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Call to Order

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

May 20 and 21, 2014

AGENDA

COMMITTEE MEETINGS

- A. Human Resource Committee** **8:30 AM**
1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
 2. Executive Director General Comments
 3. Exempt Pay Review and Recommendations – **Decision**
 4. Staffing level recommendation – **Decision**
- B. Loan Committee** **9:30 AM**
1. Public Comment – *Public Comment on issues with Committee Jurisdiction*
 2. In-State Loan Program Requests – **Decision**
- Tab 1 CALL TO ORDER – Mark Noennig, Chairman** **10:00 AM**
- A. Roll Call
 - B. Public Comment – *Public Comment on issues with Board Jurisdiction*
 - C. Approval of the April 2014 Regular Meeting Minutes – **Decision**
 - D. Administrative Business
 1. Audit Committee Report (No meeting currently scheduled)
 2. Human Resource Committee Report – **Decisions**
 3. Loan Committee Report – **Decision**
 - E. Comments from TRS and PERS Board Members
 - F. Comments from Board Legislative Liaisons
 - G. Comments from Member Buchanan
- Tab 2 EXECUTIVE DIRECTOR REPORTS – David Ewer** **10:35 AM**
- A. Member Requests or Follow up from Prior Meeting
 - B. Quarterly Cost Report
 - C. Staffing Level Review (as required by Governance Policy) – **Decision**
 - D. Budget Matters
 - E. Custodial Bank Contract Update
 - F. Education
 - G. Opportunity for Board Input on RVK, Inc. quarterly written materials
- BREAK** **10:45 AM**
- Tab 3 MONTANA LOAN PROGRAM REPORT – Herb Kulow** **11:00 AM**
- A. Commercial and Residential Portfolios Report
- Tab 4 BOND PROGRAM REPORT – Louise Welsh** **11:15 AM**
- A. INTERCAP
 1. Activity Report
 2. Staff Approved Loans Report

Tab 5 CORPORATE PROXY VOTING – David Ewer, Cliff Sheets, CFA, CIO and Rande Muffick, CFA	11:30 AM
LUNCH SERVED	12:30 PM
QUARTERLY PERFORMANCE REPORT – RVK, Inc.	1:00 PM
Tab 6 INVESTMENT ACTIVITIES/REPORTS – Cliff Sheets, CFA, CIO	1:30 PM
A. Retirement System Asset Allocation Report	
B. Private Asset Pool Reports – Ethan Hurley, CAIA	
1. Private Equity Pool (MPEP)	
2. Real Estate Pool (MTRP)	
C. Public Equity Pool Reports – Rande Muffick, CFA	
1. Domestic Equity (MDEP)	
2. International Equity (MTIP)	
D. 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	
BREAK	3:00 PM
Tab 7 CASH MANAGEMENT – Gayle Moon, CPA, Rich Cooley, CFA and Julie Feldman, CPA, Bureau Chief, State Accounting Bureau	3:15 PM
ADJOURNMENT	4:15 PM

AGENDA – DAY 2

RECONVENE AND CALL TO ORDER – Mark Noennig, Chairman	9:00 AM
Roll Call	
Public Comment – <i>Public Comment on issues with Board Jurisdiction</i>	
Tab 8 PRIVATE EQUITY AND REAL ESTATE REVIEW – Cliff Sheets, CFA, CIO and Ethan Hurley, CAIA	9:15 AM
RECAP OF STAFF TO DO LIST AND ADJOURNMENT – Mark Noennig, Chairman	10:45 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	

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

**MINUTES OF THE MEETING
April 8, 2014**

BOARD MEMBERS PRESENT:

Mark Noennig, Chairman
Kathy Bessette
Karl Englund
Quinton Nyman
Jack Prothero
Marilyn Ryan
Jon Satre
Sheena Wilson

BOARD MEMBER ABSENT:

Gary Buchanan

LEGISLATIVE LIAISONS PRESENT:

Senator Dave Lewis
Representative Kelly McCarthy

STAFF PRESENT:

Polly Boutin, Associate
Financial Manager
Jason Brent, CFA,
Alternative Investments Analyst
Geri Burton, Deputy Director
Dana Chapman, Board Secretary
Richard Cooley, CFA, Portfolio Manager,
Fixed Income/STIP
Roberta Diaz, Investment Accountant
David Ewer, Executive Director
Julie Flynn, Bond Program Officer
Tim House, Equity Analyst/Investment
Operations Chief
Ethan Hurley, CAIA, Portfolio Manager,
Alternative Equities
Ed Kelly, Alternative Investments Analyst
Eron Krpan, Investment Data Analyst

Herb Kulow, MCMB,
Portfolio Manager, In-State Loan Program
Tammy Lindgren, Investment Accountant
April Madden, Investment Accountant
Gayle Moon, CPA, Financial Manager
Rande Muffick, CFA, Portfolio Manager,
Public Equities
Mary Noack, Network Administrator
Jon Putnam, CFA, FRM, Fixed Income
Investment Analyst
John Romasko, CFA, 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 Zarlino, CFA, Director of Research

GUESTS:

Becky Gratsinger, CFA, RVK, Inc.
Jim Voytko, RVK, Inc.
Brad Sanders, Bureau Chief, State Procurement Bureau
Rick Dorvall, Contracts Officer, State Procurement Bureau

CALL TO ORDER

Board Chairman Mark Noennig called the regular meeting of the Board of Investments (Board) to order at 9:15 AM. As noted above, a quorum of Board Members was present. Board Member Gary Buchanan was absent.

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

Chairman Noennig called for any corrections or revisions to the Board minutes from the February 25-26, 2014 Board meeting. Member Marilyn Ryan had one change under PERS/TRS updates. Under TRS comments, strike the last sentence and replace with "Legislation to increase funding from the University System to fund retirement benefits failed to pass."

Board Member Jack Prothero made a Motion to approve the February 25-26, 2014, Board Meeting minutes as amended. Member Sheena Wilson seconded the Motion. The Motion carried 8-0.

ADMINISTRATIVE BUSINESS

Audit Committee Report

Audit Committee Chairman Jon Satre reported on the Audit Committee Meeting held prior to the regular Board Meeting and stated that staff briefed the Committee on current emergency and disaster preparedness procedures which staff reviews and revises regularly. He congratulated staff for taking a proactive approach.

Loan Committee Report

The Loan Committee met prior to the Board meeting. Committee Chairman Jack Prothero reported the Committee approved one INTERCAP loan to Flathead County in the amount of \$2 million for a ten (10) year term to refinance the capital lease for 12 county building HVAC systems. No Board approval is needed. The Committee also approved a \$5,024,000 interim loan to the City of Deer Lodge in anticipation of U.S. Department of Agriculture (USDA) Rural Development Services (RD) long term financing for improvements to its wastewater treatment plant. The one (1) year term loan will be in the form of a general obligation bond anticipation note (BAN). The Committee recommends approval.

Member Jack Prothero made a Motion to approve the \$5,024,000 interim loan to the City of Deer Lodge. Member Quinton Nyman seconded the Motion. The Motion carried 8-0.

Public Employees' Retirement System (PERS) and Teachers' Retirement System (TRS) Updates

Member Marilyn Ryan reported the TRS actuary Cavanaugh Macdonald Consulting, LLC will present to the TRS Board at the May 2014 meeting. Work on the 2015 budget is ongoing. Complex changes in the Governmental Accounting Standards Board (GASB) guidelines will affect reporting requirements for counties and school districts and TRS will be very involved assisting them to become compliant. The new computer system update is going well and is on schedule. The benefit module has been tested and was flawless.

Member Sheena Wilson reported PERS interviewed three outstanding candidates for the executive director position last Friday. They expect to announce the new director within a week to 10 days.

Legislative Liaisons Comments

Representative Kelly McCarthy had nothing to report.

Senator Dave Lewis reported the Senate leadership has conducted preliminary discussions with the State Administration and Veterans' Affairs Interim Committee (SAVA). Senator Lewis also noted there have been discussions regarding the public broadcast of most major state Boards, with the exception of TRS, PERS and MBOI. While most Boards meet at the Capitol where equipment is installed, the

legislature may choose to take up the issue and propose options for ensuring all Boards have the same public media access.

Senator Lewis supported the original HB 144 in 2001 enacting the broadcast of legislative and administrative proceedings (sponsored by then Representative Mark Noennig) and added estimates for viewership are high. The original bill did not include any exemptions, but rather provided authorization of the broadcasting. Chairman Noennig added the original intent of the law was that broadcasts would expand to include more meetings over time.

EXECUTIVE DIRECTOR'S REPORT

Overall Comments

Executive Director David Ewer presented his Executive Director's memo. He advised the request by Member Buchanan regarding competitive bidding for selection of the INTERCAP bond finance team will be covered under Tab 8 during the INTERCAP Loan Program presentation.

Executive Director Ewer reported a settlement has been agreed upon in the Tribune lawsuit in which MBOI was one of many defendants. The plaintiffs, creditors in the Tribune bankruptcy, claimed stock holders were unduly enriched when they received proceeds from the buyout of the company. Staff conferred with Board Chairman Noennig and legal counsel, who agreed the total settlement cost of approximately \$25,000, is a good business decision when faced with the ongoing costs of continuing to defend the suit, as well as the possibility of an adverse decision.

The Department of Commerce is updating the Commerce website templates. The project roll out is expected to be completed by late summer or early fall.

Executive Director Ewer stated the Board's Governance Manual does not currently provide any reference to the Board's Education Policy. Staff recommends revising the language in the Governance Manual by adding a reference to the Education Policy on page 4, section 10, Systematic Work and Education Plan and incorporating the Education Policy as Appendix M. The Education Policy states that RVK, Inc. will provide educational presentations to the Board twice annually and each Board meeting will have relevant education and training as part of the 24-month Systematic Work and Education Plan.

Information on educational opportunities from outside resources or for possible conference attendance will be shared with the Board as they become available. There has been no notice this year about the Annual Market Makers Conference, and there is no information posted on the IFE website. Copies of the latest edition of *Barron's Dictionary of Finance and Financial Terms* have been ordered for each Board member and six copies of Nate Silver's *The Signal and The Noise Why So Many Predictions Fail-But Some Don't* are available for Board members.

Policy Reviews

Executive Director Ewer stated all policies are reviewed annually and any recommended changes must come before the Board for approval.

Staff is recommending revisions to the Governance Manual as follows:

Index page correction: Appendix I – Resolution 218, change *Deputy Director* to *Executive Director*
Page 3, add language:

Section 1. C) – Municipal Lending Programs – The Board manages programs under the Municipal Finance Consolidation Act, primarily through the INTERCAP program.

Page 5, Section 10 – Systematic Work and Education Plan, add language:

The Board Education Policy, addressing the importance of the Systematic Work and Education Plan, is attached as Appendix M.

Page 8, Section 3 – Chief Investment Officer, add wording:

...and attached hereto as Appendix L.

Board Member Jack Prothero made a Motion to approve the changes to the Governance Manual as proposed. Member Kathy Bessette seconded the Motion. The Motion carried 8-0.

Staff recommends incorporating the Board Education Policy into the Governance Manual by reference as Appendix M, and revising language in the Board Education Policy by adding a new Section 3 (and renumbering previous Section 3 as Section 4):

3. SYSTEMATIC WORK AND EDUCATION PLAN

- A. *In order to educate, review and in all respects, assist Board Members in fulfilling their fiduciary role, Board Members will be provided on-going training and education on investment related topics and Board Operations through the Systematic Work and Education Plan (See Section 10 in the Board's Governance Manual).*

Member Sheena Wilson made a Motion to approve staff recommended changes to the Board Education Policy and incorporating it into the Governance Manual. Member Marilyn Ryan seconded the Motion. The Motion carried 8-0.

POLICY REVIEWS

Investment Policy Statement Review and Proposed Changes

Mr. Cliff Sheets presented six investment policy statements for which staff is proposing revisions. Two fixed income investment policy statements: Trust Fund Investment Pool (TFIB) and Core Internal Bond Portfolio (CIBP) have identical minor language changes on page 3 deleting “Recent exposures by sector for the portfolio and benchmark index are shown for reference” as it is no longer applicable.

The Montana Private Equity Pool (MPEP) Investment Policy Statement has two changes on page 3 Strategies and Limitations deleting “and Corporate” under Buyout and adding subcategories “Distressed, for control, special situations and co-investments.” Buyout policy range will be revised from 40%-75% to 50%-80%. Responding to a question from Chairman Noennig, Mr. Sheets stated the range adjustment allows for flexibility in the heavier allocated Buyout, which is currently nearing the 75% ceiling on the range.

The Montana Real Estate Pool (MTRP) Investment Policy Statement has one minor change on page 5, under the Benchmark section, clarifying the benchmark is net of fees.

The Montana International Equity Pool (MTIP) Investment Policy Statement revisions add a description and table detailing tracking error on page 2, under Risk Management, and revises the allocation ranges on page 3, widening the small cap range from 10%-16% to 8%-16%, and reduces the Dedicated Emerging Market range from 2%-10% to 0%-5%. These changes reflect recent minor changes to the structure of the pool.

The proposed changes to the Montana Public Retirement Plans Investment Policy Statement are to Schedule A, on page 4, for the changes to the International Equity Pool and Private Equity Pool sub-component ranges already discussed.

Chairman Mark Noennig called for a motion to approve proposed changes to the six Investment Policy Statements as presented.

Member Jack Prothero made a Motion to approve staff recommended changes to the Investment Policy statements as presented. Member Kathy Bessette seconded the Motion. The Motion carried 8-0.

Commercial Loan Policy Review and Proposed Changes

Mr. Herb Kulow presented proposed revisions to the Commercial Loan Policy, the Infrastructure Loan Policy and the Value Added Loan Policy. Changes to the policies reflect the January 1, 2014 policy change by the National Uniform Standards of Professional Appraisal Practices (USPAP) regarding new appraisal requirements. The new restrictions replace a Summary (self-contained) Appraisal with Restricted Appraisals, which are meant for the client's use only and may not be shared by a third party, such as MBOI, and full Appraisal Reports, which must include the analysis and rationale for the appraiser's basis for conclusions, and may be shared with third parties. Language under the Appraisal sections of each policy are revised stating MBOI requires an Appraisal Report as defined by the USPAP for all loans where the total loan amount is over \$250,000. Restricted Appraisals will not be accepted.

Member Jack Prothero made a Motion to approve staff recommended changes to the three Commercial Loan Policies as presented. Member Sheena Wilson seconded the Motion. The Motion carried 8-0.

CUSTODIAL BANK RFP

Executive Director David Ewer reported staff has been meeting weekly to work on the draft proposal of the custodial bank Request for Proposal (RFP). Others involved in the process include Jonathan Kowolik from RVK, Inc. and Brad Sanders, Bureau Chief and Rick Dorvall, Contracts Officer, from the Procurement Bureau. Executive Director Ewer reviewed the functions of the custodial bank:

- Hold custody of the state's investments/assets, sometimes through a depository trust
- Prime processing entity, all incoming and outgoing transactions
- Operational tracking entity
- Book of record and performance record for the State of Montana
 - Tracking of private equity assets; labor intensive and complex long term tracking utilizing Private Edge software (additional fee is paid)
- Securities lending

Responding to a question from Member Karl Englund regarding the process involved with private equity, Mr. Ethan Hurley explained once a commitment is made, the general partner makes the request for funds which goes to both State Street Bank and MBOI. All involved parties are notified and MBOI accounting and investment staff review and then sign off on the capital call notice, at which time it is entered into the system. State Street Bank waits for staff approval before processing. Ms. Gayle Moon stated State Street Bank processes the transaction through the Private Edge module.

Mr. Cliff Sheets added returns are calculated using Private Edge which shows the cash flow record.

Executive Director Ewer stated the RFP process has substantial complexity and follows the structure laid out by the Procurement Bureau. The scope of services and required qualifications are detailed. Policy requires 20% of the total points must be based on the bid price. The RFP requests bids for all services and also for securities lending specifically. State law allows for a seven year contract, an initial four year contract, which is then renewable annually for three years.

Mr. Brad Sanders stated it is a very structured process with the criteria set up to facilitate judging of the responses received. Substantial development has evolved during the process and the final product is good and meets procurement requirements.

Executive Director Ewer advised the consensus scoring committee will be comprised of Executive Director Ewer, Deputy Director Geri Burton, Chief Investment Officer Cliff Sheets, Financial Manager

Gayle Moon and Associate Financial Manager Polly Boutin. The consensus scoring proceeding is open to the public.

Mr. Sanders noted scoring committee members each score the submissions individually, then discuss as a group and come to a final consensus score.

Mr. Jim Voytko stated Mr. Jonathan Kowolik has extensive experience with custodial bank RFP's and provided substantial input throughout the process working with MBOI staff. Presenting specific details of the services you are requesting is very important to ensure you receive the detailed responses required to determine the best candidate. It is vital to have all the necessary information to make an informed decision when choosing a custodial bank.

Responding to a question from Chairman Noennig, Deputy Director Burton stated the current RFP requests more information in the performance and analytics and foreign exchange sections, as compared to the 2007 RFP. Executive Director Ewer added the changes weren't substantive. He noted it was important to ask the respondents to include the procedures used to comply with the latest requirements of the Governmental Accounting Standards Board (GASB) regulations.

Mr. Voytko stated that asking for a seven year commitment to a business relationship may allow for more competitive bidding. It's vital to be certain about the entity you will have a long term relationship with, as changing custodial banks is an expensive and arduous process. The goal is to achieve a high quality of service and a detailed RFP ensures sufficient information is collected to make an informed decision.

Ms. Becky Gratsinger noted it is very much a scale business with literally only a handful of qualified banks, and all of them are expected to respond to the RFP.

Member Prothero asked if past issues played a role in how the RFP was written.

Ms. Moon stated staff is comfortable with the language in Appendix A, which addresses staff, tenure and who will service the account. Mr. Ewer added that personnel sent by the finalists to make their presentation are required to be the same staff who will handle the account. State Street Bank comes to Helena to meet with MBOI staff three times each year and the meetings are vital to resolving any problem areas.

Deputy Director Burton stated the timeline allows for a six week response period for applicants which includes an informal pre-proposal conference call for interested parties to ask questions and a formal question and answer period. The questions and responses will be posted on the Procurement Bureau's web site for all interested parties to view.

Executive Director Ewer stated staff is recommending Board approval to allow staff to finalize the RFP and issue it in the next few days. Staff will select the finalists and invite them to travel to Helena to make their presentations. Staff will then determine the finalist and present a recommendation to the full Board at its August 2014 meeting. The total possible score is 1000; 700 for the first step which is allocated between 200 for the bid price and 500 for the content of the submitted information packet. The final 300 points is reserved for scoring the onsite presentations.

Responding to a question from Member Wilson, Mr. Sanders stated the available options at that time are to award the contract or cancel the RFP, which would require issuing another RFP.

Chairman Noennig asked if a holdover of State Street Bank's contract is allowed if a contract is not awarded. Executive Director Ewer stated that is not an option as the full allowable seven year term of State Street Bank's contract expires October 31, 2014. Mr. Sanders added the options are limited and if awarded, the contract must go to the high scorer.

Executive Director Ewer asked for Board approval to allow staff to go forward with issuing the RFP and that Board staff, in conjunction with Procurement Bureau staff, proceed with the scoring process and present the recommended finalist to the full Board at the August 2014 Board meeting.

Member Karl Englund made a Motion to approve staff going forward with the RFP process as presented. Member Sheena Wilson seconded the Motion. The Motion carried 8-0.

CONSULTANT REPORT – TERMINATED MANAGER REVIEW

Ms. Becky Gratsinger, CFA, and Mr. Jim Voytko, RVK, Inc.

Ms. Gratsinger stated looking back at managers who have been terminated is a useful exercise to perform and is instructive on manager selection. The time frame of some terminations has not been long as the restructuring of the domestic and international pools is recent, but the information is still useful.

Mr. Voytko added it's too easy to look at the buy/sell record, but it does not reflect an accurate picture. More than half of the terminated managers were terminated due to structural changes rather than for performance reasons, the shift in the level of active management and reducing quantitative in favor of more fundamental oriented funds. The review included a total of 16 terminated managers. Only eight had a three year track record and none had a five year history since termination.

Ms. Gratsinger stated the key drivers in terminating a manager are not strictly performance and relate to overall structural and/or strategic changes. Other factors driving a termination include a change in organizational structure or manager philosophy or style, and a departure of key personnel. The process of evaluating managers is subject to behavior biases, such as an emphasis of short term returns over long term performance; the tendency of groups to prefer action over inaction and to take more extreme measures than an individual might in the same circumstances; a comfort level with current holdings which may prevent decisions to change; and a group bias to follow the lead of stronger or more dominant personalities.

Ms. Gratsinger noted of the 16 terminated managers, ten were domestic managers, six were international managers and a total of 12 were terminated for structural reasons rather than performance. Mr. Voytko added although the data is limited by the short time frame, trailing three year figures show the retained managers have performed better than those terminated.

Responding to a question from Chairman Noennig, Mr. Voytko stated you will never win with all of your choices; however, the fund restructuring was conducted to improve overall fund value and the fund performance has improved since the changes were implemented.

Mr. Cliff Sheets added the restructuring changes are recent. The Montana Domestic Equity Pool (MDEP) changes were transitioned in summer 2012 and some of the Montana International Equity Pool (MTIP) changes occurred as recently as two months ago. Now that the process has been completed, while it is still early, the recent performance of the two pools has been good. The restructuring considered the portfolio as a whole and will be monitored over time to measure whether the changes live up to expectations.

INVESTMENT MANAGER ACTIONS

Montana International Equity Pool (MTIP) Small Cap Manager Transition

Mr. Rande Muffick reported the second and final phase of the Montana International Equity Pool (MTIP) restructuring, approved by the Board at the August 2012 Board meeting, has been completed. During phase one, a large allocation of actively managed large cap investments were transitioned into the large cap passive portfolio. In phase two, two new small cap managers, one growth and one value, have been hired and have received initial funding. The new managers, Franklin Templeton

International Small Cap Value and American Century International Small Cap Growth, were initially funded at \$40 million and \$30 million respectively. Due to the illiquid nature of small caps, the transition was logistically challenging and took three days to complete. The overall cost of the transition on the \$70 million was approximately \$209,000, or 30 basis points of market value. The transition was managed by BlackRock Transition Management who estimated the cost would be 40 basis points. Franklin Templeton generally requires a \$50 million minimum investment, but agreed to the initial amount of \$40 million given the potential growth of the account. Over the long term, value stocks are generally expected to provide higher returns compared with growth stocks, thus staff allocated a larger portion to value.

Member Englund asked Mr. Muffick to explain the mechanics of the transaction.

Mr. Muffick explained a lot of preliminary work goes into a transition. Upon hire of the new managers, State Street Bank provides a new account number. Funding comes from cash proceeds of the large cap index fund; first through the purchase of futures, then individual stocks are purchased vs. the sale of the futures. These stocks are then moved to the new managers' accounts to be managed at their discretion as of the effective date of the transition. Mr. Sheets added the transition agreement is signed with the transition manager who then works with the new managers throughout the process. The new managers provide a "wish list" to the transition manager. Funding the new managers is done specifically to limit market exposure and avoid any opportunity costs, keeping the money fully invested throughout the process which helps keep transition costs as low as possible. A global manager is necessary to handle the purchase of small cap stocks from around the world in the currency of the different countries. Upon the completion date of all transactions, the new managers are free to buy/sell as they choose and that is when the clock on performance begins for the managers.

Montana Private Equity Pool (MPEP) Update

Mr. Cliff Sheets provided an update on pending transactions regarding sales of specific Limited Partnership (LP) interests of funds held by MBOI. Mr. Ethan Hurley stated marketing of the eight funds managed by four different general partners was conducted and approximately 40 bids were received. Last week proceeds of \$60 million were received and an additional \$30 million is due at the end of June. In a separate sale, \$36 million is expected at the end of April. The total net asset value of the funds as of September 30, 2013 totaled \$127 million.

Mr. Sheets noted the sales were pursued due to the current valuation perspective and good market timing in terms of strong demand and ample dry powder among secondary funds which resulted in the premium bids received. Mr. Sheets added the process is labor intensive and costly to execute. Considering the uniqueness of the asset class, it makes sense to act when the normal market illiquidity is low, which seems to be the case recently. Often secondary offerings are sold at a discount, such as with newer or troubled funds. We received a net premium to the most recent NAV's of the funds being sold.

Member Satre asked if the funds chosen for sale were troubled funds or ones we were looking to eliminate or funds for which there is a high demand.

Mr. Sheets stated funds chosen for sale were among those we would not be pursuing an ongoing strategic relationship with and were not "troubled." Some were deemed popular and did enjoy high demand. Madison Dearborn, a buyout manager, is a fund we did not plan to re-up with. Also, First Reserve funds represent an energy strategy which we did not plan on re-investing with in their next offered fund. The driver of the decision to sell some of our private equity exposure was not to change the allocation per se of private equity. Last year our actual private equity allocation fell in a range of 12-13% which fell to 11.8% at 12/31/13 due to strong stock market returns and the denominator effect. The current policy range is 9%-15%. After the fund sales are completed, the estimated private equity allocation will be approximately 10.4%, all other things being equal. This provides a

cushion, should there be any general decline in public stock markets which would likely result in an increase in the private equity allocation weight.

Mr. Sheets noted total cash after completion of the sales will be at about 2%, well within the cash range of 1%-5%. Some of the cash may be used to bolster fixed income which remains at the low end of the range.

Senator Lewis asked what the current estimated monthly cash payout is to cover retirement benefits.

Mr. Sheets stated \$51.7 million was calculated at year end for monthly payouts. A large amount of cash is received each month from contributions and income. Mr. Jim Voytko added that as an aging plan, payouts will continue to increase over time.

MONTANA INTERNATIONAL EQUITY POOL ASSET CLASS REVIEW

Mr. Cliff Sheets, CFA, CIO and Mr. Rande Muffick, CFA, Portfolio Manager - Public Equities

Mr. Sheets began by presenting an allocation overview of the Montana International Equity Pool (MTIP). The asset class accounts for \$1.7 billion and is the third largest asset class. International Equities make up half the amount of domestic equities. The asset allocation range is 14%-22% with a current level of 17.6%. The asset class is generally expected to produce high positive returns over the long term and is highly liquid and as well as highly volatile.

Mr. Muffick then went on to explain the history and composition of the pool. The benchmark for MTIP was switched to the MSCI ACWI ex-U.S. IMI, as of March 1, 2014 when the new small cap managers were funded. The new benchmark contains a greater amount of small cap stocks, which over the long term are expected to provide higher returns and better growth prospects than large caps. The benchmark ratio is 87.2% large caps and 12.8% small caps. As of March 14, 2014 the MTIP allocation to small caps is 11.2%. Small cap stocks include those companies with a market cap of \$3 billion or less. Of the four small cap managers, three are active managers and one manages an index fund.

The structure of MTIP at March 14, 2014 is composed of value, core and growth equities. The portfolio contains commingled and separate accounts, which provide more control through investment guidelines spelled out in manager contracts; and index funds, where purchases are in units of a commingled fund. Index funds are structured to reduce tracking error by mirroring the benchmark. Emerging market index funds have a higher expected tracking error of approximately 30 basis points given the greater volatility of these stocks.

When structuring a portfolio, diversification of managers and how they correlate to each other is key. By choosing managers with different styles, methodology, passive vs. active, downside or upside capture profiles, the pool return stream is smoothed out over time. With actively managed large caps it is more difficult to outperform the benchmark; therefore a higher allocation to passively managed large cap holdings is desired. An overweight position of small caps is generally preferred due to the expected outperformance over large caps over time.

In June 2009 the transition to increase passive holdings was initiated and then increased again in the second half of 2011 with the termination of Artio. The structural cost effective approach is to pay fees where they have the best chance of adding returns. Fees from June 2012 through the end of 2013 were reduced on an absolute and basis point basis even as market value increased. Fees will be higher with the addition of new small cap managers but will remain lower than previous costs. The annual CEM report monitors fees and the next report should reflect reduced fees vs. peers due to restructuring the portfolio. The most recent CEM study showed MBOI had lower fees than peers and a 5%-7% lower allocation to actively managed assets. The result is expected to show less tracking error while paying less in overall fees.

Going forward, MTIP may receive funds from domestic equities for more international exposure. The long term bias calls for a small cap weighting of -2% to +4% vs. the benchmark and the emerging market weighting of -2% to +2% vs. the benchmark. Exposure to emerging markets will remain passive following staff's decision not to hire an active emerging market manager. Staff determined the hire of an emerging market manager would not be a good fit at this time.

The current structure with the addition of the new managers will be monitored for performance. Changes regarding underperforming large cap managers may be considered in the future.

Ms. Becky Gratsinger stated several clients have also taken a small cap overweight approach which makes sense. MBOI does have emerging market exposure through current managers and the overall portfolio structure is solid. Mr. Jim Voytko added now that the new structure is in place, patience and monitoring is suggested for the time being.

BOND PROGRAM

INTERCAP Mission Overview Presentation, Louise Welsh, Senior Bond Program Officer

Ms. Louise Welsh presented an overview of the INTERCAP program. The INTERCAP program is an enterprise fund providing services to public entities for a fee. The Municipal Finance Consolidation Act (MFCA) (MCA 17-5-16) grants the legal authority to lend to eligible government units, to sell bonds to fund INTERCAP loans and to independently hire underwriters, attorneys, and trustees and designates the Board guaranty for MFCA bond repayment. The Board guaranty is capped at \$190 million and the Board may charge a fee for its services.

INTERCAP has never suffered a loss in its 27 year history. The annual remarketing for the currently ~\$106 million in outstanding bonds with terms of 20 and 25 years occurred in February. The bonds received a high quality/low risk rating of AA3 VMIG1 and were oversubscribed. That resulted in the ability to push the bond rate down to 16 basis points and allow INTERCAP to maintain the low 1% loan rate to borrowers for another year. The loan rate to the borrower changes annually on February 16.

The Board has the authority to hire the finance team therefore the state procurement process does not apply. The finance team, many of whom have been part of the team since the creation of INTERCAP in 1987, is made up of Piper Jaffray & Co., D.A. Davidson & Co. of Great Falls, Jackson, Murdo & Grant, P.C. of Helena, Luxan & Murfitt, PLLP of Helena, Dorsey & Whitney, LLP, of Missoula and U.S. Bank, N.A. as trustee. The team has performed well at a reasonable cost marketing INTERCAP bonds which have a unique nature requiring the need to provide detailed information of how they work (story bonds) to investors.

The Board asked staff to consider in their opinion if a change to a competitive bid of the finance team services was necessary. Staff considered it and do not think a change is necessary. Staff is also satisfied with the performance of the remarketers and do not see a need to change that facet of the team either. This is shown in the consistently low loan rate to the borrower that recovers all the fees associated with remarketing the bonds and program administration.

INTERCAP serves local governments, state agencies and universities. There are no origination fees and no prepayment penalties. Loan repayments are due semi-annually on February 15 and August 15 to facilitate the program bond holder payments which are due on March 1 and September 1. Principal repayments go back into the pool of funds available to loan.

The program enables economic improvement which in turn enhances Montana's image. The many appreciative notes from borrowers who have used the program show the INTERCAP program continues to be a low cost, easy to use option for the many state and local government agencies that use it.

Responding to a question from Representative Kelly McCarthy about the variation of interest rates from year to year, Ms. Welsh responded the pool is remarketed and re-priced each year. Funds in excess of what is on loan are invested to generate income up to the bond yield. Income received from the funds on deposit over the bond yield is rebated to the Federal Government.

RECAP

Executive Director Ewer noted one request from Member Sheena Wilson during the Audit Committee meeting regarding emergency procedures. Member Wilson asked if there are available options to provide essential services for MBOI staff if the need should arise during a disaster situation.

Chairman Noennig stated Member Gary Buchanan has asked that he be provided a spot on the agenda for the May Board meeting to share his ideas regarding Board education and training.

There being no further business, the meeting was adjourned at 2:50 PM.

Next Meeting

The next regular meeting of the Board will be May 20 - 21, 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 E. Noennig, Chairman

ATTEST: _____
David Ewer, Executive Director

DATE: _____

MBOI:drc
5/5/14

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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
Date: May 20, 2014
Subject: Executive Reports under Tab 2 of Agenda

A. Follow up Requests from Members

Member Buchanan has asked for time on the agenda and has been scheduled. Member Wilson raised a question on internal controls and staff has already followed up to her satisfaction.

B. Quarterly Cost Report

The cost report is attached within Tab 2

C. Staffing

The Board's current authorized level of staffing is for 32 positions, of which 8 are exempt and 24 are classified. The Governance policy directs review and approval of budget and staffing levels. Staff recommends that the Board affirm the Board's currently authorized staffing level of 32 positions. This matter is scheduled for review by the Board's Human Resource Committee.

D. Budget

A spreadsheet showing the current budget for the Board's operations and status to date is included in this Tab. A memorandum explaining the budget process and more details about the Board's budget are also included.

E. Custodial Bank Update

The RFP was issued on April 15th. An informal call of interested parties was held on April 28th. Formal submission of questions is due by May 5th and the State's responses are due on or before May 12th.

F. Board Education Materials

Staff will offer some comments at the meeting.

G. Opportunity for Board Input on R. V. Kuhns Quarterly Materials

R. V. Kuhns would appreciate any thoughts and feedback on their quarterly presentation materials.

Total Fiscal Year 2014 Management Fees (Unaudited)

Board Fees					
Pool	Q1 9/30/2013	Q2 12/31/2013	Q3 3/31/2014	Change¹	FY 2014 to Date
Retirement Funds Bond Pool (RFBP)	\$ 168,798	\$ 168,798	\$ 168,798	\$ -	\$ 506,394
Trust Funds Investment Pool (TFIP)	111,288	111,288	111,288	-	333,864
Montana Domestic Equity Pool (MDEP)	153,237	153,237	153,237	-	459,711
Montana International Equity Pool (MTIP)	137,121	137,121	137,121	-	411,363
Montana Private Equity Pool (MPEP)	245,937	245,937	245,937	-	737,811
Montana Real Estate Pool (MTRP)	148,080	148,080	148,080	-	444,240
Short Term Investment Pool (STIP)	137,103	137,103	137,103	-	411,309
All Other Funds (AOF) Investments Managed	189,498	189,498	189,498	-	568,494
Total	\$ 1,291,062	\$ 1,291,062	\$ 1,291,062	\$ -	\$ 3,873,186

¹ Board Fees: No change.

Custodial Bank Fees					
Pool	Q1 9/30/2013	Q2 12/31/2013	Q3 3/31/2014	Change²	FY 2014 to Date
Retirement Funds Bond Pool (RFBP)	\$ 49,446	\$ 49,446	\$ 49,446	\$ -	\$ 148,338
Trust Funds Investment Pool (TFIP)	29,364	29,364	29,364	-	88,092
Montana Domestic Equity Pool (MDEP)	152,457	152,457	152,457	-	457,371
Montana International Equity Pool (MTIP)	34,236	34,236	34,236	-	102,708
Montana Private Equity Pool (MPEP)	29,640	30,090	30,090	-	89,820
Montana Real Estate Pool (MTRP)	22,047	22,047	22,047	-	66,141
Short Term Investment Pool (STIP)	50,982	50,982	50,982	-	152,946
All Other Funds (AOF) Investments Managed	34,728	34,728	34,728	-	104,184
Total	\$ 402,900	\$ 403,350	\$ 403,350	\$ -	\$ 1,209,600

² Custodial Fees: No change.

External Manager Fees

<u>Pool</u>	<u>Q1</u> <u>9/30/2013</u>	<u>Q2</u> <u>12/31/2013</u>	<u>Q3</u> <u>3/31/2014</u>	<u>Change</u> ³	<u>FY 2014</u> <u>to Date</u>
Retirement Funds Bond Pool (RFBP)	\$ 377,181	\$ 383,412	\$ 388,656	\$ 5,244	\$ 1,149,249
Trust Funds Investment Pool (TFIP)	412,924	463,644	426,988	(36,656)	1,303,556
Montana Domestic Equity Pool (MDEP)	1,981,664	2,107,504	2,271,438	163,934	6,360,606
Montana International Equity Pool (MTIP)	720,792	808,297	865,023	56,726	2,394,112
Montana Private Equity Pool (MPEP)	4,024,147	3,907,771	5,504,748	1,596,977	13,436,666
Montana Real Estate Pool (MTRP)	1,321,547	1,541,096	2,432,693	891,597	5,295,336
Short Term Investment Pool (STIP)	-	-	-	-	-
All Other Funds (AOF) Investments Managed	81,251	157,319	139,592	(17,727)	378,162
Total	\$ 8,919,506	\$ 9,369,043	\$ 12,029,138	\$ 2,660,095	\$ 30,317,687

³ RFBP: No significant changes.

TFIP: The decrease reflects a change in recording the TIAA-CREF fees quarterly versus monthly. Fees will be matched with the quarterly distribution.

MDEP: Fees are higher due to increased market values.

MTIP: Fees are higher due to the hiring and funding of two small cap asset managers as of March 3, 2014 and a small increase in market values.

MPEP: Fees are higher due to the recording of "Inception to Date" fees for one manager and the initial funding of new managers with catch-up fees. 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, however the large increase is mostly attributable to the lagged booking of fees on non-core funds that were not recorded in the prior two quarters. Because of this lumpy recording of fees with a lag, quarterly fee comparisons are less meaningful.

AOF: The decrease reflects a change in recording the TIAA-CREF fees quarterly versus monthly. Fees will be matched with the quarterly distribution going forward.

Total Fees

<u>Pool</u>	<u>Q1</u> <u>9/30/2013</u>	<u>Q2</u> <u>12/31/2013</u>	<u>Q3</u> <u>3/31/2014</u>	<u>Change</u>	<u>FY 2014</u> <u>to Date</u>
Retirement Funds Bond Pool (RFBP)	\$ 595,425	\$ 601,656	\$ 606,900	\$ 5,244	\$ 1,803,981
Trust Funds Investment Pool (TFIP)	553,576	604,296	567,640	(36,656)	1,725,512
Montana Domestic Equity Pool (MDEP)	2,287,358	2,413,198	2,577,132	163,934	7,277,688
Montana International Equity Pool (MTIP)	892,149	979,654	1,036,380	56,726	2,908,183
Montana Private Equity Pool (MPEP)	4,299,724	4,183,798	5,780,775	1,596,977	14,264,297
Montana Real Estate Pool (MTRP)	1,491,674	1,711,223	2,602,820	891,597	5,805,717
Short Term Investment Pool (STIP)	188,085	188,085	188,085	-	564,255
All Other Funds (AOF) Investments Managed	305,477	381,545	363,818	(17,727)	1,050,840
Total	\$ 10,613,468	\$ 11,063,455	\$ 13,723,550	\$ 2,660,095	\$ 35,400,473

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

Date: May 20, 2014

Subject: Budget Process, Budget Status Reports and Staffing Levels

Background

There are **three** different statutory frameworks authorizing the Board to expend money.

First, most of the Board's funding for operations is authorized by the Montana Legislature in House Bill 2, the main appropriations bill. In the 2013 Session, the Legislature set the maximum rate that can be charged by the Board to its investment pools and other investment accounts, \$5,109,144 for FY 2014 and \$5,234,796 for FY 2015. Again, this amount covers only the operational costs of managing the investment pools and other investment monies; it does not cover the operational costs of the Board's municipal bond programs, primarily the INTERCAP Program.

Second, there are two significant budget areas that are authorized in law known as a *statutory appropriation*. The Board's custodial banking expenses and its INTERCAP Program are authorized in separate statutory appropriations and do not need repeated authorization by the Legislature. The Legislature can change statutory appropriations but generally, these authorizations are long-standing.

Third, the Board is expressly authorized in the unified investment law to deduct investment management and other costs of its investments before distributing income. Most of the Board's expenses fall within this last category.

There are **two** distinctly separate fund classifications applicable to the Board, ***internal service fund*** and ***enterprise fund***. The Board's investment mission is classified as an internal service fund because this type of fund charges other accounts for the costs of the Board's services. The entire MBOI investment side is classified as an internal service fund and the Legislature sets the absolute dollar limit that can be applied against the accounts for this fund. The Board's INTERCAP Program and other municipal bond programs are classified as an enterprise fund because, as the name implies, these programs are enterprise in nature, they can be voluntarily used. The Board's financial statements present these two funding classifications separately.

At each quarterly meeting, the Board receives a breakout of the three main categories of costs incurred for its internal service fund: operations, custodial banking, and external investment charges.

Budget Process for the 2015 Legislative Session

As an administratively attached agency of the Department of Commerce (the “Department”), the Board submits its budget through the Department. As noted, the budget is exclusive to requesting the maximum permissive amount that the Board’s internal service fund can charge against all of its investment-mission accounts. In deriving this recommended total charge, the Board relies on directives from the Governor’s Budget Director as configured by Department staff. Board staff has input, but ultimately the Board’s budget is under the authority of the Department Director.

At the August meeting, staff will present the Department’s preliminary recommendation for the maximum rate for the 2016-2017 biennia and the draft narrative about the Board.

Budget Status Report

Attached in Tables I and II are the budgeted amounts for the account classifications, internal service fund and enterprise fund, respectively, and the amounts expensed-to-date. At the Board’s August meeting, as required by the Board’s Governance Policy, staff will recommend, for Board approval, funding amounts for the various operational categories for its two major fund types.

Staff Levels

As required by the Board’s Governance Policy, staff is required to recommend staffing levels for the next biennia. The Board is currently authorized for eight exempt positions and 24 classified positions.

Recommendation

Staff recommends the current total staffing level of eight exempt and 24 classified full-time equivalents, as authorized by the Legislature and by statute, be reaffirmed by the Board.

Table I			
Board of Investments			
Investments			
(Internal Service Fund 06527)			
		Actual	
Category	FY14 Budget	As of 4/2014	Remaining
Personal Services	2,784,752	2,242,133	542,619
Board Per Diem	7,817	3,440	4,377
Board of Housing Mortgage Services	40,000	-	40,000
Research Services	776,706	641,546	135,160
Consulting Services	320,000	221,250	98,750
Other Contracted Services (1)	391,535	274,865	116,670
Supplies/Materials (2)	50,000	23,825	26,175
Communications (3)	30,000	22,788	7,212
In-State Travel	3,000	3,553	(553)
Out-of-State Travel	35,000	29,317	5,683
Board Travel & Education	13,000	5,181	7,819
Building Rent	164,000	149,966	14,034
Other Rent (4)	3,500	2,610	890
Repairs & Maintenance (5)	1,500	712	788
Commerce Department Services (6)	409,111	329,076	80,035
Miscellaneous (7)	40,000	36,931	3,069
Total	5,069,921	3,987,193	1,082,728
Personal Services	2,792,569	2,245,573	546,996
Operating Expenses	<u>2,277,352</u>	<u>1,741,620</u>	<u>535,732</u>
	5,069,921	3,987,193	1,082,728
Authorized Fee	5,109,144		
(Under)/Over	(39,223)		
(1) Includes Employment Serv/Legal Serv//Audit/Print Services/State Computer Network Charges			
(2) Computers Hardware & Software/Office Furniture/Office Supplies/Books & Reference Materials			
(3) Phones/Parcel Delivery/Postage			
(4) Copiers/Records Management			
(5) Printer/FAX Repair & Maintenance			
(6) Percentage of Personnel Services			
(7) Training/Education/Subscriptions/Dues/Freight/Recruitment Expenses/Misc State Charges			

Table II
Board of Investments
Bond Program
(Enterprise Fund 06014)

<u>Category</u>	<u>FY14 Budget</u>	<u>Actual</u> <u>As of 4/2014</u>	<u>Remaining</u>
Personal Services	325,558	241,067	84,491
Board Per Diem	1,834	860	974
Other Contracted Services (1)	32,000	24,431	7,569
Supplies/Materials (2)	8,000	5,169	2,831
Communications (3)	6,420	5,839	581
In-State Travel	1,000	1,119	(119)
Out-of-State Travel	500	-	500
Board Travel & Education	2,500	991	1,509
Building Rent	46,000	41,721	4,279
Other Rent (4)	750	574	176
Repairs & Maintenance (5)	500	158	342
Commerce Department Services (6)	47,963	35,452	12,511
Miscellaneous (7)	5,421	3,919	1,502
Total	478,446	361,300	117,146
Personal Services	327,392	241,927	85,465
Operating Expenses	151,054	119,373	31,681
	478,446	361,300	117,146
(1) Includes Employment Serv/Legal Serv//Audit/Print Services/State Computer Network Charges			
(2) Computers Hardware & Software/Office Furniture/Office Supplies/Books & Reference Materials			
(3) Phones/Parcel Delivery/Postage			
(4) Copiers/Records Management			
(5) Printer/FAX Repair & Maintenance			
(6) Percentage of Personnel Services			
(7) Training/Education/Subscriptions/Dues/Freight/Recruitment Expenses/Misc State Charges			

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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: May 20, 2014
Subject: Commercial and Residential Portfolios

The commercial loan portfolio balance was \$104,850,137.64 as of April 30, 2014. The yield of the portfolio is currently 4.60%.

There were three committed loans totaling \$2,030,000 and nine reserved loans totaling \$45,011,375, as of April 30, 2014. Two loans were past due more than 30 days but less than 90 days totaling \$206,750.23. 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.

The residential real estate mortgage portfolio totaled \$12,287,924.30 as of April 30, 2014. There are no outstanding residential reservations for this program. Past due residential loans over 30 days totaled \$317,896.05 and consisted of six loans representing 2.59% of the portfolio. There were four residential loans from 30 – 89 days delinquent totaling \$179,705.46 or 1.46% of the residential loan portfolio. Residential delinquencies over 90 days totaled \$138,190.59 or 1.12% of the portfolio and consisted of two loans. All of the past due loans are federally guaranteed.

The Veterans Home Mortgage Loan Program (VHML) continues to grow. As of April 30, 2014, the VHML portfolio totaled \$22,287,329.66. A total of \$30,000,000 has been legislatively allocated to this program. No loans were delinquent.

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Bond Program

INTERCAP Loan Program

Activity Summary

As of March 31, 2014

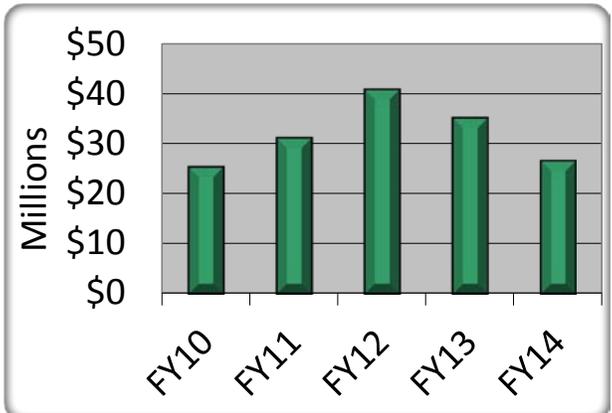
Since Inception 1987 - March 2014

Total Bonds Issued	148,000,000
Total Loan Commitments	457,202,249
Total Loans Funded	420,786,014
Total Bonds Outstanding	106,450,000
Total Loans Outstanding	73,198,708
Loan Commitments Pending	36,416,235

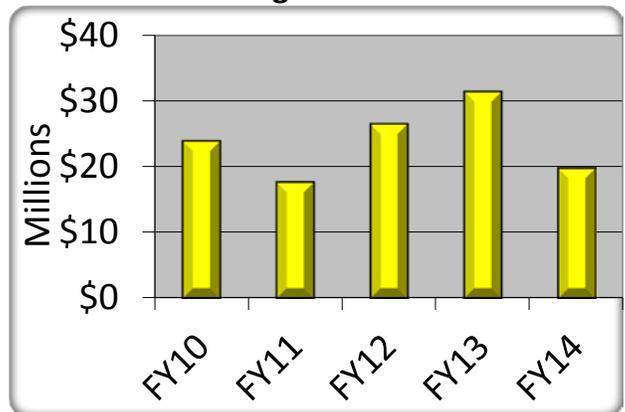
FY2014 To Date

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	672,077	1,713,127
February	3,676,380	1,692,330
March	1,485,000	2,038,512
April	-	-
May	-	-
June-14	-	-
To Date	\$ 26,604,211	\$ 19,851,896

Commitments FY10-FY14



Fundings FY10-FY14



Note: Commitments include withdrawn and expired loans.

Variable Loan Rate History February 16, 2007 - February 15, 2015

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%
February 16, 2010 - February 15, 2011	1.95%	February 16, 2014 - February 15, 2015	1.00%

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: May 20, 2014
Subject: INTERCAP Staff Approved Loans Committed

Staff approved the following loans between January 1 and March 31, 2014.



Borrower:	Lewis and Clark County
Purpose:	Finance Settler's Cove RID road improvements
Staff Approval Date	January 29, 2014
Board Loan Amount:	\$109,533
Other Funding Sources:	\$ 0
Total Project Cost:	\$109,533
Term:	15 years

Borrower:	City of Whitefish
Purpose:	Purchase an Ambulance
Staff Approval Date	January 31, 2014
Board Loan Amount:	\$155,597
Other Funding Sources:	\$ 0
Total Project Cost:	\$155,597
Term:	5 years

Borrower:	McCone County
Purpose:	Finance new Sheriff's Department vehicle
Staff Approval Date	February 3, 2014
Board Loan Amount:	\$37,640
Other Funding Sources:	\$ 0
Total Project Cost:	\$37,640
Term:	5 years

Borrower:	City of Whitefish
Purpose:	Purchase Police Department administration vehicle
Staff Approval Date	February 7, 2014
Board Loan Amount:	\$16,339
Other Funding Sources:	\$ 0
Total Project Cost:	\$16,339
Term:	3 years

Borrower:	City of Whitefish
Purpose:	Purchase 2014 Type I Fire Pumper
Staff Approval Date	February 13, 2014
Board Loan Amount:	\$485,112
Other Funding Sources:	\$ 0
Total Project Cost:	\$485,112
Term:	10 years

Borrower:	Missoula County
Purpose:	Purchase new vehicle and three dump trucks for Public Works staff and install security improvements at Public Works facility
Staff Approval Date	February 10, 2014
Board Loan Amount:	\$487,288
Other Funding Sources:	\$ 0
Total Project Cost:	\$487,288
Term:	3 years

Borrower:	Missoula County
Purpose:	Purchase six motor graders
Staff Approval Date	February 27, 2014
Board Loan Amount:	\$560,000
Other Funding Sources:	\$ 0
Total Project Cost:	\$560,000
Term:	5 years

Borrower:	Custer County
Purpose:	Purchase a new motor grader
Staff Approval Date	March 5, 2014
Board Loan Amount:	\$110,000
Other Funding Sources:	\$150,000
Total Project Cost:	\$260,000
Term:	5 years

Borrower:	Lewis and Clark County
Purpose:	Finance costs associated with constructing a Search & Rescue building.
Staff Approval Date	March 17, 2014
Board Loan Amount:	\$815,000
Other Funding Sources:	\$ 0
Total Project Cost:	\$815,000
Term:	9 years



MONTANA UNIVERSITY SYSTEM

Borrower:	MSU- Bozeman
Purpose:	Finance Wireless Campus Expansion
Staff Approval Date	January 7, 2014
Board Loan Amount:	\$ 279,347
Other Funding Sources:	\$1,220,653
Total Project Cost:	\$1,500,000
Term:	10 years

Borrower:	MSU- Bozeman
Purpose:	Purchase and license Argos Software
Staff Approval Date	January 7, 2014
Board Loan Amount:	\$127,600
Other Funding Sources:	\$ 0
Total Project Cost:	\$127,600
Term:	3 years

Borrower:	UM- Western
Purpose:	Purchase home and property within the campus boundary
Staff Approval Date	February 27, 2014
Board Loan Amount:	\$150,000
Other Funding Sources:	\$ 75,000
Total Project Cost:	\$225,000
Term:	15 years

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PROXY VOTING

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
Date: May 21, 2014
Subject: Staff Review of Proxy Voting

Overview

This memorandum reviews stock voting proxies as part of the Board's 24-month systematic work/education plan by reviewing and updating who and how the Board's public equity proxies are voted. Proxy policy was also a recommendation by the performance auditors: *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.*

Staff's response: 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.

Role of Stock Proxies

Some key decisions involving public corporations typically require a vote of the stockholders in a process set out in each corporation's by-laws. Membership of the board of directors, senior management pay, external auditors, and capital structure changes generally require an affirmative majority vote of the owners, the stockholders, of the company. The vote is carried out by 'proxy' a mechanism not requiring actual attendance at the corporation's annual meeting.

Common Proxy Issues

- Corporate Governance
- Elections of Directors
- Appointment of Auditors
- Changes in Legal and Capital Structure
- Corporate Restructurings, Mergers and Acquisitions
- Proposals Affecting Shareholder Rights
- Anti-Takeover Measures
- Executive Compensation

Board's Proxy Policies

The Board addresses proxy voting in identical language in both its domestic and international equity investment policies.

Proxy Voting...Active voting of proxies is an important part of the Board's investment program. Under the contractual arrangements between the Board and its investment managers, the responsibility for voting proxies on the investments is delegated to the managers. They are contractually required to establish a proxy voting program in coordination with Board Staff and are required to vote proxies, excluding shares on loan under the Board's securities lending program, in the interest of the Plans' beneficiaries. Records of proxy votes shall be maintained by the Managers, and/or its third party designee, and submitted to Staff and/or an external service provider annually.

Staff will monitor the proxy voting practices of the Board's external investment managers. 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 fiduciary responsibilities with respect to proxy voting.

Board's Delegation to Investment Managers Proxy

The BOI has delegated proxy responsibility to its investment managers who may choose to vote proxies completely independently, or may use the service of a proxy advice firm. The Board's external managers are required to provide us with their proxy voting policies. Staff obtains a compilation of proxy votes through the services of Broadridge.

All current BOI investment managers have submitted their proxy voting guidelines to the BOI. The more common traits are:

- They generally acknowledge that especial care and prudence when voting proxies is required with the fiduciary standards required by ERISA plans
- Many acknowledge using outside vendors, but generally do not bind themselves absolutely to the outside recommendation
- Most guidelines explicitly list what types of proxy issues will be voted *against*, for example
 - Excessive compensation
 - Poison pills and other harmful limitations to full value
 - Deleterious changes to deleterious capital structure
 - Lack of board member independence, auditors, or poor governance choices

Investment Managers Often Use External Consultants on Proxy Voting

Many external managers use outside consultants to vote, or at least advise managers, in proxy voting. There are only two primary proxy consultants, Institutional Shareholder Services (ISS) and Glass Lewis. Managers can make blanket adjustments to the voting guidelines template provided by the outside voting service. Changes can be made at any time to the template. For instance, if ISS has a default of voting **for** all poison pill proposals, the manager can change the default vote for their clients to **against** all poison pill proposals. The managers reserve the right to over-ride the consultant and almost all have language that allows the fund manager to have input in the voting process as long as the request is documented in writing.

Proxy Advisory Services

Two firms dominate the proxy consultant space. Institutional Shareholder Services (ISS), founded 25 years ago, is a subsidiary of MSCI Inc., well-known for its benchmark services. ISS states that it tracks over 33,000 companies in 114 markets worldwide. Glass, Lewis & Co., founded in 2003, also provides proxy advisory service and states that its clientele manage collectively more than \$15 trillion in assets worldwide.

Using Specific BOI Investment Managers as Examples

Below are themes routinely arising over proxy issues and specific examples how a firm addresses them.

ERISA

It is standard practice for the investment manager to acknowledge the importance of fiduciary care as required by ERISA (the federal Employee Retirement Income Security Act). For example, the language below is taken directly from one of the Board's managers, Acadian Asset Management:

“When voting proxies on behalf of our clients, Acadian assumes a fiduciary responsibility to vote in our clients' best interests. In addition, with respect to benefit plans under the Employee Retirement Income Securities Act (ERISA), Acadian acknowledges its responsibility as a fiduciary to vote proxies prudently and solely in the best interest of plan participants and beneficiaries. So that it may fulfill these fiduciary responsibilities to clients, Acadian has adopted and implemented these written policies and procedures reasonably designed to ensure that it votes proxies in the best interest of clients.”

Client Direction or Withholding a Vote

“There may be occasions when Acadian determines that not voting a proxy may be in the best interests of clients; for example, when the cost of voting the proxy exceeds the expected benefit to the client. There may also be times when clients have instructed Acadian not to vote proxies or direct Acadian to vote proxies in a certain manner. Acadian will maintain written instructions from clients with respect to directing proxy votes.

Investment Managers Generally reserve the Right to Vote outside of Consultant's Recommendations

Acadian also reserves the right to override ISS vote recommendations under certain circumstances. Acadian will only do so if they believe that changing the vote is in the best interest of clients. All overrides will be approved by an Executive Officer of Acadian and will be documented with the reasons for voting against the ISS recommendation.

Investment Managers establish Proxy Oversight Committee

It is common for the investment manager to form an internal proxy oversight committee in addition to outside consultants. From Analytic Investors:

“Analytic Investors acknowledges that it has a duty of care to its clients that requires it to monitor corporate events and vote client proxies. Analytic Investors has established a Proxy Oversight Committee (the “Committee”), to oversee the proxy voting process. The Committee consists of at least one of the

firm's Chief Investment Officer, the Compliance Officer, and the Proxy Coordinator. The Committee seeks to develop, recommend, and monitor policies governing proxy voting. The adopted guidelines for proxy voting have been developed to be consistent, wherever possible, with enhancing long-term shareholder value and leading corporate governance practices. Analytic Investors has a policy not to be unduly influenced by representatives of management or any public interest or other outside groups when voting proxies. To this end, Analytic Investors has contracted with an independent proxy voting service (the "Proxy Service")."

Outside Proxy Consultants to avoid Conflicts of Interest

It is also common for investment managers to protect themselves from conflicts of interest. Again, from Acadian: *Relying on ISS to vote proxies ensures that Acadian votes in the best interest of its clients and insulates Acadian's voting decisions from any potential conflicts of interest. There may also be times when clients have instructed Acadian not to vote proxies or direct Acadian to vote proxies in a certain manner. Acadian will maintain written instructions from clients with respect to directing proxy votes. Acadian also reserves the right to override ISS vote recommendations under certain circumstances.*

BOI's Investment Managers and their Proxy Service Provider

The list below identifies who uses which proxy service company and any other qualifier.

Acadian – ISS

Alliance Bernstein – Internal Investment managers vote proxies (will use outside consultants as advisors and for conflict of interest)

American Century – Internal Investment managers vote proxies (will use independent board in case of conflict of interest)

Analytic – ISS

Artisan – ISS

Franklin Templeton – Internal Investment managers vote proxies (will use outside consultants as advisors and for conflict of interest)

Hansberger – ISS

ING – ISS

Intech – ISS

Iridian – Internal Investment managers vote proxies (will use outside consultants as advisors for conflict of interest)

JP Morgan – Internal Investment managers vote proxies (will use outside consultants for conflict of interest)

Martin Currie – ISS

MetWest – Internal Investment managers vote proxies (will use outside consultants for conflict of interest)

Nicholas – ISS

T Rowe Price – ISS maintains and implements a custom voting policy for the Price Funds and other client accounts.

TimesSquare – ISS

Vaughan Nelson – Internal Investment managers vote proxies (will use outside consultants for conflict of interest)

Proxy voting summary for Calendar 2013

The table* below lists proxy votes recorded for meeting dates from January 1, 2013 to December 31, 2013. There were a total of 1,590 proxies and almost 100 million shares voted. The data below is obtained through Broadridge's Proxy Edge product. We have access to this service at no charge based on our relationship with State Street. We are able to view all of our managers' votes parsed by company or manager for custom time periods. The majority of shares are voted in the second quarter.

Manager Name	Company Name	Data			
		Sum of Ballot Shares	Sum of Voted Shares	Sum of Not Voted	Sum of Shares On Loan
⊕ Acadian		39,768,017	39,381,324	386,693	2,730,698
⊕ Analytic		1,799,503	1,799,503	0	119,193
⊕ Artisan		2,650,109	2,637,409	12,700	70,752
⊕ Bernstein Intl		8,601,860	8,251,516	350,344	299,760
⊕ Bernstein Small Cap		210,833	210,833	0	113,091
⊕ Hansberger		16,728,085	16,728,085	0	4,721,500
⊕ ING		75,898	75,898	0	42,769
⊕ Intech		1,618,854	1,618,854	0	42,933
⊕ Iridian		100,510	84,250	16,260	24,550
⊕ JP Morgan		6,353,492	6,353,492	0	59,260
⊕ Martin Currie		13,465,176	13,090,202	374,974	278,931
⊕ Metwest		123,098	123,098	0	59,752
⊕ Nicholas		170,840	170,840	0	5,648
⊕ T Rowe		4,558,015	4,558,015	0	110,448
⊕ TimesSquare		1,983,105	1,983,105	0	196,923
⊕ Vaughan Nelson		1,879,327	1,879,327	0	97,109
Grand Total		100,086,722	98,945,751	1,140,971	8,973,317

Proxies occasionally cannot be voted or are purposely not voted. If a stock is loaned** via securities lending, which the Board allows, the voting rights go to the borrower, who becomes the technical owner. Some countries forbid an equity owner from **both trading** a company's stock **and exercising proxy rights** during a proxy time period. It is not unusual for a manager to waive proxy voting so as not to limit possible trading. Countries having a 'no trade period' are: Argentina, Belgium, Egypt, Lebanon, Luxembourg, Mauritius, Morocco, Norway, Slovak Republic, Switzerland and Turkey.

*The report does not include comingled managers.

**Shares on loan must be recalled in order for the manager to direct a vote. Managers weigh the impact of removing the shares from loan with the desire to vote the shares.

Conclusion

Staff believes that delegating proxy voting to its outside investment managers, the *status quo*, is justified and reasonable. Individual managers have a vested economic interest in managing proxy votes that best benefit their view of investment return prospects. Retaining proxy control internally would require delegating proxy voting to a proxy service company such as ISS, at a new additional expense to the Board. Having in-house BOI staff solely voting proxies is unrealistic due to the extensive amount of due-diligence required.

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Investment Activity

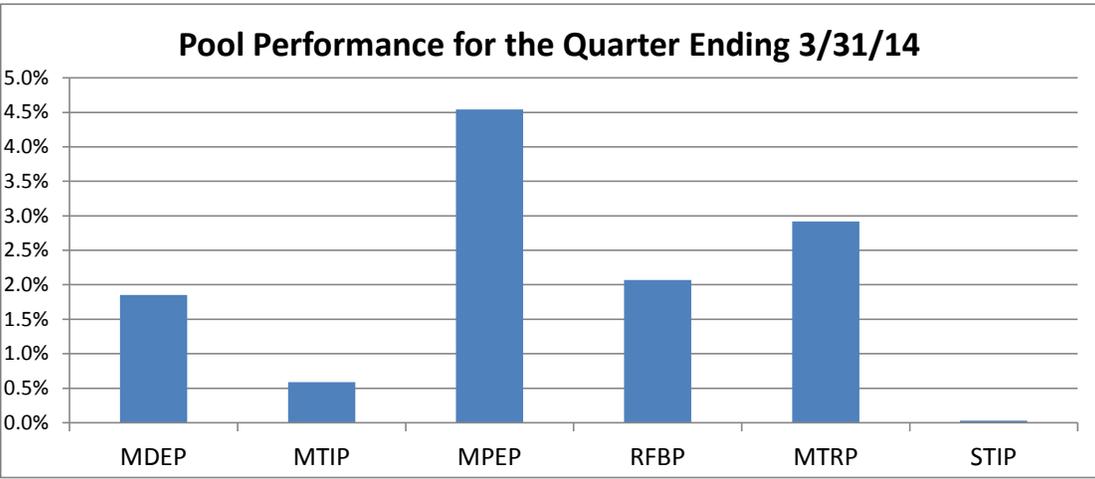
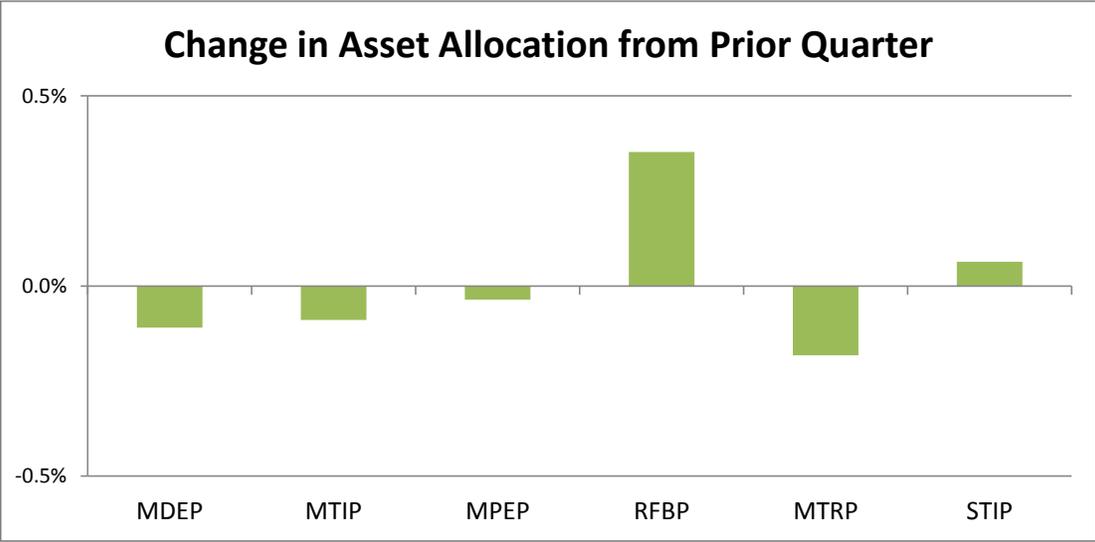
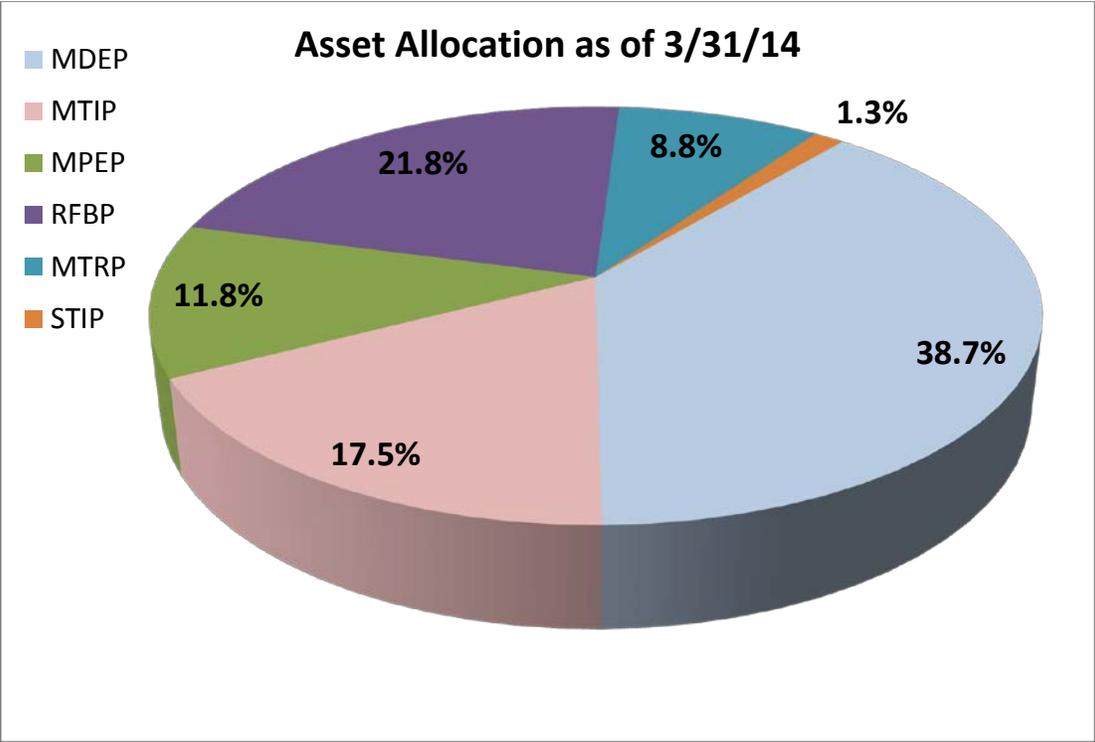
ALLOCATION REPORT

Retirement Systems Asset Allocations as of 12/31/13								
<u>Pension Fund</u>	<u>MDEP</u>	<u>MTIP</u>	<u>MPEP</u>	<u>Total Equity</u>	<u>RFBP</u>	<u>MTRP</u>	<u>STIP</u>	<u>Total Assets</u>
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%	

Retirement Systems Asset Allocations as of 3/31/14								
<u>Pension Fund</u>	<u>MDEP</u>	<u>MTIP</u>	<u>MPEP</u>	<u>Total Equity</u>	<u>RFBP</u>	<u>MTRP</u>	<u>STIP</u>	<u>Total Assets</u>
PUBLIC EMPLOYEES	38.7%	17.5%	11.8%	68.0%	21.8%	8.8%	1.4%	\$ 4,768,552,686
TEACHERS	38.8%	17.6%	11.8%	68.2%	21.9%	8.8%	1.1%	\$ 3,503,644,886
POLICE	38.7%	17.6%	11.8%	68.1%	21.9%	8.8%	1.2%	\$ 296,548,162
SHERIFFS	38.6%	17.5%	11.8%	67.8%	21.8%	8.7%	1.7%	\$ 273,700,421
FIREFIGHTERS	38.7%	17.6%	11.8%	68.1%	21.8%	8.8%	1.3%	\$ 298,496,585
HIGHWAY PATROL	38.7%	17.5%	11.8%	68.1%	21.8%	8.8%	1.3%	\$ 121,446,882
GAME WARDENS	38.5%	17.4%	11.7%	67.6%	21.7%	8.7%	2.0%	\$ 132,614,187
JUDGES	38.6%	17.5%	11.8%	67.8%	21.8%	8.8%	1.6%	\$ 81,097,553
VOL FIREFIGHTERS	38.8%	17.6%	11.8%	68.3%	21.9%	8.8%	1.1%	\$ 30,776,546
TOTAL	38.7%	17.5%	11.8%	68.1%	21.8%	8.8%	1.3%	\$ 9,506,877,908
Approved Range	28 - 44%	14 - 22%	9 - 15%	58 - 72%	22 - 30%	6-10%	1 - 5%	

Change From Last Quarter								
<u>Pension Fund</u>	<u>MDEP</u>	<u>MTIP</u>	<u>MPEP</u>	<u>Total Equity</u>	<u>RFBP</u>	<u>MTRP</u>	<u>STIP</u>	<u>Total Assets</u>
PUBLIC EMPLOYEES	-0.1%	-0.1%	-0.1%	-0.3%	0.3%	-0.2%	0.1%	76,304,823
TEACHERS	-0.1%	-0.1%	0.0%	-0.2%	0.4%	-0.2%	0.0%	39,107,816
POLICE	-0.1%	-0.1%	0.0%	-0.2%	0.4%	-0.2%	0.1%	3,456,723
SHERIFFS	0.0%	-0.1%	0.0%	-0.2%	0.4%	-0.2%	0.0%	5,058,079
FIREFIGHTERS	-0.1%	-0.1%	0.0%	-0.2%	0.4%	-0.2%	0.0%	3,887,808
HIGHWAY PATROL	-0.1%	-0.1%	-0.1%	-0.3%	0.4%	-0.2%	0.1%	1,785,596
GAME WARDENS	-0.2%	-0.1%	-0.1%	-0.4%	0.3%	-0.2%	0.3%	3,613,430
JUDGES	-0.1%	-0.1%	0.0%	-0.3%	0.3%	-0.2%	0.1%	1,354,490
VOL FIREFIGHTERS	-0.2%	-0.1%	-0.1%	-0.5%	0.3%	-0.2%	0.3%	(8,713)
TOTAL	-0.1%	-0.1%	0.0%	-0.2%	0.4%	-0.2%	0.1%	134,560,052

Allocations During Quarter						
<u>MDEP</u>	<u>MTIP</u>	<u>MPEP</u>	<u>Total Equity</u>	<u>RFBP</u>	<u>MTRP</u>	
(\$22,000,000)	\$8,000,000	(\$35,000,000)	(\$49,000,000)	\$37,000,000	(\$23,600,000)	
Net New Investments for Quarter					→	(\$35,600,000)



Montana Board of Investments

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

Periods Ending March 31, 2014

Revised 5/20/14

	% Tot Equity		% US Equity		% Int'l Equity		% Fixed Inc.		% Cash Equiv		% Real Estate		% Pvt. Equity	
High	72.73		68.94		31.50		89.15		11.16		11.88		38.04	
Median	54.80		31.04		20.54		22.04		3.48		3.79		11.80	
Low	30.95		16.24		3.79		9.73		0.01		0.09		1.22	
Observations	30		30		30		30		27		26		29	
PUBLIC EMPLOYEES RET SYS	56.16	43	38.65	40	17.51	63	21.85	53	1.44	80	8.78	24	11.78	50
TEACHERS RETIREMENT SYS	56.33	42	38.73	39	17.6	62	21.93	52	1.1	91	8.81	22	11.84	49

Montana Board of Investments

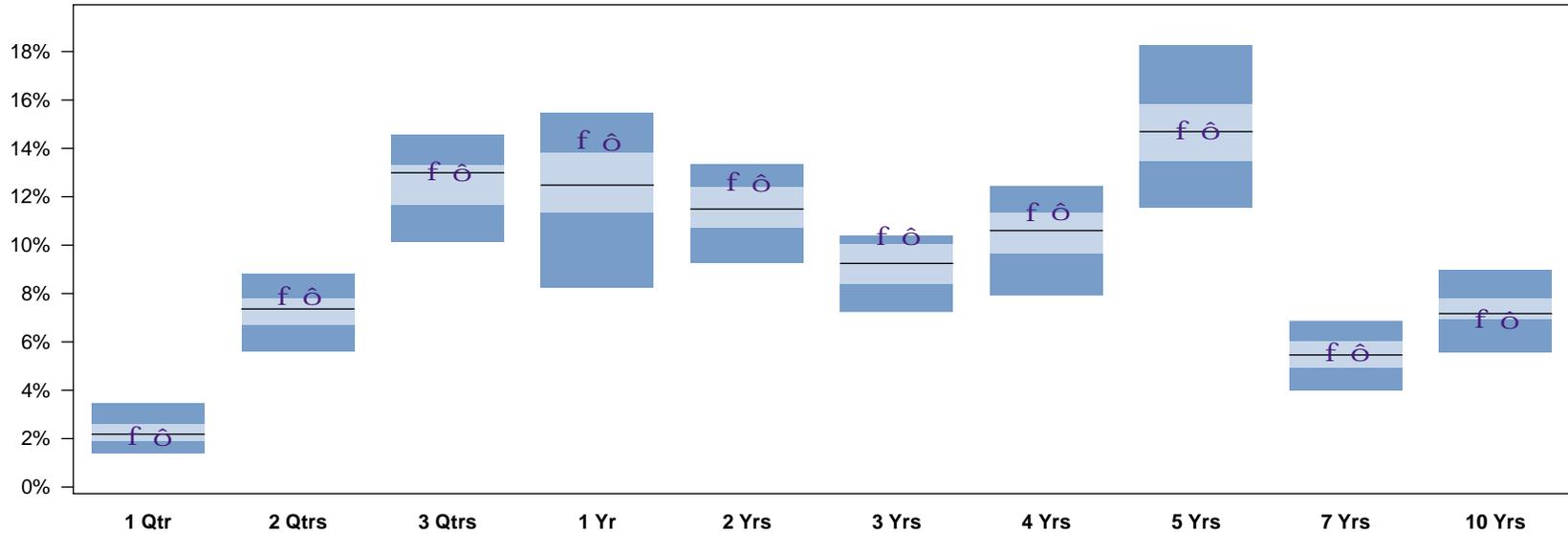
Public Funds (DB) \$3B to \$20B & >30% Equity (SSE)

PERIOD ENDING March 31, 2014

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	3.47	8.80	14.57	15.45	13.35	10.40	12.43	18.25	6.87	8.98										
25th Percentile	2.63	7.79	13.32	13.82	12.42	10.07	11.36	15.83	6.05	7.81										
50th Percentile	2.18	7.36	12.99	12.48	11.49	9.24	10.60	14.69	5.46	7.17										
75th Percentile	1.89	6.71	11.63	11.36	10.72	8.38	9.66	13.47	4.94	6.95										
95th Percentile	1.41	5.61	10.13	8.25	9.28	7.24	7.94	11.55	4.01	5.58										
No. of Obs	32	32	31	31	31	32	32	32	32	31										
f PUBLIC EMPLOYEES RE	2.19	50	7.99	17	13.15	38	14.43	16	12.70	22	10.46	4	11.47	23	14.82	49	5.68	42	7.03	63
o TEACHERS RETIREMEN	2.16	52	7.97	17	13.10	42	14.38	20	12.68	23	10.45	5	11.48	18	14.83	49	5.68	44	7.02	63

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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: May 20, 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 December 31st.
- (ii) **New Commitments:**
The table below summarizes the investment decisions made by staff since the last Board meeting. Two commitments of \$20M each were made to Trilantic Energy Partners (North America), LP and GI Partners Fund IV, LP. Investment briefs summarizing these funds and the general partners follow.

Fund Name	Vintage	Subclass	Sector	Amount	Date
Trilantic Energy Partners (North America), LP	2014	Buyout	Energy	\$20M	3/19/14
GI Partners Fund IV, LP	2014	Buyout	Diversified	\$20M	3/19/14

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

Montana Board of Investments

Private Equity Board Report

Q4 2013

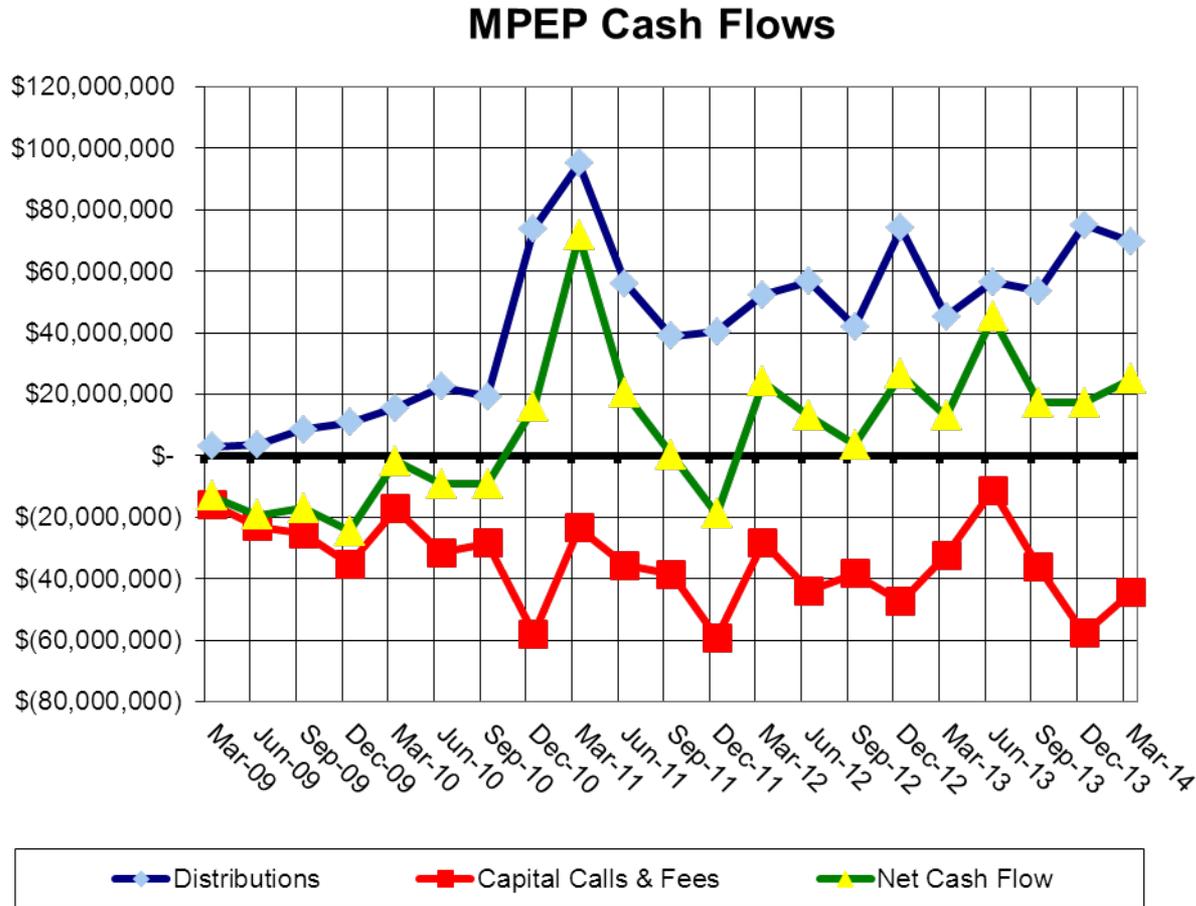
Due to, among other things, the lack of a valuation standard in the private equity industry, differences in the pace of investment across funds and the understatement of returns in the early years of a fund's life, the internal rate of return information may not accurately reflect current or expected 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 Flow

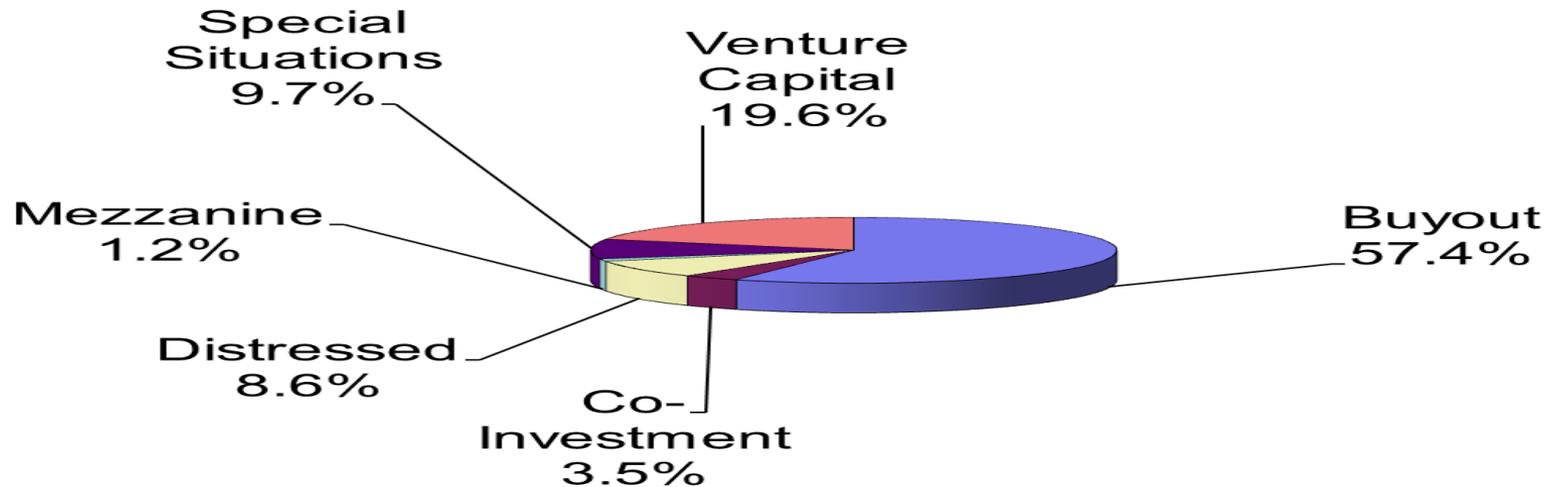
March 31, 2009 through March 31, 2014



Net cash flow for the quarter ending 3/31/14 remained positive as distributions continued to outpace capital calls. Broadly speaking relative to 4Q13, US leveraged buyout activity for the period ending 1Q14 was up both in terms of dollar volume and number of transactions. In terms of the US IPO market, 12 IPOs were completed in Q1 2014, compared to eight deals in 4Q 2013 and six in Q1 2013. Overall, US IPO proceeds increased 71% year over year, to \$1.6 billion, but declined from 4Q 2013.

Q4 2013 Strategy – Total Exposure

(Since inception through December 31, 2013)

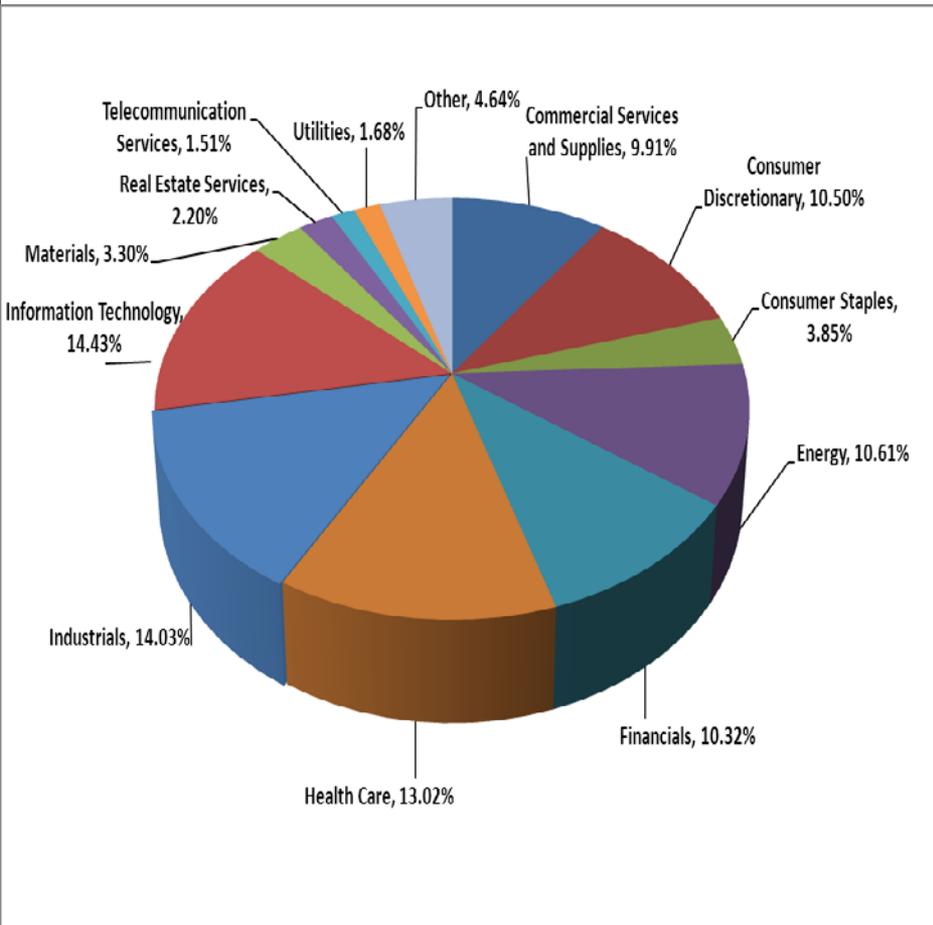


Strategy	Remaining Commitments	Percentage	Market Value	Percentage	Total Exposure	Percentage
Buyout	\$450,964,336	67.1%	\$581,077,559	51.5%	\$1,032,041,895	57.4%
Co-Investment	\$19,421,867	2.9%	\$43,704,310	3.9%	\$63,126,177	3.5%
Distressed	\$47,508,382	7.1%	\$107,423,676	9.5%	\$154,932,057	8.6%
Mezzanine	\$1,013,554	0.2%	\$20,728,871	1.8%	\$21,742,425	1.2%
Special Situations	\$78,987,294	11.8%	\$95,885,426	8.5%	\$174,872,720	9.7%
Venture Capital	\$74,043,604	11.0%	\$278,719,612	24.7%	\$352,763,216	19.6%
Total	\$671,939,037	100.0%	\$1,127,539,453	100.0%	\$1,799,478,490	100.0%

The portfolio is well diversified by strategy, with the most significant strategy weight consisting of Buyout at 57.4% of total exposure. When combined with Co-Investment and Special Situations, the overall exposure to Buyout strategies is approximately 71%. 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.

Q4 2013 Industry – Market Value Exposure

(Since inception through December 31, 2013)

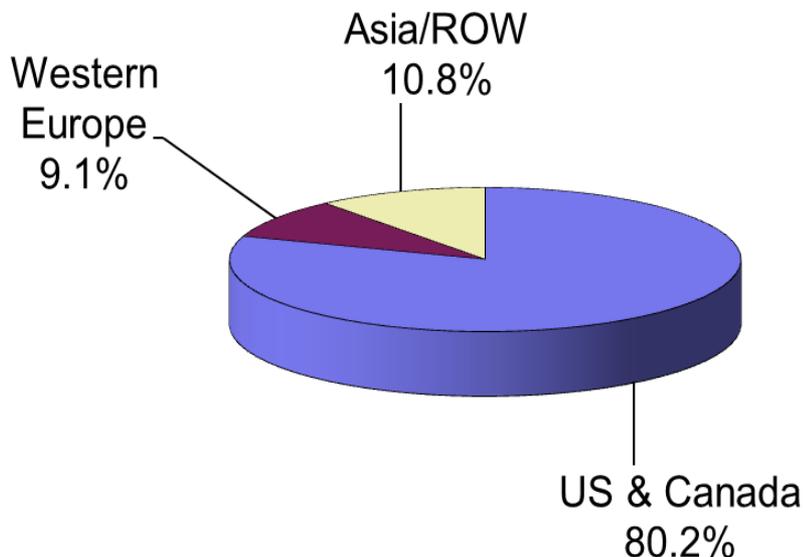


Industry	Investments, At Market Value	Percentage
Commercial Services and Supplies	107,880,806.19	9.9%
Consumer Discretionary	114,354,690.68	10.5%
Consumer Staples	41,933,407.29	3.9%
Energy	115,516,332.48	10.6%
Financials	112,351,311.28	10.3%
Health Care	141,721,655.05	13.0%
Industrials	152,792,394.31	14.0%
Information Technology	157,064,169.81	14.4%
Materials	35,919,710.28	3.3%
Real Estate Services	23,974,878.33	2.2%
Telecommunication Services	16,399,912.05	1.5%
Utilities	18,289,054.17	1.7%
Other	50,542,565.29	4.6%
Total	1,088,740,887.21	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 63% 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.

Q4 2013 Geography – Total Exposure

(Since inception through December 31, 2013)



The portfolio's predominate geographic exposure is to developed North America, representing 80.2% 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 constraints on internal resources.

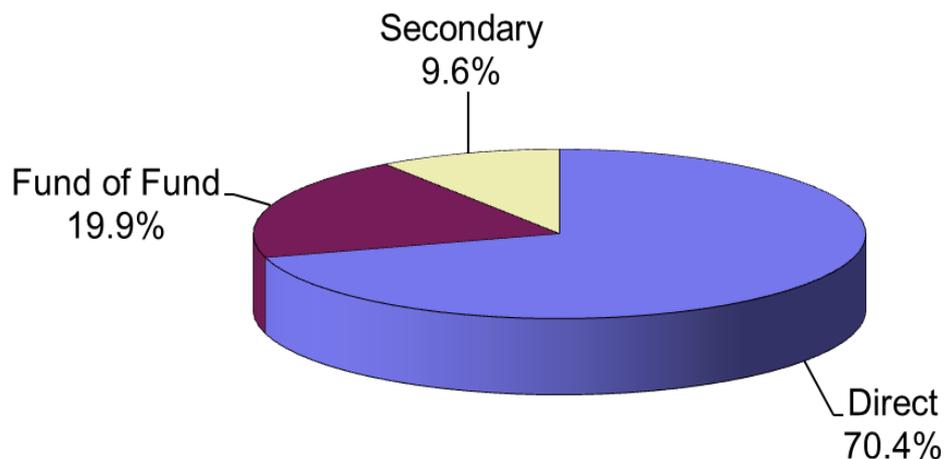
Geography	Remaining Commitments (1)	Percentage	Market Value (2)	Percentage	Total Exposure	Percentage
US & Canada	\$ 606,137,542	90.2%	\$ 808,623,548	74.0%	\$ 1,414,761,090	80.2%
Western Europe	\$ 16,718,657	2.5%	\$ 143,133,237	13.1%	\$ 159,851,895	9.1%
Asia/ROW	\$ 49,082,838	7.3%	\$ 140,679,109	12.9%	\$ 189,761,946	10.8%
Total	\$ 671,939,037	100.0%	\$ 1,092,435,895	100.0%	\$ 1,764,374,931	100.0%

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

(2) Market Value represents the aggregate market values of the underlying investment companies of the partnerships.

Q4 2013 Investment Vehicle – Total Exposure

(Since inception through December 31, 2013)



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.

Investment Vehicle	Remaining Commitments	Percentage	Market Value	Percentage	Total Exposure	Percentage
Direct	\$ 504,738,501	75.1%	\$ 762,830,672	67.7%	\$ 1,267,569,174	70.4%
Fund of Fund	\$ 120,355,056	17.9%	\$ 237,998,547	21.1%	\$ 358,353,603	19.9%
Secondary	\$ 46,845,479	7.0%	\$ 126,710,234	11.2%	\$ 173,555,713	9.6%
Total	\$ 671,939,036	100.0%	\$ 1,127,539,453	100.0%	\$ 1,799,478,489	100.0%

Q4 2013 1 – 3 – 5 – 7 Year Periodic Return Comparison

Description	Current				1 Year Return	3 Year Return	5 Year Return	7 Year Return
	Count	Ending Market Value	Inv Multiple	Annual. ROR	Annual. ROR	Annual. ROR	Annual. ROR	Annual. ROR
Total	151	1,127,539,453	1.49	12.62	14.99	13.17	13.84	9.02
Adams Street Funds	34	136,730,293	1.58	12.35	17.08	11.02	11.81	6.65
ASP - Direct VC Funds	4	26,397,335	1.72	16.13	26.41	23.68	16.17	8.92
ASP - Secondary Funds	7	9,289,821	1.65	41.73	10.39	3.77	10.01	7.93
ASP - U.S. Partnership Funds	14	88,292,304	1.52	9.94	16.77	9.75	11.10	6.03
ASP Non-US Partnership Funds	9	12,750,833	1.58	10.58	7.97	5.81	9.73	4.40
Buyout	42	405,810,231	1.65	12.58	20.33	18.01	16.44	12.84
Co-Investment	3	43,704,310	1.36	8.89	18.57	12.48	14.43	8.71
Distressed	11	105,141,769	1.50	24.47	16.52	14.62	21.81	13.19
Mezzanine	3	16,343,121	1.33	7.33	12.28	7.73	3.03	5.03
Non-US Private Equity	11	89,880,651	1.14	5.13	5.46	8.14	13.05	(0.18)
Secondary	8	117,420,413	1.42	13.07	9.38	11.17	9.88	9.11
Special Situations	9	92,135,118	1.23	7.05	8.98	6.05	9.09	6.69
Venture Capital	30	120,373,548	1.34	15.19	8.98	10.94	9.18	7.01

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 12/31/13, the portfolio's since inception net investment multiple and net IRR results were essentially flat relative to last quarter at 1.49x and 12.62% compared to 1.49x and 12.57% last quarter. The trailing 5-yr. return improved noticeably to 13.84% vs. 9.63% last quarter reflecting the drop off of poor Q4'08 returns. 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.

Q4 2013 LPs by Family of Funds

Description	Vintage Year	Since Inception									
		Capital Commitment	Capital Contributed for Investment	Management Fees	Remaining Commitment	% Capital Contributed/Committed	Capital Distributed	Ending Market Value	Net IRR	Investment Multiple	Total Exposure
LP's By Family of Funds (Active)											
Total		2,321,697,874	1,544,559,309	126,386,800	671,939,037	72	1,258,714,313	1,123,690,382	10.67	1.43	1,795,629,419
Adams Street Partners											
Adams Street Partners Fund - U.S.		295,356,964	262,998,242	28,698,053	15,427,960	99	296,810,435	136,730,293	7.71	1.49	152,158,253
Adams Street - 2002 U.S. Fund, L.P.	2002	94,000,000	80,484,134	7,026,366	6,489,500	93	68,961,075	59,618,114	8.00	1.47	66,107,614
Adams Street - 2003 U.S. Fund, L.P.	2003	34,000,000	29,667,806	2,700,194	1,632,000	95	31,782,286	18,818,204	8.99	1.56	20,450,204
Adams Street - 2004 U.S. Fund, L.P.	2004	20,000,000	17,217,500	1,462,500	1,320,000	93	15,532,714	12,263,633	8.20	1.49	13,583,633
Adams Street - 2005 U.S. Fund, L.P.	2005	15,000,000	12,696,329	1,103,671	1,200,000	92	10,040,329	9,630,169	7.30	1.43	10,830,169
Adams Street Partners Fund - Non-U.S.		25,000,000	20,902,499	1,760,001	2,337,500	91	11,605,746	18,906,108	6.46	1.35	21,243,608
Adams Street - 2002 Non-U.S. Fund, L.P.	2002	16,000,000	13,901,963	1,182,037	916,000	94	12,723,601	9,820,983	9.16	1.49	10,736,983
Adams Street - 2004 Non-U.S. Fund, L.P.	2004	6,000,000	5,303,740	462,260	234,000	96	7,353,865	2,497,513	12.56	1.71	2,731,513
Adams Street - 2005 Non-U.S. Fund, L.P.	2005	5,000,000	4,394,286	371,214	234,500	95	3,266,204	3,378,835	7.33	1.39	3,613,335
Brinson Partnership Trust - Non-U.S.		5,000,000	4,203,937	348,563	447,500	91	2,103,532	3,944,635	5.93	1.33	4,392,135
Brinson Non-U.S. Trust-1999 Primary Fund	1999	9,809,483	9,656,562	1,151,713	231,648	110	15,653,913	3,016,327	12.93	1.73	3,247,975
Brinson Non-U.S. Trust-2000 Primary Fund	2000	1,524,853	1,507,418	179,030	96,162	111	2,590,285	222,791	10.94	1.67	318,953
Brinson Non-U.S. Trust-2001 Primary Fund	2001	1,815,207	1,815,207	213,120	0	112	3,064,747	454,137	12.07	1.73	454,137
Brinson Non-U.S. Trust-2002 Primary Fund	2002	1,341,612	1,341,612	157,517	0	112	2,205,778	243,073	11.62	1.63	243,073
Brinson Non-U.S. Trust-2002 Secondary	2002	1,696,452	1,696,452	199,177	0	112	2,281,460	691,483	8.87	1.57	691,483
Brinson Non-U.S. Trust-2003 Primary Fund	2003	637,308	637,308	74,825	0	112	1,447,011	86,477	26.03	2.15	86,477
Brinson Non-U.S. Trust-2004 Primary Fund	2004	1,896,438	1,802,863	222,657	93,575	107	3,224,527	809,594	20.61	1.99	903,169
Brinson Partnership Trust - U.S.		897,613	855,702	105,387	41,911	107	840,105	508,772	7.78	1.40	550,683
Brinson Partners - 1998 Primary Fund	1998	95,547,481	91,751,846	10,236,674	4,015,812	107	120,718,318	29,884,176	7.48	1.48	33,899,988
Brinson Partners - 1999 Primary Fund	1999	7,161,019	7,122,251	840,141	38,768	111	10,819,769	173,358	6.46	1.38	212,126
Brinson Partners - 2000 Primary Fund	2000	8,346,761	7,998,817	985,958	347,944	108	9,619,329	834,871	2.61	1.16	1,182,815
Brinson Partners - 2001 Primary Fund	2001	20,064,960	19,087,369	2,301,092	985,390	107	25,935,289	3,760,133	5.89	1.39	4,745,523
Brinson Partners - 2002 Primary Fund	2002	15,496,322	14,995,863	1,614,473	666,114	107	18,472,395	5,164,204	6.02	1.42	5,830,318
Brinson Partners - 2002 Secondary Fund	2002	16,297,079	15,783,921	1,692,453	513,158	107	23,041,452	6,267,118	11.77	1.68	6,780,276
Brinson Partners - 2003 Primary Fund	2003	2,608,820	2,545,315	265,822	110,228	108	3,985,679	859,616	12.78	1.72	969,844
Brinson Partners - 2003 Secondary Fund	2003	15,589,100	14,784,432	1,591,098	804,668	105	17,671,273	6,879,988	9.39	1.50	7,684,656
Brinson Partners - 2004 Primary Fund	2004	1,151,151	1,094,757	109,038	56,394	105	2,302,297	350,370	22.81	2.20	406,764
Remaining ASP Funds		8,832,269	8,339,121	836,599	493,148	104	8,870,835	5,594,518	8.95	1.58	6,087,666
Adams Street Global Oppty Secondary Fund	2004	80,000,000	67,203,737	9,101,263	3,775,000	95	78,753,528	34,390,693	6.90	1.48	38,165,693
Adams Street V, L.P.	2003	25,000,000	19,769,569	1,455,431	3,775,000	85	23,617,126	7,993,358	11.22	1.49	11,768,358
BVCF IV, L.P.	1999	40,000,000	34,673,912	5,406,088	0	100	31,905,958	23,002,344	5.24	1.37	23,002,344
		15,000,000	12,760,256	2,239,744	0	100	23,230,444	3,394,991	7.34	1.78	3,394,991

Q4 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	12,855,897	2,290,520	19,856,935	43	3,891,309	19,013,172	14.23	1.51	38,870,107
Affinity Asia Pacific Fund III, L.P.	2006	15,000,000	11,313,542	1,981,158	1,706,967	89	3,891,309	17,707,283	15.14	1.62	19,414,250
Affinity Asia Pacific Fund IV, L.P.	2013	20,000,000	1,542,355	309,361	18,149,967	9	(0)	1,305,889	(36.63)	0.71	19,455,856
American Securities LLC		35,000,000	8,758,980	1,048,421	25,192,599	28	19,733	14,737,314	26.88	1.50	39,929,913
American Securities Partners VI, L.P.	2011	35,000,000	8,758,980	1,048,421	25,192,599	28	19,733	14,737,314	26.88	1.50	39,929,913
ArcLight Energy Partners		70,000,000	48,943,747	3,733,506	17,322,770	75	53,881,233	23,887,661	11.91	1.48	41,210,431
ArcLight Energy Partners Fund II, L.P.	2004	25,000,000	19,910,778	1,263,402	3,825,820	85	33,185,476	1,805,629	17.33	1.65	5,631,449
ArcLight Energy Partners Fund III, L.P.	2006	25,000,000	19,780,277	1,823,424	3,396,322	86	19,963,771	11,518,430	7.64	1.46	14,914,752
ArcLight Energy Partners Fund V, L.P.	2011	20,000,000	9,252,692	646,680	10,100,628	49	731,986	10,563,602	13.86	1.14	20,664,230
Audax		25,000,000	4,097,741	0	20,902,259	16	-	4,611,109	12.53	1.13	25,513,368
Audax Private Equity Fund IV, L.P.	2012	25,000,000	4,097,741	0	20,902,259	16	-	4,611,109	12.53	1.13	25,513,368
Avenue Investments		35,000,000	33,123,011	2,086,886	0	101	45,912,061	445,932	10.98	1.32	445,932
Avenue Special Situations Fund V, LP	2007	35,000,000	33,123,011	2,086,886	0	101	45,912,061	445,932	10.98	1.32	445,932
Axiom Asia Private Capital		50,000,000	19,204,356	1,608,225	29,225,903	42	2,496,591	18,798,847	1.45	1.02	48,024,750
Axiom Asia Private Capital II, LP	2009	25,000,000	16,013,937	1,298,116	7,726,431	69	2,496,583	15,678,908	2.71	1.05	23,405,339
Axiom Asia Private Capital III, LP	2012	25,000,000	3,190,419	310,109	21,499,472	14	8	3,119,939	(21.34)	0.89	24,619,411
Black Diamond Capital Management		25,000,000	13,716,403	969,692	10,313,905	59	728,410	15,838,254	9.44	1.13	26,152,159
BDCM Opportunity Fund III, L.P.	2011	25,000,000	13,716,403	969,692	10,313,905	59	728,410	15,838,254	9.44	1.13	26,152,159
Carlyle Partners		60,000,000	49,867,325	5,056,902	5,487,778	92	61,615,604	35,376,936	11.82	1.77	40,864,714
Carlyle Partners IV, L.P.	2005	35,000,000	30,710,214	1,664,556	2,801,627	92	45,883,053	20,747,298	13.63	2.06	23,548,925
Carlyle U.S. Growth Fund III, L.P.	2006	25,000,000	19,157,111	3,392,346	2,686,151	90	15,732,551	14,629,638	7.23	1.35	17,315,789
Cartesian Capital Group, LLC		20,000,000	5,448,118	617,202	13,934,680	30	29,479	6,082,105	0.72	1.01	20,016,785
Pangaea Two, L.P.	2012	20,000,000	5,448,118	617,202	13,934,680	30	29,479	6,082,105	0.72	1.01	20,016,785
CCMP Associates		55,000,000	25,272,489	2,681,242	27,046,269	51	15,591,160	30,883,619	14.75	1.66	57,929,888
CCMP Capital Investors II, L.P.	2006	30,000,000	25,243,420	2,500,281	2,256,299	92	15,609,668	30,954,073	14.94	1.68	33,210,372
CCMP Capital Investors III, L.P.	2013	25,000,000	29,069	180,961	24,789,970	1	(18,508)	(70,454)	N/A	(0.42)	24,719,516
Centerbridge		57,500,000	40,598,204	1,896,541	15,005,255	74	8,998,466	42,321,877	11.28	1.21	57,327,132
Centerbridge Capital Partners II, L.P.	2011	25,000,000	17,274,834	1,094,911	6,630,255	73	2,176	20,300,359	8.55	1.11	26,930,614
Centerbridge Special Credit Partners	2009	12,500,000	10,344,120	280,880	1,875,000	85	8,996,290	7,092,983	16.90	1.51	8,967,983
Centerbridge Special Credit Partners II	2012	20,000,000	12,979,250	520,750	6,500,000	68	-	14,928,535	11.82	1.11	21,428,535
CIVC Partners		25,000,000	11,407,410	1,900,738	11,882,424	53	11,737,570	9,405,926	34.02	1.59	21,288,350
CIVC Partners Fund IV, L.P.	2010	25,000,000	11,407,410	1,900,738	11,882,424	53	11,737,570	9,405,926	34.02	1.59	21,288,350
Energy Investors Funds		25,000,000	8,756,429	1,454,859	14,788,712	41	908,094	8,645,583	(6.38)	0.94	23,434,295
EIF US Power Fund IV, L.P.	2011	25,000,000	8,756,429	1,454,859	14,788,712	41	908,094	8,645,583	(6.38)	0.94	23,434,295

Q4 2013 LPs by Family of Funds - Continued

Description	Vintage Year	Since Inception									
		Capital Committed	Capital Contributed for Investment	Management Fees	Remaining Commitment	%Capital Contributed/C ommitted	Capital Distributed	Ending Market Value	Net IFR	Investment Multiple	Total Exposure
Eureka Growth Partners		20,000,000	0	0	20,000,000	0	-	0	N/A	0.00	20,000,000
Eureka III, L.P.	2012	20,000,000	0	0	20,000,000	0	-	0	N/A	0.00	20,000,000
First Reserve		55,485,789	53,090,564	2,498,561	2,489,878	100	19,333,983	41,551,868	2.62	1.10	44,041,746
First Reserve Fund XI, L.P.	2006	30,000,000	30,676,836	1,047,014	0	106	15,588,512	18,427,783	1.80	1.07	18,427,783
First Reserve Fund XII, L.P.	2008	25,485,789	22,413,728	1,451,546	2,489,878	94	3,745,471	23,124,085	4.07	1.13	25,613,963
Gridiron Capital		15,000,000	7,503,938	512,741	7,042,943	53	141,564	8,311,393	3.52	1.05	15,354,336
Gridiron Capital Fund II, LP	2011	15,000,000	7,503,938	512,741	7,042,943	53	141,564	8,311,393	3.52	1.05	15,354,336
GTCR LLC		25,000,000	15,564,826	484,825	8,950,349	64	850,542	18,999,081	13.57	1.24	27,949,430
GTCR X, L.P.	2011	25,000,000	15,564,826	484,825	8,950,349	64	850,542	18,999,081	13.57	1.24	27,949,430
HarbourVest		86,823,772	51,659,172	2,264,751	32,952,031	62	16,807,739	50,005,934	8.93	1.24	82,957,965
Dover Street VII L.P.	2008	20,000,000	17,792,808	970,717	1,250,000	94	8,784,484	17,496,775	12.65	1.40	18,746,775
Dover Street VIII LP	2012	25,000,000	5,149,950	106,255	19,750,000	21	870,119	6,165,452	88.84	1.34	25,915,452
HarbourVest Direct 2007 Fund	2007	20,000,000	18,174,008	675,992	1,150,000	94	4,850,135	19,741,685	7.98	1.30	20,891,685
HarbourVest Intl Private Equity Fund VI	2008	21,823,772	10,542,406	511,787	10,802,031	51	2,303,001	6,602,022	7.22	0.81	17,404,053
Hellman & Friedman		40,000,000	28,256,779	1,938,441	9,804,780	75	20,234,005	22,968,747	10.20	1.43	32,773,527
Hellman & Friedman Capital Partners VI	2006	25,000,000	22,443,557	1,436,392	1,120,051	96	19,518,306	16,746,457	10.42	1.52	17,866,508
Hellman & Friedman Capital Partners VII	2011	15,000,000	5,813,222	502,049	8,684,729	42	715,699	6,222,290	6.82	1.10	14,907,019
Highway 12 Ventures		10,000,000	8,202,863	1,685,186	111,952	99	1,074,322	12,183,355	7.58	1.34	12,295,307
Highway 12 Venture Fund II, L.P.	2006	10,000,000	8,202,863	1,685,186	111,952	99	1,074,322	12,183,355	7.58	1.34	12,295,307
HKW Capital Partners		20,000,000	0	0	20,000,000	0	-	0	N/A	0.00	20,000,000
HKW Capital Partners IV, L.P.	2012	20,000,000	0	0	20,000,000	0	-	0	N/A	0.00	20,000,000
Industry Ventures		10,000,000	9,180,159	823,977	400,001	100	7,942,615	0	(6.74)	0.79	400,001
Industry Ventures Fund IV, L.P.	2005	10,000,000	9,180,159	823,977	400,001	100	7,942,615	0	(6.74)	0.79	400,001
JCF		25,000,000	23,213,324	1,188,295	673,129	98	1,621,477	7,698,845	(15.47)	0.38	8,371,974
J.C. Flowers II, L.P.	2006	25,000,000	23,213,324	1,188,295	673,129	98	1,621,477	7,698,845	(15.47)	0.38	8,371,974
Joseph Littlejohn & Levy		25,000,000	22,073,642	1,084,174	1,842,184	93	18,092,558	21,389,981	12.30	1.70	23,232,165
JLL Partners Fund V, L.P.	2005	25,000,000	22,073,642	1,084,174	1,842,184	93	18,092,558	21,389,981	12.30	1.70	23,232,165
KKR		25,000,000	25,000,000	1,749,201	1,672	107	61,437,379	333,834	19.81	2.31	335,506
KKR European Fund, L. P.	1999	25,000,000	25,000,000	1,749,201	1,672	107	61,437,379	333,834	19.81	2.31	335,506
Lexington Capital Partners		155,000,000	128,698,988	7,468,742	18,906,816	88	122,556,370	77,442,000	14.01	1.47	96,348,816
Lexington Capital Partners V, L.P.	2001	50,000,000	46,997,565	2,759,053	243,382	100	74,442,667	8,623,000	18.49	1.67	8,866,382
Lexington Capital Partners VI-B, L.P.	2005	50,000,000	46,028,460	2,781,272	1,190,268	98	33,231,851	31,753,000	7.25	1.33	32,943,268
Lexington Capital Partners VII, L.P.	2009	45,000,000	27,783,244	1,611,574	15,679,728	65	11,693,262	30,052,000	20.62	1.42	45,731,728
Lexington Middle Market Investors II, LP	2008	10,000,000	7,889,719	316,843	1,793,438	82	3,188,590	7,014,000	12.36	1.24	8,807,438
Madison Dearborn Capital Partners		75,000,000	56,000,430	3,234,735	15,908,886	79	56,855,210	41,831,788	11.91	1.67	57,740,674
Madison Dearborn Capital Partners IV, LP	2001	25,000,000	23,823,838	590,665	727,533	98	43,089,928	4,632,807	14.99	1.95	5,360,340
Madison Dearborn Capital Partners V, LP.	2006	25,000,000	19,767,098	1,121,533	4,111,369	84	7,873,913	23,198,336	6.79	1.49	27,309,705
Madison Dearborn Capital Partners VI, LP	2008	25,000,000	12,409,494	1,522,537	11,069,984	56	5,891,369	14,000,645	15.97	1.43	25,070,629
Matlin Patterson		30,000,000	22,753,835	2,439,747	4,806,418	84	13,101,223	21,833,151	8.02	1.39	26,639,569
MatlinPatterson Global Opps. Ptrns. III	2007	30,000,000	22,753,835	2,439,747	4,806,418	84	13,101,223	21,833,151	8.02	1.39	26,639,569
MHR Institutional Partners		25,000,000	12,560,679	2,721,328	9,717,993	61	5,820,917	23,131,337	11.14	1.89	32,849,330
MHR Institutional Partners III, L.P.	2006	25,000,000	12,560,679	2,721,328	9,717,993	61	5,820,917	23,131,337	11.14	1.89	32,849,330
Montlake Capital		15,000,000	11,148,421	2,276,579	1,575,000	90	4,428,592	10,439,725	2.85	1.11	12,014,725
Montlake Capital II, L.P.	2007	15,000,000	11,148,421	2,276,579	1,575,000	90	4,428,592	10,439,725	2.85	1.11	12,014,725

Q4 2013 LPs by Family of Funds - Continued

Description	Vintage Year	Since Inception									
		Commitment	Capital Contributed for Investment	Management Fees	Remaining Commitment	%Capital Contributed/C	Capital Distributed	Ending Market Value	Net IFR	Investment Multiple	Total Exposure
Neuberger Berman Group, LLC											
NB Co-Investment Partners, L.P.	2006	55,000,000	35,131,513	2,473,513	18,271,867	68	28,075,244	23,962,625	9.27	1.38	42,234,492
NB Strategic Co-Investment Partners II	2012	35,000,000	30,181,865	2,049,404	3,530,762	92	27,302,617	17,369,073	8.46	1.39	20,899,835
		20,000,000	4,949,648	424,110	14,741,105	27	772,627	6,593,552	42.73	1.37	21,334,657
Northgate Capital Partners											
Northgate V, L.P.	2010	45,000,000	16,200,000	450,000	28,350,000	37	-	17,179,215	1.99	1.03	45,529,215
Northgate Venture Partners VI, L.P.	2012	30,000,000	14,400,000	300,000	15,300,000	49	-	15,585,274	3.48	1.06	30,885,274
		15,000,000	1,800,000	150,000	13,050,000	13	-	1,593,941	(26.72)	0.82	14,643,941
Oak Hill Capital Partners											
Oak Hill Capital Partners II, L.P.	2005	45,000,000	35,290,702	4,354,631	5,439,782	88	36,796,741	24,374,315	9.44	1.54	29,814,097
Oak Hill Capital Partners III, L.P.	2008	25,000,000	22,567,959	2,256,483	179,320	99	32,444,387	8,398,782	10.08	1.65	8,578,102
		20,000,000	12,722,743	2,098,148	5,260,462	74	4,352,354	15,975,533	7.80	1.37	21,235,995
Oaktree Capital Partners											
Oaktree Opportunities Fund VIII, L.P.	2009	120,000,000	111,780,649	4,843,950	3,527,863	97	173,847,533	17,434,033	41.83	1.64	20,961,896
OCM Opportunities Fund IVb, L.P.	2002	10,000,000	9,523,571	544,203	27,863	101	5,107,551	8,792,878	12.10	1.38	8,820,741
OCM Opportunities Fund VIIb, L.P.	2008	75,000,000	73,086,225	1,913,775	0	100	121,554,428	145,815	44.89	1.62	145,815
		35,000,000	29,170,853	2,385,972	3,500,000	90	47,185,554	8,495,340	13.26	1.76	11,995,340
Odyssey Partners Fund III											
Odyssey Investment Partners III, L.P.	2004	45,000,000	32,981,267	3,630,432	8,388,321	81	48,602,599	29,692,107	25.81	2.14	38,080,428
Odyssey Investment Partners IV, L.P.	2008	25,000,000	21,228,404	1,873,594	1,898,002	92	34,864,974	13,893,753	24.75	2.11	15,791,755
		20,000,000	11,752,863	1,756,838	6,490,319	68	13,737,625	15,798,354	30.23	2.19	22,288,673
Opus Capital Venture Partners											
Opus Capital Venture Partners VI, LP	2011	10,000,000	3,385,825	562,500	6,051,675	39	-	4,509,666	19.90	1.14	10,561,341
		10,000,000	3,385,825	562,500	6,051,675	39	-	4,509,666	19.90	1.14	10,561,341
Performance Venture Capital											
Performance Venture Capital II	2008	25,000,000	14,254,285	1,306,189	9,439,526	62	272,119	18,261,490	7.29	1.19	27,701,016
		25,000,000	14,254,285	1,306,189	9,439,526	62	272,119	18,261,490	7.29	1.19	27,701,016
Pine Brook Partners											
Pine Brook Fund II, L.P.	2013	25,000,000	3,710,567	427,184	20,956,291	17	-	3,793,620	(9.39)	0.92	24,749,911
		25,000,000	3,710,567	427,184	20,956,291	17	-	3,793,620	(9.39)	0.92	24,749,911
Portfolio Advisors											
Port. Advisors Fund IV (B), L.P.	2006	70,000,000	51,429,477	3,169,076	15,648,298	78	16,316,899	59,485,529	7.98	1.39	75,133,827
Port. Advisors Fund IV (E), L.P.	2006	30,000,000	21,716,396	1,407,813	6,875,791	77	6,539,649	27,201,045	7.34	1.46	34,076,836
Port. Advisors Fund V (B), L.P.	2008	15,000,000	10,772,356	845,450	3,382,194	77	2,065,672	11,610,531	3.64	1.18	14,992,725
Portfolio Advisors Secondary Fund, L.P.	2008	10,000,000	6,864,099	459,375	2,793,273	73	2,052,211	8,206,838	10.11	1.40	11,000,111
		15,000,000	12,076,626	456,438	2,597,040	84	5,659,367	12,467,115	17.37	1.45	15,064,155
Quintana Energy Partners											
Quintana Energy Partners Fund I, L.P.	2006	15,000,000	13,818,613	1,726,816	588,556	104	7,825,993	11,822,183	6.49	1.26	12,410,739
		15,000,000	13,818,613	1,726,816	588,556	104	7,825,993	11,822,183	6.49	1.26	12,410,739
Siguler Guff & Company											
Siguler Guff Small Buyout Opportunities	2007	50,000,000	30,595,281	1,537,007	18,000,000	64	12,530,971	29,095,422	8.49	1.30	47,095,422
Siguler Guff Small Buyout Opps Fund II	2011	25,000,000	21,092,102	1,290,185	2,750,000	90	11,607,341	22,025,928	11.24	1.50	24,775,928
		25,000,000	9,503,178	246,822	15,250,000	39	923,630	7,069,494	7.41	0.82	22,319,494
Southern Capital											
Southern Capital Fund III, L.P.	2013	15,000,000	2,656,870	394,369	11,948,762	20	(670)	2,609,752	(86.10)	0.86	14,558,513
		15,000,000	2,656,870	394,369	11,948,762	20	(670)	2,609,752	(86.10)	0.86	14,558,513
Sterling Capital Partners											
Sterling Capital Partners IV	2012	20,000,000	3,208,409	694,023	16,151,741	20	-	4,451,708	32.58	1.14	20,603,449
		20,000,000	3,208,409	694,023	16,151,741	20	-	4,451,708	32.58	1.14	20,603,449
Summit Ventures											
Summit Partners Growth Equity Fund VIII	2011	20,000,000	7,605,849	194,151	12,200,000	39	-	5,509,025	0.28	0.71	17,709,025
		20,000,000	7,605,849	194,151	12,200,000	39	-	5,509,025	0.28	0.71	17,709,025
TA Associates, Inc.											
TA XI, L.P.	2010	10,000,000	5,660,165	464,835	3,875,000	61	750,000	7,463,400	16.80	1.34	11,338,400
		10,000,000	5,660,165	464,835	3,875,000	61	750,000	7,463,400	16.80	1.34	11,338,400

Q4 2013 LPs by Family of Funds - Continued

Description	Vintage Year	Since Inception									
		Capital Commitment	Capital Contributed for Investment	Management Fees	Remaining Commitment	% Capital Contributed/Committed	Capital Distributed	Ending Market Value	Net IRR	Investment Multiple	Total Exposure
Tenaya Capital		20,000,000	7,800,708	489,777	11,709,515	41	(0)	7,762,575	(9.15)	0.94	19,472,090
Tenaya Capital VI, L.P.	2012	20,000,000	7,800,708	489,777	11,709,515	41	(0)	7,762,575	(9.15)	0.94	19,472,090
Tenex Capital Management		20,000,000	10,423,795	452,886	9,185,890	54	135,634	11,303,360	5.45	1.05	20,489,250
Tenex Capital Partners LP - Secondary	2012	20,000,000	10,423,795	452,886	9,185,890	54	135,634	11,303,360	5.45	1.05	20,489,250
Terra Firma Capital Partners		25,432,997	21,828,169	2,909,897	711,983	97	587,739	17,131,543	(7.22)	0.72	17,843,527
Terra Firma Capital Partners III, L.P.	2007	25,432,997	21,828,169	2,909,897	711,983	97	587,739	17,131,543	(7.22)	0.72	17,843,527
Thayer Hidden Creek Management, L.P.		45,000,000	16,171,829	1,671,897	27,482,972	40	4,938,320	21,144,698	23.16	1.46	48,627,670
HCI Equity Partners III, LP	2008	20,000,000	16,171,829	1,671,897	2,482,972	89	4,938,320	21,144,698	23.16	1.46	23,627,670
HCI Equity Partners IV, LP	2013	25,000,000	0	0	25,000,000	0	-	0	N/A	0.00	25,000,000
The Catalyst Capital Group		15,000,000	4,059,795	444,939	10,500,000	30	357,332	4,437,544	7.38	1.06	14,937,544
Catalyst Fund LP IV	2012	15,000,000	4,059,795	444,939	10,500,000	30	357,332	4,437,544	7.38	1.06	14,937,544
Trilantic Capital Partners		31,098,351	11,823,128	1,680,356	17,637,920	43	7,804,285	13,242,351	18.98	1.56	30,880,271
Trilantic Capital Partners IV L.P.	2007	11,098,351	8,749,789	1,071,761	1,276,800	88	7,784,613	10,316,711	20.78	1.84	11,593,511
Trilantic Capital Partners V L.P.	2013	20,000,000	3,073,339	608,595	16,361,120	18	19,672	2,925,640	(22.68)	0.80	19,286,760
Trilantic Energy Partners (NA) LP		-	0	0	0	0	-	0	N/A	0.00	-
Veritas Capital		25,000,000	13,443,952	371,359	11,184,689	55	-	20,653,846	17.48	1.49	31,838,535
The Veritas Capital Fund IV, L.P.	2010	25,000,000	13,443,952	371,359	11,184,689	55	-	20,653,846	17.48	1.49	31,838,535
Welsh, Carson, Anderson & Stowe		75,000,000	68,895,697	5,286,642	1,000,000	99	66,954,932	41,036,505	8.41	1.46	42,036,505
Welsh, Carson, Anderson & Stowe IV, LP	2004	25,000,000	22,808,469	1,691,531	500,000	98	15,225,715	16,343,121	5.71	1.29	16,843,121
Welsh, Carson, Anderson & Stowe IX, L.P.	2000	25,000,000	22,704,505	2,045,495	250,000	99	35,866,847	4,819,079	11.69	1.64	5,069,079
Welsh, Carson, Anderson & Stowe X, L.P.	2005	25,000,000	23,382,723	1,549,616	250,000	100	15,862,370	19,874,305	6.74	1.43	20,124,305
White Deer		25,000,000	2,446,794	436,301	22,116,905	12	-	2,434,203	(26.83)	0.84	24,551,108
White Deer Energy II L.P.	2013	25,000,000	2,446,794	436,301	22,116,905	12	-	2,434,203	(26.83)	0.84	24,551,108
Total Inactive		195,665,300	192,658,680	12,401,922	0	105	414,370,303	0	15.12	2.02	0.00

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 strong performance continues this quarter with a 26.88% IRR and MOIC of 1.50x relative to the prior quarter's performance of a 21.39% IRR and a 1.44x MOIC. Next quarter Eureka III, HCI IV, HKW IV and Trilantic Energy Partners will report their initial performance. NB Strategic Co-Investment Partners II continues its strong performance.

IRR Benchmark Comparison (Since 1980)
As of December 31,2013

By Investment Focus

Description	PIC	Client	DPI	Client	RVPI	Client	TVPI	Client	IRR	Client
Buyout	0.79	0.68	0.88	1.01	0.64	0.64	1.52	1.65	13.16	12.58
Venture Capital	0.77	0.74	0.86	0.72	0.57	0.74	1.43	1.47	10.91	15.61
Mezz & Distressed	0.84	0.71	0.80	1.01	0.62	0.47	1.43	1.02	11.76	21.55
Pooled IRR	0.79	0.75	0.87	0.89	0.63	0.60	1.50	1.49	12.63	12.62

By Origin

Description	PIC	Client	DPI	Client	RVPI	Client	TVPI	Client	IRR	Client
US	0.80	0.76	0.92	0.92	0.61	0.60	1.52	1.52	12.72	12.94
Non-US	0.78	0.72	0.73	0.64	0.69	0.59	1.42	1.23	12.24	6.84
Pooled IRR	0.79	0.76	0.87	0.90	0.63	0.60	1.50	1.49	12.63	12.61

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	1.03	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	23.50	0.00
1993	0.98	1.03	2.31	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	1.97	0.00	0.00	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	10.77	15.19
1998	0.97	1.11	1.36	1.33	0.02	0.02	1.38	1.35	6.85	6.02
1999	0.96	1.04	1.25	1.86	0.07	0.08	1.32	1.93	5.83	14.81
2000	0.98	1.03	1.39	1.35	0.19	0.19	1.57	1.53	10.48	8.82
2001	0.97	1.00	1.65	1.50	0.18	0.20	1.83	1.70	17.08	14.08
2002	0.97	1.00	1.51	1.41	0.29	0.22	1.79	1.62	20.33	25.47
2003	0.95	1.00	1.57	0.90	0.42	0.55	2.00	1.45	19.15	7.20
2004	0.98	0.92	1.31	1.09	0.39	0.50	1.70	1.59	13.90	12.59
2005	0.97	0.96	1.02	0.87	0.56	0.65	1.58	1.53	10.48	9.16
2006	0.93	0.89	0.62	0.51	0.74	0.83	1.36	1.34	6.82	6.67
2007	0.91	0.93	0.54	0.59	0.85	0.68	1.39	1.27	9.06	6.96
2008	0.80	0.76	0.49	0.54	0.94	0.89	1.43	1.43	12.77	13.86
2009	0.80	0.73	0.39	0.42	1.00	0.91	1.39	1.33	14.48	13.38
2010	0.69	0.53	0.15	0.26	1.13	1.11	1.28	1.37	12.98	17.76
2011	0.50	0.48	0.16	0.04	1.06	1.05	1.21	1.09	15.25	6.97
2012	0.34	0.25	0.12	0.03	1.02	1.06	1.14	1.09	15.18	10.52
2013	0.17	0.10	0.01	0.00	1.01	0.82	1.02	0.82	5.23	-42.71
Pooled IRR	0.79	0.75	0.87	0.89	0.63	0.60	1.50	1.49	12.63	12.62

Based on data compiled from 2,354 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: May 20, 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 \$15M was made to CBRE Strategic Partners US Value 7, LP. The investment brief summarizing this fund and the general partner follow.

Fund Name	Vintage	Subclass	Property Type	Amount	Date
CBRE Strategic Partners US Value 7, LP	2014	Value Add	Diverse	\$15M	3/172014

Following this fund description is the comprehensive review of the real estate portfolio for the quarter ended December 31st.

Montana Board of Investments

Real Estate Board Report

Q4 2013

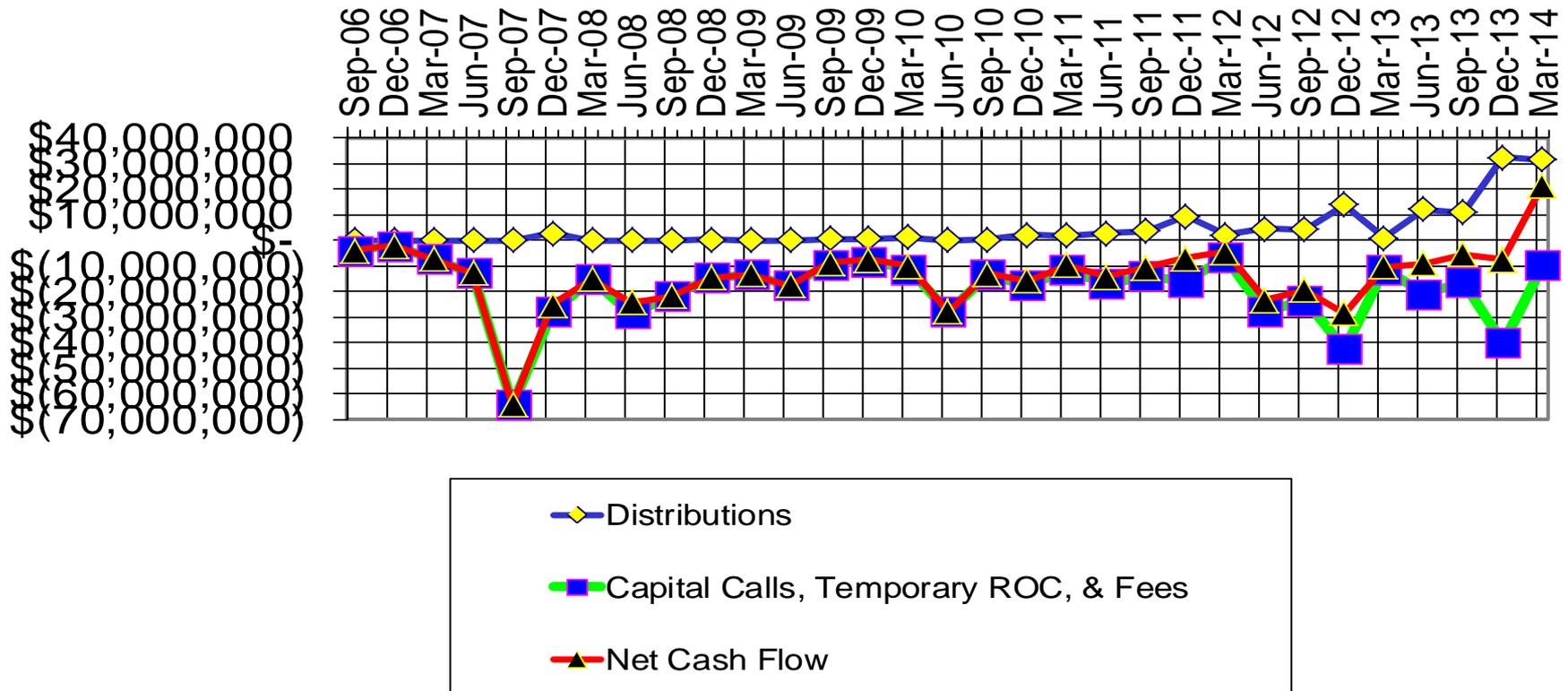
Due to, among other things, the lack of a valuation standard in the real estate private equity industry, differences in the pace of investment across funds and the understatement of returns in the early years of a fund's life, the internal rate of return information may not accurately reflect current 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**

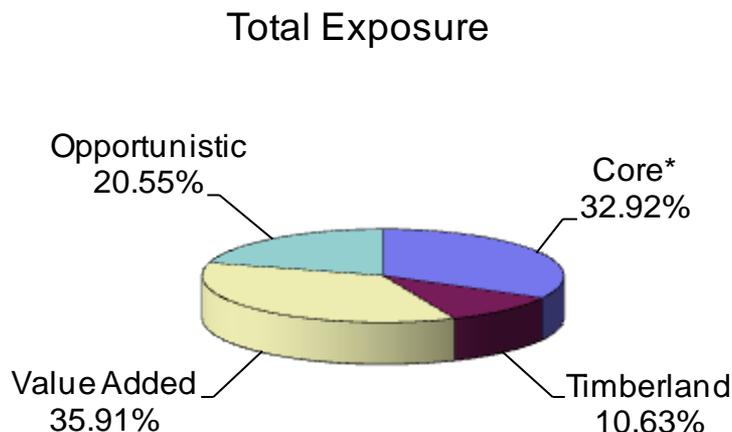
Quarterly Cash Flows through March 31, 2014

Montana RE Cash Flows Through 3/31/14 (Non Core)



Both capital calls and distributions picked up for the quarter ending 3/31/14. General market conditions seem to be improving. While not necessarily the beginning of a trend, for the first time since the real estate pool's inception, the pool was cash flow positive for the quarter ending 3/31/14.

Q4 2013 Strategy – Total Exposure



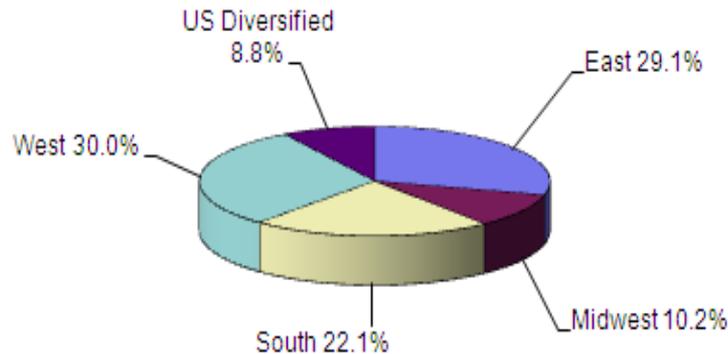
Strategy	Remaining Commitments	Percentage	Net Asset Value	Percentage	Total Exposure	Percentage
Core*	\$0	0.00%	\$339,307,552	40.14%	\$339,307,552	32.92%
Timberland	\$31,850,255	17.17%	\$77,687,621	9.19%	\$109,537,876	10.63%
Value Added	\$94,187,889	50.78%	\$275,926,347	32.64%	\$370,114,236	35.91%
Opportunistic	\$59,461,970	32.05%	\$152,340,816	18.02%	\$211,802,785	20.55%
Total	\$185,500,114	100.00%	\$845,262,335	100.00%	\$1,030,762,449	100.00%

* Includes MT Office Portfolio

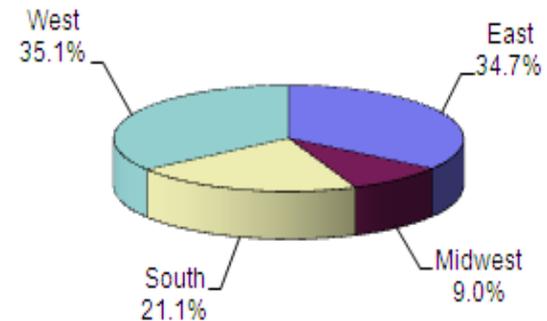
Core real estate dominates assets in the ground at approximately 40% and includes the directly owned Montana office buildings. Timberland, being the most recent addition to the real estate portfolio, represents approximately 9% of the total portfolio's NAV and approximately 11% of the aggregate exposure which includes unfunded commitments. Value Added and Opportunistic account for approximately 33% and 18% of NAV respectively.

Q4 2013 Geography – Total Exposure

Montana United States Portfolio



NCREIF Index



	East	Midwest	South	West	US Diverse	Non-US	Total
Montana US Value ²	\$367.9	\$129.2	\$279.5	\$380.2	\$108.9		\$1,265.8
Montana US Total ¹	29.1%	10.2%	22.1%	30.0%	8.6%		100.0%
NCREIF Value ^{2, 3}	122,938	31,951	74,780	124,189			\$353,858
NCREIF ¹	34.7%	9.0%	21.1%	35.1%			100.0%
Difference	-5.7%	1.2%	1.0%	-5.1%	8.6%		
Montana Total Value ²	\$367.9	\$129.2	\$279.5	\$380.2	\$108.9	\$144.1	\$1,409.9
Montana Total ¹	26.1%	9.2%	19.8%	27.0%	7.7%	10.2%	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.

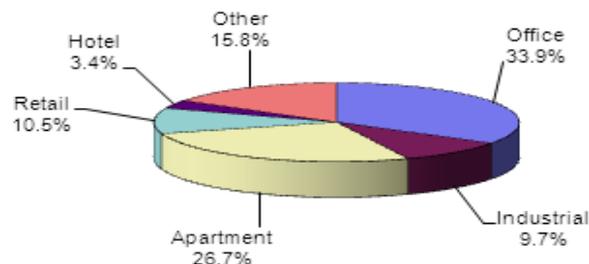
2) Values shown are in Millions.

3) The NCREIF gross market values represent the total gross asset values of the participating funds exclusive of any underlying debt.

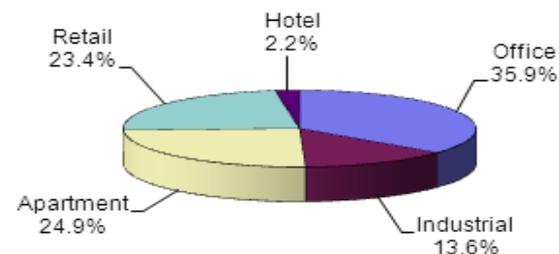
The geographic mix of the real estate portfolio is fairly aligned with NCREIF, although exposure in the West at 30.0% is 5.1% less than the index. Approximately 9% of the portfolio is broadly diversified across the remainder of the US and the portfolio's international exposure represents approximately 10% of the mix.

Q4 2013 Property Type – Market Value Exposure

Montana United States Portfolio



NCREIF Index



	Office	Industrial	Apartment	Retail	Hotel	Other ²	Total
Montana US Value ³	\$429.5	\$122.5	\$337.9	\$132.8	\$42.8	\$200.2	\$1,265.8
Montana US Total	33.9%	9.7%	26.7%	10.5%	3.4%	15.8%	100.0%
NCREIF Value ^{3,4}	126,861	48,187	88,100	82,870	7,840		\$353,858
NCREIF ¹	35.9%	13.6%	24.9%	23.4%	2.2%		100.0%
Difference	-1.9%	-3.9%	1.8%	-12.9%	1.2%	15.8%	
Montana Non-US Value ³	\$51.9	\$0.0	\$14.3	\$11.3	\$10.2	\$56.4	\$144.1
Montana Non-US Total	36.0%	0.0%	9.9%	7.8%	7.1%	39.1%	100.0%
Montana Total Value ³	\$481.5	\$122.5	\$352.2	\$144.0	\$53.1	\$256.6	\$1,409.9
Montana Total ¹	34.1%	8.7%	25.0%	10.2%	3.8%	18.2%	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 \$82,585,262 in mixed-use assets, \$811,187 in healthcare/senior living, \$8,255,851 in land, \$242,970 in storage, \$14,416,672 in debt assets, \$206,449 in parking, \$836,971 in manufactured assets, \$80,270,520 in timber, \$12,599,004 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 approximately 16%, 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.

Q4 2013 Time Weighted

	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	38,561,259	3.07%	3.31%	11.77%	12.84%	11.77%	12.84%	13.27%	14.34%	0.77%	1.83%	0.82%	1.86%	0.82%	1.86%
INVESCO Core Real Estate-USA	41,574,854	3.14%	3.37%	13.21%	14.22%	13.21%	14.22%	12.19%	13.19%	1.88%	2.80%	-	-	0.90%	1.82%
JP Morgan Strategic Properties Fund	131,504,858	3.39%	3.65%	14.49%	15.64%	14.49%	15.64%	13.62%	14.76%	3.88%	4.93%	-	-	2.75%	3.79%
TIAA-CREF Asset Management Core Property	42,362,645	2.21%	2.41%	-	-	-	-	-	-	-	-	-	-	5.35%	5.77%
UBS-Trumbull Property Fund	66,558,827	2.00%	2.27%	9.24%	10.39%	9.24%	10.39%	10.06%	11.21%	-	-	-	-	11.84%	12.91%
Core Total	320,562,443	2.87%	3.12%	12.50%	13.61%	12.50%	13.61%	12.40%	13.51%	1.99%	3.01%	2.38%	3.41%	2.38%	3.41%
Montana Office Portfolio ¹	18,745,108	0.00%	0.00%	7.58%	7.58%	7.58%	7.58%	-	-	-	-	-	-	5.77%	5.77%
Timberland Total	77,687,621	2.69%	2.93%	11.26%	12.27%	11.26%	12.27%	-	-	-	-	-	-	6.22%	7.16%
Value Added Total	275,926,347	6.26%	7.45%	13.56%	16.76%	13.56%	16.76%	11.31%	14.02%	3.88%	6.45%	2.45%	5.60%	2.86%	6.17%
Opportunistic Total	152,340,816	4.20%	4.77%	9.62%	12.23%	9.62%	12.23%	12.54%	15.06%	-3.32%	0.08%	-	-	-11.59%	-8.04%
Total Portfolio	845,262,335	4.16%	4.78%	12.08%	14.13%	12.08%	14.13%	11.69%	13.56%	1.54%	3.52%	0.37%	2.44%	0.84%	3.10%
Benchmark															
NCREIF	353,857,912,397		2.53%		10.98%		10.98%		11.92%		5.69%		-		9.15%
NFI-ODCE (NET)	106,943,400,000	2.94%		12.90%		12.90%		12.53%		2.71%		-		7.41%	

1) The value for the Montana Office Portfolio is provided by the MBOI and is taken "as-is".

The portfolio turned in a strong quarter as general real estate market conditions continue to stabilize and show signs of improvement. Total portfolio return was above the Q3 return. Timberland underperformed relative to Q3 by 14bps. Core performed below Q3 by 18bps, but continues its positive momentum. Value-Added and Opportunistic both outperformed Q3 by significant amounts and continue their upward trajectory. Both 5 and 7-yr. returns remain weak given the lagged downturn of real estate vs. other risk assets, which resulted in most real estate markets bottoming around Q1'10.

Q4 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	-		7.75%		7.75%		-		-		-		5.52%	
Molpus Woodlands Fund III, LP	47,367,176	3.27%		15.25%		15.25%		-		-		-		7.66%	
ORM Timber Fund III, LLC	12,037,749	-0.68%		2.00%		2.00%		-		-		-		1.18%	
RMS Forest Growth III LP	18,282,696	3.08%		6.75%		6.75%		-		-		-		5.89%	
Timberland	77,687,621	2.69%		11.26%		11.26%		-		-		-		6.65%	
ABR Chesapeake Fund III	17,805,450	1.37%		6.48%		6.48%		6.98%		3.07%		2.81%		2.89%	
ABR Chesapeake Fund IV	14,035,320	6.87%		14.11%		14.11%		14.28%		-		-		13.68%	
AG Core Plus Realty Fund II	7,383,208	3.65%		9.02%		9.02%		14.05%		11.54%		-		8.06%	
AG Core Plus Realty Fund III	24,297,038	12.44%		25.41%		25.41%		-		-		-		16.58%	
Apollo Real Estate Finance Corp.	3,545,373	-3.09%		1.42%		1.42%		0.92%		-2.87%		-2.17%		-2.38%	
AREFIN Co-Invest	180,170	20.62%		29.61%		29.61%		19.75%		8.07%		-		8.66%	
BPG Investment Partnership IX	8,358,533	6.01%		-		-		-		-		-		6.01%	
CBRE Strategic Partners US Value Fund 6	19,807,876	7.91%		15.31%		15.31%		-		-		-		15.95%	
DRA Growth & Income Fund VI	19,032,231	3.37%		15.16%		15.16%		15.43%		9.20%		-		7.09%	
DRA Growth & Income Fund VII	26,586,009	3.63%		15.33%		15.33%		-		-		-		14.74%	
Five Arrows Securities V, L.P.	26,734,973	12.41%		20.63%		20.63%		15.97%		13.58%		-		12.19%	
Hudson RE Fund IV Co-Invest	10,749,388	19.72%		20.49%		20.49%		14.29%		6.96%		-		6.39%	
Hudson Realty Capital Fund IV	9,323,727	10.09%		10.17%		10.17%		0.31%		-3.89%		-		-6.18%	
Landmark Real Estate Partners VI	13,406,160	2.10%		20.15%		20.15%		-		-		-		31.13%	
Realty Associates Fund IX	19,973,870	3.35%		8.71%		8.71%		10.40%		-		-		9.94%	
Realty Associates Fund VIII	12,808,688	-0.01%		3.73%		3.73%		2.61%		-4.45%		-		-4.83%	
Realty Associates Fund X	10,195,041	3.58%		-		-		-		-		-		8.93%	
Stockbridge Value Fund, LP	18,527,066	8.83%		17.24%		17.24%		-		-		-		18.37%	
Strategic Partners Value Enhancement Fund	13,176,225	0.85%		-0.48%		-0.48%		6.75%		-3.28%		-0.83%		-1.35%	
Value Added	275,926,347	6.26%		13.81%		13.81%		11.93%		6.12%		5.01%		4.94%	
AG Realty Fund VII L.P.	11,076,236	6.73%		27.42%		27.42%		17.52%		16.27%		-		12.90%	
AG Realty Fund VIII L.P.	12,802,149	3.35%		13.45%		13.45%		-		-		-		11.52%	
Beacon Capital Strategic Partners V	7,428,677	4.54%		5.08%		5.08%		7.99%		-3.21%		-		-11.23%	
Carlyle Europe Real Estate Partners III	22,354,006	-2.40%		-15.90%		-15.90%		-2.46%		-2.04%		-		-6.10%	
CIM Fund III, L.P.	31,896,734	1.37%		19.88%		19.88%		20.67%		13.57%		-		10.89%	
GEM Realty Fund IV	12,014,982	2.26%		17.83%		17.83%		14.63%		-		-		14.96%	
GEM Realty Fund V	606,674	-		-		-		-		-		-		-67.19%	
JER Real Estate Partners IV	2,527,822	0.72%		1.99%		1.99%		29.03%		2.91%		-		-5.67%	
Liquid Realty IV	11,869,856	6.47%		10.66%		10.66%		11.60%		-0.35%		-		-1.55%	
MGP Asia Fund III, LP	24,894,170	11.40%		13.20%		13.20%		14.15%		7.96%		-		5.15%	
MSREF VI International	6,667,881	2.16%		8.57%		8.57%		7.69%		-12.87%		-		-22.49%	
O'Connor North American Property Partners II	8,201,629	15.49%		13.74%		13.74%		10.61%		5.09%		-		-7.40%	
Opportunistic	152,340,816	3.50%		8.83%		8.83%		11.83%		3.88%		-		-2.33%	
Total	524,699,892	4.75%		11.71%		11.71%		11.02%		5.35%		2.21%		2.18%	

Timberland underperformed Q3 by 14bps. Value-Added and Opportunistic improved notably vs. Q3 and continue their upward trajectory, however quarterly returns are volatile and it should not be assumed these will continue at the rates shown above. The one-yr. IRR improved over 200bp vs. Q3.

Q4 2013 Commitment Summary

	Vintage Year	Since Inception									Investment Multiple
		Commitment	Capital Contributed ¹	Contributed %	Remaining Commitment	Capital Distributed	Net Asset Value	NAV %	Total Exposure	Total Exposure%	
Core		278,236,254	278,236,254	100%	-	29,506,552	320,562,443	37.92%	320,562,443	31.10%	1.21
Clarion Lion Properties Fund	2006	48,236,254	48,236,254	100%	-	11,332,526	38,561,259	4.56%	38,561,259	3.74%	0.99
INVESCO Core Real Estate-USA	2007	45,000,000	45,000,000	100%	-	7,556,364	41,574,854	4.92%	41,574,854	4.03%	1.05
JP Morgan Strategic Property Fund	2007	95,000,000	95,000,000	100%	-	1,759,599	131,504,858	15.56%	131,504,858	12.76%	1.34
TIAA-CREF Asset Management Core Property	2013	40,000,000	40,000,000	100%	-	667,355	42,362,645	5.01%	42,362,645	4.11%	1.07
UBS-Trumbull Property Fund	2010	50,000,000	50,000,000	100%	-	8,190,708	66,558,827	7.87%	66,558,827	6.46%	1.43
Montana Office Portfolio	2011	17,674,045	17,674,045	100%	-	1,670,405	18,745,108	2.22%	18,745,108	1.82%	1.16
Timberland		105,000,000	73,149,745	70%	31,850,255	4,005,215	77,687,621	9.19%	109,537,876	10.63%	1.12
Molpus Woodlands Fund III, LP	2011	50,000,000	44,664,311	89%	5,335,689	3,216,228	47,367,176	5.60%	52,702,865	5.11%	1.13
ORM Timber Fund III, LLC	2012	30,000,000	11,937,000	40%	18,063,000	-	12,037,749	1.42%	30,100,749	2.92%	1.01
RMS Forest Growth III LP	2011	25,000,000	16,548,434	66%	8,451,566	788,987	18,282,696	2.16%	26,734,262	2.59%	1.15
Value Added		408,896,000	314,708,111	77%	94,187,889	91,837,108	275,926,347	32.64%	370,114,236	35.91%	1.15
ABR Chesapeake Fund III	2006	20,000,000	20,000,000	100%	-	5,527,541	17,805,450	2.11%	17,805,450	1.73%	1.17
ABR Chesapeake Fund IV	2010	30,000,000	15,000,000	50%	15,000,000	3,765,075	14,035,320	1.66%	29,035,320	2.82%	1.17
AG Core Plus Realty Fund II	2007	20,000,000	16,742,334	84%	3,257,666	13,456,511	7,383,208	0.87%	10,640,874	1.03%	1.24
AG Core Plus Realty Fund III	2011	35,000,000	19,526,252	56%	15,473,748	216,746	24,297,038	2.87%	39,770,786	3.86%	1.26
Apollo Real Estate Finance Corp.	2007	10,000,000	10,000,000	100%	-	5,530,744	3,545,373	0.42%	3,545,373	0.34%	0.91
AREFIN Co-Invest	2008	10,000,000	8,336,000	83%	1,664,000	10,333,809	180,170	0.02%	1,844,170	0.18%	1.26
BPG Investment Partnership IX	2013	30,000,000	7,975,529	27%	22,024,471	234,649	8,358,533	0.99%	30,383,004	2.95%	1.08
CBRE Strategic Partners US Value Fund 6	2011	20,000,000	18,065,249	90%	1,934,751	116,845	19,807,876	2.34%	21,742,627	2.11%	1.09
DRA Growth & Income Fund VI	2007	24,696,000	22,540,269	91%	2,155,731	12,620,923	19,032,231	2.25%	21,187,962	2.06%	1.26
DRA Growth & Income Fund VII	2011	30,000,000	25,068,000	84%	4,932,000	2,774,653	26,586,009	3.15%	31,518,009	3.06%	1.14
Five Arrows Securities V, L.P.	2007	30,000,000	29,343,717	98%	656,283	13,642,597	26,734,973	3.16%	27,391,256	2.66%	1.34
Hudson RE Fund IV Co-Invest	2008	10,000,000	10,000,000	100%	-	3,278,583	10,749,388	1.27%	10,749,388	1.04%	1.40
Hudson Realty Capital Fund IV	2007	15,000,000	15,000,000	100%	-	844,542	9,323,727	1.10%	9,323,727	0.90%	0.68
Landmark Real Estate Partners VI	2011	20,000,000	13,298,754	66%	6,701,246	6,496,978	13,406,160	1.59%	20,107,406	1.95%	1.49
Realty Associates Fund IX	2009	20,000,000	20,000,000	100%	-	5,758,154	19,973,870	2.36%	19,973,870	1.94%	1.29
Realty Associates Fund VIII	2007	20,000,000	20,000,000	100%	-	2,219,328	12,808,688	1.52%	12,808,688	1.24%	0.75
Realty Associates Fund X	2012	20,000,000	10,000,000	50%	10,000,000	155,625	10,195,041	1.21%	20,195,041	1.96%	1.04
Stockbridge Value Fund, LP	2011	25,000,000	14,612,007	58%	10,387,993	213,565	18,527,066	2.19%	28,915,059	2.81%	1.23
Strategic Partners Value Enhancement Fund	2007	19,200,000	19,200,000	100%	-	4,650,240	13,176,225	1.56%	13,176,225	1.28%	0.93
Opportunistic		257,922,101	200,960,132	78%	59,461,970	32,382,435	152,340,816	18.02%	211,802,785	20.55%	0.89
AG Realty Fund VII L.P.	2007	20,000,000	15,024,323	75%	4,975,677	10,663,687	11,076,236	1.31%	16,051,913	1.56%	1.45
AG Realty Fund VIII L.P.	2011	20,000,000	11,262,168	56%	8,737,832	410,450	12,802,149	1.51%	21,539,981	2.09%	1.19
Beacon Capital Strategic Partners V	2007	25,000,000	21,500,000	86%	3,500,000	4,678,218	7,428,677	0.88%	10,928,677	1.06%	0.56
Carlyle Europe Real Estate Partners III ²	2007	30,994,690	28,311,339	91%	2,683,351	316,789	22,354,006	2.64%	25,037,357	2.43%	0.79
CIM Fund III, L.P.	2007	25,000,000	22,688,877	91%	2,311,123	1,826,846	31,896,734	3.77%	34,207,857	3.32%	1.34
GEM Realty Fund IV	2010	15,000,000	11,550,000	77%	3,450,000	1,723,076	12,014,982	1.42%	15,464,982	1.50%	1.18
GEM Realty Fund V	2013	20,000,000	1,849,000	9%	18,151,000	-	606,674	0.07%	18,757,674	1.82%	0.33
JER Real Estate Partners - Fund IV	2007	9,913,679	7,506,175	76%	2,407,504	1,320,854	2,527,822	0.30%	4,935,326	0.48%	0.51
Liquid Realty IV	2007	22,013,732	18,818,202	85%	3,195,530	7,455,880	11,869,856	1.40%	15,065,386	1.46%	0.93
MGP Asia Fund III, LP	2007	30,000,000	19,988,275	67%	10,011,725	35,146	24,894,170	2.95%	34,905,895	3.39%	1.25
MSREF VI International ³	2007	25,000,000	27,500,000	110%	-	807,878	6,667,881	0.79%	6,667,881	0.65%	0.26
O'Connor North American Property Partners II	2008	15,000,000	14,961,772	100%	38,228	3,143,610	8,201,629	0.97%	8,239,857	0.80%	0.74
Montana Real Estate		1,067,728,400	884,728,287	83%	185,500,114	159,401,716	845,262,335		1,030,762,449		1.11

1) Capital contributed does not include contributions for expenses outside of the commitment amounts.

2) Carlyle Europe III's Commitment amount is converted to USD by using the EUR exchange rate from 10/9/2007, the date Montana committed to the fund. The current unfunded capital is based on this figure less the cumulative USD activity.

3) 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 Q4 2013.

Q4 2013 Leverage

	<u>Q1 2013</u>	<u>Q2 2013</u>	<u>Q3 2013</u>	<u>Q4 2013</u>
Core	22.19%	22.12%	21.10%	21.27%
Timber	0.00%	0.00%	0.00%	3.83%
Non-Core (Total)	54.10%	55.12%	55.45%	48.72%
Total	42.59%	42.11%	42.36%	42.08%
Non-Core Breakout:				
Opportunistic	46.58%	45.25%	45.33%	44.67%
Value Add	57.83%	59.78%	60.21%	60.09%

The portfolio remains moderately leveraged and well within all policy constraints.

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MDEP & MTIP

MONTANA DOMESTIC EQUITY POOL

Rande R. Muffick, CFA, Portfolio Manager

May 21, 2014

3/31/2014 Domestic Stock Pool By Manager			
<u>Manager Name</u>	<u>Market Value</u>	<u>%</u>	<u>Approved</u> <u>Range</u>
BLACKROCK EQUITY INDEX FUND	2,053,177,232	55.79%	
STATE STREET SPIF ALT INV	6,198,977	0.17%	
LARGE CAP PASSIVE Total	2,059,376,209	55.96%	45-70%
ENHANCED INVEST TECHNOLOGIES	115,160,904	3.13%	
T ROWE PRICE ASSOCIATES INC	324,210,775	8.81%	
LARGE CAP ENHANCED Total	439,371,680	11.94%	8-12%
ANALYTIC INVESTORS MU3B	115,931,567	3.15%	
JP MORGAN ASSET MGMT MU3E	327,875,905	8.91%	
130-30 Total	443,807,472	12.06%	8-12%
COMBINED LARGE CAP Total	2,942,555,360	79.96%	72-90%
ARTISAN MID CAP VALUE	135,280,769	3.68%	
BLACKROCK MIDCAP EQUITY IND FD	83,116,901	2.26%	
IRIDIAN ASSET MANAGEMENT MU3V	53,658,044	1.46%	
NICHOLAS INVESTMENT PARTNERS	54,783,594	1.49%	
TIMESQUARE CAPITAL MGMT	139,090,398	3.78%	
MID CAP Total	465,929,704	12.66%	6-17%
ALLIANCE BERNSTEIN SMALL CAP3R	36,334,767	0.99%	
DIMENSIONAL FUND ADVISORS INC	91,779,934	2.49%	
ING INVESTMENT MGT MU3U	32,239,895	0.88%	
ISHARES CORE S+P SMALL CAP ETF	5,991,616	0.16%	
MET WEST CAPITAL MGT MU3W	25,286,901	0.69%	
VAUGHAN NELSON INV	80,038,201	2.17%	
SMALL CAP Total	271,671,315	7.38%	3-11%
MDEP Total	3,680,156,379	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.

Following up a strong 2013, the U.S. equity market continued to demonstrate resilience in the face of global currency troubles and what was expected to be sluggish corporate profit growth. Volatility increased during the quarter as investors reassessed their appetite for stocks at valuations that are higher than at any time since the great recession. The Standard & Poor's 500 Index and the Nasdaq Composite Index logged slight gains for the quarter, while the Dow return was just underwater. It was quite a ride for investors during the quarter though, as concerns of a currency crisis among some emerging market countries shook global equity markets in January. For example, the S&P 500 Index corrected about 6% from the intraday high on January 15th to its intraday low for the quarter on February 5th.

As stated in last quarter's strategy comments, given such a strong year in 2013, the domestic equity market is not as cheap as it was a year ago. With much of the market rise having come from multiple expansion, earnings growth will be the major driver of equity returns in 2014.

Although the markets could go higher through a volatile year, equity returns will most likely be modest. In addition, there is continued risk of a major market selloff as equity investors assess the Fed's reduction in bond purchases and the potential for higher interest rates at the same time as growth in corporate revenues and earnings is being questioned.

On March 9th, the current bull market celebrated its fifth anniversary. During that time, the S&P 500 Index cumulative return has been around 210%. That equates to an annual return of more than 25% for the five year period. With that said, it stands to reason that given this huge upward move in the markets and the time length of the bull market, many investors have a guarded approach at this point.

US Market Environment										
	1Q 2014						Last Twelve Months			
	Value	Neutral	Growth				Value	Neutral	Growth	
Large	3.0%	2.1%	1.1%				Large	21.6%	22.4%	23.2%
Mid	5.2%	3.5%	2.0%				Mid	23.0%	23.5%	24.2%
Small	1.8%	1.1%	0.5%				Small	22.7%	24.9%	27.2%

U.S. equities posted broad, modest gains in the first quarter. Mid caps led the way, followed by large caps and then small caps. Returns for the twelve months ended in March were robust as the stellar returns from 2013 were still evident within. All cap sizes returned over 20% for the past twelve months as did all style categories.

Value stocks provided the leading returns within all three cap sizes in the quarter. Mid cap value was the clear leader in the style matrix with a return of 5.2% while small cap growth posted just a slight positive return of 0.5%. These types of performance comparisons indicate the market's sentimental shift toward cheaper valuations and larger capitalization stocks. For the last twelve months small cap growth posted the highest returns, but this is unlikely to persist going forward.



Volatility in the domestic equity market remained rather subdued compared to previous years as indicated by the VIX index floating in the low teens for much of the quarter. The index spiked to over 20 at the end of January amid concerns that Fed “tapering” could lead to higher interest rates and possibly a currency crisis for emerging market countries. At the same time, worries about U.S. corporate earnings growth for 2014 also rose as some bellwether companies provided disappointing earnings reports.

MDEP underperformed the S&P 1500 Index by 3 basis points for the quarter but outperformed by 83 basis points for the past twelve months. The active portfolios along with the mid caps and small caps struggled a bit near the end of the quarter. The overweight allocations to mid caps and small caps, when combined with the actively managed portfolios’ performance, led to the success of the pool over the longer period.

The performance of actively managed portfolios for the quarter was mixed. Six of thirteen actively managed portfolios equaled or outperformed their respective benchmarks. The 130/30, small cap value, and small cap growth style buckets outperformed while the enhanced, mid cap value, mid cap growth, and small cap core style buckets lagged.

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

DOMESTIC EXPOSURE-MARKET CAP %

March 31, 2014

MANAGERS	MEGA	GIANT	LARGE			MID	SMALL	MICRO	WTD AVG
	\$200B+	\$100-\$200B	\$50-\$100B	\$20-\$50B	\$10-\$20B	\$2.5-\$10B	\$500MM-\$2.5B	< \$500MM	MARKET CAP (\$B)
Alliance Bernstein	--	--	--	--	--	60.3	38.8	0.9	3,486.0
Analytic Investors, Inc	14.6	8.9	29.7	28.1	13.2	7.7	-3.8	--	85,518.7
Artisan Partners	--	--	--	15.4	33.7	47.4	3.4	--	11,650.2
Dimensional Fund Advisors	--	--	--	--	0.2	21.4	64.9	13.5	1,719.4
ING Investment Mgt	--	--	--	--	--	42.7	56.7	0.6	2,570.9
INTECH Investment Management	10.0	10.0	13.6	32.9	23.4	10.2	--	--	77,779.0
Iridian Asset Mgmt	--	--	--	6.8	31.7	59.6	1.8	--	10,395.5
J.P. Morgan	18.7	28.1	23.5	19.1	9.0	2.1	-0.7	--	144,670.0
Met West Capital Mgt	--	--	--	--	--	55.3	41.0	3.7	2,932.8
Nicholas Investment Partners	--	--	--	12.9	24.8	58.9	3.4	--	11,044.8
T. Rowe Associates	18.6	20.6	15.7	22.1	16.6	6.3	0.1	--	122,934.6
TimesSquare Cap Mgmt	--	--	--	5.0	34.0	58.3	2.7	--	10,021.0
Vaughan Nelson Mgmt	--	--	--	--	--	62.6	37.4	--	3,159.6
BlackRock S&P 500 Index Fund	18.9	20.0	19.8	21.9	13.3	5.1	--	--	125,963.5
BlackRock Midcap Equity Index Fund	--	--	--	--	3.6	83.6	11.0	--	5,109.1
ALL DOMESTIC EQUITY PORTFOLIOS	14.7	16.2	16.0	18.9	14.3	14.9	4.0	0.4	101.1
Benchmark: S&P Composite 1500	16.9	17.1	17.7	19.6	12.3	12.5	3.7	0.1	106.1
Over/underweight(-)	-2.2	-0.9	-1.7	-0.7	2.0	2.4	0.3	0.2	

DOMESTIC EXPOSURE-SECTOR %

March 31, 2014

MANAGERS

	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Technology	Materials	Telecom Services	Utilities
Alliance Bernstein	12.6	1.9	4.3	5.3	22.4	22.4	29.0	2.0	--	--
Analytic Investors, Inc	12.9	11.3	10.3	14.9	13.5	7.0	17.2	5.0	3.4	2.7
Artisan Partners	12.4	2.9	13.0	22.3	4.2	13.3	25.8	1.3	--	4.8
Dimensional Fund Advisors	17.4	4.4	4.8	18.2	9.1	18.8	17.6	5.5	0.6	3.4
Iridian Asset Mgmt	18.2	--	6.2	--	15.0	19.2	17.4	24.0	--	--
ING Investment Mgt	18.5	2.2	5.8	11.0	18.5	14.9	23.7	5.0	--	--
INTECH Investment Management	18.3	12.1	4.6	16.2	15.5	9.8	14.3	4.1	1.1	4.1
Met West Capital Mgt	13.7	5.8	5.5	24.8	7.5	19.8	14.0	3.9	0.7	1.3
Nicholas Investment Partners	22.9	3.1	5.3	12.4	10.7	21.1	19.7	4.1	0.7	--
J.P. Morgan	16.3	5.8	10.1	15.1	15.7	9.8	20.5	4.0	2.2	0.5
T. Rowe Associates	12.9	8.9	9.3	16.2	13.8	10.5	18.6	4.2	2.4	3.1
TimesSquare Cap Mgmt	17.3	4.2	5.8	12.2	10.0	24.2	18.5	4.2	3.7	--
Vaughan Nelson Mgmt	14.4	1.9	5.1	26.5	8.1	18.2	16.6	8.0	--	1.2
BlackRock S&P 500 Index Fund	11.9	9.6	10.1	16.3	13.2	10.6	18.5	3.5	2.4	3.0
BlackRock Midcap Equity Index Fund	13.2	3.2	5.8	22.6	9.3	16.4	15.5	7.1	0.4	4.6
All Domestic Equity Portfolios	13.4	8.0	9.2	16.2	12.9	11.9	18.7	4.1	2.1	2.6
Benchmark: S&P Composite 1500	12.4	9.0	9.7	17.3	13.0	11.4	17.7	4.0	2.2	3.2
Over/underweight(-)	1.0	-0.9	-0.5	-1.1	-0.1	0.5	1.0	0.2	-0.1	-0.6

DOMESTIC PORTFOLIO CHARACTERISTICS

March 31, 2014

MANAGERS

	Market Value	Number of Securities	3Yr Historical EPS Growth	Price/Earnings	Price/Book	Dividend Yield
Alliance Bernstein	35,847,385	106	31.4	33.3	4.1	0.2
Analytic Investors, Inc	118,076,966	182	4.1	15.0	2.6	1.6
Artisan Partners	135,541,855	60	12.9	15.3	1.9	1.6
Dimensional Fund Advisors	91,774,878	2,169	16.9	20.0	2.1	1.0
ING Investment Mgt	32,213,946	150	11.2	26.3	2.9	0.7
INTECH Investment Management	115,315,036	323	15.5	17.7	2.8	1.6
Iridian Asset Mgmt	53,335,021	37	13.6	17.8	3.6	1.0
J.P. Morgan	328,878,084	278	12.9	17.3	2.4	1.6
Met West Capital Mgt	25,457,262	65	16.5	17.5	2.1	1.3
Nicholas Investment Partners	54,746,543	105	22.2	20.7	3.5	0.5
T. Rowe Associates	324,489,049	263	11.6	18.7	2.7	1.7
TimesSquare Cap Mgmt	139,202,005	78	20.9	22.0	3.5	0.7
Vaughan Nelson Mgmt	78,943,843	77	19.2	19.0	2.0	1.2
BlackRock S&P 500 Index Fund	2,053,183,098	503	11.3	17.8	2.6	1.9
BlackRock Midcap Equity Index Fund	83,116,728	403	16.1	21.4	2.4	1.3

All Domestic Equity Portfolios

3,682,312,700	3,133	12.4	18.0	2.6	1.7
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BENCHMARKS

S&P Composite 1500	1,500	11.9	18.1	2.5	1.8
S&P/Citigroup 1500 Pure Growth	348	35.6	21.4	3.0	0.7
S&P/Citigroup 1500 Pure Value	363	7.2	15.6	1.3	1.4
S&P 500	500	11.3	17.7	2.6	1.9
Russell 1000	1,016	12.2	18.0	0.4	1.8
Russell 1000 Growth	626	14.5	20.7	4.6	1.5
Russell 1000 Value	664	9.7	15.8	0.2	2.1
Russell Midcap	820	16.3	19.6	0.1	1.5
Russell Midcap Growth	502	19.3	22.7	4.5	1.0
Russell Midcap Value	535	12.9	17.0	0.1	2.0
Russell 2000	1,976	18.3	20.1	2.2	1.3
Russell 2000 Growth	1,156	22.1	24.4	3.9	0.7
Russell 2000 Value	1,374	14.2	17.1	1.5	1.9

MONTANA INTERNATIONAL EQUITY POOL

Rande R. Muffick, CFA, Portfolio Manager

May 21, 2014

3/31/2014 International Stock Pool By Manager			
			<u>Approved</u>
<u>Manager Name</u>	<u>Market Value</u>	<u>%</u>	<u>Range</u>
BLACKROCK ACWI EX US SUPERFUND	975,908,669	58.30%	
BLACKROCK MSCI EM MKT FR FD B	42,514,397	2.54%	0-5%
EAFE STOCK PERFORMANCE INDEX	12,121,615	0.72%	
PASSIVE Total	1,030,544,682	61.56%	42-66%
ACADIAN ACWI EX US VALUE	108,409,004	6.48%	
BERNSTEIN ACWI EX	113,937,407	6.81%	
VALUE Total	222,346,411	13.28%	
HANSBERGER INTL EQUITY GROWTH	118,903,698	7.10%	
MARTIN CURRIE ACWI X	117,472,604	7.02%	
GROWTH Total	236,376,302	14.12%	
AMERICAN CENTURY INV MGMT	30,561,676	1.83%	
BLACKROCK ACWI EX US SMALL CAP	28,612,578	1.71%	
DFA INTERNATIONAL SMALL COMPAN	84,820,640	5.07%	
TEMPLETON INVESTMENT COUNSEL	40,683,528	2.43%	
SMALL CAP Total	184,678,423	11.03%	8-16%
MTIP Total	1,673,945,818	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. The table includes the two small cap portfolios that were funded at the beginning of March.

International stock markets experienced a volatile first quarter as a combination of geopolitical and economic concerns mounted. European equities rose as investors were encouraged by stable economic growth and improving corporate earnings. Japanese equities gave back some of the very strong gains from 2013 as domestic economic data disappointed and a sales tax hike loomed on the horizon. Emerging markets had a rollercoaster ride, as continued worries about a slowing Chinese economy combined with the prospect of tighter U.S. Federal Reserve policy to create a sell-off in both EM currencies and EM stocks. To top things off, a political crisis in Ukraine rattled investor sentiment across the globe and led to a severe sell-off in Russian assets. Emerging market stocks as a whole dropped around 12% to January lows, only to rally back to near even by the end of the quarter as currencies stabilized and the Ukraine situation eased for the time being.

Non-US Developed Market Environment										
1Q 2014							Last Twelve Months			
	Value	Neutral	Growth				Value	Neutral	Growth	
Large	0.9%	0.4%	-0.2%				Large	18.9%	16.2%	13.3%
Mid	2.3%	2.3%	2.4%				Mid	20.3%	17.9%	16.0%
Small	4.0%	3.5%	2.9%				Small	22.8%	21.1%	19.4%

Emerging Market Environment										
1Q 2014							Last Twelve Months			
	Value	Neutral	Growth				Value	Neutral	Growth	
Large	-0.9%	-0.6%	-0.3%				Large	-3.7%	-1.5%	0.6%
Mid	-0.3%	0.7%	1.3%				Mid	-2.7%	-0.8%	0.8%
Small	2.6%	3.5%	4.5%				Small	-0.8%	0.4%	1.6%

A look at the style performance matrices shows that returns in the quarter were mostly positive across the board in developed markets. Small cap stocks and mid cap stocks did significantly better than large caps. Performance comparisons between growth stocks and value stocks were mixed.

For the twelve months ended in March, all developed market cap sizes and styles delivered strong returns. Yet the trend of small cap stocks and mid cap stocks providing higher returns than the large cap stocks was still evident. Value stocks did slightly better than growth stocks among all cap sizes.

In emerging markets, growth stocks continued to outpace value stocks, albeit by not as wide a margin as in the past several quarters. With that said, this quarter's outperformance by growth added to the lead that growth stocks had all last year. For the twelve months ended in March, EM large cap growth stocks returned more than 4% better than large cap value. In the mid and small cap EM stocks, growth was also favored over value by two to three percentage points. Recall that the performance of growth over value in emerging markets reached an all-time high last summer. That trend was still intact through March, but will be challenged going forward as the global markets began to favor stocks with cheaper valuations in April.



The currency effect on international investments had little effect on international equity returns for U.S. investors in the quarter. The dollar rallied in January and peaked at the end of the month as the currency concerns for emerging market countries reached new heights. Because the DXY Index compares the U.S. dollar to the basket of six major currencies, it doesn't show the rather dramatic volatility that hit the currency markets. Still with all the intra-quarter volatility between currencies, the DXY ended the quarter almost exactly where it started.

MTIP underperformed the pool benchmark by 13 basis points for the quarter and outperformed by 43 basis points for the twelve months through March. The quarterly outperformance was largely a result of the performance of the actively managed portfolios.

Performance of the actively managed portfolios was mixed in the quarter as three of five active portfolios outperformed their respective benchmarks. The two small cap portfolios which were recently added in March are not included in this breakdown as they had only one month of performance data. Large cap value and small cap core style buckets added to the relative return of the pool while the large cap growth style bucket underperformed. Monthly data showed the new small cap portfolios each underperformed by 39 basis points.

The restructure of the pool was completed with the funding of the small cap portfolios. Going forward, the strategy is to maintain approximately the same weightings in active/passive and large cap/small cap. An increase in the small cap allocation is possible if the market opportunity arises.

INTERNATIONAL EXPOSURE-MARKET CAP %

March 31, 2014

Managers	MEGA	GIANT	LARGE			MID	SMALL	MICRO	WTD AVG MARKET CAP (\$B)
	\$200B+	\$100-\$200B	\$50-\$100B	\$20-\$50B	\$10-\$20B	\$2.5-\$10B	\$500MM-\$2.5B	< \$500MM	
Acadian Asset Management	0.0	11.2	13.9	28.8	14.6	14.0	11.6	5.8	29.0
American Century Invt Mgmt	--	--	--	--	--	43.0	55.5	1.6	2.0
Bernstein Inv Mgt & Research with look throughs	3.2	6.3	16.7	22.1	15.1	13.6	5.0	0.1	39.6
DFA International Small Cap	--	--	--	--	0.4	33.9	52.4	13.1	1.9
Hansberger Global Investors	3.3	10.4	19.8	30.8	11.4	23.2	1.2	--	42.1
Martin Currie	4.4	11.5	24.1	23.5	18.8	17.8	--	--	45.8
Templeton Invt Counsel LLC	--	--	--	--	--	39.6	56.7	3.3	1.7
BlackRock ACWI Ex US Superfund A	3.5	13.0	20.6	25.4	16.7	18.1	1.5	--	46.3
BlackRock Intl Small Cap Index look through	--	--	--	--	--	28.9	44.7	4.9	1.9
BlackRock Emerging Market Fund look through	--	11.8	6.2	26.7	18.7	30.2	6.0	--	21.5
ALL INTERNATIONAL EQUITY PORTFOLIOS	2.8	10.6	17.5	22.9	14.5	20.0	7.9	1.2	39.4
International Custom Benchmark	3.1	11.5	18.2	22.4	14.7	19.8	8.8	1.4	40.6
Over/underweight(-)	-0.3	-0.9	-0.7	0.4	-0.2	0.2	-0.9	-0.2	

INTERNATIONAL EXPOSURE-SECTOR %

March 31, 2014

MANAGERS

	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Technology	Materials	Telecom. Services	Utilities
Acadian Asset Management	10.0	2.0	18.2	28.9	5.0	9.9	10.6	5.8	6.4	3.2
American Century Invt Mgmt	22.1	5.9	3.5	17.4	4.7	23.5	13.2	6.1	0.0	0.0
Bernstein Inv Mgt & Research with look throughs	15.2	5.2	8.7	27.3	8.3	11.2	7.5	7.4	6.1	3.0
DFA International Small Cap	19.7	5.7	6.0	14.2	5.9	24.9	9.0	10.0	2.0	2.3
Hansberger Global Investors	18.0	9.9	3.7	18.1	10.4	13.0	8.6	11.0	5.6	1.8
Martin Currie	18.0	12.2	5.9	13.5	11.8	14.6	11.1	4.4	7.0	1.3
Templeton Invt Counsel LLC	28.8	6.0	4.8	13.2	5.3	17.1	11.8	6.1	0.0	0.0
BlackRock ACWI Ex US Superfund A	10.6	9.8	9.0	26.3	8.1	11.1	6.7	8.5	5.2	3.5
BlackRock Intl Small Cap Index look through	14.1	4.2	5.0	15.9	4.3	17.1	6.8	8.6	1.0	1.6
BlackRock Emerging Market Fund look through	9.2	8.5	10.8	26.7	1.7	6.5	16.6	9.3	6.9	3.5
All International Equity Portfolios	12.8	8.7	8.6	23.8	7.8	12.4	8.4	8.2	5.1	2.9
International Custom Benchmark	11.7	9.4	8.7	25.8	7.8	12.4	7.2	9.0	4.7	3.4
Over/underweight(-)	1.1	-0.7	-0.1	-2.0	0.0	0.1	1.1	-0.8	0.4	-0.4

INTERNATIONAL PORTFOLIO CHARACTERISTICS

March 31, 2014

	Market Value	Number of Securities	3Yr Hist EPS Growth	Price/Earnings	Price/Book	Dividend Yield
International Accounts with look throughs	1,674,026,007	6,568	8.3	14.2	1.6	2.78

International Equity Managers

Acadian Asset Management	108,467,461.3	375	28.9	10.5	1.3	3.1
American Century Invnt Mgmt	30,736,734.0	106	24.0	11.7	2.5	1.3
Bernstein Inv Mgt & Research with look throughs	114,084,877.5	222	4.9	13.0	--	2.8
DFA International Small Cap	84,828,178.0	4,175	15.9	14.3	1.4	2.3
Hansberger Global Investors	119,081,790.8	61	11.3	17.3	2.3	2.0
Martin Currie	117,016,123.2	58	11.8	16.7	2.1	2.2
Templeton Invnt Counsel LLC	40,668,556.4	107	8.8	16.1	1.7	2.2
BlackRock ACWI Ex US Superfund A	975,906,350.2	1,848	4.5	14.5	1.6	3.0
BlackRock Intl Small Cap Index look through	28,602,528.2	2,417	17.5	14.6	1.5	2.3
BlackRock Emerging Market Fund look through	42,513,883.6	828	8.1	11.6	1.5	2.7

Benchmarks

MSCI All Country World Ex-United States		1,824	4.6	14.5	1.6	3.0
MSCI All Country World Ex-United States Growth		1,063	9.0	17.7	2.3	2.2
MSCI All Country World Ex-United States Value		996	0.1	12.2	1.3	3.8
MSCI EAFE Small Cap		2,162	17.3	14.4	1.5	2.3
MSCI World Ex-United States Small Cap		2,393	17.4	14.6	1.5	2.3
MSCI All Country Pacific		934	13.0	13.3	1.4	2.6
MSCI Europe		434	(1.6)	15.8	1.8	3.3

INTERNATIONAL EQUITY
Region and Market Exposure
 March 31, 2014

Developed Countries	Aggregate	MSCI	3 Month	FYTD	Calendar	1 yr	
	Int'l Portfolio	ACWI ex US					
	Weight (%)	IMI	Return	Return	YTD Return	Return	
			difference				
Asia/Pacific	21.9%	23.6%	-1.64%				
Australia	4.57%	5.55%		4.6%	13.7%	4.6%	-5.6%
Hong Kong	2.03%	1.99%		-4.1%	7.4%	-4.1%	-0.1%
Japan	14.26%	14.69%		-5.8%	2.2%	-5.8%	-1.2%
New Zealand	0.12%	0.19%		13.4%	26.0%	13.4%	10.4%
Singapore	0.95%	1.14%		-0.9%	0.9%	-0.9%	-8.2%
European Union	25.8%	25.7%	0.13%				
Austria	0.41%	0.25%		-0.1%	21.9%	-0.1%	11.6%
Belgium	0.90%	0.90%		3.1%	25.0%	3.1%	16.4%
Denmark	1.17%	1.08%		13.7%	45.3%	13.7%	38.8%
Finland	0.73%	0.72%		-0.2%	37.1%	-0.2%	31.4%
France	7.11%	6.89%		3.2%	26.6%	3.2%	23.4%
Germany	6.37%	6.52%		-0.1%	27.3%	-0.1%	26.3%
Ireland	0.37%	0.29%		9.4%	39.8%	9.4%	40.0%
Italy	1.94%	2.01%		15.0%	52.9%	15.0%	40.0%
Netherlands	1.94%	1.90%		1.0%	25.5%	1.0%	24.0%
Portugal	0.21%	0.18%		14.9%	39.3%	14.9%	24.3%
Spain	2.20%	2.48%		5.3%	46.3%	5.3%	35.1%
Sweden	2.45%	2.45%		2.2%	24.9%	2.2%	18.4%
Non-EU Europe	7.0%	7.0%	0.09%				
Norway	0.84%	0.71%		2.0%	17.4%	2.0%	7.8%
Switzerland	6.21%	6.25%		4.0%	19.6%	4.0%	16.7%
North America	6.8%	7.4%	-0.66%				
Canada	6.55%	7.41%		1.4%	13.5%	1.4%	8.2%
USA	0.21%	0.00%		1.5%	17.5%	1.5%	19.2%
United Kingdom	14.9%	15.4%	-0.44%				
United Kingdom	14.93%	15.37%		-1.2%	18.4%	-1.2%	12.5%
Other							
Other	0.70%	0.42%					
DEVELOPED TOTAL	77.2%	79.4%	-2.24%				
Emerging & Frontier Market Countries							
Asia/Pacific	14.3%	13.3%	0.95%				
China	4.43%	3.90%		-5.2%	9.6%	-5.2%	0.3%
India	1.75%	1.36%		8.2%	12.9%	8.2%	2.0%
Indonesia	0.55%	0.58%		22.3%	-14.2%	22.3%	-21.6%
South Korea	3.61%	3.28%		-2.1%	15.7%	-2.1%	7.5%
Malaysia	0.67%	0.83%		-0.6%	-0.7%	-0.6%	1.0%
Philippines	0.18%	0.20%		9.0%	-3.9%	9.0%	-16.8%
Taiwan	2.54%	2.68%		1.5%	7.9%	1.5%	7.3%
Thailand	0.54%	0.51%		7.3%	-9.9%	7.3%	-22.0%
European Union	0.5%	0.6%	-0.06%				
Czech Republic	0.07%	0.05%		6.8%	19.5%	6.8%	10.5%
Greece	0.12%	0.13%		18.6%	77.7%	18.6%	45.4%
Hungary	0.05%	0.05%		-8.6%	-16.7%	-8.6%	-11.8%
Poland	0.29%	0.37%		3.2%	23.5%	3.2%	18.9%
Non-EU Europe	1.1%	1.0%	0.09%				
Russia	1.05%	0.97%		-14.7%	-3.5%	-14.7%	-10.5%
Latin America/Caribbean	3.9%	3.7%	0.24%				
Brazil	2.39%	2.12%		1.6%	1.9%	1.6%	-16.0%
Chile	0.28%	0.31%		-3.0%	-15.7%	-3.0%	-27.0%
Colombia	0.16%	0.21%		4.8%	1.2%	4.8%	-10.4%
Mexico	0.98%	0.98%		-4.8%	-0.5%	-4.8%	-11.5%
Peru	0.14%	0.08%		3.3%	2.0%	3.3%	-18.4%
Mid East/Africa	1.8%	2.0%	-0.20%				
Egypt	0.03%	0.06%		13.9%	59.5%	13.9%	41.8%
South Africa	1.40%	1.60%		3.5%	12.7%	3.5%	4.8%
Turkey	0.36%	0.33%		0.4%	-16.8%	3.6%	-30.2%
Frontier	0.1%	0.0%	0.09%				
EMERGING & FRONTIER TOTAL	21.7%	20.6%	1.11%				

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: May 21, 2014

Subject: Public Equity External Managers Watch List - Quarterly Update

There were no changes to the Watch List this quarter. However, note that Hansberger had a change in ownership structure which has been added to the table below.

**PUBLIC EQUITIES
MANAGER WATCH LIST**
May 2014

<u>Manager</u>	<u>Style Bucket</u>	<u>Reason</u>	<u>\$ Invested (mil)</u>	<u>Inclusion Date</u>
Alliance Bernstein	International – LC Value	Performance	\$113.9	August 2012
Hansberger	International – LC Growth	Performance, Ownership Change	\$118.9	May 2013

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FIXED INCOME

FIXED INCOME OVERVIEW & STRATEGY

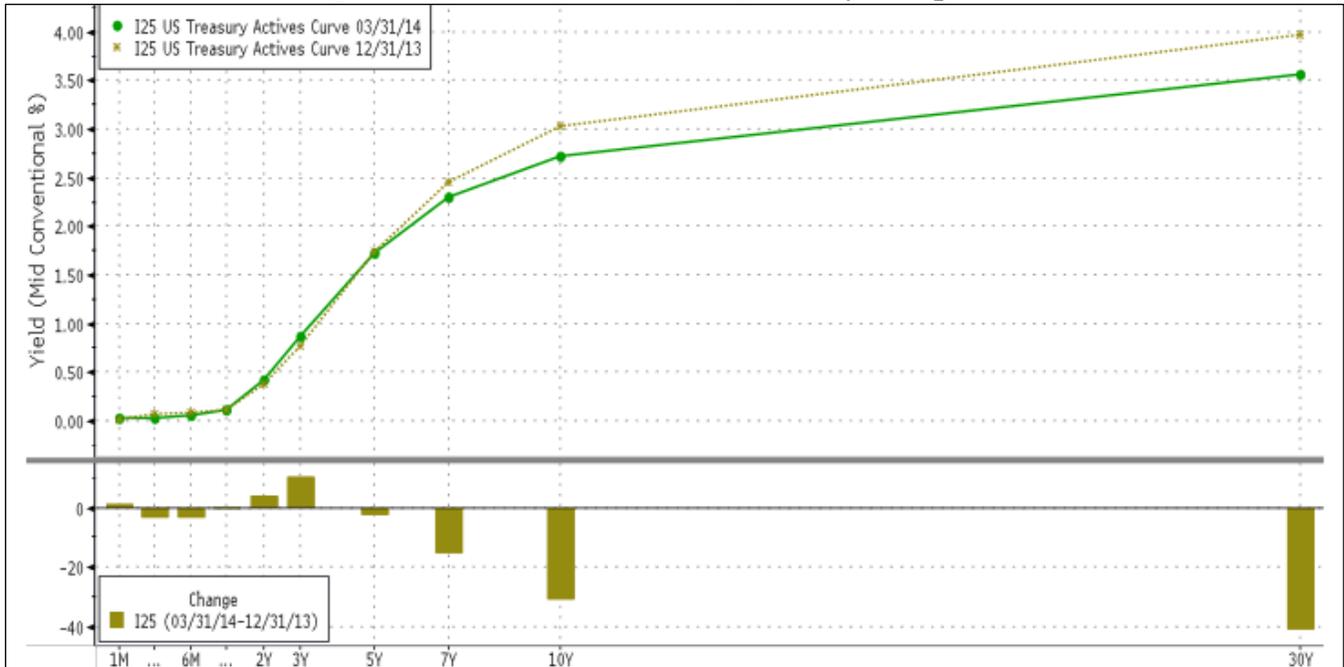
Nathan Sax, CFA, Portfolio Manager

May 20, 2014

RETIREMENT & TRUST FUND BOND POOLS

The yield on the U.S. Treasury 10-year note dropped in the first quarter, reversing the trend from the prior quarter and year. The yield on the benchmark 10-year ended 2013 at 3.03% and dropped 31 basis points in the first quarter of 2014 to yield 2.72%. Disappointing growth combined with low inflation pushed rates down in spite of Fed policy to taper its purchases of Treasury and mortgage bonds.

1Q14 Historical Yield Curve – Quarterly Comparison



Source: Bloomberg

Real GDP was reported to have grown at a seasonally adjusted annual rate of just 0.1% in the first quarter. The slower rate is largely because of harsh winter weather according to the financial press. Economic growth had been more robust in the prior two quarters, increasing at an annual pace of 4.1% in the third quarter followed by 2.6% growth in the fourth quarter. Real GDP for the calendar year 2013, however, was only 1.9%.

The Federal Reserve Board is expected to conclude its quantitative easing program later this year. That will clear the way for the central bank to begin to move the Federal Funds rate up in 2015. The current target rate for the overnight interbank lending rate is within a range of 0-1/4% as it has been for more than five years.

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 – 03/31/14

	RFBP Combined	Retirement Fund Bond Pool							
		External Management				Internal Management			
		Reams	Aberdeen	Post	Neuberg Berman	CIBP	TFBP	CIBP/TFIP Policy Range	Barclays Aggregate
Treasuries	19.48	49.46	14.22	0.00	0.00	17.15	17.54	15-45	35.65
Agencies & Govt Related	4.39	0.00	6.28	0.00	0.00	5.12	5.20	5-15	10.00
Total Government	23.87	49.46	20.50	0.00	0.00	22.27	22.74	20-60	45.65
Mortgage Backed	20.96	10.62	26.40	0.00	0.00	24.23	25.29	20-40	29.21
Asset Backed	4.81	0.00	6.37	0.00	0.00	5.92	5.86	0-7	0.49
CMBS	10.51	9.23	8.88	0.00	0.00	11.83	11.69	0-12	1.69
Total Securitized	36.28	19.85	41.65	0.00	0.00	41.98	42.84	20-59	31.39
Financial	12.87	16.89	11.69	9.80	7.90	12.76	11.73		7.47
Industrial	20.86	12.74	20.46	69.74	84.36	16.20	16.04		12.92
Utility	3.26	0.00	1.48	0.00	3.58	3.92	4.26		2.57
Total Corporate	36.99	29.63	33.63	79.54	95.84	32.88	32.03	10-40	22.96
Other	0.20	0.00	0.00	8.03	1.16	0.00	0.00		0.00
Cash	2.66	1.06	4.22	12.43	3.00	2.87	2.39		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 03/31/14
U.S. High Yield	0-15%	9.77%
Non-US (incl. EM)	0-10%	1.78%
Total "Plus" sectors	0-20%	11.55%
Core (U.S. Investment Grade)	80-100%	88.45%

TFIP Fixed Income Sector	Policy Range	TFIP on 03/31/14
High Yield	0-10%	6.74%
Core Real Estate	0-8%	7.12%
Core (U.S. Investment Grade)	0-100%	86.14%

Option-adjusted High Yield spreads tightened by 24 basis points in the first quarter. High Yield spreads narrowed in the past twelve months by 99 basis points to an OAS of 358 basis points. Investment grade corporate bonds tightened modestly, with OAS dropping from 114 basis points on December 31st to 106 basis points by March 31st. Investment grade spreads tightened by 33 basis points over the most recent 12-month period.

Barclays U.S. High Yield 2% Issuer Cap, Average OAS – 03/31/13 to 03/31/14



Source: Bloomberg

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.

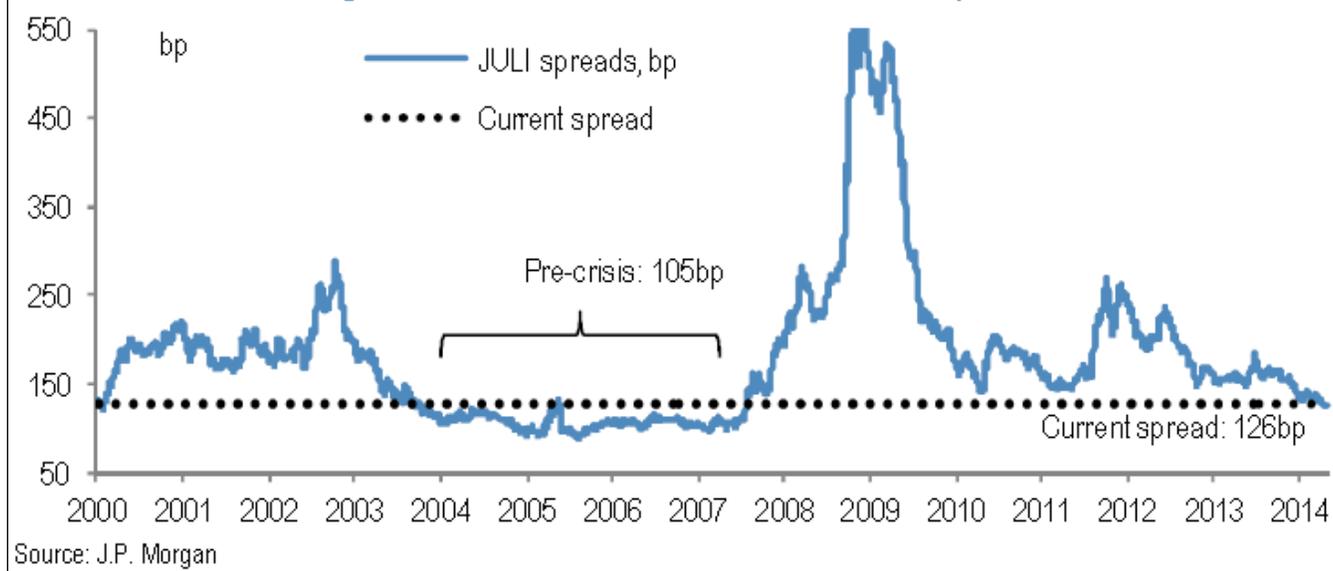
Benchmark Comparison Analysis CIBP vs. Merrill US Broad Market Index on 03/31/14						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	102.97	3.36	3.29	2.70	5.24	0.73
Benchmark	105.55	3.42	3.27	2.37	5.33	0.43
Difference	-2.58	-0.06	0.02	0.33	-0.09	0.30

Benchmark Comparison Analysis RFBP vs. Merrill US Broad Market Index on 03/31/14						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	103.13	3.51	3.50	2.91	5.16	0.94
Benchmark	105.55	3.42	3.27	2.37	5.33	0.43
Difference	-2.42	0.09	0.22	0.54	-0.17	0.51

Benchmark Comparison Analysis						
TFBP vs. Merrill US Broad Market Index on 03/31/14						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	104.42	3.84	3.75	2.70	5.25	0.73
Benchmark	105.55	3.42	3.27	2.37	5.33	0.43
Difference	-1.13	0.42	0.48	0.33	-0.08	0.30

The graph below shows recent tightening in corporate bond yield spreads. JULI is the J.P. Morgan U.S. Liquid Index. Adjusting for the longer duration and a lower financials weighting in the current makeup of the index, spreads are just 6 basis points above pre-crisis levels.

Exhibit 2: Spreads are currently 20bp above the pre crisis average. Adjusting for longer duration and lower financials weight in the index, the difference is closer to 6bp.



Concluding Comments

Following a rare negative total return for calendar year 2013, the bond market surprised money managers when yields fell in the first quarter of 2014. Globally, inflation is quite low and economic growth in the United States and abroad has not yet accelerated to the point where interest rates can rise for a more sustained period of time. Housing, credit, business investment and hiring have all lagged despite extraordinary measures on the part of the Federal Reserve to keep monetary policy accommodative.

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: Nathan Sax, CFA
Portfolio Manager – Fixed Income

Date: May 20, 2014

Subject: Fixed Income External Managers Watch List

Post Advisors, a High Yield manager in both the Retirement Funds Bond Pool and the Trust Funds Investment Pool remains on the watch list. Performance has continued to be fine; however, the firm announced several recent personnel changes, including the resignation of the firm's COO following organizational changes proposed by the majority owner, Principal Financial Group. As stated in August, while we remain confident in the manager, we think the changes merit listing until we have more time to observe the manager following recent organizational changes.

MANAGER WATCH LIST

<u>Manager</u>	<u>Strategy</u>	<u>Reason</u>	<u>Amount Invested</u> <u>(\$ millions) as of</u> <u>July 31, 2013</u>	<u>Inclusion Date</u>
Post Advisors	Public High Yield	Organizational stability	\$61.3 RFBP \$108.9 TFIP	Aug 2013

BELOW INVESTMENT GRADE FIXED INCOME HOLDINGS (INTERNALLY MANAGED)

March 31, 2014

(in millions)

	Par	Book	Market	Price	Name	Coupon %	Maturity	Rating M/S&P	Comments
	\$8.000	\$7.954	\$8.045	\$100.56	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	\$33.066	\$110.22	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	\$4.678	\$93.56	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	\$2.363	\$23.63	Lehman Brothers	5.500	05/25/10	NR/NR	Currently in default and liquidation
	\$53.000	\$42.709	\$48.152						
A	= Additions since 12/31/13								
	None								
D	= Deletions since 12/31/13								
	None								
	<u>In default</u>								
	\$10.000	\$0.000	\$2.363	\$23.630	Lehman Brothers	5.500	05/25/10	NR/NR	Currently in default and liquidation

Short Term Investment Pool (STIP)

Richard Cooley, CFA, Portfolio Manager
May 20, 2014

During the first quarter money market yields were lower as the Federal Reserve continued its five plus year-old policy of low fed funds rates. Three month Libor rates decreased by 1.55 basis points and one month Libor rates decreased by 1.57 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 slightly wider during the quarter, as depicted by the spread between three month Treasury bills and three month Libor rates (TED spread). This spread ended the first quarter at about 20 basis points, up 2 basis points for the quarter.

TED Spread (03/31/13 – 03/31/14)



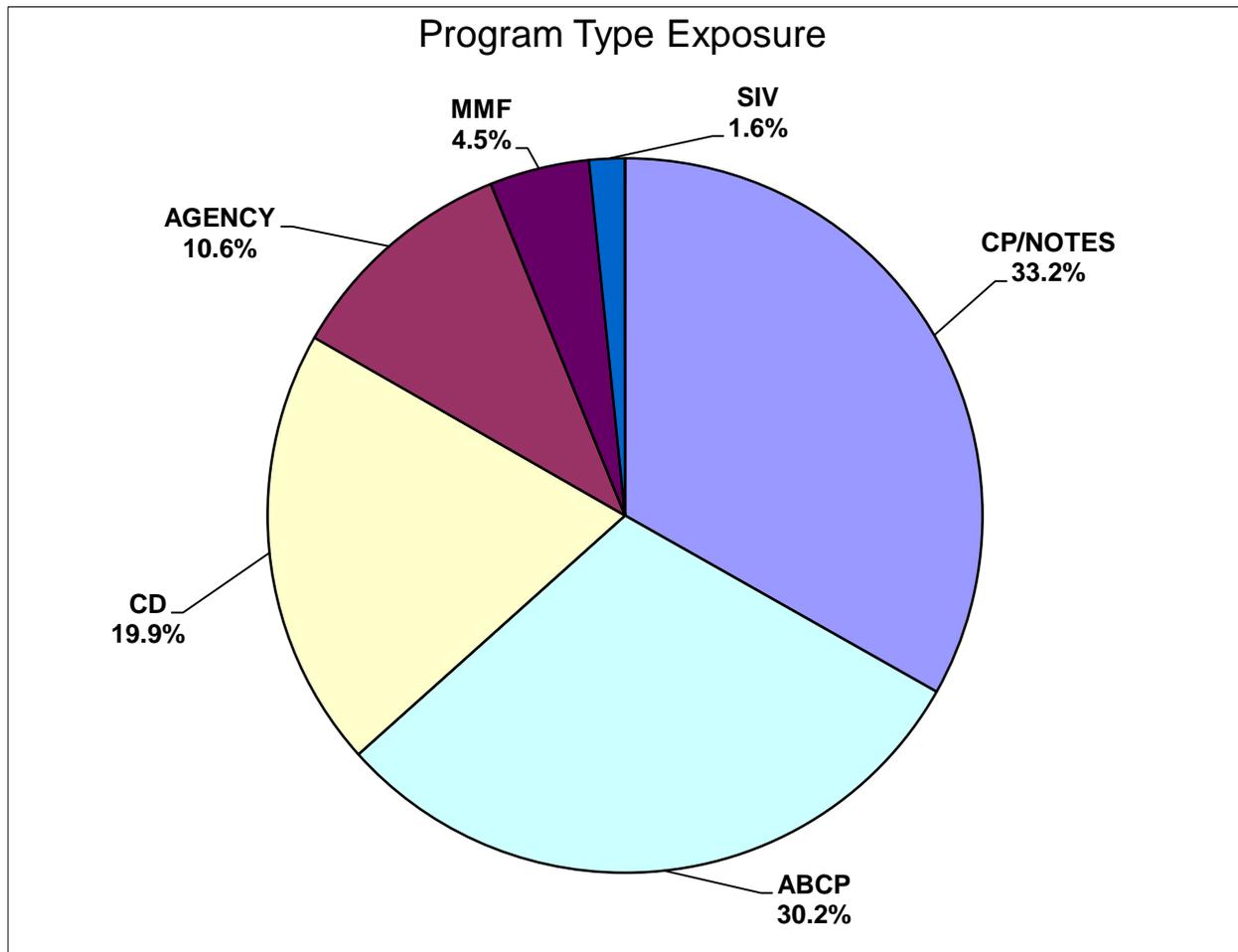
The STIP portfolio is currently well diversified and is operating within all the guidelines adopted by the Board at the November 2012 meeting. Daily liquidity is at a minimum of \$150 million and weekly liquidity is at a minimum of \$250 million. The average days to maturity is 51 days as compared to a policy maximum of 60 days. Asset-backed commercial paper is 30% of holdings (40% max) and corporate exposure is 33% (40% max). We currently have approximately 10% in agency paper, 20% in CD's (30% max) and 4.5% in four institutional money funds.

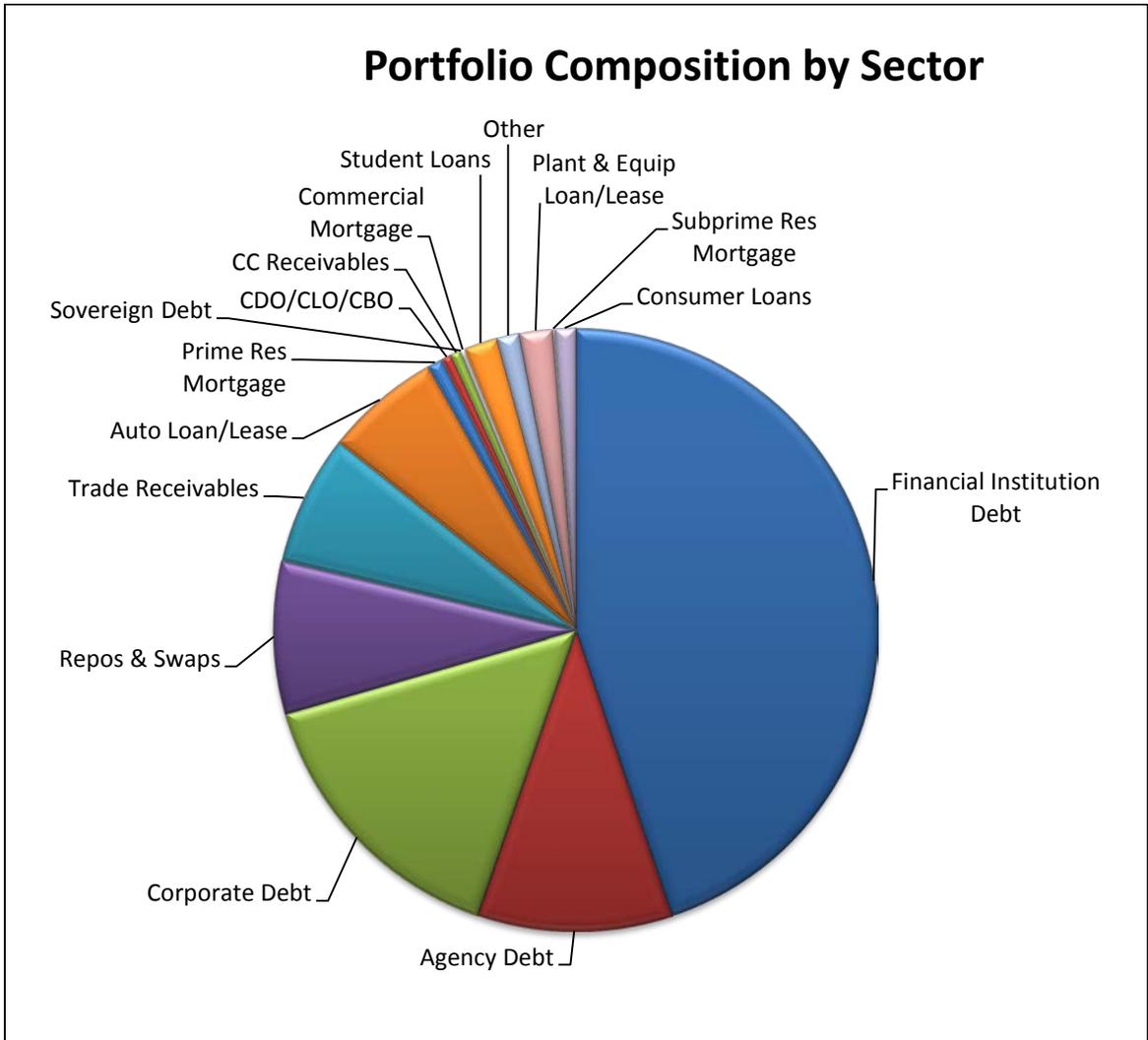
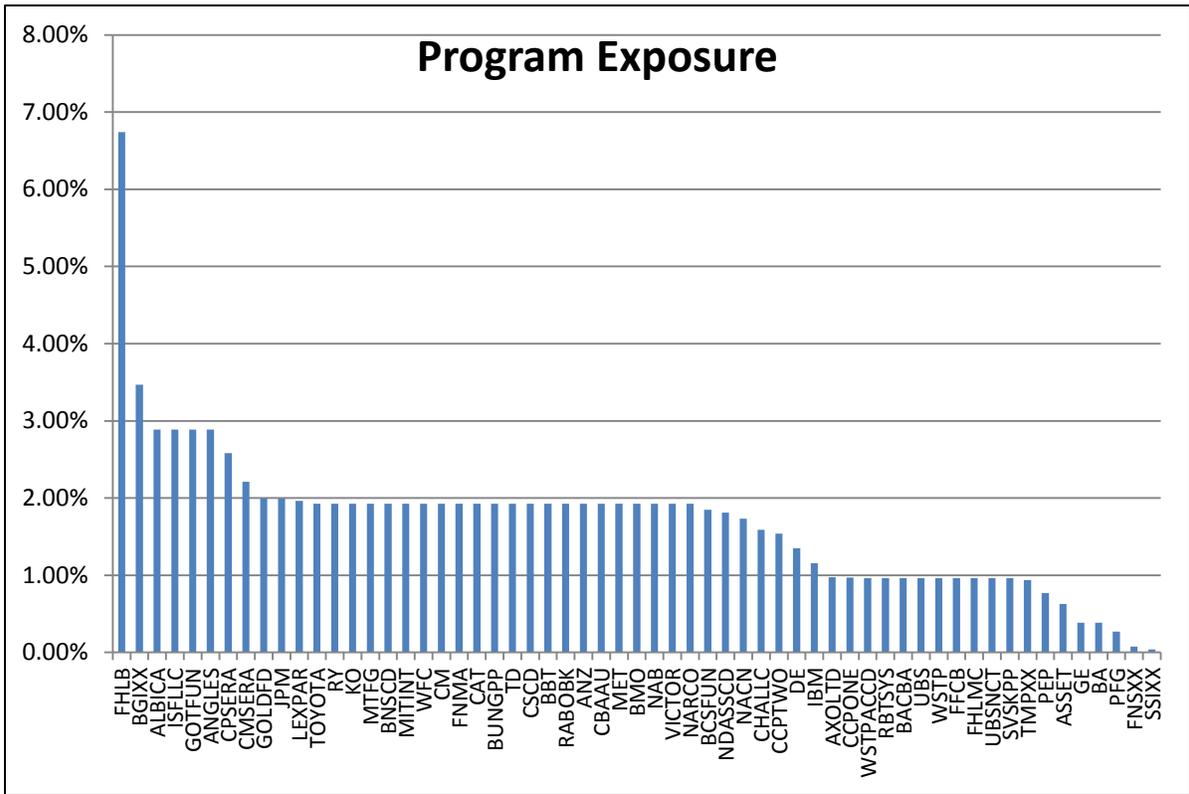
During the first quarter we purchased \$132 million of floating rate corporate notes. We also purchased \$50 million of fixed rate Yankee CDs, \$100 million of floating rate Yankee CDs and \$50 million of floating rate agencies. Lower Libor rates detracted from the portfolio yield during the quarter.

The net daily yield on STIP is currently 0.11% as compared with the current one-month LIBOR rate of 0.15% and current fed funds target rate of 0.0%-0.25%. The portfolio asset size is currently \$2.6 billion, down \$100 million from three months ago. All charts below are as of April 29, 2014.

STIP Performance (03/31/14)

	1 Year	3 Year	5 Year	10 Year
STIP Net of Fees/Reserve	0.16%	0.25%	0.30%	1.94%
iMoneynet First Tier Instit. (Gross)	0.21%	0.25%	0.32%	1.98%
LIBOR 1 Month Index	0.18%	0.21%	0.24%	1.90%





State Fund Insurance

Richard Cooley, CFA, Portfolio Manager
May 20, 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 03/31/2014						
Summary Characteristics						
	Price	Coupon	Current Yield	Yield to Maturity	Effective Duration	Effective Spread
Portfolio	104.96	3.55	3.41	1.73	3.60	0.48
Benchmark	104.09	2.78	2.69	1.71	3.94	0.37
Difference	0.87	0.77	0.72	0.02	-0.34	0.11

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 first quarter slightly tighter as compared to the end of the previous quarter. Agencies spreads were 1 basis point tighter at 16 basis points and corporate spreads tightened by 8 basis points from 114 basis points to 106 basis points. During the quarter, the ten year Treasury yield decreased by 31 basis points from 3.03% to 2.72%.

The total fixed income (including STIP) portion of the account outperformed the benchmark by 29 basis points during the March quarter and outperformed by 60 basis points over one year. Longer term performance is +93 basis points for the past three years, +196 basis points for the past five years and +50 basis points for the past ten years (ended March 31, 2014).

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

During the March quarter, there were purchases of \$37 million of corporate bonds spread across the curve. We also purchased \$15 million of 10 year Agencies. We sold \$5 million of equity fund units during the quarter.

The portfolio has a 2 basis point yield advantage over the benchmark. Client preferences include keeping the STIP balance in a 1-5 percent range (2.7% on 03/31) and limiting holdings rated lower than A3 or A- to 25 percent of fixed income, at the time of purchase, (24.9% on 03/31).

State Fund vs. Merrill US Corp and Govt, 1-10 Yrs on 03/31/2014			
	SFBP Portfolio (%)	Benchmark (%)	Difference
Treasuries	15.34	58.01	-42.67
Agencies & Govt Related	21.87	12.71	9.16
Total Government	37.21	70.72	-33.51
Mortgage Backed	0.68	0.00	0.68
Asset Backed	4.85	0.00	4.85
CMBS	0.00	0.00	0.00
Securitized	5.53	0.00	5.53
Financial	25.97	10.25	15.71
Industrial	23.16	17.39	5.77
Utility	4.94	1.64	3.30
Total Corporates	54.07	29.28	24.78
Other	0.00	0.00	0.00
Cash	3.19	0.00	3.19
Total	100.00	100.00	

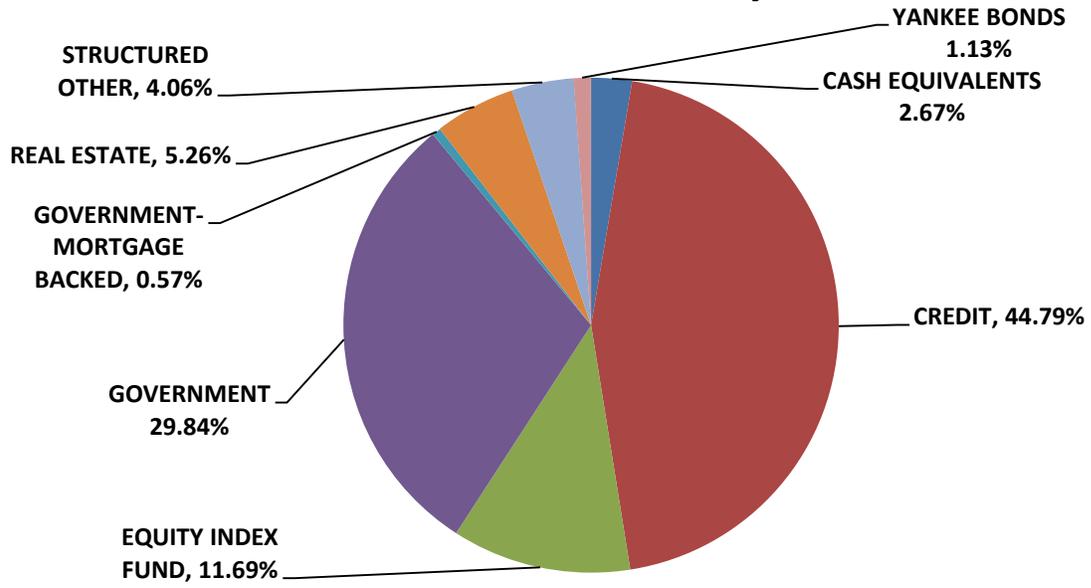
The following sector breakout is a look at the entire State Fund account including the S&P 500 and ACWI ex-U.S. equity holdings. The policy range for equities is currently 8%-12%. This is a client preference as the maximum allowed by statute is 25% of book value.

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.

3/31/2014 State Fund By Sector

<u>Security Name</u>	<u>Market Value</u>	<u>%</u>
CASH	37,008,241	2.67%
CASH EQUIVALENTS	37,008,241	2.67%
BANKS	133,838,341	9.65%
COMMUNICATIONS	14,175,848	1.02%
ENERGY	32,410,306	2.34%
GAS/PIPELINES	6,071,861	0.44%
INSURANCE	62,461,633	4.50%
OTHER FINANCE	117,963,497	8.51%
RETAIL	23,048,938	1.66%
TRANSPORTATION	44,707,692	3.22%
UTILITIES	60,713,723	4.38%
ENERGY	5,285,850	0.38%
INDUSTRIAL	120,461,455	8.69%
CREDIT	621,139,145	44.79%
EQUITY	162,113,499	11.69%
EQUITY INDEX FUND	162,113,499	11.69%
TITLE XI	695,832	0.05%
TREASURY NOTES/BONDS	176,894,553	12.76%
AGENCY	236,212,959	17.03%
GOVERNMENT	413,803,345	29.84%
FHLMC	4,394,006	0.32%
FNMA	3,521,787	0.25%
GOVERNMENT-MORTGAGE BACKED	7,915,793	0.57%
REAL ESTATE	72,935,252	5.26%
REAL ESTATE	72,935,252	5.26%
OTHER STRUCTURED	56,279,289	4.06%
STRUCTURED OTHER	56,279,289	4.06%
OTHER	15,612,463	1.13%
YANKEE GOVT. BONDS	15,612,463	1.13%
STATE FUND BY SECTOR	1,386,807,027	100.00%

3/31/2014 State Fund By Sector



Treasurer's Fund

Richard Cooley, CFA, Portfolio Manager

May 20, 2014

The fund totaled \$872 million as of March 31, 2014, consisting of approximately one half general fund monies and the balance in various other state operating accounts. There were \$30 million of security purchases in the first quarter. Current securities holdings total \$60 million. The investment policy for the fund limits security holdings to 50% of the projected General Fund FYE balance of the current period. The March projected General Fund FYE balance was \$498 million.

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Cash Management

MEMORANDUM

Montana Board of Investments

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

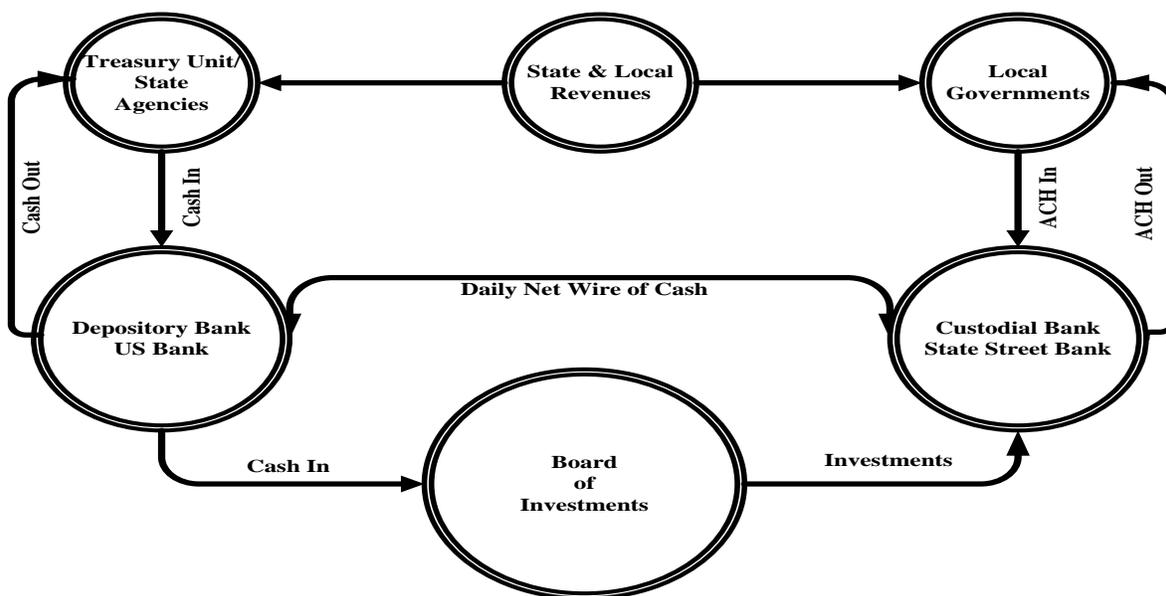
To: Members of the Board
From: David Ewer, Executive Director
(With input from Rich Cooley, Gayle Moon and Julie Feldman)
Date: May 20, 2014
Subject: Cash Management of State Monies

Background

For forty years, the Board of Investments (the “Board”) has been responsible for administering the Unified Investment Program, which is constitutionally-mandated. With only a few exceptions, this program mandates that all state money, regardless of source or use, flows into or out of the Board of Investments. The yearly velocity is in the billions of dollars, the number of transactions is in the tens of thousands. The Board serves as a vital utility, but rather than delivering gas or electricity, the Board delivers cash for the entire campus of state government.

Along with the Board of Investments, there are three other key entities at the highest level that are responsible for the state’s cash movement: the Department of Administration’s Treasury Unit, the state’s depository bank, US Bank in Helena, and the state’s custodial bank, State Street Bank, in Boston.

The chart below shows the daily cash flow possibilities among the various entities:



Montana's State Treasurer, *ex officio*, is Sheila Hogan, Director of the Department of Administration. The Department's State Accounting Bureau assists the Board of Investments in administering the treasury function and overall cash management. The Bureau Chief annually prepares General Fund cash projections which estimate monthly cash availability and potential cash deficits possibly necessitating the State to issue Tax and Revenue Anticipation Notes (TRANS).

The Treasury Unit deposits the agency collections not deposited directly at US Bank, reconciles all bank accounts, provides a collateralization report on a monthly basis, reconciles all Electronic Funds Transfer, provides prior notification to the Board of Investments of large outgoing wires, and reports all payment and receipt activity to the Board. Additionally the Department works with US Bank on all payment and collection issues and works with the Board in establishing and maintaining all external depository bank accounts and reviewing and approving deposit exceptions as allowed under State law.

The Board's involvement with cash management is closely related to managing the Short Term Investment Pool (STIP) portfolio. In general, STIP provides the liquidity for all aspects of the cash management function, including the pension funds, various state agencies, the State's General Fund, and local governments choosing to participate in STIP.

Cash Flow Types Occurring Throughout the Year

- Inflows: Income from income and property taxes, oil and gas taxes, investment earnings and US government payments.
- Outflows: Vendor payments, pension benefits, State of Montana payroll, FICA, school payments (OPI).
- Settlements: Security purchases, sales and maturities for STIP, Trust Funds Investment Pool (TFIP), State Fund, Montana Real Estate Pool (MTRP), All Other Funds and pool participant unit purchases and sales. These transactions are included in the State Street/US Bank daily net wire.

Daily Cash Flow Types to US Bank, the Depository Bank

- Deposits by the Department of Revenue and Treasury Unit
- ACH (Automated Clearing House) deposits/withdrawals
- Wires in/out including State Street Bank net wire
- Warrants cashed
- Sweep investment purchase at end of the day in excess of a \$3 million balance
- Sweep maturity from previous day

Appendix A

As a reference tool, Appendix A accompanying this memo includes specific Board policy, governance or orientation material directly relating to cash management and the general duties of the State Treasurer.

Senior Staff Involving Cash Management

While literally scores of state and private sector employees are part of the State's cash management, three state employees have principal responsibilities and will make brief presentations during the Board's May 2014 meeting relating to their respective areas.

Julie Feldman, CPA, Bureau Chief, State Accounting Bureau. Julie is responsible for the state's accounting, budget control and treasury functions. She is also responsible for the state's Comprehensive Annual Financial Report (CAFR). Julie will provide an overview of the state's characteristics of its cash flow, its biggest components as to in and out flow and the general stability (or instability) of these flows.

Richard Cooley, CFA, Portfolio Manager. Rich is the Board's principal staff person who oversees bulk cash movement to and from the depository bank, in Helena and the custodial bank, State Street Bank in Boston. Rich monitors and assures sufficient liquidity, and invests idle monies.

Gayle Moon, CPA, Financial Manager. Gayle is the principal overseer of specific cash movement from the 'customer' perspective, i.e., all the STIP customers, primarily state agencies, but many Montana local governments as well, who may use STIP. She is also responsible for accounting for the "bulk" cash transactions with respect to the STIP money pool; hers is a dual role.

Questions and Answers (Q and A)

In anticipation of some likely questions, Staff has compiled our responses in the following Q and A:

1. How does the state pay its bills?
Bills are paid through the Department of Administration by issuing checks (called 'warrants') drawn against funds at US Bank in Helena. The Board of Investments administers the daily movement of cash between US Bank (the 'Depository bank') and State Street Bank (the 'Custodial bank').
2. How does the state track, account, and invest or expend its monies?
State agencies remit the cash they collect to the state's Treasury Unit. Agencies must use SABHRS (Statewide Accounting Budgeting and Human Resource System) to track their cash and other funds. The Unified Investment Program mandates that the Board of Investments is in charge of where and how the money is invested. State agencies use the Treasurer's Fund or separate STIP accounts for holding their cash. The Treasurer's Fund has its own STIP account.
3. What is STIP? How big is it? Who governs it?
STIP is the Board's Short Term Investment Pool, which operates similarly to a money market fund. Its current size is \$2.6 billion. Its governance is entirely under the Board of Investments. State agencies that must revert earnings to the State's General Fund use the Treasurer's Fund and may not have a separate STIP account.
4. How much available cash does STIP maintain?
STIP maintains \$150 million in daily liquidity and \$250 million weekly.
5. How many STIP customers are there?
As of March 31, 2014 there were a total of 498 accounts: 329 state accounts and 169 local government accounts.
6. Can anyone use STIP?
No. State agencies must be authorized by law to have their own STIP account; otherwise they must use the Treasurer's Fund. Montana local governments may choose to invest in STIP.

7. What is the difference between the State's Depository bank and its Custodial bank? Who is responsible for hiring them?

The Depository bank, US Bank, assigns a bank account in the State of Montana's name. This account is used to deposit daily cash receipts and pay the State's warrants. The Department of Administration is responsible for hiring the Depository bank. The Custodial bank, as the name implies, holds (has 'custody' of) the securities within the Board's seven investment pools and the All Other Funds investments. The Custodial bank provides an investment accounting system. The Custodial bank is hired by the Board of Investments and the Department of Administration.

8. How are these banks paid?

Both banks are paid by a permanent law (a 'statutory' appropriation) rather than the biennial appropriation process. Both vendor functions must be bid out under the State's procurement laws.

9. What safeguards are in place to protect the state's money?

a. Compartmentalization with separate functions between the Treasury Unit and the BOI. No single individual has the authority to direct the entire cash management process.

b. User access and dollar limitations are controlled by US Bank's security module and Board internal control policies.

c. Daily reconciliation of STIP and Treasurer's cash.

d. There are numerous internal controls.

e. Audits are done annually.

Appendix A

Cash Management Authorization

From the Board's Governance Manual:

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.

Selection of Custodial Bank and Investment Consultant – While this Governance Policy 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.

From Montana Code Annotated:

17-6-101. Deposit of funds in hands of state treasurer. (1) Under the direction of the board of investments, the state treasurer shall deposit public money in the treasurer's possession and under the treasurer's control in solvent banks, building and loan associations, savings and loan associations, and credit unions located in the state, except as otherwise provided by law, subject to national supervision or state examination.

(2) If needed financial services are not available through solvent banks, building and loan associations, savings and loan associations, and credit unions located in the state, the state treasurer may deposit public money in out-of-state financial institutions subject to national supervision.

(3) The state treasurer shall deposit funds in banks, building and loan associations, savings and loan associations, and credit unions in amounts that may be designated by the board of investments and shall withdraw deposits when instructed to by the board of investments.

(4) When money has been deposited under the board of investments and in accordance with the law, the state treasurer is not liable for loss on account of any deposit occurring from any cause other than the treasurer's own neglect or fraud.

(5) The state treasurer shall withdraw all deposits or any part of the deposits from time to time to pay and discharge the legal obligations of the state presented to the treasurer in accordance with the law.

(6) The state treasurer may contract with a financial institution to provide general depository banking services. The cost of contracting for banking services is statutorily appropriated, as provided in 17-7-502, from the general fund.

17-1-111. General fiscal duties of state treasurer. (1) The state treasurer is the custodian of all money and securities of the state unless otherwise expressly provided by law.

(2) It is the duty of the state treasurer to:

(a) receive and account for all money belonging to the state, not expressly required by law to be received and kept by some other person;

(b) pay warrants out of the funds upon which they are drawn;

(c) upon payment of any warrant, record the receipt of the person to whom it is paid;

(d) keep an account of all money received and disbursed;

(e) at the request of either house of the legislature or of any legislative committee, give information in writing as to the condition of the treasury or on any subject relating to the duties of the office of state treasurer;

(f) superintend the fiscal concerns of the state;

(g) suggest plans for the improvement and management of the public revenue;

(h) keep an account of all warrants drawn upon the treasury and of other appropriation records that the treasurer determines to be essential for the support of the accounting records maintained in the department;

(i) keep a register of warrants, showing the fund upon which each warrant is drawn, each warrant's number, who received the warrant, and the date issued;

(j) require all persons who have received money belonging to the state but who have not accounted for it to settle their accounts;

(k) draw warrants on the state treasury for the payment of money directed by law to be paid out of the treasury, except that a warrant may not be drawn unless authorized by law;

(l) authenticate with the official seal of the state all warrants drawn and all copies of papers issued from the office of state treasurer;

(m) collect and pay into the state treasury all fees received;

(n) discharge other duties as may be imposed upon the state treasurer by law; and

(o) provide information through the state's official internet website detailing how donations can be made to the state general fund or to any function of state government.

Cash Management Funds from the Board's 2013 Annual Report

TREASURER'S FUND

The Treasurer's Fund (Fund) is comprised of surplus cash in all state accounts that do not retain their investment earnings. All earnings are deposited in the state general fund. State law authorizes the Board to determine the amount of surplus cash in the Fund to be invested and the type of investments to be made. Invested balances at book value vary widely due to varying levels of excess cash in the state's general fund and other accounts comprising the Fund. The Fund is managed to maximize income, rather than for total rate of return. This Fund has been a major investor in STIP since 1973 when STIP was created.

<u>Treasurer's Fund Annual Change</u>						
Investment Type	6/30/2013 Book Value	% of Total	6/30/2012 Book Value	% of Total	\$ Change	% of Change
US Bank Sweep Repo	8,790,049	0.7	7,740,691	0.7	1,049,358	13.6
US Agency Bonds	19,891,121	1.6	34,628,978	3.1	(14,737,857)	(42.6)
Cash Equivalents (STIP)	1,243,963,357	97.7	1,059,329,201	96.2	184,634,156	17.4
Total	1,272,644,527	100.0	1,101,698,870	100.0	170,945,657	15.5
<hr/>						
Income	2,464,517		2,653,812		(189,295)	(7.1)

Treasurer's Fund 2013 Total Rates of Return

<u>Asset Type</u>	<u>% Return</u>	<u>Benchmarks</u>	<u>Benchmark % Return</u>	<u>Return +/- Benchmark</u>
Cash Equivalents	0.26	3 Month Treasury	0.08	0.18
All Assets	0.26			

SHORT TERM INVESTMENT POOL

The Short Term Investment Pool (STIP), created in 1973, provides participants access to a short-term money market fund. Shares are fixed at \$1.00, fractional shares may be purchased, and participants may buy or sell shares with one business day's notice. Income is distributed on the first day of the month. Pool investments are managed by Board staff. There were 495 accounts invested in STIP during the year, consisting of 326 state accounts and 169 local government accounts. All investments are made by Board staff and all income is distributed to participants. The table below shows the annual change in the value of shares by major participant type.

STIP Annual Change by Major Participant Type						
Participant	6/30/2013 Book Value	% of Total	6/30/2012 Book Value	% of Total	\$ Change	% Change
Treasurer's Fund	1,243,963,357	47.3	1,059,329,201	44.4	184,634,156	17.4
Local Governments	494,836,035	18.8	450,226,142	18.9	44,609,893	9.9
State Agencies Operating	217,658,964	8.3	227,075,813	9.5	(9,416,849)	(4.1)
Trust Funds	205,389,962	7.8	214,294,603	9.0	(8,904,641)	(4.2)
University Funds	86,974,740	3.3	155,011,872	6.5	(68,037,132)	(43.9)
Insurance Funds	156,814,519	6.0	127,249,142	5.3	29,565,377	23.2
Pension Funds	111,725,454	4.2	72,292,061	3.0	39,433,393	54.5
Board Investment Pools	89,235,720	3.4	53,012,030	2.2	36,223,690	68.3
Debt Service Funds	22,504,572	0.9	27,165,259	1.1	(4,660,687)	(17.2)
Total	2,629,103,323	100.0	2,385,656,123	100.0	243,447,200	10.2
Income Distributed	5,973,699		6,891,076		(917,377)	(13.3)

The table below shows the historical yield, by year, since 1974 to 2013, to STIP participants net of all fees.

74	8.8	79	8.1	84	10.6	89	8.6	94	3.4	99	5.4	04	1.1	09	1.7
75	9.0	80	10.2	85	10.1	90	8.7	95	5.8	00	6.0	05	2.3	10	0.3
76	7.0	81	12.0	86	8.3	91	7.9	96	5.8	01	6.6	06	4.2	11	0.3
77	6.8	82	13.8	87	6.3	92	5.4	97	5.7	02	2.8	07	5.3	12	0.3
78	7.2	83	11.3	88	7.1	93	3.7	98	5.9	03	1.5	08	4.2	13	0.2

STIP Total Rates of Returns Versus Benchmark				
Year	% Return	Benchmark	Benchmark % Return	Return +/- Benchmark
2013	0.25	LIBOR 1 Month	0.21	0.04
3 Year Annualized Average	0.29	LIBOR 1 Month	0.23	0.06
5 Year Annualized Average	0.57	LIBOR 1 Month	0.46	0.11
10 Year Annualized Average	2.01	LIBOR 1 Month	1.97	0.04

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Private Equity & Real Estate



Overview of Private Equity and Real Estate Pools

Cliff Sheets, CFA
Chief Investment Officer

Ethan Hurley, CAIA
Portfolio Manager

Table of Contents

- **What is a Private Equity/Real Estate Fund**
 - **General Characteristics & Terms**
 - **Life Cycle of a Fund**
- **What We Have**
 - **Characteristics**
 - **Objectives and Results**
- **Strategic Priorities and Rationale**
- **2013 – Year in Review**
- **Liquidity**
- **Implementation**
- **Investment Commitment Pacing**
- **Investment Policy Statements**

General Characteristics & Terms

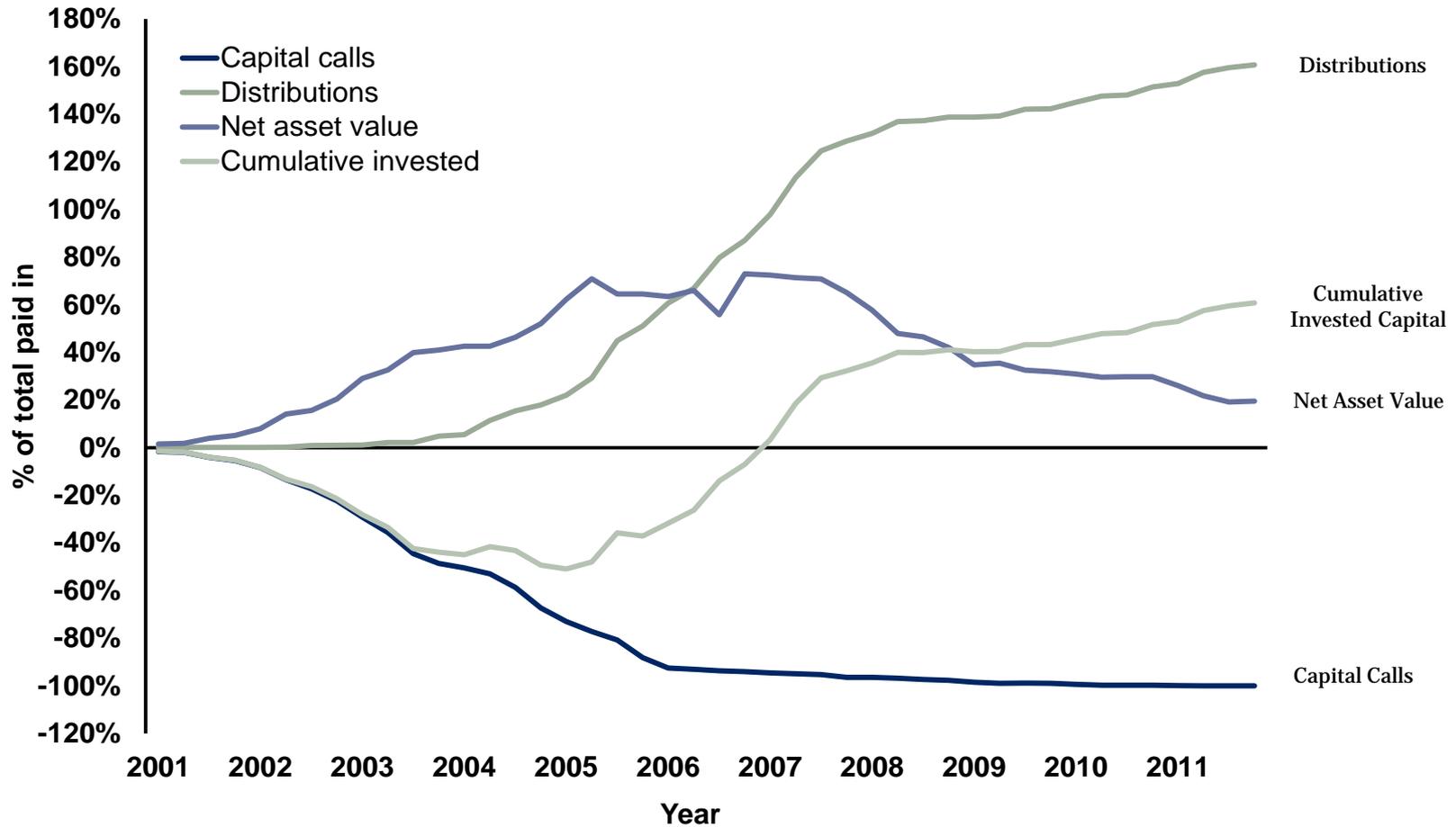
Private Equity Fund

- Finite life investment vehicle generally structured as a limited partnership
- General Partner – Manager of the Fund
- Limited Partner – Investor in the Fund
- Term of Fund – 10 - 12 years, with options to extend
- Investment Period – 4 - 6 years
- Size – \$50M - \$15B
- Minimum Commitment – \$1M
- GP Commitment – 1% - 5%, “skin in the game”
- Management Fee
 - 1.75% - 2.00% of committed capital during the investment period
 - 1.00% - 2.00% of invested capital after the investment period
- Carried Interest – 20%
- Preferred Return – 8%
- Fee Offsets – 50% - 100%

Real Estate Fund – Non Core

- Finite life investment vehicle generally structured as a limited partnership
- General Partner – Manager of the Fund
- Limited Partner – Investor in the Fund
- Term of Fund – 6 - 8 years, with options to extend
- Investment Period – 2 - 4 years
- Size – \$50M - \$5B
- Minimum Commitment - \$1M
- GP Commitment – 1% - 5%, “skin in the game”
- Management Fee
 - 1.00% - 2.00% of committed capital during the investment period
 - 1.00% - 1.25% of invested capital after the investment period
- Carried Interest – 20%
- Preferred Return – 8% - 10%
- Fee Offsets – generally not applicable

Lifecycle of a Typical Fund



Data source: Thomson Reuters (cash flow summary report) as of 12/31/11

What We Have



Private Equity - Attributes

- **Economic value-add**
 - **Based on underlying company fundamentals (revenue, EBITDA growth)**
 - **Business basics**
 - Professionalization of management and reporting systems
 - Augment sales and marketing
 - New products, new markets
 - Upgrade corporate governance
 - Establish a Board of Directors
 - M&A function
 - Manufacturing efficiency gains
 - **Financing strategies**
 - **Business rationalization**
 - Reduce headcount
 - Exit non-core, unprofitable markets/products
 - Balance sheet restructuring
 - **Multiple expansion – buy low, sell high**
 - **Debt funds – capital structure-focused**
 - Debt-to-equity conversion for influence/control

Private Equity - Attributes

- **Risks**

- Financial – “leverage”
- Operating, execution
- Valuation
- Structure, liquidity
- Country, Manager, Strategy
- Vintage year
- Technology
- Industry

- **Costs**

- Higher than traditional asset types; strategy dependent, high-end is generally 2% management fee and 20% carry (i.e., profit participation)
- However, CEM Benchmarking survey results as of 12/31/12 show MBOI average management fee of 1.44% for our direct fund commitments vs. peers at 1.65%
- Majority of our managers have a minimum return hurdle (e.g., 8%)
 - Must return our fees, expenses and capital plus meet minimum before profit participation

Private Equity - Attributes

- **Program Structure** (% of holdings as of December 31, 2013)
 - **Venture Capital (19.6%)**
 - Typical IT related company investments, early-stage, pre-revenue
 - **Buyout - Broadly (70.6%)**
 - Growth capital to smaller, growing companies, lower leverage, often minority ownership
 - Investments in larger, more established companies, higher leverage, control
 - Leverage a key component of a company's capital structure, value creation
 - Special Situations – Energy-focused funds
 - **Distressed (8.6%)**
 - Financial – companies with poorly organized capital structures
 - Operational – need for operational restructuring
 - Includes trading strategies or those focused on significant influence and control positions
 - **Mezzanine (1.2%)**
 - Subordinated debt investments senior to equity and junior to senior debt
 - Investments targeted at financing acquisitions, recapitalizations, financing growth
- **Relationships**
 - **Key relationships**
 - Largest exposures, multiple funds, those that have performed
 - Future consideration
 - **Legacy/Non-Strategic relationships**
 - Organizational/structural issues, those that have not performed
 - Mega/large buyouts, generally
 - Will not make future commitments

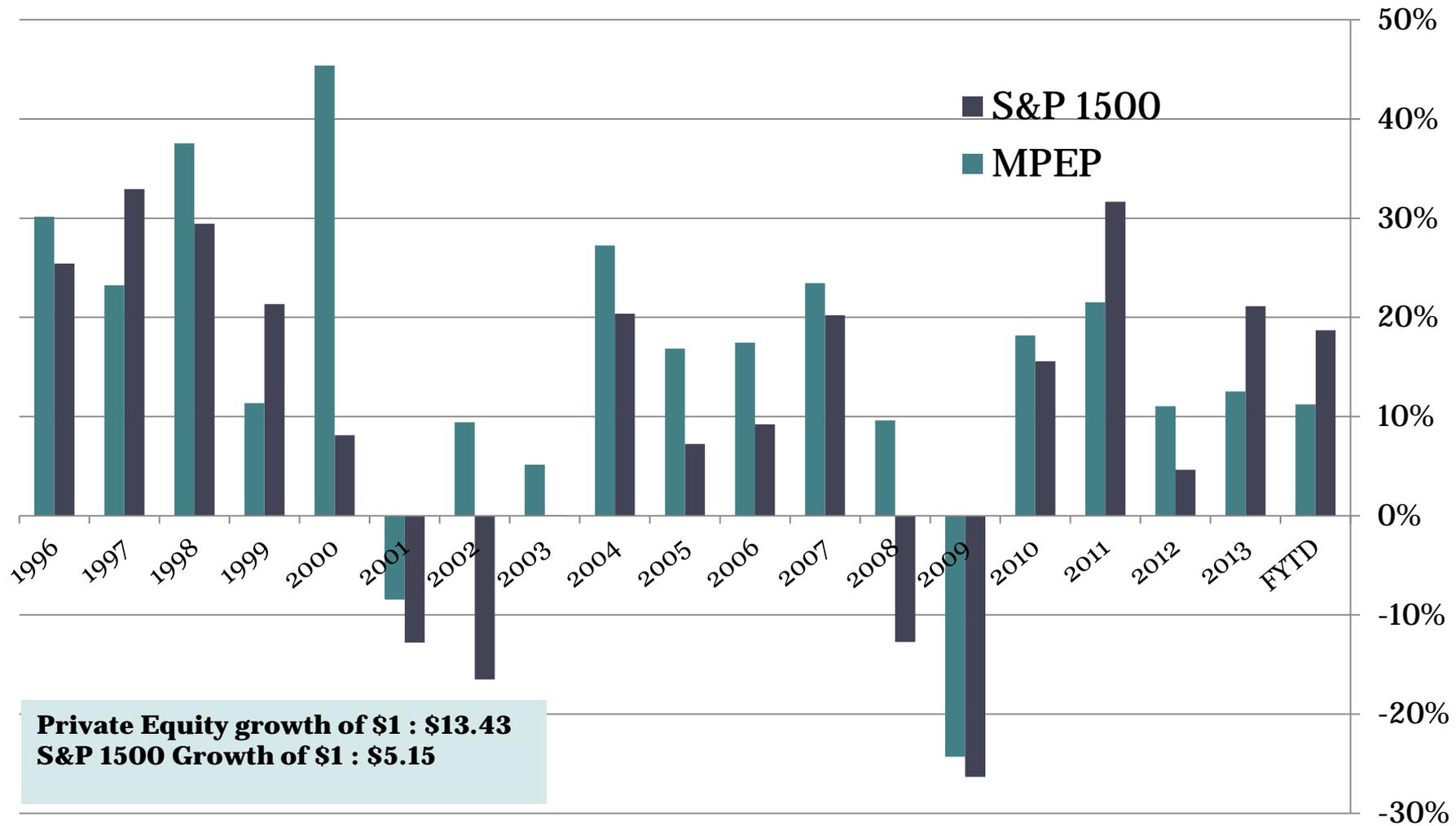
Private Equity - Objectives and Results

- **Objectives**
 - High returns
 - Diversification vs. public equities
 - Access to unique strategies not otherwise available (e.g., distressed debt)

- **Return Results**
 - Returns have been high over time; higher than public equities
 - Volatility of actual returns not as high as assumed (FY96 – Q1'14)
 - Standard deviation of annualized quarterly returns, PE 13.82% vs. S&P 1500 17.30%
 - Correlation coefficient < 1.0 , so some diversification benefit
 - Actual correlation of returns, PE vs. S&P 1500 = .35

MPEP vs. S&P 1500

FY1996 - Q1'14 (18 3/4 years)



Real Estate - Attributes

- **Economic value-add**
 - **Based on underlying property fundamentals (occupancy, net operating income)**
 - **Real Estate basics**
 - Entitlements
 - Permitting raw land for specific commercial real estate development purposes
 - Ground-up development
 - Property management
 - Marketing and leasing
 - Asset management (CAPEX related decisions)
 - Efficiency upgrades to lower operating expenses
 - Repositioning a “tired” asset
 - **Financing strategies**
 - Encumbered vs. unencumbered debt
 - **Cap rate compression – buy high, sell low**
 - Discount rate applied to net operating income to determine market value

Real Estate - Attributes

- **Risks**

- Financial – “leverage”
- Operating, execution
- Valuation
- Structure, liquidity
- Country, Manager, Strategy
- Vintage year
- Property type, geographic

- **Costs**

- Higher than traditional asset types; strategy dependent
- Core funds ~100 bps management fee annually with no profit participation
- Non-core generally 1.5% management fee and 20% carry (i.e., profit participation), some have higher fees
- CEM Benchmarking survey results as of 12/31/13 show MBOI average management fee of 1.05% for our direct, non-core fund commitments vs. 0.99% peer median
- All of our non-core managers have a minimum return hurdle (e.g., 9%)
 - Must return our fees, expenses and capital plus meet minimum before profit participation

Real Estate - Attributes

- **Program Structure** (% of holdings as of December 31, 2013)
 - **Core**
 - **Open-end funds, including directly held MT office portfolio (32.9%)**
 - Access to existing, substantially leased, diversified portfolio of assets
 - Potential for increased liquidity
 - Lower leverage
 - **Timberland (10.6%)**
 - Raw land with harvestable, merchantable timber, or intended for such use
 - Ancillary revenues generated through the sale of conservation easements, recreational leases, Higher and Better Use Sales
 - **Non-Core**
 - **Value-add (35.9%)**
 - Assets requiring rehab, redevelopment, lease-up or repositioning
 - Higher leverage
 - **Opportunistic (20.6%)**
 - May include investments in non-traditional real estate, for example, operating companies
 - Highest leverage
- **Relationships**
 - **Key relationships**
 - Largest exposures, multiple funds, those that have performed
 - Future consideration
 - **Legacy/Non-Strategic relationships**
 - Organizational/structural issues, those that have not performed
 - Will not make future commitments

Real Estate - Objectives and Results

- **Objectives**

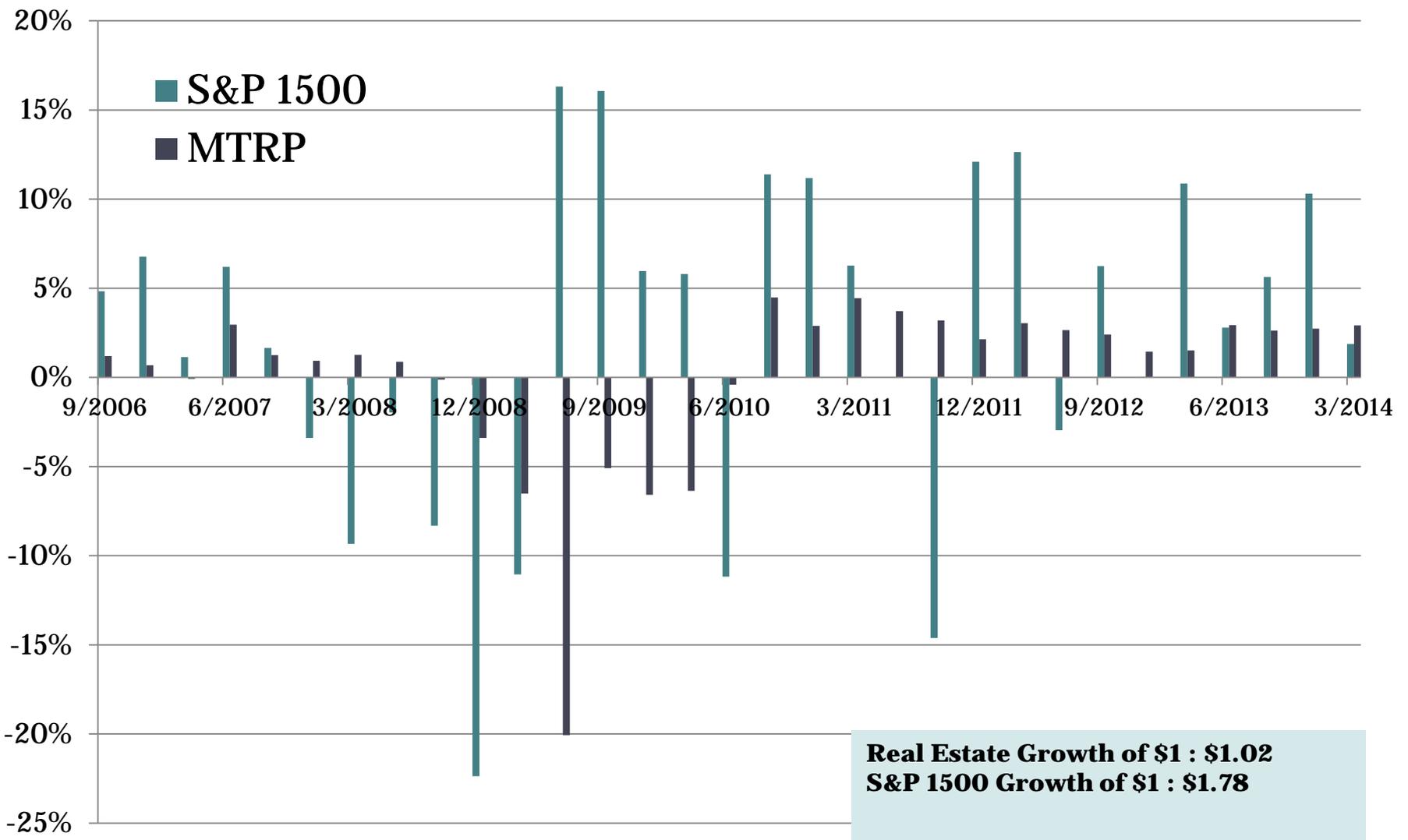
- Diversification vs. traditional assets (stocks & bonds)
- Long-term returns competitive vs. actuarial return needs

- **Return Results**

- Our actual returns since inception in '06 have been weak due to market conditions
 - Initial investments near peak of market, and “J-curve” effect from non-core exposure
 - Signs of improvement last 4 years
- Volatility of actual returns low (FY07 – Q1'14)
 - Standard deviation of annualized quarterly returns: RE 9.63% vs. S&P 1500 18.28%
- Correlation coefficient near zero, so significant diversification benefit
 - Actual correlation of quarterly returns: RE vs. S&P 1500 = .25 (assumed = 0.24)

MTRP vs. S&P 1500

FY2007 - Q1'14 (7 3/4 years, quarterly data)



Real Estate Growth of \$1 : \$1.02
S&P 1500 Growth of \$1 : \$1.78

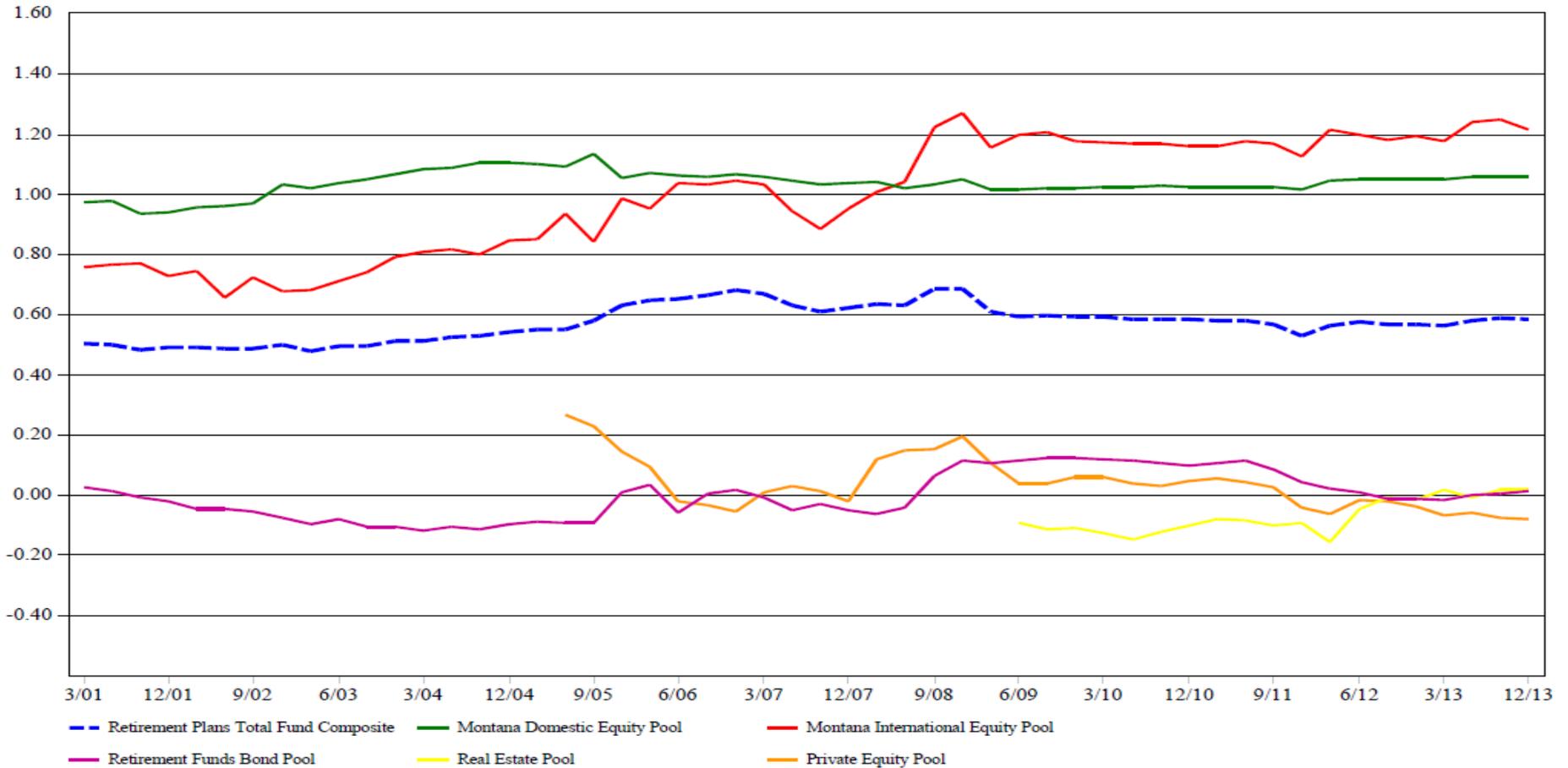
Objectives & Results - Summary

- **Private Equity**
 - Long-term program
 - Excellent results
 - Experience suggests less risk than assumed
- **Real Estate**
 - Relatively new program for MBOI, with long-term promise
 - Yet to fulfill absolute return expectations since inception, but moving in the right direction
- **Both offer diversification vs. public equity beta (systematic risk), our single largest risk**

MBOI Investment Pools - Beta vs. S&P 500

Montana Board of Investments
vs. S&P 500 Index (Cap Wtd)
36 Months Rolling Periods As of December 31, 2013

Beta



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.

RVKuhns
▶▶▶ & ASSOCIATES, INC.

Strategic Priorities and Rationale



MPEP- Strategy and Rationale

What

- Move the program toward smaller market cap strategies ———>
- Be selective with large/mega cap re-ups ———>
- Maintain some venture exposure; not actively looking to add exposure ———>
- Maintain secondaries exposure, but deemphasize throughout 2014 ———>

Why

- More value creation levers, alignment of interest, lower leverage/entry multiples
- Fewer value creation levers. Do not totally disregard but focus on our key relationships, best managers
- Focus on the right access, long-term return profile
- J-curve mitigation considerations, seller's market

MPEP - Strategy and Rationale (cont'd)

What

- Monitor Europe, consider non-control oriented debt strategies
- Target US lower-middle market debt-for-control
- Look for a diversified global emerging market manager
- Sector-focused funds – focus on energy
- Deemphasize fund-of-funds generally in favor of direct fund commitments

Why

- Significant distress, cyclical, slow to unfold
- Limited capital solutions, no access to high yield
- Growth story, augment pool exposure
- Will consider funds investing across the value chain including upstream, midstream, downstream and oil field services and equipment
- If comparable to a fund-of-funds, a direct strategy should outperform due to a reduced fee burden

MTRP- Strategy and Rationale

What

- Possibly reduce core exposure
- Add to our value-add exposure with a focus on traditional “bricks-and-sticks” value creation strategies employed by those managers focusing on the four major property types (office, retail, industrial and multifamily)
- Deemphasize the more eclectic strategies in CMBS, debt origination and other public security-related strategies

Why

- Anticipate moderating returns, reduce number of managers
- Significant market opportunity persists within the US real estate market post Global Financial Crisis
 - Lagging “risk asset”
 - Many “distressed” properties: good RE but poor capital structures that need to be fixed outside banking system
- Prefer more direct exposure to real estate without the accompanying securities market-related noise

MPEP and MTRP - 2013 Year in Review

- **MPEP Commitments**

- **Total committed capital of \$160m**
- **5 re-ups with current managers**
 - Lower middle market buyout manager
 - Pan Asia-focused middle market buyout manager
 - 2 US-focused middle market buyout managers
 - Secondaries manager
- **3 new managers added**
 - Diversified energy and financial services growth equity manager
 - Diversified energy-focused buyout manager
 - Southeast Asia-focused lower middle market buyout manager

- **MTRP Commitments**

- **Total committed capital of approximately \$140m**
 - 4 re-ups with current core, timberland, value-add and opportunistic managers
 - 1 new value-add commitment

MPEP and MTRP Liquidity

Liquidity - simple definition: “the ability to generate cash”

Two kinds:

- Transaction-based: ability to sell the asset (fund units)
 - By definition, generally illiquid (private contractual fund interests)
 - Limited to “open-end” core RE funds, under the right conditions/timing
 - Secondary sales of LP interests more problematic, but possible
 - MBOI currently in the midst of consummating the sale of 8 private equity LP interests across 4 GP relationships
- “Natural” liquidity: cash flow from the asset (income, profits, return of capital)
 - MPEP
 - Strong over last three years: cash flow **positive** (not typical, but reflects maturity of program and market conditions)
 - FYTD through March - \$197M in distributions vs. \$137M in capital calls
 - CY 2013 - \$230M in distributions vs. \$137M in capital calls
 - MTRP
 - Distributions low, but trending higher: maturity of program; market still in recovery mode
 - Cash flow **positive** FYTD through March - \$75M in distributions vs. \$66M in capital calls
 - CY 2013 - \$56M in distributions vs. \$89M in capital calls

Implementation



How We Implement MPEP and MTRP

- **Deal sourcing**
 - Other limited partners, general partners, intermediaries, periodicals
 - Filter the “noise” (does it fit with current strategy?)
- **Due diligence and investment underwriting**
 - Checklists to ensure the process is repeatable and disciplined

How We Implement MPEP and MTRP

- **MBOI Due Diligence Checklist includes a review of:**
 - **Standard Documents**
 - Private Placement Memorandum
 - Due Diligence Questionnaire
 - Limited Partnership Agreement
 - GP's Valuation Policy
 - Form ADV Part II
 - Quarterly and Annual reports and financial statements
 - **Other Documents**
 - Investment memos, fund advisory board minutes, investment term sheets, quarterly partners meeting materials
 - Industry studies, investor rights agreements, stock purchase agreements, opinions of counsel, certificates of incorporation, voter's rights agreements
 - Company specific diligence request list, financial diligence questions list

How We Implement MPEP and MTRP

- **MBOI Due Diligence Checklist (cont'd):**
 - Placement Agent Disclosure
 - On list and off list reference checks
 - Search and review recent publicly available news
 - Review all transactions of GP's prior funds; GP's cash distribution policy
 - Review GP's practices regarding fees, financing strategies
 - Understand circumstances around past secondary transactions in GP's prior funds
 - Review potential threats that may jeopardize the "going-concern" nature of the GP
 - Check that adequate insurance policies are in-place to further indemnify and limit an LP's liability
 - Document all interactions with the GP throughout the process

How We Implement MPEP and MTRP

- **Ongoing monitoring**
 - Full quarterly review of all funds
 - Attend annual meetings, selectively
 - LPAC membership participation, selectively
 - In-person, on-site updates by GP

- **Resources employed**
 - Internal Staff (“Alternatives Team”)
 - State Street Private Edge
 - Legal review – Jackson & Walker/Luxan & Murfitt
 - Costs

Private Equity and Real Estate Fund Commitment Pacing



Pacing – Private Equity & Real Estate

- **Purpose – General monitor of projected values and impact of weighting relative to pension assets**
 - Scenario-based (pension growth and commitment levels)
 - Helps to address the impact of outstanding commitments and expected new commitments
 - Mix of art and science
 - Highly uncertain and highly subject to capital market conditions (real estate, M&A, public equities)
 - Denominator effect
- **MPEP 2014 Commitment Plan - \$150M - \$200M**
- **MTRP 2014 Commitment Plan - \$60M - \$100M**

MPEP and MTRP Investment Policy Statements

- **Staff reviewed and recommended minor changes to the Board at the April 8th Board Meeting**

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APPENDIX

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	

04 Independence Day

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		

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						

1 Labor Day

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				

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			

13 Columbus Day
31 Halloween

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	

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

04 Election Day
11 Veterans Day
27 Thanksgiving Day

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						

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					

25 Christmas Day

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			

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
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
Internal Controls
Fiscal Year performance through June 30th
Custodial bank recommendation
- October 7** **Non-Quarterly Meeting**
TBD
- 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
Accounting Review

24 Month Work Plan Exposure			
2012	2013	2014 tent.	
		X	Accounting Review
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	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 timberland
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 $1/100^{\text{th}}$ 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

MONTANA BOARD OF INVESTMENTS PUBLIC MARKETS MANAGER EVALUATION POLICY

- 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.

**RECOMMENDED EDUCATIONAL RESOURCES FOR
MEMBERS OF THE MONTANA BOARD OF INVESTMENTS**

May 2014





RVK Resources			
Publication	Cost	Link	Description
RVK Quarterly Commentary <i>NEW</i>	Free	www.rvkuhns.com	Each quarter, RVK publishes a brief commentary that provides a high level overview of key macroeconomic events, as well as a performance summary for major asset classes. The commentary provides a quick reference for Board members, who wish to better understand the most important market events prior to each quarterly meeting.
RVK Investment Perspectives <i>NEW</i>	Free	www.rvkuhns.com	<p>Each quarter, RVK publishes a white paper covering topics of common concern for our clients. The first two papers in the series are described below.</p> <ol style="list-style-type: none"> Best Practices in Investment Governance—This paper provides a framework for establishing key capabilities that are critical for the success of investment committees. It also serves as an introduction to a more comprehensive best practices research study that RVK will publish at the end of 2014. Framework for Evaluating Fixed Income Portfolio Structures—This paper provides tools and insights to help investors think through the structure of their fixed income portfolios. The demand for this paper stems from the current, low interest rate environment, coupled with recent actions by the Fed to taper quantitative easing. <p>If Board members wish to receive future issues proactively, RVK can add their email addresses to a distribution list. Alternatively, the white papers can be downloaded from the RVK site.</p>

Periodicals			
Periodical	Cost	Link	Description
Pensions & Investments	\$325/Year	www.pionline.com	Pensions and Investments is a bi-weekly publication that covers current events impacting defined benefit plans. The PI Online web site also provides a variety of research reports and databases to support the decision-making of defined benefit plan staff and board members.
The Economist	\$134/Year	www.economist.com	The Economist is perhaps the most respected source of reporting and analysis on current events shaping the global economy. The Economist can help staff and board members stay familiar with the key factors and events that impact the performance of the portfolio.

RECOMMENDED EDUCATIONAL RESOURCES



Institutional Investor	\$575/Year	https://www.institutionalinvestor.com	Institutional Investor provides a monthly magazine that serves as both a source of news and proprietary research. A subscription also provides varying degrees of access to proprietary data and research online. Subscriptions range from \$575/year to \$1,680/year depending on the desired level of access to online resources. We believe that the online research capabilities are most relevant to staff, and therefore would only recommend the \$575 “silver” package for Board Members.
FundFire ^{NEW}	N/A – MBOI already subscribed	http://www.fundfire.com/	FundFire is a source of competitive intelligence for the separately managed account industry. A subscription provides access to original articles and summaries of industry news which helps investors, managers and consultants stay abreast of the changes in their industry. Investment managers read FundFire to find out what competitors and prospective clients are doing and thinking. Financial advisors, investment consultants, pension plans, endowments and foundations rely on FundFire to power their money management IQ.

Books			
Book	Cost	Link	Description
Pioneering Portfolio Management	\$24	http://tinyurl.com/3sa4c4u	This book was written by David Swensen, the Chief Investment Officer of the Yale Endowment. The book provides a blue print for Mr. Swensen’s investing strategy, which has resulted in superior long term returns for decades. While the book is especially applicable to university endowments, many of the insights are relevant to public pension funds.
The Little Book of Behavioral Investing	\$16	http://tinyurl.com/3dva98f	This book was written by a senior investment professional at GMO, a global asset management firm led by renowned investor Jeremy Grantham. The book provides a comprehensive overview of common behavioral biases that can negatively impact the investment decision-making process. The lessons are easily comprehensible to both expert and novice investors.
Cambridge Handbook of Institutional Investment and Fiduciary Duty ^{NEW}	\$135	http://tinyurl.com/nwegkvq	This book provides commentary and guidance on the evolving standards governing institutional investment. It features a wide range of contributors who share their perspectives on the forces that drive the current emphasis on short-term investment returns. This book is not yet available, and appears to be more academic in focus. However, it covers fiduciary duty in great detail, and may be a great resource for new and existing board members.

Electronic Newsletters			
Newsletter	Cost	Link	Description
CFA Financial Briefs	Free	https://www.smartbrief.com/cfa/index.jsp	Each day, this newsletter compiles the most notable headlines relating to economics, investment management, and major geopolitical events. Each headline has a link to the underlying article. This email serves as the daily newspaper for many in the investing community.
Thoughts from the Frontline	Free	https://www.mauldineconomics.com/subscribe	John Mauldin releases a daily newsletter that includes, as an attachment, his own analysis on major economic events and/or the analysis of other investment experts. The newsletter typically has a bearish bias, but provides invaluable perspective on macroeconomic events and emerging research in the investment profession.
JPMorgan Eye on the Market	Free	Send Email Request to Thomas.j.fisher@jpmorgan.com	Eye on the Market is released 2-3 times per week and provides in depth analysis on events shaping the global economy. The content is typically more balanced than John Mauldin's letter, but should be viewed with some skepticism given the role of JPMorgan as an asset manager.