REGULAR MEETING OF THE
MONTANA BOARD OF INVESTMENTS
DEPARTMENT OF COMMERCE
2401 Colonial Drive, 3rd Floor
Helena, Montana

February 25 & 26, 2014

AGENDA

COMMITTEE MEETINGS

A. **Audit Committee** **8:00AM**
1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
2. Risk Assessment Plan and Internal Control Testing Schedule – ***Decision***
3. FY 2013 Financial Audit
4. FY 2014 Financial Compliance Audit Entrance Conference
5. Performance Audit Findings and Staff Recommendations – ***Decision***

B. **Human Resource Committee** **9:00 AM**
1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
2. Executive Director General Comments
3. Continuity Resolution No. 234 for Chief Investment Officer Position – ***Decision***
4. Organizational Chart – ***Decision***
5. Reclassify Senior Loan Portfolio Manager position ***– Decision***

C. **Loan Committee** **10:00 AM**
1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
2. INTERCAP Loan Program Request ***– Decision***

Tab 1 CALL TO ORDER – Mark Noennig, Chairman **10:30 AM**

A. Roll Call
B. Public Comment – *Public Comment on issues with Board Jurisdiction*
C. Approval of the November 2013 regular and special meeting minutes – ***Decision***
D. Administrative Business
   1. Audit Committee Report – ***Decision***
   2. Human Resource Committee Report – ***Decision***
   3. Loan Committee Report
E. Comments from TRS and PERS Board Members
F. Comments from Board Legislative Liaisons

Tab 2 EXECUTIVE DIRECTOR REPORTS – David Ewer **11:45 AM**

A. Member Requests or Follow up from Prior Meeting
B. Quarterly Cost Report
C. Staff Outreach Efforts for 2013
D. Performance Audit with Staff Recommendations (Board review and action scheduled during "Audit Committee" and "Call to Order" agenda times)
E. Continuity Resolution No. 234 for Chief Investment Officer Position (Board review and action scheduled during "Human Resource Committee" and "Call to Order" agenda times)
F. Reclassify Senior Loan Portfolio Manager Position – ***Decision***
G. Organizational Chart – ***Decision***
H. Ethics Policy
I. Annual Report and Financial Statements
J. Custodial Bank Contract Update

LUNCH SERVED **12:00 PM**

The Board of Investments makes reasonable accommodations for any known disability that may interfere with a person's ability to participate in public meetings. Persons needing an accommodation must notify the Board (call 444-0001 or write to P.O. Box 200126, Helena, Montana 59620) no later than three days prior to the meeting to allow adequate time to make needed arrangements.

Tab 3 INVESTMENT ACTIVITIES/REPORTS – Cliff Sheets, CFA, CIO **1:00 PM**

A. Retirement System Asset Allocation Report
B. Public Equity Pool Reports – **Rande Muffick, CFA**
   1. Domestic Equity (MDEP)
   2. International Equity (MTIP)
   3. Update on Implementing Small Cap and Emerging Market Manager Additions
C. Fixed Income Reports
   1. Bond Pools (RFBP and TFIP) – **Nathan Sax, CFA**
   2. Below Investment Grade Holdings
   3. Short-term (STIP) and Other Fixed Income Portfolios – **Richard Cooley, CFA**
D. Private Asset Pool Reports – **Ethan Hurley, CAIA**
   1. Private Equity Pool (MPEP)
   2. Real Estate Pool (MTRP)

BREAK **2:30 PM**

CONTINUE WITH Tab 5 INVESTMENT ACTIVITIES/REPORTS **2:45 PM**

Tab 4 DOMESTIC EQUITIES – Asset Class Review, Cliff Sheets and Rande Muffick **3:30 PM**

ADJOURNMENT **5:00 PM**

AGENDA – DAY 2

RECONVENE AND CALL TO ORDER – Mark Noennig, Chairman **9:00 AM**

A. Roll Call
B. Public Comment – *Public Comment on issues with Board Jurisdiction*

Tab 5 MONTANA LOAN PROGRAM REPORT – Herb Kulow **9:10 AM**

Tab 6 BOND PROGRAM REPORT – Louise Welsh **9:30 AM**

QUARTERLY PERFORMANCE REPORT – R.V. Kuhns **9:45 AM**

BREAK **10:15 AM**

Tab 7 REAL ESTATE – Educational Review, R. V. Kuhns **10:30 AM**

RECAP OF STAFF TO DO LIST AND ADJOURNMENT – Mark Noennig, Chairman **11:30 AM**

Appendix

A. Annual Board Meeting Schedule
B. Systematic Work and Education Plan
C. Acronym Index
D. Terminology List
E. Public Market Manager Evaluation Policy
F. Educational Resources

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Return to Agenda

Call to Order

MONTANA BOARD OF INVESTMENTS
DEPARTMENT OF COMMERCE
2401 Colonial Drive, 3rd Floor
Helena, Montana

MINUTES OF THE MEETING
November 19, 2013

BOARD MEMBERS PRESENT:

Mark Noennig, Chairman (via conference call)
Kathy Bessette
Gary Buchanan
Karl Englund
Quinton Nyman
Jack Prothero
Marilyn Ryan
Jon Satre
Sheena Wilson

LEGISLATIVE LIAISONS PRESENT:

Senator Dave Lewis
Representative Kelly McCarthy

STAFF PRESENT:

Polly Boutin, Accountant
Jason Brent, CFA, Alternative Investments Analyst
Geri Burton, Deputy Director
Dana Chapman, Board Secretary
Richard Cooley, CFA, Portfolio Manager, Fixed Income/STIP
Frank Cornwell, CPA, Deputy Financial Manager
Roberta Diaz, Accountant
David Ewer, Executive Director
Tim House, Investment Operations Chief
Ethan Hurley, CAIA, Portfolio Manager, Alternative Equities
Ed Kelly, Alternative Investments Analyst
Teri Kolnik, CFA, Alternative Investments Analyst
Herb Kulow, MCMB, Portfolio Manager, In-State Loan Program
Tammy Lindgren, Accountant
April Madden, Accountant
Gayle Moon, CPA, Financial Manager
Rande Muffick, CFA, Portfolio Manager, Public Equities
Chris Phillips, CFA, Investment Staff
Jon Putnam, CFA, FRM, Fixed Income Investment Analyst
John Romasko, CFA, CPA, Fixed Income Investment Analyst
Nathan Sax, CFA, Portfolio Manager, Fixed Income
Clifford A. Sheets, CFA, Chief Investment Officer
Steve Strong, Equity Investment Analyst
Louise Welsh, Senior Bond Program Officer
Dan Zarling, CFA, Director of Research

GUESTS:

Becky Gratsinger, CFA, R.V. Kuhns & Associates
Jim Voytko, R.V. Kuhns & Associates
Roxanne Minnehan, Public Employees' Retirement System
John Harrington, Legislative Audit Division
Sam Schaefer, Legislative Audit Division
Kris Wilkinson, Legislative Audit Division
Sheri Scurr, Legislative Services Division
Mark Barry, Montana State Fund

CALL TO ORDER

Board Chairman Mark Noennig called the regular meeting of the Board of Investments (Board) to order at 10:45 AM. As noted above, a quorum of Board Members was present. Board Chairman Noennig attended via telephone conference call and designated Vice Chairman Karl Englund to conduct the meeting.

Vice Chairman Englund asked for public comment. There was no public comment.

Vice Chairman Englund called for any corrections or revisions to the Board minutes from the August 20, 2013 and October 9, 2013 meetings. Member Marilyn Ryan had two corrections for the August 20, 2013 minutes: page 1 under attendees, Mike Heale with CEM Benchmarking, Inc. needs to be added as a meeting attendee; and at the top of page 14 under interviewees for the TRS executive director position, two applicants were interviewed, not several.

> Board Member Jack Prothero made a Motion to approve the August 20, 2013, Board Meeting Minutes, as corrected. Member Jon Satre seconded the Motion. The Motion carried 9-0.
>
> Board Member Jack Prothero made a Motion to approve the October 9, 2013, Special Board Meeting Minutes. Member Marilyn Ryan seconded the Motion. The Motion carried 9-0.

ADMINISTRATIVE BUSINESS

Audit Committee Report

Audit Committee Chair Jon Satre reported on items discussed at the Committee Meeting held prior to the regular Board Meeting. Executive Director Ewer will give the Board an update on Securities Litigation later in the agenda. The legislative fiscal analyst is working on the financial audit; the Board of Investments has submitted all required information and is awaiting final comments. The performance audit is in process and expected to go before the Legislative Audit Committee by early 2014. Responding to a question from Vice Chairman Englund, Executive Director Ewer advised the performance audit first goes before the Legislative Audit Committee, then after presentation to the Committee, it is given to MBOI for final review and preparation of an official response. Audit Committee Chairman Jon Satre may choose to call for the full Board to meet with staff via conference call to review staff recommendations prior to preparation and submission of the official response.

Human Resource Committee Report

Human Resource Committee Chairman Karl Englund reported on the Committee meeting held prior to the Board meeting. The Committee reviewed the annual performance evaluations of exempt staff and the Committee is pleased to report all evaluations were good. The Committee discussed the review of Executive Director Ewer and has an outline which will be finalized and written up for final approval by the Committee. At Member Gary Buchanan's request, the Committee discussed and considered moving the annual May salary reviews for exempt staff to later in the year; however, the Committee decided to keep the schedule as it currently is.

Loan Committee Report

The Loan Committee met prior to the Board meeting. Committee Chairman Jack Prothero reported the Committee reviewed four INTERCAP loans which are contained within the Board packet: Amsterdam Churchill County Sewer District for $2.2 million interim financing for a wastewater project; Montana Department of Transportation (MDT) for $3.7 million for purchase of motor pool vehicles; the City of Boulder for $3.55 million interim financing for a wastewater project; and Craig County Water and Sewer District for $1.3 million interim financing for a wastewater project. All four loans were approved by the Loan Committee.

Mr. Herb Kulow presented two loan requests. The first loan is an infrastructure loan to the City of Great Falls for $4,999,800 for land and buildings to house ADF Group USA, Inc. and ADF International, Inc. The second loan is a participation loan for $2.7 million to ADF International, Inc. The loan dollar amount requires full Board approval, so consideration will be deferred until later in the agenda after Mr. Kulow has presented the loans to the full Board. The Committee is recommending approval of the two loans.

Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS) Updates
Member Marilyn Ryan reported TRS is a party in the retirees' lawsuit challenging the changes made by the 2013 legislature to the Guaranteed Annual Benefit Adjustment (GABA) cost of living. The Attorney General is managing case; TRS is on sidelines at this point. The new TRS Executive Director Shawn Graham has been hired.

Member Sheena Wilson reported PERS is also awaiting action on the GABA lawsuit and staff is preparing to act for either outcome on January 1, 2014, depending on whether or not the injunction on the GABA legislation is granted. Looking ahead to the 2015 legislative session, two pension systems will require additional attention: Game Wardens' Retirement and Sheriffs' Retirement. PERS Executive Director Roxanne Minnehan is back on the job and a process is in place to address any lingering issues regarding her brief removal by the PERS Board Chairman.

Member Wilson added if the GABA remains at 3%, the impact will be substantial when figuring the funded status of PERS. Member Ryan noted for TRS the GABA varies from PERS in that it is set at 1.5%.

Legislative Liaisons Comments
None

EXECUTIVE DIRECTOR'S REPORT

Overall Comments
Executive Director David Ewer presented his executive director's memo. Per member requests from the last meeting, the quarterly cost report reflects the quarterly changes over the same quarter for the previous fiscal year. Responding to a question from Member Jon Satre, Mr. Ewer noted the additional amount of $477,762 over the same quarter last year is due in part to Board fees not charged to the investment pools for July 2012 in order to maintain working capital levels within set limits. This resulted in lower fees for the first quarter of fiscal year 2013.

Member Gary Buchanan asked if the fee statement reflects savings expected by the transition in May 2012 to more passive investments of public equity holdings. Mr. Cliff Sheets responded, yes, savings are reflected; however, due to the substantial increase in market values, much of the savings were offset, as fees are based on market values.

Executive Director Ewer reported the performance audit is proceeding as expected.

Executive Director Ewer reviewed securities litigation and referenced the sample page reflecting some of the suits MBOI is involved in. State Street Bank, as custodial bank, manages the hundreds of securities litigation cases which require MBOI's involvement. Mr. Ewer added a statement of recovery from ongoing or resolved suits is presented annually to the Board. Any unusual circumstances or issues requiring action are brought before the Board.

Executive Director Ewer reviewed Resolution 218 which designates the Deputy Director as authorized to act on behalf of the Executive Director in case of incapacitation and is reviewed annually. He also presented the Resolution 217 memo which is provided annually to the Board and details any changes or revisions made over the preceding year to authorized investment managers and broker accounts.

Mr. Cliff Sheets added an additional note regarding manager fees. The four small and midcap managers hired for the domestic equity pool will result in higher management fees.

Mr. Ewer reported the annual report is under way and will be completed by the December 31st deadline. He also stated the importance of participation by the public in governmental public meetings and noted each Board meeting agenda provides opportunities for public access by regular stated calls for comment during Board meetings.

Executive Director Ewer provided an update on the upcoming Request for Proposal (RFP) for hiring of the custodial bank. The RFP discussion is on the agenda for the April 2014 Board meeting. The process will differ from the recent RFP process for a consultant and will not require an ad hoc committee be set up. Staff will work with the appropriate staff at the Department of Administration.

Mr. Ewer presented the draft 2014 Board meeting schedule. Dates are on the same timeline as the 2013 calendar, consisting of quarterly meetings scheduled for two days, with two interim one day meetings scheduled in April and October. Mr. Ewer also reviewed the draft 2014 Work Plan.

Responding to a question from Member Buchanan asking about scheduling of educational opportunities for the two interim one day meetings, Mr. Ewer stated R.V. Kuhns conducts two presentations per year on topics directed by the Board. Mr. Jim Voytko affirmed R.V. Kuhns is available to provide educational opportunities as requested by the Board.

MONTANA LOAN PROGRAMS

In-State Loan Program

Mr. Herb Kulow presented an update of the commercial and residential loan program portfolios. Commercial loans totaled $105,227,226 for 122 loans as of October 31, 2013. The dramatic payoff rate has slowed. There is one loan past due which is guaranteed by the Small Business Administration (SBA). The Vann's bankruptcy loan has not converted over to "other real estate owned" yet. The distressed appraised value is $900,000. Sale of the property should provide sufficient proceeds to pay off the current MBOI principal balance due of $634,111. Residential mortgage payoffs have also subsided leveling off at $14,063,523 at October 31, 2013. Ten loans are past due, including five over 90 days past due representing 2.85% of the portfolio, four of which are guaranteed, or 1.99%.

The Veterans' Home Loan Mortgage program (VHLM) balance has increased to $17,005,110, more than half way to the current program allocation of $30 million as of October 31, 2013. There are currently 18 new loans reserved totaling $3,449,670. Staff requested and received a reduction in servicing fees charged to MBOI by the Board of Housing (BOH). The .75% fee has been decreased to .50%.

Mr. Kulow reported he was asked by representatives of the U.S. Treasury to serve as a co-chairman for the State Small Business Credit Initiative (SSBCI) and has accepted.

Mr. Kulow noted the short term Montana Comprehensive Health Program (MCHP) loan has been paid as agreed. No additional funds are anticipated at this time; however, MCHP may utilize the $950,000 line of credit with MBOI depending on how the of implementation of the national health care program progresses.

Two loans were presented to the Loan Committee meeting held prior to the Board meeting.

The first loan presented is an MBOI direct infrastructure loan to the City of Great Falls for purchase of 100 acres of land and infrastructure (a nearly completed steel fabrication plant), from ADF International, Inc. The loan amount is $4,999,800 with a term of 15 years. The City, as the borrower, will lease the land and infrastructure to ADF Group U.S.A, Inc. and ADF International, Inc. (ADF), who will have a purchase option as part of the lease. ADF is a highly specialized fabricator of complex heavy steel structures of various kinds. MBOI indemnifies the City of Great Falls from having to repay the loan as the loan is a special limited obligation of the City, rather than a general obligation of the City. The loan is solely to be paid by Public Improvement Use fees imposed by the City on ADF Group, Inc. as the leasee. The property is appraised at $9.4 million, $1.2 million of which is land. Loan to value is 53%. ADF has invested substantial equity in the property already and has 50 employees currently undergoing training to run the plant upon completion, which is expected the third quarter of 2013. The MBOI loan amount is calculated using the 300 jobs estimated to be created over four years ($16,666 x 300 = $4,999,800). ADF is also self-financing a $6 million painting facility requiring no additional financing.

> Member Jack Prothero made a motion to approve the loan as presented. Member Marilyn Ryan seconded. The motion passed unanimously.

The second loan presented by Mr. Kulow is a participation loan with US Bank Great Falls (US Bank) to ADF International, Inc. (International) for purchase of equipment. The MBOI participation loan amount is $2,735,552, (80%), US Bank amount is $638,000 (20%), for a total loan amount of $3,419,440 for a term of 10 years. The loan will be secured by a first lien on the equipment and an Irrevocable Financial Letter of Credit (Letter of Credit) from ADF's bank, The National Bank of Canada (Bank) for the full loan amount. Approval of the loan by US Bank was granted shortly prior to the Board meeting; therefore the loan write up is not complete at this time, however the financial documents are the same for both loans under consideration.

Board members briefly discussed postponing an immediate decision on the ADF International, Inc. participation loan until the loan write up is completed and distributed to Board members for review.

> Member Gary Buchanan made a motion to convene a telephone conference call at a later date to consider the $2,735,552 ADF International, Inc. participation loan following completion of the write up and distribution to the Board for review. Member Marilyn Ryan seconded. The motion passed 8-1. Member Jack Prothero voted nay.

BOND PROGRAM REPORTS

Activity Report

Ms. Louise Welsh reviewed the quarterly Activity Summary Report and presented the staff approved loans. There were four loans approved by the Loan Committee prior to the Board meeting.

The annual remarketing of INTERCAP bonds will take place in February 2014. Rates have remained steady in the 20 to 22 basis point range.

Staff approved loans are listed below:

Borrower:	Lewistown Rural Fire District
Purpose:	Purchase a new rescue/pumper fire engine
Staff Approval Date:	July 8, 2013
Board Loan Amount:	$ 175,000
Other Funding Sources:	$ 78,425
Total Project Cost:	$ 253,425
Term:	10 years

Borrower:	Town of Valier
Purpose:	Interim loan in anticipation of Rural Development (RD) long-term financing for wastewater treatment facility improvements
Staff Approval Date:	July 31, 2013
Board Loan Amount:	$ 775,000
Other Funding Sources:	$1,289,000
Total Project Cost:	$2,064,000
Term:	1 year

Borrower:	North Havre County Water District
Purpose:	Interim loan in anticipation of Rural Development (RD) long-term financing for water system improvements project
Staff Approval Date:	August 6, 2013
Board Loan Amount:	$ 783,000
Other Funding Sources:	$1,162,000
Total Project Cost:	$1,945,000
Term:	2 years

Borrower:	Vaughn Cascade County Water & Sewer District
Purpose:	Finance a service truck
Staff Approval Date:	August 6, 2013
Board Loan Amount:	$18,900
Other Funding Sources:	$ 0
Total Project Cost:	$18,900
Term:	7 years

Borrower:	Town of Kevin
Purpose:	Repair and improve a portion of the water system
Staff Approval Date:	September 6, 2013
Board Loan Amount:	$65,000
Other Funding Sources:	$ 0
Total Project Cost:	$65,000
Term:	15 years

Borrower:	Lewis & Clark County
Purpose:	Road improvements within the Crestwood Green Estates Rural Improvement District (RID)
Staff Approval Date:	September 18, 2013
Board Loan Amount:	$ 130,067
Other Funding Sources:	$ 0
Total Project Cost:	$ 130,067
Term:	10 years

Borrower:	City of Helena
Purpose:	Upgrade municipal golf course irrigation system
Staff Approval Date:	September 20, 2013
Board Loan Amount:	$ 600,000
Other Funding Sources:	$ 0
Total Project Cost:	$ 600,000
Term:	15 years

Borrower:	City of Livingston
Purpose:	Repair the City/County Building
Staff Approval Date:	September 27, 2013
Board Loan Amount:	$ 125,000
Other Funding Sources:	$ 0
Total Project Cost:	$ 125,000
Term:	3 years

REVIEW ASSET ALLOCATION RANGES

Ms. Becky Gratsinger, CFA, R.V. Kuhns & Associates and Mr. Cliff Sheets, CFA, CIO

Ms. Becky Gratsinger presented an overview of the analysis conducted on the current asset allocation and a review of any revisions or changes that may be recommended. Ms. Gratsinger explained the Mean Variance Optimization (MVO) was used to stress test several different assumption scenarios to evaluate the risks and shortcomings of various asset mixes. Utilizing a modeling process, levels of expected risk and return for the various asset classes are projected over the next 10 years and longer.

Looking at assumptions for 2011, 2012 and 2013, anticipated sharp declines in fixed income returns produced the largest change in assumptions anticipating the impact of rising interest rates on the asset class. Factors included in the equity assumptions analysis included inflation, prices over time, expected equity dividend projections, earnings per share growth and share buyback. Similar factors are analyzed for international equities.

Responding to a question from Member Jon Satre, Ms. Gratsinger noted comparisons to other consultants and national studies are also considered. Assumptions have been appropriately conservative, falling generally near the median of other consulting firms and are updated annually. Some consultants don't differentiate between domestic and international equities although RVK maintains this granularity. Risk is also analyzed asset class by asset class and models are adjusted and constraints applied for reasonableness, relative risk, and considerations such as liquidity and other factors (i.e. limits may be placed on illiquid asset classes such as private equity). All private equity and some real estate strategies are more difficult to predict as they tend to have high expected returns but also possess greater investment and other risks which are modeled as greater standard deviation such as 30.25% assumed for private equity. Because many of these investments aren't marked to market daily the impact of risk may not be observed as period to period investment return volatility in the same manner as marketable asset classes. Major market corrections and 'fat left tail distributions' are factored into the Monte Carlo testing as such events can have a large impact on markets, and therefore reflect a more real life view on stress test results.

Fixed income is expected to have modest returns, while cash over the near term may have negative returns since inflation rates could surpass cash investment returns. Possible assumption revisions for the next year will likely include adjustments to fixed income and a trim on expected returns in equities which have experienced recent robust returns. Responding to a question from Member Satre, Ms.

Gratsinger noted historical correlations are analyzed, but related assumptions place a higher emphasis on more recent history. Fixed income and real estate are good diversifiers due to their low correlation to the other asset classes. Private equity has a high correlation to equities. Core real estate is primarily driven by lease income.

The expected arithmetic return for MBOI using the actual asset allocation as of September 30, 2013, is 7.54%, net of fees. A more conservative portfolio was examined with less risk, but expected return also decreases to an expected level of 6.74%. Expanding asset ranges would allow for greater capital appreciation and if using an aggressive approach, the corresponding increase in expected return increases to an arithmetic return 8.83% with risk increasing significantly. The more aggressive portfolio has a large allocation to private equity and a large allocation to less liquid real estate. Private investment at these levels would be unusual in public pension plans, especially pension plans that are considered mature with larger cash flow obligations.

Using the Monte Carlo Simulation comparing conservative vs. aggressive portfolios within the current asset class ranges over the one and 10-year periods, annualized total returns for the conservative portfolio shows very little risk; however, the likelihood of reaching the 7.75% actuarial assumed rate of return becomes very low. The aggressive portfolio raises expected returns; but risk increases and portfolio diversification is reduced and liquidity restricted.

Most plan sponsors are choosing not to add additional risk to pursue significant incremental return in the near term and are continuing to focus on other portfolio construction techniques such as effective implementation of asset classes and selection of active managers where deemed helpful in pursuing excess returns over market indexes. Studies have shown that over 90% of return and risk experience is dependent upon asset allocation. In summary, after detailed analysis, no major changes are recommended for the current asset allocation ranges.

Member Jon Satre asked if R.V. Kuhns has suggestions for additional asset classes not currently held. Ms. Gratsinger stated adding any new class would not be recommended unless it provided substantial correlation opportunity to the portfolio. A small position in a new class would not add to the big picture unless it possessed attractive expected return, risk, or correlation attributes.

Upon completion of the R.V. Kuhns asset allocation study, Mr. Cliff Sheets presented a summary of the pension asset allocation review by staff. Asset allocation is reviewed and presented to the Board annually along with any changes proposed by staff. As an aside, the restructuring of the Domestic Equity Pool (MDEP) and International Equity Pool (MTIP) is nearly complete. Understanding the cash flows of the pension plans is critical to determine what level of asset-based liquidity is needed to pay pension benefits. This year staff conducted a detailed cash flow analysis of the two largest plans for this purpose. These retirement plans have been running cash negative (benefits exceed contributions plus portfolio cash income) requiring the sale of assets to pay benefits, a trend that has accelerated in recent years. Changes made to the pension plans during the 2013 legislative session have infused meaningful additional cash into the plans via higher contributions and other sources, resulting in a noticeable cash flow improvement for fiscal year 2014. However, both the Teachers' Retirement System (TRS) and the Public Employees' Retirement System (PERS) still remain cash flow negative. Nevertheless, at this time, the cash flow forecast does not indicate a change in asset allocation to a higher liquidity-oriented mix is necessary.

During fiscal year 2013, 2% of assets were sold to generate needed cash to offset the negative status of the two largest plans. During this timeframe the substantial rise in equity markets was helpful. Looking ahead over the next five years, the best case scenario still requires a net sale of assets; a worst case scenario, similar to the 2008-2012 time frame, while not probable, would require annual asset sales almost double the percentage of assets sold in FY 2013. This scenario is extreme in that it also assumes both a lower growth rate of contributions and a higher growth rate of benefits. Staff will conduct a similar detailed cash flow analysis after each June 30 fiscal year end including a 5-year rolling outlook.

Mr. Sheets presented staff recommended changes to the Montana Public Retirement Plans Investment Policy Statement asset allocation ranges, which were minor. The changes recognize the inherent volatility of the markets and reflect an equity oriented risk appetite. Over the long term, expected returns are worth the equity volatility likely to be experienced. The question is how much equity exposure exists when cash needs may increase. Current equity levels are 2 to 1 domestic vs. international. Increasing the proportion of international equity is not recommended since any return advantage, which is limited in Mr. Sheets' view, is not worth the additional associated currency risks which come with international equity exposure.

Changes to asset allocation ranges last occurred in 2006. Current recommendations include narrowing the Real Estate Pool (MTRP) range and slight changes in ranges for the International Equity Pool (MTIP), Domestic Equity Pool (MDEP) and for the Retirement Funds Bond Pool (RFBP). No changes are recommended for the Private Equity Pool (MPEP) or STIP ranges. Cash and treasuries allow flexibility if liquidity is needed and fixed income remains one of the better diversifiers to balance equity risk. The low end of the range for RFBP is appropriate at 22%, as even when fixed income returns are low it acts as an insurance policy over the long term.

Senator Lewis asked what assets are sold to generate cash when liquidity needs arise.

Mr. Sheets stated sales vary across asset classes and both stocks and bonds are options. During the prior fiscal year, the monthly need for cash was $10-$11 million per month, but this has decreased over the last year. Domestic stocks have been sold over the past six months to provide cash and facilitate incremental moves in allocation ranges.

> Member Jon Satre made a motion to approve the revised Montana Public Retirement Plans Investment Policy Statement with revised asset allocation ranges as presented. Member Jack Prothero seconded. The motion passed unanimously.

CONSULTANT REPORT

R.V. Kuhns & Associates – Ms. Becky Gratsinger, CFA and Mr. Jim Voytko

Ms. Becky Gratsinger presented the quarterly performance report for the quarter ending September 30, 2013. Responding to a question from Vice Chairman Karl Englund, she agreed negative cash flows in pension plans is not desirable; however, it is a common issue with aging retirement plans. Cash flow impacts must be accommodated and assets cannot be locked up excessively in assets like private equity which carry liquidity restrictions. Naturally, plan member contributions are key to cash flow.

The quarter realized a nice resurgence in international equity with a return of 11.61%. Emerging markets have struggled and the difficulty for bonds continues, with near zero returns on cash. REITS lost ground for the quarter and continue to be volatile. The Federal Reserve indicated they will not begin tapering yet, which has provided renewed market confidence for the time being, but the Fed will ease off at some point. The rush on equities is ongoing and the S&P 500 returns are extremely good for one and two year time periods. The rally has been robust, but will not continue. The debt load on the economy continues to be very large and Gross Domestic Product (GDP) has grown despite Fed action.

P/E ratios show small and midcap markets remain expensive, while emerging markets are currently inexpensive. Yields continue at historic lows, although interest rates spiked during the quarter on the U.S. 10-year Treasury note. S&P 500 volatility has dropped. The pension plans neared the $9 billion mark at quarter end, with 55% of assets in equities. Total performance for the 1, 3, 5-year periods all reflect the recent equity market rally. Private equity has not kept up with the recent rally, due in part to the lagging mark to market relative to strong liquid market equity returns. Comparative performance return rankings have improved over time and the 1, 3 and 5-year rankings look good. Mr. Sheets added the portfolio contains a slight underweight compared to peers of international equities, which underperformed domestic equities over the 3-year and quarter to date periods.

Ms. Gratsinger reviewed pension plan performance compared to the custom universe of peer groups with public fund holdings greater than $3 billion. Five year returns have yielded better return and less risk relative to the benchmark and comparable returns relative to peers, but with less risk. Over ten years performance has exceeded the benchmark with less risk and relative to peers performance has lagged modestly, with less volatility. Reviewing the investment pool comparative performance, the Domestic Equity Pool (MDEP) has shown improvement reflecting the effects of the recent restructuring. The Montana International Pool (MTIP) also shows positive returns. The Retirement Funds Bond Pool (RFBP) and Trust Funds Investment Pool (TFIP) have both outperformed the benchmark over the long term. The Real Estate Pool (MTRP) has taken longer to recover but is improving; however, performance is compared to the core only benchmark while the pool contains greater diversification. Core real estate has recovered first, but is expected to slow down. The Private Equity Pool (MPEP) continues to have good absolute returns.

Ms. Gratsinger reviewed comparative performance of equity holdings. All equities have performed well and MBOI has benefited from small and midcap overweight positions. Only three active managers trailed their benchmark for the quarter.

Mr. Sheets stated most funds in the peer comparisons contain an EAFE bias, while MTIP is based on developed and emerging markets. Any exposure to emerging markets has shown a drag on returns.

Ms. Gratsinger reviewed the Montana Domestic Equity Pool (MDEP). More than half of the pool is invested in passive assets, reducing tracking error.

Member Jack Prothero asked if there are particular managers showing cause for concern.

Ms. Gratsinger stated real estate managers are being monitored as well as a couple of international managers, but in general, active managers are doing well.

Senator Dave Lewis asked if funds like ours with negative cash flows and growing liabilities were a concern.

Ms. Gratsinger agreed that negative cash flow is not desirable and asset liabilities should be watched continually. However, the portfolio risk profile does not appear to need to be adjusted at this time.

INVESTMENT ACTIVITIES/REPORTS

Retirement System Asset Allocation Report

Mr. Cliff Sheets presented the asset allocation report for the nine pension funds for the quarter ending September 30, 2013. Domestic stocks were the primary driver of market returns for the quarter. The pension funds realized an increase in value of $390 million for the quarter. Total equities remained at 67.4% as $90 million in sales was offset by the strong showing of international stocks. Total private equity allocation decreased by .5% due to weaker relative returns and some sales. Net cash flow continues to be positive for private equity. Fixed income assets were down due mostly to dilution from stock appreciation, but returns were still positive. Despite $50 million in investments, fixed income still fell from 22.1% to 21.7%. The real estate allocation remained unchanged for the quarter. High levels of cash in Police and Firefighters' retirement systems are due to lump sum contributions received annually in September.

In summary, there were sales totaling $23 million out of the long term asset pools and a slight cash buildup. Teachers' Retirement System (TRS) had a onetime receipt of general fund cash and employer/employee contribution increases of 1% each, plus an influx of school district cash. The cash drag hurt performance slightly under current market conditions, although Police and Firefighters' did not suffer too badly from the incremental cash dilution. Comparisons of pension performance show PERS and TRS rankings in the top one-third vs. the State Street custom peer universe for calendar year to date and one year periods, in the top quartile for 3-years and in the middle of the pack for 5 and 7-year periods. Overall, general comparisons to peers are good, especially for more recent years. Mr. Sheets thanked the legislature for their efforts in shoring up the pension plans. He also thanked Ms. Chris Phillips for all her help on the cash flow model.

Montana Domestic Equity Pool (MDEP)

Mr. Rande Muffick reported on the Montana Domestic Equity Pool (MDEP) for the quarter ending September 30, 2013. Public stocks had a very strong quarter. The overweight positions of small and midcaps helped returns and the cash flow provided by reducing large cap stocks has contributed to the small and midcap overweight. Ten of the 13 active portfolio managers outperformed for the quarter. Rebalancing may be necessary going forward to allow staying within asset allocation ranges. The four new managers have been onboard for five months. Three out of the four managers have outperformed so far, and the fourth has performed better than would have been expected given recent market conditions.

Member Sheena Wilson asked if the market was in the midst of a bubble.

Mr. Muffick stated the market has undergone a long rally and a 5% correction is anticipated at some point.

Montana International Equity Pool (MTIP)

Mr. Muffick reported the Montana International Equity Pool (MTIP) has also performed strongly over the recent quarter. Emerging markets have done well and rallied through the quarter. After emerging markets trailed most of the year, both staff and managers have increased allocations over the last quarter.

The search is ongoing for international small cap and emerging market managers. Four managers are in the contract review phase, two each of small cap and emerging markets; funding is expected in the first quarter of the new year. Transactions should total approximately $120 million and will require three or four days for transitioning. New manager fundings will come from the emerging market index and from large caps.

Public Equity External Manager Watch List

Mr. Muffick stated there were no changes to the watch list this quarter; however, Hansberger and Alliance Bernstein have both shown improvement.

Responding to a question regarding the status of Alliance Bernstein from Member Jack Prothero, Mr. Muffick noted they are improving gradually, but holding a lot of distressed assets which have not done as well in the recent market has hindered improvement.

PUBLIC EQUITIES MANAGER WATCH LIST

November 2013

Manager	**Style Bucket**	**Reason**	**$ Invested (mil)**	**Inclusion Date**
Alliance Bernstein	International – LC Value	Performance	$108.6	August 2012
Hansberger	International – LC Growth	Performance	$114.7	May 2013

Fixed Income
Mr. Nathan Sax presented the Fixed Income overview and strategy. Interest rates rose in May and June reacting to Federal Reserve comments the central bank planned to begin cutting back on monthly bond purchases. However, after the September 17-18 Federal Reserve meeting, the decision was made to delay the start of tapering. Investors believe the earliest the Fed may initiate tapering will be early spring 2014. The U.S. 10-year Treasury peaked at a high of 3.0% at the start of September but fell back to 2.61% by September 30, 2013.

Fixed income assets are all within policy and sector ranges. Returns have suffered with the Barclays Capital Aggregate Index posting calendar year to date returns of -1.89 through September 30, 2013. Economic growth, the rate of inflation and hiring have slowed. Janet Yellen will replace Ben Bernanke as Federal Reserve chairman at the end of January when his term expires. The first concern for Ms. Yellen will be lowering the unemployment rate.

Reviewing the comparative performance for fixed income managers, Post Advisory has done exceptionally well. They remain on the watch list, but not due to performance, rather because of the retirement of founder Larry Post and corresponding changes in staff structure. High yield assets have done well and positioning at close to the top of the range has helped performance.

American West has been removed from the Below Investment Grade holdings list. A $20 million position was sold of the Department of Transportation lease-backed bond, in which had a large position, which acted to improve portfolio liquidity.

Short Term Investment Pool, State Fund Insurance & Treasurer's Fund Report
Mr. Rich Cooley gave an overview of the Short Term Investment Pool (STIP) for the quarter ending September 30, 2013. Market conditions changed little over the quarter. LIBOR rates have come down slightly. The STIP portfolio is within all guidelines for liquidity, diversification and average days to maturity, currently 47 days, compared to the policy maximum of 60 days. The STIP net yield is at 15-16 basis points. The STIP balance is down to $2.45 billion due to seasonal end of year factors.

Mr. Cooley reviewed the Treasurer's Fund. The fund totaled $971 million at September 30, 2013. Rates drifted up slightly during the quarter for one and 3-year maturities. Purchases for the quarter included $20 million of 3-year agencies with an expected return of 75-90 basis points. The fund allocation is within all policy limits.

Mr. Cooley presented an overview of the State Fund Insurance portfolio for the quarter ending September 30, 2013. Fund performance continues to be good, boosted in part by the nearly 12% equity allocation. Due to continued strong equity returns, $11 million in equity units were sold to maintain the client preference of a 12% maximum allocation to equities. The addition of core real estate in spring 2013 has provided diversification and improved overall performance. Total fixed income outperformed the benchmark by 17 basis points during the quarter and by 67 basis points over one year. Long term returns compared to the fixed income benchmark were +99 basis points for three years, +174 basis points over five years, and +53 basis points for the past ten years for the quarter ending September 30, 2013.

Private Asset Pool Reviews

Montana Private Equity Pool (MPEP)
Mr. Ethan Hurley presented the private equity report for the quarter ending June 30, 2013. Cash flow remained positive for the pool for the seventh quarter in a row reflecting the self-financing maturity of the program. The pool remains broadly diversified with a concentration on buyouts. Geographic exposure is mostly within North America. Allocation to Asia will continue to increase but it is unpredictable. Axiom Asia has committed to a small Asia buyout fund. Investments in fund of funds will continue to decrease over time, in accordance with the focus on direct investments.

Responding to questions from Members Satre and Prothero, Mr. Hurley explained the level of fund of funds will decrease gradually; it is not prudent to accelerate the process. Early stage venture capital is the most beneficial utilization of fund of funds, as that is the most difficult area to break into. There is an extra layer of privacy which restricts the flow of information. Performance is always helped by eliminating the extra level of fees involved with fund of funds. Staff is prudent when choosing a particular fund of funds to invest in and target cases where there is no direct access to a particular area of the market. European buyouts, for example, would not be chosen at this time, as direct access is available.

Mr. Cliff Sheets added we scaled back venture capital and fund of funds given their characteristic of a very long term commitment period and fund life which can be problematic; going forward, both will be a minimal asset. For Asia, there are successful prospects for direct investment opportunities and the strategy will continue to be very selective when it comes to fund of funds.

Mr. Hurley continued, the overall returns for the portfolio are comparable to last quarter at a net investment multiple of 1.47 and IRR of 12.47% since inception in 1988, levels higher than those of the State Street Private Equity Index benchmark. A separate survey of private equity conducted by CEM Benchmarking for a collection of 26 state plans as of 12/31/12 showed the Montana results were in the first quartile on both a multiple and IRR basis versus this peer group.

Member Prothero asked about the wide variations in vintage years vs. the Private Edge index. Mr. Sheets stated the last five years have been more volatile due to the J curve effect. A lot of commitments occurred in 2007 during the mega fund phenomenon when half of all our commitments were to distressed funds. He went on to note the return performance since 1995 puts MBOI near the top decile for net IRR and in the top quartile for investment multiple compared to peers in the CEM survey as of 2012.

Mr. Hurley reported three commitments were made since the last Board meeting; $25 million each to Pine Brook Capital Partners II, LP, and HCI Equity Partners IV, LP, respectively. An additional $5 million was committed to White Deer Energy II, LP through acquisition of a secondary LP interest.

Fund Name	Vintage	Subclass	Sector	Amount	Date
Pine Brook Capital Partners II, LP	2013	Growth Equity	Energy & Financial Services	$25M	9/16/13
White Deer Energy II, LP	2013	Buyout	Energy	$5M	9/13/13
HCI Equity Partners IV, LP	2013	Buyout	Diversified	$25M	9/6/13

Montana Real Equity Pool (MTRP)

Mr. Hurley presented the real estate report for the quarter ended June 30, 2013. The three commitments made since the last Board meeting were $25 million each to Molpus Woodlands Fund IV, LP and DRA Growth and Income Fund VIII, LP and a $30 million commitment to BPG Investment Partnership IX, LP. Molpus and DRA are both re-ups with known entities, BPG is a new manager for us.

Fund Name	Vintage	Subclass	Sector	Amount	Date
Molpus Woodlands Fund IV, LP	2013	Timberland	Diverse	$25M	9/6/13
DRA Growth and Income Fund VIII, LP	2013	Value-Add	Diverse	$25M	8/23/13
BPG Investment Partnership IX, LP	2012	Value-Add	Diverse	$30M	7/12/13

The portfolio is well diversified by strategy and geographic exposure and is balanced and diversified by property type. The portfolio is exposed 11% internationally, which is expected to decline over time. Performance was positive for the quarter, although net cash flows remain negative.

Partnership Focus List
There were no changes to the MPEP or MTRP Focus lists since the last Board Meeting.

Member Prothero inquired what time frame is reasonable to evaluate returns for a long term asset such as real estate.

Mr. Hurley stated generally a 3-5 year timeframe should be considered depending on the type of strategy and individual closed end funds have usually reached value at five years at which time exits in the fund should be evaluated.

Mr. Sheets added pool inception had a large J curve because of initial timing into the market. The allocation weighting started out at 1-2% of the pension portfolio and has increased to the current allocation of 9%.

University of Montana Operating Funds Policy Statement
Mr. Cliff Sheets reported staff met with University staff and discussed proposed changes to the policy statement. The policy revisions reflect current client preferences and the last policy revision was completed in 2002. The Board will manage 100% of the assets. Staff recommends approval of the revised policy.

> Member Jack Prothero made a motion to approve the revised University of Montana Operating Funds Policy Statement as presented. Member Sheena Wilson seconded. The motion passed 7-0. Members Gary Buchanan and Quinton Nyman were absent for the vote.

Recap and To Do List
The Board will meet via conference call in December to consider an additional loan submission from ADF International, Inc.

ADJOURNMENT

There being no further business, the meeting was adjourned at 4:51 PM.

Next Meeting
The next regular meeting of the Board will be February 25-26, 2014 in Helena, Montana.

Complete copies of all reports presented to the Board are on file with the Board of Investments.

BOARD OF INVESTMENTS

APPROVE: ______________________________
Mark Noennig, Chairman

ATTEST: ______________________________
David Ewer, Executive Director

DATE: ______________________________

MBOI:drc
1/22/14

MONTANA BOARD OF INVESTMENTS
DEPARTMENT OF COMMERCE
2401 Colonial Drive, 3rd Floor
Helena, Montana

MINUTES OF THE SPECIAL CONFERENCE CALL MEETING
December 9, 2013

BOARD MEMBERS PRESENT:
Mark Noennig, Chairman
Kathy Bessette
Gary Buchanan
Karl Englund
Jack Prothero
Marilyn Ryan
Jon Satre
Sheena Wilson

BOARD MEMBERS ABSENT
Quinton Nyman

LEGISLATIVE LIAISONS PRESENT:
Senator Dave Lewis
Representative Kelly McCarthy

STAFF PRESENT:
Geri Burton, Deputy Director
Dana Chapman, Board Secretary
David Ewer, Executive Director
Julie Flynn, Bond Program Officer
Herb Kulow, MCMB,
Portfolio Manager, In-State Loan Program

GUEST:
Webb Brown, CAE, President/CEO
Montana Chamber of Commerce

CALL TO ORDER

Board Chairman Mark Noennig called the special conference call meeting of the Board of Investments (Board) to order at 2:02 PM. As noted above, a quorum of Board members was present. All Board members and Representative Kelly McCarthy attended via telephone conference call. Senator Dave Lewis and staff attended the meeting in person.

Chairman Noennig asked for public comment. There was no public comment.

MONTANA LOAN PROGRAM – IN-STATE LOAN REQUEST

Mr. Herb Kulow presented one loan for Board consideration and approval. The loan is an extension of the previous infrastructure loan approved at the November 19, 2013 Board meeting to the City of Great Falls in the amount of $4,999,800 for 100 acres of land and infrastructure including a heavy steel manufacturing facility under construction by ADF International, Inc.

The loan under consideration is a participation loan from US Bank Great Falls (US Bank) to purchase equipment for the steel fabrication facility. MBOI participation loan amount is $2,735,552 (80%) and

US Bank amount is $638,888 (20%), for a total loan amount of $3,419,440. The borrower is ADF International, Inc. (International), the operating company for the heavy steel manufacturing facility located in Great Falls, Montana. The total purchase price of the equipment is approximately $4,409,440. Collateral will consist of a first lien on equipment. Additionally, the loan is backed by an Irrevocable Financial Letter of Credit (Letter of Credit), in an amount not to exceed $3,410,000 (U.S. dollars) which effectively transfers the payment risk to the issuer of the Letter of Credit which is the National Bank of Canada, Montreal (Bank) and acts almost the same as cash. Loan to value will be 79.1% using the equipment value.

Mr. Kulow explained the definition of an irrevocable letter of credit as a “guarantee of payment issued by a bank on behalf of a client as payment to be used as a last resort, should the client fail to fulfil a commitment.” It is proof of a buyer’s credit quality and repayment ability, and transfers the payment risk from the applicant (ADF International, Inc.) to the issuer (National Bank of Canada, Montreal). The Letter of Credit cannot be cancelled without written approval of the beneficiary, in this case, US Bank.

The Letter of Credit is for $3,410,000 and is set up on a one year automatic renewal with a final maturity date of December 15, 2023. The issuing bank can give 90 days’ notice prior to renewal that it will not be renewing. US Bank is including in its loan agreement a provision that if the National Bank of Canada cancels the Letter of Credit, it will constitute default and US Bank can demand payoff, so the Letter of Credit acts almost the same as cash.

US Bank Great Falls performed a credit analysis of the National Bank of Canada which determined a Moody’s rating of A1; a Standard & Poor’s rating of A- and a Fitch rating of A. US Bank is including a stipulation in its loan agreement that a drop in ratings by any of the aforementioned rating services will be considered an element of default and the Letter of Credit can be drawn on.

ADF International, Inc. is financially weak, which prompted US Bank to request the Letter of Credit. ADF should show a profit by the second year of operation.

Responding to Board member questions, Mr. Kulow clarified some details:

- The loan to value (LTV) of 79.1% is calculated using only the cost of the equipment, which serves as additional collateral to the Letter of Credit.
- Wells Fargo declined to finance the loan. They do not generally finance startups and the additional collateral of the Letter of Credit was not offered at that point in the process, nor did Wells Fargo request a Letter of Credit.
- After the Letter of Credit was offered, four Great Falls banks bid on the project and US Bank won the bid.
- ADF Group, Inc. is the Canadian parent company which is a public company traded on the Toronto Stock Exchange; they own 100% of ADF Group USA, Inc., a Delaware corporation, which in turn owns 100% of ADF International, Inc., a Florida corporation and ADF Steel, Inc., a New York corporation.
- The management team includes three children of Jacques Paschini, the original founder of the Canadian parent company, ADF Group, Inc. All have been part of the company since the early 1980’s. All three are on the board of the parent company, ADF Canada, Inc. and hold executive positions at the company; as such they will be involved in the operation of the Great Falls facility.
- There are no local investors and the company was not lured to the area due to local or State economic development incentives. The decision to set up the facility in Great Falls was determined to be advantageous to ADF International, Inc. for several reasons, including Great Falls’ work force, access to the oil sands in Alberta, Interstate, rail and air transportation, availability of 100 acres of land, to name a few.

- Thirty five local individuals have been hired by ADF International, Inc. to provide construction and equipment testing at the facility and will remain employees of the company after completion, which is expected to be by early 2014.
- A tour of the completed facility would certainly be available to interested staff and Board members.
- No further requests by ADF for loans are expected. The company is planning future projects such as a painting facility; however, it will be company funded.

Board Member Kathy Bessette made a Motion to approve the loan to ADF International, Inc. as presented. Member Sheena Wilson seconded the Motion. The Motion carried 8-0.

ADJOURNMENT

There being no further business, the special meeting was adjourned at 2:21 PM.

Next Meeting
The next regular meeting of the Board will be February 25-26, 2014 in Helena, Montana.

Complete copies of all reports presented to the Board are on file with the Board of Investments.

BOARD OF INVESTMENTS

APPROVE: ________________________________
Mark Noennig, Chairman

ATTEST: __________________________________
David Ewer, Executive Director

DATE: ____________________________________

MBOI:drc
1/2/14

Return to Agenda

Executive Director Reports

MEMORANDUM

Montana Board of Investments
Department of Commerce
2401 Colonial Drive, 3rd Floor
Helena, MT 59601 (406) 444-0001

To: Members of the Board

From: David Ewer, Executive Director David Ewer

Date: February 25, 2014

Subject: Executive Director Reports

A. Follow up from the Previous Board meeting
   a. The work plan now incorporates specifically two anticipated presentations from RV Kuhns regarding education.
   b. The special Board meeting regarding the additional loan to ADF occurred on Dec. 9th.

B. Quarterly Cost Report - included in this Tab

C. Staff Outreach Efforts for 2013

D. Performance Audit

The legislative auditor's performance audit and staff's letter in response are included within this Tab and a separate memorandum on this matter is included in the Tab containing specific staff recommendations for individual committee and full Board consideration. **These recommendations will be presented first to the Board's Audit Committee.**

E. Continuity Resolution for Chief Investment Officer Position

The Board currently has a resolution providing for continuity in the absence of the executive director. Staff believes that such a resolution should also be adopted for continuity for the Chief Investment Officer position. Included in this Tab is a draft resolution and recommended changes in the Board's Governance Policy **which will be first brought to the H. R. committee for consideration.** The main points of the resolution are:

   a. The Executive Director would serve as the acting CIO, however…
   b. In matters of selection/termination of investment managers, the relevant portfolio manager would serve as the CIO to preserve the Board's checks and balances;
   c. The Executive Director can but only after consultation with the Chair designate a temporary deputy chief investment officer (if the absence of the CIO is anticipated to be lengthy);
   d. The Executive Director is empowered to best prepare for this contingency (senior investment staff have already been tasked to meet regularly in order to stay "best prepared").

The suggested change to the Governance Policy is to add the following continuity language:

Chief Investment Officer - The Chief Investment Officer is empowered by the Board to serve as the principal staff person responsible for overseeing the investment activities under the Board's jurisdiction in compliance with the Board's policies. Specific duties include managing asset exposures to stay within approved asset allocation ranges, recommending new asset types, and overseeing all aspects of the investment process including but not limited to rebalancing assets, hiring and terminating external investment managers, setting appropriate due diligence standards, overseeing the review and any revisions of investment policies, and providing staff investment reports to the Board. In addition, the Chief Investment Officer will periodically report to the pension boards on issues including a review of asset allocation, investment performance, a comparison to public fund peers, and investment strategy and objectives. The Chief Investment Officer supervises staff as assigned by the Executive Director and delegates duties to them as necessary to achieve the various investment objectives of the funds under management of the Board of Investment, consistent with fiduciary best practices and state laws. Unless there is a Board motion adopted for providing instructions to the contrary, continuity for the Chief Investment Officer is governed by Resolution 234.

F. Reclassification of Senior Loan Portfolio Manager Position

The Board's Senior Loan Portfolio Manager has informally announced that he will retire sometime in 2014. This position is currently an exempt position. Hiring this position under the state's broadband classification pay plan should provide for a competitive salary. This would free up an exempt position but the Board would lose one classified position. Staff believes the benefits of this move outweigh the negatives and will be seeking the Human Resource Committee's approval.

G. Organizational Chart

H. Code of Ethics

The following language is directly taken from the Board's ethics policy, which is mandated through its governance policy, which says, in part:

The Board adopts the following Code of Ethics (Code) for its members and staff to: ensure that the conduct of members and staff conform to state law, that potential conflicts of interest are reduced or eliminated and; that the Board's fiduciary reputation is not damaged in perception or in fact. All Board members and staff shall sign the Code annually and all new members and staff shall sign when appointed or hired. By signing the Code, each Board member and staff pledges to the best of his/her ability to comply with all provisions of the Code.

I. Annual Report and Financial Statements

The Board met its statutory requirement to submit its annual report and financial statements by December 31.

J. Custodial Bank Contract

Staff working with RV Kuhns and state administration officials has been working on a RFP; a verbal update will be given under this agenda item.

Total Fiscal Year 2014 Management Fees (Unaudited)

Board Fees

Pool	Q1 9/30/2013	Q2 12/31/2013	Change[2]	FY 2014 to Date
Retirement Funds Bond Pool (RFBP)	$ 168,798	$ 168,798	$ -	$ 337,596
Trust Funds Investment Pool (TFIP)	111,288	111,288	-	222,576
Montana Domestic Equity Pool (MDEP)	153,237	153,237	-	306,474
Montana International Equity Pool (MTIP)	137,121	137,121	-	274,242
Montana Private Equity Pool (MPEP)	245,937	245,937	-	491,874
Montana Real Estate Pool (MTRP)	148,080	148,080	-	296,160
Short Term Investment Pool (STIP)	137,103	137,103	-	274,206
All Other Funds (AOF) Investments Managed	189,498	189,498	-	378,996
Total	**$ 1,291,062**	**$ 1,291,062**	**$ -**	**$ 2,582,124**

[1] Board Fees: No change.

Custodial Bank Fees

Pool	Q1 9/30/2013	Q2 12/31/2013	Change[2]	FY 2014 to Date
Retirement Funds Bond Pool (RFBP)	$ 49,446	$ 49,446	$ -	$ 98,892
Trust Funds Investment Pool (TFIP)	29,364	29,364	-	58,728
Montana Domestic Equity Pool (MDEP)	152,457	152,457	-	304,914
Montana International Equity Pool (MTIP)	34,236	34,236	-	68,472
Montana Private Equity Pool (MPEP)	29,640	30,090	450	59,730
Montana Real Estate Pool (MTRP)	22,047	22,047	-	44,094
Short Term Investment Pool (STIP)	50,982	50,982	-	101,964
All Other Funds (AOF) Investments Managed	34,728	34,728	-	69,456
Total	**$ 402,900**	**$ 403,350**	**$ 450**	**$ 806,250**

[2] Custodial Fees: Change attributed to Private Edge manager fee.

External Manager Fees

Pool		Q1 9/30/2013		Q2 12/31/2013		Change[2]		FY 2014 to Date
Retirement Funds Bond Pool (RFBP)	$	377,181	$	383,412	$	6,231	$	760,593
Trust Funds Investment Pool (TFIP)		412,924		463,644		50,720		876,568
Montana Domestic Equity Pool (MDEP)		1,981,664		2,107,504		125,840		4,089,168
Montana International Equity Pool (MTIP)		720,792		808,297		87,505		1,529,089
Montana Private Equity Pool (MPEP)		4,024,147		3,907,771		(116,376)		7,931,918
Montana Real Estate Pool (MTRP)		1,321,547		1,541,096		219,549		2,862,643
Short Term Investment Pool (STIP)		-		-		-		-
All Other Funds (AOF) Investments Managed		81,251		157,319		76,068		238,570
Total	**$**	**8,919,506**	**$**	**9,369,043**	**$**	**449,537**	**$**	**18,288,549**

[3] RFBP: No significant changes.

TFIP: The increase reflects a core real estate addition made on July 1, 2013.

MDEP: Fees are higher due to the hiring and funding of four new small and mid cap asset managers for the quarter ended June 30, 2013 and a rise in the market values.

MTIP: Fees are higher due to increased market values.

MPEP: Fees are lower due to fee structures associated with aging portfolios for select managers and heavy distributions. Because reported fees are subject to a lag, quarterly fee comparisons are less meaningful.

MTRP: The fee increase reflects higher market values of core funds due to positive returns and fees associated with new commitments. Because reported fees are subject to a lag, quarterly fee comparisons are less meaningful.

AOF: Increase in manager fees due to the State Fund's additional core real estate investment on July 1, 2013.

Total Fees

Pool		Q1 9/30/2013		Q2 12/31/2013		Change[2]		FY 2014 to Date
Retirement Funds Bond Pool (RFBP)	$	595,425	$	601,656	$	6,231	$	1,197,081
Trust Funds Investment Pool (TFIP)		553,576		604,296		50,720		1,157,872
Montana Domestic Equity Pool (MDEP)		2,287,358		2,413,198		125,840		4,700,556
Montana International Equity Pool (MTIP)		892,149		979,654		87,505		1,871,803
Montana Private Equity Pool (MPEP)		4,299,724		4,183,798		(115,926)		8,483,522
Montana Real Estate Pool (MTRP)		1,491,674		1,711,223		219,549		3,202,897
Short Term Investment Pool (STIP)		188,085		188,085		-		376,170
All Other Funds (AOF) Investments Managed		305,477		381,545		76,068		687,022
Total	**$**	**10,613,468**	**$**	**11,063,455**	**$**	**449,987**	**$**	**21,676,923**

Staff Outreach for 2013

INTERCAP – Louise Welsh and Julie Flynn

- Presented and staffed booth at the Montana Conference of Education Leadership (MCEL) conference held in Billings. The presentation included what INTERCAP has to offer including the different types of borrowing available to school districts per statute. Also partnered with DEQ staff to discuss energy conservation advantages/pit falls and how INTERCAP can finance those projects.

- Attended and staffed booth at the Montana Rural Water Systems conference held in Great Falls.

- Attended and staffed booth at the Montana Association of Counties (MACo) conference held in Helena.

- Attended and staffed booth at the Montana League of Cities and Towns conference held in Helena.

- Attended and staffed booth at the Montana Fire Chiefs Association conference held in Missoula.

- Presented an overview of INTERCAP at two different Water, Wastewater and Solid Waste Action Coordinating Team (W_2ASACT) workshops held in Great Falls and Helena.

- Annually mail or email the new INTERCAP interest rate to all cities/towns, counties, school districts, universities and fire, water and sewer districts.

INVESTMENT STAFF

- Attend regular quarterly meetings with State Fund management.

- Annual presentation to State Fund Board.

- Annual presentations to Teachers' Retirement System and Public Employees' Retirement System

- Met with University of Montana officials on investment profile and objectives

IN-STATE LOAN PROGRAM – Herb Kulow, MCMB

- Attended the Big Sky Economic Development (BSEDA) annual meeting including meeting with several lenders who attended the meeting. Presented at the BSEDA annual meeting.

- Numerous meetings with businesses interested in moving or expanding in Montana, providing a summary of the In-State Loan Program. Most meetings were held with the Governor's Office of Economic Development.

- Met with the SBA twice during the year and made a presentation to businesses concerning access to capital sponsored by the SBA.

- Traveled to Sidney to inspect a property presented to MBOI for participation consideration. Also visited with the local chamber of commerce and visited a housing complex, which was in its construction phase.

- Ongoing outreach via phone calls made and received when talking to state lenders who are interested in participating in the In-State Loan Program.

MEMORANDUM

Montana Board of Investments
Department of Commerce
2401 Colonial Drive, 3rd Floor
Helena, MT 59601 (406) 444-0001

To: Members of the Board

From: David Ewer, Executive Director David Ewer

Date: February 25, 2014

Subject: Staff Recommendations regarding Legislative Audit Performance Audit

Background

Legislative auditors have performed and completed their performance audit on the Board, limiting their scope to investment-related activities of the Board versus the additional Board missions of economic development and municipal finance. The final report along with the staff's unofficial response, which is part of the final report, accompanies the Board's February 2014 meeting packet.

The report made six recommendations. Staff after receiving guidance from several Board members responded by concurring with four of the recommendations and not concurring on one. On the audit's most significant recommendation regarding changing the statutory make-up of the Board, staff offered an opinion but respectfully did not take a concur/non-concurrence position, given that the report's recommendation is directed to the legislature, not the Board.

The four areas where staff concurred are:

1. Board Education
2. Asset Allocation
3. Committee charter and other Board directives to its committees
4. Public Equity Proxies (votes)

Staff recommends the following changes in various Board policies for items 1-3. With respect to 'Public Equity Proxies' this matter is scheduled to be addressed at the Board's May 2014 meeting and the Board's review, deliberation and possible action in May should satisfy this audit recommendation.

Staff Recommendations for Board Action

Staff recommends that the Board adopt the following changes (shown in red) to various Board policies. All of these suggested changes will be first presented to the Board's Audit committee for review and consideration; final recommended language is subject to their changes.

Staff Recommendation #1 (related to 'education')

Change Governance Policy; add a new item #10 under section II

“Systematic Work and Education Plan - To keep the Board and the public informed on a systematic basis on the Board’s programs, missions, and responsibilities, the Executive Director shall submit a Systematic Work and Education Plan formatted as agenda topics for the upcoming Board meetings for each calendar year rotating subject matters so that all are covered within a 24-month period to educate, review and in all respects to help Board Members fulfill their fiduciary role.”

Staff Recommendation #2 (related to asset allocation)

Change Governance Policy under Asset Allocation

14. Asset Allocation - The Board, as the fiduciary of the Unified Investment Program, is responsible for establishing the investment parameters of the Unified Investment Program. The Board has the authority to allocate portfolios to any asset class in the proportions it considers prudent, subject to such limitations as are contained in law and the Constitution. When the law or Constitution precludes certain investments, the Board is responsible for allocating portfolios to asset classes within the investment types permitted by law. Asset allocation decisions may be made by the Board only in a public meeting. ***The authority to establish asset allocation ranges and targets rests solely with the Board and may not be delegated to staff. The Board shall review and affirm pension allocation ranges at least annually.***

Staff Recommendation #3 (related to Board committees)

3a. Change Audit Committee Charter under ‘Other Responsibilities’

- Perform other activities related to this charter as requested by the Board.
- Institute and oversee special investigations as needed.
- Review and assess the adequacy of the committee charter annually, requesting board approval for proposed changes.
- Confirm annually that all responsibilities outlined in this charter have been carried out.
- ~~Evaluate the committee’s and individual members’ performance on a regular basis.~~

3b. Pertaining to Loan Committee ‘Committee Duties and Responsibilities’

The following are the general duties and responsibilities of the Committee:

- ♦ Review staff recommendations to approve Coal Tax Trust loans, INTERCAP loans, and MFFA bond enhancement greater than $1.0 million and up to $5.0 million and suggest revisions or modifications to the staff recommendations as necessary.
- ♦ Concur or not concur with staff recommendations as revised or modified by Committee Members.
- ♦ Review staff recommendations to approve Coal Tax Trust loans, INTERCAP loans, and MFFA bond enhancement in excess of $5.0 million and recommend to the full Board modifications to and approval of the staff recommendations.
- ♦ Review staff recommendations to approve the issuance of Municipal Finance Consolidation Act bonds and the purchase of tendered bonds that have not been remarketed and recommend to the full Board modifications to and approval of the staff recommendations.
- ♦ Provide, when necessary and appropriate, an appeals function for lenders and borrowers whose loan applications have been disapproved by staff.

- Review staff-recommended revisions to the various loan program policies/applications and recommend to the full Board the approval, denial, or modifications of such revisions.
- When necessary and prudent, recommend to the full Board the waiver of certain loan policy provisions, as long as such waiver is limited to the merits of an individual loan application and is considered by the Committee to be in the public interest.
- Advise the Executive Director and the loan and bond program staff ~~Assistant Investment Officer~~on the setting of interest rates where permitted by law.
- Consult with the Executive Director and the loan and bond program staff~~AIO~~ on portfolio risk and loan parameters.
- Advise the Executive Director on the job performance of the loan and bond progam staff~~AIO~~.

3c. Pertaining to the Human Resource Committee

Under Committee Duties and Responsibilities

- ~~Prepare and issue the evaluations and reports required under "Committee Reports" below.~~

Under Committee Reports

The Committee shall produce the following reports and provide them to the Board.

- ~~An annual Report of the Human Resources Committee on exempt staff compensation.~~

- ~~An annual performance evaluation of the Committee comparing the performance of the Committee with the requirements of this charter. The performance evaluation should also recommend to the Board any changes to this charter deemed necessary or desirable by the Committee. The performance evaluation by the Committee shall be conducted in such manner as the Committee deems appropriate. The report to the Board may take the form of an oral report by the chairperson of the Committee or any other member of the Committee designated by the Committee to make this report.~~

- ~~A written summary of the actions taken, recommendations and decisions made by the Committee, which shall be presented to the Board at the next Board meeting following the action/decision.~~

(New Language)

- The Committee will keep the Board informed on a timely basis either verbally or in writing on all matters related to its duties and purpose. The Committee has the discretion to keep specific personnel matters within the Committee or, if required by the Board, to report on any such matter in Executive Session of the Board.

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I. PURPOSE

One of the purposes of a public investment board Governance Manual (Manual) is to clearly spell out the fiduciary responsibilities of the Montana Board of Investments (Board) as an entity and how those responsibilities, if any, are delegated to staff to carry out the Board's mission on a day to day basis. State law assigns to Board members the fiduciary responsibility of managing the Unified Investment Program and gives the Board the authority to hire staff as it deems necessary. Because the fiduciary responsibility ultimately lies with the Board it is important that the authority and roles of the Board as an entity and Board staff be clearly defined. Board staff has only those powers specifically delegated to them by the Board as specified in this Manual. This Manual shall be published on the Board's web site and may only be revised by the Board at a public meeting. Staff may update Board membership rosters as necessary.

II. BOARD MEMBER AUTHORITIES, DUTIES, AND ROLES

1. General Duties Prescribed by Law

A) The Unified Investment Program - The Montana Constitution requires that the Legislature provide for a Unified Investment Program for public funds. Section 17-6-201, MCA established the Unified Investment Program, created the Montana Board of Investments (the "Board") and gave the Board sole authority to invest state funds in accordance with state law and the state constitution. State law requires that the Board operate under the "prudent expert principle," defined as: 1) discharging its duties with the care, skill, prudence, and diligence that a prudent person acting in a like capacity with the same resources and familiar with like matters exercises in the conduct of an enterprise of a like character with like aims; 2) diversifying the holdings of each fund to minimize the risk of loss and maximize the rate of return; and 3) discharging its duties solely in the interest of and for the beneficiaries of the funds managed.

B) Economic Development Programs - In addition to managing the Unified Investment Program, the Legislature assigned to the Board the responsibilities of managing several loan programs.

2. Board Membership - The Board is comprised of nine voting members appointed by the Governor as prescribed in Section 2-15-124, MCA, subject to confirmation by the state Senate and comprised of the following:

- One member from the Public Employees' Retirement Board;
- One member from the Teachers' Retirement Board; and
- Seven members representing the financial community, small business, agriculture, and labor.

The Board also has two non-voting legislative liaisons, from different political parties, comprised of the following:

- One liaison member appointed by the President of the Senate; and
- One liaison member appointed by the Speaker of the House.

The Board is allocated to the Department of Commerce for administrative purposes as prescribed in Section 2-15-121, MCA. The following members have been appointed to the Board for a four-year term and confirmed by the State Senate:

Member	**Location**	**Term Expires**
Mark Noennig – Chairperson	**Billings**	**01/01/2017**
Kathy Bessette	**Havre**	**01/01/2017**
Sheena Wilson	**Helena**	**01/01/2017**
Karl Englund	**Missoula**	**01/01/2015**
Gary Buchanan	**Billings**	**01/01/2015**
Quinton Nyman	**Helena**	**01/01/2015**
Jon Satre	**Helena**	**01/01/2015**
Marilyn Ryan	**Missoula**	**01/01/2017**
Jack Prothero	**Great Falls**	**01/01/2017**

3. **Board Chairperson -** As prescribed in §2-15-124, MCA the Governor shall designate the Chairperson, whose duty is to ensure that the Board operates consistent with state law, state rules, and Board policies. The Chairperson may make and second motions and vote. The Chairperson shall review and sign all meeting minutes and all resolutions approved by the Board. The Chairperson may appoint a Vice Chairperson to preside in his/her absence.

4. **Code of Ethics -** The Board shall create and adhere to a Code of Ethics for its members and staff. The Code shall be designed to ensure that Board members and Board staff have no conflicting interests that would harm the integrity of the Board, harm the clients for whom the Board invests funds, or interfere with the Boards fiduciary responsibility. The Code approved by the Board is attached as **Appendix B**.

5. **Governing Law -** The Board shall maintain and update as necessary a written and electronic manual of all its pertinent governing laws and shall post the manual on its website for public access.

6. **Quorum and Voting -** A majority of the Board membership (five members) constitutes a quorum to do business. A favorable vote of at least a majority of all members (five members) of the Board is required to adopt any resolution, motion, or other substantive decision, as prescribed in §2-15-124 MCA. For example, if only five members are present, all five members must approve a substantive motion.

7. **Board Meeting Frequency -** The Board meets quarterly and is subject to the call of the Chairperson if additional meetings are required. The frequency of Board meetings is subject to change at the direction of the Board.

8. **Notice of Meetings -** All meetings of the Board must be open to the public and noticed at least 48 hours prior to the meeting. A meeting may only be closed when the demands of individual privacy clearly exceed the merits of public disclosure and the Chairperson may not close the meeting without first stating the rationale for such closure.

9. **Meeting Agendas -** Meeting agendas are prepared by the Executive Director in consultation with the Chairperson. The Board may not take action on any substantive matter unless the matter is scheduled on the agenda. The meeting notice and the meeting agenda shall be posted on the Board's web site.

10. **Systematic Work and Education Plan -** To keep the Board and the public informed on a systematic basis on the Board's programs, missions, and responsibilities, the Executive Director shall submit a Systematic Work and Education Plan formatted as agenda topics for the upcoming Board meetings for each calendar year rotating subject matters so that all are covered within a 24-month period to educate, review and in all respects to help Board Members fulfill their fiduciary role.

~~10~~11. **Public Participation** - Section 2-3-103, MCA provides that the agenda for Board meetings must include an item allowing public comment on any public matter that may or may not be on the agenda and that is within the jurisdiction of the Board. The Board may not take substantive action on any matter discussed unless specific notice of that matter is included on an agenda and the public is provided an opportunity to comment on that matter. A letter from the Governor expressing the importance of compliance with this law is attached as **Appendix A**.

~~11~~12. **Committee Creation** - The Board may:

A) Establish committees as necessary to conduct its business and charters shall be adopted for each committee describing the role, scope, and powers of the committee and the responsibilities of committee members.

B) The Board Chairperson may appoint and remove committee members. The Board has created an Audit Committee, a Loan Committee, and a Human Resources Committee and approved a charter for each. The charters are attached as **Appendices C**, **D**, and **E**.

C) All Committee Meetings must be open to the public and noticed on the Board's web site at least 48 hours prior to the meeting.

Current members of the committees are:

Audit	Loan	Human Resource
Jon Satre, Chairperson	Jack Prothero, Chairperson	Karl Englund, Chairperson
Gary Buchanan	Kathy Bessette	Quinton Nyman
Sheena Wilson	Gary Buchanan	Jack Prothero
		Marilyn Ryan
		Jon Satre

~~12~~13. **Adoption of Resolutions** - All resolutions committing the Board to issue bonds either directly or as a conduit issuer; or to enhance bonds issued by others as authorized by law must be approved by the Board at a public meeting and signed by the Chairperson and the Executive Director.

~~13~~14. **Selection of Custodial Bank and Investment Consultant** - While this Governance Manual delegates general contracting authority to the Executive Director, the Board reserves the right and the authority to make the final selection of the Custodial Bank and the Investment Consultant after which the Executive Director shall negotiate a contract.

~~14~~15. **Asset Allocation** - The Board, as the fiduciary of the Unified Investment Program, is responsible for establishing the investment parameters of the Unified Investment Program. The Board has the authority to allocate portfolios to any asset class in the proportions it considers prudent, subject to such limitations as are contained in law and the Constitution. When the law or Constitution precludes certain investments, the Board is responsible for allocating portfolios to asset classes within the investment types permitted by law. Asset allocation decisions may be made by the Board only in a public meeting. ***The authority to establish***

asset allocation ranges and targets rests solely with the Board and may not be delegated to staff. ***The Board shall review and affirm pension allocation ranges at least annually.***

~~15~~16. **Administrative Rules –** The Board has rule-making authority under state law. Administrative rules are regulations, standards or statements of applicability that implement, interpret, or set law or policy. Administrative rules can also describe the organization, procedures or practice requirements of the Board. ***The authority to revise Board Administrative Rules may not be delegated to staff.*** A list of Board Administrative Rules is attached as **Appendix K**.

~~16~~17. **Investment Policy Statements -** The Board shall create, maintain, and revise as necessary Investment Policy Statements (Statements) for each separate account it manages. The Statements shall cite the law establishing the account if such law exists, the permissible investments authorized by law, and establish an investment range for each of the permissible investments. The Board shall review such policies at least annually or more frequently at the request of Board staff. Statements may only be revised in a public meeting. All Statements shall be posted on the Board's web site for review by the public. ***The authority to approve Investment Policy Statements may not be delegated to staff.*** A list of Investment Policy Statements is attached as **Appendix K**.

~~17~~18. **Coal Tax Trust Loan Policies -** The Board shall create loan policies for each of the Coal Tax Trust loan programs assigned to it by law. The policies shall be based on the law creating the programs and may be revised from time to time as necessary to accommodate changes in the law or to enhance or clarify the programs. Substantive policy revisions may be made only by the Board at a public meeting. All loan policies shall be posted on the Board's web site. ***The authority to substantively revise Coal Tax Trust Loan Polices approved by the Board may not be delegated to staff.*** A list of Coal Tax Trust Loan Policies is attached as **Appendix K**.

~~18~~19. **Bond Program Policies -** The Board shall create policies for its various Bond Programs assigned to it by law. The policies shall be based on the law creating the programs and may be revised from time to time as necessary to accommodate changes in the law or to enhance or clarify the programs. Substantive policy revisions may be made only by the Board at a public meeting. All policies shall be posted on the Board's web site. ***The authority to substantively revise Bond Program Policies approved by the Board may not be delegated to staff.*** A list of Bond Program Policies is attached as **Appendix K**.

~~19~~20. **Interest Rate Setting Process/Methodology -** The Board shall establish and approve an interest rate setting process and methodology for loan programs for which it has discretion to set rates. Staff shall utilize the approved process and post the rates weekly on the Board's web site. ***The authority to revise interest rate setting processes and/or methodologies approved by the Board may not be delegated to staff.***

~~20~~21. **Class Action Litigation Participation -** The Board shall adopt, maintain, and revise as necessary a process and policy to ensure that it participates in all class action litigation to which it is entitled. The process and policy adopted by the Board is attached as **Appendix F**.

~~21~~22. **Budget -** The Executive Director shall prepare the Board's budget and staffing level recommendations for Board review and approval. After Board approval the budget is submitted to the Department of Commerce for approval and then to the Governor's Office of Budget and Program Planning for final approval. The Board's budget is funded from two revenue sources.

A) The Investment Program is funded by fees charged the Board's clients. Because the Board's clients are state agencies, the Legislature sets the maximum fee the Board may charge which is then allocated by Board staff to all Board clients. The Board's methodology used to allocate charges to its clients is audited by the Legislative Auditor.

B) The Bond Program is funded by the "spread" between the interest paid on the bonds sold and the interest on loans made from the bond proceeds. The spread may be no greater than 1.5 percent. Because the Bond Program's clients are primarily non-state agencies, the Legislature does not set a maximum fee the Board may charge.

~~22~~23. **Board Staff -** The Board appoints the Executive Director who has general responsibility for selection, management, and the job performance of Board staff. The Board also appoints the Chief Investment Officer. The Board assigns the duties and sets the salaries of eight staff - the Executive Director, Chief Investment Officer, and six investment professional staff. The Board's functional organization chart is attached as **Appendix G**

III. DELEGATION OF AUTHORITY TO STAFF

The Board delegates to its the Executive Director and the Chief Investment Officer the following day to day duties required to carry out the Board's mission.

1. **Executive Director** - The Executive Director is empowered by the Board to administratively supervise all Board staff and to delegate responsibilities and work assignments as necessary, to authorize expenditures, and to sign any and all documents required to conduct Board business, unless there are specific written policies or instructions from the Board to the contrary. These documents include, but are not limited to vendor contracts, commitments to investment managers, invoices, official letters detailing the position of the Board on any matter, resolutions approved by the Board, leases for Board owned buildings, authorizations to renovate and repair Board owned buildings, staff time sheets, and staff job descriptions. In exercising the delegated authority, the Executive Director shall provide the Board with the information and reports necessary for the Board to fulfill its fiduciary duty in monitoring and reviewing the actions of the Board staff and operations.

2. **Deputy Director** - To ensure continuity the Deputy Director is empowered by the Board to carry out the duties of the Executive Director in his/her absence unless there are specific written policies or instructions from the Board to the contrary. The Executive Director shall establish a written protocol to ensure continuity in his/her absence and such protocol was approved in **Resolution 218** and attached hereto as **Appendix I**.

3. **Chief Investment Officer** - The Chief Investment Officer is empowered by the Board to serve as the principal staff person responsible for overseeing the investment activities under the Board's jurisdiction in compliance with the Board's policies. Specific duties include managing asset exposures to stay within approved asset allocation ranges, recommending new asset types, and overseeing all aspects of the investment process including but not limited to rebalancing assets, hiring and terminating external investment managers, setting appropriate due diligence standards to be followed in the selection of any new external managers, overseeing the review and any revisions of investment policies, and providing staff investment reports to the Board. In addition, the Chief Investment Officer will periodically report to the pension boards on issues including a review of asset allocation, investment performance, a comparison to

public fund peers, and investment strategy and objectives. The Chief Investment Officer supervises staff as assigned by the Executive Director and delegates duties to them as necessary to achieve the various investment objectives of the funds under management of the Board of Investment, consistent with fiduciary best practices and state laws. Unless there is a Board motion adopted for providing instructions to the contrary, continuity for the Chief Investment Officer is governed by Resolution 234.

4. Operations Delegation - The Executive Director is responsible for all day-to-day operations of the Board and may delegate as necessary but remaining in specific compliance with this Governance Policy. As an agency head, the Executive Director has all powers and authority normally vested in similar positions in other state agencies to include, but not be limited to, the hiring and firing of non-exempt staff, and the commitment of funds necessary for the efficient conduct of Board business. Exempt staff may only be terminated upon Board Approval. In carrying out these duties, the Executive Director shall ensure compliance with Board policies and directives, as well as applicable state and federal laws and regulations.

5. Communications Delegation - The Executive Director shall serve as the exclusive spokesperson for the Board when communicating with the Legislature, the Governor, the public, and the media, unless the Board Chairperson determines that, in certain situations, it would be more appropriate for the Chairperson or a selected Board Member to serve as the spokesperson.

6. Investment Manager Contracts - The Board in discharging its duties under the Montana Constitution and the Unified Investment Program (the "Program") enters into various contracts. For those contracts that are fundamental in enabling the Board to invest public funds and satisfy its legal duty under the Program, including its responsibility to "determine the type of investment to be made" (17-6-201 (5)(c), M.C.A.), the Board reserves to itself the sole discretion of entering into such contracts in compliance with its constitutional and statutory mandate. The Board delegates and directs the following:

- The Executive Director and the Chief Investment Officer are authorized jointly to contract for investment manager services and if deemed appropriate, terminate them.
- However, the Chief Investment Officer is authorized to have the final decision on external investment managers.
- Provided that, the Executive Director may be a part of any negotiation and at a minimum sign all contracts for investment manager services.
- And further provided that the Board's Legal Counsel review and sign all investment management contracts and review all other investment-related service contracts as the Executive Director or Chief Investment Officer deem necessary or advisable.
- All new investment manager contracts, commitments, and terminations along with sufficient other related information, and in particular, alternative investment managers and their key terms of the fund, shall be reported to the Board at its next scheduled meeting.

7. All Other Contracts - For all contracts not specifically investment manager contracts, such contracts both competitive and sole source, shall be processed according to the State's procurement and contracting laws. The Executive Director is authorized to negotiate and enter into all contracts necessary to carry out the Board's mission without advance approval of the Board, except for contracts with the Board's Custodial Bank and Investment Consultant. The Board shall approve the selection of the Custodial Bank and the Investment Consultant after which the Executive Director shall negotiate contracts with the firms.

A Report
to the
Montana
Legislature

Performance Audit

State Investment Management and Governance Practices

Montana Board of Investments

January 2014

Legislative Audit
Division

12P-10

Performance Audits

Performance audits conducted by the Legislative Audit Division are designed to assess state government operations. From the audit work, a determination is made as to whether agencies and programs are accomplishing their purposes, and whether they can do so with greater efficiency and economy.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Members of the performance audit staff hold degrees in disciplines appropriate to the audit process.

Performance audits are performed at the request of the Legislative Audit Committee which is a bicameral and bipartisan standing committee of the Montana Legislature. The committee consists of six members of the Senate and six members of the House of Representatives.

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January 2014

The Legislative Audit Committee
of the Montana State Legislature:

This is our performance audit of the management and governance practices at the state's Board of Investments. This report presents audit findings and includes recommendations addressing the qualifications required for board membership and adopting policies to ensure operational standards are maintained on an ongoing basis. A written response from the Board of Investments staff is included at the end of the report.

We wish to express our appreciation to Board of Investments officials and staff for their cooperation and assistance throughout the audit.

Respectfully submitted,

Tori Hunthausen, CPA
Legislative Auditor

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Appointed and Administrative Officials

			Term Expires
Montana Board of Investments	Mark Noennig, Chairman	Billings	2017
	Kathy Bessette	Havre	2017
	Gary Buchanan	Billings	2015
	Karl Englund, Vice Chair	Missoula	2015
	Quinton Nyman	Helena	2015
	Jack Prothero	Great Falls	2017
	Marilyn Ryan	Missoula	2017
	Jon Satre	Helena	2015
	Sheena Wilson	Helena	2017
	David Lewis, Senate Liaison		
	Kelly McCarthy, House of Representatives Liaison		
Administrative Officials	David Ewer, Executive Director		
	Geri Burton, Deputy Director		
	Cliff Sheets, Chief Investment Officer		

For additional information concerning the Montana Board of Investments, contact:

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Montana Legislative Audit Division

Performance Audit
State Investment Management and Governance Practices
Montana Board of Investments

January 2014 | 12P-10 | Report Summary

The Montana Board of Investments provides effective oversight of over $15 billion in assets; strengthening the credentials and qualifications of Board of Investments members and making other changes in management and governance practices would improve the Board of Investments' ability to manage the large, complex assets under its care.

Context

In 1972, Montana voters ratified a new constitution that directed the legislature to provide for a Unified Investment Program. This program includes responsibility for investing state pension moneys and public funds. The Montana Board of Investments (board) as it exists today is a product of this constitutional mandate, which resulted in all the assets of the state's retirement systems, and those of other state and local government agencies, being invested through a single program. Today the board is responsible for management of over $15 billion in assets on behalf of the state's pension funds and state and local government agencies.

During our review, we determined the qualifications for citizens appointed by the Governor to the board have not changed since the 1980s. Meanwhile, the institutional investing arena has grown exponentially more complex over that time. Further, many states have more stringent experience and education requirements for the people with fiduciary responsibility for investing pension funds and other public money.

Results

Our audit found that board staff is following its policies and generally meeting industry best practice standards in performing due diligence on potential investments. We also found the organizational structure of the board's investment staff is appropriate for the asset mix and investment style currently mandated by the board, and the compensation policies of the board are consistent with peers within the public institutional investment industry.

Our report includes six recommendations related to the management and governance of the investing activities of the board, including recommending:

- The Montana Legislature increase the experience requirements for members of the board,
- The board enhance and require the ongoing educational activities provided to board members, and
- The board seek revisions to the Montana Procurement Act to provide an exemption for the contracting of external investment services.

Other recommendations are in the areas of asset allocation and the annual affirmation thereof; other tasks required by the charters of the board and its various committees; and the board's proxy voting program.

(continued on back)

Recommendation Concurrence	
Concur	4
Partially Concur	0
Do Not Concur	1
Source: Agency audit response included in final report.	

For a complete copy of the report (12P-10) or for further information, contact the Legislative Audit Division at 406-444-3122; e-mail to **lad@mt.gov**; or check the web site at **http://leg.mt.gov/audit**
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Chapter I – Introduction and Background

Introduction

In 1972, Montana voters ratified a new constitution that directed the legislature to provide for a Unified Investment Program. This program includes responsibilities for investing state pension moneys and public funds. The Montana Board of Investments (board) as it exists today is a product of this constitutional mandate, which resulted in all the assets of the state's retirement systems, and those of other state and local government agencies, being invested through a single program. Today the board is responsible for management of over $15 billion in assets on behalf of the state's pension funds and state and local government agencies.

Background

The board is allocated for administrative purposes to the Department of Commerce. It operates with a staff of approximately 30. The chief investment officer (CIO), executive director, and six professional staff serve at the pleasure of the board.

Goals and Objectives

The three primary goals and objectives of the board are: to provide prudent investment management of state and local government funds; to work with financial institutions, state agencies and local governments to enhance and expand Montana's economy and assist new and expanding Montana businesses; and to lend low-interest funds to eligible governments for a variety of infrastructure and other projects. The majority of the board's investment activities are focused on management of public funds, but the board also operates several programs that look more like traditional banking activities. These banking activities include the investment of coal severance tax trust fund assets, and the Intercap Loan program, which provides eligible state and local government units with low-cost variable rate loan financing. The board's organizational structure also includes a financial management function providing accounting support for all board activities, and administrative support.

Board Membership

The board consists of nine voting members (appointed by the governor and confirmed by the Senate) and two nonvoting legislative liaisons, one each from the Senate and House, from different political parties and appointed by legislative leadership. As a quasi-judicial board, statute requires one of the members to be an attorney, one a member of the Montana Public Employees' Retirement board and one a member of the Teachers' Retirement board, and the others to represent small business, agriculture, labor, and the financial community. The nine board members also comprise three subcommittees: the Audit Committee, the Human Resource Committee and the Loan Committee.

Prudent Expert Principle

The Montana Constitution (article VIII, section 13) requires investment of assets "be managed in a fiduciary capacity in the same manner that a prudent expert acting in a fiduciary capacity and familiar with the circumstances would use." Additionally, §17-6-201, MCA, requires an investment manager to:

- Discharge the duties with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent person acting in a like capacity with the same resources and familiar with like matters exercises in the conduct of an enterprise of a like character with like aims,
- Diversify the holdings of each fund within the unified investment program to minimize the risk of loss and to maximize the rate of return unless, under the circumstances, it is clearly prudent not to do so, and
- Discharge the duties solely in the interest of and for the benefit of the funds forming the unified investment program.

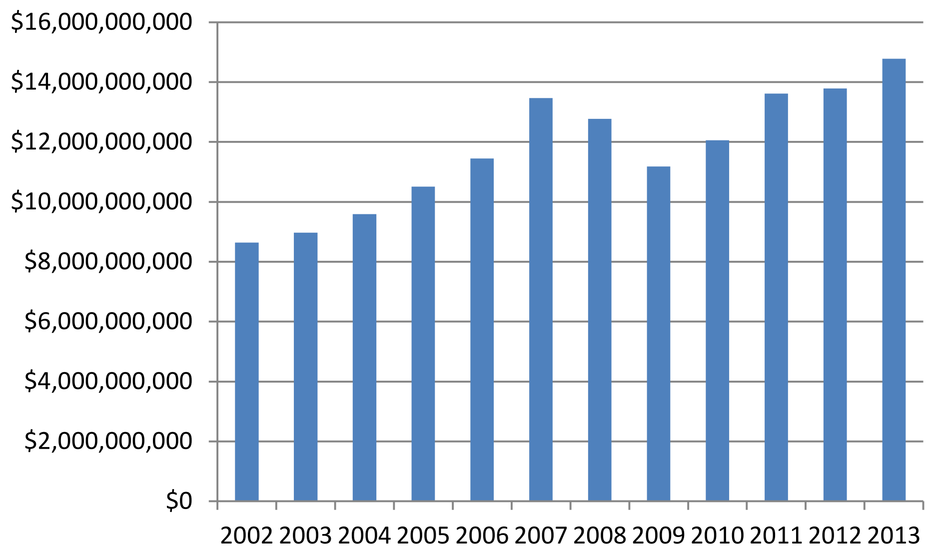
Investment Activities

Unless otherwise provided by law, the board must invest state funds. Local governments at their discretion may invest funds with the board. Local government funds are invested in the Short Term Investment Pool (STIP). During fiscal year 2013, the board invested 495 individual accounts, consisting of 326 state agency accounts and 169 local government accounts.

The assets managed by the board have grown from a net asset value of $321 million at year-end 1972 to a net asset value of nearly $15 billion by the end of fiscal year 2013. Since 2002, the assets have experienced steady growth, with the exception of the 2008-09 global financial crisis. Figure 1 depicts the growth in total assets under the control of the board since 2002.

Figure 1

Net Asset Value of Investments Managed by the Board of Investments



Source: Audited financial statements of the Board of Investments.

To facilitate management of the Unified Investment Program, the board has created seven investment pools, which operate like mutual funds.

Cash is initially deposited in STIP, which operates similar to a money market fund. Depending on the account, some or most of the account balances may be transferred from STIP to other investment pools, which include equity, fixed-income and alternative investments. If accounts may be invested in longer-term investments but their investment parameters do not permit investment in the pools, they are invested in individual nonpooled portfolios collectively known as All Other Funds.

Table 1
Board of Investment Pools/Investments

Pool	Established	What is it?
Retirement Funds Bond Pool (RFBP)	1995	Limited to pension funds only. Pool securities are a mix of corporate bonds and government bonds. Some managed by board staff, some by external managers.
Trust Funds Investment Pool (TFIP)	1995	Formerly known as Trust Funds Bond Pool, current income is important to the participants in this pool so it is managed for income generation, rather than total rate of return.
Short Term Investment Pool (STIP)	1974	Provides participants access to a short-term money market fund. Pool investments are managed by board staff. Approximately 500 accounts invested in STIP, including state and local government accounts.
Montana Domestic Equity Pool (MDEP)	1980	Actively-managed small, mid and large cap domestic stock and passively-managed mid and large cap domestic stock. The pool is managed by contracted external managers.
Montana International Equity Pool (MTIP)	1996	Limited to pension funds only. Pool securities consist of both actively-managed and passively-managed equity securities. Managed by contracted external managers.
Montana Private Equity Pool (MPEP)	2002	Limited to pension funds only. The board partners with private equity managers to invest in venture capital, leveraged buyout, and other types of alternative investments.
Montana Real Estate Pool (MTRP)	2006	Limited to pension funds only. Board partners with real estate managers to invest in core real estate, value-added real estate, and opportunistic real estate. In the "risk/return" spectrum core real estate is the lowest, while opportunistic real estate is the highest.
All Other Funds	N/A	Includes all other investments not held in the seven investment pools. Securities include bonds, mortgages/loans, and a passive index stock fund and direct real estate.

Source: Compiled by Legislative Audit Division from Board of Investments information.

Most state agency accounts and all local government accounts are limited to STIP investments only. Since the state's trust funds cannot be invested in equities, they are invested in the Trust Funds Investment Pool (TFIP), or individual fixed-income portfolios. There are no restrictions on the investment of state pension funds, so these are invested in bonds, equity pools, and alternatives in proportions directed by the board. Because many of the pools invested by the board are exclusive to the retirement system funds and the retirement funds constitute the majority of assets under board management, this report may sometimes focus on the management of these funds.

Investment Objectives

The board's overall objective is to achieve the highest level of investment performance that is compatible with its risk tolerance and prudent investment practices. According to the board's investment policy statement for pension funds, investment performance is measured by three integrated long-term objectives:

- The actuarial target rates of return, which are established by the pension boards whose funds the board invests. The policy statement indicates the board seeks to generate long-term investment performance that will exceed the actuarial annual target rate of return, net of all investment and administrative expenses.
- An investment policy benchmark calculated by applying the investment performance of the asset class benchmarks to the plans' actual asset allocation during the measurement period.
- Comparison of each plan's total performance, before all fees, to appropriate public plan sponsor universes.

The board expects to meet or exceed these objectives over a long-term investment horizon though short-term volatility may lead to unfavorable deviation from these objectives.

Asset Allocation

Within statutory guidelines that restrict or prevent equity investment in some funds, the board has the authority to allocate portfolios to any previously board-approved asset class in the proportions it considers prudent. Asset allocation decisions made by the board must be made in a public meeting. The asset allocation ranges are subject to change as modifications are adopted by the board. The actual asset allocation mix may deviate from time to time from the approved asset allocation ranges due to financial market performance, cash flows, and manager performance. Rebalancing the plans' assets to remain within the board-approved allocation ranges is delegated to the CIO, in consultation with the executive director. Any necessary rebalancing must be made in a timely manner and take into consideration associated costs and current market conditions. The CIO informs the board of rebalancing activity at the board's next regularly scheduled meeting.

Board's Governance Manual

The board maintains a governance manual to detail the responsibilities of board members and define when those responsibilities are delegated to board staff. This document recognizes that fiduciary duty ultimately falls to the members of the board. The manual delegates some powers to board staff but only those specifically delineated. Among the responsibilities assigned to members of the board in this manual are:

- Members of the board meet publicly and the public is provided notice of meetings and opportunities for public comment.
- Board members reserve the right to make selection of custodial bank and investment consultants.
- The authority to establish asset allocation ranges and approve investment policy statements is reserved exclusively for board members.

- Where granted rule-making authority under state law the board members retain authority to revise rules.
- Board members select the executive director and CIO and set the duties and compensation for all exempt staff.

The governance manual also delegates some authority to the board staff. Certain positions are granted specific authority. For example, the executive director supervises all staff, authorizes expenditures, and can sign any document required to conduct board business. The CIO is charged with managing assets within approved ranges, recommending new asset classes, and overseeing the investment process—including hiring and terminating external managers and setting appropriate due diligence standards. The manual also provides more general guidance such as the method for contracting for investment managers and other contracts and describes when board staff can initiate legal action.

Investment Policy Statements

The members of the board approve investment policy statements for the pools it uses to direct investments and for the funds it invests. These documents provide a broad strategic framework for the investments. They set investment objectives and asset allocations for investments managed, among other things. The policy statements for the pools used to manage the assets also provide direction related to investment style, eligible types of investments and defines roles for board members, board staff, and external managers.

Investment Style

Within each of the asset classes in which the board invests, there are often several different investment "styles" available. For example, assets can be managed by either internal (board staff members) or external fund managers (outside fund managers). Furthermore, some equity assets can be managed in either an "active" or "passive" fashion. Passive management typically means that the equities are picked to mimic the market as a whole or some other index and do not require the fund manager to pick individual securities. Active management means that a fund manager is trying to outperform the market as a whole by picking the most desirable securities.

Over time the investment style of the board has changed somewhat. Early on, all or nearly all of the securities were managed internally by board staff members. This has gradually changed and now board assets are managed through a mix of internal and external management. Equities and alternative assets are now primarily managed externally (board staff members select the external managers) while a large percentage of the fixed income and cash equivalents remain under internal management.

There have also been periodic shifts in the board's preference for active vs. passive management. In 2012, the board directed staff to increase passive management for asset classes where investment markets are thought to be efficient. Passive management is generally less costly and when it is difficult for an active manager to beat the market as a whole, the extra cost of active management may not be worthwhile.

Investment Management Fees

The investment program is funded by fees charged to the board's clients. The legislature sets the maximum operational fee the board may charge which is then allocated to all board clients. The board's methodology used to allocate charges is not included as part of this performance audit.

Table 2
Investment Management Fees
Fiscal Year 2013

Fee Type	Amount	% of Total
Board (operational)	$4,066,500	9.3%
Custodial Bank	$1,616,355	3.7%
External Managers	$38,236,118	87.0%
Total	**$43,918,973**	

Source: Audited financial statements of the Board of Investments.

The board contracts with a major bank for a variety of custodial banking and account management services. Custodial bank fees are paid by a statutory appropriation from the state general fund. For investments within many of the pools, the board contracts with external investment managers or general partners to manage funds within the pool. External manager fees are paid directly from the accounts they manage. The costs for board activities and external bank and manager fees for fiscal year 2013 are shown in Table 2.

Audit Scope

The scope of our audit was developed by determining which aspects of the board's functions are most significant to the public and to the long-term health of the various funds over which the board has management and investing authority. As such, this audit focused primarily on one of the board's three primary activities: the management and investing of funds belonging to state pensions and other account holders. Specifically, the audit examined:

- The board's governance structure, to include the composition and activities of the appointed board, its level of expertise in the areas in which the board operates, and its relationship with management and senior staff.
- Investment risk management and due diligence, particularly in investing in the areas of private equity and real estate.

- Personnel policies, to include compensation of exempt employees and policies related to conflicts of interest.
- External costs and services, including external investment manager fees and the use of other outside services such as a custodial bank and investment consultant.

The majority of our audit focused on review of documents, meetings, and reports from fiscal years 2012 and 2013. However, certain elements of the audit required review of reports and trends from the past 10-15 years.

Scope Exclusions

Our risk assessment process resulted in the decision to exclude certain areas of the board's operations from the scope of this audit. These areas could be worthy of consideration for future performance audits as they are significant to the operation of the board and the economic well-being of the state of Montana and a number of its municipalities. However, these functions are distinctly separate from the board's institutional investing function and thus would better stand as topics for their own audits in the future. Specifically, those board functions beyond the scope of this audit include:

- The board's role as an agent of economic development for the state, working with both local governments and private sector entities with a goal of helping establish new businesses and grow existing ones.
- The board's banking functions, in particular its lending of low-interest funds to eligible local governments for a variety of infrastructure and related projects.

Audit Objectives

Risk assessment work and the establishment of the scope of this audit led to the following audit objectives:

1. Are the legal and organizational structures of the board consistent with the prudent expert principle?
2. Are the risk management strategies and due diligence practices of the board sufficient to mitigate risk?
3. Are board personnel policies and staff structure appropriate for a public institutional investment organization?
4. Are board external investment and custodial expenses and external deliverables comparable with those across the public institutional investment industry?

To address these objectives, we performed the following types of methodologies:

- Reviewed sources of criteria for significant elements related to public institutional investment governance practices.

- Reviewed Montana statutes, agendas, minutes and other materials from board meetings and policies and procedures adopted by the board.
- Conducted structured interviews with board members.
- Observed due diligence practices of board staff.
- Regularly attended and observed meetings of the board.
- Analyzed board consideration of its asset allocation decisions.
- Reviewed methods for establishing market compensation rates.
- Reviewed Statewide Accounting, Budgeting, and Human Resource System human resource records, board meeting minutes, and other applicable sources, to compile information to illustrate trends in the organization and allocation of staff resources over time.
- Reviewed hiring process and contracts for custodial banking services and investment consulting services.
- Reviewed procurement practices for outside investment management services.
- Analyzed board budgeting and reporting.

Report Organization

The remainder of this report details our analysis of the objectives and contains six recommendations. It is organized in four additional chapters, each addressing one of the objectives.

- Chapter II Board Composition and Ongoing Education
- Chapter III Risk Management Strategies and Due Diligence Practices
- Chapter IV Personnel Policies and Organizational Structure
- Chapter V Relationships with External Service Providers

Chapter II – Board Composition and Ongoing Education

Introduction

The primary responsibilities of appointed board members of the Board of Investments (board) are to serve in a fiduciary capacity and to do so in a manner consistent with the prudent expert principle. The board has nine members and both the number and qualifications of its members are prescribed by law. Members are appointed by the Governor to staggered four-year terms. Members serve until a successor is appointed and may be removed by the Governor only for cause. The Governor appoints the chairperson, and all members must be confirmed by the state Senate.

Membership Criteria

The board is established as a quasi-judicial board, meaning one member must be an attorney. Additionally, state law specifies member criteria as follows:

- One member from the Public Employees' Retirement Board.
- One member from the Teachers' Retirement Board.

Seven members who will provide a balance of professional expertise and public interest and accountability, who are informed and experienced in the subject of investments, and who are representatives of:

- The financial community
- Small business
- Agriculture
- Labor

Additionally, there are two ex officio, nonvoting legislative liaisons to the board. One must be a senator appointed by the President of the Senate and one must be a representative appointed by the Speaker of the House. The liaisons may not be from the same political party.

Other Public Institutional Investment Boards

Many public jurisdictions are charged with managing investments on behalf of pension funds or other public funds. The structure and composition of these boards vary quite a bit in terms of the number of trustees, their qualifications, and whether members are elected, appointed, or a combination of both. To consider how well Montana's board composition meets established norms within the public institutional investment industry we considered best practices as set forth by industry organizations and research, boards in other states that manage assets of similar size, and boards that are separate from pension boards and manage numerous funds.

Industry Organizations and Research

The Stanford Institutional Investors' Forum (forum) is a well-known group of institutional investment professionals. This forum has set forth a number of best practice principles for fund governance that include guidelines for board composition. Among these principles are:

- Viewed as a group, the board should be composed of individuals with a portfolio of skills that allows it to make responsible, informed investment and legal decisions, and to discharge its fiduciary obligations to fund beneficiaries.
- A governing body should, in particular, consist of a sufficient number of trustees competent in financial and accounting matters so that the body is capable of understanding modern portfolio theory, diversification principles, basic financial analysis, and fundamental accounting principles.

The forum also recognizes that institutional investment is an increasingly complex area. Trustees "face markets that are more complicated, in certain aspects less regulated, and increasingly more global than in prior times." For mature funds that feature a large number of beneficiaries drawing from a fund, trustee acumen is especially important.

Other Unified Investment Boards

Because Montana's Board of Investments is separate from the pension system board, we looked at the composition of boards in six states that have similar separate unified investment programs.

North Dakota—the North Dakota state investment board consists of the governor, the state treasurer, the commissioner of university and school lands, the director of workforce safety and insurance, the insurance commissioner, three members of the teachers' fund for retirement board, and three members of the public employees retirement system board. The state investment board may establish an advisory council composed of individuals who are experienced and knowledgeable in the field of investments.

South Dakota—the South Dakota Investment Council consists of eight voting members. South Dakota law stipulates that "the members of the state investment council shall be qualified by training and experience in the field of investment or finance."

Iowa—in Iowa, seven voting members sit on the Investment Board of the Iowa Public Employees Retirement System (IPERS). One member is the state treasurer, and three are members or retirees of the system. The remaining three are not members of IPERS and each has "substantial institutional investment experience or substantial institutional financial experience."

Wisconsin—members of the state's investment board consist of the secretary of administration, one member who is a representative of a local government and has been employed by the local government in a finance position and has at least 10 years of financial experience, five members appointed for staggered 6-year terms, four of whom shall have had at least 10 years experience in making investments, and two participants in the Wisconsin retirement system.

Oregon—five voting members serve on the Oregon Investment Council. Members include the state treasurer and four appointed members who must be qualified by training and experience in the field of investment or finance. One appointed member may also be a member of the Public Employees Retirement Board.

South Carolina—the seven-member South Carolina Retirement System Investment Commission invests the assets of five retirement systems. Each member is appointed, by various entities. Each appointed member must possess at least one of the following qualifications: the Chartered Financial Analyst credential, the Certified Financial Planner credential, at least twenty years professional actuarial experience, at least twenty years professional teaching experience in economics or finance, an earned Ph.D. in economics or finance, or the Certified Internal Auditor credential.

Boards Managing Similar Assets

To examine the board composition of other boards which manage assets of value similar to Montana, we obtained information related to the composition of boards in three other states.

Maine—the Board of the Maine Public Employees Retirement System is composed of eight trustees. These include the Treasurer of State; two members of the State Employee and Teacher Retirement Program; four persons appointed by the Governor, at least two of whom must be qualified through training or experience in the field of investments, accounting, banking or insurance or as actuaries; one nominee submitted by the Maine Retired Teachers' Association; one nominee submitted by retired state employees; and one nominee of the Maine Municipal Association.

Kentucky—the Kentucky Retirement System board of trustees is composed of 13 individuals. Most trustees are members or retirees of various pension systems whose funds are invested by the board, but two trustees must have investment experience. "Investment experience" is defined to mean an individual with at least ten years' experience in portfolio management, securities analysis, as a chartered financial analyst, or other exceptional professional experience in public or private finances. Both of these two members serve on the five-member investment committee that manages the assets of the funds.

Kansas—the Kansas Public Employees Retirement System board of trustees consists of nine members. One is the state treasurer and two are elected by members or retirees of the retirement system. The remaining six members are appointed. Each appointed member must have demonstrated experience in the financial affairs of a public or private organization or entity which employs 100 or more employees, or had at least five years' experience in the field of investment management or analysis, actuarial analysis, or administration of an employee benefit plan.

Unified and of Similar Size

Finally, there are a few other states that are both similar in size of assets managed and have a separate, unified investment board. The board composition of two such states is described below.

West Virginia—This state's Investment Management Board consists of thirteen members. Three serve because they fulfill a specific public office (governor, auditor, and treasurer). The other ten are appointed by the Governor and confirmed by the Senate. All appointees must have experience in pension management, institutional management or financial markets. In addition, one must be an attorney experienced in finance and investment matters and another must be a Certified Public Accountant. Only six of the ten appointed trustees may be from the same political party. A member of each defined benefit retirement plan is designated to represent the plans' interests and these members do not have a vote but have the right to be heard at the annual meetings of the board.

Nebraska—Nebraska's Investment Council has five voting members. Each appointed member of the council must have at least seven years of experience in the field of investment management or analysis or have at least twelve years of experience in the financial management of a public or private organization. There is a preference for members who are appointed to have experience in investment management or analysis. During 2013, three of the five members held a Chartered Financial Analyst designation.

Research and Other States Demonstrate Importance of Investment Acumen

Industry research and practices in other states demonstrate that an investment board should include individuals with a substantial amount of investment expertise. Institutional investing is a complex arena. Modern fund trustees must have appropriate experience and knowledge to ensure they can substantially and materially evaluate the issues presented to them. Boards are faced with decisions related to complicated, global, and in some ways less-regulated markets than in the past.

The board has demonstrated its ability to make good choices related to complex asset allocation decisions. The board's investment consultant recommended the board allocate a small percentage of its portfolio to hedge funds, however, the board declined to do so. Since making this decision, the performance of hedge funds has been generally poor. The investment activities of hedge funds can also sometimes be controversial, so the board has also avoided potential risks related to investing in controversial activities.

Nonetheless, the assets managed by the board are invested in increasingly complex areas. The current asset allocation has evolved from a portfolio dominated by fixed income securities to a much more diversified asset mix that includes substantial investments in alternative assets like real estate and private equity. Board members have indicated that without formal investment experience, there is a steep learning curve in order to understand and manage the assets of such a portfolio.

Additional Investment Expertise Would Benefit Board

Section 2-15-1808, MCA, requires that certain board members are "informed and experienced in the subject of investments" but does not provide further guidance related to the amount or depth of knowledge or experience. The law does require that representatives of the pension boards, small business, agriculture, and labor are included on the board but requires only one member who represents the financial community.

State law (§17-6-201, MCA) also requires the board to administer the unified investment program in accordance with the prudent expert principle. This principle states that the management of the funds must be discharged with the "care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent person acting in a like capacity with the same resources and familiar with like matters exercises" in managing a similar program. Due to the statutory qualifications for board membership, collectively the board may have less institutional investing expertise than is suggested by best practices in other states and industry research. Board members with institutional investing experience could be better prepared to scrutinize, analyze, and make decisions based upon the information provided by board staff and investment consultant.

The Council of Institutional Investors suggests that a substantially independent board is important to good governance because independent members will have the necessary ability to monitor and assess performance; select, monitor, evaluate and, when necessary, fire the chief executive and other senior managers; oversee management succession; and structure, monitor and approve compensation paid to the chief executive and other senior managers.

Legislation Required to Address Board Composition

Because the board qualification requirements are set forth in state law, changing the requirements for membership requires legislative action. The Stanford Institutional Investors' Forum suggests legislative changes should be made when membership selection "could be inconsistent with the appropriate exercise of fiduciary responsibility on behalf of fund beneficiaries." The Forum concludes, "the board should at all times include individuals with investment and financial market expertise and experience relevant to the fund's ability to exercise its fiduciary obligations to its beneficiaries."

The inclusion of individuals with specific legal or investment management experience or knowledge does not necessarily preclude participation by individuals who offer other unique contributions to the board. But the Stanford Institutional Investors' Forum cautions the flexibility to include others "should be narrowly construed and should be exercised in a manner consistent with fiduciary principles."

The current statutory qualifications for collective membership of the board do not provide a level of investment expertise comparable to some similar institutional investment organizations. The Unified Investment Program was created 1972. At that time, the required knowledge and experience specific to institutional investing was not as extensive. Investment vehicles were fewer and more easily understood. Yet the composition requirements of the board have not changed since the mid-1980s. Revising the qualifications for board composition would improve the board's ability to manage the large, complex assets under its care.

There are a number of options the legislature could consider for revising board composition, including:

- Adding additional members with institutional investing knowledge and/or experience.

- Revising current membership to include additional representation from investment industry.
- Requiring professional certifications (Chartered Financial Analyst, Certified Public Accountant, Securities and Exchange Commission registered broker/dealer, etc.) for one or more board members.
- Requiring a minimum level of investment experience for all board members.
- Adding a nonvoting advisory committee composed of investment professionals.
- Other options for increasing the collective investment expertise of the board.

Recommendation #1

We recommend the Montana Legislature revise the professional and experience requirements for the composition of the Board of Investments to increase the board's collective knowledge and understanding of institutional investing.

Ongoing Education Requirements

In addition to appointing individuals with investing expertise, another method for ensuring board members are able to discharge their duties in a manner consistent with the prudent expert principle is through ongoing education efforts. As has been discussed, institutional investing is an ever-evolving field with new types of investments to consider and associated risks. It is necessary for board members to maintain currency in the field.

Board's Education Policy

At its April 2013 meeting, the board voted to amend its education policy. The changes removed language mandating board members attend training and education opportunities. The policy continues to affirm the importance of ongoing education in order to fulfill the board's fiduciary duties, but instead of mandating attendance of appropriate educational tools, such as conferences, seminars, workshops, relevant reading materials and in-house presentations, it now only encourages such activities.

There is a broad array of issues on which education is encouraged, including:

- Governance and fiduciary duty.
- Actuarial policies and pension funding.
- Best practices in total fund, asset class composite and investment manager monitoring, funding and decision-making.

- Key institutional investment management concepts, such as portfolio management theory and strategies, asset class attributes and investment strategies, and performance evaluation concepts.

Prior to this policy revision, new board members were also required to attend an orientation session geared towards ensuring new "Board Members are in a position to contribute fully to Board and Committee deliberations and effectively carry out their fiduciary duties as soon as possible after joining the Board." Board staff continue to provide an orientation opportunity, but board member attendance is now optional.

Board staff indicated that these policy revisions were necessary because as gubernatorial appointees, board members could not be compelled to attend the orientation or other educational opportunities.

Best Practices in Board Education

In general, industry experts recognize the need for ongoing professional education on the part of fiduciaries in order to maintain currency in the field of institutional investing. For example, the Stanford Institutional Investors' Forum suggests "trustees, on a regular basis, should obtain education that provides and improves core competencies, and that assists them in remaining current with regard to their evolving obligations as fiduciaries." Other best practices guidance also suggests that a board that is overly reliant on outside experts such as attorneys, consultants, and financial experts is less responsive to changing plan participant needs and circumstances.

Education Policies in Other States

To compare Montana's board education policy to those policies in place in other states, we reviewed the education policies in five other states where the investment board manages a unified investment program.

Nebraska—the Nebraska Investment Council places the responsibility of providing board education on the state's investment officer. Among the responsibilities of that position are to provide the board with periodic educational sessions on investment topics of current relevance and inform the council of educational opportunities for fiduciaries.

West Virginia—each trustee and any board designated employee of the West Virginian Investment Management Board is required to complete at least twelve hours of approved continuing education each fiscal year. The executive director determines what may qualify as "approved continuing education," which may include seminars, presentations, classes, articles, books, videotapes and conferences related to investing, ethics, and fiduciary responsibilities. Each individual member provides a written education compliance report. A subcommittee of the board reviews compliance with this policy and may recommend disciplinary action to the Board of Trustees. Action may include reporting noncompliance to the Governor or appropriate selection body.

Vermont—the Vermont Pension Investment Committee requires each member to participate in ongoing training in investments, securities and fiduciary responsibilities. The authority responsible for electing or appointing each member informs the member of the education requirement. The board then provides an annual report to the respective authorities responsible for electing and appointing members regarding attendance at relevant educational programs attended.

South Carolina—Commissioners are encouraged to participate in at least 16 hours of continuing education annually, including in-house seminars, pertinent national conferences, select investment and pension plan administration courses, and continuing educational courses offered through local colleges and universities. New commissioners must attend an investment and administration orientation within sixty days of becoming a commissioner and are encouraged to attend at least one conference or seminar relating to pension fund investments within his or her first year as a commissioner.

Washington—members of the Washington State Investment Board are expected to attend eight hours of continuing education activities per year and new board members can also participate in an orientation and mentoring program. The aim of the orientation program is to ensure that new board members are in a position to contribute fully to board and committee deliberations and effectively carry out their fiduciary duties as soon as possible after joining the board. During orientation, new members are offered to participate in a mentorship with a standing board member who will review with the new member meeting materials prior to the new member's first meetings and contact the new member on a quarterly basis over a one-year period. The executive director submits an annual report on the educational activities of the board.

Ongoing Education at the Board of Investments

During our interviews with board members, several members indicated there is a great deal to learn about board activities. Some reported that it takes years to become truly comfortable in exercising the duties of a board member. Several of the newer board members have attended outside training courses and have reported these to be valuable learning experiences. Other members indicated the primary vehicle for ongoing education are sessions held during regular board meetings, provided either by board staff members or the investment consultant.

In recent years, staff leadership has instituted a work plan for the board that covers a rotating variety of topics. This plan includes topics related to ongoing board member education in addition to regular reports on board operations. The work plan is a useful tool in helping to ensure the board members receive ongoing updates related to board business but neither the contents nor the completion of the work plan are required by board policy.

In its November 2012 meeting minutes, the board reports that it and the consultant agree that the consultant is expected to provide a semi-annual educational presentation on any matter desired, and specifically identifies best practices, governance, what other state pension systems are doing, trend investments, and risk management as possible topics. The consultant is expected to be a resource for providing material, seminars or other training opportunities for board member education.

In our interviews with board members, staff, and the consultant, all agree that steps have been taken to provide such educational opportunities and there is a virtually unlimited supply of topics that could be covered. The board minutes indicate the board chairman will act as liaison for information or educational requests to the consultant.

The board's contract with the consultant does stipulate that the consultant will provide training to board members and staff on requested investment topics, as needed. Board members we interviewed thought informal training opportunities with the consultants prior to regular board meetings, a list of suggested reading materials, and a glossary of terms have all helped with ongoing educational needs, especially for newer board members.

Ad Hoc Ongoing Education Could Lead to Shortcomings

Without an organized, mandatory ongoing education program there is a chance that an individual board member or the board collectively may not keep up to date with topics that are required to discharge their duties with the skill and knowledge necessary to comply with the prudent expert principle.

Possible Enhancements to Board Education Policy

Ongoing educational activities have been made available to board members but the current board policy may allow individual members or the board collectively to fall behind in maintaining currency in the field of institutional investing. To ensure that relevant educational topics are not overlooked or missed, the board should consider the following:

- Require (rather than make optional) attendance at board member orientation and ongoing training courses.

- Formalize the educational opportunities provided by the investment consultant in the contract to more clearly define the expected scope of training to be provided.
- Institute some type of reporting mechanism through which board member attendance at educational activities is monitored and can be reported to the board, through its annual report, or to the governor (who appoints board members).
- Institutionalize the rotating work plan to ensure that relevant educational topics are covered at regularly scheduled board meetings.

Recommendation #2

We recommend the Board of Investments require ongoing educational activities be provided to board members.

Chapter III – Risk Management Strategies and Due Diligence Practices

Introduction

As the fiduciary charged with investing billions of dollars, the Board of Investments (board) confronts risk in a number of different areas, and must be prudent and thoughtful in weighing and managing that risk. Among the types of risk identified by the board and its investment staff during the course of the audit: investment risk, or the risk that investments will decline in value or fail to meet established benchmarks; liquidity risk, or the risk that too much money is tied up in long-term investments and cash is not readily available to meet monthly benefits obligations or other needs; and agency risk, or the risk that the board's actions will serve to benefit itself above the interests of its beneficiaries.

To mitigate these various types of risk, it's imperative that the board act prudently and perform adequate research when determining broadly what types of investments to make, and more specifically, with which external managers to invest or partner with.

Due Diligence Practices

In the world of institutional investing, due diligence refers to the vetting of a potential investment before any funds are committed. In practice, this can include interviews with external fund managers; examination of a fund's history, prospectus and detailed financial statements; reference calls to other clients, past employees and others with knowledge of the fund's operations; and other background work to assess the risk and opportunity presented.

Throughout the course of the audit we made detailed observations of several aspects of the board staff's due diligence work as the investment staff weighed potential investments. The following summarizes the observations we made for each of two separate efforts to identify appropriate investment opportunities.

Private Equity

Unlike the purchase of stocks or bonds, investment in private equity is not done through a public exchange or market. Rather, private investors or funds make investments directly in privately held companies, or in public companies with a goal of taking them private. Private equity is considered a less liquid investment than stocks or bonds. Once capital is committed to a private equity fund, it can be several years before capital is "called" by the fund for commitment, and years more beyond that before returns are realized. Also, private equity funds do not undergo the same regulatory scrutiny as public companies, making due diligence on the part of the investor even more important.

In establishing criteria for measuring the due diligence practices of the board's alternative investments staff, we looked to national organizations with established best practices in the area of due diligence on alternative investments.

The Institutional Limited Partner Association (ILPA), a membership organization dedicated to the interests of limited partners in alternative investments, developed a due diligence questionnaire tool that provides a detailed list of suggested questions and topics to be answered and addressed by private equity firms during the due diligence process. The ILPA suggests potential investors perform diligence in multiple areas, including: fund and firm information; investment strategy and process; the fund team; alignment of interest; market environment; fund terms; governance; risk and compliance; track record; accounting/valuation/reporting; and legal/administrative structures and considerations.

Also, the Greenwich Roundtable, an organization of alternative investment experts dedicated to providing education about alternative forms of investing, has developed a series of best practices documents that address due diligence in the selection of alternative fund managers. These documents address many of the same areas covered by the ILPA and reinforce the accepted best practices necessary for prudent investment in the alternative arena.

We also examined the board's Montana Private Equity Investment Policy Statement for guidance on due diligence. According to the policy, the board's staff is to review and select appropriate funds to fulfill the objectives of the private equity pool. In evaluating potential investments, staff is to determine whether fund managers have the appropriate skills and experience necessary to execute the strategy being proposed for the fund. Among its due diligence responsibilities, staff must also assess the fund manager's proposed strategy and business plan, the risk/reward trade-off in the particular market in which the fund would operate, the quality of the fund's corporate governance, and the integrity and experience of key principals and employees as well as the reputation of the firm.

Locally, work in this area included observations of two meetings with private equity fund managers who had traveled to Helena to meet with board staff. These fund managers were each in the process of soliciting commitments for new private equity funds, and the board was considering investing around $25 million as a limited partner with each. In each meeting, staff sought information on the fund managers' investment philosophy, discussed specific investments made by the partners in previous funds, sought assurances that key people would remain with the organization for the life of the fund, and discussed the funds' fee structures and how the board might limit its costs.

Following these two meetings, we observed a meeting of the "alternatives" team, whose members discussed these two meetings as well as several other private equity and real estate proposals that were under consideration at the time. We collected eight samples of due diligence documents and checklists used by board staff to ensure all appropriate work is done prior to making a decision to commit to a fund or pass on the opportunity, including review of files for four private equity commitments that were made, as well as four opportunities that were declined. Review determined the board alternatives staff is completing its checklists, performing reference checks and fulfilling its due diligence obligations.

We found that the board alternative investments staff is generally meeting industry best practices in the due diligence screening of potential general partners. The staff makes reasonable efforts to balance the appropriate use of resources with the need to exercise its due diligence responsibilities.

Small Cap International Equity

The board is utilizing more active (thus expensive) management to invest in smaller companies, where the board believes that active management has a better chance of improving returns net of fees over time.

Due diligence in this area is similar to what is performed in the private equity arena, although there are differences due to the more transparent and regulated world of public equities. Nonetheless, it is important for the board equities staff to properly vet its potential external managers before committing dollars to a particular fund.

We measured the board equities staff's due diligence work against best practices espoused by the Chartered Financial Analyst Institute and found that the board staff is generally meeting accepted due diligence practices for hiring external managers of public equities.

For this portion of the objective, we observed telephone interviews with three firms offering small cap international investing opportunities, and also observed separate in-person meetings with two additional small cap international managers. We reviewed the fund documents submitted by prospective managers and observed meetings of the board investment staff as the advantages and disadvantages of each candidate were discussed.

We also interviewed the board investment consultant's expert on small cap international fund managers. The board sought her guidance in the selection process as a service agreed to in the consultant's contract. In our interview she shared thoughts on what the board staff does well and might improve upon in choosing its external managers. She characterized the board's staff as "above average" in the level of due diligence performed, and suggested they might improve their investment decisions by making more visits to fund managers at their own offices as opposed to doing most work over the phone or by invitation to Helena.

Conclusion

The Board of Investments research and investment staff performs appropriate levels of due diligence when researching and weighing potential investment opportunities.

Asset Allocation: Deciding Where to Invest

The concept of asset allocation refers to how an investor, or in the case of the board, a fiduciary, elects to divide the funds to be invested among various asset classes. Broadly, these categories might include public equities (stocks), private equity funds, real estate, fixed income (bonds), and cash and cash equivalents, although there may also be several sub-categories within each of those classifications, as well as other types of investments, such as hedge funds, that the board does not utilize at this time.

Asset allocations typically involve a range of percentages allowable for each asset class, to permit some flexibility to the investment staff as various markets move up and down and the total weights in the portfolio shift.

Asset Allocation Is a Critical Function of the Board as a Driver of Returns

Many academic and industry sources identified throughout the course of the audit cite asset allocation as one of the primary drivers of actual and anticipated returns on investments. According to the board's investment consultant, "Multiple studies conclude that asset allocation is the most important determinant of total fund performance in the long run. Studies estimate that 90 percent of the volatility in annual fund returns is attributable to asset allocation (as opposed to individual manager selection)." Thus, setting these allocation ranges is one of the most important functions of the board.

While the movement of markets as a whole is the single largest factor in a portfolio's performance, how investments are divided among various asset classes also plays a significant role in the fund's volatility and potential return. For example, a portfolio heavily weighted toward fixed income investments (U.S. Treasury bonds, corporate bonds, and the like) would be expected to provide less investment risk and a lower but more stable return. A portfolio more heavily weighted in equities, including domestic and international stocks, would be expected to be more volatile year to year, but with a greater chance at a higher rate of return.

In determining its asset allocation ranges, the board must weigh its appetite for risk, in both the short and long term, with the demands of its clients–primarily the pension funds–who have in part based their contribution and benefit calculations on the expectations of certain rates of return on their investments. Additionally, the board must manage funds to be liquid enough to make regular payments to pensions for distribution to beneficiaries.

The board's investment consultant is on the record at several public meetings emphasizing the importance of asset allocation, and stressing to the board the need to use it to balance risk and return in a way that can minimize the former and maximize the latter.

According to its Public Retirement Plans Investment Policy Statement, the board is to employ the same asset allocation blend for all retirement funds it invests. Also, any changes the board makes to its asset allocation blend must be made in a public meeting. Further, the board is required to formally affirm or revise its asset allocation ranges for the Plans at least annually.

The Board Regularly Discusses its Asset Allocation Ranges

Throughout the course of the audit we observed a number of public discussions of asset allocation. Nearly every board meeting we attended included some talk of the concept, and as early as April 2013 the director was preparing the board for a vote at its November 2013 meeting.

For illustrative purposes, Table 3 indicates the asset allocation changes recommended by staff and approved unanimously by the board at its November 2013 meeting:

Table 3
Current Asset Allocation Ranges for Pension Funds

Asset Category	Previous Allocation Range	New Allocation Range
Total Public Equity	60-70%	58-72%
Domestic Equity	30-50%	28-44%
International Equity	15-30%	14-22%
Private Equity	9-15%	9-15%
Bond Pool (fixed income)	22-32%	22-30%
Real Estate	4-10%	6-10%
Short Term (cash, etc.)	1-5%	1-5%

Source: Compiled by Legislative Audit Division from Board of Investments data.

Once the board has established its asset allocation targets, it is the job of the investment staff to ensure the retirement portfolios remain within these established ranges. If assets in one class become overweight, the staff must sell from that asset class and buy in another, rebalancing the portfolio to ensure the appropriate asset ranges are maintained.

Audit work revealed that the investment staff receives daily reports from its custodial bank, indicating whether the various investment pools were within the board-mandated allocation guidelines. We also examined a number of daily, monthly and quarterly portfolio statements that showed how asset allocations changed as market conditions fluctuated.

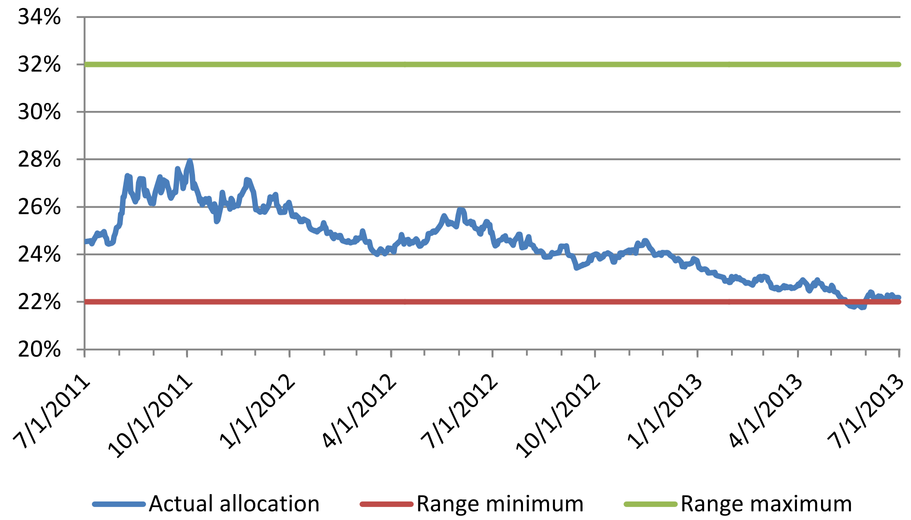
When looking in more detail at specific investments or the allocations within individual retirement systems, we did identify instances when a particular asset class fell outside its board-approved range. When this occurred, the investment staff took steps to rebalance the portfolio in a timely fashion so that assets were allocated appropriately.

Figure 2 shows only the allocation to fixed income securities for the most recent two fiscal years. Near the end of the period, the allocation to bonds did dip below the minimum threshold but at the first of the following month, board staff took steps to bring it back within the guidelines by selling equities and using the proceeds to fuel the bond portfolio.

Figure 2

Fixed Income Asset Allocation

Fiscal Years 2012-13



Source: Compiled by Legislative Audit Division from custodial bank data.

Similarly, the allocation to cash equivalents has also dipped below the minimum for very short periods of time until income from the retirement systems has accumulated to bring it back above minimum levels. Certain retirement systems receive lump sums of income at infrequent intervals. This raises the amount of cash equivalents for those individual systems above the maximum allocation and causes some other asset classes to dip below their minimums until board staff takes steps to rebalance. In each of the instances we noted, this occurred at the beginning of the month following the cash infusion.

Audit work also examined the agendas and minutes from meetings of the board over the past three years. From mid-2010 to the present, we found that while the board regularly discussed its asset allocations, and at times voted to tweak the allowable ranges for certain specific asset classes within the allocation, the board did not in that time period, until November 2013, formally vote to revise or affirm its asset allocation as a whole as called for by its own Montana Public Retirement Plans Investment Policy Statement.

In an interview, management noted that while the board and its consultant and staff regularly discuss aspects of asset allocation at nearly every board meeting, and that certain aspects of asset allocation may be adjusted from time to time, the board did not actively affirm its entire asset allocation in 2011 or 2012. Management suggested that perhaps the mandate to do so was previously overlooked because the requirement is stated in the Pension Investment Policy Statement and not in the higher profile Governance Policy.

While acknowledging the importance of asset allocation, the board has not annually affirmed or revised its asset allocation ranges as required by policy. Board staff does take the steps necessary to keep various asset classes within the appropriate allocation ranges within the broad portfolio.

RECOMMENDATION #3

We recommend the Board of Investments amend its Governance Policy to more strongly emphasize its commitment to annual affirmation of the asset allocation of its entire portfolio of investments.

Board Committees

The board has three sub-committees comprised of board members: the Audit Committee, the Human Resources Committee, and the Loan Committee. Given the scope of this project, audit work focused primarily on the board's Audit Committee and Human Resource Committee.

Audit Committee Fulfills Most of the Duties in its Charter

The purpose of the Audit Committee is to assist the board in fulfilling its oversight responsibilities for the financial reporting process, the system of internal control, the audit process, and the board's process for monitoring compliance with laws and regulations and its code of ethical conduct. The committee, of at least three "financially literate" (as defined by the board) board members, must meet a minimum of twice a year and has several responsibilities spelled out in its Charter, including:

- Review of financial statements with management and external auditors.
- Consideration of effectiveness of board's internal controls.
- Review with management of annual internal audit (currently contracted to a local accounting firm).
- Review of any external audits performed on the board.
- Review of board's compliance with laws and regulations, including internal ethics policy.
- Annual confirmation that all mandates in the Audit Committee Charter have been carried out, and regular evaluation of the performance of the

committee as a whole and of individual committee members on a regular basis.

Audit work, including attendance at Audit Committee meetings and interviews with Audit Committee members, determined that the Committee is fulfilling the majority of its obligations; however the Committee is not regularly reviewing its own performance as a whole, nor reviewing the performance of individual members of the committee, as required by its Charter.

Human Resource Committee Fulfills Most of the Duties in its Charter

The purpose of the Human Resources Committee is to discharge the board's responsibilities relating to personnel matters of all board staff, and compensation of the board's exempt staff. The committee is comprised of at least three board members and per its Charter must meet no fewer than two times per year. The committee's responsibilities include:

- Establishing pay ranges for exempt staff based on peer surveys.
- Recommending compensation levels for exempt staff.
- Overseeing staff in development of Job Profiles and performance criteria for exempt staff.
- Overseeing the director in development and maintenance of a succession plan.
- Issuing an annual Report of the Human Resources Committee on exempt staff compensation.
- Conducting annual performance evaluation of the committee, comparing the performance of the committee with the requirements of the Charter.

Work in this area included attendance at multiple meetings of the Human Resources Committee; interviews with members of the committee and the director regarding the committee's work; and examination of three years' worth of meeting minutes (both of the committee and of the board as a whole) to determine whether required activities are being completed by the committee.

We found that although the committee is meeting a number of the requirements of its charter, we saw no evidence of committee reports on exempt compensation, nor annual performance evaluations of the committee itself in complying with the Charter's mandates.

These policies of the board are secondary to its main activities related to asset allocation and investment management but were still deemed important enough to be included in the board's committee charters. The activities prescribed by each of the charters or policy statements should be followed but without adequate visibility have sometimes been overlooked. If the current board members no longer find a required activity to be worthwhile, those could be removed through board action. Otherwise, the board should adopt a list of the requirements and place this list within its governance policy to ensure they are not overlooked.

Recommendation #4

We recommend the Board of Investments ensure that its regularly required votes, reports and affirmations are adhered to in accordance with its charters.

Proxy Voting

Proxy voting is a right belonging to owners of shares in publicly held companies. Owners of shares are allowed to vote on matters at companies' annual meetings, typically including composition of the board of directors, certain executive compensation matters, and other matters presented to shareholders either by the board or by other shareholders.

In the case of the board, it is the board members who have the fiduciary responsibility over investment activity to the owners of the state's pension assets and other funds overseen and managed by the board. To that end, proxy voting is addressed in the Investment Policy Statement for both the Domestic Equity Pool and the International Equity Pool.

In each case, the responsibility for voting proxies is delegated to the external money managers, and board staff is directed to establish a proxy voting program with external money managers, who are to vote shares "in the interest of the Plans' beneficiaries." Proxy voting policies are also discussed in the retirement funds investment policy statement, which indicates "the Board will prudently manage these assets of the Plans for the exclusive purpose of enhancing the value of the Plans for its participating systems' members and beneficiaries through such means as adopting and implementing a proxy voting policy." External service providers may be retained by either the board or the managers to assist in monitoring efforts. This monitoring will be coordinated with each manager to reasonably assure the staff that managers are fulfilling their responsibilities with respect to proxy voting.

Analysis of other states found varying levels of detail in proxy voting policies with some that provide guidance to investment managers on how to vote in many specific situations that may arise in proxy materials. The board policy regarding proxy voting should cover all public equities invested in by the board and provide staff and external managers with sufficient guidance to act in the best interests of account holders.

Recommendation #5

We recommend the Board of Investments adopt a proxy voting policy which provides staff and external managers with sufficient guidance to act in the best interests of account holders and that board members periodically review proxy voting results.

Personal Investment Disclosure/Conflict of Interest

The board's Governance Policy includes a Code of Ethics designed to ensure that board members and staff have no conflicting or competing interests that would harm the integrity of the board, harm the clients for whom the board invests funds, or interfere with the board's fiduciary responsibility.

The board's policy notes that "perhaps the greatest potential for conflicts of interest of board members and staff is with private investment vendor relationships. The board's mission requires it to have numerous relationships with these vendors… Vendors selected by the board… will receive millions in fees during the contract period. Therefore, the process for establishing and terminating these relationships must be based on well-established protocol."

The Montana Board of Investments' Code of Ethics includes provisions in the following areas:

- **Monetary**: Board members may not attend conferences subsidized by current or potential investment vendors; gifts exceeding $50 in value must be declared, documented, and donated to charity (perishable gifts may be shared with staff); restaurant dinners are to be no-host.
- **Relationship**: Board staff with material personal or financial relationships with current or potential vendors must recuse themselves from any part of decisions to select, negotiate contracts with, or terminate services with a vendor, and must not influence the decision; board members with similar relationships must recuse themselves from similar decisions and must disclose in public meetings the reasons for their recusal; similar recusal requirements are in place for both board members and staff in the areas of borrowing

and lending; board members may vote on INTERCAP loans made to local governments in their home towns.

- **Time and Facilities**: Board staff may not use state time or facilities to conduct private business, including researching of securities for personal portfolios, securities trading, or any activities for a revenue-generating business.
- **Dual Salaries**: Board members who are also public employees must declare if their salaries are being paid at times when they are also eligible for a board per diem; board members may receive travel expenses but not per diem in such circumstances.

Board members and staff are required annually to sign the board's ethics policy, and we verified this had been done by all investment staff and board members during 2013.

Audit work determined that several other states require varying levels of disclosure of personal brokerage accounts, investments and trades, or some combination thereof, by investment staff and board members. The director believes that such disclosure is not necessary in Montana as the board and investment staff are not directly researching and buying individual securities, but rather contracts with external managers for its public equity management.

Conclusion

The Board of Investments' conflict of interest/disclosure policy is regularly affirmed by staff and board members.

Chapter IV – Personnel Policies and Organizational Structure

Introduction

The Board of Investments (board) is currently allocated 32 full-time positions. Of the 32 positions, 16 are strictly investment-related under the supervision of the chief investment officer. Two of the investment positions were vacant as of January 2014, though the board was actively trying to fill one of those positions, and the other is being transferred to the accounting function pending board approval. Figure 3 describes the organization of the investment staff.

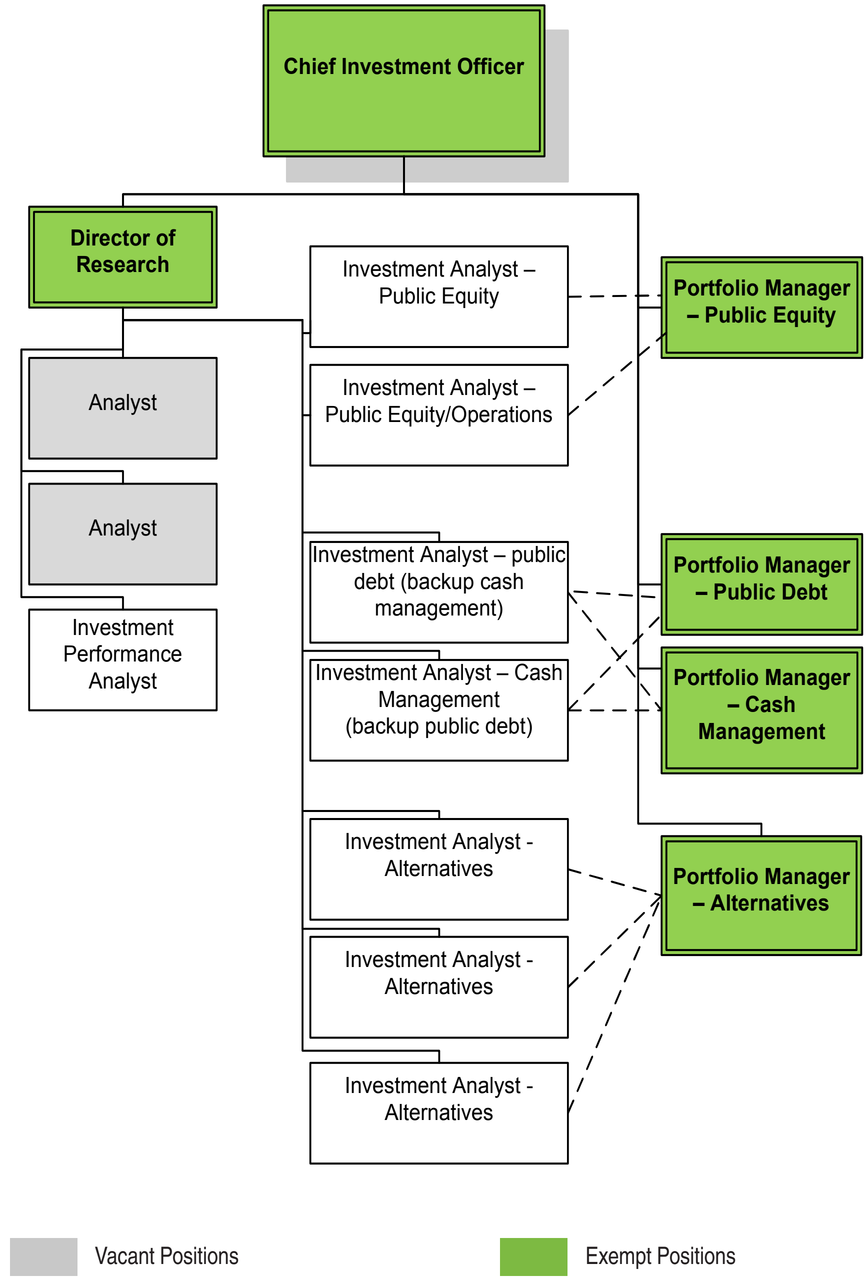
In recent years, this organization has changed somewhat. Two positions that were formerly allocated to the board were reassigned to perform other duties within the Department of Commerce. One position is now an attorney and the other works in human resources. Furthermore, several of the investment analyst positions have been reassigned to different asset classes as the asset allocation and management style of funds invested has changed.

For example, for public equity funds, the board has changed its strategy from internal to external management, in an effort to increase returns, and also from active to passive management for a large portion of the domestic equity portfolio, in an effort to decrease costs. In addition, the allocation to alternative assets such as private equity and real estate has increased significantly over the past decade. The duties of the equity investment analysts on the staff have shifted from a focus on picking individual stocks to selecting and monitoring external managers. Also, as the allocation to alternative assets has grown, analysts have moved from public equity to alternatives. Ten years ago, there was only one alternative analyst, and now there are four positions in this area. Staff leadership indicated that as asset allocation changes or there are shifts in management styles, there will likely be future reallocation of investment staff resources.

Figure 3

Board of Investments Organizational Chart (Investment Staff)

as of January 2014



Source: Compiled by Legislative Audit Division from Board of Investments records.

Alternative Staff Organizations

We obtained staffing information from several other states that manage assets of similar size to Montana. Based on these comparisons, it is evident that there are a number of possible staffing strategies but there does not appear to be a single standard that is recognized as a best-practice model. The appropriate staff strategy varies based on:

- Asset allocation
- Investment style
- Reliance on investment consultants
- Amount of diligence when selecting external managers

Asset Allocation

Managing a broad array of asset classes may require more staff members than a narrow band of assets. Even if assets are managed externally, board staff would need to be familiar with the asset class generally. Montana invests in many but not all of the potential asset classes available to institutional investors.

Investment Style

Assets can be managed by internal staff or external managers and may be passively or actively invested. Increasing the amount of external and passive management can reduce the amount of internal staff required but may reduce diversification. For example, one state used a single external manager for all of its equity and fixed income assets and was able to oversee this manager with a single employee. Montana employs a mix of internal and external management, using internal staff in areas where staff has expertise but hiring external managers when necessary. Montana also uses a mix of passive and active styles, preferring active management for markets that are thought to be less efficient and therefore where active management can provide positive value.

Reliance on Investment Consultants

Investment consultants are available for hire with a wide variety of investment expertise. Our review of other states found that virtually all institutional investors employ consultants of some type, with many states hiring multiple specialty consultants. States that make heavy use of consultants may also be able to use fewer internal staff members but must also pay additional consulting fees. Montana uses a single general investment consultant (and in recent years has hired a cost benchmarking consultant) but continues to use internal staff expertise in some areas where consultants may sometimes be used. This can cause a greater need for internal staff than in states that rely more on outside consultants.

Amount of Diligence When Selecting External Managers

As discussed in the previous chapter, we have concluded that the board staff are meeting industry practices for due diligence related to potential investments. It may be possible to perform less due diligence and reduce staff but in order to maintain the level of diligence, additional reliance (and therefore costs) would likely be placed on an investment consultant.

Internal Management Requires More Staff, May Increase Returns

While it may appear there is an opportunity to reduce staff levels by reducing the amount of internal management and increase reliance on consultants for decision making, such a strategy may come at a cost. A study completed by an external consulting firm (one which counts the board among its clients for its annual survey of public institutional investing funds) found that 70 percent of the difference in total investment full-time equivalent among the survey participants was attributed to differences in internal management, with the asset mix also playing an important role. The authors of the study conclude funds with more internal management performed better than funds with less due to lower costs. For every 10 percent increase in internal management, there was an increase of 3.6 basis points in net value added; this increase was driven largely by the lower costs attributed to internal management.

Some public institutions are even exploring the idea of managing some alternative assets in-house. For labor-intensive investments such as private equity, such internal management is probably feasible for only the very largest of institutional investors.

Staff Organization Appropriate for Asset Mix, Investment Style

The organization of Montana's Board of Investments staff has changed over time based on the asset allocation set by the board and the preferred investment style of the times. The board continues to manage assets internally in areas in which it has expertise but has outsourced some management to external providers. If these factors change in the future, staff organization changes may be required.

Conclusion

The organizational structure of the board's investment staff is appropriate for the asset mix and investment style currently mandated by the board.

Institutional Investing Industry Compensation

Careers within the institutional investment industry frequently offer monetary compensation that far exceeds typical public employer pay ranges. For example, a survey of over 70 firms cited in Forbes Magazine found that the average first-year equity research analyst earned over $72,000, and by the third year earned nearly $150,000 annually. Experienced individuals have the opportunity to earn $300,000 per year or more, with top executives earning in the millions. This compensation usually comes partly in the form of base salary and partly as a bonus. The wages do not come without long hours. In private industry, equity researchers may be expected to work 60-70 hours per week while investment banking associates may work up to 100 hours a week.

Employment Policies at Board of Investments

It is not realistic to expect a public institutional investment entity such as the state of Montana to compete for top talent within the investment industry strictly on a monetary basis. The state can hope to attract and retain talented employees with a combination of wages comparable to other public institutional investment opportunities coupled with working fewer hours per week and offering a desirable location in which to live and work.

Exempt Employees

Eight positions in the board are exempt from the requirements of Montana's job classification and pay system. The exempt positions include:

- Chief investment officer,
- Executive director, and
- Six professional staff designated by the board. The four portfolio managers and the director of research are designated as exempt. The sixth designated position is the portfolio manager for the in-state loan program.

The salaries for exempt positions are established by the board. By policy, the board is to conduct a salary survey of similar organizations to establish market pay rates for comparable positions. To do this, the board contracts with a compensation benchmarking firm specializing in the financial services industry. The contractor conducts an annual survey of public investment institutions. The 2012 survey was the most recent available when we were conducting fieldwork. This survey included 53 participating agencies.

The board used the survey results to establish the market rates for the exempt positions, then, according to its pay policy, used the market to establish a range for each of the positions. Salary ranges are calculated as described in Table 4.

Table 4
Exempt Staff Salary Ranges

Staff Type	Market Salary	Bottom of Range	Top of Range
Executive Director	$217,300	62.5% of market	137.5% of market
Chief Investment Officer	$245,000	62.5% of market	137.5% of market
Other designated staff members	$125,000	72.5% of market	127.5% of market

Source: Compiled by Legislative Audit Division from Board of Investments information.

Once pay ranges have been established by the board, the salary of each exempt employee is set after considering performance, professional credentials, experience, skill, and pay equity. The board may choose the weight each factor may have and may also adjust the factors to be considered. For these employees, the board can make temporary, lump sum, or conditional pay adjustments.

Classified Employees

The remaining positions at the board are classified employees of the Department of Commerce. The pay rates for these positions are established through a combination of legislative action and classification actions by the Department of Commerce and the State Personnel Division.

During the two-year period between December 1, 2011, and December 1, 2013, the classified employees generally received a series of three across-the-board increases: 1 percent in December 2011, 7.5 percent in June 2012, and 3 percent in June 2013. These increases are consistent with other employees of the Department of Commerce.

Board Action for Exempt Employees

We verified the board conducted annual salary surveys for 2011 and 2012. At its February 2012 meeting, the board authorized 1 percent increases for all exempt employees except the executive director, who received no increase. In addition, at its August 2012 meeting, the board authorized a 7.5 percent disparity adjustment for two portfolio managers, retroactively effective to January 1, 2012. In May 2013, the board awarded all exempt employees an increase ranging from 5.5 to 9.75 percent.

The current market rate for the portfolio managers and research director is $125,000, which corresponds to the 2012 market median established by the contractor's survey for a Senior Portfolio Manager II for all asset classes. The Director of Research position market rate is also set using portfolio manager data.

The five exempt investment employees now earn between 96.1 and 122.9 percent of the market rate, all of which fall within the range established by policy. The executive director earns 79.9 percent of market and the chief investment officer 88.7 percent.

Turnover at Board of Investments

The board staff has generally experienced lower turnover rates than state government as a whole. The annualized five-year turnover rate between fiscal years 2009 and 2013 for the board of investments was 10.5 percent. This compares favorably to the Department of Commerce overall, which experienced an annualized 26.5 percent turnover rate for the same period. The board's staff turnover rate also compares well against other agencies such as the pension administration organizations which had a 21.2 percent rate and Montana State Fund, which was 13 percent. In this context, the current salary structure at the board would not appear to be contributing to undue organizational turnover.

Board staff leadership has reported some difficulty in filling some positions. In fall 2013, the board attempted to hire an analyst for alternative investments, but successful applicants turned down offers in favor of other opportunities. It has successfully competed to fill other positions. In one case, however, the successful candidate was able to negotiate a $25,000 relocation fee as one of the conditions of acceptance.

Performance Pay

As mentioned earlier, professionals in the investment industry are commonly compensated with some portion of their pay based on job performance. Frequently this is explicitly tied to the performance of the employee's portfolio of assets. According to the market survey, 64.4 percent of senior portfolio managers are eligible to receive performance compensation. In Montana, the board does evaluate employee performance but does not exclusively tie job performance to the portfolio performance.

All of the board's portfolio managers are eligible for lump sum, temporary compensation should the board deem it appropriate. Per its pay policy, the board recognizes its statutory ability to set all exempt salaries, but it also recognizes the general compensation or pay adjustments received by other state employees could factor in its consideration for exempt employee pay. In the past two years, the board has opted not to provide lump sum performance pay, but could institute such payment if a majority of board members agree to do so.

Conclusion

The compensation policies of the Board of Investments are consistent with peers within the public institutional investment industry.

Chapter V – Relationships with External Service Providers

Introduction

The Board of Investments (board) and its staff rely on external providers for several types of services, including custodial banking, investment consulting, and external investment management. The need for these services has evolved over time as the board has changed its investment philosophy. For example, equity investments were formerly managed internally, with board staff buying and selling individual stocks. Equities are now managed externally via investments in vehicles that are similar to retail mutual funds. As the board has increased its allocation in alternative assets, additional external management has also been required in that area.

Custodial Bank Services are Necessary for Board to Fulfill Its Duties

The board contracts with a major bank for a variety of custodial banking and account management services, including:

- Securities safekeeping.
- Securities accounting and reporting.
- Participant accounting (mutual fund type accounting and reporting).
- Investment performance and analytics reporting (daily, monthly, quarterly).
- Securities lending.
- Providing and maintaining a comprehensive online accounting system to account for the board's entire portfolio and all transactions.
- Providing an electronic interface to permit the board to customize and download all accounting and investment data.

The contract calls for base annual payments to the bank of $1.5 million. The total annual payment may be $1.65 million, depending upon additional services provided.

Securities lending is a common practice among institutional investors and provides added income by lending securities to borrowers who need additional inventory to settle sales. The transfer of the assets to the borrower is protected by collateral in the form of cash or securities exceeding 102-105 percent of the securities' value. The securities loaned generated net income of $5 million in fiscal year 2012 and $3.4 million in fiscal year 2013. While this is a relatively small margin, it can boost overall fund results.

Given limitations of staff resources and in-house expertise as well as the need for accounting controls, this contracted custodial banking relationship is necessary and appropriate for the board. Its most recent contract with the bank was executed in 2007, and a Request for Proposals (RFP) is currently being prepared for 2014, when the current custodial banking contract expires. The board's investment consultant counts among its duties assisting the board in its search for custodial services (see below). Members of the consulting team have told the board they expect a strong response from the limited number of eligible custodial banks when the next RFP is advertised.

Investment Consultants are Common Among Institutional Investment Organizations

The board contracts with an independent investment consulting firm, to provide an array of services for board members and staff. Service areas contracted with the investment consultant include:

- Physical presence at six board meetings per year.
- Annual review of existing asset allocation.
- Generation of quarterly investment performance reports, broken down by pool and by retirement plan and including high level performance attribution, performance versus benchmarks, and other performance metrics.
- Advice on the board's investment management structure.
- Assistance in searches for external investment managers.
- Review of benchmarks for all external managers, internally managed portfolios and investment pools.
- Expert testimony (i.e., to legislative committees) as needed.
- Pacing studies for private equity and real estate investments.
- Private equity and real estate peer performance comparisons.
- Real estate services.
- Review of investment guidelines and policies.
- Assistance in searches for custodial and securities lending services.
- Cost analysis.
- Proxy vote guidance.
- Board and staff education.

In addition, in our interviews with board members, several cited the investment consultant as an important independent check on the staff and a source of additional information and guidance should board members question any decisions or proposals made by staff.

The five-year investment consulting contract calls for annual payments of $295,000 in each of the first three years, $303,850 in year four and $312,966 in year five. The board issued a Request for Proposals in 2012, received six responses, and interviewed two firms in person before selecting the current consultant and executing a five-year contract.

Audit work revealed that other, similarly sized and structured states' investment boards routinely employ investment consultants, though the range of services contracted may vary. For example, some states use consultants to perform due diligence on potential private equity partnerships, whereas Montana's investment staff performs this function internally. One state of similar size to Montana employs three different investment consultants, receiving different services from each.

For the past several years the board has contracted with a consulting firm to provide analysis of the board's investment performance and expenses in the context of other similarly sized institutional investing organizations. The most recent study, delivered in August, 2013, found that the board's costs were normal for an organization managing assets of similar size and with a similar asset allocation.

Conclusion

The services provided by the board's custodial bank and investment consultant are reasonable for an organization of the board's size and expertise.

Investment Costs Have Risen as Pools Have Grown and Asset Allocation Shifted

The 2015 Biennium Executive Budget shows the board with Total Executive Budgets of $5.40 million for fiscal year 2014 and $5.36 million for fiscal year 2015. Other than the statutory general appropriation to cover custodial banking fees, the board recovers its operational costs from the entities that use its services.

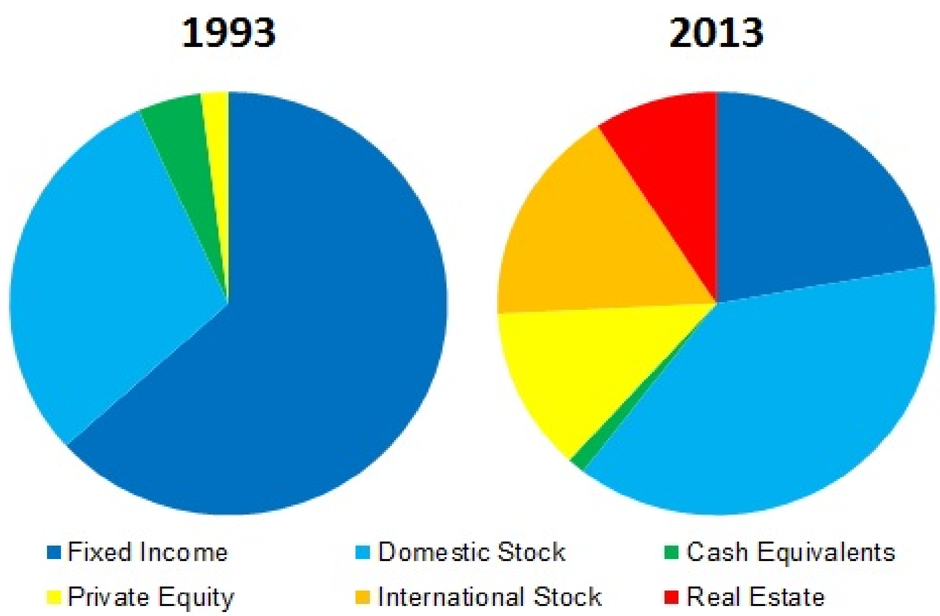
In addition to the costs that are borne in the Executive Budget, the board incurs fees on the money it invests that are paid to various money managers and investment partners, a category that includes external managers of domestic and international equity funds, as well as alternative investment (private equity and real estate) general partners. By state law, the cost of administering and accounting for each investment fund must be deducted from the income for each fund.

According to board documents, these fees totaled $40.0 million in fiscal year 2012 and $38.2 million in fiscal year 2013. Over time, the amount of money paid to money managers as fees has increased dramatically, this most recent decrease notwithstanding, due to both the growing portfolios (fees are typically assessed as a percentage of assets under management) as well as to an increased exposure to private equity and other alternative investments. Generally, private equity and other alternatives are some of the most expensive asset classes in which to invest, with active external management, passive external management, and internal management usually being progressively less costly in the area of fees.

Between 1993 and 2013, high cost investment types, including international equity, private equity, and real estate have increased from 2 percent to 38.3 percent of the pensions portfolio.

Figure 4

Historic Year-end Asset Allocation (Pension Funds)



Source: Compiled by Legislative Audit Division from Board of Investments data.

We reviewed the difference paid in external management fees from fiscal year 2007 to 2013. Overall, external fees increased $21,304,925 between these years, with most of the increase coming early during that time period. Most of the difference is attributable to the growth in fees paid to managers of alternative investments. Table 5 displays the change in external fees paid by pool over the most recent seven years.

Of the total increase, $17,763,868 (83.4 percent), was attributable to higher cost alternative assets. Over the same time period, the investment expenses related to internal board staff also increased. The total increase was $887,584, of which 80 percent was in alternative assets, likely due to the increasing size of the alternative asset analyst staff discussed in Chapter IV.

Table 5
Change in External Management Fees Paid
Fiscal Years 2007-13

Fund	External Management Fees
RFBP	$1,533,111
TFIP	$1,617,475
MDEP	$3,224,927
MTIP	-$2,840,885
MPEP	$9,277,111
MTRP	$8,486,757
STIP	$0
AOF	$6,429
Total	**$21,304,925**

Source: Audited financial statements of the Board of Investments

It is important to note that the board and its staff recognize the high cost of alternative assets, and demand higher returns from these investments in exchange for the high cost and elevated investment and liquidity risk assumed. The internal performance benchmark for private equity is the performance of the S&P 1500 (a broad measure of market performance) plus 4 percent, a threshold for success much higher than that for safer and more liquid investments. While returns vary for each pool from year to year, the Montana Private Equity Pool (12.65 percent annualized return) has outperformed both the Montana Domestic Equity Pool (7.28 percent) and the Montana International Equity Pool (7.35 percent) over the last 10 years.

Through observation and interviews we learned that board members and staff are aware of the increasing costs associated with changing the asset allocation, and staff routinely looks to negotiate lower fees whenever possible. In interviews with private equity general partners, board staff asked for ways to lower the board's expenses. And in discussions over hiring external fund managers for small cap international stocks, the board's consultant offered guidance on which managers under consideration might be more likely to accept lower fee payments from the board.

CONCLUSION

Fees paid to external investment managers and alternative assets managers by the Board of Investments have increased as the board's allocation of assets and other investment decisions have shifted funds into more expensive asset classes.

External Manager Contracting and the Montana Procurement Act

The legislature created the board and gives the board primary authority to invest state funds in accordance with state law and the Montana Constitution. Historically, the board has operated within the framework of the Montana Procurement Act (MPA) when acquiring most investment services. Among other reasons, the MPA exists to provide for consistency in the acquisition of goods and services across state government; to acquire goods and services in a fair and equitable manner; to encourage competition among bidders within the free enterprise system; and to foster public confidence that appropriate procurement procedures are being followed in the expenditure of public funds.

Procurement Act Applicability to Certain Board Contracts

Given how private equity commitments are identified and negotiated, it is not practicable for the board to operate within the constraints of the MPA when entering such arrangements. There is also some question as to whether private equity or real estate deals would fall under the MPA in any case, as rather than securing a good or service, the arrangement is typically structured as a partnership between fund managers (general partners) and the board (limited partner; typically one of several in a given private equity fund). The board has historically not followed traditional state procurement procedures when entering into such agreements.

In 2012, the board changed its Governance Policy with regard to its method for selecting external public asset managers. According to minutes from the February meeting this was done to "reassert the board's authority over the type of investments to be made." The unanimously approved changes had the effect of exempting the board's investment staff from the requirements of the MPA when contracting with public equities managers, instead vesting the final authority in making such investments with the executive director and the chief investment officer.

In suggesting the policy change to the board, the executive director wrote that "Montana law directs that the board shall determine the type of investment to be made. It is staff's recommendation that the Governance Policy accurately reflect that in choosing a type of investment, such as using a public or private equity manager and/or using passive or active styles and their corresponding external money managers, that this power rests solely with the board. It is not governed under Montana law by the Montana Procurement Act."

Further, the director claimed, "the Unified Investment law is specific: where the board's contracts are axiomatic to the board's statutory mission in determining the type of investment to be made, the board has the sole say. Its contracts under this narrow statutory provision cannot be vetoed by another state agency under the law."

The MPA is a general act that applies to the expenditure of public funds by the state acting through a governmental body under any contract, although there are several exemptions in the law for certain types of goods and services (see §18-4-132(3), MCA). Included in these exemptions are the acquisition of insurance-related services by the state compensation insurance fund; hiring of registered professional engineers, surveyors, real estate appraisers and registered architects; hiring of physicians, dentists, pharmacists or other medical, dental or health care providers; consulting actuaries; and others.

The acquisition of external investment management services bears similarities to other professional services for which there are exemptions to the MPA. These professionals are generally highly educated and qualified to work in a specialized field, and the best hiring practice may not necessarily entail choosing the low bidder. Further, the MPA can involve a cumbersome, lengthy process that does not lend itself well to procuring time-sensitive services of professionals with a specific investment expertise. Through research we determined that some other states follow their state's formal procurement processes when contracting with external public equity managers, while others do not.

It would be appropriate for the board to be exempt from the MPA when hiring external investment managers. Other state agencies have sought and received from the legislature statutory exceptions to the MPA for various goods and services. However, the board did not seek legislation in changing the areas in which it follows the MPA.

RECOMMENDATION #6

We recommend the Board of Investments seek revisions to the Montana Procurement Act to provide an exemption to the board for the procurement of external investment management services.

Montana Board of Investments

Board Response

MONTANA
BOARD OF INVESTMENTS

Department of Commerce

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January 24, 2014

Tori Hunthausen, CPA
Legislative Auditor
Legislative Audit Division
P.O. Box 201705
Helena MT 59620-1705

Dear Ms. Hunthausen:

The Board of Investments has received your office's performance audit covering various aspects of our Board. I want to express our appreciation to you and your staff who worked hard to understand our investment mission, practices, and perhaps most importantly, the oversight from our Board members.

The legislative audit process allows agencies to respond in writing and to have our comments become part of the final audit document for the Legislative Audit Committee and the public. We much appreciate this courtesy. Because your audit process currently provides that legislators who serve on the Legislative Audit Committee have the first public opportunity to receive and comment on your reports, the Board of Investments can only informally respond at this time. The Board is scheduled to formally consider this report in open meeting at its February meeting. The comments I offer below are my best efforts to represent the initial thoughts of the Board of Investments after receiving input from many of them on an individual basis.

Recommendation #1

We recommend the Montana Legislature revise the professional and experience requirements for the composition of the Board of Investments to increase the board's collective knowledge and understanding of institutional investing.

We acknowledge that the statutory makeup of the Board is the prerogative of both the Legislature and the Governor and that this recommendation is directed specifically to the Legislature, not the Board. Therefore, we respectfully request that our view be taken not on a concur/non-concur basis, but as an interested and knowledgeable party.

The current intent of the law is that the Board be a citizen board, composed (as the law requires), of a diverse make up. As you know, the law currently requires "a balance of professional expertise and public interest and accountability." Over many years, governors have appointed investment brokers and financial advisors, bankers, attorneys, small business owners, farmers, ranchers, educators, engineers, working men and women and public employees. To serve on the Board of Investments is a high honor and significant responsibility.

A key strength that results from the diversity of membership of the Board is that the professional staff and consultants are required to explain their work and investment strategies to a representative group of Montanans. Good Board members are unafraid to ask even the most rudimentary questions in conjunction with the difficult technical ones. This helps all of us understand the recommendations and actions of the highly trained investment staff. This insures that the staff has a reasonable, explainable basis for its recommendations to the Board and helps all citizens better understand the Board's business and missions.

We believe that the current law on Board of Investments member composition is appropriate for the Board to function in fulfilling all of its responsibilities. As the audit report attests, the Board is meeting its fiduciary responsibilities in a competent manner. Finally, we believe that the current statute on Board of Investments composition and the requirement that seven out of nine of its members "be informed and experienced in the area of investments" is as strict as, or stricter, than many other states as to requiring financial knowledge or experience for Board eligibility.

Recommendation #2

We recommend the Board of Investments require ongoing educational activities be provided to Board members.

We Concur.

While the Board cannot legally compel members to participate on some conditional basis, no matter how worthy, the Board understands and appreciates how important it is for members to understand and be conversant in the many areas of the Board's responsibilities. The Board's existing education policy covers a wide number of guidelines and procedures. Additionally, two years ago, the Board adopted a 24-month work plan strategy, which exposes and educates members on a systematic basis to all of the functions that the Board must fulfill. Additionally, the Board has directed its consultant to provide educational services. Staff will request that the importance of this systematic work and education plan be elevated by incorporating that such a work/education plan be adopted within the Board's governance policy.

Staff offers a few other comments: The Board is sensitive about costs and the cost of attending educational seminars can be significant. The Board is also aware that many investment conferences are of dubious educational value and are instead either junkets or sales pitches. Thus, it is a difficult task to select educational seminars and investment conferences that are cost-effective and truly educational. The staff will continue its effort to do so.

Recommendation #3

We recommend the Board of Investments amend its Governance Policy to more strongly emphasize its commitment to annual affirmation of the asset allocation of its entire portfolio of investments

We Concur.

Staff will recommend to the Board that this matter be elevated to the Board's general governance policy. As the report noted, the Board has often addressed specific asset allocation issues. The global affirmation on asset allocation was scheduled in the Board's 2013 work plan and was addressed at its November 2013 meeting. While this recommendation covers a technical deficiency, nevertheless, it is a fair criticism given the importance of overall asset allocation.

Recommendation #4

We recommend the Board of Investments ensure that its regularly required votes, reports and affirmations are more strictly adhered to in accordance with its charters.

We Concur.

Staff will suggest that the best way to concur with this recommendation is to be sure that policies contain requirements on Board members that are truly enforceable. Some of the existing policies in the committee charters would therefore need to be modified or even eliminated.

Recommendation #5

We recommend the Board of Investments adopt a proxy voting policy which provides staff and external managers with sufficient guidance to act in the best interest of account holders and that board members periodically review proxy voting results.

We Concur.

Staff will work to ensure the matter of proxy voting for public equities will be reviewed on a timelier manner by the full Board. This subject is scheduled for the Board's May meeting and proxy voting is now included in the Board's 24-month systematic work plan.

Recommendation #6

We recommend the MBOI seek revisions to the Montana Procurement Act to provide an exemption to the Board for the procurement of external investment management services.

We respectfully do not concur.

The Board fully respects and complies with the state procurement law. Under the Uniform Investment Act, the Board is charged with choosing investment types which means choosing investment managers. The audit report points out the impracticability of using a procurement process for private equity. But the law is the law; a government body cannot ignore the law simply because it is impractical to comply.

The Board's position is that the Legislature has already given the Board the authority to contract with investment managers without going through the procurement process. The Board through its governance policy acknowledges that this exception is a very limited one. Consequently the Board has clarified that it has the sole responsibility under the law to choose private or public investment managers. This matter was reviewed and concurred with by the chief legal counsel for the Department of Administration.

Only one executive agency may administer the Unified Investment Program as required under the Montana Constitution. The Legislature has chosen the Board of Investments to serve this role. We also believe, and our view is supported by counsel for the Department of Administration, that there would be two state agencies with that final authority if investment managers were subject to the procurement process.

We acknowledge that the performance auditors support the Board's authority and acknowledge that the selection of investment managers should not be made through the procurement process. Instead, the auditors are recommending a 'clean up' statute. The Board, however, respectfully believes that accepting the very premise that such a statute is necessary runs counter to the legal opinion it received from the chief attorney for the department that implements the Procurement Act.

Sincerely,

David Ewer

David Ewer
Executive Director

Montana Board of Investments
Human Resources Committee Charter
Approved: ~~April 15, 2005~~February 25, 2014 Pending Approval

Purpose of Committee

The purpose of the Human Resources Committee is to discharge the Board's responsibilities relating to personnel matters of all Board staff and compensation of the Board's exempt staff.

Committee Membership

The Committee shall consist of at least three Board Members.

Members shall be appointed by the Board Chair who shall notify the Board of all appointments as they are made. The Chair shall appoint for membership to the Committee only those individuals who the Chair believes in his/her judgment are qualified to perform the duties of the Committee as set forth in this charter. The Chair may remove a Committee member at any time and appoint a replacement to complete the removed member's term, provided the Chair notifies the Board of the removal and the reasons at the time of the removal.

Committee Structure and Operations

The Chair shall designate one member of the Committee as its chairperson The Committee shall meet in person or telephonically as it deems necessary or appropriate, and at least two times per year, at a place and time determined by the Committee chairperson

The Committee may invite such staff to its meetings as it may deem desirable or appropriate, consistent with the maintenance of the confidentiality of performance and compensation discussions. The Board's Executive Director ("Director") should not attend any meeting where the Director performance or compensation is discussed, unless specifically invited by the Committee.

If one member of the Committee cannot attend a meeting, the remaining two members of the Committee, acting unanimously, shall have the power to take any action necessary or convenient to the efficient discharge of its responsibilities. No action of the Committee shall be valid unless approved by at least two members of the Committee.

Committee Duties and Responsibilities

The following are the general duties and responsibilities of the Committee:

- In consultation with the Director and Chief Investment Officer ("CIO"), establish and periodically review the general compensation policies applicable to the Board's employees, and oversee the development and implementation of compensation programs. This activity includes the commissioning of peer salary surveys, the review of such surveys, and the establishing of pay ranges based on the surveys.

- Review and recommend the compensation and incentive programs, and modifications and amendments thereto, applicable to the exempt Board staff and other employees of the Board whose compensation has a component that includes the relationship of the Board's investment performance to compensation and the basis for calculating such compensation. Discharge any responsibilities imposed on the Committee by any of these programs.

- Review and recommend the specific levels of compensation, including salaries, incentives, benefits and perquisites, of the Director, CIO and the other exempt Board staff and of other staff as the Board may have authority over with respect to compensation.

- Review and approve goals and objectives relevant to the compensation, including incentive compensation, of the Director, CIO, and other exempt staff. In setting long-term goals and objectives relevant to the long-term incentive component of those goals and objectives, the Committee shall consider, among other factors, the Board's investment performance and return relative to investment performance at comparable investment boards, the awards given to the CIO and investment staff in past years and the provisions of the Board's compensation plan for exempt staff.

- Oversee the Director in developing Job Profiles and performance criteria for all exempt staff.

- Evaluate and advise the Board concerning the performance of the Director, the CIO, and other exempt staff against established goals and objectives.

- Recommend the Director's, CIO's, and exempt staff compensation level for the coming year based on this evaluation and recommend, as appropriate, a course of action to remedy deficiencies observed or improve performance.

- Review and advise the Board concerning and, if deemed appropriate, retain consultants to advise the Committee regarding industry compensation practices and trends in order to assess the adequacy and competitiveness of the Board's compensation programs. Retain as necessary consultants to advise on other personnel issues.

- Prepare and deliver to the Board, at such time as the Board shall request, reports concerning the activities and recommendations of the Committee and disclose the compensation policies applicable to the Director, CIO, and exempt Board staff. Discuss the relationship of the Board's investment performance to exempt staff compensation and the basis for the compensation awarded during such period.

- Oversee the Director in development and maintenance of a succession plan for exempt staff and other key employees, and report to the Board the Committee's recommendations regarding succession.

- In consultation with the Director, oversee regulatory compliance with respect to compensation matters.

- Consider and act on written employee appeals and grievances when the Director is unable to resolve differences with exempt employees.

- ~~Prepare and issue the evaluations and reports required under "Committee Reports" below.~~

- Any other duties or responsibilities expressly delegated to the Committee by the Board from time to time relating to exempt staff performance and compensation.

Committee Reports

The Committee shall produce the following reports and provide them to the Board.

- ~~An annual Report of the Human Resources Committee on exempt staff compensation.~~

- ~~An annual performance evaluation of the Committee comparing the performance of the Committee with the requirements of this charter. The performance evaluation should also recommend to the Board any changes to this charter deemed necessary or desirable by the Committee. The performance evaluation by the Committee shall be conducted in such manner as the Committee deems appropriate. The report to the Board may take the form of an oral report by the chairperson of the Committee or any other member of the Committee designated by the Committee to make this report.~~

- ~~A written summary of the actions taken, recommendations and decisions made by the Committee, which shall be presented to the Board at the next Board meeting following the action/decision.~~

- The Committee will keep the Board informed on a timely basis either verbally or in writing on all matters related to its duties and purpose. The Committee has the discretion to keep specific personnel matters within the Committee or, if required by the Board, to report on any such matter in executive session of the Board.

Resources and Authority of the Committee

The Committee shall have the resources and authority appropriate to discharge its duties and responsibilities, including the authority to select, retain, terminate, and approve the fees and other retention terms of special legal counsel or other experts or consultants, as it deems appropriate, subject to state procurement rules. With respect to compensation consultants retained to assist in the evaluation of staff this authority shall be vested solely in the Committee.

Montana Board of Investments
Human Resources Committee Charter
Approved: February 25, 2014

Purpose of Committee

The purpose of the Human Resources Committee is to discharge the Board's responsibilities relating to personnel matters of all Board staff and compensation of the Board's exempt staff.

Committee Membership

The Committee shall consist of at least three Board Members.

Members shall be appointed by the Board Chair who shall notify the Board of all appointments as they are made. The Chair shall appoint for membership to the Committee only those individuals who the Chair believes in his/her judgment are qualified to perform the duties of the Committee as set forth in this charter. The Chair may remove a Committee member at any time and appoint a replacement to complete the removed member's term, provided the Chair notifies the Board of the removal and the reasons at the time of the removal.

Committee Structure and Operations

The Chair shall designate one member of the Committee as its chairperson The Committee shall meet in person or telephonically as it deems necessary or appropriate, and at least two times per year, at a place and time determined by the Committee chairperson

The Committee may invite such staff to its meetings as it may deem desirable or appropriate, consistent with the maintenance of the confidentiality of performance and compensation discussions. The Board's Executive Director ("Director") should not attend any meeting where the Director performance or compensation is discussed, unless specifically invited by the Committee.

If one member of the Committee cannot attend-a meeting, the remaining two members of the Committee, acting unanimously, shall have the power to take any action necessary or convenient to the efficient discharge of its responsibilities. No action of the Committee shall be valid unless approved by at least two members of the Committee.

Committee Duties and Responsibilities

The following are the general duties and responsibilities of the Committee:

- In consultation with the Director and Chief Investment Officer ("CIO"), establish and periodically review the general compensation policies applicable to the Board's employees, and oversee the development and implementation of compensation programs. This activity includes the commissioning of peer salary surveys, the review of such surveys, and the establishing of pay ranges based on the surveys.

- Review and recommend the compensation and incentive programs, and modifications and amendments thereto, applicable to the exempt Board staff and other employees of the Board whose compensation has a component that includes the relationship of the Board's investment performance to compensation and the basis for calculating such compensation. Discharge any responsibilities imposed on the Committee by any of these programs.

- Review and recommend the specific levels of compensation, including salaries, incentives, benefits and perquisites, of the Director, CIO and the other exempt Board staff and of other staff as the Board may have authority over with respect to compensation.

- Review and approve goals and objectives relevant to the compensation, including incentive compensation, of the Director, CIO, and other exempt staff. In setting long-term goals and objectives relevant to the long-term incentive component of those goals and objectives, the Committee shall consider, among other factors, the Board's investment performance and return relative to investment performance at comparable investment boards, the awards given to the CIO and investment staff in past years and the provisions of the Board's compensation plan for exempt staff.

- Oversee the Director in developing Job Profiles and performance criteria for all exempt staff.

- Evaluate and advise the Board concerning the performance of the Director, the CIO, and other exempt staff against established goals and objectives.

- Recommend the Director's, CIO's, and exempt staff compensation level for the coming year based on this evaluation and recommend, as appropriate, a course of action to remedy deficiencies observed or improve performance.

- Review and advise the Board concerning and, if deemed appropriate, retain consultants to advise the Committee regarding industry compensation practices and trends in order to assess the adequacy and competitiveness of the Board's compensation programs. Retain as necessary consultants to advise on other personnel issues.

- Prepare and deliver to the Board, at such time as the Board shall request, reports concerning the activities and recommendations of the Committee and disclose the compensation policies applicable to the Director, CIO, and exempt Board staff. Discuss the relationship of the Board's investment performance to exempt staff compensation and the basis for the compensation awarded during such period.

- Oversee the Director in development and maintenance of a succession plan for exempt staff and other key employees, and report to the Board the Committee's recommendations regarding succession.

- In consultation with the Director, oversee regulatory compliance with respect to compensation matters.

- Consider and act on written employee appeals and grievances when the Director is unable to resolve differences with exempt employees.

- Any other duties or responsibilities expressly delegated to the Committee by the Board from time to time relating to exempt staff performance and compensation.

Committee Reports

The Committee shall produce the following reports and provide them to the Board.

- The Committee will keep the Board informed on a timely basis either verbally or in writing on all matters related to its duties and purpose. The Committee has the discretion to keep specific personnel matters within the Committee or, if required by the Board, to report on any such matter in Executive Session of the Board.

Resources and Authority of the Committee

The Committee shall have the resources and authority appropriate to discharge its duties and responsibilities, including the authority to select, retain, terminate, and approve the fees and other retention terms of special legal counsel or other experts or consultants, as it deems appropriate, subject to state procurement rules. With respect to compensation consultants retained to assist in the evaluation of staff this authority shall be vested solely in the Committee.

Montana State Board of Investments
Audit Committee Charter
Approved: ~~August 21, 2012~~February 25, 2014 Pending Approval

Purpose of the Audit Committee
To assist the Board in fulfilling its oversight responsibilities for the financial reporting process, the system of internal control, the audit process, and the Board's process for monitoring compliance with laws and regulations and its code of ethical conduct.

Authority
The Audit Committee has authority to conduct or authorize investigations into any matters within its scope of responsibility. It is empowered to:

- Retain outside counsel, accountants, or others to advise the committee or assist in the conduct of an investigation.
- Seek any information it requires from employees — all of whom are directed to cooperate with the committee's requests — or external parties.
- Meet with Board officers, external auditors, or outside counsel, as necessary.

Composition
The Audit Committee will consist of at least three members of the Board. The Chairman of the Board shall serve as an ex-officio member of the Audit Committee. The Board Chairman will appoint committee members and the committee chair. Each committee member will be both independent and financially literate, as defined by the Board. At least one member shall have expertise in financial reporting or auditing.

Meetings
The Audit Committee will meet at least twice a year, with authority to convene additional meetings, as circumstances require. All committee members are expected to attend each meeting, in person or via teleconference. The committee will invite members of management, auditors, or others to attend meetings and provide pertinent information as necessary. It will hold private meetings with auditors (see below) and executive sessions. Meeting agendas will be prepared and provided in advance to committee members, along with appropriate briefing materials. Minutes will be prepared.

Responsibilities
The committee will carry out the following responsibilities:

Financial Statements

- Review with management and the external auditors:
  - the results of the audit, including any difficulties encountered;
  - significant accounting and reporting issues, including complex or unusual transactions and highly judgmental areas;
  - recent professional and regulatory pronouncements, and understand their impact on the financial statements;
  - review the annual financial statements, and consider whether they are complete, consistent with information known to committee members, and reflect appropriate accounting principles;

    - review other sections of the annual report before release and consider the accuracy and completeness of the information; and
    - review with management and the external auditors all matters required to be communicated to the committee under generally accepted auditing standards.
- Understand how management develops interim financial information, and the nature and extent of internal and external auditor involvement.
- Review interim financial reports with management and the external auditors, before filing with state agencies and constituent groups, and consider whether they are complete and consistent with the information known to committee members.

Internal Control

- Consider the effectiveness of the Board's internal control systems, including financial reporting and information technology security and control.
- Understand the scope of internal and external auditors' review of internal control over financial reporting, and obtain reports on significant findings and recommendations, together with management's responses.

Internal Audit

- Review with management and the Internal Auditor the charter, plans, activities, staffing and organizational structure of the internal audit activity.
- Ensure there are no unjustified restrictions or limitations, and review and concur in the appointment, replacement or dismissal of the Internal Auditor.
- Review the effectiveness of the internal audit activity, including compliance with The Institute of Internal Auditors' *Standards for the Professional Practice of Internal Auditing.*
- On a regular basis, meet separately with the Internal Auditor to discuss any matters that the committee or internal audit believes should be discussed privately.

External Audits

- Review any external auditors' proposed audit scope and approach, including coordination of audit effort with internal audit.
- Review the performance of the external auditors.
- Review and confirm the independence of the external auditors.
- On a regular basis, meet separately with the external auditors to discuss any matters that the committee or auditors believe should be discussed privately.

Compliance

- Review the effectiveness of the system for monitoring compliance with laws and regulations and the results of management's investigation and follow-up (including disciplinary action) of any instances of noncompliance.
- Review the findings of any examinations by regulatory agencies, and any auditor observations.
- Review the process for communicating the code of ethics to Board personnel, and for monitoring compliance therewith.
- Obtain regular updates from management and Board legal counsel regarding compliance matters.

Reporting Responsibilities

- Regularly report to the Board following each Audit Committee meeting about committee activities, issues, and related recommendations.
- Provide an open avenue of communication between internal audit, the external auditors, and the Board.
- Report regularly, following an Audit Committee meeting, to the Board's constituent groups, describing the committee's composition, responsibilities and how they were discharged, and any other information required by rule.
- Review any other reports the Board issues that relate to committee responsibilities.

Other Responsibilities

- Perform other activities related to this charter as requested by the Board.
- Institute and oversee special investigations as needed.
- Review and assess the adequacy of the committee charter annually, requesting board approval for proposed changes.
- Confirm annually that all responsibilities outlined in this charter have been carried out.
- ~~Evaluate the committee's and individual members' performance on a regular basis.~~

Montana State Board of Investments
Audit Committee Charter
Approved: February 25, 2014

Purpose of the Audit Committee
To assist the Board in fulfilling its oversight responsibilities for the financial reporting process, the system of internal control, the audit process, and the Board's process for monitoring compliance with laws and regulations and its code of ethical conduct.

Authority
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- Retain outside counsel, accountants, or others to advise the committee or assist in the conduct of an investigation.
- Seek any information it requires from employees — all of whom are directed to cooperate with the committee's requests — or external parties.
- Meet with Board officers, external auditors, or outside counsel, as necessary.

Composition
The Audit Committee will consist of at least three members of the Board. The Chairman of the Board shall serve as an ex-officio member of the Audit Committee. The Board Chairman will appoint committee members and the committee chair. Each committee member will be both independent and financially literate, as defined by the Board. At least one member shall have expertise in financial reporting or auditing.

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Financial Statements
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  - the results of the audit, including any difficulties encountered;
  - significant accounting and reporting issues, including complex or unusual transactions and highly judgmental areas;
  - recent professional and regulatory pronouncements, and understand their impact on the financial statements;
  - review the annual financial statements, and consider whether they are complete, consistent with information known to committee members, and reflect appropriate accounting principles;

- review other sections of the annual report before release and consider the accuracy and completeness of the information; and
- review with management and the external auditors all matters required to be communicated to the committee under generally accepted auditing standards.

- Understand how management develops interim financial information, and the nature and extent of internal and external auditor involvement.
- Review interim financial reports with management and the external auditors, before filing with state agencies and constituent groups, and consider whether they are complete and consistent with the information known to committee members.

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- Review the findings of any examinations by regulatory agencies, and any auditor observations.
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- Review any other reports the Board issues that relate to committee responsibilities.

Other Responsibilities

- Perform other activities related to this charter as requested by the Board.
- Institute and oversee special investigations as needed.
- Review and assess the adequacy of the committee charter annually, requesting board approval for proposed changes.
- Confirm annually that all responsibilities outlined in this charter have been carried out.

Montana Board of Investments
Loan Committee Charter
Original Document Approved: June 24, 2005
Last Revised: ~~August 16, 2011~~February 25, 2014 Pending Approval

Delegated Authority

This Charter delegates authority to Board staff and the Loan Committee as follows:

- Board staff may approve federally guaranteed loans of any size without concurrence of the Loan Committee.
- Board staff may approve all Coal Tax Trust and INTERCAP loans up to $1.0 million without concurrence of the Loan Committee, provided that the underwriting for such loans complies with all provisions of the relevant loan policies approved by the Board.
- Board staff may authorize enhancement of up to $1.0 million in Montana Facility Finance Authority Act (MFFA) bonds, without concurrence of the Loan Committee.
- Board staff may approve all Coal Tax Trust and INTERCAP loans greater than $1.0 million and up to $5.0 million only with concurrence of the Loan Committee.
- Board staff may authorize enhancement of MFFA bonds greater than $1.0 million and up to $5.0 million, only with concurrence of the Loan Committee. Enhancement of MFFA bonds greater than $5.0 million shall be reviewed by the Loan Committee and recommended to the full Board for final approval.
- All non-federally guaranteed Coal Tax Trust and INTERCAP loans in excess of $5.0 million shall be reviewed and approved by the Loan Committee and recommended to the full Board for final approval.

For purposes of this Charter, loan amounts include only the Board's portion of a participation loan.

Loan Parameters

- Commercial maximum loan size is limited by law to 10.0 percent of the Coal Tax Trust.
- Value-Added maximum loan size is limited by law to 1.0 percent of the Coal Tax Trust.
- Value-Added minimum loan size is set by law at $250,000.
- Maximum amount of Value-Added loans outstanding is limited by law to $50.0 million.
- Infrastructure maximum loan size is limited by law to $16,666 per each job created.
- Infrastructure minimum loan size is set by law at $250,000.
- Maximum amount of Infrastructure loans outstanding is limited by law to $50.0 million.
- Maximum Board participation in Commercial loans is 80.0 percent.
- Board participation in Value-Added loans is set by law at 75.0 percent.
- Infrastructure loans are made directly to local government entities.

Purpose of Committee

The purpose of the Loan Committee is:

- To provide the due diligence required for Coal Tax Trust loans, and enhancement of MFFA bonds in an amount greater than $1.0 million.
- To review and approve Coal Tax Loan Program Policy and Residential Loan Program Policy prior to presentation to the Board.
- Provide guidance regarding pricing of loans.

The Committee is charged with:

- Reviewing and taking appropriate action on all staff recommendations for non-federally guaranteed Coal Tax Trust loans, INTERCAP loans, and the enhancement of MFFA bonds in excess of $1.0 million and up to $5.0 million.
- Reviewing staff recommendations for non-federally guaranteed Coal Tax Trust loans and INTERCAP loans in excess of $5.0 million and enhancement of MFFA bonds in excess of $5.0 million and making a recommendation to the full Board.
- Reviewing staff recommendations to issue additional INTERCAP bonds and recommending to the full Board approval of the recommendation as modified by the Committee.

Committee Membership
The Committee shall consist of at least three Board Members.

Members shall be appointed by the Board Chair who shall notify the Board of all appointments as they are made. The Chair shall appoint for membership to the Committee only those individuals who the Chair believes in his/her judgment are qualified to perform the due diligence duties of the Committee as set forth in this Charter. The Chair shall designate one member of the Committee as its chairperson. The Chair may remove a Committee member at any time and appoint a replacement to complete the removed Member's term, provided the Chair notifies the Board of the removal and the reasons at the time of the removal.

Committee Structure and Operations

Loans greater than $1.0 million up to $5.0 million: Staff shall provide hard copy loan approval recommendations to each Committee Member. Such documents shall include all pertinent information required by Members to fulfill their obligations under this Charter. After reviewing such documents, the Committee may meet in person or telephonically as required to perform their obligations under this Charter. In lieu of meeting in person or telephonically, Members may e-mail staff with their input and concurrence, subject to the "Confidentiality" provisions of this Charter.

Committee Members may require that certain loan provisions, loan participation share (when permitted by law), or loan covenants recommended by staff be revised. If two Committee Members do not concur with staff recommendations for loan approval as modified or revised by Members, the staff recommendation shall be forwarded to the full Board at a public meeting in which the lender and the borrower may be present. If Committee concurrence is granted via e-mail, such concurrence will serve as a written record of concurrence and obviate the need for recording such action in Committee minutes.

Loans and Bond Enhancement Greater than $5.0 million: Staff shall provide hard copy loan approval recommendations to each Committee Member. Such documents shall include all pertinent information required by Members to fulfill their obligations under this Charter. After reviewing such documents, the Committee may meet in person or telephonically as required to perform their obligations under this Charter.

Committee Members may require that certain loan provisions, loan participation share (when permitted by law), or loan covenants recommended by staff be revised. Such revisions shall be incorporated into the staff recommendations and if the staff recommendations with any such revisions are approved by at least two Members, the recommendations shall be forwarded to the full Board for a final decision. If the staff recommendations with any such revisions are not approved by at least two Members, the lender and the borrower may appeal such decision to the full Board at its next regularly scheduled meeting.

Committee Duties and Responsibilities

The following are the general duties and responsibilities of the Committee:

- ♦ Review staff recommendations to approve Coal Tax Trust loans, INTERCAP loans, and MFFA bond enhancement greater than $1.0 million and up to $5.0 million and suggest revisions or modifications to the staff recommendations as necessary.
- ♦ Concur or not concur with staff recommendations as revised or modified by Committee Members.
- ♦ Review staff recommendations to approve Coal Tax Trust loans, INTERCAP loans, and MFFA bond enhancement in excess of $5.0 million and recommend to the full Board modifications to and approval of the staff recommendations.
- ♦ Review staff recommendations to approve the issuance of Municipal Finance Consolidation Act bonds and the purchase of tendered bonds that have not been remarketed and recommend to the full Board modifications to and approval of the staff recommendations.
- ♦ Provide, when necessary and appropriate, an appeals function for lenders and borrowers whose loan applications have been disapproved by staff.
- ♦ Review staff-recommended revisions to the various loan program policies/applications and recommend to the full Board the approval, denial, or modifications of such revisions.
- ♦ When necessary and prudent, recommend to the full Board the waiver of certain loan policy provisions, as long as such waiver is limited to the merits of an individual loan application and is considered by the Committee to be in the public interest.
- ♦ Advise the Executive Director and the ~~Assistant Investment Officer - in-state investments (AIO)~~ loan and bond program staff on the setting of interest rates where permitted by law.
- ♦ Consult with the Executive Director and the ~~AIO~~ loan and bond program staff on portfolio risk and loan parameters.
- ♦ Advise the Executive Director on the job performance of the ~~AIO~~loan and bond program staff.
- ♦ Prepare and deliver to the Board, at such time as the Board shall request and as required by this Charter, reports concerning the activities and recommendations of the Committee
- ♦ Any other duties or responsibilities expressly delegated to the Committee by the Board from time to time relating to in-state investments.

Reports

A written summary of the actions taken, recommendations and decisions made by the Committee shall be presented to the Board at the next Board meeting following the action/decision.

Resources and Authority of the Committee

The Committee shall have the resources and authority appropriate to discharge its duties and responsibilities.

Montana Board of Investments
Loan Committee Charter
Original Document Approved: June 24, 2005
Last Revised: February 25, 2014

Delegated Authority

This Charter delegates authority to Board staff and the Loan Committee as follows:
- ♦ Board staff may approve federally guaranteed loans of any size without concurrence of the Loan Committee.
- ♦ Board staff may approve all Coal Tax Trust and INTERCAP loans up to $1.0 million without concurrence of the Loan Committee, provided that the underwriting for such loans complies with all provisions of the relevant loan policies approved by the Board.
- ♦ Board staff may authorize enhancement of up to $1.0 million in Montana Facility Finance Authority Act (MFFA) bonds, without concurrence of the Loan Committee.
- ♦ Board staff may approve all Coal Tax Trust and INTERCAP loans greater than $1.0 million and up to $5.0 million only with concurrence of the Loan Committee.
- ♦ Board staff may authorize enhancement of MFFA bonds greater than $1.0 million and up to $5.0 million, only with concurrence of the Loan Committee. Enhancement of MFFA bonds greater than $5.0 million shall be reviewed by the Loan Committee and recommended to the full Board for final approval.
- ♦ All non-federally guaranteed Coal Tax Trust and INTERCAP loans in excess of $5.0 million shall be reviewed and approved by the Loan Committee and recommended to the full Board for final approval.

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- ♦ Maximum Board participation in Commercial loans is 80.0 percent.
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- ♦ Infrastructure loans are made directly to local government entities.

Purpose of Committee

The purpose of the Loan Committee is:
- ♦ To provide the due diligence required for Coal Tax Trust loans, and enhancement of MFFA bonds in an amount greater than $1.0 million.
- ♦ To review and approve Coal Tax Loan Program Policy and Residential Loan Program Policy prior to presentation to the Board.
- ♦ Provide guidance regarding pricing of loans.

Montana Board of Investments
Loan Committee Charter
Original Document Approved: June 24, 2005
Last Revised: February 25, 2014

The Committee is charged with:

- ♦ Reviewing and taking appropriate action on all staff recommendations for non-federally guaranteed Coal Tax Trust loans, INTERCAP loans, and the enhancement of MFFA bonds in excess of $1.0 million and up to $5.0 million.
- ♦ Reviewing staff recommendations for non-federally guaranteed Coal Tax Trust loans and INTERCAP loans in excess of $5.0 million and enhancement of MFFA bonds in excess of $5.0 million and making a recommendation to the full Board.
- ♦ Reviewing staff recommendations to issue additional INTERCAP bonds and recommending to the full Board approval of the recommendation as modified by the Committee.

Committee Membership

The Committee shall consist of at least three Board Members.

Members shall be appointed by the Board Chair who shall notify the Board of all appointments as they are made. The Chair shall appoint for membership to the Committee only those individuals who the Chair believes in his/her judgment are qualified to perform the due diligence duties of the Committee as set forth in this Charter. The Chair shall designate one member of the Committee as its chairperson. The Chair may remove a Committee member at any time and appoint a replacement to complete the removed Member's term, provided the Chair notifies the Board of the removal and the reasons at the time of the removal.

Committee Structure and Operations

Loans greater than $1.0 million up to $5.0 million: Staff shall provide hard copy loan approval recommendations to each Committee Member. Such documents shall include all pertinent information required by Members to fulfill their obligations under this Charter. After reviewing such documents, the Committee may meet in person or telephonically as required to perform their obligations under this Charter. In lieu of meeting in person or telephonically, Members may e-mail staff with their input and concurrence, subject to the "Confidentiality" provisions of this Charter.

Committee Members may require that certain loan provisions, loan participation share (when permitted by law), or loan covenants recommended by staff be revised. If two Committee Members do not concur with staff recommendations for loan approval as modified or revised by Members, the staff recommendation shall be forwarded to the full Board at a public meeting in which the lender and the borrower may be present. If Committee concurrence is granted via e-mail, such concurrence will serve as a written record of concurrence and obviate the need for recording such action in Committee minutes.

Loans and Bond Enhancement Greater than $5.0 million: Staff shall provide hard copy loan approval recommendations to each Committee Member. Such documents shall include all pertinent information required by Members to fulfill their obligations under this Charter. After reviewing such documents, the Committee may meet in person or telephonically as required to perform their obligations under this Charter.

Committee Members may require that certain loan provisions, loan participation share (when permitted by law), or loan covenants recommended by staff be revised. Such revisions shall be incorporated into the staff recommendations and if the staff recommendations with any such revisions are approved by at least two Members, the recommendations shall be forwarded to the full Board for a final decision. If the staff recommendations with any such revisions are not approved by at least two Members, the lender and the borrower may appeal such decision to the full Board at its next regularly scheduled meeting.

Committee Duties and Responsibilities

The following are the general duties and responsibilities of the Committee:

- Review staff recommendations to approve Coal Tax Trust loans, INTERCAP loans, and MFFA bond enhancement greater than $1.0 million and up to $5.0 million and suggest revisions or modifications to the staff recommendations as necessary.
- Concur or not concur with staff recommendations as revised or modified by Committee Members.
- Review staff recommendations to approve Coal Tax Trust loans, INTERCAP loans, and MFFA bond enhancement in excess of $5.0 million and recommend to the full Board modifications to and approval of the staff recommendations.
- Review staff recommendations to approve the issuance of Municipal Finance Consolidation Act bonds and the purchase of tendered bonds that have not been remarketed and recommend to the full Board modifications to and approval of the staff recommendations.
- Provide, when necessary and appropriate, an appeals function for lenders and borrowers whose loan applications have been disapproved by staff.
- Review staff-recommended revisions to the various loan program policies/applications and recommend to the full Board the approval, denial, or modifications of such revisions.
- When necessary and prudent, recommend to the full Board the waiver of certain loan policy provisions, as long as such waiver is limited to the merits of an individual loan application and is considered by the Committee to be in the public interest.
- Advise the Executive Director and the loan and bond program staff on the setting of interest rates where permitted by law.
- Consult with the Executive Director and the loan and bond program staff on portfolio risk and loan parameters.
- Advise the Executive Director on the job performance of the loan and bond program staff.
- Prepare and deliver to the Board, at such time as the Board shall request and as required by this Charter, reports concerning the activities and recommendations of the Committee
- Any other duties or responsibilities expressly delegated to the Committee by the Board from time to time relating to in-state investments.

Reports

A written summary of the actions taken, recommendations and decisions made by the Committee shall be presented to the Board at the next Board meeting following the action/decision.

Resources and Authority of the Committee

The Committee shall have the resources and authority appropriate to discharge its duties and responsibilities.

Resolution 234
Continuity Resolution for Chief Investment Officer Position

WHEREAS, the Montana Board of Investments (Board) has delegated certain critical authority and duties to its Chief Investment Officer that must be exercised and performed in the absence of the Chief Investment Officer; and

WHEREAS, the Chief Investment Officer may be incapacitated or temporarily absent from the office under circumstances that render the Chief Investment Officer unavailable to exercise such authority and perform such duties,

NOW, THEREFORE:

RESOLVED, that the Executive Director and the Deputy Director shall notify the Board Chairperson immediately at any time the Chief Investment Officer, due to incapacity, unexpected absence or other circumstance, is unable to perform his/her duties; and

FURTHER RESOLVED, that during the period of incapacity, absence, or inability to perform the duties by the Chief Investment Officer, the Executive Director or if necessary as provided under the Board's Resolution 218, the Deputy Director, is hereby designated the Acting Chief Investment Officer and fully empowered to perform all the duties of this position except as further described herein below for ***Investment Manager Contracts***; and

FURTHER RESOLVED, that while serving as the Acting Chief Investment Officer, the Executive Director may designate, after consultation with the Board Chairman, a deputy chief investment officer from among the Board's exempt investment staff whose role and authority would be defined at the time; and

FURTHER RESOLVED, that during the time that the Executive Director serves also as the Acting Chief Investment Officer, in order that appropriate checks and balances are preserved for matters ***specifically*** and ***only pertaining*** to ***Investment Manager Contracts***, as further prescribed by the Board's Governance Policy, that the oversight responsibilities regarding ***Investment Management Contracts*** held by the Chief Investment Officer shall be overseen by whomever the Board's portfolio manager is responsible for the relevant asset class involving the particular ***Investment Management Contract*** issue; and

FURTHER RESOLVED, that so long as the Chief Investment Officer is incapacitated, absent or otherwise unable to perform his/her duties, and during the period that there is an Acting Chief Investment Officer, the Executive Director must specifically update the Board, at its regularly scheduled meetings, regarding all relevant matters pertaining to the need for the continued implementation of this Resolution's delegations; and

FURTHER RESOLVED, that the Executive Director is fully empowered to take whatever steps to best prepare the Board to minimize the potential disruption, interruption, and other negative consequences that would occur from the Chief Investment Officer's incapacity, unexpected absence or other circumstance; and

FURTHER RESOLVED, that the Acting Chief Investment Officer shall operate only within the authority and parameters established in the Board's Governance Policy, and as otherwise provided by Board policy and statute.

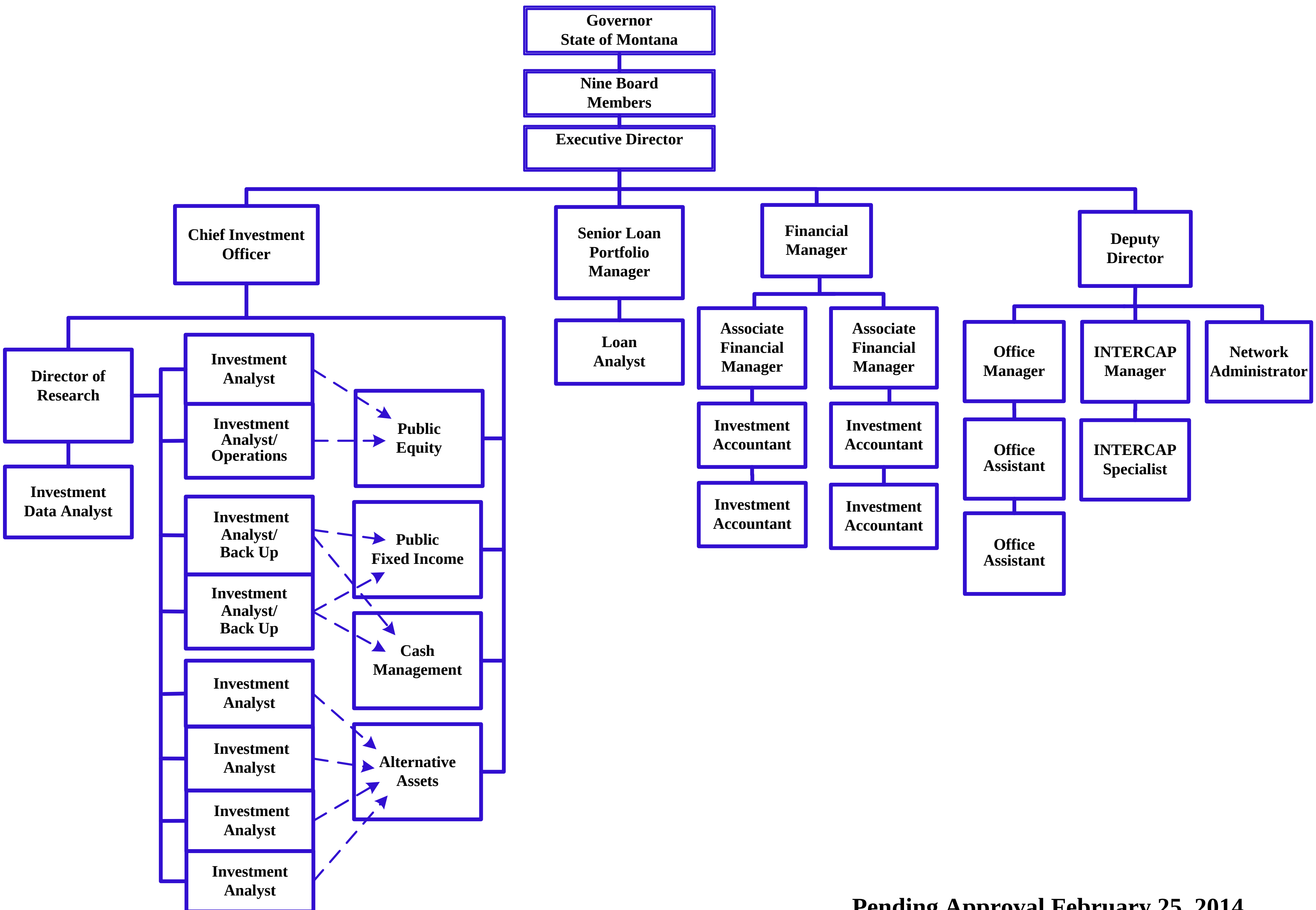
Dated and approved this 25th day of February 2014.

ATTEST

By: ______________________________

Chairman

Montana Board of Investments Functional Organization Chart



Pending Approval February 25, 2014

I. PURPOSE

State law regarding the standards of conduct for public officers and employees defines both Montana Board of Investments (Board) members and staff as public employees and includes them within the state's Code of Ethics (Ethics Code). The Board finds that the state Ethics Code is subject to differing interpretations and may not adequately address the fiduciary responsibilities of Board members and staff. Therefore, the Board adopts this Code of Ethics tailored specifically for its members and staff who have the fiduciary responsibility of managing billions of dollars in state and local government funds. The Board's Code of Ethics, while derived from and conforming to state law, establishes standards for Board members and staff conduct that specifically relate to the Board's responsibilities, mission, and potential for conflicts of interest. The state Ethics Code contains four major provisions that are applicable to the Board's investment and operations activities.

- Monetary Provisions
- Relationship Provisions
- Time and Facilities Provisions
- Dual Salary Provisions

II. STATE CODE OF ETHIC PROVISIONS

1. <u>**Monetary Provisions**</u> - The state's Ethics Code is found in Title 2, chapter 2, part 1, Montana Code Annotated. Legislative intent for the law is described in the statement of purpose:

> **Section 2-2-101. Statement of purpose. The purpose of this part is to set forth a code of ethics prohibiting conflict between public duty and private interest as required by the constitution of Montana. This code recognizes distinctions between legislators, other officers and employees of state government, and officers and employees of local government and prescribes some standards of conduct common to all categories and some standards of conduct adapted to each category. <u>The provisions of this part recognize that some actions are conflicts per se between public duty and private interest while other actions may or may not pose such conflicts depending upon the surrounding circumstances.</u>**

The underlined language (emphasis added) reflects the remainder of the state Ethics Code in that it is rather ambiguous and subject to interpretation. The underlined language seems to imply that it is the circumstances surrounding the action that may be more important in determining conflict rather than the action itself. Generally, the state's Ethics Code attempts to describe circumstances under which a public employee responsible for making material decisions impacting others may have a conflict of interest. The conflict could involve a personal or financial relationship with an existing or potential vendor/contractor/borrower or the receipt of a gift with monetary value from these entities if such a gift could influence an action favorable to the entity.

> **Section 2-2-104. A public officer, legislator, or public employee may not accept a <u>gift of substantial value</u> or a substantial economic benefit tantamount to a gift <u>that would tend improperly to influence</u> a reasonable person in the person's position to depart from the faithful and impartial discharge of the person's public duties or that the person knows or that a reasonable person in that position should know under the circumstances is primarily for the purpose of rewarding the person for official action taken.**

The underlined language (emphasis added) prohibits a public employee from receiving a "gift of substantial value" if such a gift would influence the recipients official action (assumed to be an action relating to the gift giver). This section apparently does not prevent public employees not serving in a "decision making" role from accepting gifts. Lending more ambiguity to this section is how a "gift of substantial value" is defined. Section 2-2-102(3) (a) describes a gift of substantial value as a gift with a value of $50.00 or more per individual unless the gift is not used and within 30 days of receipt is returned to the donor or donated to charity. The problem with this definition is there are no frequency limitations that might cap the cumulative effect of gifts over time, i.e. could one receive a $49.00 gift each day of the week and still not receive a "gift of substantial value?" In an extreme example, a person receiving a $49.00 gift every day of the year would have received gifts totaling $17,885 but would have never crossed the $50.00 substantial value threshold. Another potential problem is how the recipient would know the value of the gift without a pricing source. A pen for example, could be nothing more than an advertising prop or could be worth well over $50.00 dollars.

While the preceding discussion highlights the ambiguities and "subject to interpretation" provisions in the state Ethics Code, another section of state law is more on target as it relates to public employees who serve in material decision-making capacities. These provisions are found in Title 45 "Crimes" with a short title of "Criminal Code of 1973."

> **Section 45-7-104 (2) "No public servant having any discretionary function to perform in connection with contracts, purchases, payments, claims, or other pecuniary transactions of the government shall solicit, accept, or agree to accept any pecuniary benefit from any person known to be interested in or likely to become interested in any such contract, purchase, payment, claim, or transaction."**

This provision is very blunt and to the point but is tempered somewhat later in subsection (5) (b):

> **"This section shall not apply to trivial benefits incidental to personal, professional, or business contacts and involving no substantial risk of undermining official impartiality."**

Discretionary function is not defined here but a definition in the state Ethics Code likely describes the type of discretion referred to here. Section 2-2-102(5) states:

> **"Official act" or "official action" means a vote, decision, recommendation, approval, disapproval, or other action, including inaction, that involves the use of discretionary authority.**

The above provisions would seem to prevent any Board member or staff who has any responsibility for scoring/selecting investment vendors and contractors, or recommending/approving loans from receiving any type of monetary benefit from current or potential vendors, contractors, or borrowers unless the benefit is "trivial" which is subject to interpretation. While "pecuniary" is not defined here, the dictionary describes it as "consisting of or measured in money" and in Section 45-2-101(56) is defined as "benefit in the form of money, property, commercial interest, or anything else the primary significance of which is economic gain."

2. <u>**Relationship Provisions**</u> – The state Ethics Code prohibits certain types of relationships that may improperly interfere with a public employee's partiality.

> **Section 2-2-105, MCA (1) The requirements in this section are intended as rules of conduct, and violations constitute a breach of the public trust and public duty of office or employment in state or local government.**
> **(2) Except as provided in subsection (4), a public officer or public employee may not acquire an interest in any business or undertaking that the officer or employee has reason to believe may be directly and substantially affected to its economic benefit by official action to be taken by the officer's or employee's agency. ***

(4) When a public employee who is a member of a quasi-judicial board or commission or of a board, commission, or committee with rulemaking authority is required to take official action on a matter as to which the public employee has a conflict created by a personal or private interest that would directly give rise to an appearance of impropriety as to the public employee's influence, benefit, or detriment in regard to the matter, the public employee shall disclose the interest creating the conflict prior to participating in the official action.
(5) A public officer or public employee may not perform an official act directly and substantially affecting a business or other undertaking to its economic detriment when the officer or employee has a substantial personal interest in a competing firm or undertaking.
***(3) Has been excluded because it is not immediately relevant.**

This provision relates directly to the official duties of Board members and staff who are involved in the decision making process. Subsection (2) prevents a public employee from acquiring a personal or financial interest in an entity that they believe could benefit from future action the public employee may take. Examples would be a Board member or staff taking a financial interest in a business that had a loan request pending upon which the Board member or staff would ultimately act. Subsection (5) is the reverse situation in which a public employee has a financial or personal interest in a business that is a direct competitor of a business with a pending loan request before the Board. The competing interest of the Board member or staff could color the ultimate decision. Subsection (4) is specifically aimed at quasi-judicial Board members, such as the Board. It recognizes that lay board members have day-to-day business interests some of which may come before them in their official capacity as board members. Specific examples of this would be board members who are bank officials or employees when loan requests submitted by their bank are considered by the Board.

3. **Time and Facilities Provisions –** The state Ethics Code prohibits public employees from conducting private business on state time or facilities.

Section 2-2-121 (2) A public officer or a public employee may not: (a) subject to subsection (7), use public time, facilities, equipment, supplies, personnel, or funds for the officer's or employee's private business purposes

This provision prohibits public employees from using state time, facilities, etc. to conduct private business. Private business is not defined here but would likely mean conducting some type of business generating revenue rather than sending an occasional personal e-mail or making a personal phone call. This interpretation of private business is further reinforced by the reference to subsection (7) which states:

A listing by a public officer or a public employee in the electronic directory provided for in 30-17-101 of any product created outside of work in a public agency is not in violation of subsection (2)(a) of this section. The public officer or public employee may not make arrangements for the listing in the electronic directory during work hours.

This language implies that the reference to private business is in fact a bona fide business that produces a product for sale that may be listed in the "Made in Montana" electronic directory provided by the Department of Commerce.

4. **Dual Salaries Provisions –** The Ethics Code prohibits public employees from drawing two salaries from public agencies for the same period of time.

Section 2-2-104(3)(a) Except as provided in subsection (3)(b), a public officer, legislator, or public employee may not receive salaries from two separate public employment positions that overlap for the hours being compensated, unless: the public officer, legislator, or public employee reimburses the public entity from which the employee is absent for the salary paid for performing the function from which the officer, legislator, or employee is absent; or the public officer's, legislator's, or public employee's salary from one employer is reduced by the amount of salary received from the other public employer in order to avoid duplicate compensation for the overlapping hours.

This provision prohibits a Board member who is also a public employee from receiving compensation from both sources for the same period of time. For example, if a Board member spent two days away from a public employee job to attend Board meetings and was a salaried employee who remained on a public payroll during the period, he/she could not receive per diem for attending the Board meeting. However, as clarified later in the state Ethics Code if the Board member was an hourly employee who took accrued leave or compensation time to attend the meeting he/she would be eligible for per diem for Board attendance.

This provision is reinforced in the law that governs quasi-judicial Boards:

2-15-124 (7) Unless otherwise provided by law, each member is entitled to be paid $50 for each day in which he is actually and necessarily engaged in the performance of board duties, and he is also entitled to be reimbursed for travel expenses, as provided for in 2-18-501 through 2-18-503, incurred while in the performance of board duties. Members who are full-time salaried officers or employees of this state or of a political subdivision of this state are not entitled to be compensated for their service as members except when they perform their board duties outside their regular working hours or during time charged against their annual leave, but such members are entitled to be reimbursed for travel expenses as provided for in 2-18-501 through 2-18-503. Ex officio board members may not receive compensation but shall receive travel expenses.

III. RATIONALE FOR A BOARD OF INVESTMENTS CODE OF ETHICS

The Board's composition does not lend itself to the "pay to play" problems that have been discovered in other investment Boards. There are no elected officials on the Board as voting members nor do any elected officials exert any influence on the Board's decision making process. Therefore campaign contributions to any Montana elected official will have no impact on the Board's decision to hire or fire an investment vendor, make or deny a loan, or to conduct business with a political contributor.

Perhaps the greatest potential for conflicts of interest of Board members and staff is with private investment vendor relationships. The Board's mission requires it to have numerous relationships with these vendors; including investment managers, investment brokers, investment consultants, investment and custodian banks, and commercial banks. Vendors selected by the Board to provide these services will receive millions in fees during the contract period. Therefore, the process for establishing and terminating these relationships must be based on well established protocol. When existing and potential vendors provide any type of financial benefits to persons who are ultimately responsible for selecting and maintaining these relationships a potential conflict could exist.

The type of "financial benefit" does not have to be direct to create a potential conflict of interest. There are firms in the investment business who sponsor conferences couched as educational in nature but are in fact a not so subtle attempt to get "buyers" and "sellers" of services (vendors) in the same place at the same time. Generally, the service "buyers", such as the Board are provided a host of "free" amenities to attend and mix with potential vendors. Basically, it is the vendors paying for the amenities provided free to the buyers.

While it is difficult to put a dollar value on these amenities, the cost to the vendors of providing free services to potential buyers is a "gift equivalent."

This restriction does not apply to meals/beverages provided at investor conferences held by General Partners in which the Board is a Limited Partner. This is the only opportunity Board Members/staff have to meet and interact with other Limited Partners and hear the General Partner discuss the strategy and progress of the fund. Because of the significant number of Limited Partners in the larger General Partnerships, the General Partners do not usually visit the Limited Partners individually but rather host periodic investor meetings.

The second greatest potential for conflict of interest involves the Board's economic development role. The Board manages several loan programs that lend Coal Tax Trust funds to hundreds of Montana borrowers. If Board members or staff in the "decision making loop" have personal or financial relationships with local lenders or borrowers whose loans are pending, serious conflicts could occur.

Also, Board employees are unique in state government because many of them have state-provided access to financial research tools and information that could benefit them when investing a personal portfolio. While research information obtained by staff in the course of normal job duties may provide incidental knowledge and benefit to the management of a personal portfolio, state time and facilities must not be used for personal enrichment. Personal security trading must not be conducted on state time/facilities nor should staff conduct any type of business enterprise on state time and facilities.

The Board adopts the following Code of Ethics (Code) for its members and staff to: ensure that the conduct of members and staff conform to state law, that potential conflicts of interest are reduced or eliminated and; that the Board's fiduciary reputation is not damaged in perception or in fact. All Board members and staff shall sign the Code annually and all new members and staff shall sign when appointed or hired. By signing the Code, each Board member and staff pledges to the best of his/her ability to comply with all provisions of the Code.

IV. BOARD OF INVESTMENTS CODE OF ETHICS PROVISIONS

1. <u>Monetary Provisions</u>

A) Board members/staff shall not attend conferences if any of the actual costs to the Board of attending such conferences are subsidized by current or potential investment vendors. However, Board members/staff may attend if the Board pays the actual cost for such attendance. If the conference is truly educational and otherwise worthwhile Board funds should be used to cover costs for member/staff attendance. These costs would include transportation, lodging, meals, and reasonable registration fees.

This restriction does not apply to meals/beverages provided at investor conferences held by General Partners in which the Board is a Limited Partner as this is usually the only opportunity Board Members/staff have to meet and interact with other Limited Partners and hear the General Partner discuss the strategy and progress of the fund.

B) A gift from current or potential vendors sent to a Board member/staff at the member's or staff's home or at the Board's office shall be donated to charity if the perceived value of the gift exceeds $50.00**.** The Board member/staff should immediately notify the Executive Director of such gift, the disposition of such gift, and the Executive Director shall maintain a log of such gifts and their disposition. Such gifts received by the Executive Director shall be immediately reported to the Board Chairperson.

C) A perishable gift from current or potential vendors to a Board member/staff at the Board's office with a perceived value of less than $50.00 shall be shared with all Board staff. The Executive Director shall maintain a log of such gifts and their disposition.

D) A non-perishable gift from current or potential vendors to a Board member/staff at the Board's office with a perceived value of less than $50.00 shall be auctioned and the auction proceeds deposited in the "employee fund." The Executive Director shall maintain a log of such gifts and their disposition.

E) All restaurant dinners attended by Board members\staff and current or potential investment vendors, or lenders shall be "no host."

F) The above meal restriction does not apply to Board members\staff attending meetings held by the General Partner of private equity funds, private real estate funds, or other private funds in which the Board is a Limited Partner.

2. Relationship Provisions

A) Board staff who have a material personal or financial relationship with a current or potential vendor shall recuse themselves from participating in any part of the decision to select, negotiate a contract with, or terminate the services of the vendor and shall not attempt to influence in any way Board members/staff who are part of the decision making process.

B) Board members who have a material personal or financial relationship with a current or potential vendor shall recuse themselves from participating in any part of the decision to select or terminate the services of the vendor and shall not attempt to influence in any way Board members/staff who are part of the decision making process. If the Board, as an entity, has the final authority to make the decision the Board member with the relationship shall, at the Board's public meeting, divulge in general terms the relationship and abstain from voting. Such abstention and the reason for the abstention shall be recorded in the meeting minutes.

C) Board staff who have a material personal or financial relationship with a current or potential lender or borrower shall recuse themselves from participating in any part of the decision to participate or not participate in the loan with the current or potential lender or borrower and shall not attempt to influence in any way Board members/staff who are part of the decision making process.

D) Board members who have a material personal or financial relationship with a current or potential lender or borrower shall recuse themselves from participating in any part of the decision to participate or not participate in the loan with the current or potential lender or borrower and shall not attempt to influence in any way Board members/staff who are part of the decision making process. If the Board, as an entity, has the final authority to make the decision the Board member with the relationship shall, at the Board's public meeting, divulge in general terms the relationship and abstain from voting. Such abstention and the reason for the abstention shall be recorded in the meeting minutes.

E) Board members may vote on INTERCAP loans made to local governments in the jurisdiction in which a Board member resides. Board members represent the entire state on the Board regardless of where they may reside.

3. Time and Facilities Provision

A) Board staff shall not use state time and facilities to conduct private business; which includes the researching of securities for personal portfolios, the trading of securities; or conduct any activities for a revenue generating business.

4. Dual Salaries Provision

A) Board members who are also public employees shall inform the Executive Director if they are in a public employee salaried position that continues to pay their salaries while they are carrying out Board activity for which they are entitled to per diem. Board members in this status shall not receive per diem for the same hours for which their salaries are paid but shall receive travel, meal, and lodging entitlement, and reimbursement for out of pocket expenses as do other Board members. This provision does not apply if the public employee takes accrued leave or compensatory time from the public employee position in order to carry out Board activities.

I have read and understand the Montana Board of Investments Code of Ethic and agree to the best of my ability to comply with all its provisions.

____

Board member/staff Date

Return to Agenda

Investment Activity

ALLOCATION REPORT

Retirement Systems Asset Allocations as of 9/30/13								
				Total				
Pension Fund	**MDEP**	**MTIP**	**MPEP**	**Equity**	**RFBP**	**MTRP**	**STIP**	**Total Assets**
PUBLIC EMPLOYEES	37.8%	17.7%	12.0%	67.5%	21.7%	9.2%	1.6%	$ 4,465,997,227
TEACHERS	38.0%	17.7%	12.1%	67.8%	21.8%	9.2%	1.1%	$ 3,296,956,518
POLICE	36.2%	16.9%	11.5%	64.6%	20.8%	8.8%	5.8%	$ 280,012,677
SHERIFFS	37.7%	17.6%	12.0%	67.3%	21.7%	9.1%	1.9%	$ 254,652,954
FIREFIGHTERS	36.2%	16.9%	11.5%	64.6%	20.8%	8.8%	5.8%	$ 281,297,045
HIGHWAY PATROL	37.8%	17.7%	12.0%	67.5%	21.7%	9.2%	1.6%	$ 113,932,943
GAME WARDENS	37.7%	17.5%	12.0%	67.2%	21.6%	9.1%	2.1%	$ 121,832,772
JUDGES	37.7%	17.6%	12.0%	67.3%	21.7%	9.2%	1.9%	$ 75,846,539
VOL FIREFIGHTERS	38.0%	17.8%	12.1%	67.9%	21.7%	9.1%	1.4%	$ 29,788,678
TOTAL	**37.8%**	**17.7%**	**12.0%**	**67.4%**	**21.7%**	**9.2%**	**1.7%**	**$ 8,920,317,354**
Approved Range	30 - 50%	15 - 30%	9 - 15%	60 - 70%	22 - 32%	4-10%	1 - 5%	

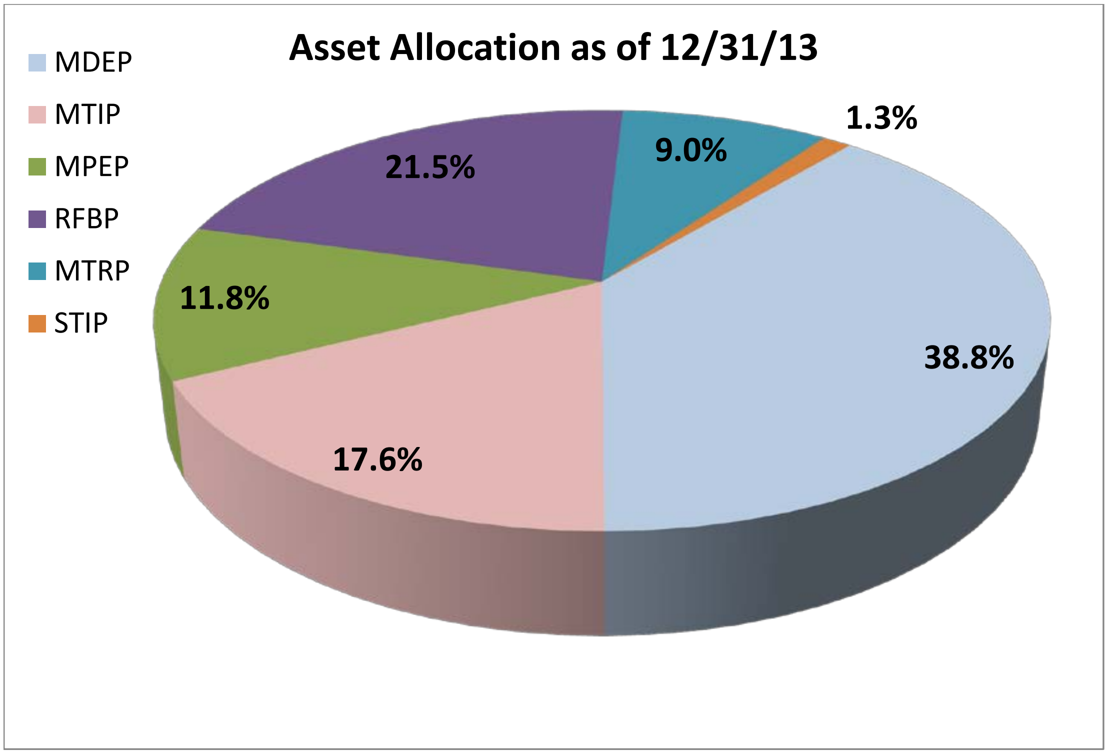
Retirement Systems Asset Allocations as of 12/31/13								
				Total				
Pension Fund	**MDEP**	**MTIP**	**MPEP**	**Equity**	**RFBP**	**MTRP**	**STIP**	**Total Assets**
PUBLIC EMPLOYEES	38.8%	17.6%	11.8%	68.3%	21.5%	9.0%	1.3%	$ 4,692,247,863
TEACHERS	38.9%	17.7%	11.9%	68.4%	21.5%	9.0%	1.1%	$ 3,464,537,069
POLICE	38.8%	17.7%	11.9%	68.3%	21.5%	9.0%	1.2%	$ 293,091,439
SHERIFFS	38.6%	17.5%	11.8%	68.0%	21.4%	8.9%	1.7%	$ 268,642,342
FIREFIGHTERS	38.8%	17.6%	11.8%	68.3%	21.5%	9.0%	1.3%	$ 294,608,777
HIGHWAY PATROL	38.8%	17.6%	11.9%	68.3%	21.5%	9.0%	1.2%	$ 119,661,286
GAME WARDENS	38.6%	17.5%	11.8%	68.0%	21.4%	8.9%	1.7%	$ 129,000,757
JUDGES	38.7%	17.6%	11.8%	68.1%	21.4%	9.0%	1.5%	$ 79,743,064
VOL FIREFIGHTERS	39.0%	17.8%	11.9%	68.7%	21.6%	8.9%	0.7%	$ 30,785,259
TOTAL	**38.8%**	**17.6%**	**11.8%**	**68.3%**	**21.5%**	**9.0%**	**1.3%**	**$ 9,372,317,856**
Approved Range	28 - 44%	14 - 22%	9 - 15%	58 - 72%	22 - 30%	6-10%	1 - 5%	

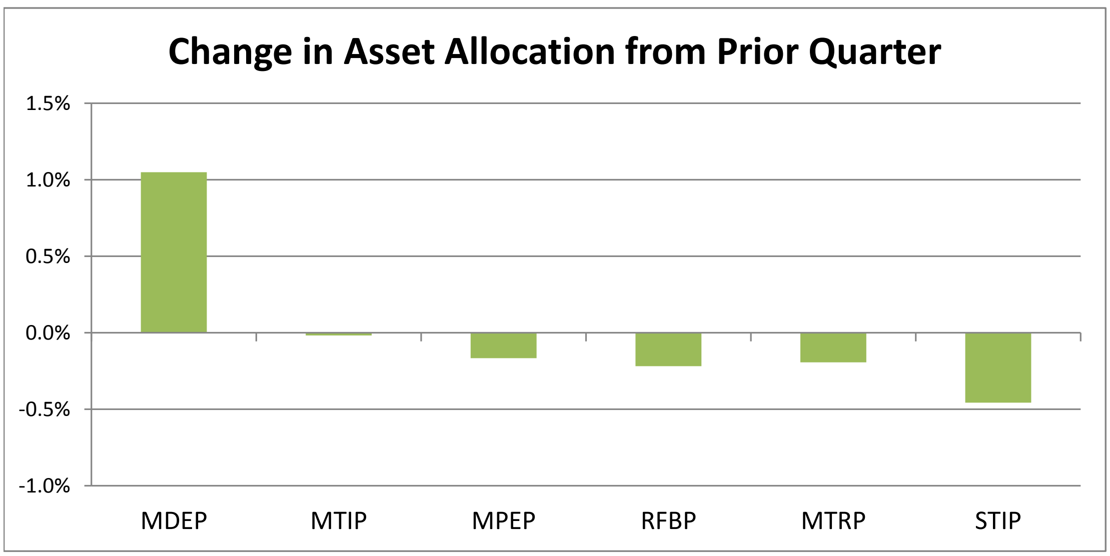
			Change From Last Quarter					
				Total				
Pension Fund	**MDEP**	**MTIP**	**MPEP**	**Equity**	**RFBP**	**MTRP**	**STIP**	**Total Assets**
PUBLIC EMPLOYEES	1.0%	-0.1%	-0.2%	0.7%	-0.3%	-0.2%	-0.3%	226,250,636
TEACHERS	0.9%	-0.1%	-0.2%	0.6%	-0.3%	-0.2%	0.0%	167,580,551
POLICE	2.7%	0.7%	0.3%	3.8%	0.7%	0.2%	-4.7%	13,078,762
SHERIFFS	0.9%	-0.1%	-0.2%	0.7%	-0.3%	-0.2%	-0.2%	13,989,388
FIREFIGHTERS	2.6%	0.7%	0.3%	3.7%	0.7%	0.2%	-4.5%	13,311,732
HIGHWAY PATROL	1.0%	0.0%	-0.2%	0.8%	-0.2%	-0.2%	-0.4%	5,728,343
GAME WARDENS	1.0%	0.0%	-0.2%	0.8%	-0.2%	-0.2%	-0.4%	7,167,985
JUDGES	1.0%	-0.1%	-0.2%	0.8%	-0.2%	-0.2%	-0.3%	3,896,524
VOL FIREFIGHTERS	1.0%	0.0%	-0.2%	0.9%	-0.1%	-0.1%	-0.6%	996,581
TOTAL	**1.0%**	**0.0%**	**-0.2%**	**0.9%**	**-0.2%**	**-0.2%**	**-0.5%**	**452,000,501**

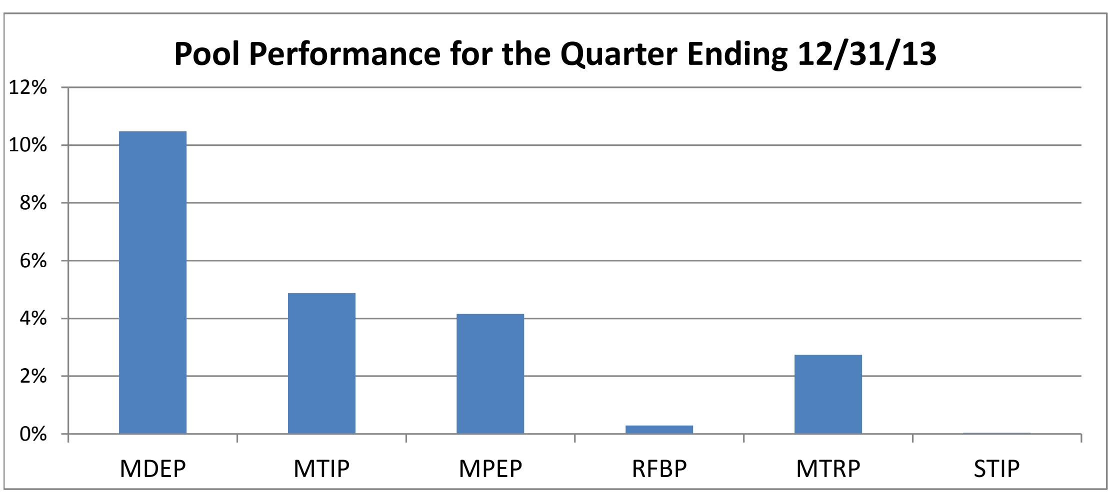
locations During Quarter

MDEP		**MTIP**		**MPEP**		**Total Equity**	**RFBP**	**MTRP**
($76,000,000)		$2,500,000		($3,000,000)		($76,500,000)	$89,000,000	$6,300,000

Net New Investments for Quarter → **$18,800,000**


Asset Allocation as of 12/31/13
MDEP
MTIP
MPEP
RFBP
MTRP
STIP
1.3%
9.0%
21.5%
11.8%
38.8%
17.6%


Change in Asset Allocation from Prior Quarter
1.5%
1.0%
0.5%
0.0%
-0.5%
-1.0%
MDEP
MTIP
MPEP
RFBP
MTRP
STIP


Pool Performance for the Quarter Ending 12/31/13
12%
10%
8%
6%
4%
2%
0%
MDEP
MTIP
MPEP
RFBP
MTRP
STIP

Montana Board of Investments

Asset Allocation - Public Funds (DB) $3B to $20B & >30% Equity

Periods Ending December 31, 2013

	% Tot Equity	% US Equity	% Int'l Equity	% Fixed Inc.	% Cash Equiv	% Real Estate	% Pvt. Equity
High	72.87	68.59	31.81	87.25	11.11	11.65	39.86
Median	56.41	32.41	20.46	21.70	3.80	4.73	10.46
Low	30.85	15.83	3.82	10.22	0.67	0.10	1.10
Observations	34	34	34	34	30	28	31
PUBLIC EMPLOYEES RET SYS	56.38 (53)	38.77 (39)	17.61 (67)	21.51 (53)	1.31 (91)	8.97 (21)	11.83 (42)
TEACHERS RETIREMENT SYS	56.48 (49)	38.83 (38)	17.65 (66)	21.55 (52)	1.12 (95)	8.99 (18)	11.85 (41)

Note: all zero allocations to an asset class have been removed.

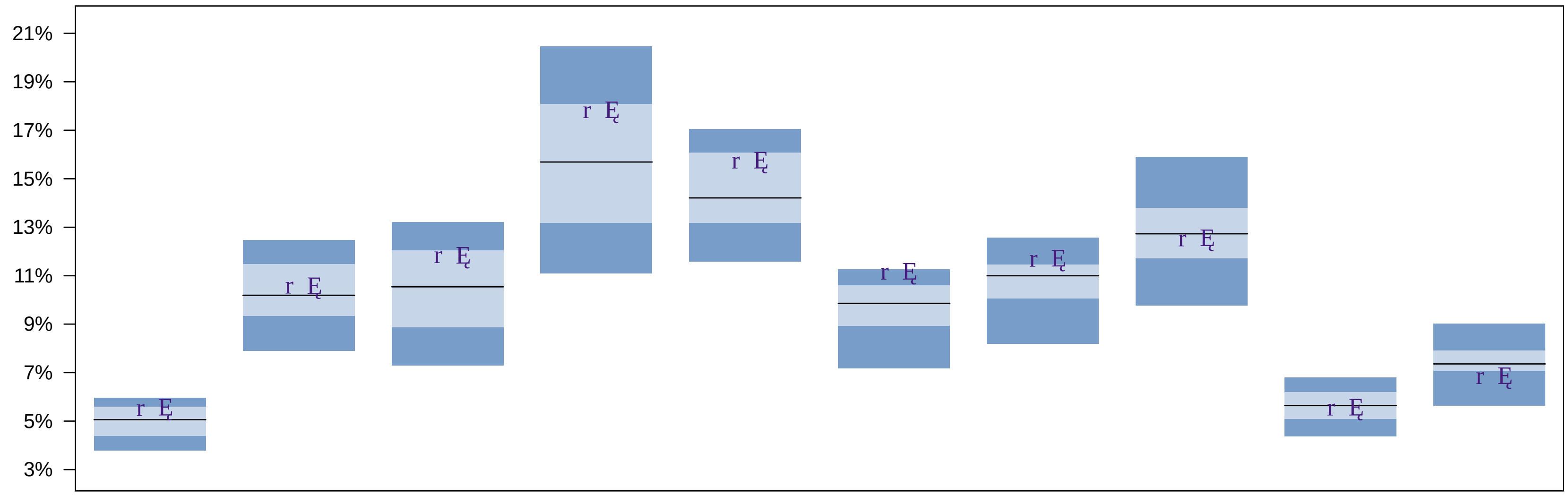
Montana Board of Investments

Public Funds (DB) $3B to $20B & >30% Equity (SSE)

PERIOD ENDING December 31, 2013

Total Returns

STATE STREET.



		1 Qtr		2 Qtrs		3 Qtrs		1 Yr		2 Yrs		3 Yrs		4 Yrs		5 Yrs		7 Yrs		10 Yrs	
	5th Percentile	5.96		12.46		13.21		20.46		17.05		11.26		12.56		15.90		6.80		9.02	
	25th Percentile	5.59		11.48		12.05		18.10		16.09		10.62		11.46		13.80		6.21		7.92	
	50th Percentile	5.06		10.19		10.54		15.69		14.21		9.86		11.00		12.73		5.64		7.36	
	75th Percentile	4.38		9.34		8.86		13.17		13.16		8.92		10.05		11.72		5.08		7.07	
	95th Percentile	3.79		7.90		7.30		11.10		11.58		7.18		8.19		9.77		4.37		5.63	
	No. of Obs	34		33		33		33		33		34		34		34		33		31	
r	PUBLIC EMPLOYEES RE	5.67	24	10.72	45	11.98	27	17.96	27	15.88	27	11.30	3	11.83	18	12.67	52	5.69	45	6.99	79
Ę	TEACHERS RETIREMEN	5.69	22	10.70	46	11.96	28	17.96	28	15.88	27	11.30	3	11.84	15	12.68	52	5.69	45	6.99	79

Provided by State Street Investment Analytics

MONTANA DOMESTIC EQUITY POOL
Rande R. Muffick, CFA, Portfolio Manager
February 25, 2014

12/31/2013 Domestic Stock Pool By Manager			
			Approved
Manager Name	**Market Value**	**%**	**Range**
BLACKROCK EQUITY INDEX FUND	2,026,566,647	55.88%	
STATE STREET SPIF ALT INV	6,275,414	0.17%	
LARGE CAP PASSIVE Total	**2,032,842,062**	**56.06%**	**45-70%**
ENHANCED INVEST TECHNOLOGIES	113,565,440	3.13%	
T ROWE PRICE ASSOCIATES INC	321,434,909	8.86%	
LARGE CAP ENHANCED Total	**435,000,349**	**12.00%**	**8-12%**
ANALYTIC INVESTORS MU3B	113,933,371	3.14%	
JP MORGAN ASSET MGMT MU3E	322,570,618	8.89%	
130-30 Total	**436,503,988**	**12.04%**	**8-12%**
COMBINED LARGE CAP Total	**2,904,346,399**	**80.09%**	**72-91%**
ARTISAN MID CAP VALUE	133,100,159	3.67%	
BLACKROCK MIDCAP EQUITY IND FD	80,663,220	2.22%	
IRIDIAN ASSET MANAGEMENT MU3V	51,492,563	1.42%	
NICHOLAS INVESTMENT PARTNERS	51,458,915	1.42%	
TIMESSQUARE CAPITAL MGMT	137,060,318	3.78%	
MID CAP Total	**453,775,175**	**12.51%**	**6-17%**
ALLIANCE BERNSTEIN SMALL CAP3R	35,828,133	0.99%	
DIMENSIONAL FUND ADVISORS INC	91,175,819	2.51%	
ING INVESTMENT MGT MU3U	32,043,864	0.88%	
ISHARES CORE S+P SMALL CAP ETF	5,941,024	0.16%	
MET WEST CAPITAL MGT MU3W	24,909,282	0.69%	
VAUGHAN NELSON INV	78,451,525	2.16%	
SMALL CAP Total	**268,349,647**	**7.40%**	**3-11%**
MDEP Total	**3,626,471,221**	**100.00%**	

The table above displays the Montana Domestic Equity Pool (MDEP) allocation at quarter end across market cap segments and manager styles. At this time, all weightings are within the approved ranges. Staff recognizes the Large Cap Enhanced and 130-30 allocations are at the top of their ranges and these will be trimmed as needed going forward.

Domestic stocks finished an extremely strong year with a resounding performance in the fourth quarter. The Fed announced its decision to begin “tapering” its purchases of fixed income securities which was met with a positive reaction by the markets. It is a very gradual move that is planned by the Fed in removing stimulus and equity investors welcomed that type of action. At the planned rate of “tapering,” the stimulus wouldn’t be completely removed for almost a year.

With that said, the domestic equity market is not as cheap as it once was given such a strong year in 2013 and with much of the rise having come from multiple expansion, earnings growth will be the major driver of equity returns in 2014. As such, although the markets could go higher through a volatile year, equity returns will most likely be modest. In addition, market corrections similar to the current one being experienced have been long overdue and are likely to be prevalent in 2014.

US Market Environment

	4Q 2013						Last Twelve Months		
	Value	Neutral	Growth				Value	Neutral	Growth
Large	9.4%	11.4%	10.3%			Large	31.5%	31.0%	36.1%
Mid	9.1%	8.9%	7.6%			Mid	37.4%	35.2%	35.3%
Small	9.8%	9.1%	9.2%			Small	35.4%	38.6%	49.9%

Large cap is defined as approximately the largest 70% of total US market capitalization; Mid cap is approximately the next 20% and Small cap is approximately the bottom 10%. Growth is defined as approximately the bottom 25% of securities based on book-to-market; neutral is approximately the next 50% and value is approximately the highest 25% of securities based on book-to-market.

In US dollars. MSCI indices are total returns net of foreign withholding taxes on dividends. Marketwide returns use MSCI's Global Investable Market Indices Methodology and comprise large, mid, and small cap equities.

For the quarter, stocks in all cap sizes posted strong gains. Large caps led the way at 11.4%, which was surprising given the dominance of mid caps and small caps for the year. Mid caps gained 8.9% and small caps added 9.1% for the quarter, still stellar numbers. Returns for the twelve months ended in December were remarkable to say the least. All cap sizes returned over 30% for the year, with small caps generating a lofty 38.6% as the leaders.

Looking at returns by style, growth stocks and value stocks provided similar returns within all three cap sizes in the quarter. The last twelve months returns displayed a slightly better performance by growth overall which included a huge outperformance by small cap growth stocks at a 49.9% annual return.

Volatility in the domestic equity market remained rather subdued as indicated by the VIX index floating in the low teens for much of the quarter. The index did spike briefly to 20 early in the quarter as a result of early concerns about the federal budget and leading up to the Fed "tapering" announcement but those fears disappeared quickly and investors bought stocks into the end of the year.

MDEP outperformed the S&P 1500 Index by 17 basis points for the quarter and by 139 basis points for the past twelve months. The overweight allocations to mid caps and small caps along with the actively managed portfolio performances, led to the success of the pool.

The performance of actively managed portfolios for the quarter was quite good. Similar to the previous quarter, 10 of 13 actively managed portfolios equaled or outperformed their respective benchmarks. The enhanced index, 130/30, mid cap growth, mid cap value, and small cap core style buckets outperformed. Only small cap growth and small cap value lagged.

The strategy going forward is to continue the overweight positions in mid caps and small caps at the expense of large caps. The active/passive weights are expected to remain the same.

DOMESTIC EXPOSURE-MARKET CAP %

December 31, 2013

MANAGERS	MEGA $200B+	GIANT $100-$200B	LARGE $50-$100B	LARGE $20-$50B	LARGE $10-$20B	MID $2.5-$10B	SMALL $500MM-$2.5B	MICRO < $500MM	WTD AVG MARKET CAP ($B)
Alliance Bernstein	--	--	--	--	--	58.8	39.3	1.9	3,330.6
Analytic Investors, Inc	16.3	11.1	27.9	22.1	11.7	10.7	-2.6	0.0	92,781.2
Artisan Partners	--	--	--	16.2	30.1	50.1	3.5	--	11,616.4
Dimensional Fund Advisors	--	--	--	--	0.1	21.8	64.1	14.1	1,682.6
ING Investment Mgt	--	--	--	--	--	47.4	52.0	0.6	2,609.7
INTECH Investment Management	10.5	11.6	14.3	28.3	23.8	11.6	0.0	0.0	77,390.1
Iridian Asset Mgmt	0.0	0.0	0.0	11.4	28.8	55.0	4.8	0.0	11,595.1
J.P. Morgan	23.6	24.6	25.6	19.6	6.2	0.0	-0.5	0.0	135,789.2
Met West Capital Mgt	--	--	--	--	--	56.7	38.5	4.8	2,770.3
Nicholas Investment Partners	--	--	--	10.4	24.0	60.7	4.9	0.0	9,841.3
T. Rowe Associates	19.1	21.6	16.8	19.9	15.5	7.0	0.0	0.0	116,734.2
TimesSquare Cap Mgmt	--	--	--	5.0	38.2	55.1	1.7	0.0	9,938.3
Vaughan Nelson Mgmt	--	--	--	--	--	63.9	35.7	0.4	3,146.9
BlackRock S&P 500 Index Fund	19.8	19.7	18.9	21.3	13.7	5.5	0.0	0.0	119,944.0
BlackRock Midcap Equity Index Fund	--	--	--	--	2.7	84.4	11.3	--	5,021.5
ALL DOMESTIC EQUITY PORTFOLIOS	**16.5**	**16.7**	**16.5**	**18.7**	**13.9**	**13.2**	**3.3**	**0.4**	**100.7**
Benchmark: S&P Composite 1500	**17.7**	**17.6**	**16.9**	**19.0**	**12.4**	**12.7**	**3.7**	**0.1**	**106.1**
Over/underweight(-)	**-1.1**	**-0.9**	**-0.4**	**-0.3**	**1.5**	**0.5**	**-0.4**	**0.3**	

DOMESTIC EXPOSURE-SECTOR %

December 31, 2013

MANAGERS	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Technology	Materials	Telecom Services	Utilities
Alliance Bernstein	16.9	1.8	4.6	5.0	22.2	21.3	26.4	1.9	--	--
Analytic Investors, Inc	12.9	10.2	9.9	14.3	12.8	10.7	17.4	5.2	2.0	1.6
Artisan Partners	12.9	2.9	13.6	22.4	4.4	13.6	26.3	1.1	--	2.7
Dimensional Fund Advisors	17.3	4.9	4.2	18.4	9.3	19.3	17.3	5.5	0.6	3.1
Iridian Asset Mgmt	17.5	--	5.2	--	18.7	17.1	18.8	22.7	--	--
ING Investment Mgt	19.5	2.2	5.3	10.7	16.9	15.4	24.8	4.9	--	--
INTECH Investment Management	17.7	13.0	5.5	16.6	15.2	7.5	13.3	4.7	1.9	4.5
Met West Capital Mgt	14.8	5.4	5.8	22.3	7.8	20.3	14.6	5.4	0.7	1.2
Nicholas Investment Partners	22.8	5.2	5.1	10.3	12.8	18.8	20.4	3.8	0.8	--
J.P. Morgan	16.0	5.4	10.6	16.1	14.3	8.8	21.9	4.7	1.1	0.4
T. Rowe Associates	13.5	9.3	9.5	15.5	12.8	10.7	19.1	4.2	2.2	2.9
TimesSquare Cap Mgmt	18.7	3.9	6.1	10.3	10.9	25.0	17.7	3.6	3.9	--
Vaughan Nelson Mgmt	14.9	1.9	5.6	27.9	7.1	17.2	16.9	7.4	--	1.2
BlackRock S&P 500 Index Fund	12.4	9.6	10.2	16.0	12.8	10.8	18.4	3.5	2.3	2.9
BlackRock Midcap Equity Index Fund	13.9	4.0	5.6	21.9	8.8	17.0	15.4	6.9	0.4	4.3
All Domestic Equity Portfolios	**13.6**	**8.4**	**9.5**	**16.3**	**12.4**	**11.8**	**18.8**	**3.9**	**1.9**	**2.5**
Benchmark: S&P Composite 1500	**12.8**	**9.1**	**9.7**	**16.9**	**12.6**	**11.6**	**18.4**	**3.9**	**2.1**	**3.1**
Over/underweight(-)	**0.8**	**-0.7**	**-0.1**	**-0.6**	**-0.2**	**0.2**	**0.4**	**0.0**	**-0.1**	**-0.5**

DOMESTIC PORTFOLIO CHARACTERISTICS

December 31, 2013

MANAGERS	Market Value	Number of Securities	3Yr Historical EPS Growth	Price/ Earnings	Price/ Book	Dividend Yield
Alliance Bernstein	35,534,228	106	24.4	32.5	4.3	0.2
Analytic Investors, Inc	117,212,824	190	23.0	13.9	2.8	2.2
Artisan Partners	133,522,182	58	20.1	16.4	2.0	1.4
Dimensional Fund Advisors	91,165,718	2,161	27.9	20.3	2.2	1.1
ING Investment Mgt	32,190,213	147	20.6	26.1	3.0	0.6
INTECH Investment Management	113,661,101	313	17.5	18.2	2.8	1.7
Iridian Asset Mgmt	52,071,574	38	24.6	17.4	3.9	1.0
J.P. Morgan	325,334,310	269	11.3	17.4	2.4	1.5
Met West Capital Mgt	25,082,805	66	22.5	17.7	2.0	1.3
Nicholas Investment Partners	51,562,967	104	32.6	19.6	3.7	0.4
T. Rowe Associates	321,626,378	257	15.3	18.6	2.7	1.7
TimesSquare Cap Mgmt	137,381,053	76	31.5	24.1	3.6	0.7
Vaughan Nelson Mgmt	78,577,941	76	29.4	19.3	2.1	1.2
BlackRock S&P 500 Index Fund	2,026,482,399	503	15.5	17.8	2.6	1.9
BlackRock Midcap Equity Index Fund	80,661,943	403	27.8	21.7	2.4	1.3
All Domestic Equity Portfolios	**3,473,376,078**	**3,091**	**17.0**	**18.0**	**2.6**	**1.7**
BENCHMARKS						
S&P Composite 1500		1,500	16.5	18.2	2.6	1.8
S&P/Citigroup 1500 Pure Growth		347	34.9	22.0	3.2	0.6
S&P/Citigroup 1500 Pure Value		366	10.0	15.1	1.3	1.5
S&P 500		500	15.5	17.8	2.6	1.9
Russell 1000		1,015	16.6	18.0	2.6	1.8
Russell 1000 Growth		625	17.5	20.9	4.8	1.5
Russell 1000 Value		662	15.7	15.7	1.8	2.2
Russell Midcap		820	22.7	19.6	2.6	1.5
Russell Midcap Growth		502	25.8	23.1	4.8	1.0
Russell Midcap Value		534	18.4	16.7	1.7	2.0
Russell 2000		2,004	26.3	21.1	2.2	1.3
Russell 2000 Growth		1,174	24.3	25.5	4.1	0.7
Russell 2000 Value		1,394	28.4	17.8	1.5	1.9

MONTANA INTERNATIONAL EQUITY POOL
Rande R. Muffick, CFA, Portfolio Manager
February 25, 2014

12/31/2013 International Stock Pool By Manager			
			Approved
Manager Name	**Market Value**	**%**	**Range**
BLACKROCK ACWI EX US SUPERFUND	1,007,158,147	60.90%	
BLACKROCK MSCI EM MKT FR FD B	42,756,607	2.59%	
EAFE STOCK PERFORMANCE INDEX	32,929,684	1.99%	0-10%
CORE Total	**1,082,844,438**	**65.48%**	**50-70%**
ACADIAN ACWI EX US VALUE	105,903,219	6.40%	
BERNSTEIN ACWI EX	114,166,773	6.90%	
VALUE Total	**220,069,992**	**13.31%**	**10-20%**
HANSBERGER INTL EQUITY GROWTH	121,369,612	7.34%	
MARTIN CURRIE ACWI X	120,346,464	7.28%	
GROWTH Total	**241,716,076**	**14.62%**	**10-20%**
BLACKROCK ACWI EX US SMALL CAP	27,653,202	1.67%	
DFA INTERNATIONAL SMALL COMPAN	81,388,836	4.92%	
SMALL CAP Total	**109,042,038**	**6.59%**	**5-15%**
MTIP Total	**1,653,672,544**	**100.00%**	

The table above displays the Montana International Equity Pool (MTIP) allocation at quarter end across market cap segments and manager styles. At this time, all weightings are within the approved ranges.

International stocks posted solid returns in the fourth quarter as developed market stocks returned 5.8%, topping off a strong performance for the year. The European financial crisis seemed more under control by the European Central Bank and improved growth prospects for Europe and Japan added to growing confidence in these markets.

Emerging market stocks (EM) earned slight gains in the quarter, but overall posted losses for the year. Currency valuation worries and weaker growth prospects in China plagued the emerging markets.

A look at the style performance matrices shows that returns in the quarter were positive across the board in developed markets. This time though, as in the United States, large caps did relatively better than their smaller brethren. Within developed markets large cap value stocks and large cap growth stocks posted similar mid single digit returns. Growth stocks in the mid cap and small cap areas did slightly better than the value stocks. For the year ended December, all developed market cap sizes and styles delivered strong returns in the neighborhood of 20%, with the exception of small cap core which lead with a 30% annual return.

Non-US Developed Market Environment

	4Q 2013			Last Twelve Months		
	Value	Neutral	Growth	Value	Neutral	Growth
Large	6.6%	5.8%	7.0%	23.0%	19.9%	25.5%
Mid	2.8%	4.8%	4.4%	19.2%	22.3%	21.3%
Small	2.2%	6.2%	3.5%	17.8%	30.0%	21.5%

Emerging Market Environment

	4Q 2013			Last Twelve Months		
	Value	Neutral	Growth	Value	Neutral	Growth
Large	2.0%	0.7%	5.8%	-0.8%	-6.3%	11.1%
Mid	1.4%	1.0%	3.5%	-4.8%	-5.1%	-2.8%
Small	0.7%	0.3%	1.7%	-1.5%	-1.2%	6.5%

Large cap is defined as approximately the largest 70% of total US market capitalization; Mid cap is approximately the next 20% and Small cap is approximately the bottom 10% Growth is defined as approximately the bottom 25% of securities based on book-to-market; neutral is approximately the next 50% and value is approximately the highest 25% of securities based on book-to-market.

In US dollars. MSCI indices are total returns net of foreign withholding taxes on dividends. Marketwide returns use MSCI's Global Investable Market Indices Methodology and comprise large, mid, and small cap equities.

In emerging markets, growth stocks continued to outpace value stocks significantly in the quarter, adding to the lead that growth stocks had all year. For the twelve months ended in December, EM large cap growth stocks returned almost 12% better than large cap value. In the mid and small cap EM stocks, growth was also favored over value in the quarter. For the year it was a closer race in mid caps while growth substantially outperformed value in the small caps. Recall that the performance of growth over value in emerging markets reached an all time high last summer. That trend appears to still be intact.

The currency effect on international investments had little effect on international equity returns for U.S. investors in the quarter. The dollar declined in October when compared to the basket of six major currencies. However, it rallied following the Fed announcement of "tapering." The result for the quarter was basically a wash, as the DXY ended almost exactly where it started.

MTIP outperformed the pool benchmark by 12 basis points for the quarter and outperformed by 77 basis points for the twelve months through December. The quarterly outperformance was largely a result of the performance of the actively managed portfolios.

Performance of the actively managed portfolios was encouraging in the quarter as three of the five active portfolios outperformed their respective benchmarks. Large cap value and small cap style buckets added to the relative return of the pool while the large cap growth bucket underperformed.

Going forward, further diversification of the active management portion of the small cap allocation is planned, with the two new managers to begin on March 3.

INTERNATIONAL EXPOSURE-MARKET CAP %

December 31, 2013

Managers	MEGA $200B+	GIANT $100-$200B	LARGE $50-$100B	$20-$50B	$10-$20B	MID $2.5-$10B	SMALL $500MM-$2.5B	MICRO < $500MM	WTD AVG MARKET CAP ($B)
Acadian Asset Management	--	10.4	16.6	24.7	15.1	14.5	13.7	5.1	28.0
Bernstein Inv Mgt & Research with look throughs	2.9	9.8	13.6	20.2	15.9	14.8	4.8	0.1	44.4
DFA International Small Cap	--	--	--	--	0.9	32.1	53.0	13.9	1.8
Hansberger Global Investors	6.3	11.6	14.9	31.1	12.1	24.0	0.0	0.0	44.9
Martin Currie	1.7	14.9	23.8	27.5	15.9	16.1	0.0	0.0	44.1
BlackRock ACWI Ex US Superfund A	4.6	12.6	20.0	25.9	16.4	18.1	1.5	0.0	47.5
BlackRock Intl Small Cap Index look through	--	--	--	--	--	28.6	59.2	11.5	1.5
BlackRock ACWI Ex US Superfund A	1.6	7.9	10.0	24.4	20.6	29.6	5.8	0.0	21.9
BlackRock Emerging Market Fund look through	3.7	11.4	17.7	24.1	15.0	19.0	5.8	1.2	42.3
ALL INTERNATIONAL EQUITY PORTFOLIOS	**3.7**	**11.5**	**17.9**	**24.4**	**15.2**	**19.4**	**6.1**	**1.2**	**42.3**
International Custom Benchmark	**4.6**	**12.6**	**20.0**	**25.8**	**16.3**	**18.4**	**2.1**	**0.1**	**-**
Over/underweight(-)	**-0.9**	**-1.1**	**-2.1**	**-1.4**	**-1.2**	**1.0**	**4.0**	**1.1**	

INTERNATIONAL EXPOSURE-SECTOR %

December 31, 2013

MANAGERS	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Technology	Materials	Telecom. Services	Utilities
Acadian Asset Management	8.9	2.0	18.0	31.2	4.7	10.0	10.5	5.5	6.9	2.3
Bernstein Inv Mgt & Research with look throughs	15.8	5.2	9.2	26.5	9.4	11.4	6.4	7.4	5.4	2.9
DFA International Small Cap	20.1	5.8	5.7	14.2	5.8	24.7	9.5	10.0	1.8	2.2
Hansberger Global Investors	17.3	10.1	5.3	15.8	10.6	12.8	10.0	8.9	6.9	2.2
Martin Currie with look throughs	19.3	14.2	6.4	15.3	8.2	14.9	8.6	6.7	4.9	1.4
BlackRock ACWI Ex US Superfund A	10.7	9.8	9.0	26.5	7.7	11.0	6.7	8.5	5.8	3.3
BlackRock Intl Small Cap Index look through	18.5	5.8	5.5	19.4	5.7	20.1	10.1	10.9	1.1	2.1
BlackRock Emerging Market Fund look through	8.9	8.6	11.3	26.7	1.7	6.5	16.0	9.7	7.4	3.4
All International Equity Portfolios	**12.1**	**9.7**	**8.8**	**24.4**	**7.5**	**12.0**	**7.6**	**8.5**	**5.5**	**3.1**
International Custom Benchmark	**10.9**	**9.9**	**9.0**	**26.7**	**7.8**	**11.3**	**6.7**	**8.6**	**5.8**	**3.3**
Over/underweight(-)	**1.2**	**-0.2**	**-0.2**	**-2.3**	**-0.3**	**0.7**	**0.9**	**-0.1**	**-0.3**	**-0.2**

INTERNATIONAL PORTFOLIO CHARACTERISTICS

December 31, 2013

	Market Value	Number of Securities	3Yr Hist EPS Growth	Price/ Earnings	Price/ Book	Dividend Yield
International Accounts with look throughs	**1,653,050,875**	**8,366**	**13.4**	**14.6**	**1.7**	**2.73**
International Equity Managers						
Acadian Asset Management	105,931,455.2	361	14.9	10.1	1.2	2.92
Bernstein Inv Mgt & Research with look throughs	113,820,099	229	11.0	14.0	1.4	2.87
DFA International Small Cap	81,364,683	4,206	17.4	15.3	1.4	2.37
Hansberger Global Investors	121,301,954	59	15.4	19.3	2.5	1.80
Martin Currie with look throughs	119,885,311	59	18.2	17.4	2.3	2.24
BlackRock ACWI Ex US Superfund A	1,007,092,104	1,846	12.2	14.8	1.7	2.87
BlackRock Intl Small Cap Index look through	27,637,752	4,275	18.6	15.0	1.5	2.39
BlackRock Emerging Market Fund look through	42,742,650	826	16.9	11.4	1.5	2.58
Benchmarks						
MSCI All Country World Ex-United States		1,824	12.2	14.8	1.7	2.88
MSCI All Country World Ex-United States Growth		1,062	15.9	18.6	2.4	2.06
MSCI All Country World Ex-United States Value		995	8.4	12.2	1.3	3.71
MSCI EAFE Small Cap		2,179	18.7	15.5	1.5	2.31
MSCI World Ex-United States Small Cap		2,412	19.2	15.6	1.5	2.37
MSCI All Country Pacific		934	18.5	14.2	1.5	2.41
MSCI Europe		432	6.7	15.9	1.8	3.23

INTERNATIONAL EQUITY
Region and Market Exposure
December 31, 2013

Developed Countries		Aggregate Int'l Portfolio Weight (%)	International Custom Benchmark Weight	difference	3 Month Return	FYTD Return	Calendar YTD Return	1 yr Return
Asia/Pacific		**22.6%**	**23.7%**	-1.11%				
	Australia	4.71%	5.37%		-2.0%	8.7%	-1.7%	-1.7%
	Hong Kong	1.98%	2.07%		3.5%	12.0%	9.8%	9.8%
	Japan	14.81%	15.14%		1.8%	8.6%	24.8%	24.8%
	New Zealand	0.11%	0.09%		-2.4%	11.1%	9.3%	9.3%
	Singapore	1.03%	1.07%		-1.7%	1.8%	-3.2%	-3.2%
European Union		**24.6%**	**25.3%**	-0.67%				
	Austria	0.38%	0.20%		2.9%	22.1%	12.1%	12.1%
	Belgium	0.86%	0.86%		7.4%	21.3%	22.7%	22.7%
	Denmark	0.92%	0.86%		10.5%	27.7%	31.0%	31.0%
	Finland	0.60%	0.66%		10.2%	37.3%	36.4%	36.4%
	France	7.10%	7.19%		5.9%	22.7%	24.8%	24.8%
	Germany	6.16%	6.82%		12.9%	27.5%	28.6%	28.6%
	Ireland	0.31%	0.21%		10.5%	27.8%	45.2%	45.2%
	Italy	1.66%	1.62%		11.8%	32.9%	22.7%	22.7%
	Netherlands	1.88%	1.96%		8.4%	24.2%	27.9%	27.9%
	Portugal	0.17%	0.13%		8.9%	21.3%	20.4%	20.4%
	Spain	2.12%	2.44%		10.9%	38.9%	29.3%	29.3%
	Sweden	2.47%	2.34%		5.5%	22.2%	23.4%	23.4%
Non-EU Europe		**7.2%**	**7.0%**	0.24%				
	Norway	0.88%	0.60%		6.4%	15.1%	6.9%	6.9%
	Switzerland	6.35%	6.39%		4.7%	15.0%	24.4%	24.4%
North America		**6.2%**	**7.1%**	-0.93%				
	Canada	6.14%	7.15%		3.2%	11.9%	2.6%	2.6%
	USA	0.08%	0.00%		9.5%	15.8%	30.7%	30.7%
United Kingdom		**15.7%**	**15.9%**	-0.15%				
	United Kingdom	15.71%	15.85%		7.2%	19.8%	18.4%	18.4%
Other								
	Other	0.61%	0.33%					
DEVELOPED TOTAL		**77.02%**	**79.35%**	-2.34%				
Emerging & Frontier Market Countries								
Asia/Pacific		**14.3%**	**13.0%**	1.32%				
	China	4.74%	4.07%		4.2%	15.6%	2.2%	2.2%
	India	1.59%	1.31%		11.3%	4.4%	-6.8%	-6.8%
	Indonesia	0.48%	0.46%		-6.7%	-29.8%	-25.9%	-25.9%
	South Korea	3.70%	3.34%		3.3%	18.2%	3.0%	3.0%
	Malaysia	0.70%	0.80%		3.9%	-0.1%	4.7%	4.7%
	Philippines	0.14%	0.18%		-5.9%	-11.8%	-8.5%	-8.5%
	Taiwan	2.34%	2.43%		4.3%	6.3%	8.7%	8.7%
	Thailand	0.66%	0.45%		-10.7%	-16.0%	-16.7%	-16.7%
European Union		**0.5%**	**0.6%**	-0.05%				
	Czech Republic	0.05%	0.05%		-1.8%	11.9%	-13.9%	-13.9%
	Greece	0.08%	0.10%		18.8%	49.9%	24.4%	24.4%
	Hungary	0.05%	0.05%		-5.8%	-8.9%	-6.4%	-6.4%
	Poland	0.31%	0.35%		4.2%	19.6%	-0.1%	-0.1%
Non-EU Europe		**1.5%**	**1.3%**	0.20%				
	Russia	1.45%	1.25%		0.2%	13.1%	-2.8%	-2.8%
Latin America/Caribbean		**3.9%**	**3.9%**	0.00%				
	Brazil	2.40%	2.20%		-6.5%	0.3%	-19.4%	-19.4%
	Chile	0.29%	0.32%		-7.7%	-13.1%	-24.2%	-24.2%
	Colombia	0.16%	0.21%		-11.4%	-3.5%	-23.9%	-23.9%
	Mexico	0.95%	1.11%		6.6%	4.5%	-2.5%	-2.5%
	Peru	0.14%	0.09%		2.3%	-1.3%	-31.9%	-31.9%
Mid East/Africa		**1.7%**	**1.9%**	-0.15%				
	Egypt	0.03%	0.04%		18.8%	40.1%	9.0%	9.0%
	South Africa	1.32%	1.53%		1.3%	8.9%	-8.6%	-8.6%
	Turkey	0.39%	0.31%		-1.4%	-19.7%	-27.5%	-27.5%
Frontier	**Frontier**	0.09%	0.00%	0.09%				
EMERGING & FRONTIER TOTAL		**22.1%**	**20.6%**	1.40%				

MEMORANDUM

Montana Board of Investments
Department of Commerce
2401 Colonial Drive, 3rd Floor
Helena, MT 59601 (406) 444-0001

To: Members of the Board

From: Rande R. Muffick, CFA
Portfolio Manager – Public Equities

Date: February 25, 2014

Subject: Public Equity External Managers Watch List - Quarterly Update

There were no changes to the Watch List this quarter.

PUBLIC EQUITIES
MANAGER WATCH LIST
February 2014

Manager	**Style Bucket**	**Reason**	**$ Invested (mil)**	**Inclusion Date**
Alliance Bernstein	**International – LC Value**	**Performance**	**$114.2**	**August 2012**
Hansberger	**International – LC Growth**	**Performance**	**$121.4**	**May 2013**

Back to Agenda

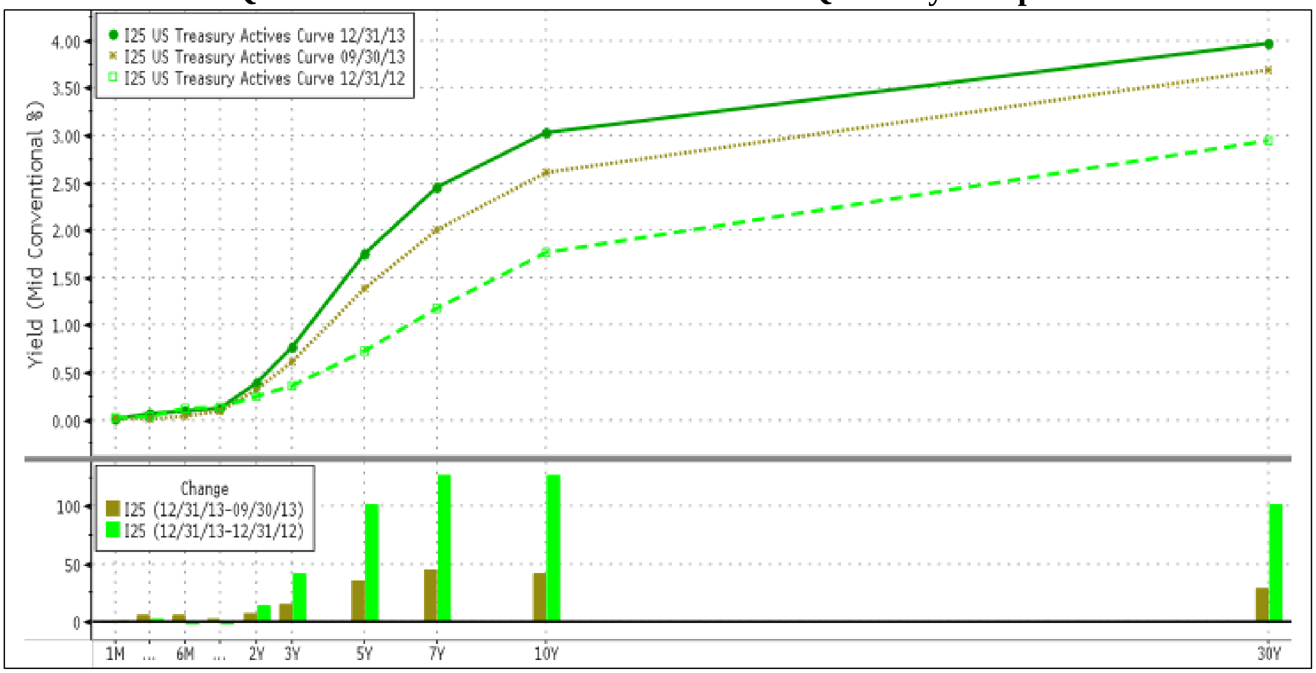
FIXED INCOME

FIXED INCOME OVERVIEW & STRATEGY
Nathan Sax, CFA, Portfolio Manager
February 25, 2014

RETIREMENT & TRUST FUND BOND POOLS

The yield on the U.S. Treasury 10-year note rose steadily through the fourth quarter, ending a bearish year to yield 3.03% with the bond market returning -2.02% as reflected by the Barclays Capital Aggregate Bond Index. The index return for the fourth quarter was -0.14%. The 10-year Treasury started the year yielding 1.76%. The Federal Reserve Bank reduced monthly purchases of Treasury and mortgage bonds by $10 billion per month to begin the “tapering” of its quantitative easing program following its December 18th meeting.

4Q13 Historical Yield Curve – Annual and Quarterly Comparison



Economic growth had impressive back to back quarters, with real GDP up at an annual rate of 4.1% in the third quarter followed by 3.2% growth in the fourth quarter. Real GDP for the calendar year 2013 was 1.9% although growth measured by fourth quarter over fourth quarter was 2.7%. Several quarters of strong inventory growth in 2013 is likely to take away from 2014 GDP. The Christmas retail shopping season showed good revenues although profitability was hampered by aggressive discounting. Consumer spending outpaced personal income growth while the personal savings rate declined. Given the cautious behavior on the part of U.S. consumers since 2008, we do not expect this trend to continue.

The following table shows the sector weightings of our internally and externally managed funds. It also shows a comparison to policy constraints:

RFBP/TFBP vs. Barclays Aggregate – 12/31/13

		Retirement Fund Bond Pool							
	RFBP Combined	**External Management**				**Internal Management**			
		Reams	Artio	Post	Neuberg Berman	CIBP	TFBP	CIBP/TFIP Policy Range	Barclays Aggregate
Treasuries	18.84	42.43	15.57	0.00	0.00	17.20	15.80	15-45	35.69
Agencies & Govt Related	4.29	0.00	9.65	0.00	0.00	4.76	5.41	5-15	9.99
Total Government	**23.13**	**42.43**	**25.22**	**0.00**	**0.00**	**21.96**	**21.21**	**20-60**	**45.68**
Mortgage Backed	20.98	10.66	22.90	0.00	0.00	24.48	25.86	20-40	29.80
Asset Backed	4.64	0.00	5.97	0.00	0.00	5.73	5.62	0-7	0.46
CMBS	10.34	8.28	9.31	0.00	0.00	11.72	11.90	0-12	1.73
Total Securitized	**35.96**	**18.94**	**38.18**	**0.00**	**0.00**	**41.93**	**43.38**	**20-59**	**31.99**
Financial	13.60	24.14	9.96	12.58	7.53	12.65	11.88		7.33
Industrial	21.06	13.75	19.84	75.70	86.20	16.18	16.05		12.56
Utility	3.23	0.00	1.50	0.00	3.28	3.92	4.25		2.44
Total Corporate	**37.89**	**37.89**	**31.30**	**88.28**	**97.01**	**32.75**	**32.18**	**10-40**	**22.33**
Other	0.18	0.00	3.98	4.98	0.60	0.00	0.00		0.00
Cash	2.84	0.74	1.32	6.74	2.39	3.36	3.23		0.00
Total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

RFBP Fixed Income Sector	**Policy Range**	**RFBP on 12/31/13**
U.S. High Yield	0-15%	8.97%
Non-US (incl. EM)	0-10%	3.42%
Total "Plus" sectors	0-20%	12.39%
Core (U.S. Investment Grade)	80-100%	87.61%

TFIP Fixed Income Sector	**Policy Range**	**TFIP on 12/31/13**
High Yield	0-10%	7.13%
Core Real Estate	0-8%	7.20%
Core (U.S. Investment Grade)	0-100%	85.67%

Option-adjusted spreads tightened by 79 basis points in the fourth quarter in the High Yield sector. High Yield OAS for the year overall narrowed by 129 basis points. Investment grade corporate bonds tightened as well, with OAS going from 141 basis points on September 30th to 114 basis points on December 31st. Investment grade spreads tightened by 27 basis points for the fourth quarter as well as for the calendar year. High yield spreads did, however, widen in the first quarter of 2014 in sympathy with the selloff in equities. Investment grade widened as well although not as much.

Barclays U.S. High Yield 2% Issuer Cap, Average OAS – 12/31/12 to 02/06/14

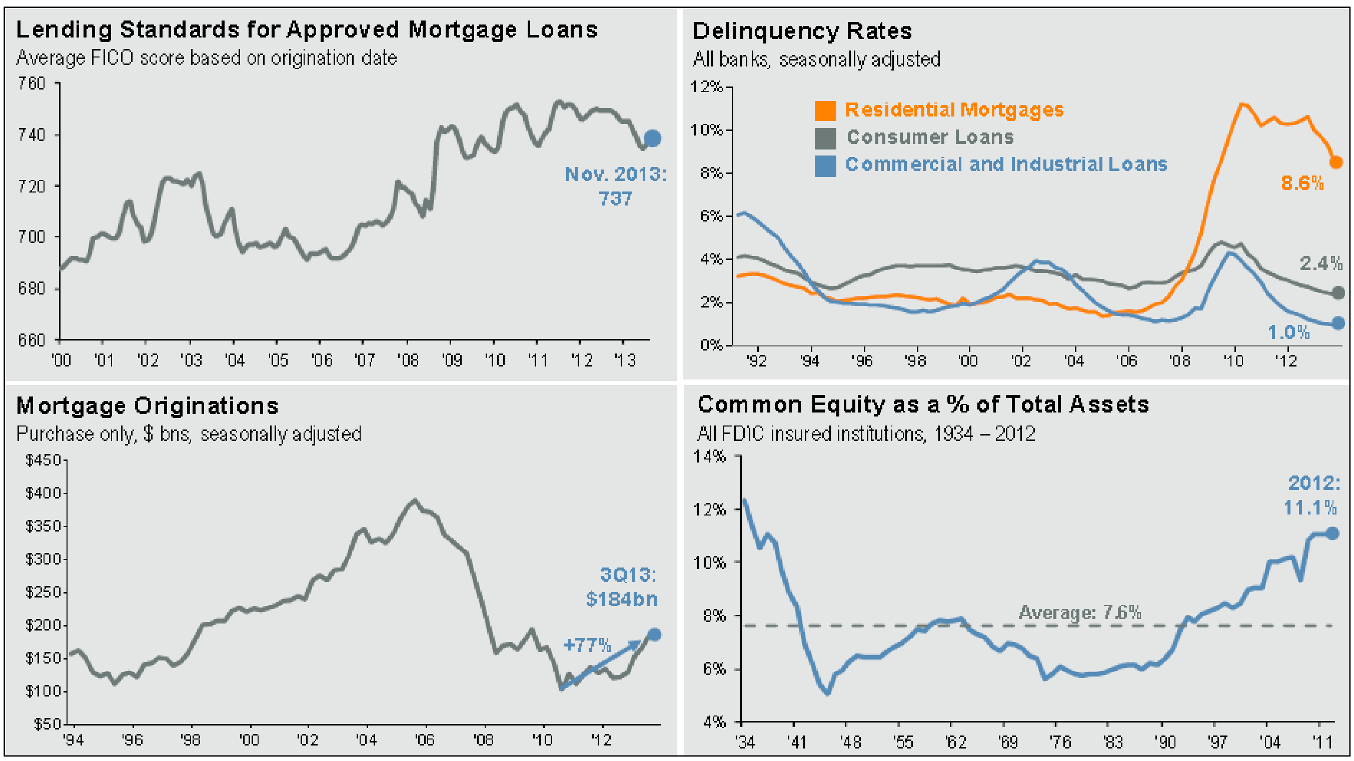
The bond portfolios as compared to the benchmark are shown below. The Merrill index shown here is used as a proxy for the actual benchmark, the Barclays Capital Aggregate Bond Index.

Benchmark Comparison Analysis CIBP vs. Merrill US Broad Market Index on 12/31/13						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	101.64	3.36	3.33	2.85	5.26	0.77
Benchmark	104.34	3.43	3.32	2.48	5.25	0.45
Difference	-2.70	-0.07	0.01	0.37	0.01	0.32

Benchmark Comparison Analysis RFBP vs. Merrill US Broad Market Index on 12/31/13						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	101.80	3.54	3.61	3.07	5.35	1.02
Benchmark	104.34	3.43	3.32	2.48	5.25	0.45
Difference	-2.54	0.11	0.29	0.59	0.10	0.57

Benchmark Comparison Analysis TFBP vs. Merrill US Broad Market Index on 12/31/13						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	103.48	3.90	3.84	2.86	5.20	0.79
Benchmark	104.34	3.43	3.32	2.48	5.25	0.45
Difference	-0.86	0.47	0.52	0.38	-0.05	0.34

The graph below shows recent improvement is residential mortgage statistics.



Concluding Comments

The bond market's return for the year was only the third negative total return ever recorded since the inception of the Aggregate index in 1986. Treasury bonds trailed in relative return as investors favored the risk sectors. The belief that the U.S. economy would pick up steam fueled expectations among institutional investors that the Federal Reserve will continue to reduce quantitative easing, eventually closing the program out this year. Even if this should play out, the Federal Funds rate is expected to remain close to zero well into 2015.

	BELOW INVESTMENT GRADE FIXED INCOME HOLDINGS (INTERNALLY MANAGED)								
	December 31, 2013								
	(in millions)								
	Par	**Book**	**Market**	**Price**	**Name**	**Coupon %**	**Maturity**	**Rating M/S&P**	**Comments**
	$8.000	$7.954	$8.135	$101.69	Zions Bancorporation	5.650	05/15/14	BA2/BB+	Zions credit quality has been severely stressed but they were able to issue debt and equity in 2009 and remain relatively well capitalized. Repaid TARP in 2012.
D	$30.000	$30.000	$32.406	$108.02	DOT Headquarters II Lease	6.001	12/07/21	NR/BB+	The bond was insured by XL Capital which has defaulted. However, lease payments are guaranteed by the US govt and the bond is collateralized by the building.
	$5.000	$4.755	$4.700	$94.00	American Presidents Co	8.000	01/15/24	NR/NR	Downgraded to below investment grade in December of 1997 due to high leverage and overall stress in the industry. The rating was dropped in August of 1999 when the company was acquired by NOL. NOL is wholly owned by AAA rated TEMASEK which will likely continue support.
	$10.000	$0.000	$2.100	$21.00	Lehman Brothers	5.500	05/25/10	NR/NR	Currently in default and liquidation
	$53.000	$42.709	$47.341						
A	= Additions since 9/30/13								
	None								
D	= Deletions since 9/30/13								
	$20.000	$20.000	$21.777	$108.89	DOT Headquarters II Lease	6.001	12/07/21	NR/BB+	Sold $20 million at weighted average price of $108.89 in 4Q 2013
	In default								
	$10.000	$0.000	$2.100	$21.000	Lehman Brothers	5.500	05/25/10	NR/NR	Currently in default and liquidation

Treasurer's Fund

Richard Cooley, CFA, Portfolio Manager

February 25, 2014

The fund totaled $960 million as of December 31, 2013, consisting of approximately one half general fund monies and the balance in various other state operating accounts. There were no security purchases in the fourth quarter. Current securities holdings total $30 million. The investment policy for the fund limits security holdings to 50% of the projected General Fund FYE balance of the current period. The December projected General Fund FYE balance was $460 million.

Short Term Investment Pool (STIP)

Richard Cooley, CFA, Portfolio Manager
February 25, 2014

During the fourth quarter money market yields were lower as the Federal Reserve continued its five year-old policy of low fed funds rates. Three month Libor rates decreased by 0.2 basis points and one month Libor rates decreased by 1.1 basis points during the quarter. The improvement in Libor rates reflects the continuation of better market tone and funding conditions for the large international banks. Credit spreads were tighter during the quarter, as depicted by the spread between three month Treasury bills and three month Libor rates (TED spread). This spread ended the fourth quarter at about 18 basis points, down 6 basis points for the quarter.

TED Spread (12/31/12 – 12/31/13)

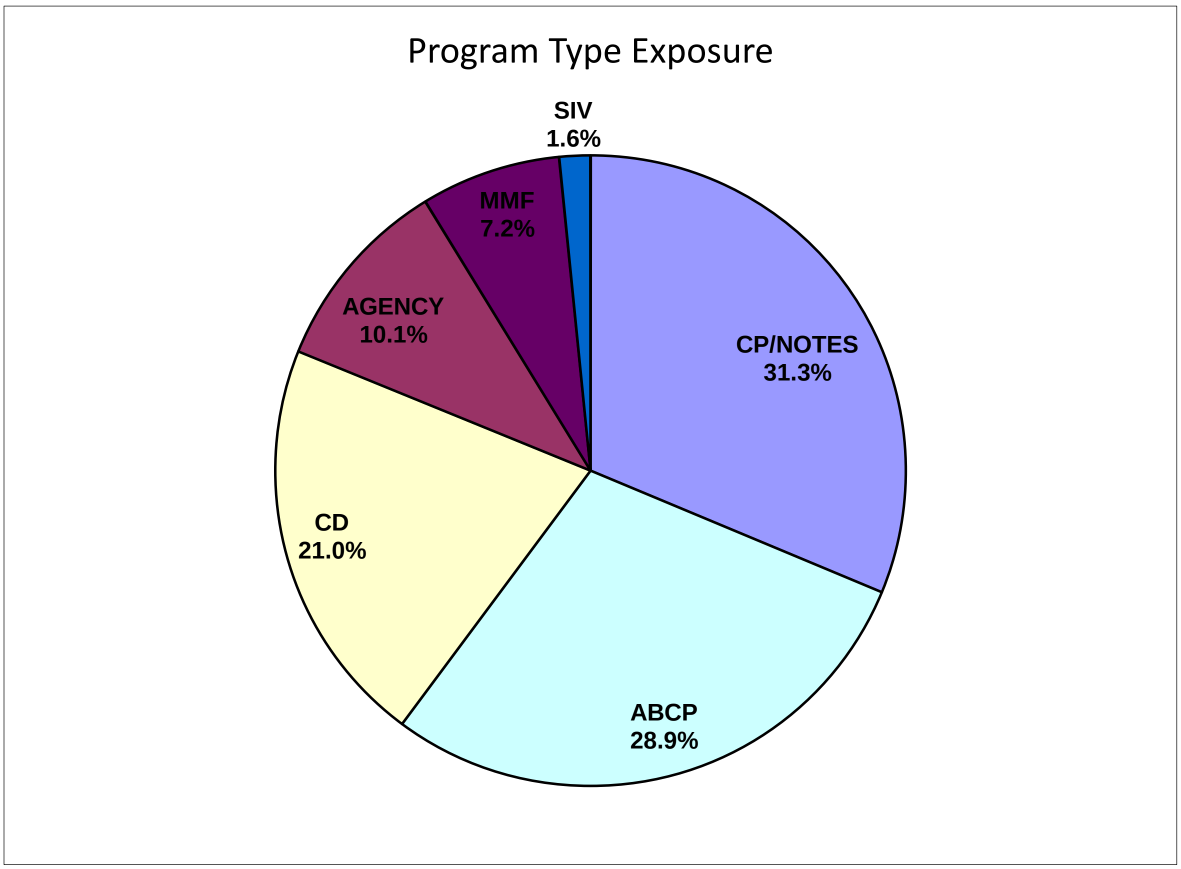
The STIP portfolio is currently well diversified and is operating within all the guidelines adopted by the Board at the November 2012 meeting. Daily liquidity is at a minimum of $150 million and weekly liquidity is at a minimum of $250 million. The average days to maturity is 53 days as compared to a policy maximum of 60 days. Asset-backed commercial paper is 29% of holdings (40% max) and corporate exposure is 31% (40% max). We currently have approximately 10% in agency paper, 21% in CD's (30% max) and 7% in four institutional money funds.

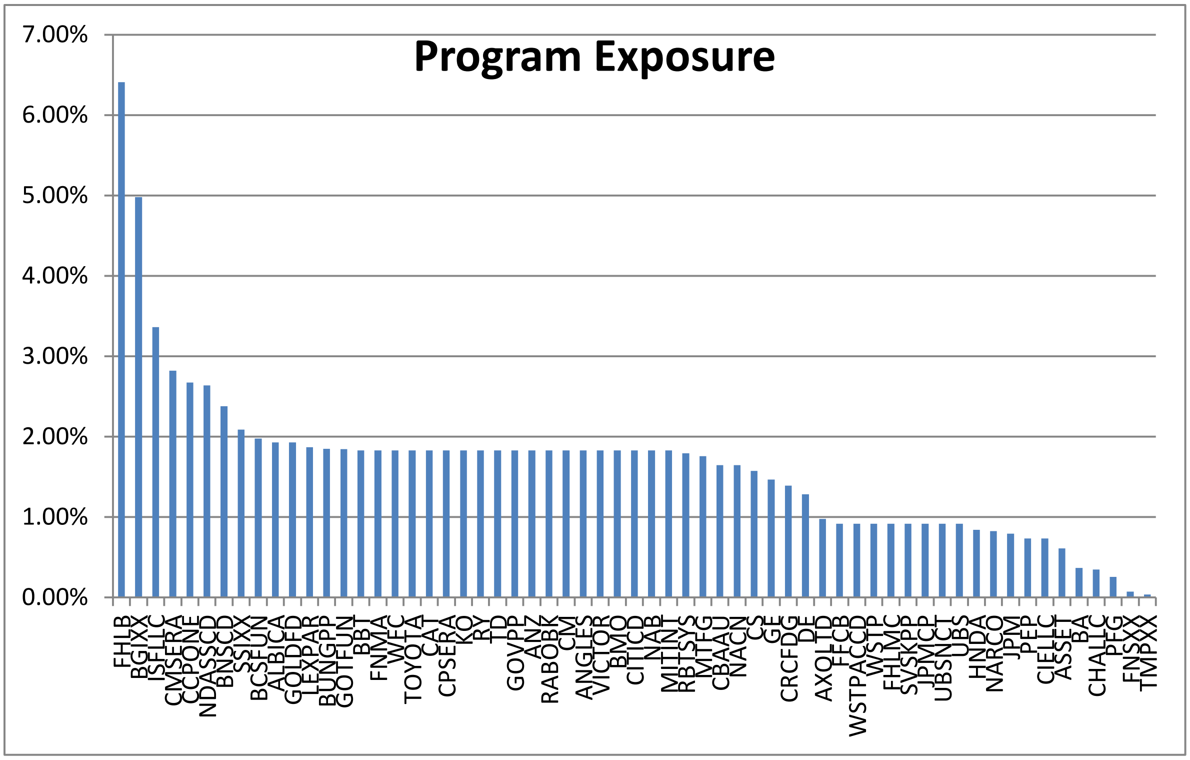
During the fourth quarter we purchased $50 million of floating rate corporate notes. We also purchased $50 million of fixed rate agencies and $75 million of floating rate agencies. Lower Libor rates detracted from the portfolio yield during the quarter.

The net daily yield on STIP is currently 0.12% as compared with the current one-month LIBOR rate of 0.16% and current fed funds target rate of 0.0%-0.25%. The portfolio asset size is currently $2.7 billion, up $250 million from three months ago. All charts below are as of January 31, 2014.

STIP Performance (12/31/13)

	1 Year	3 Year	5 Year	10 Year
STIP Net of Fees/Reserve	0.19%	0.26%	0.35%	1.97%
iMoneynet First Tier Instit. (Gross)	0.22%	0.26%	0.36%	2.00%
LIBOR 1 Month Index	0.19%	0.22%	0.25%	1.93%




Program Exposure
7.00%
6.00%
5.00%
4.00%
3.00%
2.00%
1.00%
0.00%
FHLB
BGIXX
ISFLLC
CMSERA
CCPONE
NDASSCD
BNSCD
SSIXX
BCSFUN
ALBICA
GOLDFD
LEXPAR
BUNGPP
GOTFUN
BBT
FNMA
WFC
TOYOTA
CAT
CPSERA
KO
RY
TD
GOVPP
ANZ
RABOBK
CM
ANGLES
VICTOR
BMO
CITICD
NAB
MITINT
RBTSYS
MTFG
CBAAU
NACN
CS
GE
CRCFDG
DE
AXOLTD
FFCB
WSTPACCD
WSTP
FHLMC
SVSKPP
JPMCP
UBSNCT
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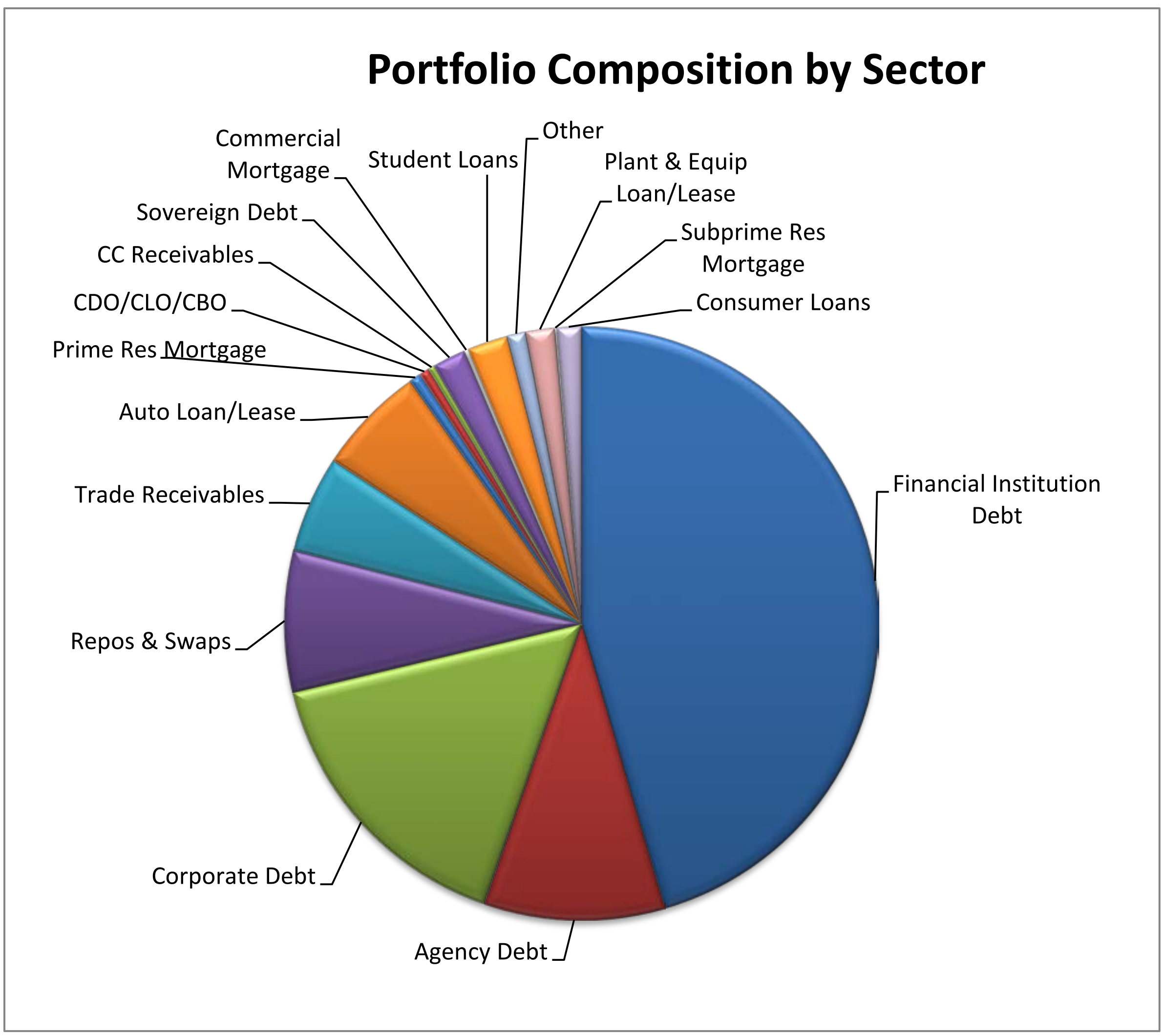
HNDA
NARCO
JPM
PEP
CIELLC
ASSET
BA
CHALLC
PFG
FNSXX
TMPXX


Portfolio Composition by Sector
Commercial Mortgage
Student Loans
Other
Plant & Equip Loan/Lease
Sovereign Debt
CC Receivables
Subprime Res Mortgage
CDO/CLO/CBO
Consumer Loans
Prime Res Mortgage
Auto Loan/Lease
Trade Receivables
Financial Institution Debt
Repos & Swaps
Corporate Debt
Agency Debt

State Fund Insurance

Richard Cooley, CFA, Portfolio Manager
February 25, 2014

The table below lays out the basic characteristics of the State Fund fixed income portfolio in comparison to a Merrill Lynch index. The Merrill Lynch index serves as a proxy for the account's actual benchmark, the Barclays Capital Government/Credit Intermediate Index.

Benchmark Comparison Analysis State Fund vs. Merrill US Corp and Govt, 1-10 Yrs on 12/31/2013						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	104.70	3.59	3.46	1.80	3.57	0.55
Benchmark	103.78	2.80	2.72	1.75	3.92	0.40
Difference	0.92	0.79	0.74	0.05	-0.35	0.15

The portfolio has an overweight in agencies, asset backed securities (ABS) and corporate bonds and is underweighted in Treasuries. The sector table on the following page provides more detail on the differences between the portfolio and the benchmark. The portfolio has a slightly shorter duration than the benchmark.

Spread product ended the fourth quarter tighter as compared to the end of the previous quarter. Agencies spreads were 4 basis points tighter at 17 basis points and corporate spreads tightened by 27 basis points from 141 basis points to 114 basis points. During the quarter, the ten year Treasury yield increased by 42 basis points from 2.61% to 3.03%.

The total fixed income (including STIP) portion of the account outperformed the benchmark by 18 basis points during the December quarter and outperformed by 51 basis points over one year. Longer term performance is +92 basis points for the past three years, +184 basis points for the past five years and +48 basis points for the past ten years (ended December 31).

As a reminder, the primary investment objective is to maximize investment income consistent with safety of principal.

During the December quarter, there were purchases of $39 million of corporate bonds spread across the curve. We also purchased $10 million of Agencies. We sold $5 million of equity fund units during the quarter and a total of $31 million during the calendar year.

The portfolio has a 5 basis point yield advantage over the benchmark. Client preferences include keeping the STIP balance in a 1-5 percent range (1.9% on 12/31) and limiting holdings rated lower than A3 or A- to 25 percent of fixed income, at the time of purchase, (25.1% on 12/31).

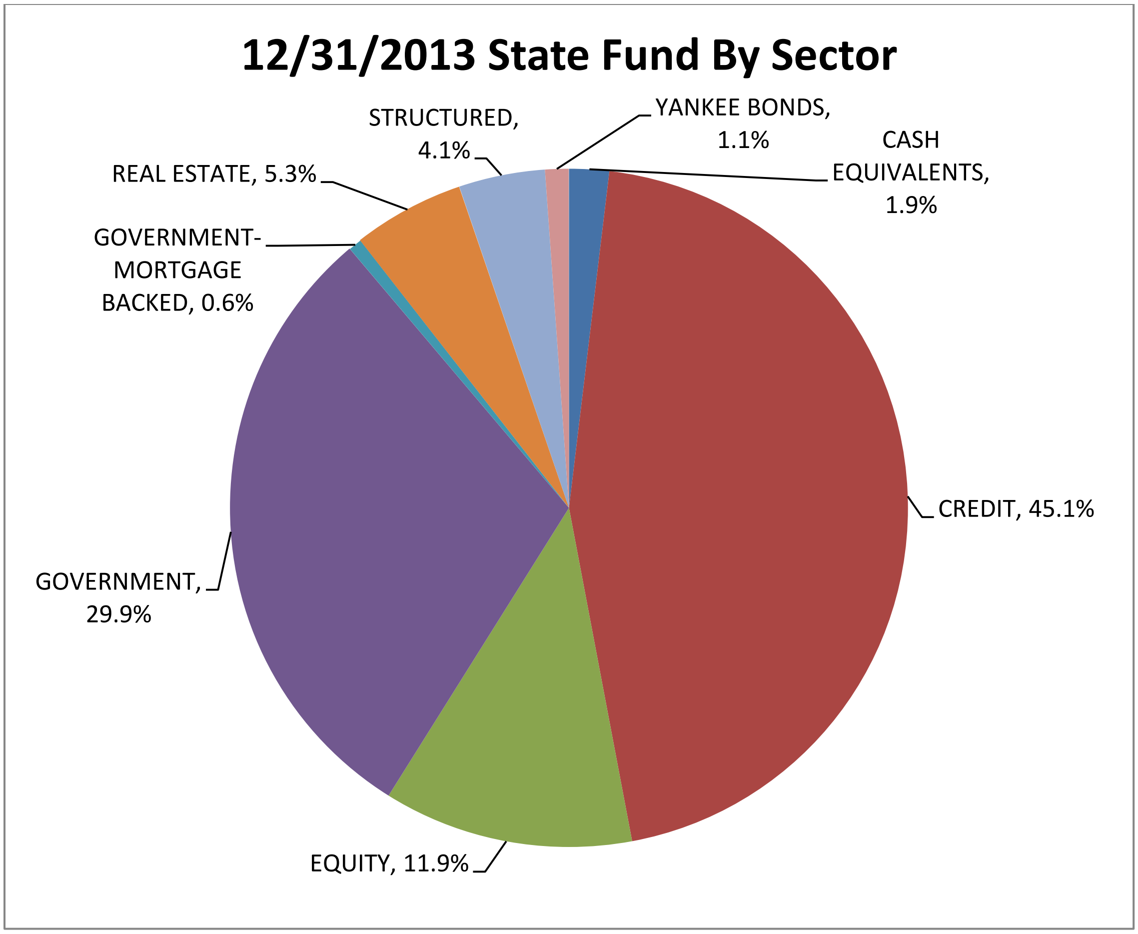
State Fund vs. Merrill US Corp and Govt, 1-10 Yrs on 12/31/2013

	SFBP Portfolio (%)	Benchmark (%)	Difference
Treasuries	16.03	58.22	-42.19
Agencies & Govt Related	21.37	12.80	8.57
Total Government	**37.40**	**71.02**	**-33.62**
Mortgage Backed	0.76	0.00	0.76
Asset Backed	4.58	0.00	4.58
CMBS	0.00	0.00	0.00
Securitized	**5.34**	**0.00**	**5.34**
Financial	26.58	10.25	16.33
Industrial	23.34	17.17	6.17
Utility	5.06	1.56	3.49
Total Corporates	**54.98**	**28.98**	**25.99**
Other	0.00	0.00	0.00
Cash	2.28	0.00	2.29
Total	**100.00**	**100.00**	

The following sector breakout is a look at the entire State Fund account including the S&P 500 and ACWI ex-U.S. equity holdings. The policy range for equities is currently 8%-12%. This is a client preference as the maximum allowed by statute is 25% of book value.

The last page is the monthly performance report from State Street. The custom composite index is an asset-weighted index that holds the same weights as the portfolio in each of the underlying benchmarks. The fixed income returns have been over the benchmark due to an overweight in spread product versus the benchmark.

12/31/2013 State Fund By Sector			
	Security Name	**Market Value**	**%**
	CASH	26,114,771	1.91%
CASH EQUIVALENTS		26,114,771	1.91%
	BANKS	136,134,728	9.97%
	COMMUNICATIONS	24,582,437	1.80%
	ENERGY	32,311,128	2.37%
	GAS/PIPELINES	6,052,085	0.44%
	INSURANCE	61,610,453	4.51%
	OTHER FINANCE	112,659,438	8.25%
	RETAIL	22,916,466	1.68%
	TRANSPORTATION	42,697,428	3.13%
	UTILITIES	61,165,265	4.48%
	ENERGY	5,073,627	0.37%
	INDUSTRIAL	110,655,708	8.10%
CREDIT		615,858,764	45.10%
	EQUITY	162,436,860	11.90%
EQUITY		162,436,860	11.90%
	TITLE XI	704,050	0.05%
	TREASURY NOTES/BONDS	181,424,449	13.29%
	AGENCY	226,308,753	16.57%
GOVERNMENT		408,437,252	29.91%
	FHLMC	4,740,279	0.35%
	FNMA	3,862,286	0.28%
GOVERNMENT-MORTGAGE BACKED		8,602,565	0.63%
	REAL ESTATE	72,369,154	5.30%
REAL ESTATE		72,369,154	5.30%
	OTHER STRUCTURED	56,226,642	4.12%
STRUCTURED		56,226,642	4.12%
	OTHER	15,434,870	1.13%
YANKEE BONDS		15,434,870	1.13%
STATE FUND BY SECTOR		1,365,480,878	100.00%


12/31/2013 State Fund By Sector
YANKEE BONDS, 1.1%
CASH EQUIVALENTS, 1.9%
STRUCTURED, 4.1%
REAL ESTATE, 5.3%
GOVERNMENT-MORTGAGE BACKED, 0.6%
CREDIT, 45.1%
GOVERNMENT, 29.9%
EQUITY, 11.9%

Return to Agenda

Private Equity & Real Estate

MEMORANDUM

Montana Board of Investments
Department of Commerce
2401 Colonial Drive, 3rd Floor
Helena, MT 59601 (406) 444-0001

To: Members of the Board

From: Ethan Hurley, Portfolio Manager – Alternative Investments

Date: February 25, 2014

Subject: Montana Private Equity Pool (MPEP)

Following this memo are the items listed below:

(i) **Montana Private Equity Pool Review:**
Comprehensive overview of the private equity portfolio for the quarter ended September 30th.

(ii) **New Commitments:**
The table below summarizes the investment decisions made by staff since the last Board meeting. Three commitments of $20M, $20M and $25M were made to Eureka Growth Capital III, LP, HKW Capital Partners IV, LP and Odyssey Investment Partners Fund V, LP, respectively. Investment briefs summarizing these funds and the general partners follow.

Fund Name	Vintage	Subclass	Sector	Amount	Date
Eureka Growth Capital III, LP	2013	Growth Equity	Diversified	$20M	1/23/14
HKW Capital Partners IV, LP	2013	Buyout	Diversified	$20M	1/23/14
Odyssey Investment Partners Fund V, LP	2014	Buyout	Diversified	$25M	1/24/14

(iii) **Portfolio Index Comparison:**
Table comparing the performance of the private equity portfolio to the State Street Private Equity Index™.

Montana Board of Investments

Private Equity Board Report

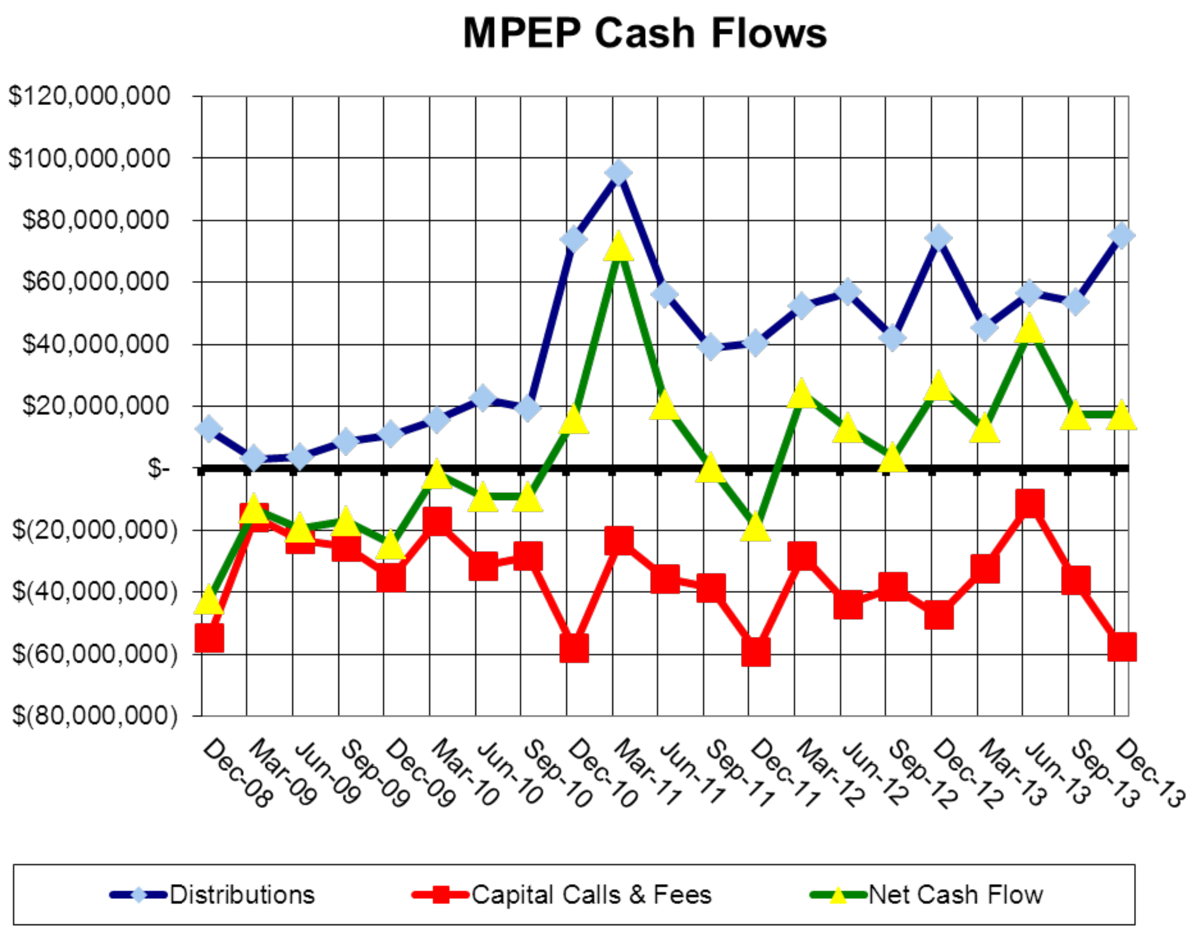
Q3 2013

Due to, among other things, the lack of a valuation standard in the private equity industry, differences in the pace of investment across funds and the understatement of returns in the early years of a fund's life, the internal rate of return information may not accurately reflect current or expected future returns, and the internal rates of return and all other disclosures with respect to the Partnerships have not been prepared, reviewed or approved by the Partnerships, the General Partners, or any other affiliates.

Contents

- Quarterly Cash Flow Chart
- Strategy – Total Exposure Chart
- Industry – Market Value Exposure Chart
- Geography – Total Exposure Chart
- Investment Vehicle – Total Exposure Chart
- Periodic Return Comparison
- LPs by Family of Funds Table

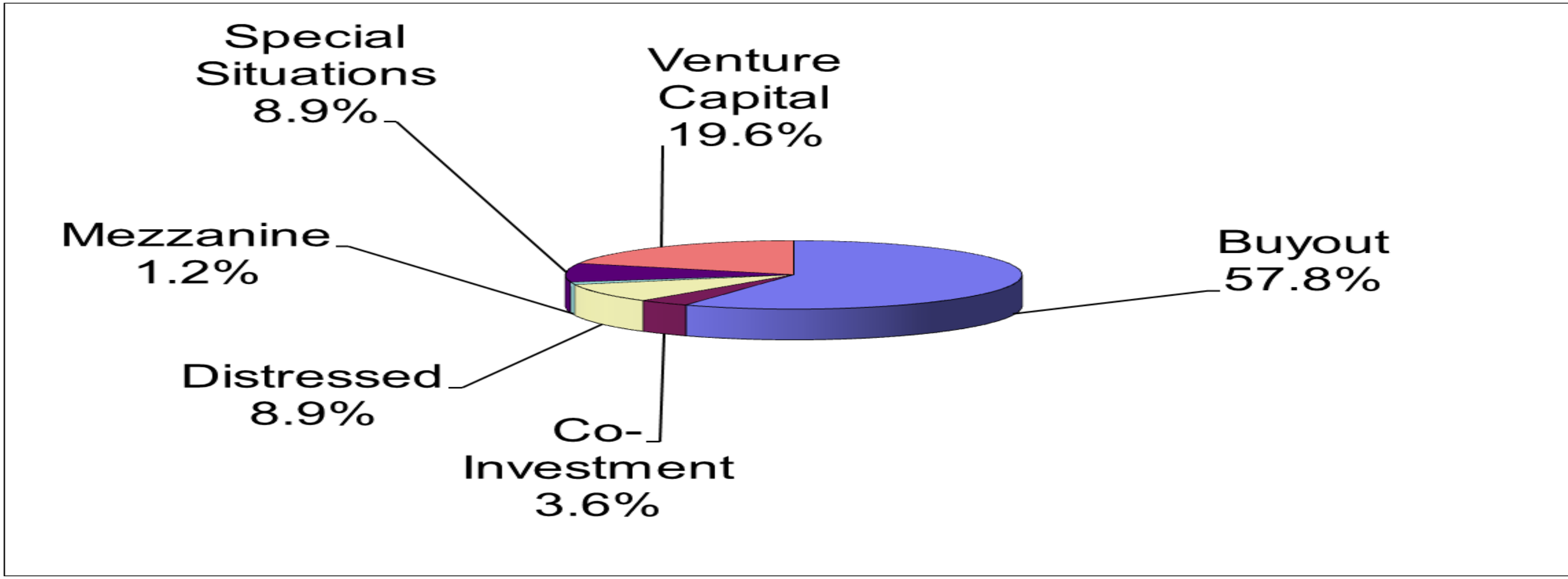
MPEP Quarterly Cash Flows
December 31, 2008 through December 31, 2013



Net cash flow for the quarter ending 12/31/13 remained positive as distributions continued to outpace capital calls. Broadly speaking relative to 3Q13, US leveraged buyout activity for the period ending 4Q13 was down on a dollar volume basis and based on number of transactions. In terms of the US IPO market, year over year, the number of IPOs increased 67%, from 133 in 2012 to 222 in 2013. Proceeds increased 28%. Quarter over quarter, there were 67 IPOs in Q4 2013 compared with 33 in Q4 2012, an increase of 103%, with proceeds up 171%; additionally, the number of IPOs in Q4 increased by 12%, and proceeds increased by 96% when compared with Q3 2013.

Q3 2013 Strategy – Total Exposure

(Since inception through September 30, 2013)

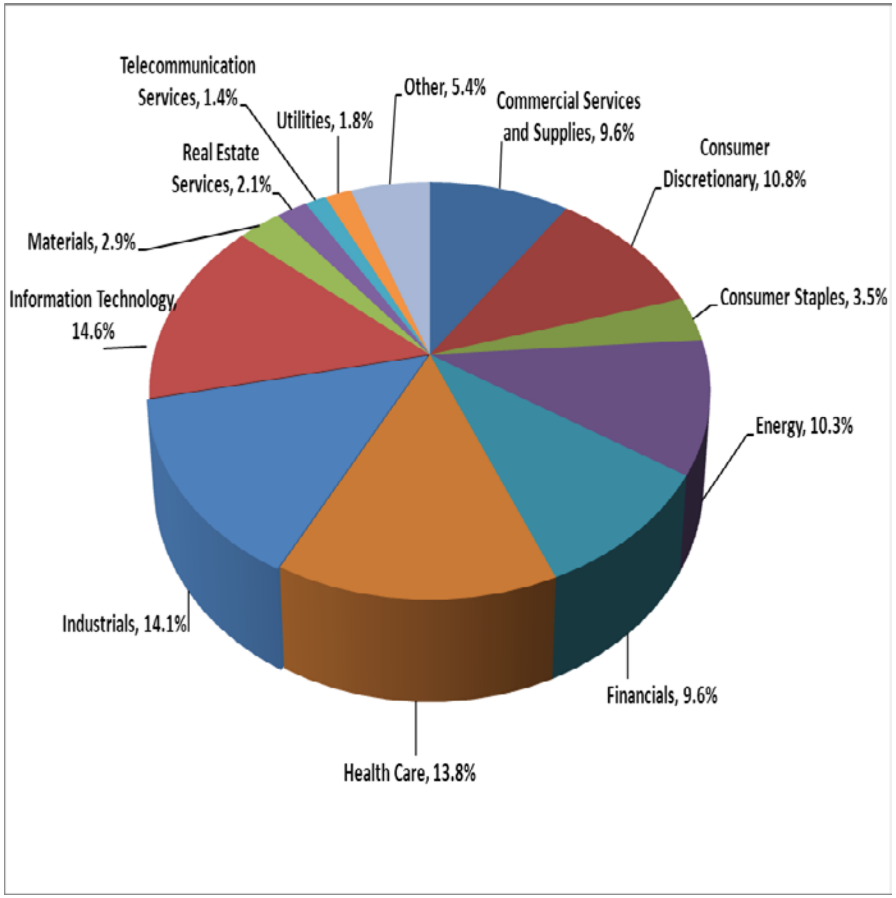


Strategy	Remaining Commitments	Percentage	Market Value	Percentage	Total Exposure	Percentage
Buyout	$441,064,226	66.7%	$567,744,103	52.4%	$1,008,808,329	57.8%
Co-Investment	$19,640,304	3.0%	$43,433,031	4.0%	$63,073,335	3.6%
Distressed	$52,980,251	8.0%	$102,296,620	9.4%	$155,276,871	8.9%
Mezzanine	$1,528,358	0.2%	$19,623,500	1.8%	$21,151,858	1.2%
Special Situations	$67,756,895	10.3%	$86,916,376	8.0%	$154,673,271	8.9%
Venture Capital	$77,932,844	11.8%	$264,114,674	24.4%	$342,047,518	19.6%
Total	$660,902,878	100.0%	$1,084,128,304	100.0%	$1,745,031,182	100.0%

The portfolio is well diversified by strategy, with the most significant strategy weight consisting of Buyout at 57.8% of total exposure. When combined with Co-Investment and Special Situations, the overall exposure to Buyout strategies is approximately 70%. Strategic allocations are expected to remain relatively stable going forward. That said, the Distressed allocation should continue to decline marginally in the near-term given the ongoing liquidation of mature funds in this category.

Q3 2013 Industry – Market Value Exposure

(Since inception through September 30, 2013)

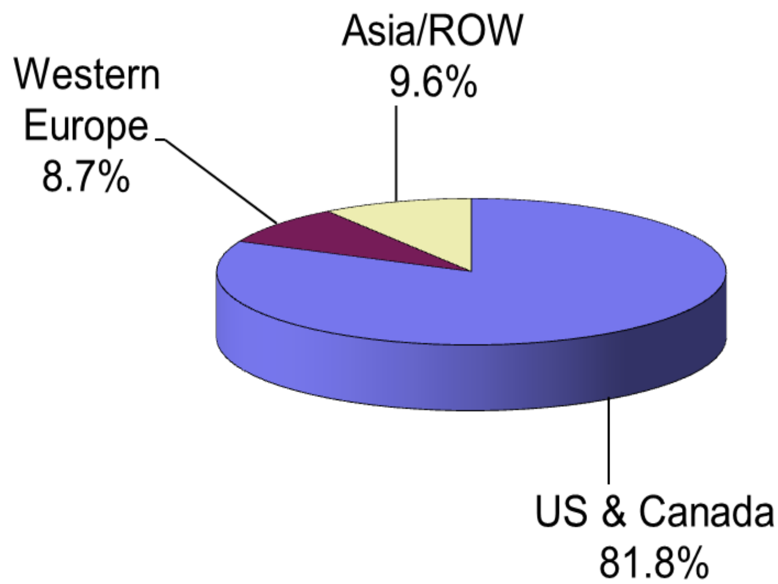


Industry	Investments, At Market Value	Percentage
Commercial Services and Supplies	102,157,983.92	9.6%
Consumer Discretionary	115,193,322.18	10.8%
Consumer Staples	37,591,282.78	3.5%
Energy	109,719,698.43	10.3%
Financials	103,101,693.15	9.6%
Health Care	147,835,558.34	13.8%
Industrials	150,574,345.72	14.1%
Information Technology	156,555,383.19	14.6%
Materials	31,325,275.85	2.9%
Real Estate Services	22,621,922.56	2.1%
Telecommunication Services	15,314,809.49	1.4%
Utilities	19,234,484.42	1.8%
Other	57,857,130.65	5.4%
Total	1,069,082,890.69	100%

The portfolio is broadly diversified by industry with the consumer discretionary, energy, healthcare, industrials and information technology sectors representing the five largest industry exposures at approximately 64% of total assets. With the exception of energy and the information technology-related industries, the portfolio's underlying managers tend to be multi-sector investors. Therefore, composition of the portfolio by industry is and will continue to primarily be a function of a manager's industry expertise and success in sourcing deals rather than a function of staff's desire to over or underweight a specific industry.

Q3 2013 Geography – Total Exposure

(Since inception through September 30, 2013)



The portfolio's predominate geographic exposure is to developed North America, representing 81.8% of the market value and uncalled capital domiciled in or targeted for the US and Canada. No significant divergence from this is expected in the near-term. Targeted international investments will continue to be made largely through fund-of-funds given existing constraints on internal resources.

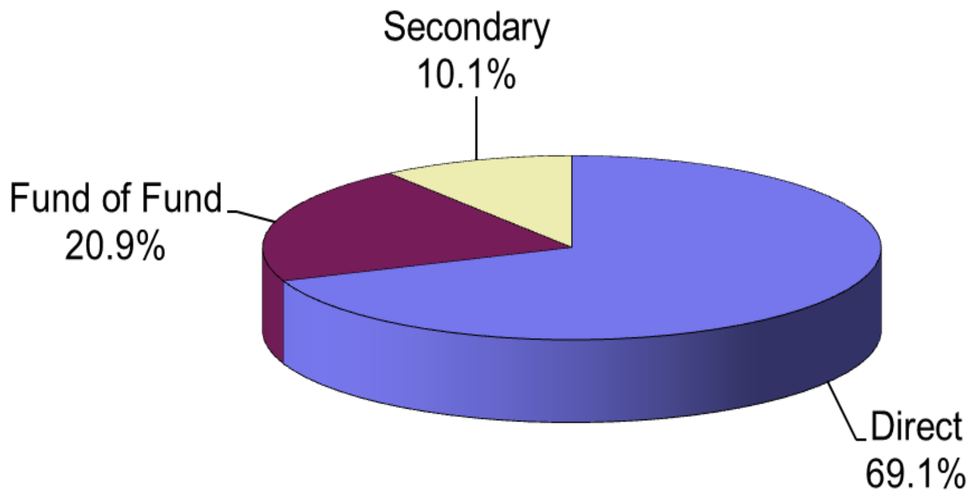
Geography	Remaining Commitments [1]	Percentage	Market Value [2]	Percentage	Total Exposure	Percentage
US & Canada	$ 590,419,278	89.3%	$ 824,285,804	77.1%	$ 1,414,705,082	81.8%
Western Europe	$ 17,974,165	2.7%	$ 132,061,888	12.4%	$ 150,036,053	8.7%
Asia/ROW	$ 52,509,435	7.9%	$ 112,735,198	10.5%	$ 165,244,633	9.6%
Total	$ 660,902,878	100.0%	$ 1,069,082,891	100.0%	$ 1,729,985,769	100.0%

(1) Remaining commitments are based upon the investment location of the partnerships.

(2) Market Value represents the agrregate market values of the underlying investment companies of the partnerships.

Q3 2013 Investment Vehicle – Total Exposure

(Since inception through September 30, 2013)



Investment Vehicle	Remaining Commitments	Percentage	Market Value	Percentage	Total Exposure	Percentage
Direct	$ 481,742,173	72.9%	$ 723,520,088	66.7%	$ 1,205,262,261	69.1%
Fund of Fund	$ 128,409,014	19.4%	$ 235,562,601	21.7%	$ 363,971,615	20.9%
Secondary	$ 50,751,691	7.7%	$ 125,045,615	11.5%	$ 175,797,306	10.1%
Total	$ 660,902,878	100.0%	$ 1,084,128,304	100.0%	$ 1,745,031,182	100.0%

The portfolio is invested primarily through direct private equity commitments. To the extent the quality of managers invested with directly is comparable to the quality of managers available through a fund-of-funds, a direct strategy should outperform fund-of-funds due to a reduced fee burden. In the medium-term, the portfolio is likely to continue to depend upon fund-of-funds managers for targeted international investments as well as for maintaining its core allocation to domestic venture capital. Longer term it is the intention of staff to leverage the fund-of-funds relationships to slowly, but not entirely move away from this model in order to access more of these specialized managers directly and to reduce overall costs. Non-venture domestic exposure will be accessed directly.

Q3 2013 1 – 3 – 5 Year Periodic Return Comparison

	Current					1 Year Return	3 Year Return	5 Year Return
Description	Count	Ending Market Value	Investment Multiple	Inception to Date IRR	Contribution to IRR	Annual. ROR	Annual. ROR	Annual. ROR
Total	**147**	**1,084,128,304.15**	**1.49**	**12.57**	**12.57**	**15.06**	**15.07**	**9.63**
Adams Street Funds	34	137,897,875.00	1.56	12.19	2.57	12.26	12.94	6.53
ASP - Direct VC Funds	4	24,745,441.00	1.67	15.78	0.62	19.00	23.79	8.51
ASP - Secondary Funds	7	9,734,414.00	1.64	41.79	0.33	2.75	12.96	7.82
ASP - U.S. Partnership Funds	14	90,543,358.00	1.50	9.84	1.42	12.69	11.25	6.26
ASP Non-US Partnership Fur	9	12,874,662.00	1.55	10.39	0.20	6.41	7.34	3.11
Buyout	39	396,758,305.00	1.64	12.52	5.59	20.41	19.18	12.38
Co-Investment	3	43,433,031.00	1.31	8.36	0.25	15.40	12.74	9.14
Distressed	11	99,956,973.00	1.51	24.67	1.67	22.12	17.19	16.05
Mezzanine	3	15,126,775.00	1.33	7.28	0.12	12.30	6.55	2.21
Non-US Private Equity	11	78,663,511.71	1.14	4.85	0.26	6.96	12.73	4.68
Secondary	8	115,311,201.00	1.41	13.14	1.05	11.40	13.71	9.07
Special Situations	8	82,320,039.00	1.27	7.44	0.50	11.77	10.29	6.31
Venture Capital	30	114,660,593.44	1.31	15.10	0.57	6.30	11.27	7.47

1.) Due to, among other things, the lack of a valuation standard in the private equity industry, differences in the pace of investment across funds and the understatement of returns in the early years of a fund's life, the internal rate of return information does not accurately reflect current or expected future returns, and the internal rates of return and all other disclosures with respect to the Partnerships have not been prepared, reviewed or approved by the Partnerships, the General Partners, or any other affiliates.

As of 9/30/13, the portfolio's since inception net investment multiple and net IRR results were essentially flat relative to last quarter at 1.49x and 12.57% compared to 1.47x and 12.47% last quarter. As of quarter end, all strategy categories performed approximately in-line relative to last quarter's performance. This exhibit will reflect 10-year IRR return data in the future once the necessary data has been gathered by our administrator.

Q3 2013 LPs by Family of Funds

Description	Vintage Year	Commitment	Capital Contributed for Investment	Management Fees	Remaining Commitment	% Capital Contributed/ Committed	Capital Distributed	Ending Market Value	Net IRR	Investment Multiple	Total Exposure
Total		2,256,697,874	1,487,720,308	121,738,077	660,902,878	71.32	1,196,077,153	1,084,128,304	10.55	1.42	1,751,587,044
Adams Street Partners		295,356,964	262,871,607	28,423,001	15,727,960	98.62	286,512,064	137,897,875	7.47	1.46	153,667,456
Adams Street Partners Fund - U.S.		94,000,000	80,295,419	6,909,226	6,789,500	92.77	64,730,016	60,964,922	7.79	1.44	67,760,277
Adams Street - 2002 U.S. Fund, L.P.	2002	34,000,000	29,694,423	2,667,722	1,632,000	95.18	30,732,853	19,202,123	8.90	1.54	20,839,978
Adams Street - 2003 U.S. Fund, L.P.	2003	20,000,000	17,140,000	1,440,000	1,420,000	92.90	13,997,813	13,316,177	8.11	1.47	14,736,177
Adams Street - 2004 U.S. Fund, L.P.	2004	15,000,000	12,642,247	1,082,753	1,275,000	91.50	9,190,289	10,072,643	7.14	1.40	11,347,643
Adams Street - 2005 U.S. Fund, L.P.	2005	25,000,000	20,818,749	1,718,751	2,462,500	90.15	10,809,061	18,373,979	5.80	1.29	20,836,479
Adams Street Partners Fund - Non-U.S.		16,000,000	13,922,914	1,161,086	916,000	94.28	11,982,048	9,946,726	8.79	1.45	10,862,726
Adams Street - 2002 Non-U.S. Fund, L.P.	2002	6,000,000	5,309,469	456,531	234,000	96.10	6,888,969	2,814,969	12.44	1.68	3,048,969
Adams Street - 2004 Non-U.S. Fund, L.P.	2004	5,000,000	4,401,258	364,242	234,500	95.31	3,159,360	3,258,364	6.79	1.35	3,492,864
Adams Street - 2005 Non-U.S. Fund, L.P.	2005	5,000,000	4,212,187	340,313	447,500	91.05	1,933,719	3,873,393	5.27	1.28	4,320,893
Brinson Partnership Trust - Non-U.S		9,809,483	9,620,796	1,146,808	231,648	109.77	15,516,544	3,012,187	12.92	1.72	3,279,601
Brinson Non-U.S. Trust-1999 Primary Fund	1999	1,524,853	1,507,418	178,268	96,162	110.55	2,590,285	222,253	10.96	1.67	318,415
Brinson Non-U.S. Trust-2000 Primary Fund	2000	1,815,207	1,815,207	212,213	0	111.69	3,064,747	425,969	12.02	1.72	425,969
Brinson Non-U.S. Trust-2001 Primary Fund	2001	1,341,612	1,341,612	156,846	0	111.69	2,118,392	308,852	11.55	1.62	308,852
Brinson Non-U.S. Trust-2002 Primary Fund	2002	1,696,452	1,696,452	198,329	0	111.69	2,281,460	705,813	9.03	1.58	705,813
Brinson Non-U.S. Trust-2002 Secondary	2002	637,308	601,542	74,506	0	106.08	1,447,011	84,251	26.22	2.27	120,017
Brinson Non-U.S. Trust-2003 Primary Fund	2003	1,896,438	1,802,863	221,709	93,575	106.76	3,224,527	755,205	20.54	1.97	848,780
Brinson Non-U.S. Trust-2004 Primary Fund	2004	897,613	855,702	104,938	41,911	107.02	790,122	509,844	7.17	1.35	551,755
Brinson Partnership Trust - U.S.		95,547,481	91,751,846	10,181,513	4,015,812	106.68	118,467,126	30,722,353	7.40	1.46	34,738,165
Brinson Partners - 1998 Primary Fund	1998	7,161,019	7,122,251	840,141	38,768	111.19	10,819,769	173,264	6.46	1.38	212,032
Brinson Partners - 1999 Primary Fund	1999	8,346,761	7,998,817	985,054	347,944	107.63	9,277,486	1,144,577	2.57	1.16	1,492,521
Brinson Partners - 2000 Primary Fund	2000	20,064,960	19,087,369	2,292,814	985,390	106.55	25,935,289	3,509,347	5.80	1.38	4,494,737
Brinson Partners - 2001 Primary Fund	2001	15,496,322	14,995,863	1,603,281	666,114	107.12	17,639,705	5,782,795	5.95	1.41	6,448,909
Brinson Partners - 2002 Primary Fund	2002	16,297,079	15,783,921	1,680,232	513,158	107.16	23,041,452	5,819,031	11.62	1.65	6,332,189
Brinson Partners - 2002 Secondary Fund	2002	2,608,820	2,545,315	263,781	110,228	107.68	3,985,679	812,272	12.72	1.71	922,500
Brinson Partners - 2003 Primary Fund	2003	15,589,100	14,784,432	1,579,033	804,668	104.97	16,988,476	7,306,101	9.33	1.48	8,110,769
Brinson Partners - 2003 Secondary Fund	2003	1,151,151	1,094,757	108,062	56,394	104.49	2,302,297	331,645	22.81	2.19	388,039
Brinson Partners - 2004 Primary Fund	2004	8,832,269	8,339,121	829,115	493,148	103.80	8,476,973	5,843,321	8.93	1.56	6,336,469
Remaining ASP Funds		80,000,000	67,280,632	9,024,368	3,775,000	95.38	75,816,330	33,251,687	6.42	1.43	37,026,687
Adams Street Global Oppty Secondary Fund	2004	25,000,000	19,809,942	1,415,058	3,775,000	84.90	22,803,760	8,506,246	11.16	1.48	12,281,246
Adams Street V, L.P.	2003	40,000,000	34,710,434	5,369,566	0	100.20	29,782,126	21,559,843	4.25	1.28	21,559,843
BVCF IV, L.P.	1999	15,000,000	12,760,256	2,239,744	0	100.00	23,230,444	3,185,598	7.28	1.76	3,185,598

Q3 2013 LPs by Family of Funds – Continued

Description	Vintage Year	Since Inception Commitment	Capital Contributed for Investment	Management Fees	Remaining Commitment	% Capital Contributed/Committed	Capital Distributed	Ending Market Value	Net IRR	Investment Multiple	Total Exposure
Affinity Asia Capital		35,000,000	12,699,299	2,290,520	20,013,532	42.83	3,891,309	17,155,507	12.52	1.40	37,169,039
Affinity Asia Pacific Fund III, L.P.	2006	15,000,000	10,660,200	1,981,158	2,360,309	84.28	3,891,309	15,815,929	14.19	1.56	18,176,238
Affinity Asia Pacific Fund IV, L.P.	2013	20,000,000	2,039,100	309,361	17,653,223	11.74	0	1,339,578	(83.47)	0.57	18,992,801
American Securities LLC		35,000,000	6,489,633	991,816	27,518,550	21.38	19,733	10,768,294	21.39	1.44	38,286,845
American Securities Partners VI, L.P.	2011	35,000,000	6,489,633	991,816	27,518,550	21.38	19,733	10,768,294	21.39	1.44	38,286,845
Arclight Energy Partners		70,000,000	46,921,307	3,624,761	20,031,936	72.21	54,459,213	20,178,095	11.80	1.48	39,632,050
ArcLight Energy Partners Fund II, L.P.	2004	25,000,000	20,439,626	1,254,936	3,825,820	86.78	33,705,858	1,680,921	17.30	1.63	4,986,359
ArcLight Energy Partners Fund III, L.P.	2006	25,000,000	19,846,988	1,814,312	3,396,322	86.65	20,021,369	11,229,450	7.59	1.44	14,568,174
ArcLight Energy Partners Fund V, L.P.	2011	20,000,000	6,634,694	555,513	12,809,794	35.95	731,987	7,267,724	10.65	1.11	20,077,517
Audax		25,000,000	4,097,741	0	20,902,259	16.39	0	4,535,323	10.68	1.11	25,437,582
Audax Private Equity Fund IV, L.P.	2012	25,000,000	4,097,741	0	20,902,259	16.39	0	4,535,323	10.68	1.11	25,437,582
Avenue Investments		35,000,000	33,123,011	2,086,886	0	100.60	45,765,175	658,388	11.04	1.32	658,388
Avenue Special Situations Fund V, LP	2007	35,000,000	33,123,011	2,086,886	0	100.60	45,765,175	658,388	11.04	1.32	658,388
Axiom Asia Private Capital		50,000,000	16,059,363	1,483,225	32,495,903	35.09	1,037,684	16,199,099	(1.08)	0.98	48,694,995
Axiom Asia Private Capital II, LP	2009	25,000,000	13,701,437	1,173,116	10,163,931	59.50	1,037,677	13,898,272	0.22	1.00	24,062,203
Axiom Asia Private Capital III, LP	2012	25,000,000	2,357,926	310,109	22,331,972	10.67	7	2,300,827	(35.62)	0.86	24,632,792
Black Diamond Capital Management		25,000,000	11,196,681	969,692	12,055,935	48.67	728,410	13,916,011	14.89	1.20	26,749,638
BDCM Opportunity Fund III, L.P.	2011	25,000,000	11,196,681	969,692	12,055,935	48.67	728,410	13,916,011	14.89	1.20	26,749,638
Carlyle Partners		60,000,000	50,966,671	4,906,367	5,503,513	93.12	60,143,337	34,788,066	11.41	1.70	39,176,498
Carlyle Partners IV, L.P.	2005	35,000,000	31,664,089	1,630,857	2,801,627	95.13	44,708,590	21,184,933	13.38	1.98	23,032,685
Carlyle U.S. Growth Fund III, L.P.	2006	25,000,000	19,302,582	3,275,510	2,701,886	90.31	15,434,747	13,603,133	6.33	1.29	16,143,813
Cartesian Capital Group, LLC		20,000,000	4,721,792	617,202	14,661,006	26.69	0	5,324,862	(0.28)	1.00	19,985,868
Pangaea Two, L.P.	2012	20,000,000	4,721,792	617,202	14,661,006	26.69	0	5,324,862	(0.28)	1.00	19,985,868
CCMP Associates		55,000,000	25,754,201	2,681,242	27,027,317	51.70	16,053,476	28,922,195	14.17	1.58	55,486,752
CCMP Capital Investors II, L.P.	2006	30,000,000	25,687,228	2,500,281	2,256,299	93.96	16,053,476	28,862,860	14.29	1.59	30,675,351
CCMP Capital Investors III, L.P	2013	25,000,000	66,973	180,961	24,771,018	0.99	0	59,335	(76.07)	0.24	24,811,401
Centerbridge		57,500,000	29,275,027	1,622,567	24,088,709	53.73	7,629,330	33,148,298	13.92	1.32	59,750,704
Centerbridge Capital Partners II, L.P.	2011	25,000,000	11,373,078	913,181	12,713,709	49.15	2,176	13,801,462	8.27	1.12	26,515,203
Centerbridge Special Credit Partners	2009	12,500,000	7,830,455	280,880	1,875,000	64.89	7,627,154	8,090,852	16.79	1.94	12,479,517
Centerbridge Special Credit Partners II	2012	20,000,000	10,071,494	428,506	9,500,000	52.50	0	11,255,984	8.52	1.07	20,755,984
CIVC Partners		25,000,000	11,065,081	1,798,305	12,324,930	51.45	11,599,964	8,882,799	35.75	1.59	21,207,729
CIVC Partners Fund IV, L.P.	2010	25,000,000	11,065,081	1,798,305	12,324,930	51.45	11,599,964	8,882,799	35.75	1.59	21,207,729
Energy Investors Funds		25,000,000	4,484,687	1,345,484	19,169,829	23.32	908,094	3,935,536	(11.18)	0.83	23,105,365
EIF US Power Fund IV, L.P.	2011	25,000,000	4,484,687	1,345,484	19,169,829	23.32	908,094	3,935,536	(11.18)	0.83	23,105,365

Q3 2013 LPs by Family of Funds - Continued

Description	Vintage Year	Commitment	Since Inception: Capital Contributed for Investment	Management Fees	Remaining Commitment	%Capital Contributed/Committed	Capital Distributed	Ending Market Value	Net IRR	Investment Multiple	Total Exposure
First Reserve		55,485,789	50,335,924	2,390,146	4,862,344	95.03	15,881,282	44,728,706	4.00	1.15	49,597,038
First Reserve Fund XI, L.P.	2006	30,000,000	30,329,997	1,047,014	137,024	104.59	13,494,178	23,333,985	4.20	1.17	23,471,009
First Reserve Fund XII, L.P.	2008	25,485,789	20,005,928	1,343,131	4,725,320	83.77	2,387,104	21,394,721	3.58	1.11	26,126,029
Gridiron Capital		15,000,000	7,503,935	512,741	7,042,943	53.44	141,564	7,703,752	(1.68)	0.98	14,746,698
Gridiron Capital Fund II, LP	2011	15,000,000	7,503,935	512,741	7,042,943	53.44	141,564	7,703,752	(1.68)	0.98	14,746,698
GTCR LLC		25,000,000	15,564,826	484,825	8,950,349	64.20	0	18,793,052	11.78	1.17	27,743,401
GTCR X, L.P.	2011	25,000,000	15,564,826	484,825	8,950,349	64.20	0	18,793,052	11.78	1.17	27,743,401
HarbourVest		86,823,772	44,955,328	2,067,505	36,850,000	54.16	13,848,248	47,887,750	10.78	1.31	87,708,419
Dover Street VII L.P.	2008	20,000,000	17,555,308	908,217	1,550,000	92.32	7,132,208	18,654,216	13.19	1.40	20,204,216
Dover Street VIII LP	2012	25,000,000	2,563,124	107,022	22,375,000	10.68	696,095	3,506,614	86.56	1.57	25,842,673
HarbourVest Direct 2007 Fund	2007	20,000,000	18,212,018	637,982	1,150,000	94.25	4,305,176	19,861,151	7.92	1.28	21,011,151
HarbourVest Intl Private Equity Fund VI	2008	21,823,772	6,624,878	414,284	11,775,000	32.25	1,714,769	5,865,769	5.28	1.08	20,650,380
Hellman & Friedman		40,000,000	26,706,022	1,938,441	11,260,497	71.61	17,425,868	20,692,894	8.18	1.33	32,048,431
Hellman & Friedman Capital Partners VI	2006	25,000,000	22,346,249	1,436,392	1,122,319	95.13	16,710,169	16,337,638	8.50	1.39	17,554,997
Hellman & Friedman Capital Partners VII	2011	15,000,000	4,359,773	502,049	10,138,178	32.41	715,699	4,355,256	2.79	1.04	14,493,434
Highway 12 Ventures		10,000,000	8,106,210	1,643,556	181,093	97.50	972,722	10,330,739	4.00	1.16	10,580,973
Highway 12 Venture Fund II, L.P.	2006	10,000,000	8,106,210	1,643,556	181,093	97.50	972,722	10,330,739	4.00	1.16	10,580,973
Industry Ventures		10,000,000	9,150,847	807,933	445,358	99.59	7,803,167	3,988,520	4.26	1.18	4,433,878
Industry Ventures Fund IV, L.P.	2005	10,000,000	9,150,847	807,933	445,358	99.59	7,803,167	3,988,520	4.26	1.18	4,433,878
JCF		25,000,000	23,673,977	1,074,320	752,122	98.99	1,997,698	7,381,527	(16.53)	0.38	7,687,837
J.C. Flowers II, L.P.	2006	25,000,000	23,673,977	1,074,320	752,122	98.99	1,997,698	7,381,527	(16.53)	0.38	7,687,837
Joseph Littlejohn & Levy		25,000,000	22,169,311	1,075,747	2,178,736	92.98	18,188,449	19,848,055	11.77	1.64	21,602,997
JLL Partners Fund V, L.P.	2005	25,000,000	22,169,311	1,075,747	2,178,736	92.98	18,188,449	19,848,055	11.77	1.64	21,602,997
KKR		25,000,000	25,000,000	1,749,201	1,672	107.00	61,437,379	335,138	19.81	2.31	336,810
KKR European Fund, L. P.	1999	25,000,000	25,000,000	1,749,201	1,672	107.00	61,437,379	335,138	19.81	2.31	336,810
Lexington Capital Partners		155,000,000	128,757,782	7,279,869	19,712,939	87.77	117,023,289	76,753,135	13.52	1.42	95,790,030
Lexington Capital Partners V, L.P.	2001	50,000,000	47,009,070	2,747,548	243,382	99.51	73,077,564	9,282,933	18.43	1.66	9,526,315
Lexington Capital Partners VI-B, L.P.	2005	50,000,000	46,595,365	2,709,966	1,100,300	98.61	30,945,161	31,677,132	6.35	1.27	32,371,801
Lexington Capital Partners VII, L.P.	2009	45,000,000	28,117,684	1,520,005	16,296,555	65.86	10,319,667	29,109,105	18.78	1.33	44,545,962
Lexington Middle Market Investors II, LP	2008	10,000,000	7,035,662	302,350	2,072,702	73.38	2,680,897	6,683,965	13.78	1.28	9,345,953
Madison Dearborn Capital Partners		75,000,000	61,362,227	3,241,316	15,919,399	86.14	57,828,738	42,428,680	11.38	1.55	52,952,608
Madison Dearborn Capital Partners IV, LP	2001	25,000,000	23,703,222	590,665	710,952	97.18	41,127,645	6,355,590	15.02	1.95	7,187,158
Madison Dearborn Capital Partners V, LP.	2006	25,000,000	22,267,313	1,121,533	4,111,369	93.56	7,923,524	23,367,725	5.65	1.34	24,978,878
Madison Dearborn Capital Partners VI, LP	2008	25,000,000	15,391,692	1,529,117	11,097,078	67.68	8,777,570	12,705,365	13.92	1.27	20,786,571
Matlin Patterson		30,000,000	22,806,802	2,439,747	4,806,418	84.16	13,154,190	19,292,705	6.43	1.29	24,046,156
MatlinPatterson Global Opps. Ptnrs. III	2007	30,000,000	22,806,802	2,439,747	4,806,418	84.16	13,154,190	19,292,705	6.43	1.29	24,046,156
MHR Institutional Partners		25,000,000	12,148,884	2,619,775	10,467,993	59.07	4,582,355	23,309,911	11.20	1.89	33,541,252
MHR Institutional Partners III, L.P.	2006	25,000,000	12,148,884	2,619,775	10,467,993	59.07	4,582,355	23,309,911	11.20	1.89	33,541,252
Montlake Capital		15,000,000	11,176,560	2,248,440	1,575,000	89.50	4,428,592	10,499,378	3.11	1.11	12,074,378
Montlake Capital II, L.P.	2007	15,000,000	11,176,560	2,248,440	1,575,000	89.50	4,428,592	10,499,378	3.11	1.11	12,074,378

Q3 2013 LPs by Family of Funds - Continued

		Since Inception									
Description	Vintage Year	Commitment	Capital Contributed for Investment	Management Fees	Remaining Commitment	%Capital Contributed/Committed	Capital Distributed	Ending Market Value	Net IRR	Investment Multiple	Total Exposure
Neuberger Berman Group, LLC		55,000,000	35,343,695	2,391,006	18,490,304	68.61	26,653,031	23,571,880	8.54	1.33	41,653,657
NB Co-Investment Partners, L.P.	2006	35,000,000	30,394,047	1,966,896	3,749,199	92.46	25,918,668	17,697,018	8.01	1.35	21,037,690
NB Strategic Co-Investment Partners II	2012	20,000,000	4,949,648	424,110	14,741,105	26.87	734,364	5,874,862	29.53	1.23	20,615,967
Northgate Capital Partners		45,000,000	15,240,000	360,000	29,860,989	34.67	0	15,686,130	0.39	1.01	45,086,130
Northgate V, L.P.	2010	30,000,000	13,860,000	240,000	16,507,698	47.00	0	14,484,540	1.79	1.03	30,384,540
Northgate Venture Partners VI, L.P.	2012	15,000,000	1,380,000	120,000	13,353,291	10.00	0	1,201,590	(32.17)	0.80	14,701,590
Oak Hill Capital Partners		45,000,000	35,453,613	4,120,293	5,557,986	87.94	28,741,079	31,667,477	9.45	1.53	37,174,925
Oak Hill Capital Partners II, L.P.	2005	25,000,000	22,601,000	2,153,702	282,101	99.02	27,483,431	12,891,734	10.04	1.63	13,137,032
Oak Hill Capital Partners III, L.P.	2008	20,000,000	12,852,613	1,966,591	5,275,885	74.10	1,257,649	18,775,743	7.88	1.35	24,037,892
Oaktree Capital Partners		120,000,000	111,772,047	4,784,751	3,500,000	97.13	171,567,562	18,910,623	41.86	1.63	22,478,397
Oaktree Opportunities Fund VIII, L.P.	2009	10,000,000	9,483,660	516,340	0	100.00	4,107,551	9,446,333	12.06	1.36	9,514,107
OCM Opportunities Fund IVb, L.P.	2002	75,000,000	73,086,225	1,913,775	0	100.00	121,554,428	144,840	44.89	1.62	144,840
OCM Opportunities Fund VIIb, L.P.	2008	35,000,000	29,202,162	2,354,636	3,500,000	90.16	45,905,583	9,319,450	18.21	1.75	12,819,450
Odyssey Partners Fund III		45,000,000	34,746,498	3,507,230	7,267,961	85.01	35,625,374	43,307,301	26.19	2.06	50,053,594
Odyssey Investment Partners III, L.P.	2004	25,000,000	21,953,808	1,841,185	1,939,982	95.18	35,599,948	13,784,139	25.01	2.08	14,989,147
Odyssey Investment Partners IV, L.P.	2008	20,000,000	12,792,690	1,666,045	5,327,979	72.29	25,426	29,523,162	31.45	2.04	35,064,447
Opus Capital Venture Partners		10,000,000	2,451,575	500,000	6,550,050	29.52	0	3,899,072	21.56	1.32	10,947,498
Opus Capital Venture Partners VI, LP	2011	10,000,000	2,451,575	500,000	6,550,050	29.52	0	3,899,072	21.56	1.32	10,947,498
Performance Venture Capital		25,000,000	14,839,530	1,306,189	9,439,526	64.58	857,365	18,261,490	8.10	1.18	27,115,770
Performance Venture Capital II	2008	25,000,000	14,839,530	1,306,189	9,439,526	64.58	857,365	18,261,490	8.10	1.18	27,115,770
Portfolio Advisors		70,000,000	51,579,792	3,059,929	15,778,030	78.06	12,675,245	60,096,810	7.33	1.33	75,703,940
Port. Advisors Fund IV (B), L.P.	2006	30,000,000	21,753,895	1,370,313	6,875,791	77.08	4,242,782	28,100,887	6.79	1.40	34,976,679
Port. Advisors Fund IV (E), L.P.	2006	15,000,000	10,966,889	826,700	3,382,194	78.62	1,634,834	11,450,062	2.46	1.11	14,656,473
Port. Advisors Fund V (B), L.P.	2008	10,000,000	6,885,974	437,500	2,793,273	73.23	1,555,386	8,137,145	8.94	1.32	10,930,418
Portfolio Advisors Secondary Fund, L.P.	2008	15,000,000	11,973,034	425,416	2,726,772	82.66	5,242,243	12,408,716	17.82	1.42	15,140,370
Quintana Energy Partners		15,000,000	13,758,300	1,668,984	735,522	102.85	7,650,540	10,921,940	5.62	1.20	11,607,458
Quintana Energy Partners Fund I, L.P.	2006	15,000,000	13,758,300	1,668,984	735,522	102.85	7,650,540	10,921,940	5.62	1.20	11,607,458
Siguler Guff & Company		50,000,000	25,194,474	1,443,732	20,000,000	53.28	9,155,368	28,443,999	10.15	1.41	51,938,081
Siguler Guff Small Buyout Opportunities	2007	25,000,000	20,134,421	1,253,785	3,250,000	85.55	9,108,457	22,866,424	11.19	1.49	26,610,506
Siguler Guff Small Buyout Opps Fund II	2011	25,000,000	5,060,053	189,947	16,750,000	21.00	46,911	5,577,575	2.53	1.07	25,327,575
Southern Capital		15,000,000	0	244,369	12,240,297	1.63	0	0	(100.00)	0.00	14,755,631
Southern Capital Fund III, L.P.	2013	15,000,000	0	244,369	12,240,297	1.63	0	0	(100.00)	0.00	14,755,631
Sterling Capital Partners		20,000,000	3,334,278	694,023	15,275,484	20.14	0	5,138,659	38.46	1.28	21,164,531
Sterling Capital Partners IV	2012	20,000,000	3,334,278	694,023	15,275,484	20.14	0	5,138,659	38.46	1.28	21,164,531
Summit Ventures		20,000,000	2,813,188	186,812	14,700,000	15.00	0	2,767,870	(10.86)	0.92	19,767,870
Summit Partners Growth Equity Fund VIII	2011	20,000,000	2,813,188	186,812	14,700,000	15.00	0	2,767,870	(10.86)	0.92	19,767,870

Q3 2013 LPs by Family of Funds - Continued

						Since Inception					
Description	Vintage Year	Commitment	Capital Contributed for Investment	Management Fees	Remaining Commitment	%Capital Contributed/Committed	Capital Distributed	Ending Market Value	Net IRR	Investment Multiple	Total Exposure
TA Associates, Inc.		10,000,000	5,200,166	424,834	4,375,000	56.25	650,000.00	6,555,305	14.80	1.28	10,930,305
TA XI, L.P.	2010	10,000,000	5,200,166	424,834	4,375,000	56.25	650,000.00	6,555,305	14.80	1.28	10,930,305
Tenaya Capital		20,000,000	6,178,122	389,777	13,432,101	32.84	0.00	6,142,619	-10.72	0.94	19,574,720
Tenaya Capital VI, L.P.	2012	20,000,000	6,178,122	389,777	13,432,101	32.84	0.00	6,142,619	-10.72	0.94	19,574,720
Tenex Capital Management		20,000,000	7,582,608	355,907	11,256,191	39.69	83,908.25	8,518,409	8.62	1.08	20,642,464
Tenex Capital Partners LP - Secondary	2012	20,000,000	7,582,608	355,907	11,256,191	39.69	83,908.25	8,518,409	8.62	1.08	20,642,464
Terra Firma Capital Partners		25,432,997	21,407,651	2,782,944	915,529	95.12	587,739.39	14,951,547	-9.85	0.64	16,211,001
Terra Firma Capital Partners III, L.P.	2007	25,432,997	21,407,651	2,782,944	915,529	95.12	587,739.39	14,951,547	-9.85	0.64	16,211,001
Thayer Hidden Creek Management, L.P.		45,000,000	13,130,268	1,671,897	30,562,497	74.01	4,976,284.00	17,857,752	25.21	1.54	48,382,285
HCI Equity Partners III, LP	2008	20,000,000	13,130,268	1,671,897	5,562,497	74.01	4,976,284.00	17,857,752	25.21	1.54	23,382,285
HCI Equity Partners IV, LP	2013	25,000,000	0	0	25,000,000	0.00	0.00	0	N/A	0.00	25,000,000
The Catalyst Capital Group		15,000,000	4,504,734	0	10,500,000	30.03	230,830.25	4,522,499	8.72	1.06	15,022,499
Catalyst Fund LP IV	2012	15,000,000	4,504,734	0	10,500,000	30.03	230,830.25	4,522,499	8.72	1.06	15,022,499
Trilantic Capital Partners		31,098,351	10,697,442	1,507,892	18,775,301	39.25	7,231,951.48	11,753,588	18.62	1.56	30,695,561
Trilantic Capital Partners IV L.P.	2007	11,098,351	8,531,656	1,046,708	1,353,667	86.30	7,226,705.71	9,833,737	20.20	1.78	11,354,076
Trilantic Capital Partners V L.P.	2013	20,000,000	2,165,786	461,185	17,421,634	13.13	5,245.77	1,919,851	-26.77	0.73	19,341,485
Veritas Capital		25,000,000	13,443,952	261,085	11,294,963	54.82	0.00	18,691,159	14.77	1.36	29,986,122
The Veritas Capital Fund IV, L.P.	2010	25,000,000	13,443,952	261,085	11,294,963	54.82	0.00	18,691,159	14.77	1.36	29,986,122
Welsh, Carson, Anderson & Stowe		75,000,000	67,456,845	5,225,494	1,750,000	96.91	65,929,545.00	39,622,122	8.39	1.45	42,122,122
Welsh, Carson, Anderson & Stowe IV, LP	2004	25,000,000	21,851,370	1,648,630	1,000,000	94.00	15,087,769.00	15,126,775	5.62	1.29	16,626,775
Welsh, Carson, Anderson & Stowe IX, L.P.	2000	25,000,000	22,704,505	2,045,495	250,000	99.00	35,543,585.00	4,658,031	11.57	1.62	4,908,031
Welsh, Carson, Anderson & Stowe X, L.P.	2005	25,000,000	22,900,970	1,531,369	500,000	97.73	15,298,191.00	19,837,316	6.86	1.44	20,587,316
White Deer		25,000,000	2,446,794	436,301	22,116,905	11.53	0.00	2,555,762	-31.35	0.89	24,672,667
White Deer Energy II L.P.	2013	25,000,000	2,446,794	436,301	22,116,905	11.53	0.00	2,555,762	-31.35	0.89	24,672,667
Total Inactive		**195,665,300**	**192,658,680**	**12,401,922**	**0**	**104.80**	**414,370,100.00**	**0**	**15.12**	**2.02**	**0**

1.) Due to, among other things, the lack of a valuation standard in the private equity industry, differences in the pace of investment across funds and the understatement of returns in the early years of a fund's the internal rate of return information does not accurately reflect current or expected future returns, and the internal rates of return and all other disclosures with respect to the Partnerships have not been pre reviewed or approved by the Partnerships, the General Partners, or any other affiliates.

American Securities Partners VI experienced another material uplift in performance this quarter with a 21.39% IRR and MOIC of 1.44x relative to the prior quarter's performance of a 14.79% IRR and a 1.23x MOIC. After a homerun exit in 3Q13, Odyssey IV bumped up from a 22.02% IRR and 1.62x MOIC to an IRR of 31.45% and an MOIC of 2.04x. Opus Ventures VI is now in positive territory reporting an IRR of 21.56% and an MOIC of 1.32x. Both NB Strategic Co-Investment Partners II and Sterling Capital Partners IV continue their strong performance.

State Street Private Equity Index℠

STATE STREET GLOBAL SERVICES.

IRR Benchmark Comparison (Since 1980)
As of Sept 30, 2013

By Investment Focus

Description	PIC	Client	DPI	Client	RVPI	Client	TVPI	Client	IRR	Client
Buyout	0.81	0.69	0.85	0.99	0.64	0.65	1.50	1.64	12.95	12.52
Venture Capital	0.83	0.73	0.80	0.71	0.59	0.72	1.39	1.43	10.47	15.41
Mezz & Distressed	0.77	0.82	0.86	1.04	0.56	0.46	1.43	1.50	11.64	21.76
Pooled IRR	**0.81**	**0.74**	**0.85**	**0.89**	**0.62**	**0.60**	**1.47**	**1.49**	**12.40**	**12.57**

By Origin

Description	PIC	Client	DPI	Client	RVPI	Client	TVPI	Client	IRR	Client
US	0.81	76.08	0.89	0.91	0.61	0.60	1.50	1.51	12.58	12.90
Non-US	0.79	68.55	0.71	0.65	0.67	0.56	1.38	1.22	11.58	6.60
Pooled IRR	**0.81**	**75.38**	**0.85**	**0.89**	**0.62**	**0.59**	**1.47**	**1.49**	**12.40**	**12.56**

By Vintage Year

Description	PIC	Client	DPI	Client	RVPI	Client	TVPI	Client	IRR	Client
1990	1.01	1.04	2.46	2.41	0.00	0.00	2.46	2.41	18.53	27.63
1991	1.02	1.07	2.83	2.29	0.00	0.00	2.83	2.29	27.07	24.24
1992	0.99	0.00	2.28	0.00	0.00	0.00	2.28	0.00	23.49	0.00
1993	0.98	1.03	2.32	2.23	0.00	0.00	2.32	2.23	25.27	23.25
1994	0.96	0.00	2.50	0.00	0.00	0.00	2.50	0.00	26.10	0.00
1995	0.92	0.00	1.96	0.00	0.01	0.00	1.97	0.00	21.47	0.00
1996	0.98	1.12	1.70	1.65	0.01	0.00	1.71	1.65	13.18	14.80
1997	0.99	1.05	1.59	1.89	0.01	0.00	1.60	1.89	10.84	15.19
1998	0.97	1.11	1.37	1.33	0.03	0.02	1.40	1.35	7.01	6.02
1999	0.97	1.04	1.24	1.85	0.07	0.08	1.31	1.93	5.72	14.80
2000	0.98	1.03	1.38	1.34	0.20	0.18	1.58	1.52	10.50	8.72
2001	0.97	1.00	1.62	1.45	0.19	0.24	1.81	1.69	16.79	14.04
2002	0.97	1.00	1.51	1.40	0.27	0.22	1.78	1.61	19.82	25.49
2003	0.95	1.00	1.49	0.85	0.59	0.55	2.08	1.40	20.49	6.64
2004	0.97	0.92	1.24	1.08	0.44	0.49	1.68	1.58	13.78	12.61
2005	0.97	0.96	0.95	0.82	0.60	0.69	1.55	1.50	10.26	9.07
2006	0.93	0.90	0.55	0.48	0.77	0.82	1.32	1.29	6.36	6.08
2007	0.90	0.92	0.50	0.57	0.84	0.66	1.33	1.23	8.14	6.30
2008	0.78	0.74	0.46	0.45	0.91	0.98	1.37	1.44	11.76	14.39
2009	0.79	0.68	0.33	0.37	0.99	0.97	1.33	1.34	13.34	13.66
2010	0.66	0.51	0.13	0.26	1.07	1.05	1.20	1.31	10.43	16.77
2011	0.45	0.35	0.15	0.04	1.00	1.09	1.15	1.13	11.28	8.47
2012	0.34	0.25	0.09	0.03	0.99	1.06	1.08	1.09	10.34	12.01
2013 Q3	0.17	0.06	0.04	0.00	0.92	0.70	0.96	0.70	-8.39	-67.90
Pooled IRR	**0.81**	**0.74**	**0.85**	**0.89**	**0.62**	**0.60**	**1.47**	**1.49**	**12.40**	**12.57**

Based on data compiled from 2,273 Private Equity funds, including fully liquidated partnerships, formed between 1980 to 2013.

IRR: Pooled Average IRR is net of fees, expenses and carried interest.

MEMORANDUM

Montana Board of Investments
Department of Commerce
2401 Colonial Drive, 3rd Floor
Helena, MT 59601 (406) 444-0001

To: Members of the Board

From: Ethan Hurley, Portfolio Manager – Alternative Investments

Date: February 25, 2014

Subject: Montana Real Estate Pool (MTRP)

The table below summarizes the investment decisions made by staff since the last Board Meeting. One commitment of $25M was made to Stockbridge Value Fund II, LP. The investment brief summarizing this fund and the general partner follow.

Fund Name	Vintage	Subclass	Property Type	Amount	Date
Stockbridge Value Fund II, LP	2014	Value Add	Diverse	$25M	1/6/2014

Following this fund description is the comprehensive review of the real estate portfolio for the quarter ended September 30th.

Montana Board of Investments

Real Estate Board Report

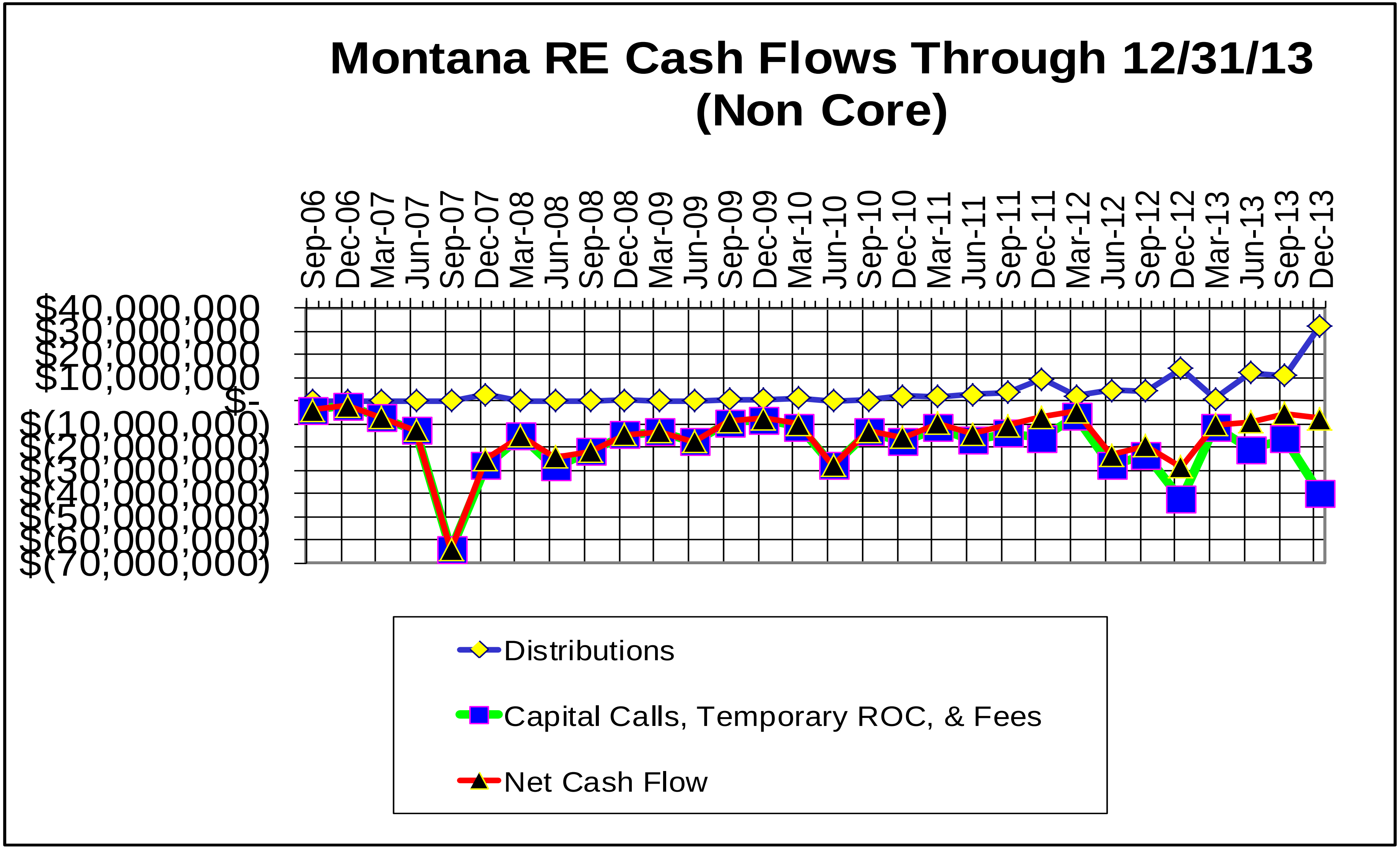
Q3 2013

Due to, among other things, the lack of a valuation standard in the real estate private equity industry, differences in the pace of investment across funds and the understatement of returns in the early years of a fund's life, the internal rate of return information may not accurately reflect current or expected future returns, and the internal rates of return and all other disclosures with respect to the Partnerships have not been prepared, reviewed or approved by the Partnerships, the General Partners, or any other affiliates.

Contents

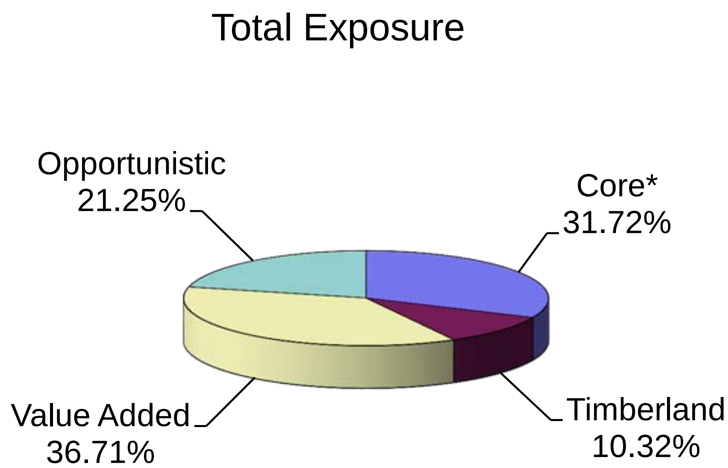
- Quarterly Cash Flow Chart
- Strategy – Total Exposure Chart
- Geography – Total Exposure Chart
- Property Type – Market Value Exposure Chart
- Time Weighted Returns & Internal Rates of Return
- Commitment Summary
- Leverage

Quarterly Cash Flows through December 31, 2013



Both capital calls and distributions picked up for the quarter ending 12/31/13. While general market conditions seem to be improving, similar to prior quarters, net cash flow remains negative.

Q3 2013 Strategy – Total Exposure

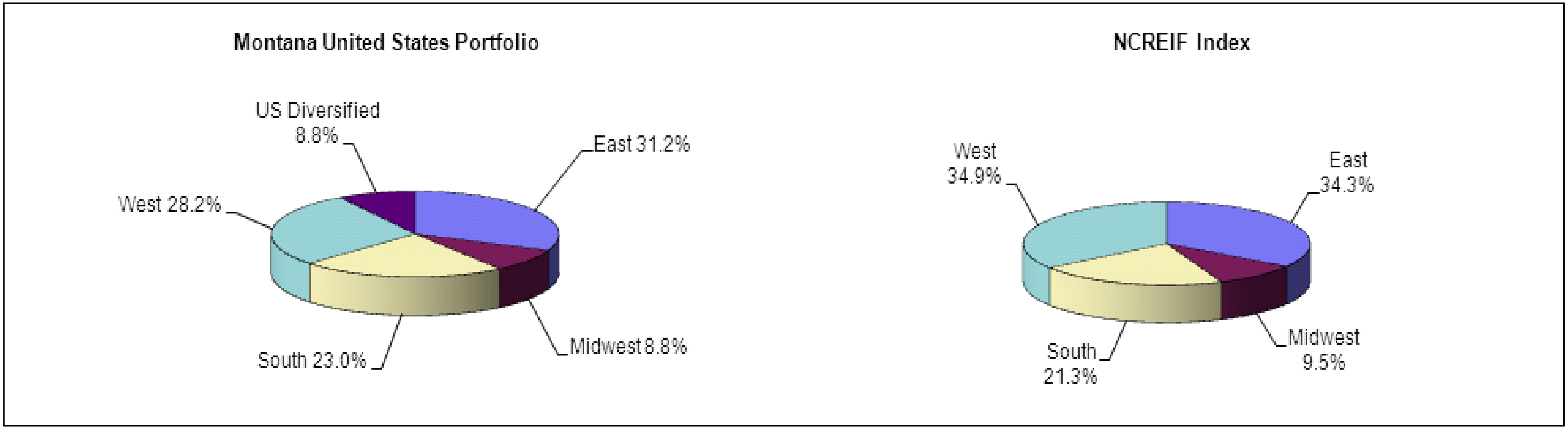


Strategy	Remaining Commitments	Percentage	Net Asset Value	Percentage	Total Exposure	Percentage
Core*	$0	0.00%	$331,436,338	40.95%	$331,436,338	31.72%
Timberland	$42,052,255	17.85%	$65,818,509	8.13%	$107,870,764	10.32%
Value Added	$120,488,508	51.14%	$263,134,696	32.51%	$383,623,204	36.71%
Opportunistic	$73,050,209	31.01%	$149,030,774	18.41%	$222,080,983	21.25%
Total	$235,590,973	100.00%	$809,420,317	100.00%	$1,045,011,290	100.00%

* Includes MT Office Portfolio

Core real estate dominates assets in the ground at approximately 41% and includes the directly owned Montana office buildings. Timberland, being the most recent addition to the real estate portfolio, represents approximately 8% of the total portfolio's NAV and approximately 10% of the aggregate exposure which includes unfunded commitments. Value Added and Opportunistic account for approximately 33% and 18% of NAV respectively.

Q3 2013 Geography – Total Exposure



	East	Midwest	South	West	US Diverse	Non-US	Total
Montana US Value[2]	$370.2	$104.7	$273.1	$334.5	$103.9		$1,186.5
Montana US Total[1]	31.2%	8.8%	23.0%	28.2%	8.8%		100.0%
NCREIF Value[2, 3]	117,881	32,599	73,181	120,031			$343,692
NCREIF[1]	34.3%	9.5%	21.3%	34.9%			100.0%
Difference	-3.1%	-0.7%	1.7%	-6.7%	8.8%		
Montana Total Value[2]	$370.2	$104.7	$273.1	$334.5	$103.9	$142.1	$1,328.6
Montana Total[1]	27.9%	7.9%	20.6%	25.2%	7.8%	10.7%	100.0%

1) Diversification percentages are based on the Gross Market Value, which represents the MBOI share of the partnerships' interests in properties exclusive of any underlying debt used to acquire each property.

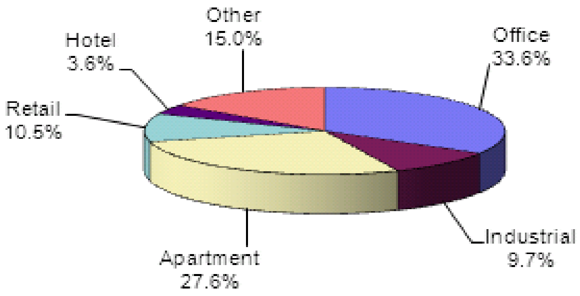
2) Values shown are in Millions.

3) The NCREIF gross market values represent the total gross asset values of the participating funds exclusive of any underlying debt.

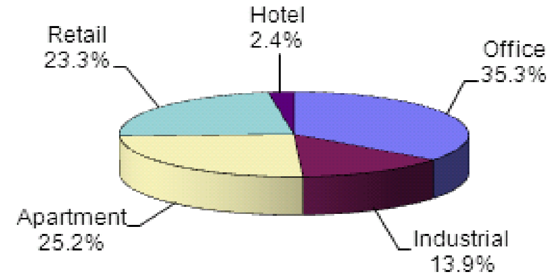
The geographic mix of the real estate portfolio is fairly aligned with NCREIF, although exposure in the West at 28.2% is 6.7% less than the index. Approximately 9% of the portfolio is broadly diversified across the remainder of the US and the portfolio's international exposure represents approximately 11% of the mix.

Q3 2013 Property Type – Market Value Exposure

Montana United States Portfolio



NCREIF Index



	Office	Industrial	Apartment	Retail	Hotel	Other[2]	Total
Montana US Value[3]	$398.9	$115.7	$327.6	$124.4	$42.5	$177.5	$1,186.5
Montana US Total	33.6%	9.7%	27.6%	10.5%	3.6%	15.0%	100.0%
NCREIF Value[3,4]	121,335	47,702	86,504	80,091	8,060		$343,692
NCREIF[1]	35.3%	13.9%	25.2%	23.3%	2.4%		100.0%
Difference	-1.7%	-4.1%	2.4%	-12.8%	1.2%	15.0%	
Montana Non-US Value[3]	$50.6	$0.0	$13.5	$10.5	$10.5	$57.0	$142.1
Montana Non-US Total	35.6%	0.0%	9.5%	7.4%	7.4%	40.1%	100.0%
Montana Total Value[3]	$449.5	$115.7	$341.1	$134.9	$53.0	$234.5	$1,328.6
Montana Total[1]	33.8%	8.7%	25.7%	10.2%	4.0%	17.6%	100.0%

Note: Due to limited GP reporting for Liquid Realty holdings values have been rolled forward from the prior reporting cycle.

1) Diversification percentages are based on the Gross Market Value, which represents the MBOI share of the partnerships' interests in properties exclusive of any underlying debt used to acquire each property.

2) Total U.S. Other includes $76,589,424 in mixed-use assets, $1,115,429 in healthcare/senior living, $7,973,794 in land, $208,348 in storage, $13,726,764 in debt assets, $198,307 in parking, $1,011,053 in manufactured assets, $65,690,339 in timber, $10,943,484 in other assets.

3) Values shown are in Millions.

4) The NCREIF gross market values represent the total gross asset values of the participating funds exclusive of any underlying debt. This amount differs from the index total due to rounding in the NCREIF report.

The real estate portfolio is well diversified across the major property types and is underweight relative to NCREIF in Office, Retail and Industrial and overweight in Apartments and Hotels. At 15%, Other represents the portfolio's exposure to Timberland, Mixed-Use properties, Land, Manufactured Housing, Storage, Parking, Senior Living and Healthcare related properties. As has been noted in the past, composition of the portfolio by property type is and will continue to be primarily a function of a manager's expertise and success in sourcing deals rather than a function of staff's desire to over or underweight a specific property type.

Q3 2013 Time Weighted Returns

	Current Quarter			Year to Date		1 - Year		3 - Year		5 - Year		7 - Year		Inception	
	NAV	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross
Clarion Lion Properties Fund	37,716,242	2.39%	2.64%	8.44%	9.22%	11.10%	12.18%	14.51%	15.60%	-15.72%	-15.47%	-	-	0.40%	1.44%
INVESCO Core Real Estate-USA	40,616,059	2.02%	2.25%	9.77%	10.50%	11.84%	12.84%	12.63%	13.64%	-8.51%	-8.28%	-	-	0.42%	1.34%
JP Morgan Strategic Properties Fund	126,875,874	3.88%	4.14%	10.73%	11.57%	13.54%	14.68%	14.09%	15.22%	-8.91%	-8.68%	-	-	2.31%	3.35%
TIAA-CREF Asset Management Core Property	41,767,450	3.07%	3.28%	-	-	-	-	-	-	-	-	-	-	3.07%	3.28%
UBS-Trumbull Property Fund	65,715,605	2.48%	2.75%	7.09%	7.94%	8.89%	10.03%	10.52%	11.64%	-	-	-	-	12.10%	13.17%
Core Total	**312,691,230**	**3.05%**	**3.30%**	**9.36%**	**10.17%**	**11.78%**	**12.88%**	**12.99%**	**14.09%**	**-10.78%**	**-10.54%**	-	-	**2.05%**	**3.06%**
Montana Office Portfolio [1]	**18,745,108**	**0.00%**	**0.00%**	**7.58%**	**7.58%**	**7.58%**	**7.58%**	-	-	-	-	-	-	**6.44%**	**6.44%**
Timberland Total	**65,818,509**	**2.83%**	**3.05%**	**8.35%**	**9.07%**	**8.70%**	**9.83%**	-	-	-	-	-	-	**5.74%**	**6.66%**
Value Added Total	**263,134,696**	**2.74%**	**3.42%**	**6.87%**	**8.66%**	**10.19%**	**13.16%**	**9.72%**	**12.18%**	**-7.33%**	**-6.66%**	**2.07%**	**5.31%**	**2.07%**	**5.31%**
Opportunistic Total	**149,030,774**	**0.82%**	**1.31%**	**5.20%**	**7.13%**	**8.54%**	**11.53%**	**14.12%**	**16.77%**	**-33.36%**	**-32.48%**	-	-	**-12.64%**	**-9.07%**
Total Portfolio	**809,420,317**	**2.44%**	**2.87%**	**7.61%**	**8.93%**	**10.27%**	**12.33%**	**11.78%**	**13.60%**	**-14.45%**	**-13.95%**	**0.28%**	**5.31%**	**0.28%**	**2.53%**
Benchmark															
NCREIF	**343,691,930,224**		**2.59%**		**8.25%**		**11.00%**		**12.67%**		**3.36%**				**9.14%**
NFI-ODCE (NET)	**103,610,700,000**	**3.35%**		**9.67%**		**11.97%**		**13.17%**		**-0.24%**				**7.37%**	

1) The value for the Montana Office Portfolio is provided by the MBOI and is taken "as-is" per their request.

The portfolio turned in another positive quarter as general real estate market conditions continue to stabilize and show signs of improvement. Overall the portfolio underperformed relative to Q2 by 35bps. Core underperformed Q2 by 62bps, but continues its positive momentum. Value-Added outperformed Q2 by 76bps and continues its upward trajectory. Opportunistic underperformed relative to Q2 by 24bps, but also continues its upward trajectory.

Q3 2013 Internal Rates of Return

	Current Quarter			Year to Date		1 - Year		3 - Year		5 - Year		7 - Year		Inception	
	NAV	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross
	Internal Rates of Return (Net of Fees)														
Montana Office Portfolio	**18,745,108**	**0.00%**		**7.68%**		**7.64%**		-		-		-		**6.08%**	
Molpus Woodlands Fund III, LP	40,127,461	3.32%		11.59%		11.30%		-		-		-		6.85%	
ORM Timber Fund III, LLC	7,797,865	3.69%		2.91%		3.48%		-		-		-		2.61%	
RMS Forest Growth III LP	17,893,183	1.36%		3.56%		5.22%		-		-		-		5.17%	
Timberland	**65,818,509**	**2.83%**		**8.34%**		**8.89%**		-		-		-		**6.03%**	
ABR Chesapeake Fund III	17,989,761	0.48%		5.03%		10.97%		7.00%		2.47%		2.83%		2.79%	
ABR Chesapeake Fund IV	12,307,500	2.87%		6.09%		13.07%		11.26%		-		-		11.10%	
AG Core Plus Realty Fund II	9,270,492	2.14%		5.49%		15.47%		14.62%		8.88%		-		7.88%	
AG Core Plus Realty Fund III	21,608,747	2.22%		10.30%		13.76%		-		-		-		9.60%	
Apollo Real Estate Finance Corp.	3,658,263	2.48%		3.79%		2.88%		0.69%		-3.39%		-		-2.12%	
AREFIN Co-Invest	3,277,021	15.39%		20.44%		22.02%		17.44%		8.17%		-		8.51%	
BPG Investment Partnership IX	0	-		-		-		-		-		-		-	
CBRE Strategic Partners US Value Fund 6	10,280,062	1.78%		3.92%		-		-		-		-		6.04%	
DRA Growth & Income Fund VI	23,320,690	4.69%		11.38%		11.25%		14.79%		6.81%		-		6.79%	
DRA Growth & Income Fund VII	23,890,292	3.12%		11.30%		14.50%		-		-		-		14.61%	
Five Arrows Securities V, L.P.	31,117,011	3.37%		7.38%		12.56%		10.61%		10.05%		-		9.22%	
Hudson RE Fund IV Co-Invest	10,525,107	-0.34%		1.25%		18.49%		7.55%		3.60%		-		3.49%	
Hudson Realty Capital Fund IV	8,606,094	0.30%		0.35%		-13.18%		-3.34%		-9.65%		-		-7.84%	
Landmark Real Estate Partners VI	14,744,052	6.07%		18.23%		23.03%		-		-		-		34.43%	
Realty Associates Fund IX	20,532,822	1.55%		5.22%		7.99%		11.00%		-		-		9.64%	
Realty Associates Fund VIII	13,958,934	0.72%		3.70%		5.21%		2.41%		-6.83%		-		-5.02%	
Realty Associates Fund X	7,169,592	1.98%		-		-		-		-		-		3.81%	
Stockbridge Value Fund, LP	17,050,440	3.65%		7.38%		15.40%		-		-		-		13.56%	
Strategic Partners Value Enhancement Fund	13,827,816	3.22%		-1.22%		-2.80%		10.01%		-2.97%		-		-1.52%	
Value Added	**263,134,696**	**2.74%**		**6.89%**		**10.14%**		**10.11%**		**3.49%**		**3.64%**		**3.64%**	
AG Realty Fund VII L.P.	12,555,584	3.81%		19.48%		29.54%		17.50%		14.71%		-		12.34%	
AG Realty Fund VIII L.P.	10,911,559	3.37%		9.74%		22.29%		-		-		-		11.12%	
Beacon Capital Strategic Partners V	8,600,433	-2.91%		0.60%		-1.96%		5.40%		-9.98%		-		-12.31%	
Carlyle Europe Real Estate Partners III	22,546,526	-0.62%		-13.96%		-12.85%		-0.07%		-3.36%		-		-5.85%	
CIM Fund III, L.P.	32,931,722	0.27%		18.26%		20.45%		20.39%		13.80%		-		11.34%	
GEM Realty Fund IV	12,092,766	2.36%		15.14%		17.10%		16.94%		-		-		15.70%	
GEM Realty Fund V	-207,829	-		-		-		-		-		-		-	
JER Real Estate Partners IV	2,509,850	0.88%		1.27%		4.41%		35.36%		-1.95%		-		-5.78%	
Liquid Realty IV	11,132,692	0.00%		4.35%		4.33%		11.08%		-2.39%		-		-2.52%	
MGP Asia Fund III, LP	22,345,845	0.99%		1.45%		7.28%		20.72%		3.99%		-		2.78%	
MSREF VI International	6,510,306	3.80%		6.28%		8.43%		9.98%		-22.22%		-		-23.70%	
O'Connor North American Property Partners II	7,101,320	-0.32%		-1.36%		3.79%		6.94%		-10.11%		-		-10.43%	
Opportunistic	**149,030,774**	**0.77%**		**5.15%**		**8.51%**		**13.28%**		**-1.05%**		-		**-3.19%**	
Total	**496,729,087**	**2.05%**		**6.58%**		**9.36%**		**10.53%**		**1.99%**		**1.08%**		**1.08%**	

1) The value for the Montana Office Portfolio is provided by the MBOI and is taken "as-is" per their request.

Value-Added outperformed Q2 by 76bps and continues its upward trajectory. Opportunistic underperformed relative to Q2 by 24bps, but also continues its upward trajectory.

Q3 2013 Commitment Summary

	Since Inception										
	Vintage Year	Commitment	Capital Contributed [1]	Contributed %	Remaining Commitment	Capital Distributed	Net Asset Value	NAV %	Total Exposure	Total Exposure%	Investment Multiple
Core		**278,236,254**	**278,236,254**	**100%**	**-**	**27,664,501**	**312,691,230**	**38.63%**	**312,691,230**	**29.92%**	**1.18**
Clarion Lion Properties Fund	2006	48,236,254	48,236,254	100%	-	10,937,103	37,716,242	4.66%	37,716,242	3.61%	0.97
INVESCO Core Real Estate-USA	2007	45,000,000	45,000,000	100%	-	7,158,985	40,616,059	5.02%	40,616,059	3.89%	1.02
JP Morgan Strategic Property Fund	2007	95,000,000	95,000,000	100%	-	1,759,599	126,875,874	15.67%	126,875,874	12.14%	1.30
TIAA-CREF Asset Management Core Property	2013	40,000,000	40,000,000	100%	-	259,519	41,767,450	5.16%	41,767,450	4.00%	1.05
UBS-Trumbull Property Fund	2010	50,000,000	50,000,000	100%	-	7,549,295	65,715,605	8.12%	65,715,605	6.29%	1.41
Montana Office Portfolio	**2011**	**17,674,045**	**17,674,045**	**100%**	**-**	**1,670,405**	**18,745,108**	**2.32%**	**18,745,108**	**1.79%**	**1.16**
Timberland		**105,000,000**	**62,947,745**	**60%**	**42,052,255**	**3,844,590**	**65,818,509**	**8.13%**	**107,870,764**	**10.32%**	**1.11**
Molpus Woodlands Fund III, LP	2011	50,000,000	38,764,311	78%	11,235,689	3,216,228	40,127,461	4.96%	51,363,150	4.92%	1.12
ORM Timber Fund III, LLC	2012	30,000,000	7,635,000	25%	22,365,000	-	7,797,865	0.96%	30,162,865	2.89%	1.02
RMS Forest Growth III LP	2011	25,000,000	16,548,434	66%	8,451,566	628,362	17,893,183	2.21%	26,344,749	2.52%	1.12
Value Added		**408,896,000**	**288,407,492**	**71%**	**120,488,508**	**63,395,074**	**263,134,696**	**32.51%**	**383,623,204**	**36.71%**	**1.11**
ABR Chesapeake Fund III	2006	20,000,000	20,000,000	100%	-	5,098,308	17,989,761	2.22%	17,989,761	1.72%	1.15
ABR Chesapeake Fund IV	2010	30,000,000	12,000,000	40%	18,000,000	1,637,713	12,307,500	1.52%	30,307,500	2.90%	1.14
AG Core Plus Realty Fund II	2007	20,000,000	16,742,334	84%	3,257,666	11,746,011	9,270,492	1.15%	12,528,158	1.20%	1.26
AG Core Plus Realty Fund III	2011	35,000,000	19,526,252	56%	15,473,748	216,746	21,608,747	2.67%	37,082,495	3.55%	1.12
Apollo Real Estate Finance Corp.	2007	10,000,000	10,000,000	100%	-	5,530,744	3,658,263	0.45%	3,658,263	0.35%	0.92
AREFIN Co-Invest	2008	10,000,000	8,336,000	83%	1,664,000	7,187,148	3,277,021	0.40%	4,941,021	0.47%	1.26
BPG Investment Partnership IX [2]	2013	30,000,000	-	0%	30,000,000	-	-	-	30,000,000	2.87%	-
CBRE Strategic Partners US Value Fund 6	2012	20,000,000	9,737,014	49%	10,262,986	116,845	10,280,062	1.27%	20,543,048	1.97%	1.05
DRA Growth & Income Fund VI	2007	24,696,000	22,036,000	89%	2,660,000	7,911,624	23,320,690	2.88%	25,980,690	2.49%	1.27
DRA Growth & Income Fund VII	2011	30,000,000	22,773,000	76%	7,227,000	2,164,651	23,890,292	2.95%	31,117,292	2.98%	1.12
Five Arrows Securities V, L.P.	2007	30,000,000	29,340,958	98%	659,042	6,177,130	31,117,011	3.84%	31,776,053	3.04%	1.24
Hudson RE Fund IV Co-Invest	2008	10,000,000	10,000,000	100%	-	1,434,380	10,525,107	1.30%	10,525,107	1.01%	1.20
Hudson Realty Capital Fund IV	2007	15,000,000	15,000,000	100%	-	694,542	8,606,094	1.06%	8,606,094	0.82%	0.62
Landmark Real Estate Partners VI	2011	20,000,000	12,103,927	61%	7,896,073	3,674,073	14,744,052	1.82%	22,640,125	2.17%	1.52
Realty Associates Fund IX	2008	20,000,000	20,000,000	100%	-	4,664,058	20,532,822	2.54%	20,532,822	1.96%	1.26
Realty Associates Fund VIII	2007	20,000,000	20,000,000	100%	-	1,070,954	13,958,934	1.72%	13,958,934	1.34%	0.75
Realty Associates Fund X	2012	20,000,000	7,000,000	35%	13,000,000	1,965	7,169,592	0.89%	20,169,592	1.93%	1.02
Stockbridge Value Fund, LP	2012	25,000,000	14,612,007	58%	10,387,993	185,942	17,050,440	2.11%	27,438,433	2.63%	1.14
Strategic Partners Value Enhancement Fund	2007	19,200,000	19,200,000	100%	-	3,882,240	13,827,816	1.71%	13,827,816	1.32%	0.92
Opportunistic		**267,564,448**	**197,014,239**	**74%**	**73,050,209**	**27,776,663**	**149,030,774**	**18.41%**	**222,080,983**	**21.25%**	**0.87**
AG Realty Fund VII L.P.	2007	20,000,000	15,024,323	75%	4,975,677	8,970,187	12,555,584	1.55%	17,531,261	1.68%	1.43
AG Realty Fund VIII L.P.	2011	20,000,000	9,762,168	49%	10,237,832	410,450	10,911,559	1.35%	21,149,391	2.02%	1.17
Beacon Capital Strategic Partners V	2007	25,000,000	21,500,000	86%	3,500,000	3,131,188	8,600,433	1.06%	12,100,433	1.16%	0.55
Carlyle Europe Real Estate Partners III [3]	2007	30,994,690	27,714,446	89%	3,280,244	316,789	22,546,526	2.79%	25,826,770	2.47%	0.82
CIM Fund III, L.P.	2007	25,000,000	22,688,877	91%	2,311,123	808,103	32,931,722	4.07%	35,242,845	3.37%	1.35
GEM Realty Fund IV	2009	15,000,000	11,550,000	77%	3,450,000	1,376,576	12,092,766	1.49%	15,542,766	1.49%	1.16
GEM Realty Fund V [2]	2013	20,000,000	-	0%	20,000,000	-	(207,829)	-0.03%	19,792,171	1.89%	-
JER Real Estate Partners - Fund IV	2007	19,556,026	7,506,175	38%	12,049,851	1,320,854	2,509,850	0.31%	14,559,701	1.39%	0.51
Liquid Realty IV	2007	22,013,732	18,818,202	85%	3,195,530	7,455,880	11,132,692	1.38%	14,328,221	1.37%	0.90
MGP Asia Fund III, LP	2007	30,000,000	19,988,275	67%	10,011,725	35,146	22,345,845	2.76%	32,357,570	3.10%	1.12
MSREF VI International [4]	2007	25,000,000	27,500,000	110%	-	807,878	6,510,306	0.80%	6,510,306	0.62%	0.26
O'Connor North American Property Partners II	2008	15,000,000	14,961,772	100%	38,228	3,143,610	7,101,320	0.88%	7,139,548	0.68%	0.67
Montana Real Estate		**1,077,370,747**	**844,279,775**	**78%**	**235,590,973**	**124,351,233**	**809,420,317**		**1,045,011,290**		**1.08**

1) Capital contributed does not include contributions for expenses outside of the commitment amounts.
2) As of Q3 2013, this investment has not had its first cash flow and is not subject to performance. It is presented in this schedule because of its effect on the total portfolio commitment amount.
3) Carlyle Europe III's Commitment amount is converted to USD by using the EUR exchange rate from 10/9/2007, the date Montana commited to the fund. The current unfunded capital is based on this figure less the cumulative USD activity.
4) Morgan Stanley has the ability to call a 10% reserve from the investors. The full reserve, $2.5 million, was called on 5/21/2009.

No new commitments were added during Q3 2013. As of quarter end both GEM V and BPG IX had yet to draw capital

Q3 2013 Leverage

	Q4 2012	Q1 2013	Q2 2013	Q3 2013
Core	22.34%	22.19%	22.12%	21.10%
Timber	0.00%	0.00%	0.00%	0.00%
Non-Core (Total)	54.87%	54.10%	55.12%	55.45%
Total	**43.06%**	**42.59%**	**42.11%**	**42.36%**
Non-Core Breakout:				
Opportunistic	46.79%	46.58%	45.25%	45.33%
Value Add	59.13%	57.83%	59.78%	60.21%

The portfolio remains moderately leveraged and well within all policy constraints.

Montana Domestic Equity Pool
Asset Class Review

Presented by:
Clifford A. Sheets, CFA, Chief Investment Officer
Rande Muffick, CFA, Portfolio Manager
February 25, 2014

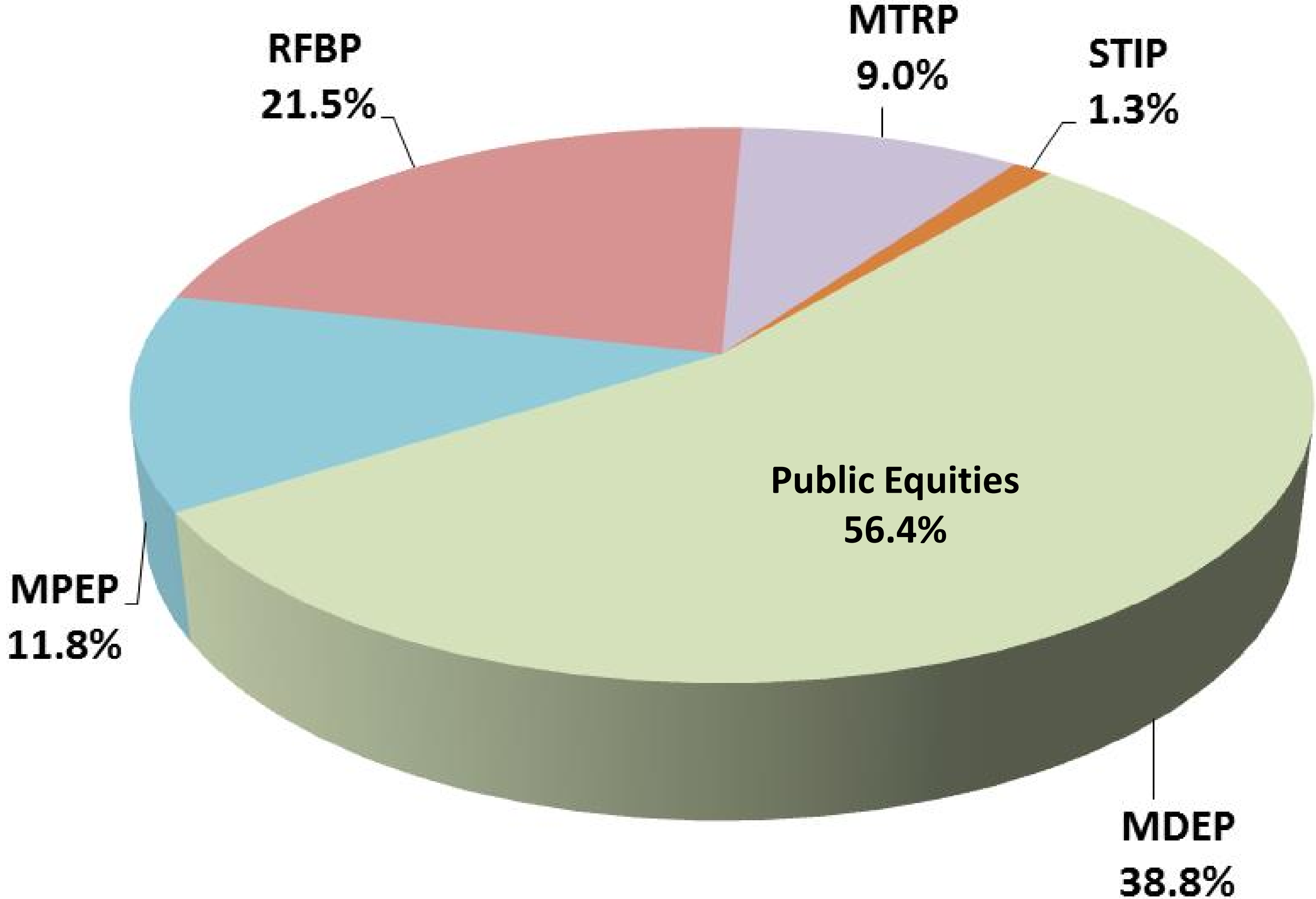
Contents

- Asset Allocation Context
- Current Pool Structure
- Types of Portfolios Within MDEP
- Positioning
- Fees and Costs
- What to Expect Going Forward

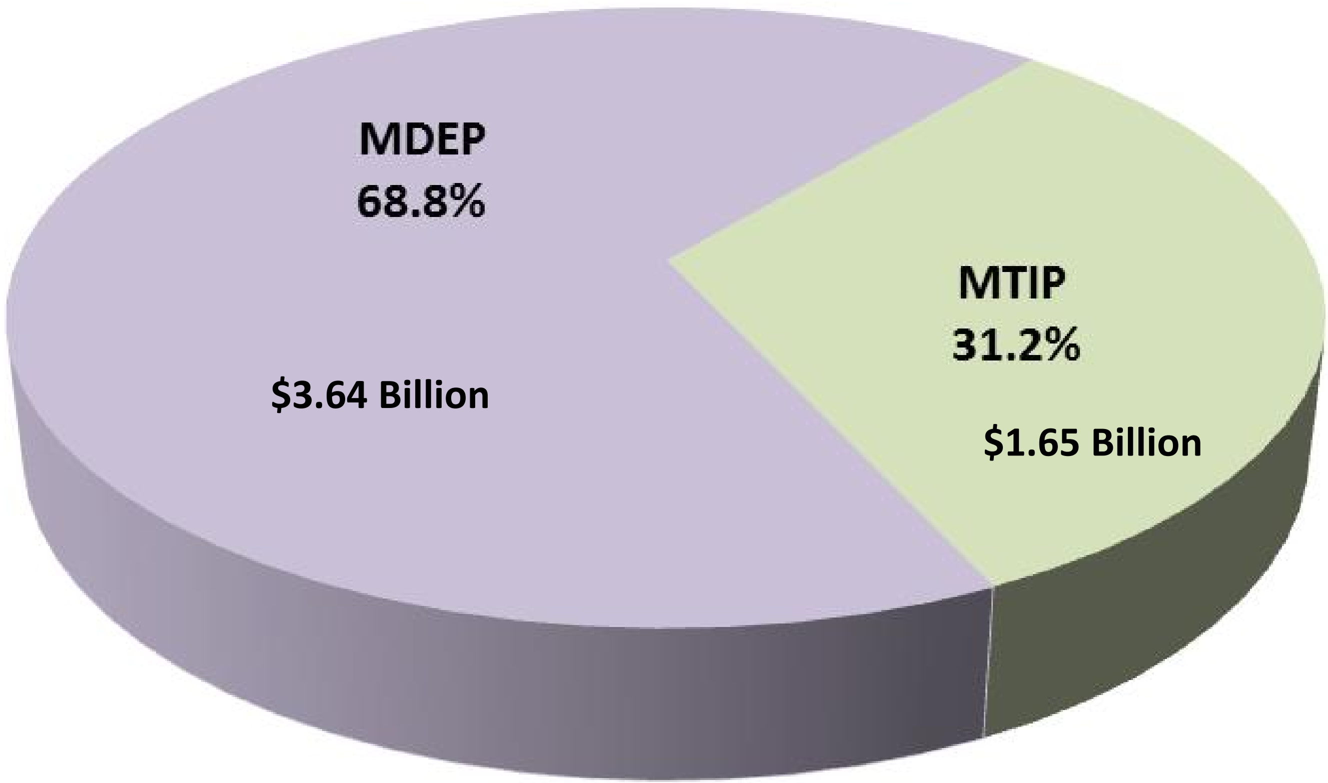
Montana Domestic Equity Pool (MDEP)

- Objective: Provide high long-term returns via ownership of U.S. companies
- Largest Asset Class
  - Allocation range: 28-44%
  - Domestic vs. International ~2:1
- Major driver of plan returns
- Highly liquid assets
- Highly volatile returns

Pension Allocation as of 12/31/13



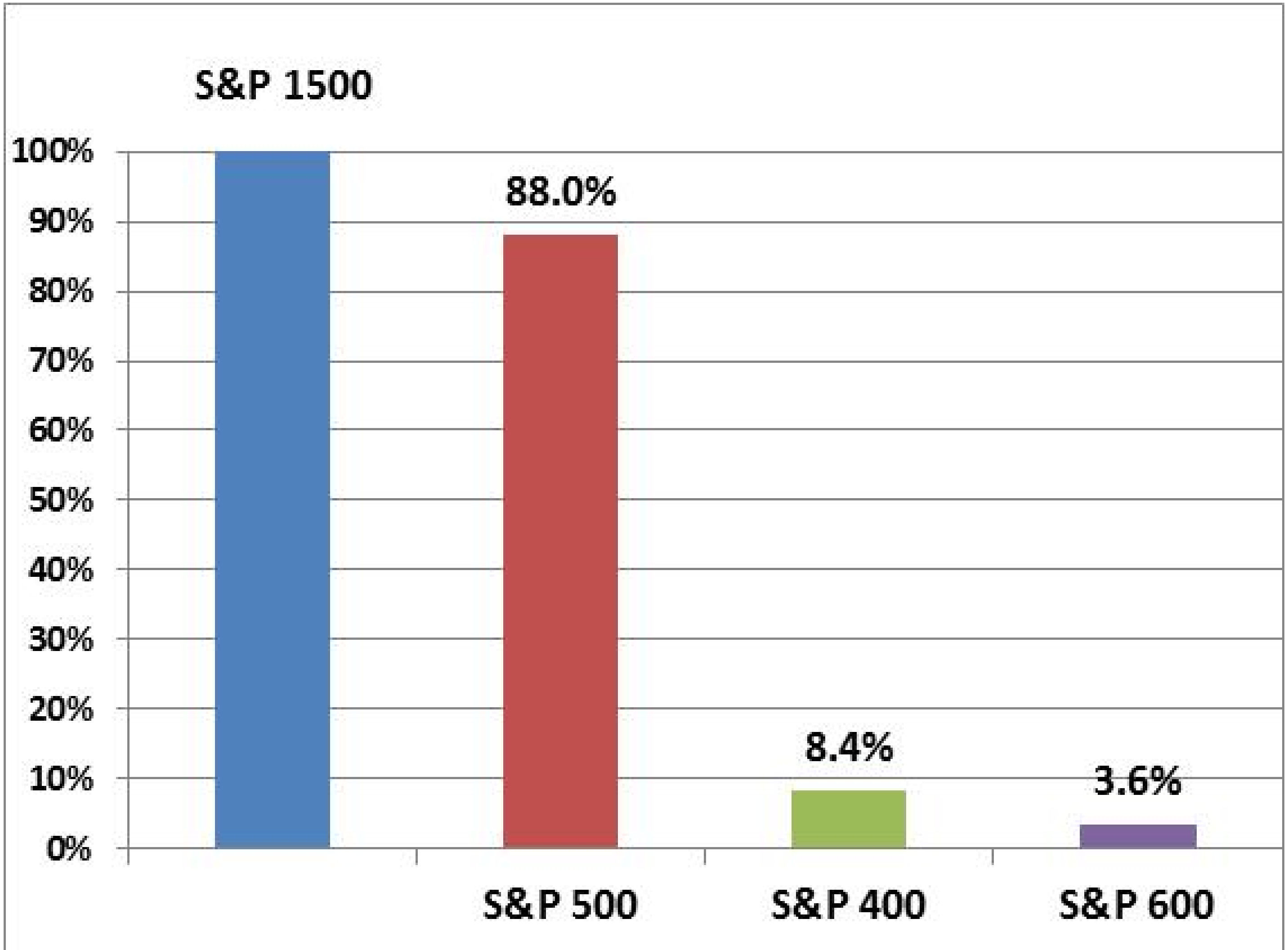
Public Equities as of 12/31/13



Current Pool Structure

- Standard & Poor's 1500 Benchmark
- Mid Caps and Small Caps are isolated by design
- Market Capitalization Ranges
- Manager Style Ranges

S&P 1500 Market Capitalization



Domestic Stock Pool by Manager at 12/31/13

Manager Name	Market Value	%	Approved Range	Benchmark Weight
BLACKROCK EQUITY INDEX FUND	2,026,566,647	55.88%		
STATE STREET SPIF ALT INV	6,275,414	0.17%		
LARGE CAP PASSIVE Total	**2,032,842,062**	**56.06%**	**45-70%**	
ENHANCED INVEST TECHNOLOGIES	113,565,440	3.13%		
T ROWE PRICE ASSOCIATES INC	321,434,909	8.86%		
LARGE CAP ENHANCED Total	**435,000,349**	**12.00%**	**8-12%**	
ANALYTIC INVESTORS MU3B	113,933,371	3.14%		
JP MORGAN ASSET MGMT MU3E	322,570,618	8.89%		
130-30 Total	**436,503,988**	**12.04%**	**8-12%**	
COMBINED LARGE CAP Total	**2,904,346,399**	**80.09%**	**72-91%**	**88.0%**
ARTISAN MID CAP VALUE	133,100,159	3.67%		
BLACKROCK MIDCAP EQUITY IND FD	80,663,220	2.22%		
IRIDIAN ASSET MANAGEMENT MU3V	51,492,563	1.42%		
NICHOLAS INVESTMENT PARTNERS	51,458,915	1.42%		
TIMESSQUARE CAPITAL MGMT	137,060,318	3.78%		
MID CAP Total	**453,775,175**	**12.51%**	**6-17%**	**8.4%**
ALLIANCE BERNSTEIN SMALL CAP3R	35,828,133	0.99%		
DIMENSIONAL FUND ADVISORS INC	91,175,819	2.51%		
ING INVESTMENT MGT MU3U	32,043,864	0.88%		
ISHARES CORE S+P SMALL CAP ETF	5,941,024	0.16%		
MET WEST CAPITAL MGT MU3W	24,909,282	0.69%		
VAUGHAN NELSON INV	78,451,525	2.16%		
SMALL CAP Total	**268,349,647**	**7.40%**	**3-11%**	**3.6%**
MDEP Total	**3,626,471,221**	**100.00%**		

Types of Portfolios Within MDEP

- Commingled Funds and Separate Accounts
- Indexed Portfolios
- Enhanced Indexed Portfolios
- Traditional Long Only Active Portfolios
    - o Fundamental (94% of actively managed equities)
    - o Quantitative-Mathematical (6% of actively managed equities)
- 130/30 Active Portfolios

Types of Portfolios Within MDEP

Passive Index Portfolios

BlackRock	500
BlackRock	400
BlackRock iShares	600

Active Portfolios

Enhanced Index	*Traditional Long Only*	*130/30*
INTECH (Quant)	Artisan	JPMorgan
T Rowe Price	Iridian	Analytic (Quant)
	TimesSquare	
	Nicholas	
	Vaughan Nelson	
	Met West	
	AllianceBernstein	
	ING	
	DFA	

Types of Portfolios Within MDEP

Value	***Core***	***Growth***
Artisan	INTECH (Quant)	TimesSquare
Iridian	T Rowe Price	Nicholas
Vaughan Nelson	JPMorgan	AllianceBernstein
Met West	Analytic (Quant)	ING
	DFA	

Downside Capture	***Market Capture Neutral***	***Upside Capture***
Artisan	INTECH (Quant)	Iridian
TimesSquare	T Rowe Price	Nicholas
Vaughan Nelson	JPMorgan	Met West
ING	Analytic (Quant)	AllianceBernstein
	DFA	

Positioning

- Diversification is Key
- Passive and Active Portfolios
- Complementary Active Portfolios
  - Styles – Growth and Value
  - Methodologies
  - Market Capture Profiles
  - Correlation of Return Histories
- Mid Cap and Small Cap Overweights

Fees and Costs

- Cost effective Approach
- Total fees reduced substantially compared to previous
- Active management fees paid primarily in Mid Cap and Small Cap areas
- CEM Study monitors fees within the pool compared to peers

Fees by Market Cap (Then and Now)

3/31/2012	Ave Mkt ($Mil)	$ Fees	Effective Fee %	
Passive Mgt				
Large Cap	$ 640.5	$ 108,554	0.02%	
Mid Cap	$ 98.8	$ 77,059	0.08%	
Small Cap	$ 15.6	$ 31,210	0.20%	
Total Passive Fees	**$ 754.9**	**$ 216,823**	**0.03%**	
	Ave Mkt ($Mil)	**$ Fees**	**Effective Fee %**	
Active Mgt				
Large Cap	$ 1,662.4	$ 7,279,280	0.44%	
Mid Cap	$ 209.7	$ 1,487,229	0.71%	
Small Cap	$ 137.9	$ 836,701	0.61%	
Total Active Fees	**$ 2,010.0**	**$ 9,603,210**	**0.48%**	
TOTAL FEES	**$ 2,764.9**	**$ 9,820,033**	**0.36%**	
12/31/2013				
	Ave Mkt ($Mil)	**$ Fees**	**Effective Fee %**	
Passive Mgt				
Large Cap	$ 1,869.7	$ 184,669	0.01%	
Mid Cap	$ 85.0	$ 72,903	0.09%	
Small Cap	$ 10.9	$ 21,747	0.20%	
Total Passive Fees	**$ 1,965.6**	**$ 279,319**	**0.014%**	
	Ave Mkt ($Mil)	**$ Fees**	**Effective Fee %**	
Active Mgt				
Large Cap	$ 781.2	$ 3,801,641	0.48%	
Mid Cap	$ 333.3	$ 2,375,880	0.71%	
Small Cap	$ 232.9	$ 1,607,993	0.69%	
Total Active Fees	**$ 1,347.4**	**$ 7,785,514**	**0.58%**	
TOTAL FEES	**$ 3,313.0**	**$ 8,064,833**	**0.24%**	
Total Change	**$ 548.1**	**$ (1,755,200)**	**-0.12%***	**** one third reduction***

What to Expect Going Forward

- Typical source of funds for monthly plan cash needs
- Maintain Mid Cap and Small Cap overweight (1%-4%)
- Maintain current stable of managers
- Possible leveling of weights among Mid Cap and Small Cap portfolios over time

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Montana Loan Program

MEMORANDUM

Montana Board of Investments
Department of Commerce
2401 Colonial Drive, 3rd Floor
Helena, MT 59601 (406) 444-0001

To: Board of Directors

From: Herb Kulow, CMB

Date: February 25, 2014

Subject: Commercial and Residential Portfolios

The commercial loan portfolio balance was $102,914,934.90 consisting of 117 individual units, as of February 4, 2014. The yield of the portfolio is currently 4.84%. The types of loans in the portfolio are shown below.

Commercial Loan Portfolio Types
February 4, 2014

Loan Types	Amount	Units
Participations	53,811,131.71	51
Gtd. Participations	26,139,206.83	32
Infrastructure	18,119,701.17	7
IRP	3,157,629.79	22
Value Added	1,227,942.70	4
Seasoned	459,322.70	1
	102,914,934.90	117

Within the Gtd. Participations loan type, Rural Business Services (USDA) represented 13 loans totaling $22,569,343.52.

There were two committed loans totaling $4,268,000 and nine reserved loans totaling $36,328,897. One SBA guaranteed loan was past due for 31 days totaling $95,580.18 or 0.09% of the portfolio. In addition, there is a $634,111.45 loan that has not yet been transferred into other real estate owned, due to waiting for the lender to settle with the bankrupt borrower. This loan represents 0.62% of the portfolio. Total MBOI commercial loan past due percentage is 0.71% and compares favorably with the State of Montana banks, as of September 30, 2013, which reflect 30 days to 89 days past due, 90 days + past due and nonaccrual loans of 4.06%. If nonaccrual loans are excluded from the calculation, the State of Montana past due ratio for 30 days to 89 days and 90 days + is 1.20%.

Residential real estate mortgage portfolio totaled $13,193,687.97 and consisted of 302 units, as of January 31, 2014. The current yield of the portfolio is 6.32%. The types of loans in the portfolio are shown below. The nine VA guaranteed loans were purchased and funded by pension funds prior to the current Veterans Home Mortgage Loan Program, which uses coal tax trust funds.

Residential Loan Portfolio Types
January 31, 2014

Loan Type	Amount	Units
FHA Guaranteed	5,497,105.45	119
Conventional PMI	5,000,308.72	141
Conventional	2,187,052.97	33
VA Guaranteed	509,220.83	9
	13,193,687.97	302

There are no outstanding residential reservations for this program. Past due residential loans over 30 days totaled $488,927.60 and consisted of nine loans representing 3.71% of the portfolio. There were five residential loans from 30 – 89 days delinquent totaled $234,535 or 1.78% of the residential loan portfolio. Residential delinquencies over 90 days are shown below.

Residential Loan Portfolio Delinquencies Over 90 Days
January 31, 2014

Loan Type	Amount	Units	Percentage
Conventional PMI	82,574.95	1	0.63%
VA Guaranteed	31,694.99	1	0.24%
FHA Guaranteed	140,121.76	2	1.06%
Total	254,391.70	4	1.93%

As of the 9-30-13 FDIC consolidated call report for all Montana banks, residential delinquencies were as follows:

Montana 1-4 Family Residential Delinquencies
as of 9-30-13

Days	Amount	Percentage	1/31/2014 MBOI
30-89 days	24,535,000	0.72%	1.78%
90 days +	2,404,000	0.07%	1.93%
Non Accrual	65,055,000	1.92%	0.00%
Total	91,994,000	2.71%	3.71%
Montana 1-4 family loans	3,388,585,000		
MBOI 1-4 family loans, 1-31-14	13,193,688		

The Veterans Home Mortgage Loan Program (VHML) continues to grow. As of 1-30-14, there were eight outstanding reservations totaling $1,364,534. Total VHML is $20,871,129. A total of $30,000,000 has been legislatively allocated to this program. No loans were delinquent.

The internal loan committee approved a $250,000 IRP loan to Gallatin Development Corporation d/b/a Prospera Business Network as matching funds for a USDA $500,000 IRP revolving loan fund. For fiscal year 2013, the USDA used $1,2000,000 of their allocated $1,800,000 revolving loan funds as matching funds for the MBOI IRP loan program.

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Bond Program

INTERCAP Loan Program

Activity Summary

As of December 31, 2013

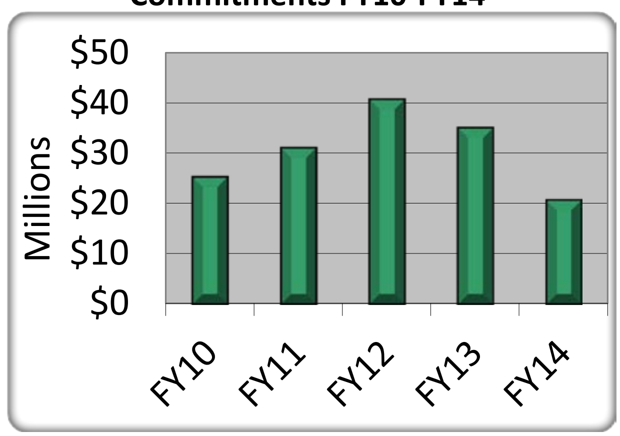
Since Inception 1987 - December 2013

Total Bonds Issued	**148,000,000**
Total Loan Commitments	**454,297,543**
Total Loans Funded	**415,342,045**
Total Bonds Outstanding	**106,615,000**
Total Loans Outstanding	**75,750,306**
Loan Commitments Pending	**38,955,498**

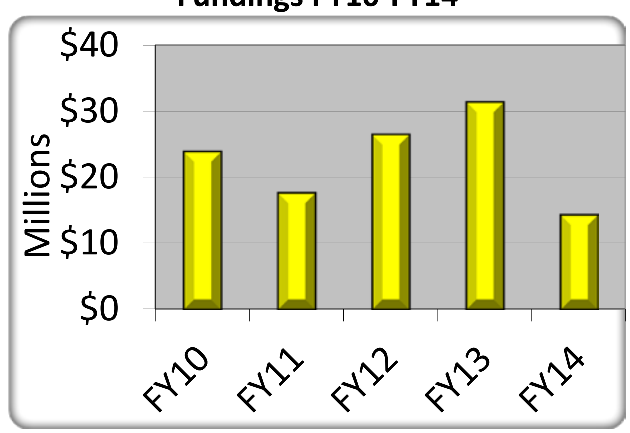
FY2014 To Date

Month	Commitments	Fundings
July-13	$ 950,000	$ 2,786,539
August	3,801,900	1,813,528
September	920,067	2,230,551
October	-	3,636,511
November	13,581,827	1,550,524
December	1,516,960	2,390,274
January	-	-
February	-	-
March	-	-
April	-	-
May	-	-
June-14	-	-
To Date	$ 20,770,754	$ 14,407,927

Commitments FY10-FY14



Fundings FY10-FY14



Note: Commitments include withdrawn and expired loans.

Variable Loan Rate History February 16, 2006 - February 15, 2014

February 16, 2006 - February 15, 2007	**4.75%**	February 16, 2010 - February 15, 2011	**1.95%**
February 16, 2007 - February 15, 2008	**4.85%**	February 16, 2011 - February 15, 2012	**1.95%**
February 16, 2008 - February 15, 2009	**4.25%**	February 16, 2012 - February 15, 2013	**1.25%**
February 16, 2009 - February 15, 2010	**3.25%**	February 16, 2013 - February 15, 2014	**1.00%**

L:\INTERCAP\BOARD\ACTIVITY SUMMARY1.xlsx

MEMORANDUM

Montana Board of Investments
Department of Commerce
2401 Colonial Drive, 3rd Floor
(406) 444-0001

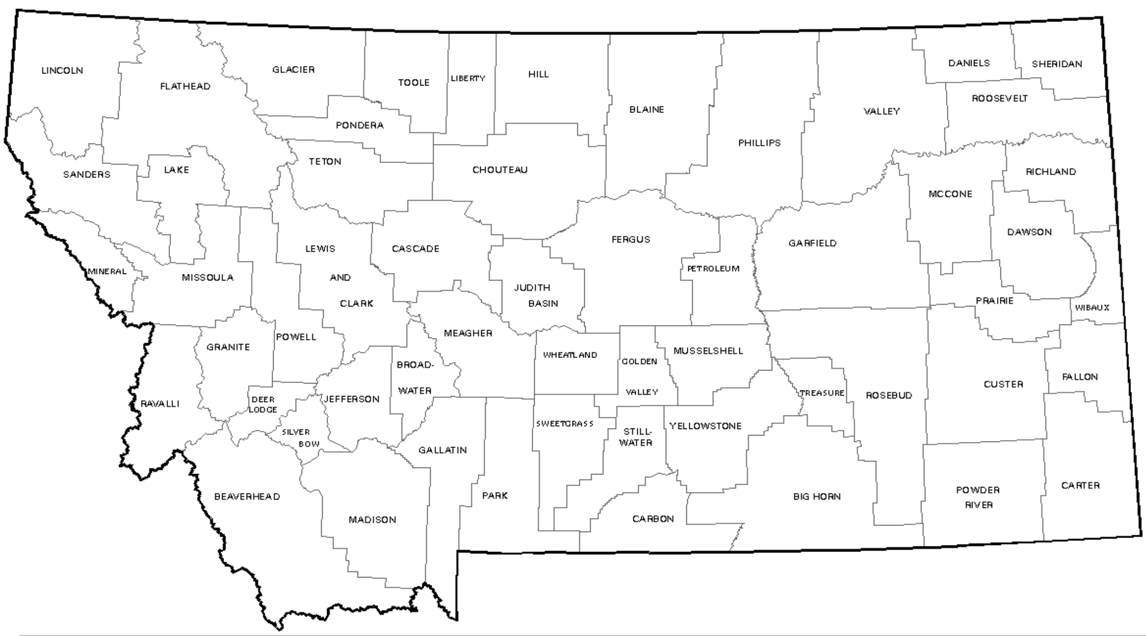
To: Members of the Board

From: Louise Welsh, Senior Bond Program Officer

Date: February 25, 2014

Subject: INTERCAP Staff Approved Loans Committed

Staff approved the following loans between October 1, 2013 and December 31, 2013.



Borrower:	Hamilton School District #3
Purpose:	Upgrade technology infrastructure
Staff Approval Date:	November 5, 2013
Board Loan Amount:	$750,000
Other Funding Sources:	$ 0
Total Project Cost:	$750,000
Term:	7 years

Borrower:	Elliston Rural Fire District
Purpose:	Finance a new fire truck
Staff Approval Date:	November 5, 2013
Board Loan Amount:	$60,000
Other Funding Sources:	$30,000
Total Project Cost:	$90,000
Term:	10 years

Borrower:	Montana City Rural Fire District
Purpose:	Purchase land and construct a satellite fire station
Staff Approval Date	November 5, 2013
Board Loan Amount:	$750,000
Other Funding Sources:	$ 0
Total Project Cost:	$750,000
Term:	15 years

Borrower:	McCone County
Purpose:	Refinance five road graders
Staff Approval Date	November 8, 2013
Board Loan Amount:	$350,000
Other Funding Sources:	$ 0
Total Project Cost:	$350,000
Term:	5 years

Borrower:	Custer County
Purpose:	Interim loan in anticipation of issuing a General Obligation Bond to construct a detention center
Staff Approval Date	November 8, 2013
Board Loan Amount:	$400,000
Other Funding Sources:	$ 0
Total Project Cost:	$400,000
Term:	1 year

Borrower:	Lake County
Purpose:	Finance gravel pit reclamation settlement
Staff Approval Date	November 13, 2013
Board Loan Amount:	$365,022
Other Funding Sources:	$ 0
Total Project Cost:	$365,022
Term:	3 years

Borrower:	Hot Springs
Purpose:	Finance water system improvements
Staff Approval Date	November 14, 2013
Board Loan Amount:	$ 156,805
Other Funding Sources:	$1,042,550
Total Project Cost:	$1,199,355
Term:	15 years

Borrower:	City of Kalispell
Purpose:	Purchase garbage truck and two dump trucks
Staff Approval Date	December 5, 2013
Board Loan Amount:	$400,000
Other Funding Sources:	$ 0
Total Project Cost:	$400,000
Term:	5 years

Borrower:	Cascade County
Purpose:	Purchase 42 vehicles for County motor pool
Staff Approval Date	December 9, 2013
Board Loan Amount:	$1,000,000
Other Funding Sources:	$ 179,726
Total Project Cost:	$1,179,726
Term:	4 years

Borrower:	Bridger School District #2
Purpose:	Finance an Energy Retrofit Using Energy Performance Contracting
Staff Approval Date	December 30, 2013
Board Loan Amount:	$116,960
Other Funding Sources:	$184,600
Total Project Cost:	$301,560
Term:	15 years

Montana Board of Investments
LOAN COMMITTEE
INTERCAP Loan Summary and Approval

Borrower: Department of Natural Resources and Conservation (DNRC) **Date:** January 31, 2014
Approval Date: _______________

The DNRC requests a $2.5 million interim loan in anticipation of issuing general obligation bonds for its Drinking Water State Revolving Fund (DWSRF) Loan Program. The loan will be financed over a three (3) year term in the form of a general obligation bond anticipation note (BAN). The DNRC intends to begin drawing funds this spring.

The DWSRF was established pursuant to Title XIV of the Safe Drinking Water Act. This federal act established the DWSRF program for states to make loans to community water systems. The DNRC funds each DWSRF loan using 80% U. S. Environmental Protection Agency (EPA) capitalization grant and 20% state match.

Authorization:

17-5-802 Montana Code Annotated (MCA) (1) When authorized by and within the limits of a bond act and as provided in this part, the board may issue and sell bonds of the state in the manner that it considers necessary and proper to provide funds for the purpose set forth in the bond act. (2) The full faith and credit and taxing powers of the state must be pledged for the payment of all bonds and notes issued pursuant to this part,…

BAN authorization

17-5-805 MCA (1) When the board has been authorized to issue and sell bonds under this part, it may, pending the issuance of the bonds, issue in the name of the state temporary notes in anticipation of: (a) the money to be derived from the sale of the bonds; … (c) other money to be received as revenue for the specified program.

(3) Bond, grant, or revenue anticipation notes maturing not more than three (3) years after the date of issue may be issued from time to time as the proceeds are needed.

75-6-227 MCA The legislature, …, authorizes the creation of state debt in an amount not to exceed $30 million in principal amount of general obligation bonds outstanding from time to time for the purpose of: (1) providing the state's share of the program; and (2) funding portions of loans on an interim basis pending receipt of: (b) other revenue for the program. [Staff Note: DNRC has $23,039,000 available debt authority under this statute.]

Repayment:

The bond proceeds from the issuance and sale of a general obligation bond backed by the full faith and credit of the state will repay the BAN. However, the DNRC will use excess DWSRF borrower loan repayments net of any existing obligations to pay down the proposed debt prior to finalizing the bond amount to be issued.

INTERCAP Debt:

Since 1996, INTERCAP has provided over $31.5 million in interim financing to the DNRC for its various programs. DNRC currently has ~$2.0 million in a combination of bond anticipation notes (BANs) and revenue anticipation notes (RANs) outstanding; final maturity January 2017. Assuming a full draw down of the DNRC's ~$6.9 million remaining commitment and this proposed request of $2.5 million, the DNRC has the potential total INTERCAP outstanding of ~$11.4 million.

Recommendation:

The DNRC can adequately service the debt. Approval recommended with the following conditions:

1. The loan will be in the form of a bond anticipation note (BAN) and passed by the Board of Examiners.
2. The BAN does not cause the DNRC to exceed the $30 million debt limit for DWSRF according to 75-6-227 MCA.
3. The DNRC will not use INTERCAP loan proceeds to fund loans in the non-point source private loan portion of the DWSRF program.
4. The loan term limit will not exceed the limit as set for by law for a BAN.
5. The Board requires a copy of the following prior to releasing funds:
    a. 2012 Capitalization Grant **(on file)**
    b. Resolution of the Board of Examiners authorizing the BAN.

Staff Loan Committee – Recommendation

David Ewer, Executive Director	David Ewer	Date: 2/3/14
Geri Burton, Deputy Director	Geri Burton	Date: 2-4-13
Louise Welsh, Sr. Bond Program Officer	Louise Welsh	Date: 1/31/14
Julie Flynn, Bond Program Officer	Julie Flynn	Date: 1-31-14

Board Loan Committee – February 25, 2013

	Approval		
Jack Prothero, Chairperson – Loan Committee	☐ Yes	☐ No	☐ Abstain
Kathy Bassette, Member	☐ Yes	☐ No	☐ Abstain
Gary Buchanan, Member	☐ Yes	☐ No	☐ Abstain

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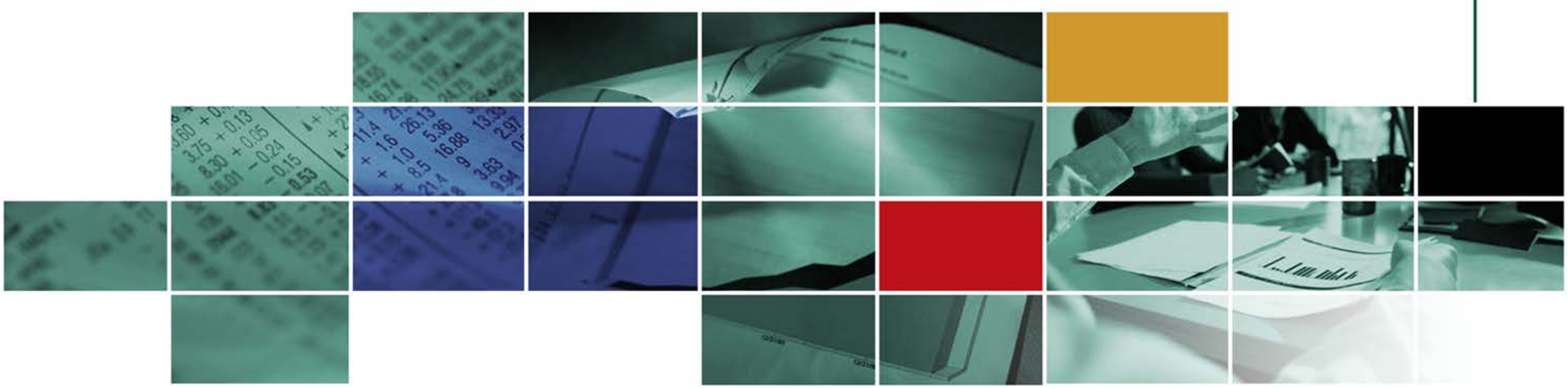
Investment Consultant

RVKuhns & ASSOCIATES, INC.

Introduction to Real Estate Investing

Montana State Board of Investment

February 2014



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Role of Real Estate Investments in Institutional Portfolios

Key Benefits

1. **Diversification**
   - Key drivers of returns are rental growth and appraised values, as the replacement cost of real estate acts as a natural hedge.
   - As such, returns from real estate investments have historically had a low correlation to traditional asset classes, such as equity, and have served as an effective inflation hedge.

2. **Income Generation**
   - Real estate provides a relatively high income yield driven largely by rental income.
   - In the wake of the 2008/2009 financial crisis, income generation has re-emerged as a prime focus, particularly among core fixed income funds.

3. **Capital Appreciation**
   - Underlying price increases of assets provide additional capital appreciation potential.
   - Historically real estate has provided returns commensurate with traditional asset classes. Return expectations for core real estate generally fall somewhere between equity and fixed income.

Key Constraints

1. **Liquidity**
   - Most real estate investments are relatively illiquid, and cannot be used as a short term trading vehicle.

2. **Time Horizon**
   - Many real estate investments require a long holding period (5-10 years) before the value can be fully realized.

Key Facts & Terminology

Investment Types	1. **Equity Interests—**Values fluctuate depending on the changes in market value of the asset. Equity investments are typically in a "first loss" position. 2. **Debt Interests—**Investments are primarily in mortgages or portions of mortgages. Upside potential based on underlying property values is less; however, securities are not in a "first loss" position.
Return Drivers	1. **Income—**Returns on equity investments are driven primarily by rental income, while returns on debt securities are driven by interest income. 2. **Capital Appreciation**—Capital appreciation is realized via the appreciation on underlying properties or increase in market value of debt securities.
Investment Vehicles	1. **Open-Ended Funds—**Commingled fund structure enables greater liquidity for investors; however, in times of market stress, liquidity can be restricted. 2. **Closed-Ended Funds**—Private equity-like structure requires long term commitment, limited liquidity, and gradual return of capital over multiple years.
Sub Asset Classes	1. **Core Real Estate—**Generally considered the least volatile investment type. Investments are concentrated in highly stable, income producing assets. 2. **Value-Added Real Estate**—Considered to have moderate levels of volatility. Investments combine properties with both income and appreciation potential. 3. **Opportunistic Real Estate**—Generally considered the most speculative type of investment with returns stemming primarily from capital appreciation. 4. **Timber—**Unique asset that combines real estate, equity, and natural resource exposure.

Real Estate Sectors

Traditional Commercial Real Estate

Sectors

- ☑ **Office**
- ☑ **Retail**
- ☑ **Apartments/Residential**
- ☑ **Industrial**
- ☑ **Hotels/Hospitality**

Non-Traditional Commercial Real Estate

Sectors

- ☑ **Self Storage**
- ☑ **Senior Housing**
- ☑ **Student Housing**
- ☑ **Other Hybrid Types (e.g., healthcare, infrastructure)**

Core Real Estate

1. **Investment Strategy**
   a. Managers typically buy and hold core assets and actively manage tenancy to maximize income.
   b. Assets are typically purchased close to fair market value.
   c. Managers may develop new assets, but only if fair market value far exceeds development costs.
   d. Asset and market selection are crucial differentiators.

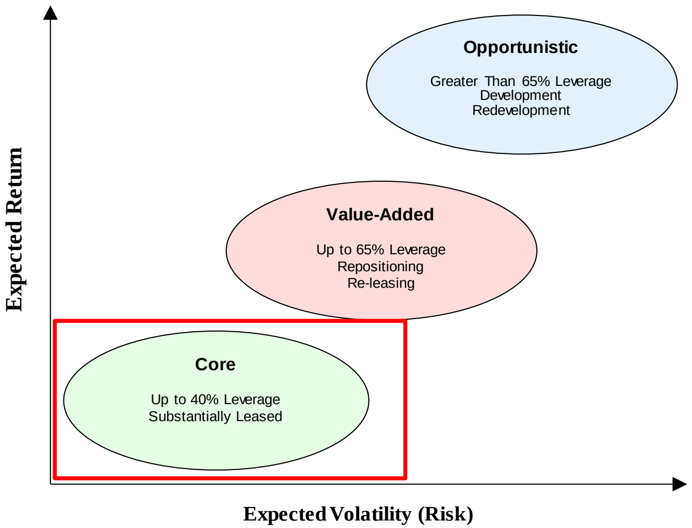
2. **Characteristics of Underlying Assets**
   a. High-profile, “trophy” assets
   b. Top tier markets (e.g., Boston, NY, Washington DC)
   c. Mission critical facilities for tenants
   d. Limited vacancy and substantial, in-place income

3. **Key Risks**
   a. Substantial in-flows into open-ended funds (valuation concerns and long investment queues)
   b. False sense of liquidity in stressed markets

4. **Common Vehicles**
   a. REITS
   b. Open-ended, private commingled funds

Sample Property
Washington DC-based Class A Office Space

Risk Spectrum of Real Estate Investments



RVKuhns & ASSOCIATES, INC.

Value-Added Real Estate

1. **Investment Strategy**
   a. Managers purchase assets in need of improvement.
   b. Value is created through actions, such as renovation, redevelopment, lease-ups, and debt restructuring.
   c. After completing value-added projects, managers sell properties for a gain.

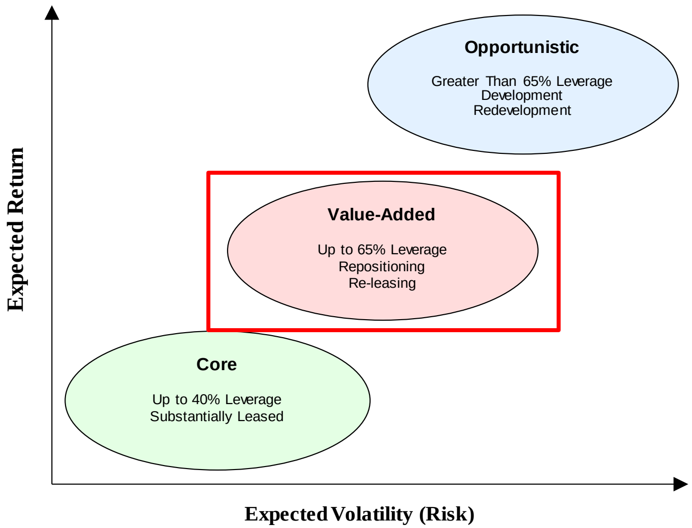
2. **Characteristics of Underlying Assets**
   a. Managers purchase assets that were once considered core, but have significant opportunities for improvement.
   b. Improvement opportunities may stem from high vacancy, over-leveraging, and significant need for renovation.

3. **Key Risks**
   a. Lower liquidity
   b. Greater business cycle sensitivity
   c. Greater dispersion of returns due to manager skill

4. **Common Vehicles**
   a. Closed-ended, private commingled funds

Sample Property
Renovated Corporate Center – San Diego

Risk Spectrum of Real Estate Investments

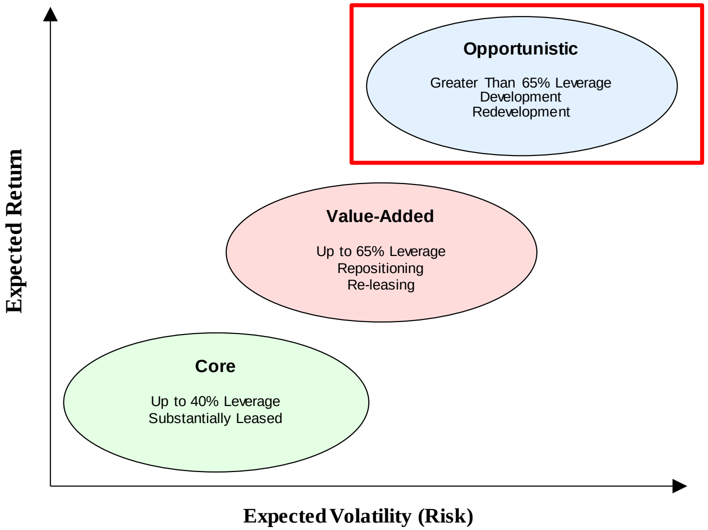


Opportunistic Real Estate

1. **Investment Strategy**
   a. Managers purchase assets in need of improvement, restructuring and/or completely new development.
   b. Value is created through actions, such as renovation, development, lease-ups, and debt restructuring.
   c. After completing all development projects, managers sell properties for a gain.
   d. Primary difference between value-added and opportunistic is the degree of required development.
   e. Most international real estate strategies fall into the opportunistic category.
2. **Characteristics of Underlying Assets**
   a. Investments typically consist of assets that require significant redevelopment, highly distressed/mismanaged assets, and entirely new development projects.
3. **Key Risks**
   a. Lower liquidity
   b. Greater business cycle sensitivity
   c. Greater dispersion of returns due to manager skill
   d. Higher leverage
4. **Common Vehicles**
   a. Closed-ended, private commingled funds

Sample Property
New Condominium Complex – New York

Risk Spectrum of Real Estate Investments



Timber

1. **Investment Strategy**
    a. Managers purchase direct ownership of large timberland tracts, which include trees, real estate, roads and infrastructure.
    b. Returns generated from multiple sources:
        1. Biological growth of trees
        2. Select harvesting for income
        3. Highest/best use of land (i.e., strategic sales, conservation easements, recreational leases)
2. **Characteristics of Underlying Assets**
    a. Private timber investments generally consist only of timberlands and do not include lumber mills, lumber, paper, or paper products.
    b. Low volatility (10-year standard deviation of ~6%); stability driven by multiple economic exposures and natural value increase in trees due to biological growth.
    c. Limited institutional ownership, but meaningful growth since late 1990s.
3. **Key Risks**
    a. Illiquidity and long investment time horizon (10+ years)
4. **Common Vehicles**
    a. Closed-ended, private commingled funds
    b. Private separate accounts

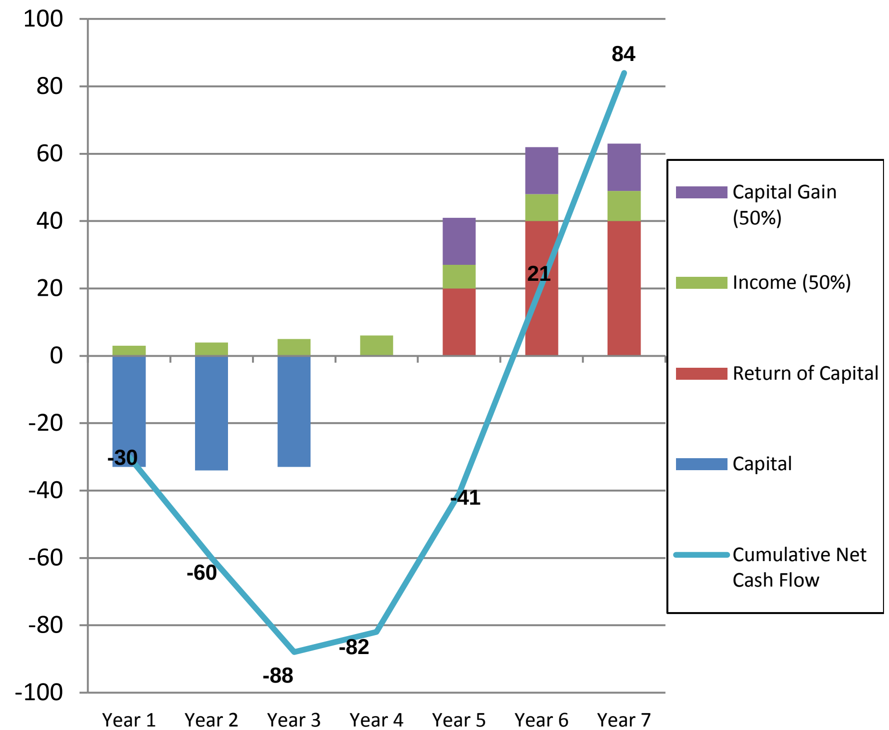
Sample Investment
500,000 Acres of Northern Hardwoods - Canada

Cash Flow Attributes of Non-Core Funds

Key Facts

- Core funds are typically open-ended (infinite life), while non-core funds are typically closed-ended (self-liquidating, finite life).
- Returns from core funds are approximately 20% capital gains and 80% income. Non-core funds are approximately 50% capital gains and 50% income.
- Cash flows of non-core funds typically follows a J-Curve, which is illustrated in the figure on the right.
- J-Curve affect generally produces substantially lower returns in the early years for closed-ended, non-core funds versus open-ended core funds.
- The cumulative net cash flow from non-core funds tends to be greater than core funds.

Non-Core Real Estate Cash Flows
J-Curve Effect



Benchmarking Challenges with Private Real Estate

Challenges

1. **Lack of Investable Indices**
2. **Infrequent Reporting of Index Returns (i.e., Quarterly)**
3. **Infrequent and Subjective Appraisals of Underlying Assets**
4. **Index Exposures Often Vary Significantly from Investors' Exposures**

Investor Impact

1. **High Tracking Error**—Over short time horizons, real estate investors may experience significant tracking error versus chosen benchmarks if their exposures differ significantly from the benchmark.
2. **Stale Performance**—Over short time horizons, real estate investors may experience delays in reporting of valuation changes, as manager appraisals can be as infrequent as annually.
3. **Subjective Performance**—Over short time horizons, returns may have a moderate margin of error, as the appraisal process has some subjectivity. While this margin of error tightens over time as assets are sold, it can distort short term performance.

Implications for MBOI

1. **Short Term Performance Should be Evaluated with Caution**
   a. MBOI experiences significant tracking error, as roughly half of the portfolio consists of value-added and opportunistic funds; however, the portfolio is benchmarked against an index that consists primarily of open-ended, core funds.
   b. Closed-ended funds (which follow a J-Curve return cycle) make up a large portion of the portfolio.
   c. Roughly 7% of the portfolio consists of Timber, which is not represented at all in the benchmark.
2. **Diversification and Income Benefits Should be Valued**
   a. Diversification and income benefits are key to the real estate value proposition.
   b. Attributes, such as Beta and volatility reduction, should be considered when evaluating this allocation.

Emerging Real Estate Trends

1 Continued flocking of investors to yield-generating properties, which has particularly fueled strong returns in core real estate.

2 Gradual return of debt availability to the market (particularly noteworthy with commercial MBS).

3 Compelling opportunities remain in sectors, such as:

- Secondary offerings
- Non-core real estate
- Global and emerging markets real estate

Glossary of Common Terms

Acquisition / Subscription Line – A reserve or line of credit, made available by a bank for acquisition activity, secured by either Fund assets or equity commitments of the Fund's investors.

Asset Level Debt – Debt financing secured by individual Fund real estate assets.

Capitalization Rate ("Cap Rate") **-** Rate of return on a real estate investment property based on the expected future income. This measure is used to estimate return on investment. Calculated by dividing the income generated (after fixed costs and variable costs) by the total value of the property.

Cash Reserve Ratio - The ratio of cash (and cash equivalents) to the Fund's net asset value (NAV).

Closed End Fund – A closed-end Fund has a targeted finite life of investment activity and cannot accept new investment capital after expiration of the fundraising period. Committed capital is called from the investors periodically over the investment period and returned by the end of the Fund term.

Commitment – An investor's contractual agreement to contribute a specified amount of capital over the Fund's investment period.

Commitment Funded - Amount of the investor's commitment that has been called to date. For funds denominated in foreign currency, the Commitment Funded may differ from the manager reported amount due to currency fluctuations.

Core Real Estate – A real estate strategy to invest in markets that are well developed, in top tier locations (coastal cities, major metropolitan areas, etc.), with well-leased properties (generally 80%+), and do not require significant enhancement, renovation, or re-development. Core real estate funds strive to provide consistent income and lower volatility. Target returns are generally 8-10% per annum and derive the majority of total return from income rather than capital appreciation.

Debt Maturity – The maturity date of the Fund's debt obligations.

Entry Queue ($) – The dollar value of capital pledged by investors that has not been called by the manager in an open-ended fund structure. An entry queue exists when the manager does not have sufficient acquisition opportunities available to put all investor capital to work in the market at a given time.

Equity Multiple –The sum of cumulative distributions and remaining investment value divided by total paid-in-capital. The equity multiple is a client-specific performance metric that does not take timing of cash flows into consideration.

Exit Queue ($) – The dollar value of capital requested to be withdrawn by current investors in an open-ended Fund structure. An exit queue exists for open-end core Funds when the manager does not have suitable disposition activity or available cash to meet investor redemption requests.

Glossary of Common Terms

Fees:

- *Management Fee* – Fees tied to the level of commitment or invested capital; management fees typically cover a Fund's operating expenses.
- *Incentive Fee* – Fees charged to limited partners that are tied to the performance of the assets under management. Incentive fees compensate the investment manager for achieving performance hurdles.
- *Acquisition Fee* – Fees charged based on the acquisition of assets to cover due diligence and other acquisition expenses.
- *Disposition Fee* – Fees charged based on the sale or transfer of property to cover disposition expenses.
- *Other Fees* – Tangible fees not covered by any of the fee types above (cash management, etc.).

FTSE EPRA/NAREIT – A global set of indices to measure public equity real estate securities (REITs and REOCs), produced by a joint venture of the Financial London Times Stock Exchange (FTSE), the European Public Real Estate Association (EPRA) and the National Association of Real Estate Investment Trusts (NAREIT).

Fund Size – The Fund Size is the total value of equity commitments from all investors in a Fund, including the general partner.

Gross Real Estate Assets – The current or fair market value of real estate assets, inclusive of all debt financing.

Internal Rate of Return ("IRR") – Measures the rate of return an investor can expect on capital invested to purchase an asset (e.g., rental property) based upon anticipated future income streams. Rather than simply dividing future income by the initial investment, IRR applies a "discount rate" to future cash flows in order to compute the total "present value" of future income before dividing by the investment.

Investment Period Expiration – The date when a closed-end Fund ceases acquisition activity. The investment period expiration is typically 3-5 years following the expiration of the fundraising period (the final closing) for closed-end Funds. Typically this period may be extended and acquisition activity may continue following this date upon manager recommendation and/or investor approval.

Leverage – The use of credit to finance purchases or development.

- Fixed-Rate Debt – Loans with a static interest rate over the life of the loan.
- Floating-Rate Debt – Loans with a variable interest rate over the life of the loan.

Loan-to-Value (%) – Ratio of all outstanding direct debt obligations (including subscription/acquisition lines) divided by the fair value of Fund's real estate assets (gross real estate asset value).

NCREIF-ODCE Index - The National Council of Real Estate Investment Fiduciaries' Open-ended Diversified Core Equity index ("NCREIF-ODCE") reports the time-weighted quarterly investment returns of approximately 18 open-end commingled core equity real estate funds. The index is capitalization-weighted and is reported on a gross of fees and net of fees basis. Domestic geographic regions are split into West, East, South, and Midwest.

Net Real Estate Assets – The current or fair market value of the Fund's real estate assets less all outstanding direct debt obligations.

Glossary of Common Terms

Non-Core Real Estate – All real estate investment strategies that do not have core real estate characteristics are considered non-core strategies. Significant capital expenditures, leasing, renovation, development, and/or re-development are common in non-core real estate investing. Due to the increased risk of these strategies, non-core real estate has a higher expected return profile than core real estate. Non-core real estate returns may have little or no income component.

- *Value Added* – A sub-category of non-core real estate, this is generally a medium-to-high risk/return strategy, requiring significant capital expenditures to allow for rent growth. Properties are considered value added when they exhibit management or operational problems, require physical improvement, and/or suffer from capital constraints.
- *Opportunistic* – A sub-category of non-core real estate, this is generally a high risk/return strategy. The investments will require a high degree of enhancement and may also include investments in development, raw land, and niche property sectors.

Open-Ended Fund – A fund that does not have a targeted finite life. As capital is available, open-ended funds continually make new investments, accept capital from investors, and allow capital withdrawals from investors.

Portfolio Level Debt – The leverage utilized by a Fund that is not secured individually by specific assets, but rather by multiple assets and/or investor capital commitments. Portfolio level debt also may be unsecured.

Real Estate Investment Trust (REIT) – An investment vehicle in which investors purchase certificates of ownership in the trust, which in turn invests in real property. REITs are required to comply with certain rules. For example, REITs must distribute 90% of taxable income to shareholders each year and hold investments for a period of not less than two years.

Real Estate Securities Fund – A fund that invests in publicly-traded REITs and/or REOCs (real estate operating companies).

Unsecured Debt Percentage – The amount of total debt, expressed as a percentage, which is not secured by specific real estate assets and/or other Fund collateral.

Time-Weighted Return – The yield on an investment portfolio over a specified period of time. Returns are calculated on a quarterly basis and are geometrically linked to calculate multi-period returns. Time-weighted returns are calculated on a pre-fee (gross of fees) and after-fee (net of fees) basis. The calculation methodology for each is provided below:

- *Gross of Fees*: (Gross Income + Gross Appreciation) / Weighted Average Equity
- *Net of Fees*: (Net Income + Net Appreciation) / Weighted Average Equity
- *Weighted Average Equity* (WAE): Beginning Market Value + Weighted Net Cash Flow

Uncalled Capital – The difference between Commitment Funded and the Commitment amount.

Weighted-Average Interest Rate – The asset-weighted average interest rate payable across all outstanding debt. Weighted-average interest rate is shown for the total fixed rate debt and floating rate debt utilized by a Fund.

Appendix A: Methods of Real Estate Investing

Private Investments	Pros	Cons
Direct Investment	• Direct insight into investments • Minimal fee leakage • All potential profits flow directly to the investor	• Less liquid than most other real estate investment options • Inherent lack of diversification • Management intensive • Difficult to measure- appraisal-based valuation processes • Increased liability concerns
Joint Venture/Separate Accounts	• Advantageous terms (Fees, Promote Structure) • Pooled nature of resources can greatly increase diversification • Limited liability vis-à-vis direct investments	• Less liquid than most other real estate investment options • Difficult to measure- appraisal-based valuation processes
Commingled Funds • Open-Ended Funds • Close-Ended Funds	• Pooled nature of resources can greatly increase diversification • Ability to leverage expertise of sponsor who co-invest in the vehicle • Limited liability vis-à-vis direct investments	• Difficult to measure- appraisal-based valuation processes • Required to commit capital for long periods of time-Close-Ended Fund • Potentially subject to redemption queue-Open-Ended Funds

Structures Appropriate for Most Investors

Public Investments	Pros	Cons
Domestic REITs	• Most liquid real estate investment option • Typically lower fees than private real estate vehicles • Limited liability vis-à-vis direct investments	• Domestic REITs are significantly correlated with U.S. equities • Less visibility to underlying real estate
Global REITs and REOCs	• Most liquid real estate investment option • Typically lower fees than private real estate vehicles • Limited liability vis-à-vis direct investments	• Global REITs are significantly correlated with local equity markets • Less visibility to underlying real estate • Currency risk

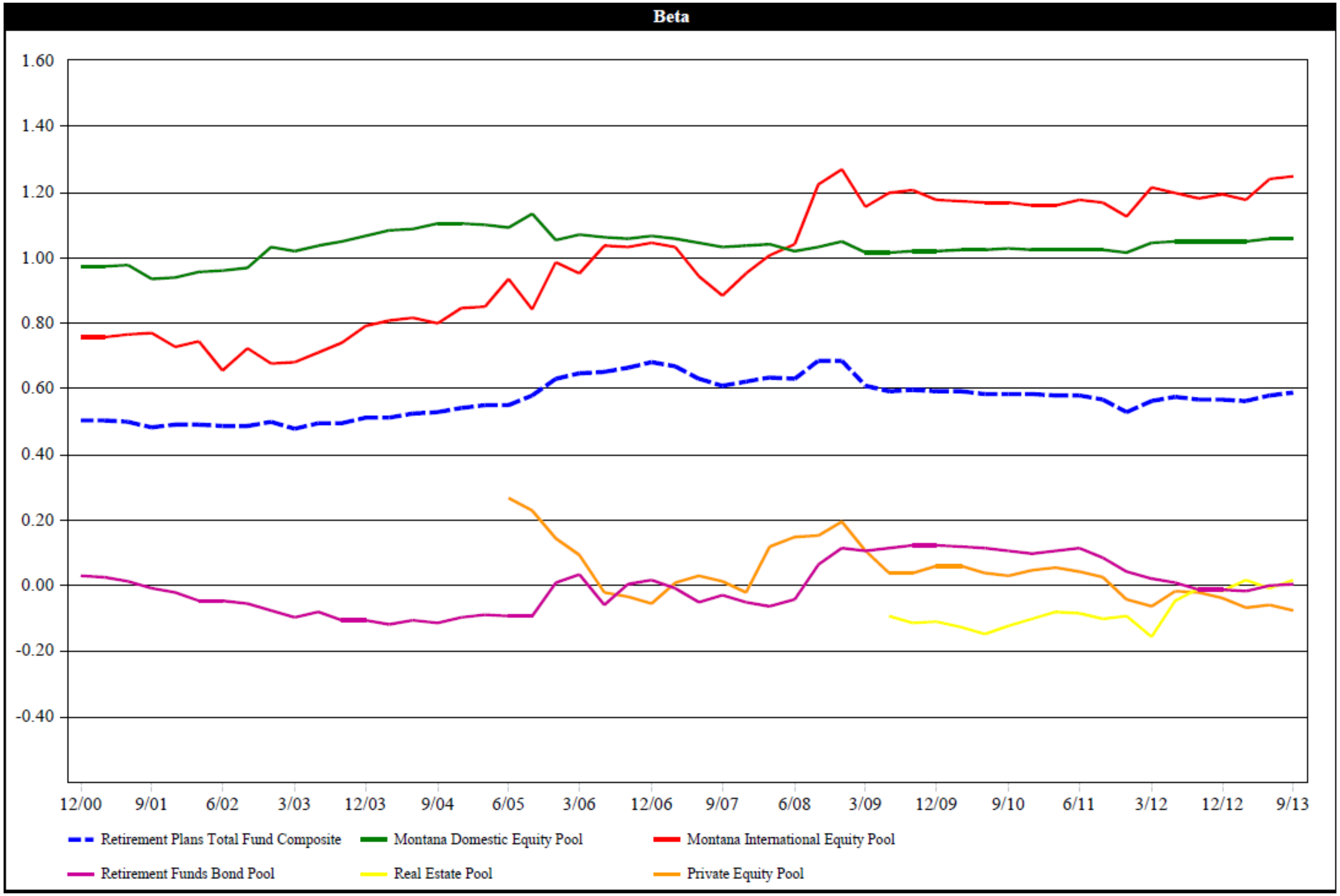
Appendix B: Real Estate Fund Contractual Limitations

Real Estate Investment Funds Are Governed by Limited Partnership Agreements.

	Core Open-Ended Funds	Value-Added Closed-Ended Funds	Opportunistic Closed-Ended Funds
Limitation of Liability	Always limited liability for LPs	Always limited liability for LPs	Always limited liability for LPs
Life of Fund	Contract typically specifies a perpetual life	Contract always specifies a termination date for a fund, subject to certain extension rights for orderly liquidation of assets	Contract always specifies a termination date for a fund, subject to certain extension rights for orderly liquidation of assets
Debt Limitations	Typically no more than 25-35% indebtedness, calculated on a loan-to-value basis (i.e., based upon quarterly net asset values)	Typically no more than 65% indebtedness, calculated on either a loan-to-value or loan-to-cost basis	Often greater than 65% indebtedness, calculated on either a loan-to value or loan-to-cost basis
Size Limitations	Often no single asset greater than 15% of a fund	Often no single asset greater than 20% of a fund	Diversification often not a high consideration in the investment process
Commitment Period	Immediate, subject to entry queues	Typically up to three years to fully invest capital	Typically up to three years to fully invest capital
Ability to Withdraw Capital	At periodic redemption “windows” usually quarterly, subject to withdrawal queues	At the liquidation of the fund	At the liquidation of the fund
Key Person Clauses	Very rarely included	If triggered, the investment period may end and committed capital returned to investors	If triggered, the investment period may end and committed capital returned to investors
Types of Properties Owned	Primarily the 5 major property types (e.g. office, retail, residential, industrial, hospitality)	Typically allows investment in most major property types and may allow or be focused on niche sectors	Typically allows investment in most major property types and may allow or be focused on niche sectors
Removal of General Partner	Typically allowed with only a very high threshold of approval by LPs (80%+)	Typically allowed with a lower threshold for approval by LPs (66%+)	Typically allowed with a lower threshold for approval by LPs (66%+)
Advisory Committee Representation	Typically provided only to largest fund investors	Typically provided to largest fund investors and may be offered to smaller investors	Typically provided to largest fund investors and may be offered to smaller investors

Appendix C: Real Estate Diversification Effect

Montana Board of Investments vs. S&P 500 Index (Cap Wtd)
36 Months Rolling Periods As of September 30, 2013



The objective of the Total Fund Beta is to measure the aggregate level of non-diversifiable or systematic equity risk exposure of the Montana Retirement Plans. The Total Fund Beta is calculated using the S&P 500 as the benchmark and is based on monthly periodicity. It represents a measure of the sensitivity of the total fund to movements of the S&P 500 over the preceding three year period.

2014 CALENDAR

Board Dates Board Packet Mailing

01 New Year's Day
20 M L King Day

JANUARY						
S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JULY						
S	M	T	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

04 Independence Day

17 President's Day

FEBRUARY						
S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	

AUGUST						
S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

MARCH						
S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER						
S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

1 Labor Day

18 Good Friday
20 Easter Sunday

APRIL						
S	M	T	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER						
S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

13 Columbus Day
31 Halloween

11 Mother's Day
26 Memorial Day

MAY						
S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER						
S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

04 Election Day
11 Veterans Day
27 Thanksgiving Day

15 Father's Day

JUNE						
S	M	T	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER						
S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

25 Christmas Day

Systematic Work and Education Plan 2014

Feb. 25-26 **Quarterly Meeting**
Quarterly reports and subcommittee meetings
Annual Report and Financial Statements
Financial Audit
Performance Audit
Ethics
Domestic equities
Real estate - RVK

April 8 **Non-Quarterly Meeting**
All policy review
International equities
Emergency/Disaster preparedness
Intercap program
Custodial bank RFP
Web site
Look-back on terminated managers (RVK)
Board education and possible conferences (IFE usually in June)

May 20-21 **Quarterly Meeting**
Quarterly reports and subcommittee meetings
Private equity, real estate and timberland
Proxy voting public equities
Cash management
Internal controls
Staffing level review

August 19-20 **Quarterly Meeting**
Quarterly reports and subcommittee meetings
Costs (including reviewing CEM Benchmarking Inc. results)
MBOI Budget and legislative-related action-decision
Accounting and internal control systems
Fiscal Year performance through June 30th

October 7 **Non-Quarterly Meeting**
TBD
Custodial bank recommendation (sometime between August and late Sept)

Nov. 18-19 **Quarterly Meeting**
Quarterly reports and subcommittee meetings
Affirm or Revise Asset Allocation
Resolution 217
PERS/TRS annual update
Securities litigation status
Exempt staff annual review

Systematic Work and Education Plan - 2012 through 2014			
2012	**2013**	**2014**	
X	X	X	Annual report and financial statements
X	X	X	Asset Allocation Range Approval (Board must review/approve annually as per policy)
X	X		Capital Market/Asset Allocation
X	X	X	Audit (Financial)
	X		Board as a rated investment credit, a bond issuer and a credit enhancer
X	X	X	Board member education
X	X	X	Board's budget
	X		Board as landlord/tenant holdings
	X		Board's website
X		X	Cash Management of state monies
X	X	X	Cost reporting including CEM, Inc. analysis
		X	Custodial bank relationship, performance, continuity
	X		Customer relationships (State government)
	X	X	Disaster Recovery and other emergency preparedness
X	X	X	Education (RVK minimum 2 presentations/year)
X	X	X	Exempt staff performance and raises (HR policy requires annual consideration)
X	X	X	Ethics policy – (Board policy requires annual affirmations)
X	X		Fixed Income
	X		In-state Loan program
X		X	INTERCAP program
X	X	X	Internal controls
X	X	X	Investment Policy Statements Review (Governance policy requires annual review)
X	X	X	Legislative session and interim matters
	X	X	Outreach efforts for Board - loan and municipal programs
X	X	X	PERS and TRS relationship
X		X	Private Equities
		X	Proxy voting public equities
X		X	Public Domestic Equities
X		X	Public International Equities
X		X	Real Estate and timber
X	X	X	Resolution 217 update of current Investment Firms (Board policy requires annual update)
X	X	X	Resolution 218, role of deputy director to serve as acting executive if necessary
	X		Securities Lending
X	X		Securities Litigation
	X		Staffing levels (required biannually in board policy)
	X		State Fund as major client

MONTANA BOARD OF INVESTMENTS
ACRONYM INDEX

ACH .... Automated Clearing House

ADR .... American Depository Receipts

AOF .... All Other Funds

ARC .... Actuarially Required Contribution

BOI .... Board of Investments

CFA .... Chartered Financial Analyst

EM .... Emerging Market

FOIA .... Freedom of Information Act

FWP .... Fish Wildlife and Parks

FX .... Foreign Exchange

IPS .... Investment Policy Statement

LDI .... Liability-Driven Investing

MBOH .... Montana Board of Housing

MBOI .... Montana Board of Investments

MDEP .... Montana Domestic Equity Pool

MFFA .... Montana Facility Finance Authority

MPEP .... Montana Private Equity Pool

MPT .... Modern Portfolio Theory

MSTA .... Montana Science and Technology Alliance

MTIP .... Montana International Pool

MTRP .... Montana Real Estate Pool

MTSBA .... Montana School Boards Association

MVO .... Mean-Variance Optimization

MONTANA BOARD OF INVESTMENTS
ACRONYM INDEX

NAV .... Net Asset Value

PERS .... Public Employees' Retirement System

PFL .... Partnership Focus List

QZAB .... Qualified Zone Academy Bonds

QSCB .... Qualified School Construction Bonds

RFBP .... Retirement Funds Bond Pool

RFP .... Request for Proposal

SABHRS .... Statewide Accounting Budgeting and Human Resource System

SLQT .... Securities Lending Quality Trust

SSBCI .... State Small Business Credit Initiative

STIP .... Short Term Investment Pool

TFBP .... Trust Funds Bond Pool

TFIP .... Trust Funds Investment Pool

TIF .... Tax Increment Financing

TIFD .... Tax Increment Financing District

TRS .... Teachers' Retirement System

TUCS .... Trust Universe Comparison Service

VIX .... Volatility Index

Terminology Commonly Used and Generally Understood at the Montana Board of Investments
(And most typical context used at BOI)

Active management (typically with respect to stocks)
Investment method which involves hiring a manager to research securities and actively make investment decisions to buy and sell securities in an effort to outperform an assigned index, rather than purchasing a portfolio of securities that would simply replicate the index holdings (*'passive'* investing).

Actuarial assumed rate (pension concept)
The investment return rate used by actuaries that enables them to project the investment growth of retirement system assets into the future (typically perpetual).

Actuarial funding status (pension concept)
A measurement made by actuaries to measure a pension system's financial soundness (ratio of actuarial liabilities to the actuarial value of the assets available to pay the liabilities).

Alpha (investment term)
Return on an investment portfolio in excess of the market return or benchmark return; generally used in the context of *'active'* management (as passive management, by definition, does not seek excess returns, or 'alpha').

Alternative Investments
A wide range of investments, other than traditional assets such as publically traded stocks and bonds. The most common nontraditional or alternative investments are private equity, real estate, commodities, and hedge funds.

Arbitrage (bond program)
A structural or systematic difference between investment types which may allow profiting from the 'difference,' i.e., arbitrage. The most common context for the use of 'arbitrage' at the BOI is the federal law that prevents 'arbitrage,' i.e., the profiting of investing tax-exempt securities (e.g. INTERCAP) into taxable yields investments (such as U.S. Treasuries).

Asset Allocation and Asset Allocation Range (general investment principle)
The Board's invested assets are divided or allocated into various asset classes such as stocks and bonds, each with its own characteristics, with the objective of attaining an optimal mix of risk and return. The total expected return of a portfolio is primarily determined by the mix or allocation to its underlying assets classes. Given the importance of 'asset allocation,' the BOI Board sets the asset allocation 'range' for each broad investment type or asset class.

Average life (fixed income, particularly bonds)
The average time period the debt is expected to be outstanding. This is typically the maturity date for a traditional bond structure, however it will be shorter for bonds having a sinking fund or amortizing payment structure.

Barclay's Aggregate Index (fixed income)
A composite of outstanding bond issues, including corporate, structured, and government bonds whose overall investment features such as return and investment type are tracked over many years. This is the most common benchmark used for comparing the performance of a portfolio that invests in U.S. investment grade fixed income securities. Formerly known as the Lehman Aggregate bond index.

Basis points (investment jargon)
A basis point is 1 100th of a percentage. Ten basis points is one tenth of a percent, typically written as 10 bps.

Benchmark (standard investment concept)
The concept of employing a particular independent or market investment return as a measurement to judge an investment portfolio's return; typically chosen investment benchmarks have the following attributes: they are investible, quantifiable, chosen in advance, easily understandable, and have a long history; common examples are the S & P 500 Index and the Barclay's Aggregate Index.

Beta (investment jargon)
A measure of the risk (or volatility) of a security or a portfolio in comparison to the market as a whole. If the stock or portfolio moves identically to that market, its beta value is 1; if its price volatility (or movement) is greater than that market's price volatility, it is said to have beta greater than 1.

Cap, as in large 'cap' (generally for stocks, i.e., public equities)
'Cap' is short for capitalization, as a reference to the market value of a publically-traded company. The current stock price times the total shares outstanding of the company equals its market capitalization or market 'cap'; often used contextually such as 'large-cap,' 'mid-cap,' and 'small-cap' for different sized public companies.

Clawback (private equity)
A clause in the agreement between the general partner and the limited partners of a private equity fund. The clawback gives limited partners the right to reclaim a portion of distributions to a general partner for profitable investments based on significant losses from later investments in a portfolio which ultimately resulted in the general partner receiving more distributions than it was legally entitled to.

Core (context varies for equity, fixed income, real estate)
In equity and fixed income, 'core' refers to investments that are generally always found in the portfolio and normally expect to hold for a very long time e.g. 'core' holdings of the largest U.S. companies, or U.S. treasuries; in real estate, 'core' generally refers to the best quality of real estate holdings such as prime commercial property in major metropolitan cities that have low leverage and low levels of vacancy.

Correlation (common statistical concept)
A measure of how two or more investment values or two asset classes move relative to each other during the same time period. A central concept in portfolio construction is to seek investments whose values do not move *together* at the same time, i.e., are uncorrelated. A correlation of 1 means that two or more investments 'move' precisely together.

Custom benchmark (or sometimes custom index)
A way to measure investment performance using a tailor-made measurement versus a generic industry-standard benchmark. At the BOI, total pension performance is measured against the Board's 'custom index' or 'custom benchmark' which is a weighted blend of all the underlying asset class benchmarks used to measure the asset class returns.

Derivatives (investment jargon)
Investment securities whose performance itself depends (or is 'derived') from another underlying investment return. Examples include stock options, puts/calls, and forward currency contracts whose returns are based on the underlying stock or currency.

Developed markets (equity)
Countries having a long period of stable industrialization; or are the most economically developed.

Discount (fixed income, generally)
Used most often with respect to bonds, the price paid that is less than face (or 'par') value. A $1 million face-value of a bond purchased for less than a million is bought at a 'discount.' Described as the difference between a bond's current market price and its face or redemption value.

Diversification (standard investment concept)
The concept of spreading risk by putting assets in several investment categories, each having different attributes with respect to type, expected return, risk, and correlation, to best protect against the risk of loss.

Duration (bonds)
Almost exclusively used when discussing fixed income bonds, a measurement of how sensitive a bonds' change in price is to a change in general market interest rates, expressed in years (specifically calculated as a weighted average term to maturity of the bond's cash flows). The greater the duration of a bond, the greater the volatility of price for changes in market interest rates.

Efficiency (usually when discussing various stock markets)
Used to describe markets where it is very difficult to achieve return in excess of that of the overall market from individual stock selection. When information is widely available on a company and its securities are traded regularly the market is considered 'efficient.'

Emerging Markets (most often for public equities)
Certain international securities markets that are typically small, new, have low turnover, and are located in countries where below-average income prevails and is developing in response to the spread of capitalism.

Enhanced (pertaining to stocks)
Generally linked with 'index' as in enhanced index, an indexed investment management style that has been modified to include the portfolio manager's idea of how to outperform the index by omitting some stocks in the index and overweighting others in a limited manner designed to enhance returns but at minimal risk.

Enhancement (bond program)
At BOI, the term generally refers to credit support or a bond or loan guarantee. For example the Board's INTERCAP bonds are 'enhanced' by the BOI's performance guarantee bringing down the yearly interest rate.

Excess returns (standard investment concept)
Returns are 'excess' if they are more than the market or more than the benchmark they are measured against.

Exempt staff vs. classified staff (specific to Montana state government)
"Exempt" refers to the Board's seven employees who, under state law, do not fall under the state's standard employment rules (the 'classified' staff).

Fiduciary (from the Latin verb, fidere, to trust)
The concept of trust and watchfulness; a fiduciary is charged with the responsibility of investing the money wisely for the beneficiary's benefit. Board members are the ultimate 'fiduciaries' for the Board's assets and are obligated to be a good agent.

FTE (state government jargon)
An acronym in state government: "full time equivalent" as in full time employee. The concept is a slot or position, not the actual individuals. The BOI is currently authorized for 32 FTE's.

Fund of funds (private equity)
A concept used in alternative investments referring to using an investment manager to invest in ***other*** managers or funds, as opposed to making direct investments in funds.

GAAP/GASB (accounting terminology)
GAAP…Generally Accepted Accounting Principles; Montana state law uses GAAP accounting principles unless specifically allowed otherwise. GASB…Government Accounting Standards Board, the board that sets GAAP

standards for U.S. governments (FASB…Financial Accounting Standards Board, the entity for commercial and business accounting standards).

General obligation (municipal finance term)
Used to describe the promise that a government makes to bond holders, backed by taxing and further borrowing power, it is generally considered the highest level of commitment to bondholders. At the local government level, general obligation bonds typically require a vote of the residents.

General partner vs. limited partner (private equity)
In private equity, the general partner is responsible for the operations of the partnership and makes the actual underlying investment decisions; the limited partner is the investor, and therefore has limited liability for investment decisions; the BOI is the 'limited' partner in its private equity fund investments (and real estate funds as well).

Growth (as to style public equities)
An investment style that more heavily invests in companies whose earnings are expected to grow at an above average rate to the market. A growth stock usually does not pay a dividend, as the company would prefer to reinvest retained earnings in capital projects to grow the company (vs. *'value,'* which considers buying established companies they feel are trading at bargain prices to the fundamental analysis of the company's financial statements and internal competitive factors).

Indenture (bond and loan programs)
The central document describing the contract between investors and the borrower or user of the proceeds. The Board's INTERCAP program is structured around a bond indenture.

Hedge fund (as defined by *Investopedia*)
An aggressively managed portfolio of investments that uses advanced investment strategies such as *leverage*, long, short and *derivative* positions in both domestic and international markets with the goal of generating high returns (either in an absolute sense or over a specified market *benchmark*).

Hurdle Rate (private equity)
a minimum return per annum that must be generated for limited partners of a private equity fund before the general partner can begin receiving a percentage of profits from investments.

Index (investment concept)
Typically a single measure of a broadly-based group of investments that can be used to judge, or be compared to the return performance of an individual investment or manager.

Indexing (investment concept)
Typically refers to investing in a portfolio to match a broad range of investments that are set within a pre-determined grouping, such as the S&P 500, so as to match its performance; such investing is generally labeled 'passive' or indexed investing; or buying shares in an Index Fund.

In-state loan program (Montana-specific)
Programs that are funded by the state's coal severance tax monies.

Internal service vs. enterprise fund (state accounting concept)
Within Montana state government: a program whose funding is dependent on ***mandatory participation*** by another state government program is labeled an 'internal' service fund; a program whose funding is dependent on voluntary participation is labeled an enterprise fund. At BOI, the investment program is an internal service fund because participation is not voluntary; the Board's bond and loan programs, because their use is voluntary, are accounted for as an enterprise.

Investment grade (bonds)
Bond ratings from Moody's, Standard and Poor's, and Fitch high enough to be considered secure enough for most investors (bonds rated AAA – BBB). Below investment-grade bonds (below BBB) are generally considered to have a more speculative outlook and carry more risk of default.

IRR (private equity)
A measure of investment performance, short for 'internal rate of return,' expressed as a percentage (the 'internal rate of return' number, or discount rate) that mathematically will equalize the total future cash flows of an investment to the initial cash outflow of the investment; the concept accounts for the time value of money.

Leverage (investment concept)
As an investment concept, a way to increase a return on an investment through a combination of one's own money and also by borrowing additional money to enhance such an investment; high 'leverage' is also associated with high risk.

Mean Variance Optimization Model ('Modern Portfolio Theory')
A theory that it is possible to construct a portfolio to maximize the return for the least amount of risk or volatility. This theory is based on various asset types and their level of expected return, risk (volatility) and their correlation with each other or how the asset values move with each other. The central idea of the model is to blend investments so that in total, they provide both the best expected return and optimal amount of diversification to minimize deep performance swings (volatility); a central tenant is that long term historical returns are indicative of future returns.

Mezzanine finance (private equity)
Subordinated debt with an equity 'kicker' or ability to share in the equity value of the company. It is typically lower quality because it is generally subordinated to debt provided by senior lenders such as banks, thus is considered higher risk.

Multiple (as in "multiple" of invested capital, private equity)
The ratio of total cash returned over the life of the investment plus the investment's residual value over the total cash expended in making the investment. A multiple of 2 means, regardless of the total investment time period, that total cash returned was twice the cash invested.

130/30 Strategy (public equities)
Also called 'partial long short,' this strategy involves the establishment of a short position in select stocks while taking the proceeds of those shorts and buying additional long positions in stocks. The net effect is an overall market position that is 100% long, but the active decisions on individual stock selections are amplified by this ability to short. If the stock selections are successful, the strategy enables the portfolio to profit more than if a stock had simply not been owned, as with traditional long-only portfolios.

Opportunistic (real estate)
In real estate, a euphemism for the most risky real estate investments, typically distressed, raw land, newly developed buildings or other high risk investments in the real estate sector, (versus, *'core,'* which are the best quality fully leased commercial properties).

Overweight or underweight (investment concept)
Generally the level of holdings of a certain type of investment that is above or below either a benchmark's weight (portion of total investment), or the percentage held of a particular asset class compared to the Board's asset allocation policy weight. Also used to describe an external investment manager's decision to have more (or less) of a particular investment than the percentage or weighting found in the benchmark.

Passive management or passive investment (most often in public equities, but not exclusively)
An investment style where a fund's portfolio mirrors a market index, such as the S&P 500, with limited selection decisions by the manager, resulting in market returns. Passive management is the opposite of active management in which a fund's manager attempts to beat the market with various investment strategies and buy/sell decisions of a portfolio of securities to enhance returns.

P/E ratio (equity)
The price of a publically traded stock divided by its estimated or actual earnings is the price/earnings or P/E ratio. This can also be calculated for a stock index or portfolio of stocks. Over the last 100 years, the S&P 500 has had an overall P/E ratio of about 15, or a total index price of about 15 times the annual earnings of its underlying companies.

Pacing study (private equity)
An analysis of the likely timing and amount of the drawdown of committed but yet uninvested monies and the estimated distributions or returns from the funds held in an alternative investment portfolio, generally used to judge the future size of the portfolio and its potential liquidity needs, i.e., cash funding demands.

Par (fixed income)
The initial principal amount designated by the issuer of the bond, or face value of a bond.

Passive
For investments, generally not materially participating in an investment decision, meaning an investment portfolio whose returns follows that of a broad market index, such as an investable stock index, i.e. the S & P 500.

Passive weight (generally equities)
The percentage of a stock held in a particular index portfolio, or percentage of an overall asset class that is held in passive portfolios.

Policy Portfolio
A fixed-target asset allocation, as opposed to asset allocation ranges, which theoretically allows gauging whether deviations from the target portfolio had a positive or negative impact on overall performance.

Portable alpha (public equities)
An investment strategy which involves the active selection of securities while neutralizing overall beta or market risk. This often involves the use of derivative investments such as futures to replicate the market return, either taking a short or long position, while then selecting securities which are expected to add return in an absolute sense or in addition to the market return. As an example, this strategy can be found with certain hedge funds where a market exposure is shorted while individual securities such as specific stocks are purchased that are expected to outperform the general market. The concept of portable applies when the ability to generate positive alpha can be overlaid or ported onto a portfolio. This is not a strategy employed by any of MBOI's existing managers.

Premium (fixed income)
Most often the amount paid over the stated face amount (often called 'par') of a bond, but also used in other contexts, typically paying more (the premium) than a market price (as in a take-over bid for a company).

Proxy (publically traded companies)
An agent legally authorized to act on behalf of another party. Shareholders not attending a company's annual meeting may choose to vote their shares by proxy by allowing someone else to cast votes on their behalf, but the word 'proxy' is used more frequently colloquially as a 'close approximation.'

Prudent expert, prudent person (a central fiduciary concept)
These legal terms have long histories of court-determined standards of care, deriving originally under English common law. The BOI is empowered to operate under the 'prudent expert rule,' which states that the Board shall manage a portfolio:
a) with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent man acting in a like capacity and familiar with such matters would use in the conduct of an enterprise of a like character and with like aims;
b) diversify the holdings of each fund within the unified investment program to minimize the risk of loss and to maximize the rate of return unless, under the circumstances, it is clearly prudent not to do so; and
(c) discharge the duties solely in the interest of and for the benefit of the funds forming the unified investment program.
At an 'expert' level; there is more room for accepting risk under the prudent expert rule than the prudent person rule.

Rebalancing (general investment term)
The process of realigning the weightings of the portfolio of assets. Rebalancing involves periodically buying or selling assets in the portfolio to maintain the original desired level of asset allocation and/or to stay within predetermined asset category range; it is part of a disciplined investment approach within modern portfolio theory.

Resolution (government term)
Generally a formal and written action by a governmental (or corporate) body that has long term significance and requiring a vote of the governing body. BOI uses 'resolutions' generally only for its most significant and long term actions and/or policies.

Securities lending (general investment)
Investments that are temporally borrowed by other investors for a fee; the BOI allows most of its publically traded investments to be loaned for additional marginal income.

Standard deviation (common statistical concept)
A specific statistic that measures the dispersion of returns from the mean over a specific time period to determine the "historical volatility" of returns for a stock, or portfolio, or asset class; more specifically a single unit (i.e., one standard deviation) of dispersion that accounts for approximately 66% of all data around a mean using a 'normal' (or 'uniform' or 'bell-shaped' curve; as opposed to a skewed or asymmetrical) distribution. The standard deviation is used as a gauge for the amount of expected future volatility.

SABHRS (accounting jargon)
Montana state government's State Accounting, Budgeting and Human Resource System; the State's central information management system. BOI investment and other financial data must tie and be reported on this system, which is the official book of record and includes the state's financial statements.

Style drift (often in reference to public equity managers, but applicable to other managers, too)
As the name implies, a divergence from an investor's professed investment bias or style or objective.

Tracking error (statistical concept in investments)
A measurement of the standard deviation of a portfolio's return versus the return of the benchmark it was attempting to outperform. The concept is often used when discussing investment managers. For example some styles are expected to have high 'tracking errors,' (e.g., deep 'value' investors who buy companies that may be dogs for years), versus passive managers, whose stock volatility is expected to be very close to their benchmark. Tracking error can either be intentional or unintentional; it can also be regarded as an accepted deviation or contrary to the management agreement. High *unexpected* tracking error is generally a serious concern to be examined and understood.

Underwriter (bond program)
In investments, the agent who buys investments to be resold to the public; at BOI, the investment firms that buy the Board's bonds to be resold to the public.

Unified Investment Program (Montana Constitution)
The Program in the State's constitution requiring a central investment program which the legislature has assigned to the BOI.

Value (as to style when discussing public equities)
An investment style that focuses on buying established companies that investors believe are undervalued and trading at bargain prices to the fundamental analysis of the company's financial statements and internal competitive factors.

Venture capital (private equity)
A higher-risk/high-return type of investing in startup firms and small businesses with perceived long-term growth potential. Sometimes these are already existing business ventures with limited operating history that need additional management expertise and access to capital. (For start-ups, 'seed capital,' or 'angel investor' are terms differentiating this even higher risk type of investment.)

Volatility (investment jargon)
A statistical measure of the dispersion of returns for a given security or market index. Volatility is typically measured by using the standard deviation of returns from the security or market index. Commonly, the higher the volatility, the riskier the security.

Yield (general investment, but most often within fixed income)
The amount returned to the investor above the original investment generally expressed as a percentage. Yield can be thought of as the expected return from the combination of interest and price accrual or amortization to maturity (in the case of a bond trading at a discount or premium to par).

Yield curve (fixed income)
A line that plots the prevailing interest rates at a given time for bonds ranging in maturity from as short as three months out to 30 years. When plotted across these various maturities (typically 2, 5, 7, 10 and 30 years), the resultant line is shaped like a curve with generally low interest rates (the yield) for shorter maturities and gradually higher interest rates for longer maturities, because generally investors demand higher interest rates for longer term investments. The yield curve for U.S. Treasury debt is the most common when referring to the prevailing level of interest rates.

MONTANA BOARD OF INVESTMENTS
PUBLIC MARKETS MANAGER EVALUATION POLICY

INTRODUCTION

The purpose of this policy is to broadly define the monitoring and evaluation of external public markets managers. This policy also provides a basis for the retention and/or termination of managers employed within the Montana Domestic Equity Pool (MDEP), the Montana International Equity Pool (MTIP), the Retirement Funds Bond Pool (RFBP), and the Trust Funds Investment Pool (TFIP).

The costs involved in transitioning assets between managed portfolios can be significant and have the potential to detract from returns. Therefore it is important that the decision process be based on a thorough assessment of relevant evaluation criteria prior to implementing any manager changes. Staff will consider such costs when deciding to add or subtract to manager weights within the pools as well as in deciding to retain or terminate managers.

MONITORING PROCESS

Periodic Reviews: Staff will conduct periodic reviews of the external managers and will document such periodic reviews and subsequent conclusions. Periodic reviews may include quarterly conference calls on portfolio performance and organizational issues as well as reviews conducted in the offices of the Montana Board of Investments (MBOI) and on-site at the offices of the external managers. Reviews will cover the broad manager evaluation criteria indicated in this policy as well as further, more-detailed analysis related to the criteria as needed.

Continual Assessment: Staff will make a continual assessment of the external managers by establishing and maintaining manager profiles, monitoring company actions, and analyzing the performance of the portfolios managed with the use of in-house data bases and sophisticated analytical systems, including systems accessed through the Master Custodian and the Investment Consultant. This process culminates in a judgment which takes into account all aspects of the manager's working relationship with MBOI, including portfolio performance.

Staff will actively work with the Investment Consultant in the assessment of managers which will include use of database research, conference calls and discussions specific to each manager, and in any consideration of actions to be taken with respect to managers.

MANAGER EVALUATIONS

The evaluation of managers includes the assessment of the managers with respect to the following qualitative and quantitative criteria.

Qualitative Criteria:

- Firm ownership and/or structure
- Stability of personnel
- Client base and/or assets under management
- Adherence to investment philosophy and style (style drift)
- Unique macroeconomic and capital market events that affect manager performance

- Client service, reporting, and reconciliation issues
- Ethics and regulatory issues
- Compliance with respect to contract and investment guidelines
- Asset allocation strategy changes that affect manager funding levels

Quantitative Criteria:

- Performance versus benchmark – Performance of managers is evaluated on a three-year rolling period after fees.
- Performance versus peer group – Performance of managers is evaluated on a three-year rolling period before fees.
- Performance attribution versus benchmark – Performance of managers is evaluated on a quarterly and annual basis.
- Other measures of performance, including the following statistical measures:
    - Tracking error
    - Information ratio
    - Sharpe ratio
    - Alpha and Beta

PERFORMANCE MEASUREMENT

Performance calculations and relative performance measurement compared to the relevant benchmark(s) and peer groups are based on a daily time-weighted rate of return. The official book of record for performance measurement is the Master Custodian.

The performance periods relevant to the manager review process will depend in part on market conditions and whether any unique circumstances are apparent that may impact a manager's performance strength or weakness. Generally, however, a measurement period should be sufficiently long to enable observation across a variety of different market conditions. This would suggest a normal evaluation period of three to five years.

ACTIONS

Watch List Status: Staff will maintain a "Watch List" of external managers that have been noted to have deficiencies in one or more evaluation criteria. An external manager may be put on the "Watch List" for deficiencies in any of the above mentioned criteria or for any other reason deemed necessary by the Chief Investment Officer (CIO). A manager may be removed from the "Watch List" if the CIO is satisfied that the concerns which led to such status have been remedied and/or no longer apply.

Termination: The CIO may terminate a manager at any time for any reason deemed to be prudent and necessary and consistent with the terms of the appropriate contract.

MONTANA BOARD OF INVESTMENTS
PUBLIC MARKETS MANAGER EVALUATION POLICY

ROLES AND RESPONSIBILITIES

CIO: The CIO is responsible for the final decision regarding retention of managers, placement on and removal of "Watch List" status, and termination of managers.

Staff: Staff is responsible for monitoring external managers, portfolio allocations and recommending allocation changes to the CIO, and recommending retention or termination of external managers to the CIO.

Investment Consultant: The consultant is responsible for assisting staff in monitoring and evaluating managers and for reporting independently to the Board on a quarterly basis.

External Managers: The external managers are responsible for all aspects of portfolio management as set forth in their respective contracts and investment guidelines. Managers also must communicate with staff as needed regarding investment strategies and results in a consistent manner. Managers must cooperate fully with staff regarding administrative, accounting, and reconciliation issues as well as any requests from the Investment Consultant and the Custodian.