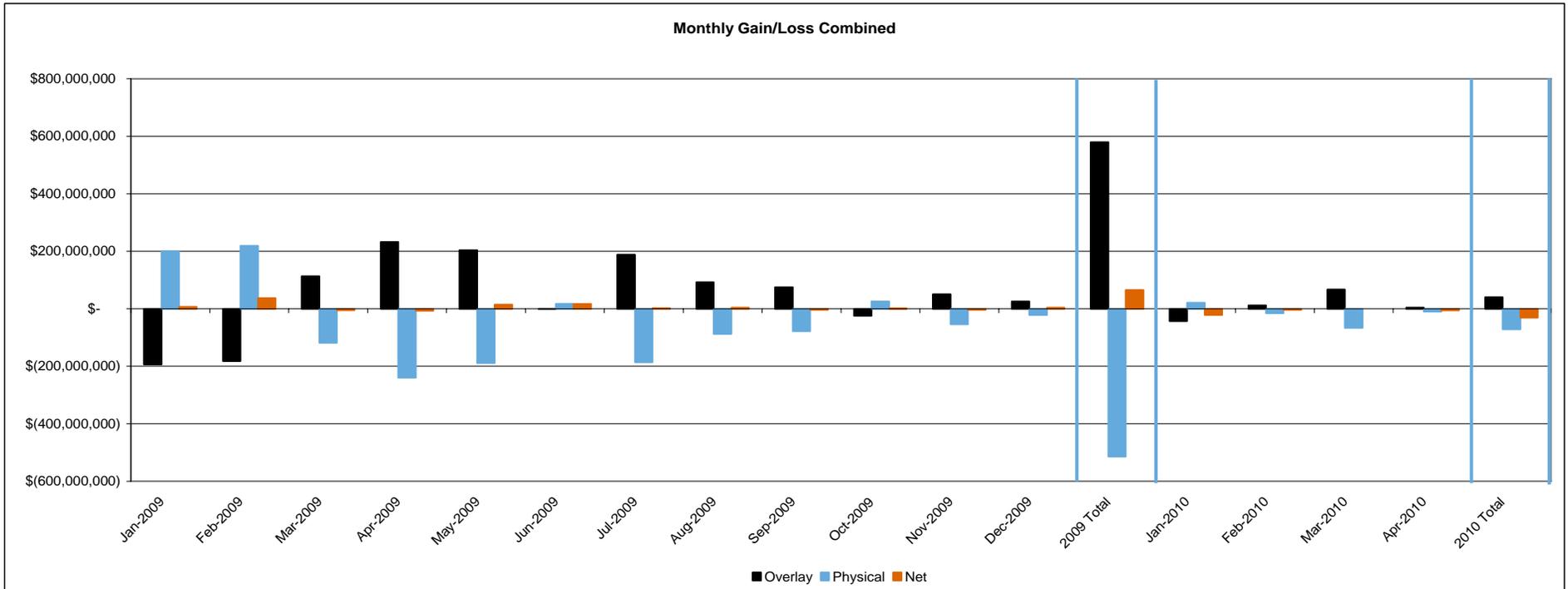


Rolling 20 Day Tracking Error



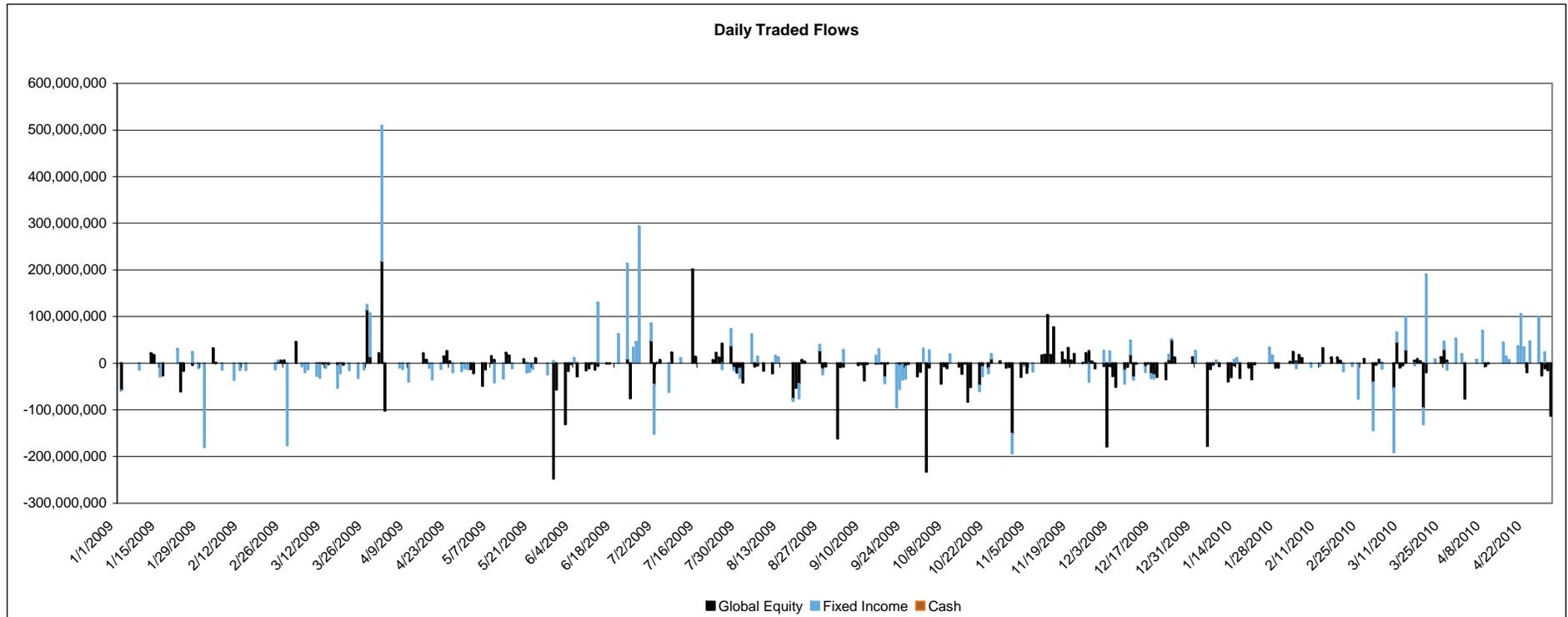
The information provided is based on historical data and is not a guarantee of future results

Performance Attribution



The information provided is based on historical data and is not a guarantee of future results

Performance Attribution



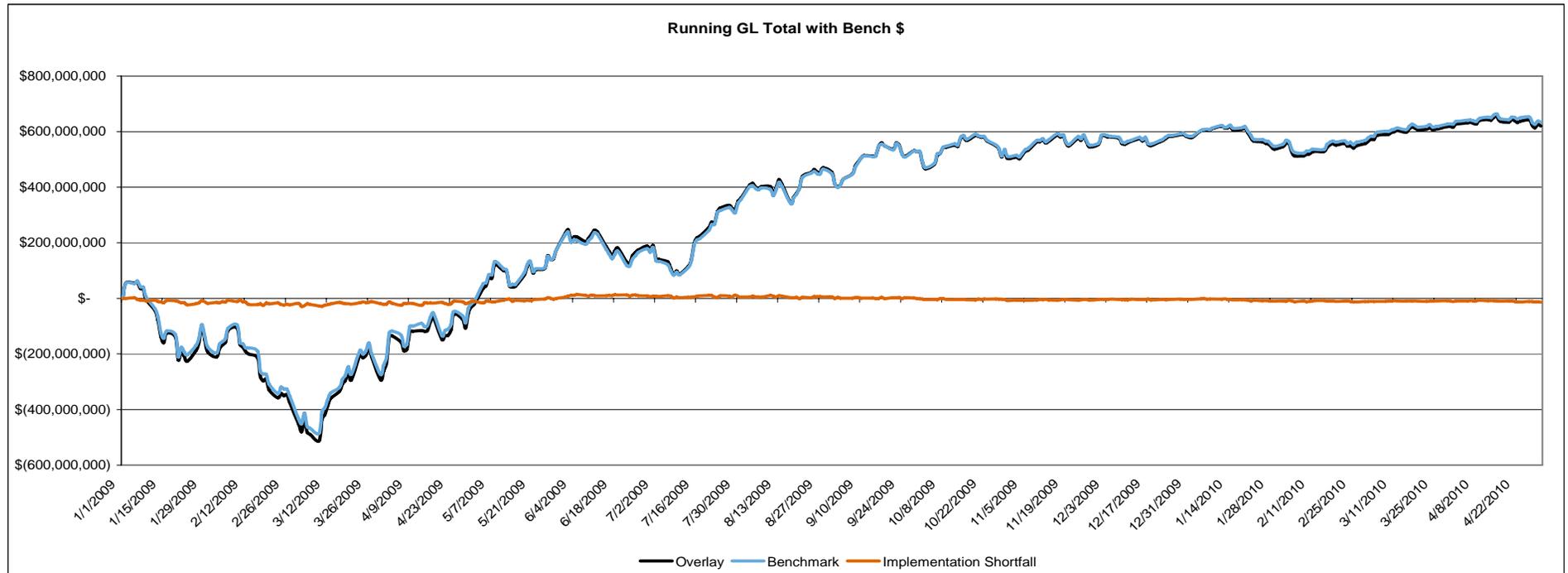
- **Total amount traded = \$10.6 billion dollars**
- **Estimated transactions costs**
 - **Physical = \$20 mm**
 - **Synthetic = \$3 mm**
 - **Savings of approximately \$17 mm**

Physical trading cost assumptions: US Equity at 11 bps, International equity at 23 bps, global equity at 14 bps and US Fixed income at 25 bps.

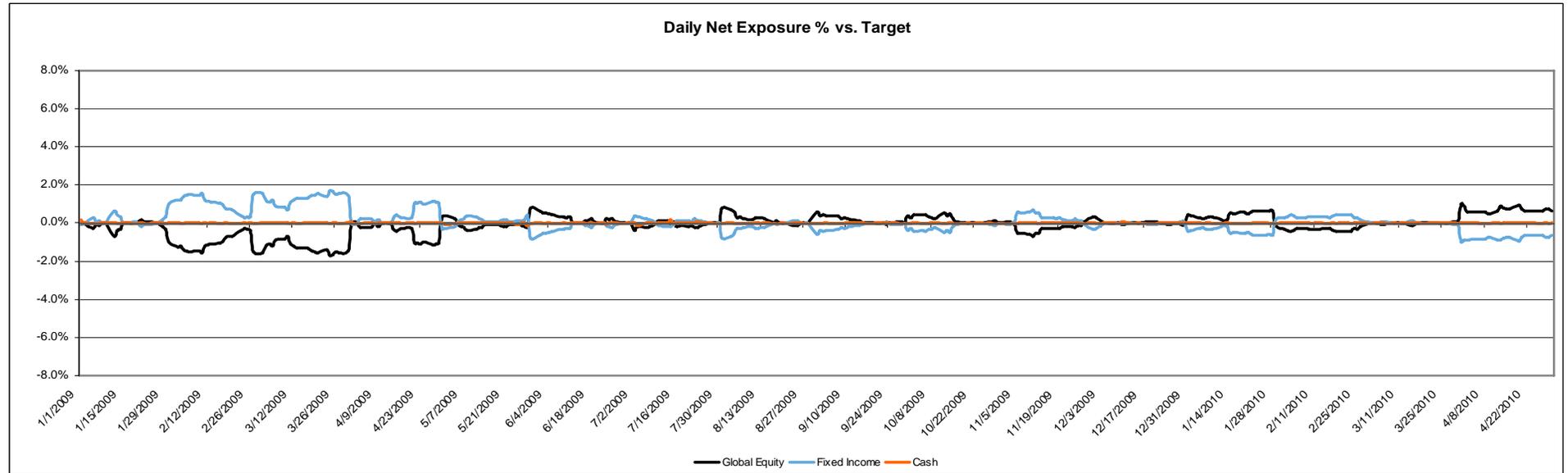
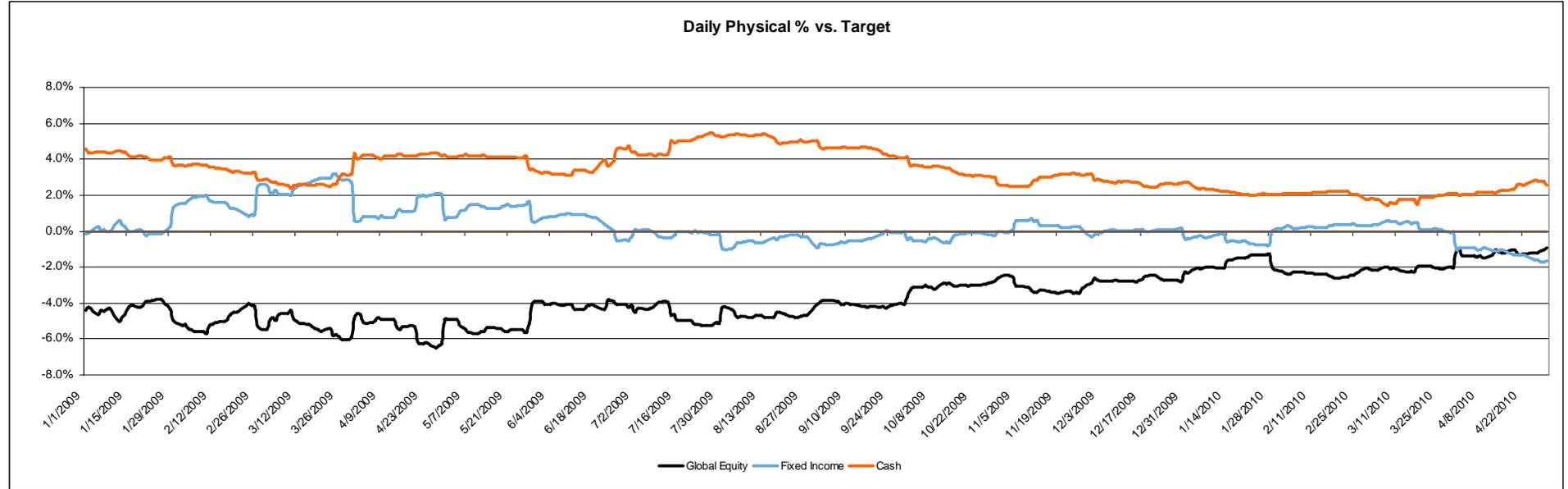
Futures trading cost assumptions: US Equity at 2.7 bps, International equity at 6.5 bps, global equity 5.5 bps and US Fixed income at 1.5 bps.

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

Performance Attribution



The information provided is based on historical data and is not a guarantee of future results

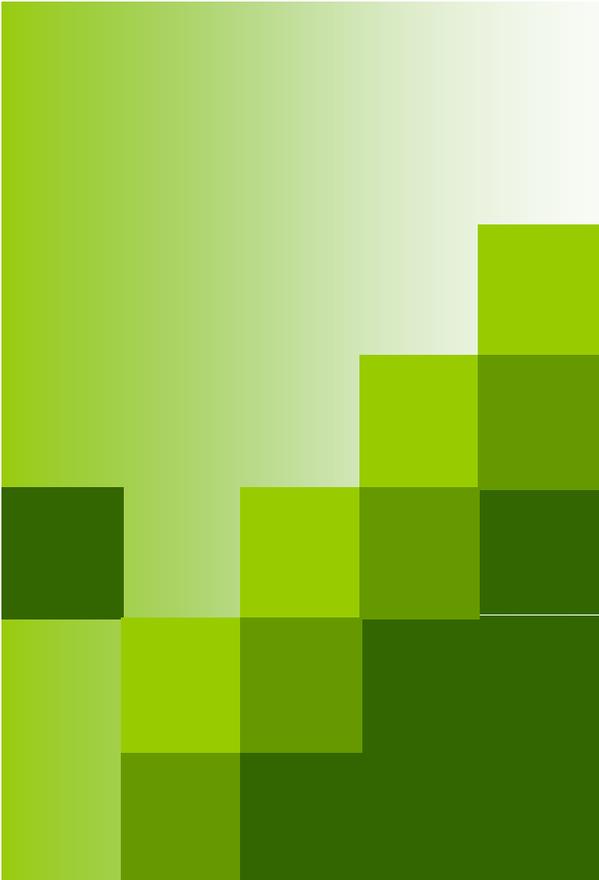


The information provided is based on historical data and is not a guarantee of future results



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TAB 5 – OPERF ASSET LIABILITY STUDY



OREGON PUBLIC EMPLOYEES RETIREMENT FUND

**ASSET/LIABILITY DISCUSSION:
PHASE THREE-ASSETS/LIABILITY ANALYSIS**

May 26, 2010

STRATEGIC INVESTMENT SOLUTIONS, INC.

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

Michael R. Beasley
Managing Director

John P. Meier, CFA
Managing Director

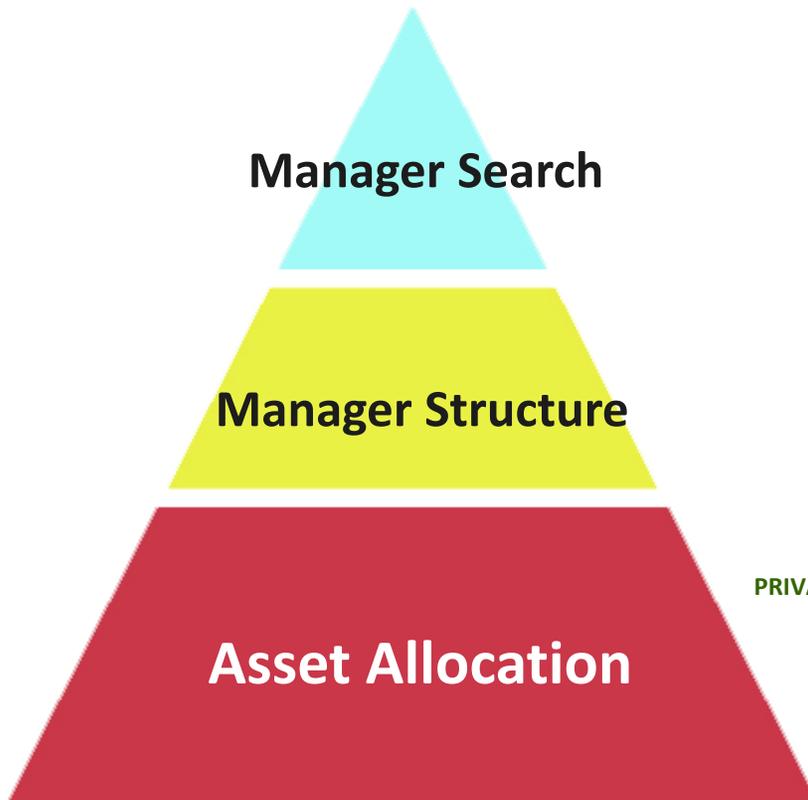


Road to Asset Allocation Policy

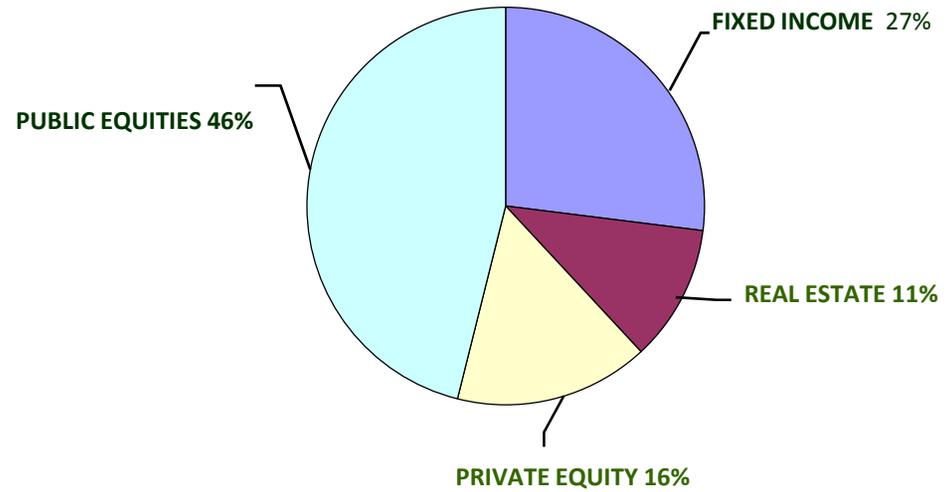
- Asset Liability Modeling Presentation Today
 - Stochastic Simulations for the next 5 – 7 years
 - Uses Representative Asset Mixes
 - Risk/Reward Analysis used to point toward an appropriate level of risk/return
 - Liquidity Analysis
 - Scenario Analyses
 - Inflation, Deflation, Recession and Low Return
- July Presentation
 - Refine ALM Analyses as necessary
 - Refine Potential Asset Allocation Policy
 - New Asset Classes or Implementation (Opportunity Portfolio, Alternatives Portfolio, TIPS, EMD, etc.)
 - Adopt New Asset Allocation Policy



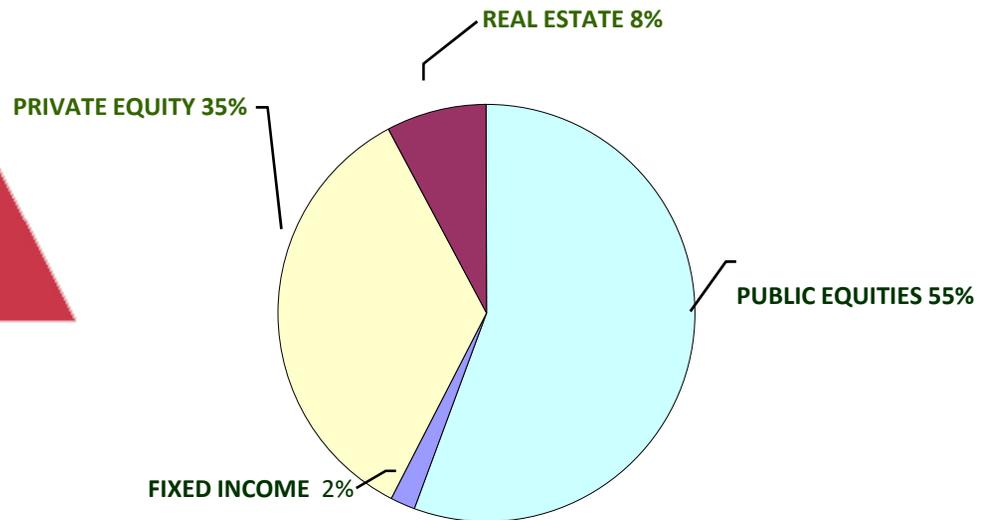
Asset Allocation



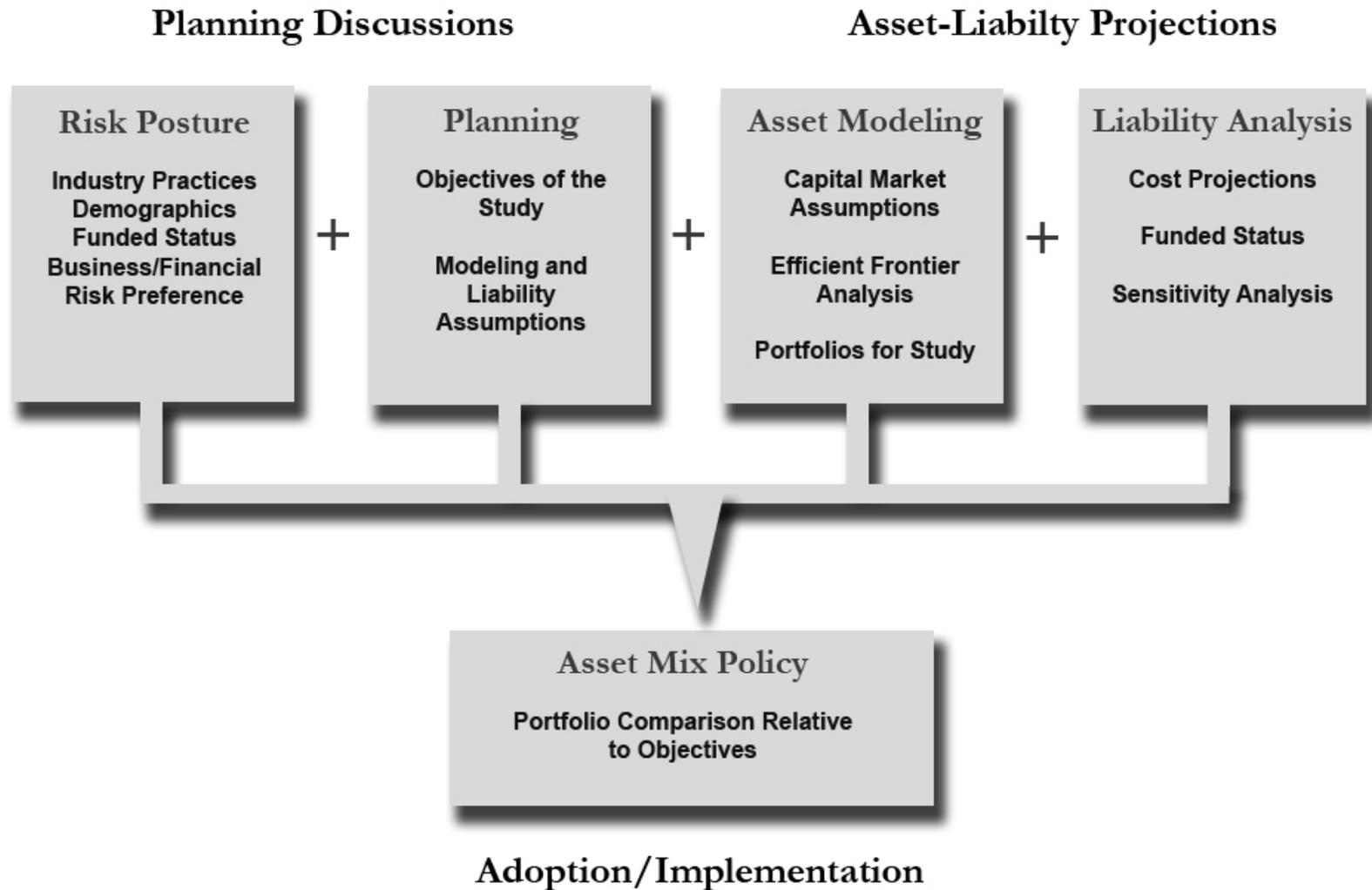
Plan's Strategic Policy



Portfolio Risk Allocation – Current Policy



Overview of the Asset-Liability Process





Current Asset Class “Implementation Assumptions”

Asset Class	Expected Return	Expected Risk
Public Equity	9.0%	17.2%
Fixed Income	4.6%	4.3%
Private Equity	11.0%	25.0%
Real Estate	8.0%	20.0%
TIPS	4.0%	5.0%
Alternatives Portfolio	8.0%	17.0%

- Alternatives Portfolio – Permanent, Non Traditional, Real/Absolute Return Objective
 - Infrastructure, Absolute Return, Hard Assets/Commodities, etc.
- Lower Risk in PE than SIS Base Case to reflect OIC Capabilities and Experience
- Higher Return/Risk in RE than SIS Base Case to reflect OIC’s Risk Strategy and Experience

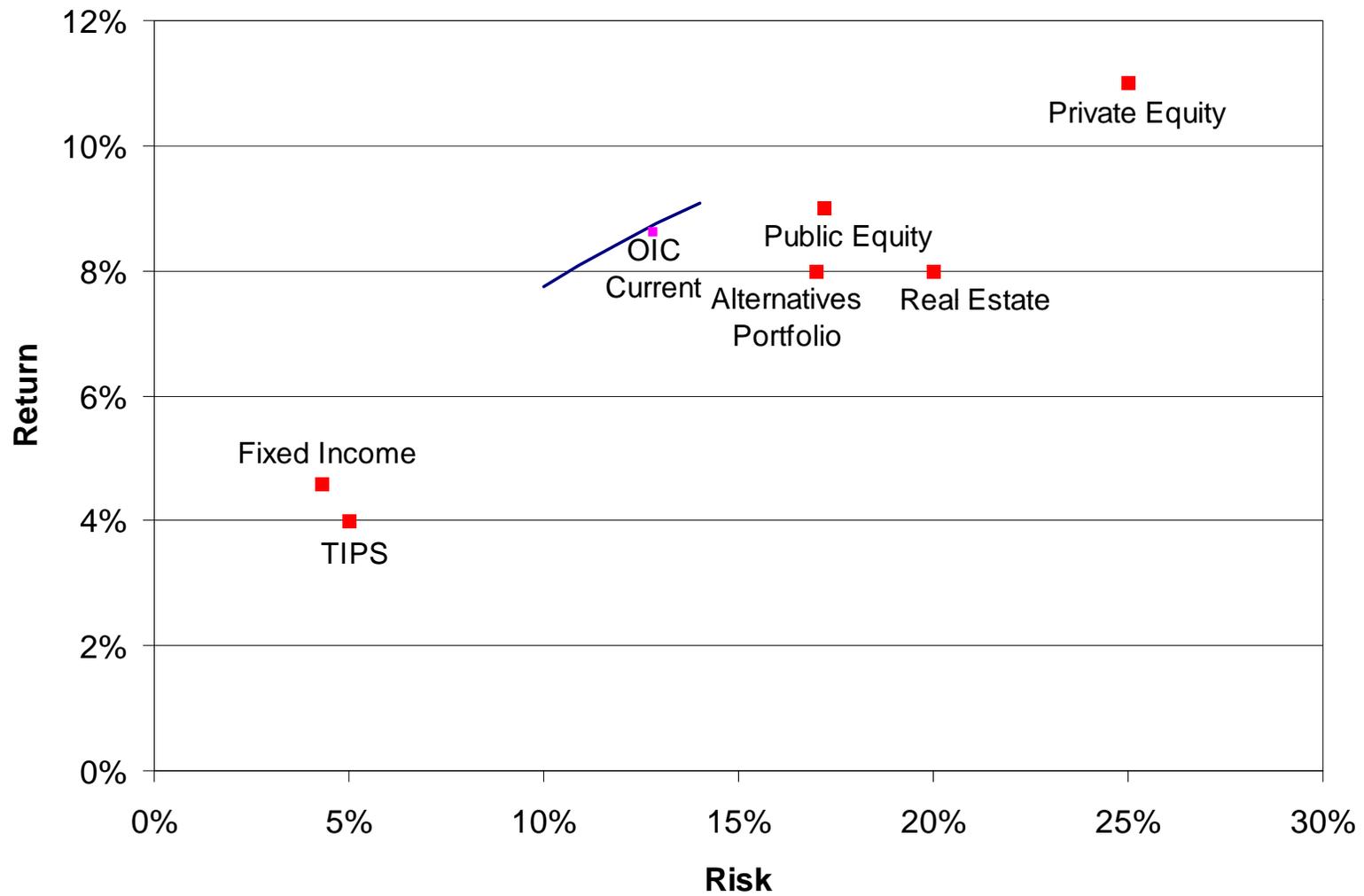


Alternatives Portfolio

- 33% Absolute Return
- 33% Infrastructure
- 34% Hard Assets
 - 11% Commodities
 - 11% Timber and Agriculture
 - 12% Industrial Commodity Producers



Expected Risk vs Return



Current Asset Class Implementation, Add TIPS and Alternatives Portfolio

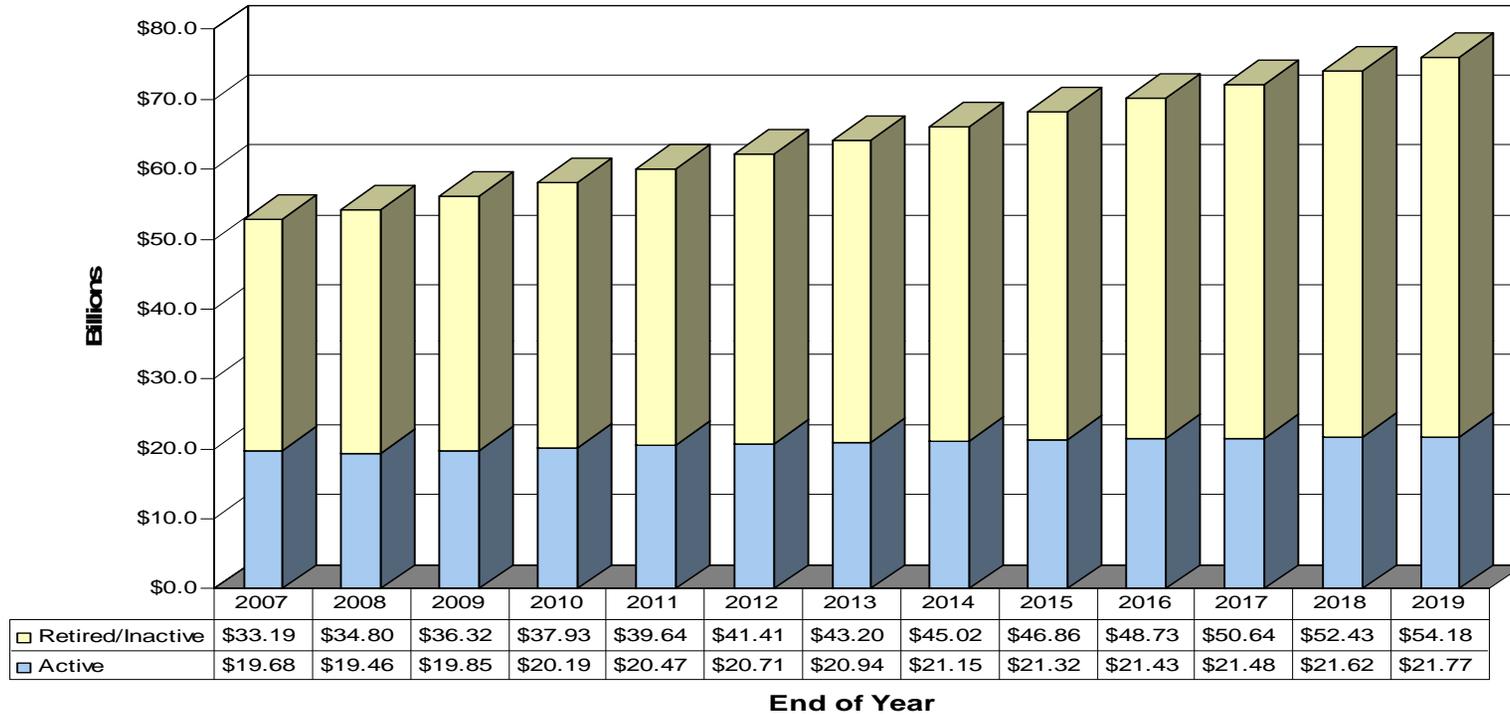
	Current Policy	Mix 4-1	Mix 4-2	Mix 4-3	Mix 4-4	Mix 4-5	Current Mix*
Public Equity	46.0%	19.8%	21.9%	24.2%	31.4%	39.2%	42.9%
Fixed Income	27.0%	36.9%	36.9%	31.5%	28.5%	20.7%	25.7%
Private Equity	16.0%	18.8%	20.7%	22.9%	24.0%	25.0%	19.8%
Real Estate	11.0%	8.2%	10.1%	12.1%	11.0%	10.0%	9.4%
TIPS	0.0%	11.4%	5.5%	4.3%	0.1%	0.1%	0.0%
Alts Port	0.0%	5.0%	4.8%	5.0%	5.0%	5.0%	2.2%
Equity	73.0%	51.7%	57.6%	64.2%	71.4%	79.2%	74.3%
Expected Return	8.61%	7.75%	8.08%	8.42%	8.76%	9.09%	8.61%
Std Deviation	12.8%	10.0%	10.9%	11.9%	12.9%	14.0%	12.8%
Sharpe Ratio	0.44	0.47	0.47	0.46	0.45	0.44	0.44

- TIPS are an important diversifier in lower risk mixes.
- Sharpe Ratio- Risk/Return Efficiency Higher for lower return mixes.
- Alternatives Portfolio at or near maximum for all mixes.
- All except the most conservative mix achieve the actuarial return without accounting for “alpha.”

*Actual mix as of 3/31/10

OPERF Actuarial Liability

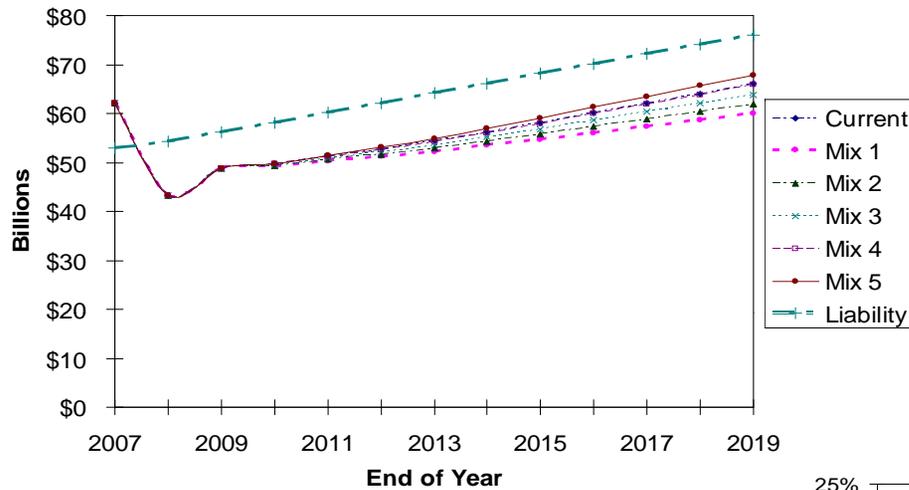
Projected Actuarial Accrued Liability



- Total Liability expected to grow by 3.1% over the next 10 years.
- Retired Liability grows from 65% to 71% of Total Liability

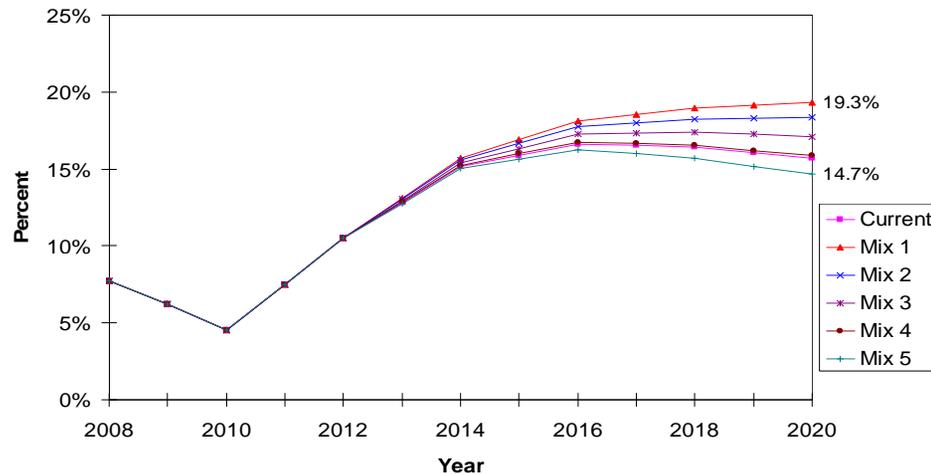
Simulation Results – “Expected” Values

Projected Values of Assets and Liabilities



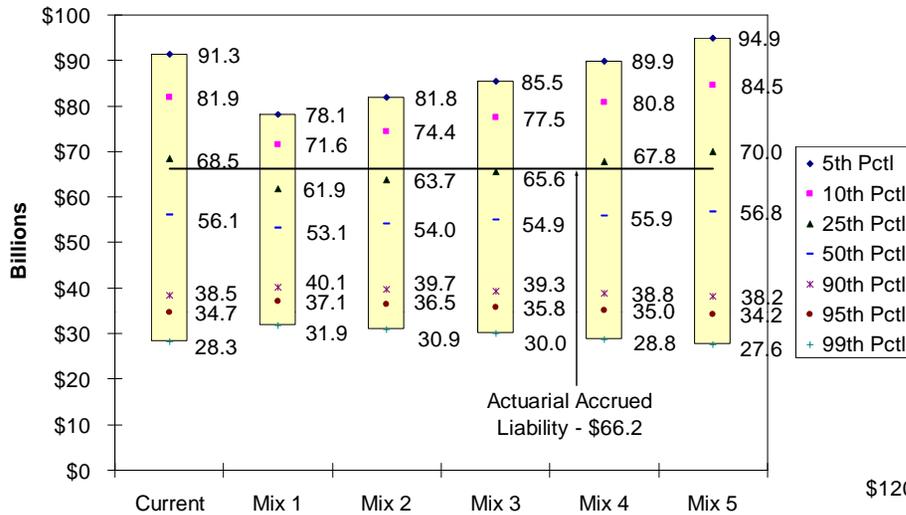
- Contribution Rates through Mid 2013 cannot be affected by asset mix.
- Expected Net (After Side Account Adjustments) Contribution rates stay in the upper teens for the next 10 years.

Projected Cash Contributions Made by Employer as Percentage of Pay (After Side Account Relief)



Distribution of Asset Values

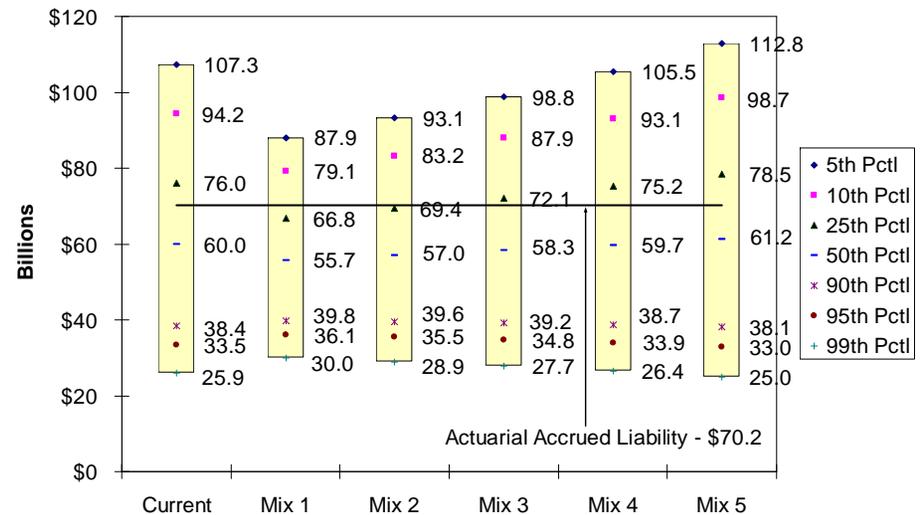
Range of Asset's Market Value
(Five Year Horizon - December 31, 2014)



- The 5 years ending March 2008, were akin to a 90th percentile 5 year event.

- Examine 5 and 7 Year horizons
- 5% chance that the unfunded liability will be 29.1 to 32.0 billion in 5 years, 34.1 to 37.2 billion in 7 years.
- While \$3+ billion is significant, the loses are also significant with a "low risk" mix.

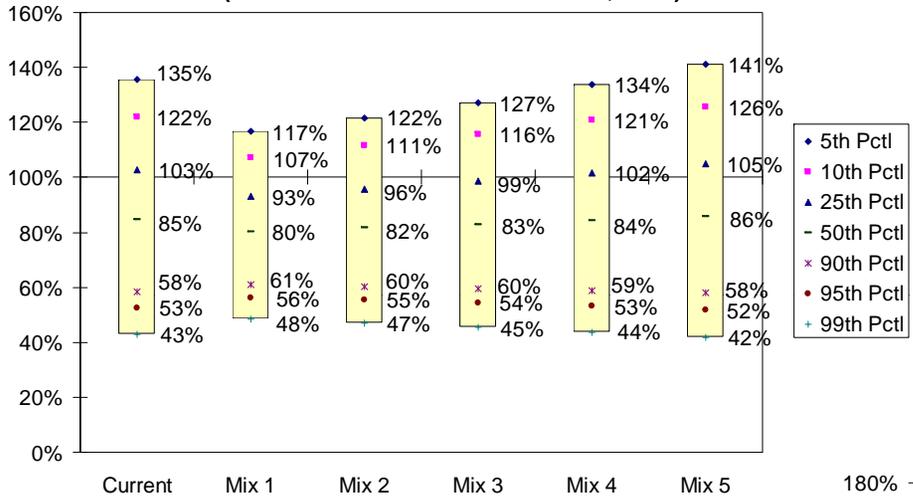
Range of Assets' Market Value
(Seven Year Horizon - December 31, 2016)





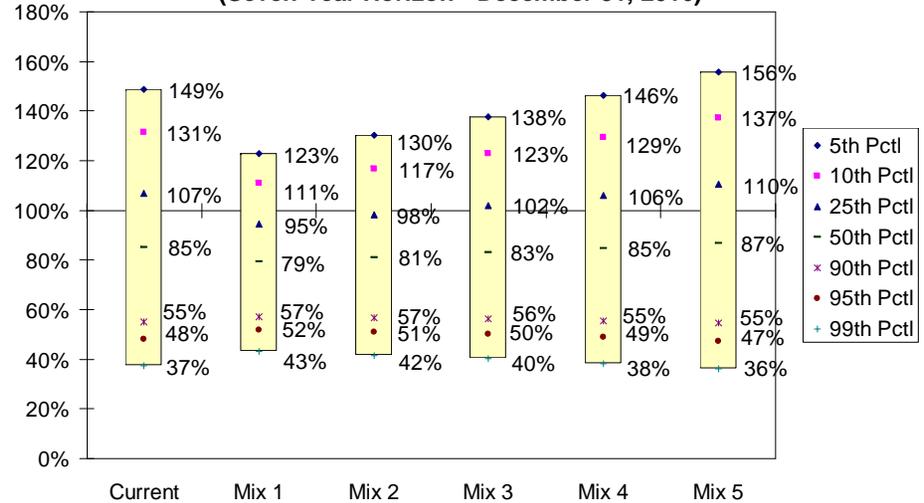
Distribution of Funded Status

**Projected Funded Status Using Market Value of Assets
Including Side Accounts
(Five Year Horizon - December 31, 2014)**



- Funded status expected to deteriorate for mixes 1 and 2 and improve or sustain for mixes 3 to 5.
- Roughly a 5% chance of that funded status could fall to less than 50% over the next 5 or 7 years.

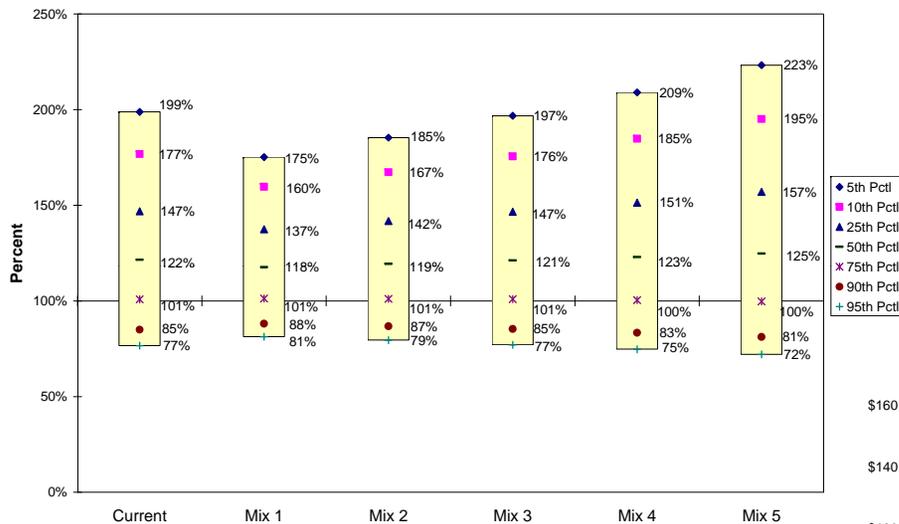
**Projected Funded Status Using Market Value of Assets
Including Side Accounts
(Seven Year Horizon - December 31, 2016)**





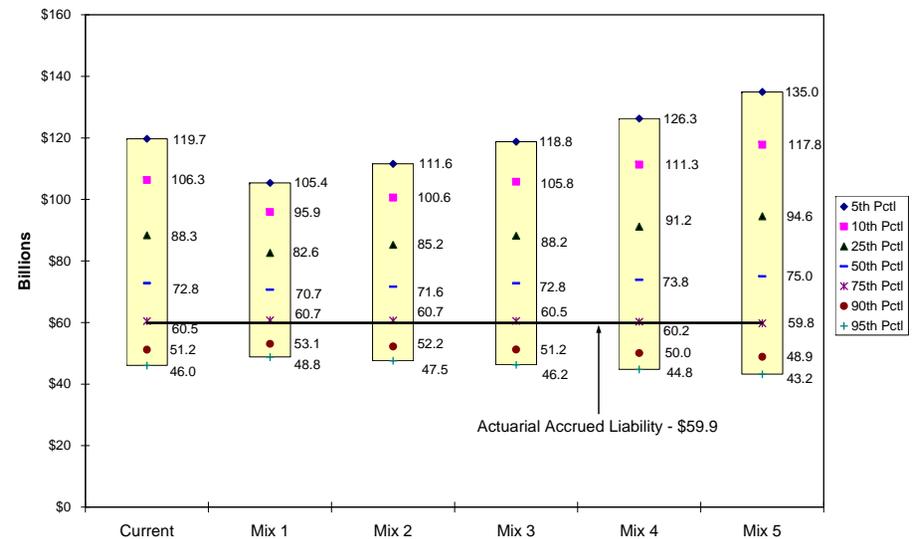
Comparable Charts from 2007 Study Presentation

**Projected Funded Status Using Market Value of Assets Including Side Accounts
(Five Year Horizon - December 31, 2011)**



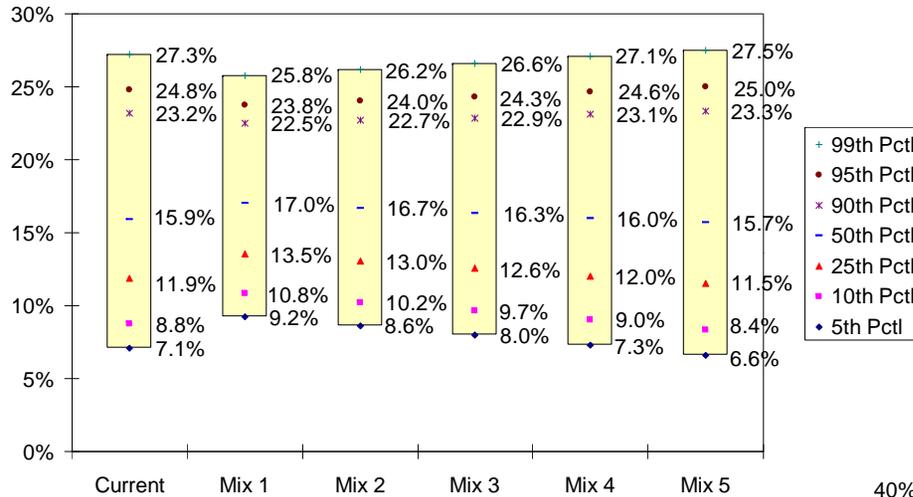
- 90 to 95th Percentile result similar to that which has been experienced since the study.

**Range of Asset's Market Value
(Five Year Horizon - December 31, 2011)**



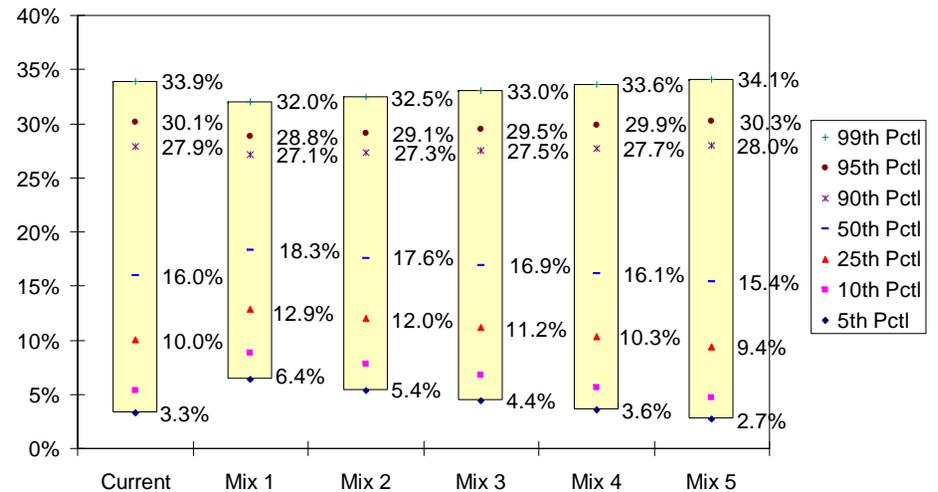
Distribution of Average OPERF Contribution (% of Pay)

**Projected Total Cash Contributions by Employer as a Percent of Pay After Side Account Relief
(Five Year Horizon - December 31, 2014)**

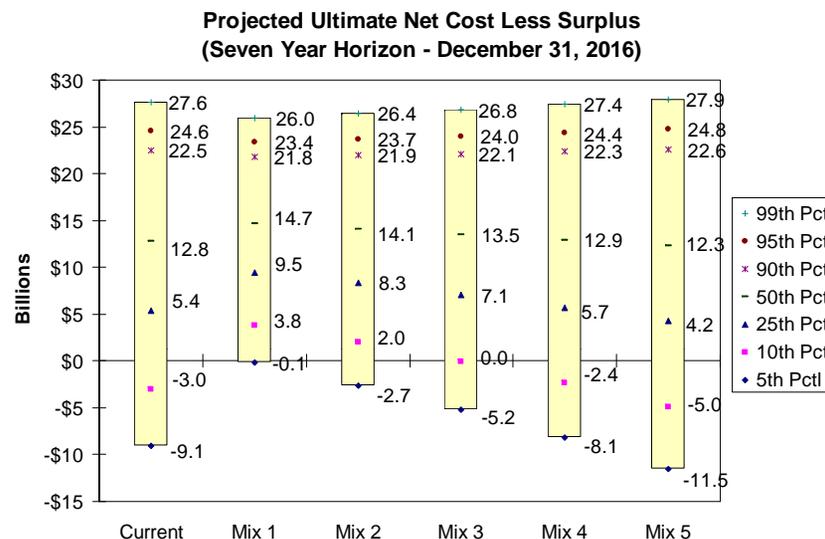
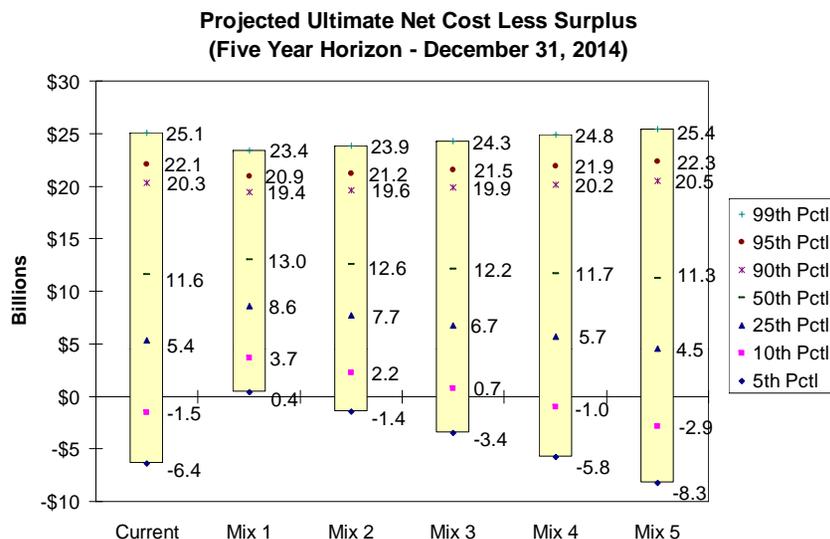


- In the event of a 95th Percentile event, taking less risk would limit contribution increases to 1.2% less at a five year horizon and 1.5% less at a seven year horizon.

**Projected Total Cash Contributions by Employer as a Percent of Pay After Side Account Relief
(Seven Year Horizon - December 31, 2016)**



Distribution of Ultimate Net Cost

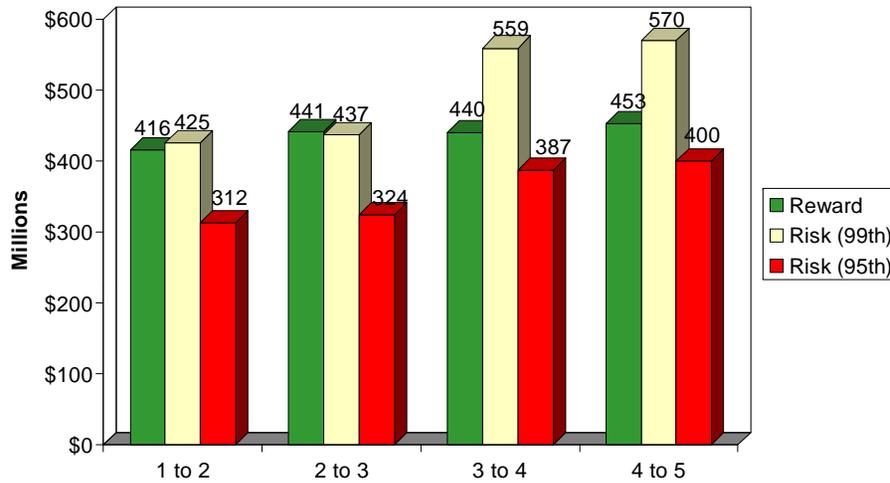


- Ultimate Net Cost Less Surplus** is the economic present value of the expected cost of the pension fund to the sponsor. All costs, whether or not they are actually funded during the projection time period are taken into consideration. The calculation of the Ultimate Net Cost is the present value of the plan’s contributions over the projection time horizon plus the present value of the plan’s unfunded liability (value of assets minus actuarial liability) at the end of the projection period. Ultimate Net Cost assumes that there is no economic benefit to any surplus that has built up. For our analysis, we include a credit to Ultimate Net Cost if at the end of the projection period a surplus has been accumulated. We determine the present value of the surplus and subtract it to obtain the variable we typically use in evaluating alternative asset allocations. This variable, Ultimate Net Cost Less Surplus, is the ideal variable for “fully funded” plans.



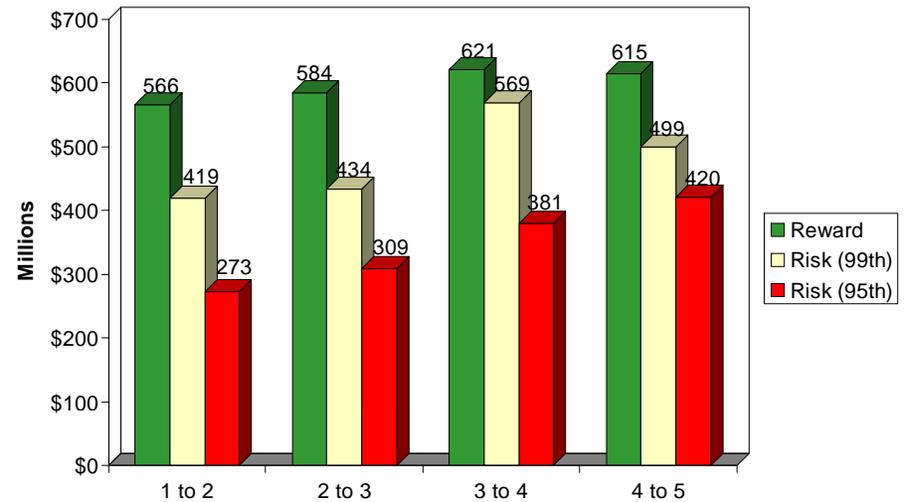
Risk/Reward Analysis

Ultimate Net Cost Less Surplus - Risk/Reward
(Five Year Horizon - December 31, 2014)



- 5 and 7 year horizon and a 95th Percentile level of risk suggest that most aggressive mix is appropriate.
- At a higher definition of risk, 99th, the most conservative mix is suggested as appropriate at a 5 year horizon.

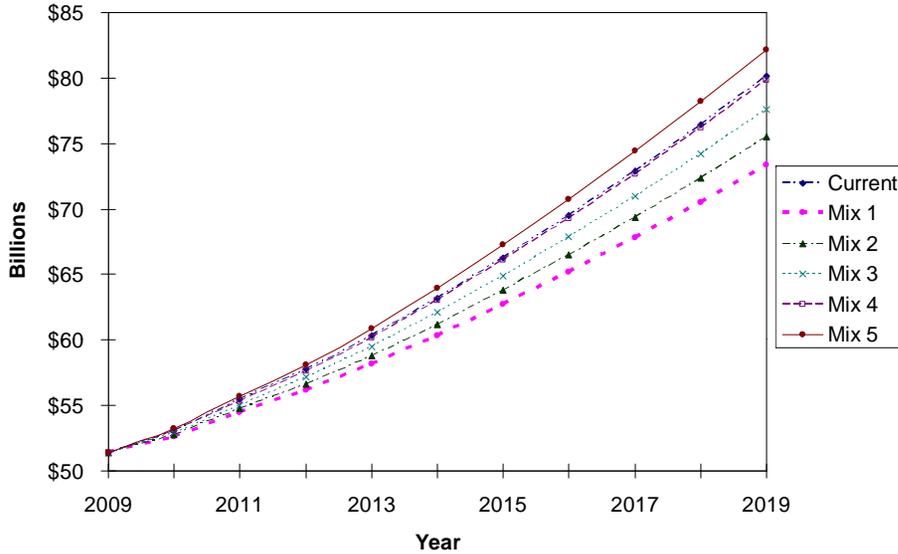
Ultimate Net Cost Less Surplus - Risk/Reward
(Seven Year Horizon - December 31, 2016)





Liquidity Analysis – Potential Influence of the IAP

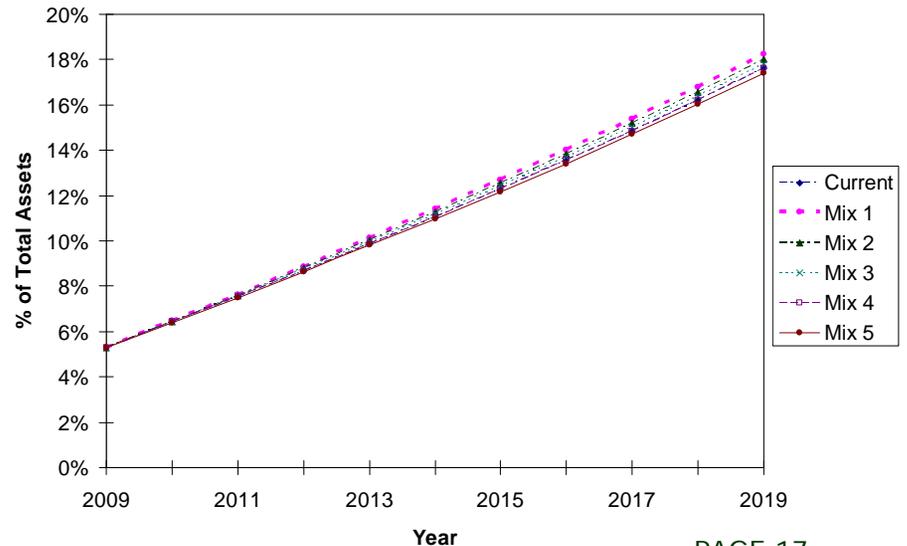
Expected Value of Total Trust Fund Assets



- IAP will be an increasing portion of the trust and influence on liquidity constraints on the trust.
- How will the IAP be managed as it becomes a larger portion of member retirement savings?
- For this analysis the IAP is assumed to be a significant positive cash flow contributor to the trust.

	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
2009	51.4	51.4	51.4	51.4	51.4	51.4
2010	53.1	52.7	52.8	52.9	53.1	53.2
2011	55.4	54.5	54.8	55.0	55.4	55.7
2012	57.8	56.2	56.7	57.1	57.6	58.1
2013	60.3	58.2	58.8	59.5	60.2	60.9
2014	63.2	60.3	61.2	62.1	63.0	64.0
2015	66.3	62.7	63.8	64.9	66.1	67.3
2016	69.5	65.2	66.5	67.9	69.3	70.8
2017	72.9	67.8	69.4	71.0	72.7	74.4
2018	76.5	70.5	72.4	74.2	76.2	78.2
2019	80.1	73.4	75.5	77.6	79.9	82.2

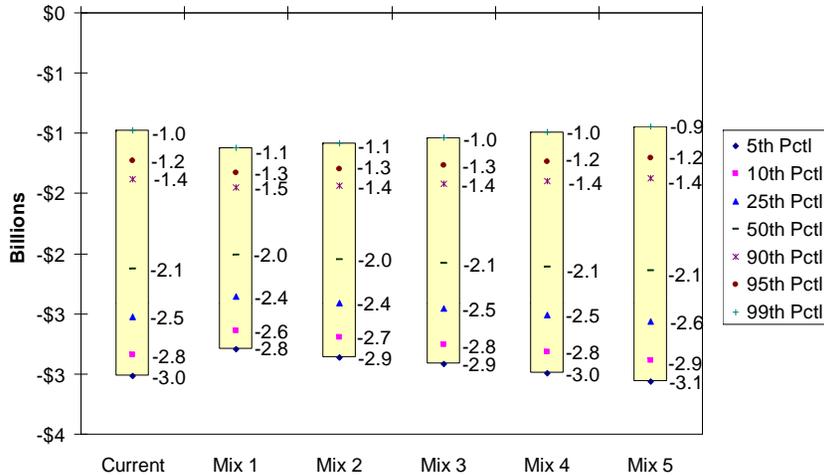
IAP as a Percentage of Trust Fund Assets



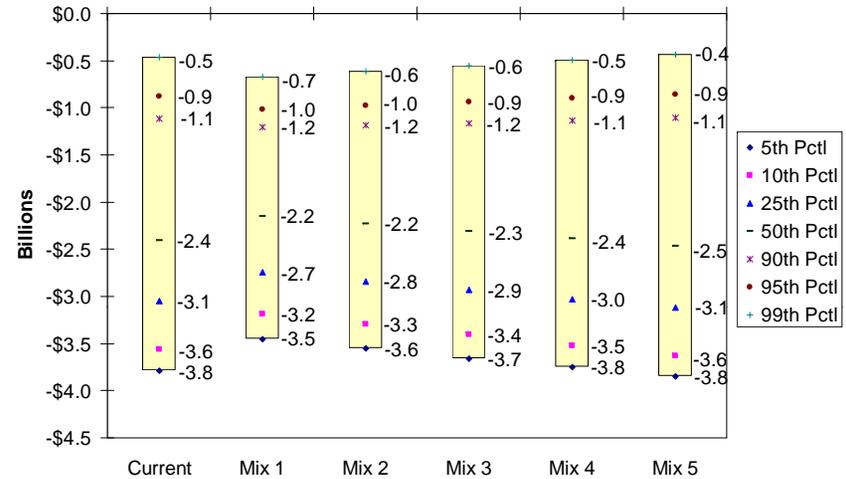


Liquidity Analysis – Trust Fund Net External Cash Flow

Range of Net External Cash Flow (OPERF + IAP)
(Five Year Horizon - December 31, 2014)



Range of Net External Cash Flow (OPERF + IAP)
(Seven Year Horizon - December 31, 2016)



Range of Net External Cash Flows (% of Assets OPERF + IAP)

	December 31, 2014					
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
5th Pctl	-3.0%	-3.2%	-3.1%	-3.1%	-3.0%	-2.9%
10th Pctl	-3.1%	-3.3%	-3.2%	-3.2%	-3.1%	-3.1%
25th Pctl	-3.3%	-3.4%	-3.4%	-3.3%	-3.3%	-3.3%
50th Pctl	-3.4%	-3.4%	-3.4%	-3.4%	-3.4%	-3.4%
90th Pctl	-3.2%	-3.2%	-3.2%	-3.2%	-3.2%	-3.2%
95th Pctl	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%	-3.1%
99th Pctl	-3.0%	-3.1%	-3.1%	-3.0%	-3.0%	-3.0%

Range of Net External Cash Flows (% of Assets OPERF + IAP)

	December 31, 2016					
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
5th Pctl	-3.1%	-3.4%	-3.3%	-3.2%	-3.1%	-3.0%
10th Pctl	-3.3%	-3.5%	-3.4%	-3.4%	-3.3%	-3.2%
25th Pctl	-3.5%	-3.6%	-3.5%	-3.5%	-3.5%	-3.5%
50th Pctl	-3.5%	-3.3%	-3.4%	-3.4%	-3.5%	-3.5%
90th Pctl	-2.5%	-2.6%	-2.5%	-2.5%	-2.5%	-2.5%
95th Pctl	-2.2%	-2.4%	-2.3%	-2.3%	-2.2%	-2.2%
99th Pctl	-1.5%	-1.9%	-1.8%	-1.7%	-1.6%	-1.4%

- Net external cash flow is a manageable and stable portion of the trust.
- Under extremely poor events, net cash flow is actually a smaller portion of the trust.



Scenario Analysis Assumptions

- Inflation – Similar to late 1970's and early 1980's market returns
- Deflation- Hypothetical (no “extended” deflation experienced in the US recently)
- Low Return – Market conditions remain similar to now for extended period
- Recession – Similar to 1970's recession market returns

Current Asset Class Implementation-Scenario Analysis

	Current Policy	Mix 4-1	Mix 4-2	Mix 4-3	Mix 4-4	Mix 4-5	Current Mix*
Public Equity	46.0%	19.8%	21.9%	24.2%	31.4%	39.2%	42.9%
Fixed Income	27.0%	36.9%	36.9%	31.5%	28.5%	20.7%	25.7%
Private Equity	16.0%	18.8%	20.7%	22.9%	24.0%	25.0%	19.8%
Real Estate	11.0%	8.2%	10.1%	12.1%	11.0%	10.0%	9.4%
TIPS	0.0%	11.4%	5.5%	4.3%	0.1%	0.1%	0.0%
Alts Port	0.0%	5.0%	4.8%	5.0%	5.0%	5.0%	2.2%
Equity	73.0%	51.7%	57.6%	64.2%	71.4%	79.2%	74.3%
Scenario Return							
Inflation	9.11%	9.29%	9.27%	9.46%	9.33%	9.38%	9.13%
Deflation	5.20%	4.79%	4.99%	4.98%	5.13%	5.10%	5.19%
Low Return	6.36%	6.36%	6.59%	6.83%	7.09%	7.34%	7.14%
Recession	-1.15%	0.68%	0.35%	-0.11%	-0.95%	-1.92%	-1.49%

*Actual mix as of 3/31/10

Scenario Analysis Results

Inflation Scenario - December 31, 2014						
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Actuarial Accrued Liability	69.4	69.4	69.4	69.4	69.4	69.4
MV Assets	59.1	59.5	59.3	59.6	59.3	59.6
Unfunded Liability	11.5	11.1	11.3	11.0	11.2	11.1
Funded Status	84%	84%	84%	84%	84%	84%
Ultimate Net Cost	12.1	11.9	12.0	11.8	12.0	11.9
Contrib % of Pay	14.2%	14.0%	14.1%	14.0%	14.1%	14.0%

Recession Scenario - December 31, 2014						
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Actuarial Accrued Liability	66.1	66.1	66.1	66.1	66.1	66.1
MV Assets	32.3	36.6	35.7	34.6	33.1	31.5
Unfunded Liability	30.8	27.4	28.2	29.1	30.2	31.5
Funded Status	53%	58%	57%	56%	54%	52%
Ultimate Net Cost	23.4	21.3	21.7	22.3	23.0	23.8
Contrib % of Pay	23.6%	22.4%	22.6%	23.0%	23.4%	23.8%

Base Case Scenario - December 31, 2014						
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Actuarial Accrued Liability	66.6	66.6	66.6	66.6	66.6	66.6
MV Assets	56.2	53.5	54.3	55.2	56.1	57.0
Unfunded Liability	11.3	13.6	12.9	12.2	11.4	10.7
Funded Status	83%	80%	81%	82%	83%	84%
Ultimate Net Cost	11.6	13.0	12.6	12.2	11.7	11.3
Contrib % of Pay	15.9%	16.9%	16.6%	16.3%	16.0%	15.7%

- Inflation Scenario results in an outcome that is slightly better than the Base Case.
- Under the Recession Scenario, the best outcome is with lowest risk mix but a poor outcome for all mixes.

Scenario Analysis Results

Deflation Scenario - December 31, 2014						
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Actuarial Accrued Liability	66.2	66.2	66.2	66.2	66.2	66.2
MV Assets	46.9	46.0	46.5	46.5	46.9	46.8
Unfunded Liability	14.7	15.5	15.1	15.1	14.8	14.9
Funded Status	76%	75%	76%	76%	76%	76%
Ultimate Net Cost	15.9	16.4	16.2	16.1	16.0	16.0
Contrib % of Pay	19.1%	19.4%	19.2%	19.2%	19.1%	19.1%

Low Return Scenario - December 31, 2014						
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Actuarial Accrued Liability	66.4	66.4	66.4	66.4	66.4	66.4
MV Assets	51.8	49.8	50.4	50.9	51.6	52.2
Unfunded Liability	15.0	16.6	16.1	15.6	15.1	14.6
Funded Status	77%	75%	76%	76%	77%	78%
Ultimate Net Cost	13.9	14.9	14.7	14.4	14.0	13.7
Contrib % of Pay	17.4%	18.1%	17.9%	17.7%	17.5%	17.3%

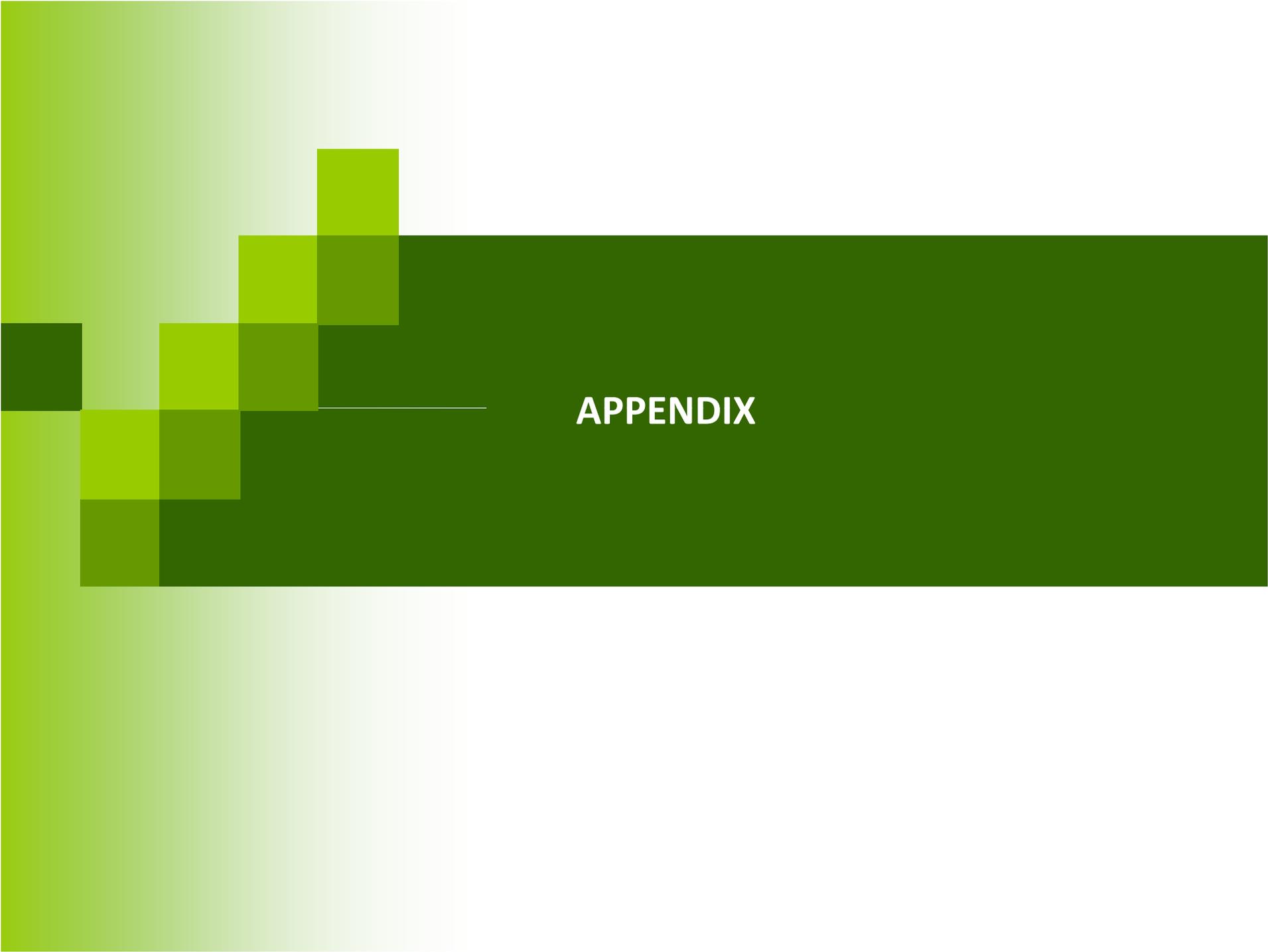
Base Case Scenario - December 31, 2014						
	Current	Mix 1	Mix 2	Mix 3	Mix 4	Mix 5
Actuarial Accrued Liability	66.6	66.6	66.6	66.6	66.6	66.6
MV Assets	56.2	53.5	54.3	55.2	56.1	57.0
Unfunded Liability	11.3	13.6	12.9	12.2	11.4	10.7
Funded Status	83%	80%	81%	82%	83%	84%
Ultimate Net Cost	11.6	13.0	12.6	12.2	11.7	11.3
Contrib % of Pay	15.9%	16.9%	16.6%	16.3%	16.0%	15.7%

- Riskiness of the mix does not materially change the outcome in the Deflation Scenario and all mixes are significantly worse than the Base Case.
- Under the Low Return Scenario, the best outcome emanates from the riskiest mix but as you would expect, costs are higher than the Base Case and the payoff for taking on risk is less.



Summary/Next Steps

- Ultimate Net Cost does not suggest taking less risk.
- Liquidity is not a problem.
 - IAP is the wild card.
- Refine ALM analyses as necessary.
- Refine asset mixes while reflecting OIC risk/return preferences.
- June/July – Share interim written correspondence, present final results on July 28, 2010.



APPENDIX



Professional Biographies

- **MICHAEL R. BEASLEY**. *Managing Director*. Co-founded Strategic Investment Solutions, Inc. (SIS) with Barry Dennis in 1994. Former EVP and Head of Consulting of Callan Associates, which he joined in 1986 and left in 1993. Founded Callan's Atlanta Office in 1986 and concurrently managed its New York Office in 1988. Served as Chairman of Callan's Manager Search Committee for two years. Brings 30 years of consulting and institutional investment experience to SIS. Prior experience includes 13 years with Merrill Lynch's Capital Markets Group in Jacksonville and Atlanta. Former Editorial Board member of the *Journal of Pension Plan Investing*. Frequent speaker on institutional investment issues. Graduate of the New Mexico Military Institute and an officer of the U.S. Army for five years that included a combat tour of duty in Vietnam.
- **JOHN P. MEIER, CFA**. *Managing Director and Head of Quantitative Services*. Highly experienced specialist in strategic planning, capital markets analysis, and quantitative investment strategies. A leading authority in the fields of performance benchmarking and portfolio performance attribution, whose ideas have been published in *Pensions and Investments*, *Futures*, *Risk* and *Quantitative International Investing*. Senior Product Manager at BARRA from 1988 to 1994, responsible for equity risk and valuation models and services. B.S. in Chem. Eng. From Michigan State, MBA in Finance from UC Berkeley.
- **MARC GESELL, CFA**. *Vice President*. Quantitative analysis, statistical research, and systems development specialist responsible for strategic planning. Seven years experience in software R&D, asset allocation modeling, and investment analysis. Most recently AVP and portfolio manager for First Interstate Bank (now Wells Fargo), responsible for managing \$200 million in private client portfolios. Helped establish clients' strategic plans, investment objectives, asset allocation mixes, and portfolio structure. B.S. in Computational Mathematics, Arizona State University, MBA in Finance, San Francisco State University, Chartered Financial Analyst. Former Officer, United State Army.
- **LOUIS KINGSLAND, JR.** *Adviser and Chair, Investment Policy Committee*. Developed first commercially available asset allocation and liability simulation model and asset mix optimizer, both still widely used today. Most recently EVP of Mellon Capital Management. Graduate, Air Force Academy. MA in Engineering, CalTech. Served as Deputy Mission Director of The Viking Space Project, and received a Distinguished Service Medal from NASA.



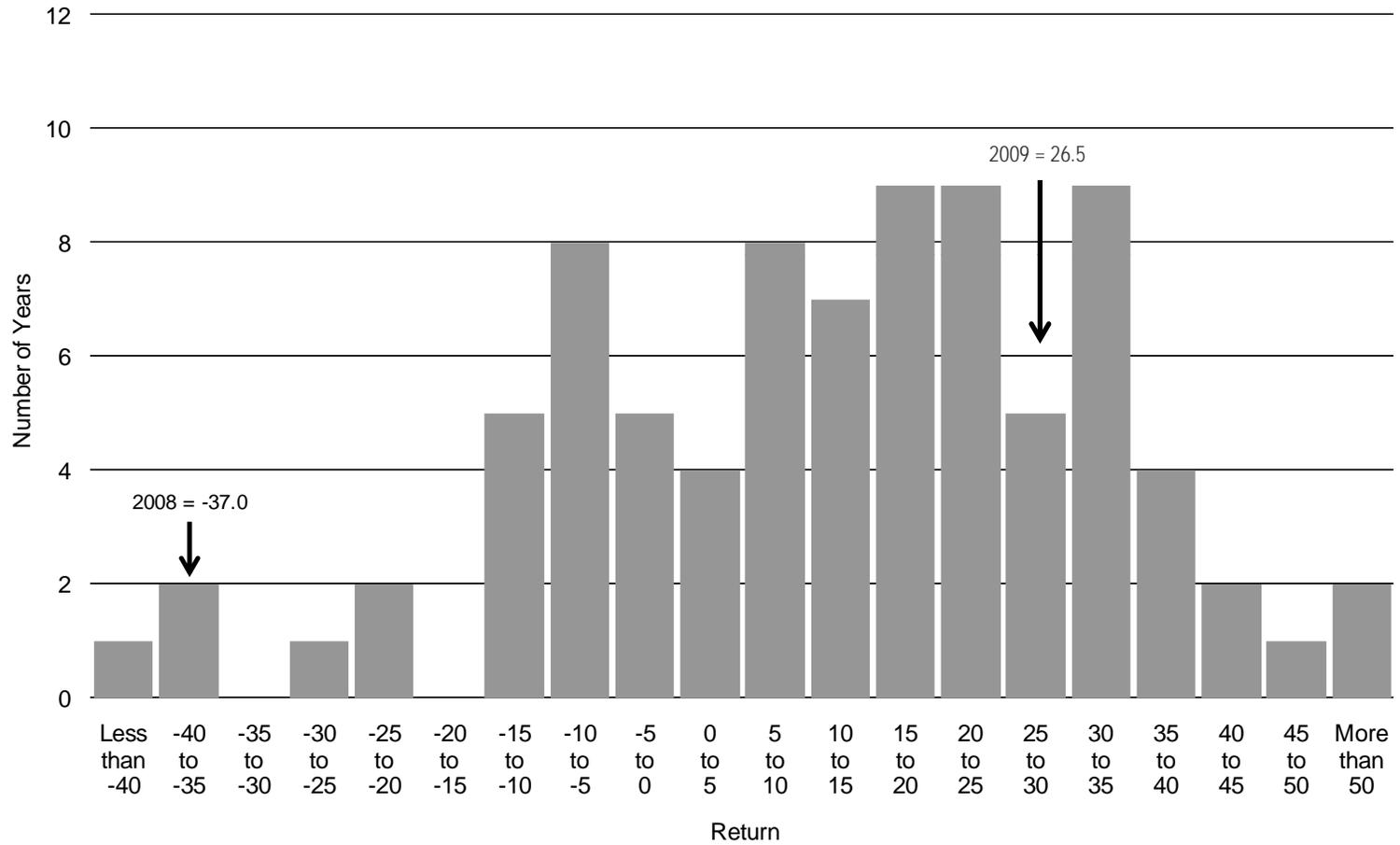
Defining Risk

- The basic definition of investment risk is variability of return. The alternative policies, or “asset mixes,” examined here are built to minimize this variability given an expected level of return over a long period of time. These mixes we call efficient. The method used to build them is an improved version of standard mean-variance optimization. The probabilities of continuously compounded returns to each asset class are assumed to approximate a bell shaped curve, or normal distribution. In other words, returns are random, and returns near the expected average are more likely than extreme returns. The likelihood of extreme returns is expressed as standard deviation. The probability of a particular asset-class return depends on the returns provided by every other asset class; this interdependence is expressed as correlation. Thus asset-class return expectations are commonly presented as three sets of numbers: mean returns, standard deviations, and correlations.



How Risky Are Investment Returns?

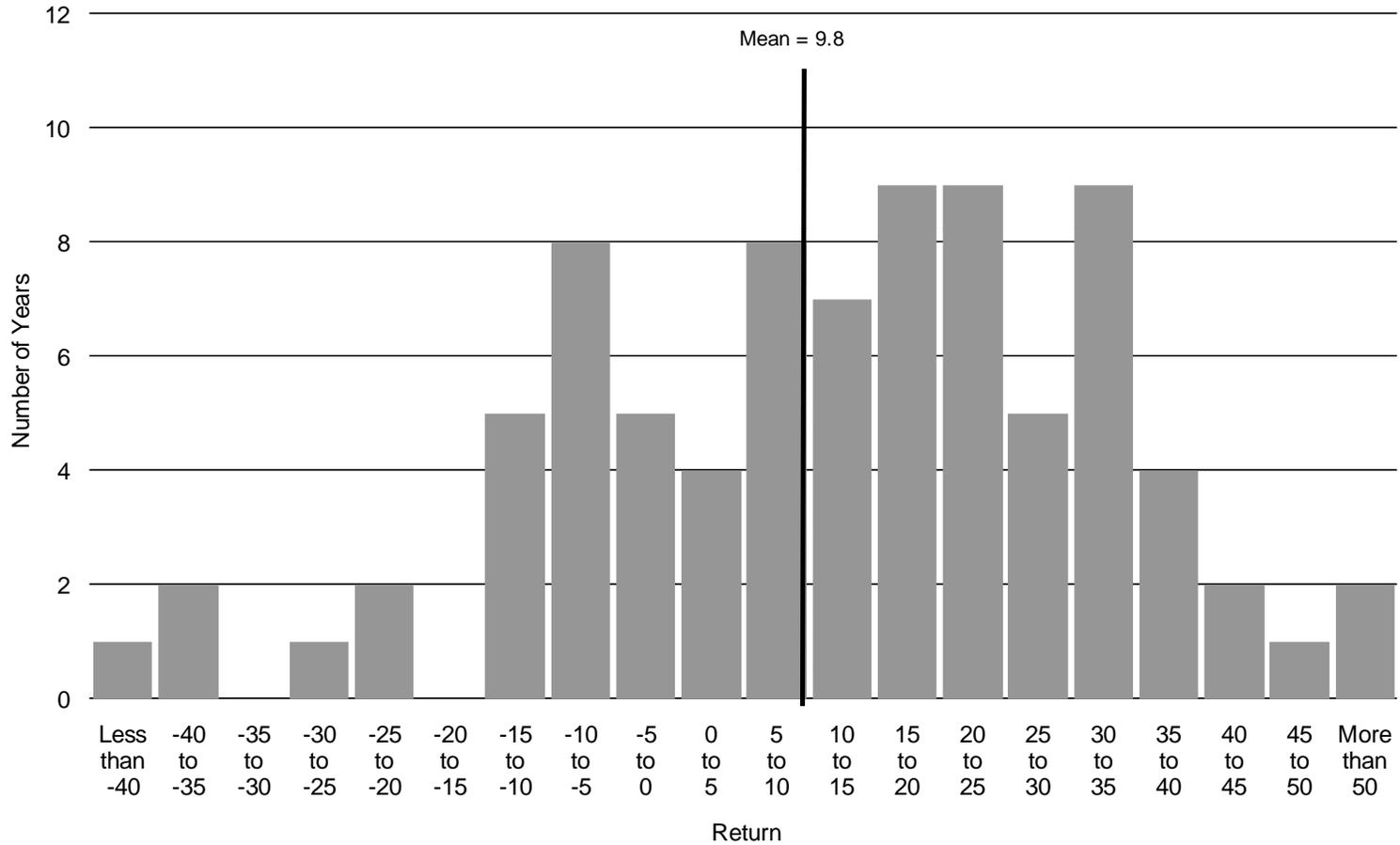
Distribution of S&P 500 Annual Returns 1926 - 2009





What Return Do We Plan On?

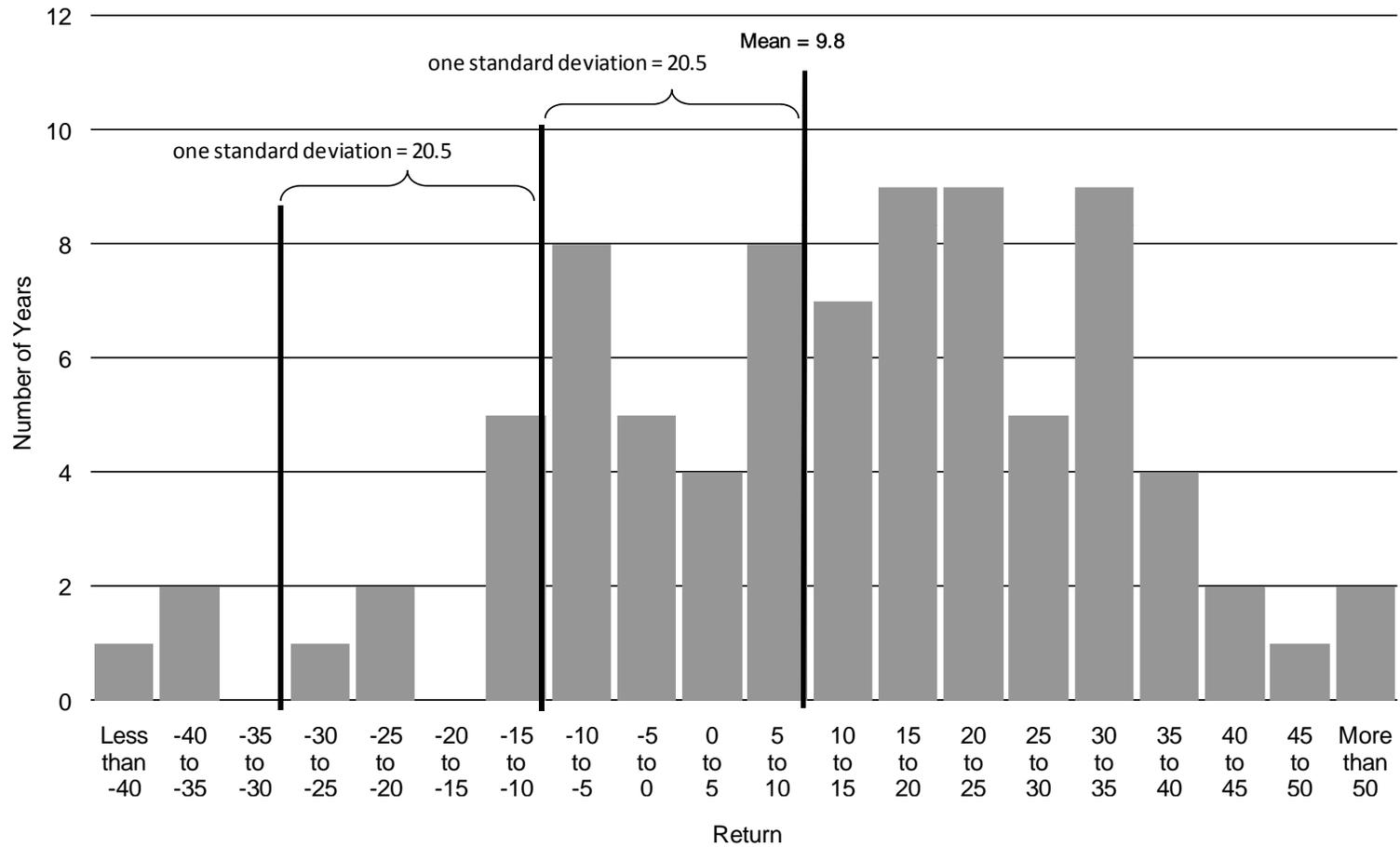
Distribution of S&P 500 Annual Returns 1926 - 2009





How Do We Measure Investment Risk?

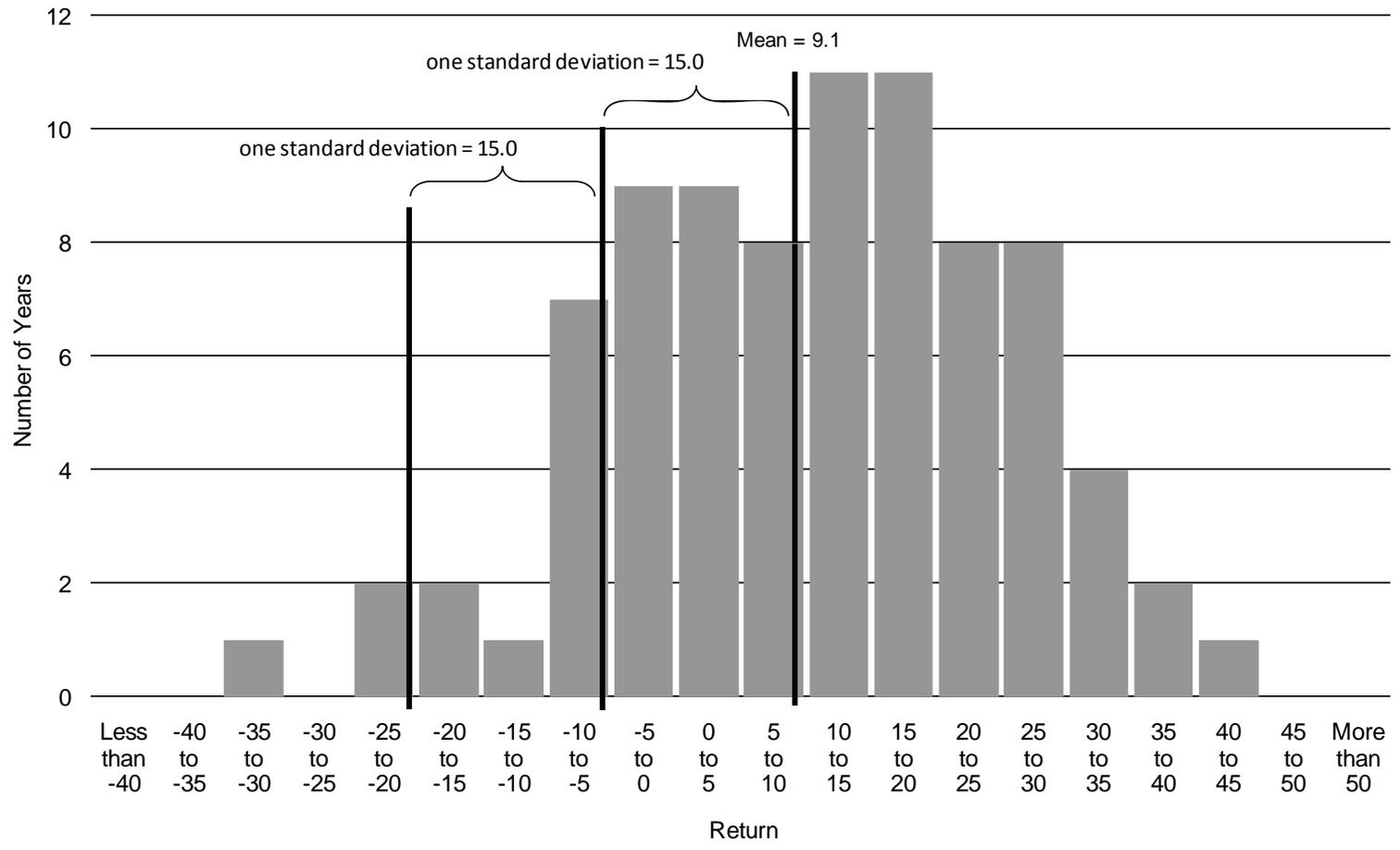
Distribution of S&P 500 Annual Returns 1926 - 2009





Diversification Reduces Risk (at Some Cost)

Distribution of 70/30 Portfolio Annual Returns 1926 - 2009



Definitions

STRATEGIC ASSET ALLOCATION

The discipline used to determine which assets and what proportion among those assets meet an investor's cash flow requirements, planning horizon, and attitude toward risk.

EXPECTED RATE OF RETURN

The expected value or mean of a probability distribution of returns. In our case, the expected return is the compounded annual return which is the same as the geometric mean. After tax expected return nets out the expected income and capital gains taxes paid by the trust.

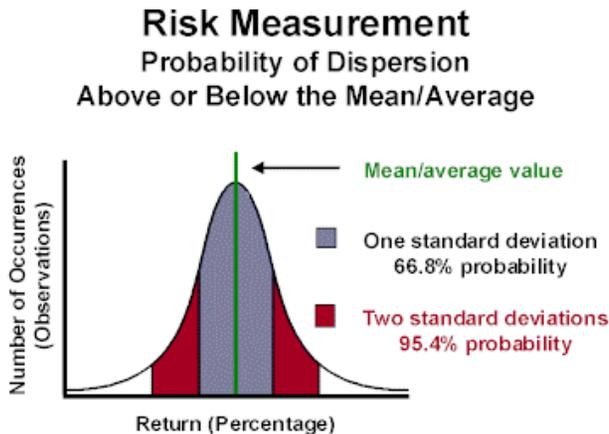
STANDARD DEVIATION

A statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. The square root of the **variance**. When returns are normally distributed, an individual return will fall within one standard deviation of the mean about two-thirds of the time. For example, if a portfolio had an expected return of 5% and an expected risk (standard deviation) of 13, then:

One Standard Deviation 68% of the time, returns can be expected to fall between -8.0% and +18%

Two Standard Deviations 95% of the time, returns can be expected to fall between -21% and +31%

Standard deviation is a useful historical measure of the variability of return earned by an investment portfolio. In performance measurement, it is generally assumed that a larger degree of dispersion implies that greater risk was taken to achieve the return.



Definitions

CORRELATION COEFFICIENT

Correlation Coefficient
Shows Strength & Direction of Correlation



Correlation coefficient (r) is a measure of the degree of **correlation** between two quantities or variables, such as the rates of return on stocks and on bonds. A negative coefficient of correlation indicates an inverse or negative relationship, whereas a positive value indicates a direct or positive relationship. The range of values is from -1 to +1 inclusive. A zero (0) value indicates that no correlation exists. Correlation coefficients are useful in **asset class** identification and portfolio **diversification**.



Scenario Analysis Returns

ASSET	BASE	INFLATION	DEFLATION	LOW RETURN	RECESSION
US LRG CAP	8.5%	6.5%	4.5%	7.0%	-5.7%
US SML CAP	9.0%	6.5%	4.5%	7.5%	-5.7%
US FIXED	4.0%	5.3%	6.0%	4.0%	6.0%
INTL STOCK	8.5%	9.2%	4.5%	7.0%	-5.7%
EM STOCK	9.2%	9.2%	4.5%	7.5%	-5.7%
INTL FIXED	4.1%	8.0%	6.0%	4.0%	6.0%
REAL EST	8.0%	13.0%	2.0%	6.0%	5.0%
PRIV EQTY	11.0%	8.5%	4.5%	8.0%	-10.0%
HIGH YIELD	6.4%	5.9%	5.2%	5.5%	1.0%
EM DEBT	5.7%	8.0%	6.0%	5.0%	6.0%
TIPS	4.0%	11.0%	1.0%	3.5%	3.5%
BANK LOAN	5.0%	10.0%	2.5%	3.0%	3.0%
ALTERNATIVES PORT	8.0%	11.0%	2.0%	6.5%	-1.0%
CASH	3.0%	9.0%	0.5%	1.0%	1.0%
INFLATION	2.4%	9.0%	0.0%	2.4%	1.9%

TAB 6 – ASSET ALLOCATIONS AND NAV UPDATES

Asset Allocations at April 30, 2010

Regular Account								Variable Fund	Total Fund
OPERF	Policy	Target	\$ Thousands	Pre-Overlay	Overlay	Net Position	Actual	\$ Thousands	\$ Thousands
Public Equity	41-51%	46%	21,552,461	41.2%	584,027	22,136,488	42.3%	936,440	23,072,928
Private Equity	12-20%	16%	10,295,295	19.7%		10,295,295	19.7%		10,295,295
Total Equity	57-67%	62%	31,847,756	60.9%	584,027	32,431,783	62.0%		33,368,223
Opportunity Portfolio			1,118,982	2.1%		1,118,982	2.1%		1,118,982
Fixed Income	22-32%	27%	13,247,725	25.3%	521,439	13,769,164	26.3%		13,769,164
Real Estate	8-14%	11%	5,006,027	9.6%	-	5,006,027	9.6%		5,006,027
Cash*	0-3%	0%	1,110,176	2.1%	(1,105,466)	4,710	0.0%	3,526	8,236
TOTAL OPERF		100%	\$ 52,330,666	100.0%	\$ -	\$ 52,330,666	100.0%	\$ 939,966	\$ 53,270,632

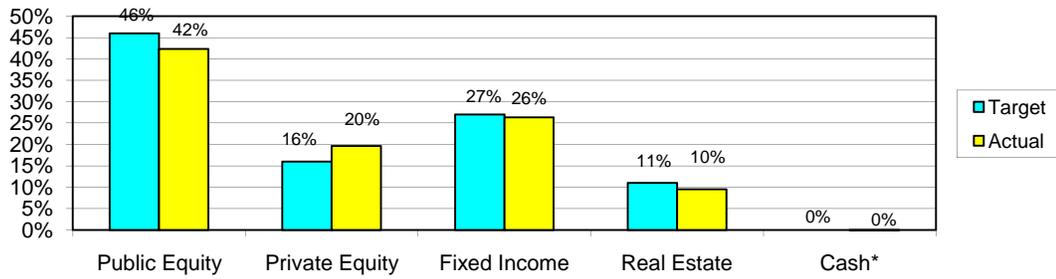
*Includes cash held in the policy implementation overlay program.

SAIF	Policy	Target	\$ Thousands	Actual
Total Equity	7-13%	10.0%	426,287	10.6%
Fixed Income	87-93%	90.0%	3,552,301	88.2%
Cash	0-3%	0%	47,784	1.2%
TOTAL SAIF		100%	\$4,026,372	100.0%

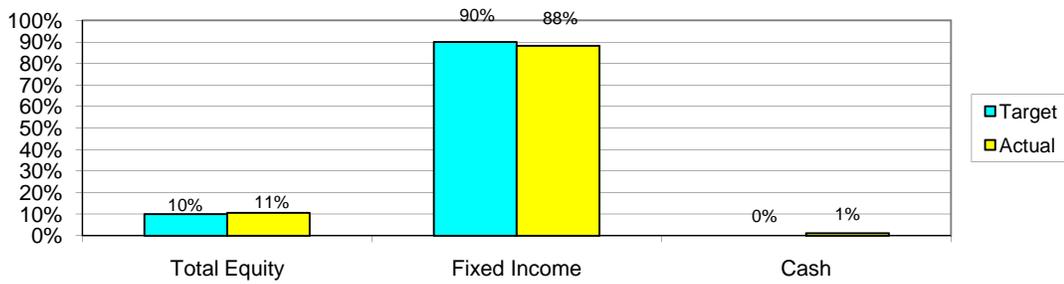
CSF	Policy	Target	\$ Thousands	Actual
Domestic Equities	25-35%	30%	\$351,080	34.3%
International Equities	25-35%	30%	341,557	33.4%
Private Equity	0-12%	10%	31,075	3.0%
Total Equity	65-75%	70%	723,712	70.8%
Fixed Income	25-35%	30%	293,209	28.7%
Cash	0-3%	0%	5,558	0.5%
TOTAL CSF			\$1,022,479	100.0%

HIED	Policy	Target	\$ Thousands	Actual
Domestic Equities	25-35%	30%	\$19,343	30.2%
International Equities	25-35%	30%	20,989	32.8%
Private Equity	0-10%	10%	5,195	8.1%
Total Equity	65-75%	70%	45,527	71.1%
Fixed Income	25-35%	30%	18,233	28.5%
Cash	0-3%	0%	287	0.4%
TOTAL HIED			\$64,047	100.0%

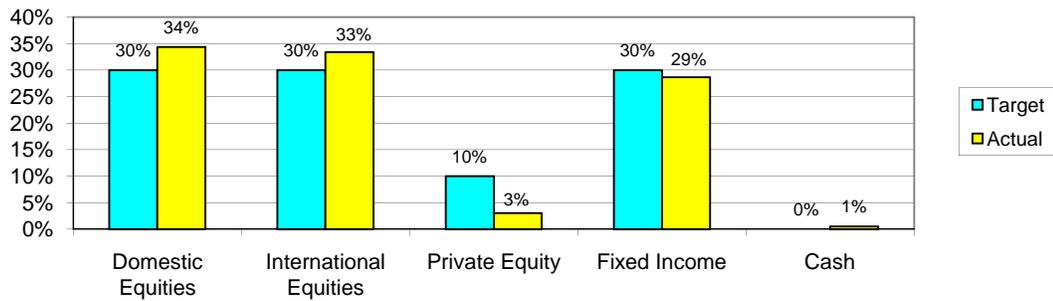
OPERF Asset Allocation



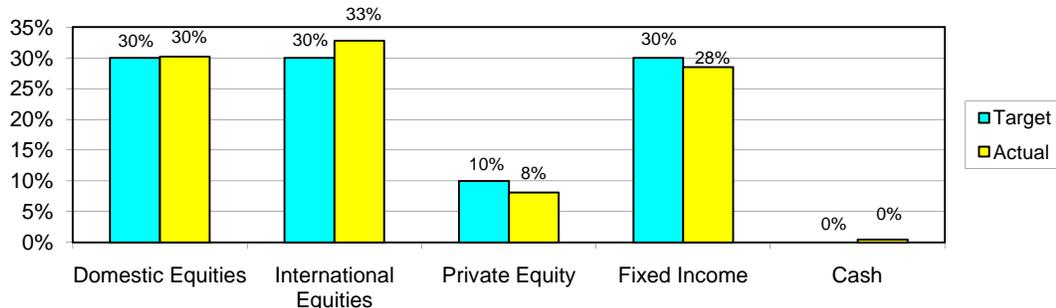
SAIF Asset Allocation



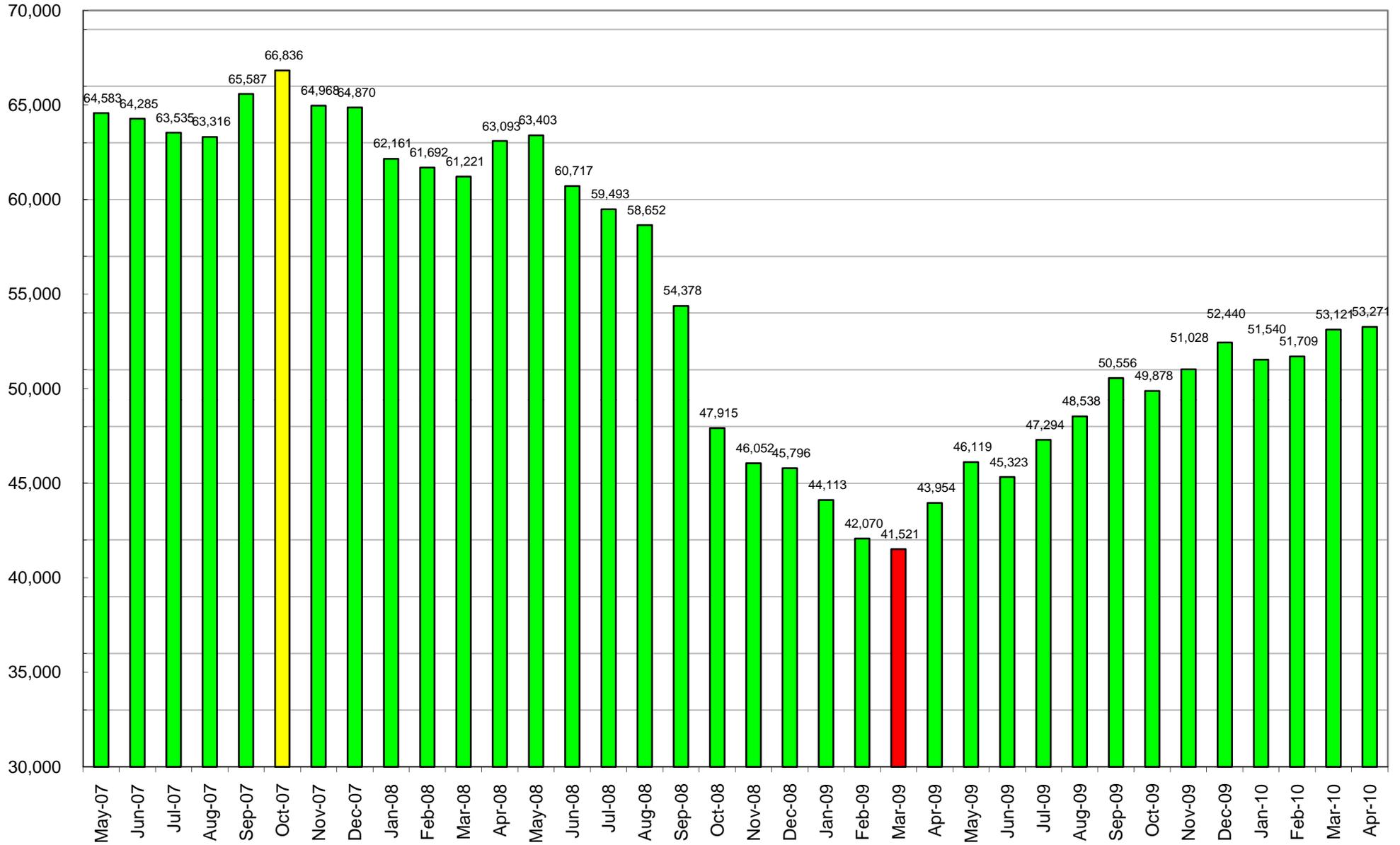
CSF Asset Allocation



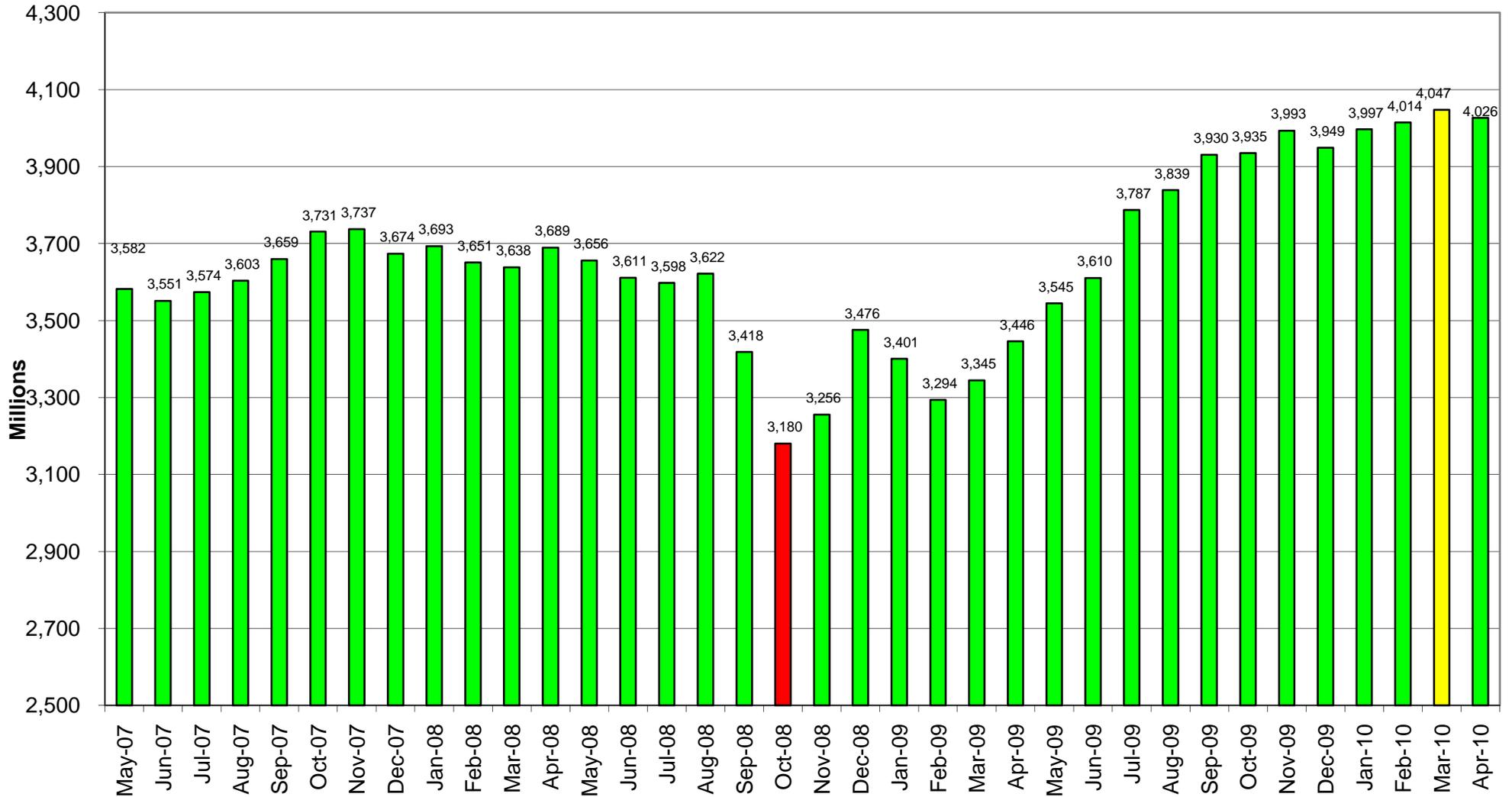
HIED Asset Allocation



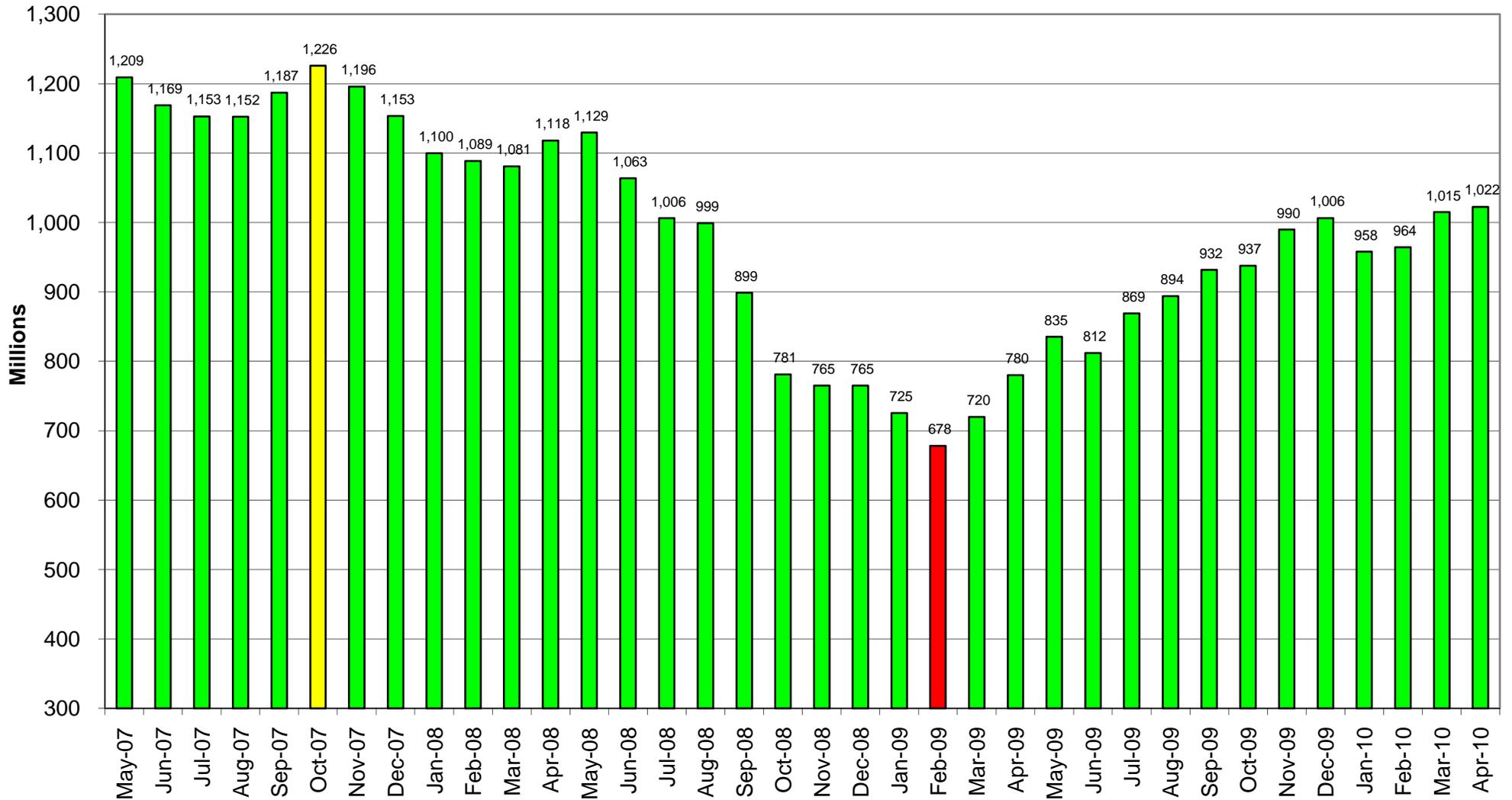
OPERF NAV
Three years ending April 2010
(\$ in Millions)



SAIF NAV
Three years ending April 2010
(\$ in Millions)



CSF NAV
Three years ending April 2010
(\$ in Millions)



TAB 7 – CALENDAR – FUTURE AGENDA ITEMS

2010 OIC Forward Agenda Topics

- July 28:** OPERF Real Estate Annual Review
Proxy Voting Update
Annual Audit Update
- September 29:** CEM Annual Review
CSF Annual Review
Passive/Active Analysis & OPERF Equity Attribution
General Consultant Review
- October 27:** OPERF Opportunity Portfolio Annual Plan
- December 1:** OPERF 3rd Quarter Performance Review
HIED Annual Review