These minutes are Approved and Final. Full Board review and decision took place at the August 19 & 20, 2014 Regular Meeting of the Board.

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

MINUTES OF THE MEETING
May 20 - 21, 2014

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

LEGISLATIVE LIAISONS PRESENT:
Senator Dave Lewis
Representative Kelly McCarthy

STAFF PRESENT:
Polly Boutin, 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
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 Zarling, CFA, Director of Research

GUESTS:
Becky Gratsinger, CFA, RVK, Inc.
Jim Voytko, RVK, Inc.
Mark Higgins, CFA, RVK, Inc.
Julie Feldman, CPA, State Accountant, Department of Administration
Cheryl Grey, Administrator, State Financial Services, DOA
Chuck Johnson, Lee Newspapers

CALL TO ORDER

Board Chairman Mark Noennig called the regular meeting of the Board of Investments (Board) to order at 10:00 AM. As noted above, a quorum of Board Members was present.

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 April 8, 2014 Board meeting.

Board Member Jack Prothero made a Motion to approve the April 8, 2014, Board Meeting minutes. Member Sheena Wilson seconded the Motion. The Motion carried 9-0.

ADMINISTRATIVE BUSINESS

Audit Committee Report
The Audit Committee did not meet.

Human Resource Committee Report
The Human Resource Committee met prior to the Board meeting. Human Resource Committee Chairman Karl Englund presented to the Board three items discussed in the meeting:

1. The Board is currently authorized and budgeted for 32 full time employees (FTE's) consisting of 8 exempt positions and 24 classified positions. The Committee asks the full Board annually to affirm the current staffing level.

Member Englund moved to affirm the current staffing level of 32 full time employees. Member Marilyn Ryan seconded. The motion carried 9-0.

2. The Committee reviewed the exempt staff pay plan for the eight exempt positions. The Committee reviewed pay rates as reported in the 2014 Bank Survey and the McLagan Survey. All positions increased in salary with the exception of the loan officer position which decreased for the period.

Member Englund moved to approve the inclusion of the survey results into the exempt pay plan. Member Jon Satre seconded. Chairman Noennig called for discussion on the motion.

Member Buchanan asked for clarification on whether there would be new pay range survey data available in time for the next annual review of exempt salaries. Deputy Director Geri Burton advised the McLagan survey is received in the fall and the annual Bank Survey is received each April.

With no further discussion, the motion carried 9-0.

3. The Committee reviewed the proposed pay rate increases for the eight exempt staff positions. Per the Exempt Pay Plan Policy, the factors considered when deciding on pay rates include:

- Performance
- Professional Credentials
- Experience and Skill
- Pay Equity

MBOI exempt staff is highly credentialed and skilled, and does excellent work. All non-exempt classified staff will receive a 5% pay increase in November of this year. The committee is recommending a 5% pay increase for each of the eight exempt staff, effective July 1, 2014.

Member Englund moved to approve the 5% pay increases for exempt staff as of July 1, 2014. Member Marilyn Ryan seconded.

Member Buchanan stated fiscal year end (FYE) benchmark performance comparisons should be considered when deciding raises for exempt staff and added he made a motion at the November

2013 Board meeting to stipulate FYE performance be considered. Performance evaluations on exempt staff were completed November 2013. He asked what criteria were considered and if consideration was given regarding whether some staff performed better than others.

Member Englund stated it is an overstatement to conclude that the Board does not consider benchmark performance for performance evaluations. When reviewing the performance evaluations with the staff responsible for compiling them, the Committee takes a comprehensive look at overall performance, including benchmark comparisons, which is given significant consideration when setting salaries. The staff received very favorable reviews in November when the Committee reviewed performance evaluations.

Chairman Noennig noted some adjustments were made last time around for exempt staff. Tying raises only to benchmarks is inadequate as they are not the only measure of performance.

Senator Lewis clarified the legislature did not approve the 5% raises for classified staff, but rather it was the Governor who designated, through negotiations, for the 5%, effective November 2014. Additionally, the exempt staff raises become effective as of July 1, 2014 versus the classified staff raises which do not go into effect until mid-November.

> With no further discussion, the motion to approve the 5% pay increases for exempt staff as of July 1, 2014 carried 9-0.

Loan Committee Report

The Loan Committee met prior to the Board meeting. Committee Chairman Jack Prothero reported the Committee approved one loan which requires full Board approval. The request is from Eagle Enterprises, LLC and Don K Chevrolet, Inc. in the amount of $5,024,000.

> Member Jack Prothero moved to approve the $5,024,000 loan to Eagle Enterprises, LLC and Don K Chevrolet, Inc. Member Kathy Bessette seconded. The motion carried 9-0.

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

Member Marilyn Ryan reported the TRS Board met on May 16, 2014 and approved the recommendations from the Cavanaugh McDonald Experience Study for the 5-year period ending July 1, 2013.

Price inflation was reduced from 3.50% to 3.25% and real wage growth assumption was reduced from 1% to 0.75% therefore the payroll growth assumption amortization as a level percent of pay will be reduced from 4.50% to 4.00%. The healthy post-retirement mortality was slightly less than expected while the rate of disabled post-retirement mortality was slightly higher than expected.

To comply with GASB (Governmental Accounting Standards Board) the actuaries recommended an investment return assumption that is net of expenses only. (The current investment return assumption is net of investment expenses and TRS administrative expenses.) The assumed investment rate of return remained the same at 7.75%.

Member Prothero asked if the actuary determined the funded percent of the pension plan.

Member Ryan stated yes, the information is in the report which she will send electronically to Board members. She added the GABA (Guaranteed Annual Benefit Adjustment) issue is still in litigation.

Member Sheena Wilson reported PERS has hired Mr. Dore Schwinden as Executive Director; last week was his first week on the job. Most recently Mr. Schwinden served as the Deputy Commissioner at the Department of Labor & Industry and he comes with a lot of management and legislative experience as well as IT experience.

Member Wilson stated there may be some movement on the GABA case before the court trial date, which is set for February 2015. The judge may grant summary judgment.

Chairman Noennig clarified there are two GABA cases ongoing, one each for TRS and PERS.

Member Wilson stated a Request for Proposal (RFP) has been issued for an investment advisor to manage the 401 and 457 retirement plans. Four applicants were automatically disqualified for failing to submit the correct documents. Two applicants have successfully advanced in the process, Wilshire and Buck Consultants (a Xerox subsidiary).

Legislative Liaisons Comments

Senator Dave Lewis stated the State Administration and Veterans' Affair Interim Committee (SAVA) chairman has included on the June meeting agenda "the Status of SAVA's request that the PER Board, TRS Board, and Board of Investments hold meetings in Capitol."

Member Marilyn Ryan noted TRS is currently reviewing the meeting request.

Representative Kelly McCarthy reported the Governor has proposed issuing up to $45 million in bonds for eastern Montana infrastructure improvements. A vote to approve the proposal may be conducted prior to the 2015 Legislative Session. The bond price would be 2.5% but would not be an MBOI issued bond.

Executive Director Ewer added details have not been provided yet. A General Obligation Bond or funding from the Coal Severance Tax would both require legislative approval. MBOI is not authorized to issue the bond.

Representative McCarthy agreed a special session may be called to address the bond issue and details are yet to be worked out.

Training and Education

Member Gary Buchanan expressed his concerns regarding Board training and education, an issue which was noted in the 2014 Legislative Performance Audit Report. Member Buchanan stated MBOI has a strong orientation program for new Board members, additionally, education and training have improved over time, but stronger actuarial/fiduciary training and increased opportunities for core competencies would be beneficial. Member Buchanan stated onsite training is preferred to help keep costs down and RVK, Inc. continues to be an important resource which should be utilized to a greater extent. Annual client conferences, education and retreats should all be options for training new and experienced Board members. Member Buchanan asked for input on best practices from Becky Gratsinger and Mark Higgins of RVK, Inc.

Mr. Higgins stated RVK conducts polling of clients to reveal the challenges shared by managers. They have distributed 20 interviews of Chief Officers polled so far. They are expanding their scope to include 200 current clients and should be able to provide comprehensive data by the end of the calendar year.

EXECUTIVE DIRECTOR'S REPORT

Overall Comments

Executive Director David Ewer presented his executive director's memo.

A. Follow up Requests from Members:

Member Buchanan's request for time on the agenda was scheduled and Member Sheena Wilson's question for follow-up on Internal Controls was provided to her satisfaction.

B. The quarterly cost report is included in the Board packet.

C. Staffing was addressed with the Human Resource Committee report.

D. The budget memo details the budget process and includes the operational budget year to date. The budget is submitted to the Governor's office in August.

E. Custodial Bank Update. The Request for Proposal (RFP) was issued April 15, 2014. An informational conference call was conducted on April 28; two parties participated on the call. Responses to the RFP are due May 28, 2014. A comprehensive review of the submitted RFP's will be conducted by Procurement Bureau and MBOI RFP Committee members over the summer. Responding to a question from Member Jon Satre, Executive Director Ewer stated there were nearly 100 formal questions received from the RFP respondents. Those of a legal or technical nature were addressed by the Procurement Bureau. Finalists will be invited to Helena for onsite presentations.

F. Board Education Materials. Staff asked Board Members for input regarding what types of education and training is preferred. Access to investment publications, such as Pensions & Investments can be provided to Board Members and copies of the Dictionary of Investment terms are available. Board Members Jon Satre and Marilyn Ryan are attending the JP Morgan conference in Denver on June 5.

Member Karl Englund asked if RVK could order the manager pages in the quarterly performance report in a format more easily followed. Mr. Higgins stated the current order is alphabetical by asset class, i.e. large cap, small cap, mid cap, but the data can be reordered alpha by manager if the Board prefers. Member Sheena Wilson asked if a short narrative or summary explanation could also be added to the diagrams such as the scatter grams. Mr. Higgins stated notes are available and will be added. Mr. Jim Voytko added RVK can focus on the same graphics at each quarterly performance review, drawing attention to specific items of note that are relative to that quarter. Ms. Gratsinger suggested "how to read performance reports" may be a good educational topic for the Board, as well as providing a quarterly commentary of the market overview for the quarter in the resources section of the Board packet.

MONTANA LOAN PROGRAMS

In-State Loan Program

Mr. Herb Kulow presented an update of the commercial and residential loan program portfolios. Commercial loans totaled $104,850,138 as of April 30, 2014. The current yield of the portfolio is 4.60%. There were three loans committed totaling $2,030,000 and there are nine reservations totaling $45,011,375 as of April 30, 2014. There are two past due loans between 30 and 90 days totaling $206,750; and the Vann's bankruptcy loan for $634,111.45 which has not been transferred to "other real estate owned" is awaiting settlement between the lender and the bankrupt owner. A Sheriff's sale is scheduled for June 6, 2014 and there is a potential buyer.

The residential mortgage balance is $12,287,924 as of April 30, 2014. Twelve residential loans are past due over 30 days totaling $635,792 which represents 5.17% of the portfolio. All past due loans are federally guaranteed.

The Veterans' Home Mortgage Loan Program (VHML) portfolio has grown to $22,287,330 as of April 30, 2014, although activity has slowed for the program. Legislative allocation for the program is $30,000,000. There are no past due loans.

Member Satre asked why the program use has slowed.

Mr. Kulow explained the initial demand for the program has mostly been satisfied at this point. The very favorable interest rate of 1.75% for a 30 year term requiring only a $2,500 down payment by the borrowers, led to a rush to use the program when it first became available.

BOND PROGRAM REPORTS

Activity Report

Ms. Louise Welsh reviewed the quarterly Activity Summary Report and presented the staff approved loans.

The issue regarding the Ravalli County Treasurer's Office is ongoing; however, all of their INTERCAP loans are fully funded and paid current. The County inquired about the possibility of INTERCAP refinancing a few of their other bank loans. Staff is requiring receipt of their 2014 audited financial report before consideration.

Jefferson County is missing ~$100,000 prompting the resignation of the Treasurer. A retired Meagher County Treasurer has been brought on board to help out. All INTERCAP loans with the County are funded and paid current.

Staff approved loans are listed below:

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

CORPORATE PROXY VOTING

Executive Director David Ewer, Mr. Cliff Sheets, CFA, CIO and Mr. Rande Muffick, CFA, Portfolio Manager - Public Equities

Executive Director Ewer stated there are a host of public equity proxy issues which require a vote of the owners, the stockholders, of public corporations. The Legislative Auditors recommended in the 2014 Performance Audit (Performance Audit) that the Board adopt a proxy voting policy which is periodically reviewed by Board Members.

Executive Director Ewer explained the Board clearly has a proxy policy, but concurred with the Performance Audit recommendation that a timely review of the policy be brought before the Board and be added as a regularly scheduled item on the 24-month Systematic Work and Education Plan.

As public equity owners and fiduciaries, we are responsible to see that proxies are voted. MBOI delegates the voting of proxies to the individual external managers who manage the funds. Managers are required to provide their proxy guidelines to MBOI which are kept on file and staff obtains a summary of proxy votes from the service Broadridge Proxy Edge. Most managers use

external consultants to vote or provide advice on votes, in conjunction with individual manager preferences. The two services used are Institutional Shareholder Services (ISS) and Glass, Lewis & Co.

Securities out on loan are not eligible for voting, but are sometimes called back so they can be voted. There are also "no trade" quiet periods which affect foreign countries, during which equities cannot be voted.

Executive Director Ewer stated generally, proxies are voted in accordance with the best economic advantage of MBOI and the managers. The current system is working well, especially when considering the added time, due diligence and responsibility voting proxies would require of staff.

Mr. Sheets advised he spoke to ISS about their services and rates charged. They offer a standard turn key product which can be customized according to customer preferences at additional cost.

Responding to a question from Chairman Noennig, Mr. Muffick stated managers do not insist that they be allowed to vote proxies and it is not an issue raised when negotiating manager contracts. Mr. Sheets added most proxy votes are inconsequential to stock price or economics.

Chairman Noennig asked if there is no economic impact but fees are paid to do it, where is the justification for voting proxies.

Mr. Sheets stated proxy voting is an important function of corporate governance. Occasionally a more important issue arises which has direct economic impact, but most are benign and non-controversial. More issues have been introduced by shareholders since the days of Enron and corporate fraud issues; some are political or address transparency issues.

Member Buchanan added clients dislike proxies and most are benign and asked if there are concerns with proxies.

Member Englund noted the proxy issue was raised in the Performance Audit. Chairman Noennig added a legislator also requested we look at social and/or political issues; however, the Board is fiduciarily bound.

Member Englund stated the Performance Audit recommended adoption of a proxy policy; however, the current policy looks sufficient and allows for managers to vote proxies and fulfills the Board's fiduciary duty.

Member Englund asked if our investment advisors are covered by the Employee Retirement Income Securities Act (ERISA).

Executive Director Ewer noted it is common for managers to acknowledge their need to act in the best interests of the clients.

Ms. Becky Gratsinger affirmed it is an ERISA duty to vote fiduciarily and the institutional investor world has devised to meet ERISA and unless a social policy intervenes, they vote accordingly.

Responding to a question from Member Englund, Mr. Sheets noted some managers do vote proxies in house rather than hire a service such as ISS. MBOI always has the option to take voting from the managers and hire a service such as Institutional Shareholder Services (ISS) or Glass, Lewis & Co. or utilize a combination of a service and/or staff, which would require monitoring compliance. Additionally, managers could be directed to use different voting standards.

Executive Director Ewer stated the current system is functioning well and staff will now bring proxy voting before the full Board on a regular schedule.

CONSULTANT REPORT

Ms. Becky Gratsinger, CFA, Mr. Jim Voytko and Mr. Mark Higgins, CFA, RVK, Inc.
Ms. Becky Gratsinger stated RVK, Inc. has recently undergone a name change and added a new look to their materials. Ms. Gratsinger added this is her 20th year with the company. Mr. Jim Voytko stated a group of young professionals has just been promoted to consultants. Ms. Gratsinger reported the market environment had a volatile start for the quarter ending March 31, 2014, but overall ended positive for the quarter. The S&P 500 returned 1.8%, small cap stocks pulled back and international stocks continue to perform weaker than domestic stocks. Emerging markets were weak; the bond market was positive returning 1.84% for the quarter. REITs returned 10.13% for the quarter.

On the basis of cyclically-adjusted Price to Earnings (P/E) ratios, stock prices are at high levels in the U.S., with small caps valued at higher levels than large caps. Emerging markets on the other hand have relatively attractive valuations, but also face a number of unique headwinds. Italy, Portugal, Spain and Greece suffer from debt and high unemployment, especially in Greece and Spain, although yields in Europe have started to normalize. Public debt to Gross Domestic Product (GDP) is also high.

For emerging markets, the focus is on China. China's GDP growth is still in the 7–7.5% range. While this is three times what you'd expect to see in the U.S., it is a more moderate rate than China experienced in previous years.

REITs were the best performing traditional asset class for the quarter. Most sectors performed well, but hotels were the weakest. Commodities and long duration bonds also performed well. Certain sectors of the market did well. Utilities and health care performed the best, while telecom was at the bottom. The Consumer Price Index (CPI) remained benign; the Fed will be monitoring, but for now there are no inflation concerns.

Member Jack Prothero asked what the outlook for the future is.

Mr. Voytko stated the question of whether stocks are currently overvalued is a concern. By historical standards, stocks appear to be highly valued, but fixed income yields are also at historical lows. Some economists argue that lofty stock valuations are justifiable by virtue of the fact that fixed income is offering so little now. On the flipside, many economists argue that corporate profit margins are at all-time highs, and that earnings margins have to regress at some point or even go down.

Member England observed the health care sector has seen high returns over the 1, 3 and 5-year time periods, and asked if the trend will likely continue.

Ms. Gratsinger stated health care insurance reform is ongoing and is still uncertain. Mr. Voytko added that however health care unfolds, the sector is bound to expand and will likely undergo mergers and acquisitions as health care reform goes forward.

Responding to a question from Executive Director Ewer, Ms. Gratsinger noted the financial sector continues to suffer and has not come back. The S&P 500 Index is well diversified; the financial sector totals 18% of the index. In comparison, the international markets contain 26.63% in the financial sector, dragging down returns.

Ms. Gratsinger reviewed return performance for the nine retirement plans for the quarter ending March 31, 2014. Private equity had the best returns of all the asset classes for the quarter, although below the benchmark due to the one quarter lag environment of private equity and the high return expectation.

Member Buchanan observed with the continued strong performance of public equities, the high private equity benchmark expectation along with the quarter lag effect, the drag from private equity will continue.

Mr. Voytko agreed that private equity will continue to have a drag on returns. It would take two flat quarters in equities to see the numbers right themselves for private equity. The high threshold of the S&P 1500 benchmark plus the 4% premium expectation placed on private equity means the lag will continue over the long term.

Chairman Noennig noted over ten years, private equity has been the strongest returning asset class in the portfolio by far.

Ms. Gratsinger added the portfolio structural difference vs. peer plans has helped BOI. Mr. Voytko stated peers are using different strategies based on liabilities and asset differences. BOI has underperformed relative to the total fund benchmark; however, this is due mainly to private equity.

Chairman Noennig stated the portfolio has benefited from the bias to U.S. equities vs. international compared to peers with more balanced allocations.

Mr. Voytko stated lower exposure to commodities, which have performed badly, has also helped portfolio performance.

Member Englund observed BOI consistently outperforms other peer plans but underperforms the benchmark.

Ms. Gratsinger stated alternative options are not good and all peers experience a lag vs. the benchmark when it comes to private equity. The benchmark is not ideal, but it is the best option available. Mr. Voytko added there are times when benchmark options should be revisited or in cases where they cause Boards to make unwise choices. BOI is not unlike peers, most use the S&P 1500 plus a 3-5% premium for private equity.

Chairman Noennig added that while the return numbers for the 1, 3 and 5-year periods reflect negatively vs. the benchmark, the longer term 7 and 10-year periods are positive.

Ms. Gratsinger reviewed plan risk and return. The overall plan beta is .56 which is right at the median compared to equity in peer plans. The portfolio standard deviation is 9% compared to the median of 9.65%, so the portfolio has considerably less risk but is on target with returns. Mr. Voytko added there are many measurements of risk that look at how sensitive the portfolio is to fluctuations in stock market ups and downs.

Member Buchanan asked if the plan actuary has looked at whether a rate of 7.75% is realistic going forward.

Ms. Gratsinger stated no, although going forward there will likely be a correction and many think asset allocation could prove more challenging over the next ten years. Mr. Voytko added all forward assumptions have been reined in and the market is not expected to continue at current levels. Assumed rate of return is used to set contribution levels which over the long term will be sufficient to fund benefits over a long time horizon.

Mr. Mark Higgins reviewed asset class comparisons. The Domestic Equity Pool (MDEP) and the International Equity Pool (MTIP) have both improved, aided in part by the recent move into passive equities and the termination of underperforming managers. The Retirement Fund Bond Pool (RFBP) and the Trust Fund Bond Pool (TFBP) are both doing well. Real estate vs. the universe performed the best, but the universe is based on core holdings and BOI has a lot in the portfolio in addition to core, so a comparison is a bit of a mismatch. The Montana Private Equity Pool (MPEP) returned

11% over the 10-year period. Overall, the portfolio had a very solid performance. The recent decision to become more efficient with passive should pay off, although it's still early. Mr. Voytko suggested letting the new strategy run its course through a market cycle before making any judgments is the best strategy for now.

Mr. Higgins gave brief highlights of equity managers. The two recent domestic equity manager additions, Iridian Asset Management and Nicholas Investment Partners, have both done very well so far. Since inception, each has outperformed the benchmark by over 1000 basis points. For international equities, value manager AllianceBernstein is still cause for concern, although they have had a solid year. Martin Currie has recovered pretty well and the three year returns look good, but we will continue to monitor them. American Century has a senior person retiring and another left due to a move from the area. Personnel changes are always looked at, including who will be replacing the ones who depart. Post Advisory has undergone several personnel changes; however, the new person has done well and brought good people on board, so it should be smooth sailing.

INVESTMENT ACTIVITIES/REPORTS

Retirement System Asset Allocation Report

Mr. Cliff Sheets presented the asset allocation report for the nine pension funds for the quarter ending March 31, 2014. The quarter was positive with nearly a 2% return, although not up to the 2013 levels. Assets increased by $135 million for the quarter net of distributions. Private equity and fixed income led the way, but all asset classes were positive for the quarter.

The allocation to total equities decreased by 0.2% to 68.1% for the quarter due to public stock and private equity sales and dilution due to the stronger return from other asset classes. International equity allocation was down -0.1% to 17.5%, due to weaker relative performance. Private equity sales of $35 million for the quarter, not including the secondary sale of assets, was offset by a strong return of 4.5%

Member England asked where the cash proceeds went.

Mr. Sheets explained cash coming into the private equity pool goes into an equitized liquidity vehicle, a fund invested in S&P 500 futures which mirrors the S&P 500 to ensure the funds stay fully invested and to accommodate capital calls. Typically the pension cash allocation which is invested in STIP is kept at approximately 1% but increased to nearly 1.4% for the quarter. An additional $37 million was injected into fixed income which raised the allocation up to 21.8%, just below the 22% minimum allocation. As of market close yesterday, fixed income was just slightly above 22%. Real estate returned 2.9% for the quarter. Relative to peers, the portfolio has done well and absolute returns are strong, aided by the asset allocation mix. The portfolio bias towards domestic equity, the absence of hedge funds and commodities, and a moderately higher allocation to private equity and real estate have all helped absolute returns.

The 5-year trailing performance return period starts near the stock market bottom at March 2009, providing the perfect time frame for the 5-year trailing numbers. A similar period of growth is unlikely to be repeated.

For the quarter ending March 31, 2014, peer group comparisons provided by State Street Bank show that relative to peers, overall portfolio performance has benefited from a slightly higher allocation to public equities and a higher allocation of domestic equity vs. international equity. The peer group is comprised of a custom group of 30 public plans in the $3 - $20 billion range with at least 30% equity. Fixed income is near the peer median and cash is below the median. All public fund universes are different and don't offer transparency of holdings. Private equity is at the median; generally larger plans have a heavier weighting and four of the 30 contain no real estate. The portfolio is very equity biased and therefore carries a lot of equity risk; however, this generally leads to higher returns over

the long term. Relative performance has improved and the portfolio has taken on less risk/volatility compared to peers.

Private Asset Pool Reviews

Montana Private Equity Pool (MPEP)
Mr. Ethan Hurley presented the Montana Private Equity Pool report for the quarter ending December 31, 2013. Thirteen of the last 14 quarters have realized net positive cash flows for the pool. Pool exposure is mostly in direct investments. Fund of funds will continue to decline. Data is not available at the individual fund level yet for 10-year internal rate of return (IRR) but should be available by the third quarter. The overall portfolio has an IRR of 12.62%, net of all fees, since inception.

Member Jack Prothero asked if there were any funds of particular concern.

Mr. Hurley noted both J.C. Flowers and Terra Firma Capital Partners remain a concern, but are being held for now. If they were sold it would be at a severe discount. There are no new issues of concern.

Mr. Hurley stated there were two new commitments of $20 million each since the last Board meeting. Trilantic Energy Partners and GI Partners Fund IV, LP. Trilantic is a co-investment buyout fund investing side by side with Trilantic Capital Partners Fund V, which MBOI is already invested in. Trilantic Energy provides a strategic focus and uses an innovative approach and this fund offers an attractive fee structure.

Member Satre asked which markets GI Partners is seeking. Mr. Hurley stated they focus on four targeted sectors: IT infrastructure and services, healthcare, retail and leisure, and financial and real estate services.

Mr. Hurley reported net IRR pool performance is right at the median on the State Street Private Equity Index.

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

Montana Real Estate Pool (MTRP)
Mr. Ethan Hurley presented the Montana Real Estate Pool report for the quarter ending December 31, 2013. Cash flows for the quarter were positive in general for non-core funds due to massive distributions and sales of funds. The portfolio is well diversified across the risk spectrum and geographic exposure, and is balanced and diversified by property type. The pool includes just over 10% of market value in foreign exposure.

Core funds had positive relative returns to the benchmark and the portfolio continues its positive momentum.

Mr. Sheets added that real estate bottomed later than stocks in the market downturn; in one year we should see much better 5-year returns given an inception date near the low.

Mr. Hurley reported the IRR continues positive momentum. There was one new commitment since the last Board meeting listed below.

Fund Name	Vintage	Subclass	Sector	Amount	Date
CBRE Strategic Partners US Value Fund 7, LP	2014	Value Add	Diverse	$15M	3/17/2014

Member Prothero asked when determining new investments in MTRP and MPEP, how many different investments are reviewed.

Mr. Hurley stated he has tracked all funds that come through the door. Over the last three years 2,300 private equity funds and 700 real estate funds have been tracked, of which MBOI has invested in 1%.

There is an established framework which enables staff to cull through the ones that don't fit.

Mr. Sheets added the world of private equity is very large with a lot of large firms. Options vary from broad to very specialized and we receive a lot of arcane pitches.

Mr. Hurley stated staff focuses on what fits, our key relationships and who performs. New additions are generally split 50/50 between known names and new relationships. Private equity is a $3.5 trillion dollar business globally.

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

Montana Domestic Equity Pool (MDEP)
Mr. Rande Muffick reported on the Montana Domestic Equity Pool (MDEP) for the quarter ending March 31, 2014. A lot of shifting is going on in the domestic market and there was a 7% intraday correction during the quarter. The quarter ended with slight gains as investors steered away from the pricier growth stocks and favored value stocks.

MBOI portfolios continued to be slightly cyclical as health care and utilities led the quarter. Artisan and TimesSquare both had tough quarters in having more beta than they realized. This positioning paid off in 2013, but they gave back some performance in the first quarter because of it.

J. P. Morgan and T. Rowe Price have the largest weights in the pool and both have tracked off the benchmark a bit. J. P. Morgan 130/30, in addition to having the largest pool weighting, has large tracking error and therefore relative performance fluctuations of this manager can affect the whole pool to a greater degree than our other managers.

Generally MDEP still had a good quarter due in part to momentum of the two new managers, Iridian and Nicholas, although any pull back may drag on performance going forward. Some managers have been on a great run so may experience pull back as well. Six of the 13 active managers outperformed the benchmark; however, many are giving back some relative performance so far in the second quarter and midcaps are suffering vs. large caps.

Montana International Equity Pool (MTIP)
Mr. Muffick reported the Montana International Equity Pool (MTIP) mirrored many of the same dynamics as the domestic market for the quarter ending March 31, 2014. Large caps are finding preference over small caps and investors are going more for value stocks over growth stocks although not as pronounced as U.S. markets. Three of the five managers outperformed the benchmark, not including the two new managers who have only been on board a month. The new managers, Franklin Templeton and American Century, both started on March 3 and we are confident they will perform well, although at this early point are both behind 39 basis points compared to their benchmarks. American Century is experiencing some personnel changes at the top, as RVK mentioned. The second in command left, which was unexpected. Replacement of key personnel is always an issue and though we have not added them to the watch list, we will continue to monitor. The key person remains with the firm.

Emerging markets trailed for the quarter, but have turned around since quarter end. Growth stocks are still outperforming value. Mr. Sheets added there is some exposure to emerging markets through the passive index funds.

Responding to a question from Member Englund about continuing concerns for Alliance Bernstein, Mr. Muffick stated they are the manager of biggest concern at this time. A deep value manager with lots of cheap stocks of distressed companies, they should be outperforming but it hasn't happened this time around. The economy is rallying around the globe and this should be to Bernstein's advantage, but so far they are our biggest disappointment during this bull market run.

Mr. Jim Voytko added maintaining a patient strategy to see if Alliance Bernstein will recover is recommended at this time, rather than terminating them at the bottom of performance.

Public Equity External Manager Watch List
Mr. Muffick stated there were no changes this quarter to the watch list. Hansberger has undergone management/ownership changes and there has been a separation of the growth and value teams. The value team, which has struggled, has lost a significant amount of assets. The growth team has been bought out by Madison Asset Management. MBOI is only invested with the growth team, so this should not have an impact on our investments.

PUBLIC EQUITIES MANAGER WATCH LIST
March 2014

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

CASH MANAGEMENT

Cash Management of State Monies – Gayle Moon, CPA, Financial Manager, Rich Cooley, CFA, Portfolio Manager – Fixed Income/STIP and Julie Feldman, CPA, Bureau Chief, State Accounting Bureau
Executive Director Ewer stated this is the second time presenting cash management to the Board since its addition as a permanent item in the 24 Month Systematic Work and Education Plan. The Board administers the constitutionally mandated Unified Investment Program which manages almost all state monies. The Board's utility is to keep state monies flowing: payroll, retirement benefits, etc. and totals in the billions each year and includes the processing of tens of thousands of transactions annually.

Ms. Gayle Moon detailed the cash movement of money in and out through the Department of Administration's Treasury Unit, US Bank in Helena, the state's depository bank, and the state's custodial bank, State Street Bank of Boston. There are five types of money:

- STIP (Short Term Investment Pool) – daily buy/sell tickets generated by participants utilizing the state's EPass account. These transactions are electronically submitted to the custodial bank's transfer agent InvestTA. The custodial bank processes the local government transactions using Electronic Funds Transfer via ACH (Automated Clearing House).
- Commercial Loans – ACH or wire via US Bank SinglePoint system
- Alternative Equities
- Investment Trades
- Daily US Bank repurchase agreement, also known as the "sweep."

Ms. Moon stated all fund transfers require two staff members. For example, private equity capital calls and distributions are processed by Ms. Polly Boutin and Ms. Roberta Diaz via the Cash Flow Module (CFM) provided by the custodial bank's Private Edge group. Public equity trade wire purchases and sales are verified by Ms. Boutin. Ms. Tammy Lindgren uses the depository bank's SinglePoint module to finalize the net wire as reported on the daily Cash Movement Sheet. The end of business day "sweep" transaction of cash in excess of $3 million is deposited to US Bank. Ms. Moon, Mr. Frank Cornwell and Ms. Boutin review the cash balances.

Member Ryan asked if there is sufficient cross-over. Ms. Moon stated all transactions have assigned accountants, plus all transaction duties have back up staff trained in the procedures.

Member Prothero asked about potential risks in the process and assurances against fraud and mistakes, or in the case of Ms. Moon's absence from the office.

Ms. Moon stated before the previous Executive Director Carroll South retired, the ePass system was implemented for STIP. Buy/sell transactions are received electronically, input into a spread sheet and verified before transmission to InvestTA. After the template is sent, balances are verified to assure that STIP participants have sufficient funds to process the transactions on InvestTA. If Ms. Moon is out of the office, Mr. Cornwell and Ms. Boutin approve the daily SABHRS transactions. Daily STIP buy/sell transactions downloaded from InvestTA are imported to the state accounting system, SABHRS. Staff is always on the lookout for ways to fine tune the system to make it run more efficiently and/or more securely.

Executive Director Ewer noted the system has been converted from paper to an electronically traced system and there are lots of eyes monitoring the system. There are security measures in place such as the segregation of duties, stop limits on the size of transactions approved by State Street Bank and a highly professional accounting staff.

Ms. Moon advised the Online Electronic Deposit (OED) system has been in place at MBOI for a year and a half which eliminated the need to physically transport checks. The checks are now scanned and deposited electronically, to US Bank eliminating the need for armored car service. Very few checks are received, usually Colson or litigation checks. Responding to a question from Member Jon Satre, Ms. Moon noted the daily "sweep" does not go to State Street Bank, but rather stays at US Bank, which provides a collateral report daily.

Ms. Cheryl Grey, Administrator at State Financial Services, Department of Administration (DOA), stated all payments and deposits go through the state accounting system. SABHRS has internal controls and warrants are reconciled daily. The Treasury Unit deposits collections and reconciles all fund transfers and has daily communications with MBOI. The US Bank SinglePoint system is used by MBOI and the state accounting system. The contract for US Bank expires in 2021. DOA is always looking for ways to streamline the system. Agencies not managing cash correctly can be assessed penalty fees under federal law.

Member Buchanan asked about the recent news story regarding the $45 million bond issue proposed for infrastructure improvements in eastern Montana to support the rapid growth the area is experiencing.

Ms. Julie Feldman stated details will depend on the type of bond to be issued, which has not been determined at this time. General Obligation bonds are issued by the State Treasurer's Office.

Mr. Rich Cooley explained the daily process of cash movement. The US Bank SinglePoint custom report gathers all the summary data from the bank which shows the beginning balance including deposits, debits, ACH listing wires and floats, warrants cashed and also any unavailable amounts. The Repo Sweep is determined and signed off on, then given to accounting. All data is compiled on a spreadsheet which shows how much is available to invest while staying within policy liquidity limits

of $150 million per day or $250 million per week to provide sufficient funds for liquidity needs such as trades, payroll, Office of Public Instruction (OPI) and how much is available to invest in STIP. This is compared to the State Street Bank transactions spreadsheet of maturities, income, ACH in or out by STIP participants, to determine the net daily wire in or out from MBOI to State Street Bank. Amounts over $3 million go into the SWEEP account. The ending balance for the day after all transactions is the beginning balance for the next business day.

Member Ryan asked when State Street Bank started as MBOI's custodial bank and Ms. Moon stated they started in 1993.

Responding to a question from Representative Kelly McCarthy, Ms. Julie Feldman stated three banks bid for the role of depository bank when US Bank was hired. They have a strong Montana presence and they handle a lot of government agency work. There is a local account representative in Montana, but business is conducted with representatives located throughout the country.

Executive Director Ewer noted MBOI's numbers must tie to the State's accounting system, which Ms. Feldman oversees as the principal state accountant for the annual report and that the Board works closely with the Treasurer's Office as well.

ADJOURNMENT

The meeting was adjourned for the day at 4:20 PM.

CALL TO ORDER

Board Chairman Mark Noennig called the regular meeting of the Board of Investments (Board) to order at 9:00 AM. As noted above, a quorum of Board Members was present. Chairman Noennig called for public comment. There was no public comment.

INVESTMENT ACTIVITIES/REPORTS

Fixed Income

Mr. Nathan Sax presented the Fixed Income overview and strategy. Calendar year 2013 had a negative total return and over the first quarter interest rates went down while investors were positioned for rates to increase. Real GDP for the first quarter was just 0.1% based on the initial release. Corporate bond yield spreads tightened as investors were taking more risk with investment grades. Spreads which spiked in 2008 have come back to pre-crisis levels. Tight spreads may not continue over the long run. Global inflation remains low and economic expansion factors are all suppressed. The Federal Reserve Board is scheduled to end tapering and discontinue the purchases of treasury and mortgage backed securities by the end of the year.

Three quarters of all fixed income is managed by staff in house. The remaining 25% is externally managed and is split out between high yield and core plus managers. Reams, which manages 11.5% of the total, is one of the core plus managers and their current strategy involves giving up income to the index with their focus on short duration and a lower credit exposure than benchmark, and they may struggle if rates stay at current levels or go down. Aberdeen is at the 99th percentile vs. peers over the one year term but that could be short lived due to a currency exposure with the Mexican Peso which detracted. They have done well over the longer term. The Core Internal Bond Portfolio (CIBP) outperformed the benchmark by +210 basis points over 5 years, but has pulled back some over the fiscal year to date. Neuberger Berman continues to perform well.

Post Advisors remains on the watch list due to a recent management shakeup including the departure of the company's founder who left to start a competing company and an associated loss in some of their assets under management. They will remain on the watch list for now but are expected to stabilize. Performance has been good, placing in the top decile over three years.

Mr. Sax stated there was one change to the below investment grade list. Zions Bancorporation comes off the list as it matured last week. Lehman Brothers is expected to return 23 cents on the dollar.

Member Jack Prothero asked if a metric providing the risk of the internal bond fund portfolio could be developed to determine the riskiness of the portfolio.

Mr. Cliff Sheets stated the staff report to the board now shows such things as corporate bond exposure and high yield exposure which are both compared vs. policy and relative duration is also shown. The Core and Trust funds show effective duration and the spread implies a broad picture of risk.

Mr. Sax added investment policies control our sector exposures. Staff could compile performance and liquidity for the Board. Mr. Sheets noted more detail on holdings and exposure across the rating systems could be provided.

Member Prothero and Member Jon Satre agreed that periodically the Board would like to see more detailed analysis.

Mr. Sheets stated staff will discuss options for collecting the most useful information and will present it to the Board at the next meeting.

Short Term Investment Pool, State Fund Insurance & Treasurer's Fund Report

Mr. Rich Cooley gave an overview of the Short Term Investment Pool (STIP) for the quarter ending March 31, 2014. The STIP balance at quarter end was $2.6 billion, down $100 million from three months ago. Low interest rates continue with fed funds between 0 – 25 basis points. Low interest rates since 2008 have driven down absolute short term rates forcing investors into longer term securities to find yield. Seven years ago STIP generated about $130 million in income annually, now that figure is down to around $6 million.

The STIP portfolio is within all guidelines for liquidity, diversification and average days to maturity, currently 51 days, compared to the policy maximum of 60 days. The STIP current net yield is at 11 basis points, compared to the benchmark one month LIBOR rate of 15 basis points.

Purchases of $332 million over the quarter were mostly in the form of longer term securities with terms of up to two years, Yankee CDs and 2-year floaters, mostly to try and pick up more yield. Prior to last quarter there were 2-year securities which have since matured and rolled off at rates that cannot be replaced and therefore portfolio yield is coming down. Reserve fund deductions have been reduced from $12,500 to $11,000 per day in recognition of this.

Member Satre asked if interest rates stay at current levels, will staff continue to reduce the amount being added each day to the reserve fund. Mr. Cooley stated yes, if necessary to maintain a yield between 10 – 12 basis points is the target return. Current money market returns are between 4 and 10 basis points, so the portfolio return is competitive.

Mr. Cooley presented an overview of the State Fund Insurance portfolio for the quarter ending March 31, 2014. Fixed income rates are down; the ten year Treasury yield decreased from 3.03% to 2.72% for the quarter. The portfolio is defensively positioned. Total fixed income outperformed the benchmark by 29 basis points during the quarter and by 60 basis points over one year, aided by higher-than-average corporate exposure in the account. Long term returns compared to the fixed income benchmark were +93 basis points for three years, +196 basis points over five years, and +50 basis points for the past ten years for the quarter ending March 31, 2014.

There were sales of $5 million in equity units in the quarter to maintain the client preference of a 12% maximum allocation to equities. Total equity return fiscal year to date was 18.07%. Real estate

returned 7.99% fiscal year to date with a current allocation of 5.26%. The policy range for real estate is 3%-7%. Equities and real estate have added substantial return to the portfolio. Fiscal year to date return for the total fund is 4.27% compared to the composite benchmark return of 3.43%.

Mr. Cooley reviewed the Treasurer's Fund. The fund totaled $872 million at March 31, 2014. Half of that amount is in the General Fund in the form of STIP to provide liquidity. Purchases for the quarter included $30 million of security purchases. Purchases are traditionally of 3-year agencies or Treasuries, and some were purchased when interest rates briefly spiked, but given current market interest rates additional purchases are not contemplated at the moment.

MONTANA PRIVATE EQUITY AND REAL ESTATE REVIEW

Mr. Cliff Sheets, CFA, CIO and Mr. Ethan Hurley, CFA, Portfolio Manager – Alternative Investments
Mr. Ethan Hurley presented the general characteristics of private equity and real estate. Private equity is a finite life vehicle in the form of limited partner relationships; the manager is the general partner and MBOI is a limited partner in the funds. The investment periods are generally 4–6 years for private equity and 2-4 years for real estate. Fund sizes vary and incentive fees are paid after certain hurdles are met.

Private equity is not a "standard" business and all funds are different. Significant risk is taken on with the underlying investments; therefore staff carefully looks at audits, reference checks, etc., and conducts an educated, informed analysis before making an investment.

In response to a question, Mr. Hurley explained the mechanism for preferred return, when this feature exists, requires that the general partners return all invested capital, all expenses plus an 8% rate of return before they participate in the profits of a fund investment. Responding to a question from Chairman Noennig, Mr. Hurley advised in the case of finder's fees or placement agent fees, the general partner has a negotiated fee of what BOI's investment will be, but the fee is paid from the general fund by the general partner. Anything over and above the 8% return and the return of all management fees, the general partner then receives their 20% carry. Mr. Sheets added in the case where a fund has no profits, such as the case with Flowers, no fees or profits are recovered.

Mr. Hurley reviewed the life cycle of a fund and added all aspects of an investment are negotiable. The typical investment period is limited to five years, however sometimes it's prudent to beyond five. Capital calls in the first five years lead to negative cash when calls exceed distributions to the LPs. When the investment period ends only a portion of capital can be called for expenses and follow-on investments and distributions typically begin. Management fees generally decrease after the investment period when they are based on invested cost rather than on committed capital during the investment period.

Mr. Hurley reviewed the different aspects of private equity: how value is created, the risks involved in the asset class and the associated costs. Value is created through increased growth in earnings, capital/debt restructure, a change/upgrade in management and board structures, increase in sales force and marketing, mergers and acquisitions, financing strategies, reducing headcount, exiting non-profitable sectors and achieving company control.

The risks in private equity include operating/execution risk, financial leveraging, valuation risk, which can be subjective, and the aspect that value is not discovered until a sales process is completed, i.e. when buyer and seller strike a deal and investment exit occurs. Risk is offset by diversification, investing primarily in U.S. with very little international exposure, diversifying over a market cycle and not overcommitting in bad years.

The costs associated with investing in private equity are higher than traditional asset classes. Fee structure is generally "2 and 20," 2% management fee and 20% carry or profit participation, although venture capital is typically more expensive at 2.5% and 20. Responding to a question from Member

Karl Englund, Mr. Hurley stated venture capital generally has a very long duration, often with a 7 or 8 year life cycle at the portfolio company level. MBOI currently has 19.6% in venture capital but is slowly decreasing the allocation by letting it naturally wind down. Successful venture capital firms are exceedingly difficult to access, with approximately 5% of firms are responsible for 95% of returns. Staff will continue to consider firms such as Northgate Capital Partners, a fund of funds manager, which has limited access to high performing venture capital managers.

Mr. Sheets added that we will occasionally re-up with a venture capital manager we have a relationship with, but we do have "access challenge" and venture capital are long tail investments where we may not realize gains for 10 years. Buyouts also tend to be risky, but generally are a better fit.

Mr. Hurley stated buyouts are the largest private equity holding at 70.6% and offer more opportunities to buy, exit and create value. The remaining private equity portfolio contains 8.6% in distressed debt which focuses on financial or operational restructuring and 1.2% of mezzanine which finances acquisitions, recapitalization and growth.

Mr. Hurley concluded that private equity is a relationship business involving the active building of relationships which staff does. He stated there are some legacy names which have not performed well and so re-investing with these GPs will not be considered. Staff attends their meetings and participates on some advisory committees as well as calling on the general partners regularly or quarterly. Discussions are proactive and can apply to all levels of staff. Partnerships are complex and communications can include the top partners. Responding to a question from Member Englund, Mr. Hurley stated not all limited partners are as involved as MBOI, which takes a proactive approach.

Executive Director Ewer noted we see a lot of visitors here in the office from the different funds. Once a quarter staff reviews each fund which is very labor intensive; Mr. Hurley has four support positions for private equity.

Mr. Cliff Sheets stated when staff considers underwriting a fund a detailed analysis is conducted on strategy, stability, returns and the ability to repeat performance. A lot of public funds hire a consultant to select funds, which may be adequate, but the consultant is not invested over the long term timeline required for most funds. The current process works well and is always being fine-tuned. Some funds have been a disappointment, but saving the private equity consultant costs of $400-500 thousand annually makes better economic sense.

The objectives and results expected from private equity include high returns, portfolio diversification and access to investments otherwise not available in the public market. The private equity market is smaller than small caps which are available in public markets and have a market cap between $1.5 and $4 billion, vs. private equity which can have a market cap as small as $50 to $200 million. Returns over time for private equity will exceed those for public equities but come with additional risk. For our portfolio the standard deviation for private equity over the last 20 years has been less than for broad U.S. stocks, and private equity doesn't move in the same direction or with the same magnitude as public stocks. Extra return over time and the diversification benefit are very important factors.

Mr. Hurley reviewed the fundamentals of Real Estate which has many of the same attributes as private equity. Real estate adds economic value by increasing net operating income, increasing occupancy rates, development of raw land or property upgrades, or repositioning of tired assets. Real estate continues to have a lumpy recovery. Financing can be encumbered or unencumbered; some properties lend themselves to higher debt. Diversification across property types can help reduce risk.

Fee costs are higher for real estate than for traditional asset classes and commitment-based fees are high. According to the CEM report, MBOI real estate fee expenses are comparable to peers.

Real estate is structured in core and non-core assets. Core funds are open ended, use low leverage and invest in high occupancy properties. Returns are generated from income such as rents vs. capital appreciation. Timberland is a core investment where revenues are generated from the sale of conservation easements, recreational leases as well as harvesting and sale of the timber. Diversification is by age, geography, end-user markets and tree species.

Non-core real estate is value-add through updating and rehabbing properties, and is generally leveraged higher and carries more risk.

Mr. Sheets stated real estate provides diversification and competitive returns over the long term, usually in the 7%-10% range depending on risk level. Return values for real estate also experience a one quarter lag on returns as private equity does. Since the first quarter of 2010 real estate has posted positive returns. Real estate lagged on the way down with the market downturn and has lagged as well as on the way up as the market has rebounded.

Both private equity and real estate are meeting our objectives over the long term, with excellent results and less volatility than we anticipated and less than public equity. Both provide diversification vs. public equity beta.

Member Englund asked what the net IRR is. Mr. Hurley stated IRR is the annualized Internal Rate of Return, net of fees.

Mr. Sheets added IRR is negative at the start of a fund due to the J Curve, i.e., cash outlays via capital calls, and will vary over the life of a fund. The multiple of invested capital is 1.5, or 150% of our investment. Active funds are marked to market, however, as private companies, the value is not fully known until the end of the life of the fund and the final sale.

Mr. Hurley stated the MPEP strategic framework has been developed over time and is revisited annually. The program is moving to small cap where more value and lower leverage are available. Staff is selective with large and mega cap re-ups as they generally offer fewer options to create value; we will maintain some exposure to venture capital. Some exposure to secondaries will be ongoing, but staff will continue to deemphasize fund of funds where fees are a drag on return. Staff will continue to look at managers with a global emerging markets focus and energy sector-focused funds For MTRP, core will be reduced over time. The commitments for 2013 totaled $160 million of capital to MPEP and $140 million to MTRP.

Mr. Sheets stated private equity and real estate in general are not liquid because of private contractual restraints. Core real estate contractually is the most liquid; however, purchase queues have now formed where investors are lined up to invest and must wait to get their money into some of these funds. In contrast many core funds closed the door to redemptions in 2008 and 2009 when investors wanted out. Private equity cash flows have been positive for the last three years with $197 million received in distributions vs. $137 million in capital calls. Real estate distributions have been low but are increasing due to market conditions and the fund profile. The first quarter in 2014 was the first quarter to realize a positive net cash flow in the real estate pool.

Mr. Sheets added both asset classes are actually more liquid than generally portrayed. Staff will be adding SEC inquiries and investigation outcomes to the check list to enhance the review process.

RECAP

Executive Director Ewer stated that Member Jack Prothero would like the risk metrics for fixed income presented to the Board. Fundfire access will be provided to the Board members for a one year period. Changes to the RVK, Inc. quarterly performance books will be implemented to allow for an easier to follow format. Member Buchanan suggested utilizing the October one day Board meeting for Board member education and training. The monthly performance summary will be emailed to TRS, PERS and Board members; Mr. Eron Krpan will distribute these monthly when available.

There being no further business, the meeting was adjourned at 11:27 AM.

Next Meeting
The next regular meeting of the Board will be August 19 - 20, 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
Mark E. Noennig, Chairman

ATTEST: D. Ewer
David Ewer, Executive Director

DATE: August 19, 2014

MBOI:drc
7/1/14