

**REGULAR MEETING OF THE  
MONTANA BOARD OF INVESTMENTS  
DEPARTMENT OF COMMERCE**

**2401 Colonial Drive, 3<sup>rd</sup> Floor  
Helena, Montana**

**February 12 & 13, 2008**

**AGENDA – DAY 1**

- |   |                       |
|---|-----------------------|
| <b>I. CALL TO ORDER</b>   | <b>10:00 a.m.</b>     |
| A. Roll Call  |                       |
| B. Approval of the November 6 & 7, 2007 Regular Meeting Minutes             | <b>10:05 a.m.</b>     |
| C. Public Comment - <i>Public Comment on issues with Board Jurisdiction</i> | <b>10:10 a.m.</b>     |
| D. Administrative Business  | <b>10:15 a.m.</b>     |
| 1. Human Resource Committee Report  |                       |
| 2. Audit Committee Report   |                       |
| 3. Loan Committee Report  |                       |
| <br><b>II. BOND PROGRAM – Louise Welsh</b>                                  | <br><b>10:30 a.m.</b> |
| A. INTERCAP   |                       |
| 1. Activity Report  |                       |
| 2. Staff Approved Loans Report  |                       |
| 3. Loan Requests  |                       |
| <br><b>III. MONTANA LOAN PROGRAM – Herb Kulow</b>                           | <br><b>10:45 a.m.</b> |
| A. Commercial and Residential Portfolios Report                             |                       |
| <br><b>IV. INVESTMENT ACTIVITIES/REPORTS – Cliff Sheets, CFA, CIO</b>       | <br><b>11:00 a.m.</b> |
| A. State Street Performance Report by Manager, Net of Fees                  |                       |
| B. Retirement System Asset Allocation Report                                |                       |
| C. Private Equity (MPEP)  |                       |
| 1. Portfolio Holdings and Recent Activity                                   |                       |
| 2. Private Edge Performance Report (as of September, 2007)                  |                       |
| D. Real Estate  |                       |
| 1. Portfolio Holdings and Recent Activity                                   |                       |
| 2. Private Edge Report (as of September, 2007)                              |                       |
| E. Investment Pool Strategies   |                       |
| 1. Domestic Equity (MDEP)   |                       |
| i. Update on 130/30 Manager Transition                                      |                       |
| ii. New Approved Ranges Recommendation - Decision                           |                       |
| 2. International Equity (MTIP)  |                       |
| 3. Fixed Income Strategy Statements   |                       |
| i. Bond Pools (RFBP and TFBP)   |                       |
| ii. Other Fixed Income Portfolios   |                       |
| F. Fixed Income Strategy Diversification Recommendation - Decision          |                       |
| <br><b>V. ADJOURN for Lunch</b>   | <br><b>12:00 p.m.</b> |

**VI. RECONVENE** 12:45 p.m.

**VII. EXTERNAL MANAGER PRESENTATIONS**

**Artisan Partners LP**

12:45 p.m.

- Emily Collella, Institutional Client Services
- Darren DeVore, Managing Director, Client Services
- James Kieffer, CFA, Managing Director, Portfolio Manager

**BREAK 1:30 P.M.**

**Western Asset Management**

1:45 p.m.

- Steve Fulton, Product Specialist
- Joseph Carieri, Client Service Executive

**BREAK 2:30 P.M.**

**VIII. QUARTERLY PERFORMANCE REPORTS**

2:45 p.m.

A. Pension Funds and Investment Pools – R.V. Kuhns and Cliff Sheets

**IX. REVIEW OF THE SHORT TERM INVESTMENT POOL - R.V. Kuhns**

3:45 p.m.

**X. ADJOURNMENT**

5:00 p.m.

**REGULAR MEETING OF THE  
MONTANA BOARD OF INVESTMENTS  
DEPARTMENT OF COMMERCE**

**2401 Colonial Drive, 3<sup>rd</sup> Floor  
Helena, Montana**

**AGENDA – DAY 2**

**I. RECONVENE AND CALL TO ORDER**

8:00 a.m.

A. Roll Call

**II. EDUCATIONAL PRESENTATION – Hedge Funds - Fund of Funds**

**BlackRock Alternative Advisors**

8:00 a.m.

- Neil Collins, Managing Director
- Dan McLaughlin, Managing Director

**Grosvenor Capital Management, LP.**

9:00 a.m.

- Stephen Brewster, Managing Director
- Brad Meyers, Vice President, Investments

**III. EXECUTIVE DIRECTOR REPORTS – Carroll South**

10:00 a.m.

- A. Fixed Income Portfolio Manager Search - Decision
- B. STIP Update & Investment Policy Revisions - Decision
- C. Proposed STIP Legislation - Decision

**IV. ADJOURNMENT**

11:30 a.m.

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

**MONTANA BOARD OF INVESTMENTS  
DEPARTMENT OF COMMERCE**

**2401 Colonial Drive, 3<sup>rd</sup> Floor  
Helena, Montana  
February 12 & 13, 2008**

**MINUTES**

**BOARD MEMBERS PRESENT:**

|                       |                               |
|-----------------------|-------------------------------|
| Terry Moore, Chairman | John Paull                    |
| Teresa Cohea          | Jack Prothero                 |
| Karl Englund          | Maureen Fleming               |
| Senator Dan Weinberg  | Jon Satre                     |
|                       | Representative Tom McGillvray |

**BOARD MEMBERS ABSENT:**

Elouise Cobell  
Jim Turcotte

**STAFF PRESENT:**

|   |   |
|---|---|
| Polly Boutin, Accountant                      | Rande Muffick, CFA, Portfolio Manager             |
| Jason Brent, Investment Analyst               | Jon Putnam, CFA, Investment Analyst               |
| Geri Burton, Deputy Director                  | Nancy Rivera, Credit Analyst                      |
| Richard Cooley, CFA, Portfolio Manager        | Mari Rohrig, Accountant                           |
| Kim Dallas, Program Assistant/Board Secretary | John Romasko, Fixed Income Investment Analyst     |
| Rachel Fairbank, Accountant                   | Clifford A. Sheets, CFA, Chief Investment Officer |
| Tim House, Chief of Investment Operations     | Jon Shoen, CFA, Investment Analyst                |
| Linda Hunter, Accountant                      | Carroll South, Executive Director                 |
| Ed Kelley, Portfolio Manager                  | Steve Strong, Investment Analyst                  |
| Teri Kolnik, Equity Investment Analyst        | Louise Welsh, Bond Program Officer                |
| Herb Kulow, CMB, Portfolio Manager            | Charlie Williamson, Investment Analyst            |
| Gayle Moon, Accounting Fiscal Manager         | Dan Zarling, CFA, Director of Research            |

**GUESTS:**

Jim Voytko, R.V. Kuhns and Associates  
Becky Gratsinger, R.V. Kuhns and Associates  
Peter Madsen, R.V. Kuhns and Associates  
Chris Phillips, BOI Contract Consultant  
Gordon Hoven, Piper Jaffray  
Emily Collella, Institutional Client Services, Artisan Partners LP  
Darren DeVore, Managing Director, Client Services, Artisan Partners LP  
James Kieffer, CFA, Managing Director, Portfolio Manager, Artisan Partners LP  
Steve Fulton, Product Specialist, Western Asset Management  
Joseph Carieri, Client Service Executive Western Asset Management  
Neil Collins, Managing Director, BlackRock Alternative Advisors  
Dan McLaughlin, Managing Director, BlackRock Alternative Advisors  
Stephen Brewster, Managing Director, Grosvenor Capital Management, LP.  
Brad Meyers, Vice President, Investments, Grosvenor Capital Management, LP.

Scott Miller, Public Employees' Retirement System  
Dave Senn, Executive Director, Teachers' Retirement System  
Roxanne Minnehan, Executive Director, Public Employees' Retirement System  
Susan Gallagher, Associated Press  
Hope Stockwell, Montana Public Radio

### **CALL TO ORDER**

Chairman Moore called the regular meeting of the Board of Investments (Board) to order at 10:02 a.m. in the conference room at 2401 Colonial Drive, 3<sup>rd</sup> Floor, Helena, Montana. As noted above, the meeting convened with seven members of the Board present. Member Turcotte and Member Cobell were absent.

**Motion:** Member Prothero motioned for approval of the November 6 & 7, 2007 minutes; Member Cohea seconded the motion and the motion was unanimously approved 7-0.

#### **Public Comment**

Chairman Moore called for Public Comment of Board-Related Items. *No Public Comment made.*

### **ADMINISTRATIVE BUSINESS**

Chairman Moore presented the following Administrative Business:

1. Human Resources Committee Report – No report.
2. Audit Committee Report – No report.
3. Loan Committee Report
  - Member Prothero, Chairperson of the Loan Committee, reported that the Committee reviewed staff recommendation to participate in the following INTERCAP Loan Request.

|   |
|---|
| Borrower: Montana Dept. of Transportation                   |
| Board Loan Amount: \$1,420,692                              |
| Term: 6 year term (\$1,112,314) and 7 year term (\$308,378) |
| Purpose: To finance vehicles purchases for its Motor Pool.  |

**Motion:** Member Prothero motioned for approval of this loan request and authorize staff to proceed with processing and closing this loan using the Board's standard Bond Program Office procedures; Member Fleming seconded the motion and the motion was unanimously approved 7-0.

Member John Paull also took a moment to compliment and extend a thank you to Louise Welsh from the Butte Silver Bow Fire Department. Ms. Welsh worked very closely with the Fire Department in the purchase of three new fire trucks.

## **BOND PROGRAM**

### Activity Report

The Board reviewed this report for the period ending December 31, 2007.

### Staff Approved Loans Report

Ms. Louise Welsh reported that the following loans have been approved by staff:

|                     |   |
|---------------------|---|
| Borrower:           | City of Thompson Falls                                      |
| Purpose:            | To purchase a front end loader and two (2) police vehicles. |
| Staff Approval Date | October 19, 2007  |
| Board Loan Amount:  | \$140,000 and \$40,000                                      |
| Term:               | Ten (10) and five (5) years                                 |

|                     |  |
|---------------------|--|
| Borrower:           | Wapati Acres County Water and/or Sewer District (Kalispell)  |
| Purpose:            | To finance costs associated with a preliminary engineering report (PER) for water system upgrades. |
| Staff Approval Date | October 24, 2007   |
| Board Loan Amount:  | \$9,000  |
| Term:               | Six (6) years  |

|                     |   |
|---------------------|---|
| Borrower:           | State of Montana Department of Natural Resources and Conservation (DNRC)  |
| Purpose:            | Interim loan in anticipation of issuing state general obligation bonds (GO Bonds) for its Drinking Water State Revolving Fund (DWSRF) Loan Program. |
| Staff Approval Date | October 29, 2007  |
| Board Loan Amount:  | \$1,000,000   |
| Term:               | Three (3) years   |

|                     |   |
|---------------------|---|
| Borrower:           | State of Montana Department of Natural Resources and Conservation (DNRC)  |
| Purpose:            | Interim loan in anticipation of issuing state general obligation bonds (GO Bonds) for its Water Pollution Control State Revolving Fund (WPCSRF) Loan Program. |
| Staff Approval Date | October 29, 2007  |
| Board Loan Amount:  | \$350,000   |
| Term:               | Three (3) years   |

|                     |  |
|---------------------|--|
| Borrower:           | City of Helena   |
| Purpose:            | To finance costs associated City golf course improvements. |
| Staff Approval Date | October 30, 2007   |
| Board Loan Amount:  | \$207,000  |
| Term:               | Ten (10) year  |

|           |  |
|-----------|--|
| Borrower: | Lewis and Clark County   |
| Purpose:  | To finance costs associated with elevator, air conditioning and mechanical room upgrades, roof repairs, and 2 <sup>nd</sup> floor remodel of the City-County Building. |

|                     |                   |
|---------------------|-------------------|
| Staff Approval Date | November 23, 2007 |
| Board Loan Amount:  | \$950,000         |
| Term:               | Ten (10) year     |

|                     |  |
|---------------------|--|
| Borrower:           | Northern Express Transportation Authority (Shelby) |
| Purpose:            | Land purchase.                                     |
| Staff Approval Date | November 29, 2007                                  |
| Board Loan Amount:  | \$100,000  |
| Term:               | Ten (10) year                                      |

|                     |  |
|---------------------|--|
| Borrower:           | Three Forks School District J-24   |
| Purpose:            | To finance costs associated with providing utilities and roadway to school land. |
| Staff Approval Date | December 6, 2007   |
| Board Loan Amount:  | \$240,000  |
| Term:               | Four (4) years   |

|                     |  |
|---------------------|--|
| Borrower:           | City of Great Falls  |
| Purpose:            | To finance costs associated with design and installation of Eagle Crossing II & III street lights. |
| Staff Approval Date | December 12, 2007  |
| Board Loan Amount:  | \$46,600   |
| Term:               | Fifteen (15) years   |

|                     |  |
|---------------------|--|
| Borrower:           | Town of Geraldine                                  |
| Purpose:            | To finance legal fees for a well drilling lawsuit. |
| Staff Approval Date | December 26, 2007                                  |
| Board Loan Amount:  | \$30,600   |
| Term:               | Ten (10) years                                     |

### **MONTANA LOAN PROGRAMS**

#### **Commercial and Residential Portfolios Report**

Mr. Herb Kulow presented and the Board reviewed this report for the period ending January 31, 2008.

### **INVESTMENT ACTIVITY**

#### **State Street Performance Report by Manager**

Mr. Cliff Sheets presented the Summary of External Active Managers (Net of fees) Report for the period ending December 31, 2007.

#### **Asset Allocation Report**

Mr. Cliff Sheets presented the Retirement Systems Asset Allocation Report as of December 31, 2007.

Private Equity (MPEP)

Mr. Cliff Sheets presented September 30, 2007 reports by Private Edge showing by strategy the total exposure by market value and outstanding commitments and the Portfolio Holdings Performance Report, holdings as of December 31, 2007 and an investment brief for the Montana Private Equity Portfolio for a commitment made since the last Board meeting, as shown below.

| <u>Fund Name</u>              | <u>Vintage</u> | <u>Subclass</u> | <u>Amount</u> | <u>Date</u> |
|-------------------------------|----------------|-----------------|---------------|-------------|
| Oak Hill Capital Partners III | 2008           | Buyout          | \$20M         | 1/8/2008    |
| <b>Total New Commitments</b>  |                |                 | <b>\$20M</b>  |             |

Real Estate (MTRP)

Mr. Cliff Sheets presented September 30, 2007 reports by Private Edge showing the real estate fund commitments made to date and holdings as of December 31, 2007. There were no new commitments made since the last Board meeting.

Domestic Equity (MDEP)

Mr. Rande Muffick presented the Montana Domestic Equity Pool Report as of December 31, 2007 and a summary of the pool manager changes and recent market trends.

Domestic Equity Transition Plan – 130/30 Strategy

Mr. Rande Muffick presented an update on the Domestic Equity Transition Plan – 130/30 Strategy. The funding of the partial long/short style allocation is scheduled for the second week in February. The total amount to be allocated among three 130/30 portfolios will be approximately \$410 million and this amount will be sourced from the Barclays Global Investors Index 500 Fund. Management firms to receive funding with their approximate dollar amount are: Analytic Investors \$120M, JP Morgan Asset Management \$210M and Martingale Asset Management \$80 million.

State Street Global Markets has been selected as the transition manager and Citigroup Global Markets Inc. was selected as prime broker for the three portfolios. A report of the completed transition will be presented to the Board at the May meeting.

MDEP Approved Ranges Recommendation

Mr. Cliff Sheets presented a staff recommendation for Board approval of new asset allocation ranges by strategy within the domestic equity pool as presented in the following table.

| <b>Strategy</b>             | <b>Post transition weight (approx.)</b> | <b>Current Approved Range</b> | <b>Proposed Approved Range</b> |
|-----------------------------|---|-------------------------------|--------------------------------|
| Large Cap Core (passive)    | 26%                                     | 20-40%                        | 10-30%                         |
| Large Cap Enhances          | 23%                                     | 15-25%                        | 20-30%                         |
| Large Cap Style-based       | 25%                                     |                               | 20-30%                         |
| Partial long/short (130/30) | 13%                                     |                               | 10-30%                         |
| Total Large Cap             | 87%                                     | 82-92%                        | 82-92%                         |
| Mid Cap                     | 8%                                      | 5-11%                         | 5-11%                          |
| Small Cap                   | 5%                                      | 3-8%                          | 3-8%                           |

The table shows the current approved ranges by strategy type and also proposed ranges. The new ranges are designed to accommodate both the immediate situation of funding the new 130/30 managers

and the potential increase in this allocation in the future. It also adds a range for the style-based managers which are a combination of both the large cap value and growth managers.

**Motion:** Member Cohea motioned that the range for “Partial long/short (130/30)” be changed from the Proposed Approved Range of 10-30% as recommended by staff to 10-20%, and the other Proposed Approved Ranges remain as recommended. Member Fleming seconded the motion and the motion was unanimously approved 7-0.

International Equity (MTIP)

Mr. Rande Muffick presented the Montana International Equity Pool Report for the period ending December 31, 2007 and discussed market trends during the quarter.

Fixed Income

Mr. Cliff Sheets presented the Fixed Income Overview and Strategy, the Below Investment Grade Holdings Report, State Fund Insurance and Treasurer’s Fund Portfolio Reports.

Fixed Income Strategy Diversification Recommendation

Mr. Cliff Sheets presented a staff recommendation that the Board approve the utilization of non-core sectors of the bond market as part of the Retirement Funds Bond Pool portfolio and adopt the proposed ranges for these sectors as discussed. This recommendation only addresses the Retirement Funds Bond Pool (RFBP).

The recommended ranges for the use within the RFBP are as follows:

| <b>Fixed Income Sector</b>   | <b>Proposed Range*</b> |
|------------------------------|------------------------|
| U.S. High Yield              | 0 – 15%                |
| Non-U.S. (including EMD)     | 0 – 10%                |
| Total “Plus” Sectors         | 0 – 20%                |
| Core (U.S. Investment Grade) | 80 – 100%              |

\*% of total RFBP

The Board currently manages only U.S. investment grade fixed income portfolios. The addition of “plus” sector exposure would be accomplished through external management by firms with the necessary resources to effectively manage these more specialized sectors of the market.

The additional sector exposures would include U.S. High Yield and Non-U.S. Fixed Income. The Non-U.S. category could include both emerging market debt (EMD) and developed country debt. The Non-U.S. segment of the portfolio would be expected to consist predominantly of sovereign debt, though limited exposure to corporate credit may be allowed. The U.S. High Yield sector would be restricted to predominantly corporate credits, whether in the form of bonds or loans.

**Motion:** Member Jack Prothero motioned for approval of the Fixed Income Strategy Diversification as recommended by staff; Member Fleming seconded the motion and the motion was unanimously approved 7-0.

## **PRESENTATION**

### **Artisan Partners, LP.**

Mr. Rande Muffick introduced Ms. Emily Collella, Mr. Darren DeVore and Mr. James Kieffer. Artisan Partners manages mid cap funds held in the Domestic Equity Pool. Ms. Collella, Mr. DeVore and Mr. Kieffer reviewed their firm and management strategy.

### **Western Asset Management**

Mr. Rande Muffick introduced Mr. Steve Fulton and Mr. Joseph Carieri. Western Asset Management manages large cap enhanced index funds held in the Domestic Equity Pool. Mr. Fulton and Mr. Carieri reviewed their firm and management strategy.

## **QUARTERLY PERFORMANCE REPORTS**

The Quarterly Performance Report for the period ending December 31, 2007 was presented.

### **REVIEW OF THE SHORT TERM INVESTMENT POOL**

*(A complete copy of this report is kept on file with documents of this meeting)*

At the request of Chairman Terry Moore, R.V. Kuhns and Associates conducted an extensive examination of the Short-Term Investment Pool. The report presented by R.V. Kuhns and Associates serves as an independent and objective discussion of the policy, objectives, and execution of the STIP portfolio and a summary view of the underlying securities.

Ms. Becky Gratsinger, Mr. Jim Voytko and Mr. Pete Madsen, R.V. Kuhns and Associates, presented the review and report of the Montana Short-Term Investment Pool.

The STIP Review and Analysis Report performed and completed by R.V. Kuhns and Associates answered some of the basic questions about STIP, as well as the questions relating to recent market and investment concerns.

The STIP Fund is an internally managed investment vehicle intended to preserve principal, maintain appropriate levels of liquidity, and provide a market rate of return. Investments utilized to achieve these objectives have historically included the following: 1) Government Agency short duration securities; 2) Corporate issued notes for short-term financing; and 3) Asset-backed securities for short-term financing.

The portfolio has within it several securities issued by Structured Investment Vehicles (SIVs), and upon learning of the SIV exposure, some local governments withdrew all or a portion of their assets. SIVs are a subset of the asset-backed segment of the short-term market. The withdrawals took place during the fourth quarter of 2007 and local government assets decreased from 34% to approximately 25%. Sudden, ongoing withdrawals could have forced the sale of assets prematurely at a loss to generate the liquidity needed to fund redemptions, penalizing other participants invested in the STIP.

BOI responded proactively to the situation at hand. The STIP investment policy includes parameters designed to ensure a reasonable level of liquidity for the portfolio. As market events began to unfold in 2007, BOI staff further strengthened policy limitations before any security specific problems emerged, and during the third and fourth quarters of 2007, BOI established additional controls and policy exposure limits were reduced and pool liquidity levels adjusted further.

In conclusion, R.V. Kuhns and Associates observed that BOI staff reacted quickly and effectively, and in a prudent manner to pre-empt a crisis.

**ADJOURNED**

The meeting adjourned for the day at 5:15 p.m.

**CALL TO ORDER**

The meeting was reconvened Wednesday, February 13, 2007 at 8:00 a.m. with seven members of the Board present. Member Turcotte and Member Cobell were absent.

**EDUCATIONAL PRESENTATION**

**Blackrock Alternative Advisors**

Mr. Neil Collins and Mr. Dan McLaughlin gave an educational presentation to the Board on Hedge Funds – Fund of Funds.

**Grosvenor Capital Management, LP.**

Mr. Stephen Brewster and Mr. Brad Meyers gave an educational presentation to the Board on Hedge Funds – Fund of Funds.

At the conclusion of these two presentations, the Board discussed at length its thoughts about Hedge Funds as an investment avenue.

*Terry Cohea:* This is a valid area and we should continue to explore it. It would be useful, if staff has time, to go through an RFP Process to see what is available. But before a decision is made, the board and staff must look closely at the amount that would be allocated and what constraints there would be.

*Jack Prothero:* Echo Terry's comments and add that we must make sure that we do this right.

*Dan Weinberg:* Please continue the investigation cautiously and continue with the education. There are some negatives in this investment area and maybe we should hear more about those. The things that we heard today were all the positive views.

*Maureen Fleming:* Staff should continue exploring; however it may be too soon to begin an RFP Process. This is not urgent and not something that is going to be rushed into. Member Fleming stated that at this time she would not endorse putting money into this investment vehicle.

*Karl Englund:* Agreement with Member Fleming and Senator Weinberg's thoughts. Would like to hear other perspectives and views, specifically someone that can tell the Board why we should not be investing in Hedge Funds.

*Tom McGillvray:* Board and staff should pursue more allocation of resources to hedge funds; it makes sense from an investment perspective and a diversification perspective. The Fund of Funds investment may be a great opportunity; however more knowledge and a better understanding is needed to make us comfortable in this area.

*Jon Satre:* In the pursuit of diversification that the Board has been on over the past few years, this is an area that bears a lot of examination, and some of the remarks that R. V. Kuhns made about missing

some components of diversification and how that may be hurting the returns. This element is worth looking at more.

*John Paull:* The information that R.V. Kuhns and staff are providing is very helpful and he would like to receive more education on the issue. Board and staff have been looking for diversification and that has been the goal since R. V. Kuhns was hired.

*Terry Moore:* The consensus is to proceed with caution; continue assessing the area and the education. Investing is not a priority today, rather the Board is giving staff the yellow light to move forward and put energy along side with R.V. Kuhns to take the steps of continual assessment and education to understand both the pitfalls as well as the possible opportunities. It is not the number one objective in the next quarter or two, but that there is a prospect of bringing a recommendation to the Board at some point in the future. There are no decisions to be made today.

Member Englund asked Carroll South and Cliff Sheets for their view of the fees.

Representative McGillvray commented that the biggest criticism of the Board of Investments from the legislators is where the S&P and Nasdaq stocks in general just went down 2,000 points. If the Board had had a position in a fund of funds hedge fund, which did not have that same reaction in that market environment, the performance would have been incredibly better. These types of alternative investments do have merit, and board has real opportunity to look at these. Yes, the fee may be more expensive but you must also look at what you get for that fee.

Mr. South stated that the fees may also be a topic of concern. It would be helpful if R.V. Kuhns would ask a representative from another public fund that has made a decision to utilize hedge funds such as CALPERS or CALSTRS to come before the Board and present a peer's perspective. This may be the last component of the education of Hedge Funds – Fund of Funds needed.

Member Fleming also asked Mr. Sheets to state his view point on Hedge Funds.

Mr. Sheets stated that he has opinions in both directions and could have asked the two presenting firms many more questions that what there was time for. Further research and education will be beneficial to all involved.

### **EXECUTIVE DIRECTOR REPORTS**

#### Fixed Income Portfolio Manager Search - Decision

Mr. Carroll South reported that the Executive Director and Chief Investment Officer are currently searching for a fixed-income Portfolio Manager. Advertisements have been posted on the Chartered Financial Analyst and Wall Street Journal web sites.

In addition to managing fixed-income portfolios, the new incumbent in this position will be required to manage the external fixed-income managers to be hired through the current fixed-income RFP process. Staff will present a detailed job description to the Human Resource Committee for review and approval prior to submitting it to the full Board in May.

The Board is required to set the salary of this position; however staff will not know what salary must be offered to a successful applicant until the interview process is completed and finalists are selected. The Board at its discretion may delegate the salary setting approval to the Human Resource Committee.

Mr. Carroll South presented staff recommendation that the Board authorize the Human Resource Committee to approve a salary for the successful applicant based on a staff recommendation and report its approval to the Board at its May 13 & 14, 2008 meeting.

**Motion:** Member Karl Englund motioned for approval of staff recommendation as presented; Member Paull seconded the motion and the motion was unanimously approved 7-0.

#### STIP Update & Investment Policy Revisions - Decision

Mr. Carroll South presented an update on the Short-Term Investment Pool and presented to the Board a staff recommendation for revisions to the investment policy statement for this Pool.

The Short Term Investment Pool (STIP) was created by the Legislature on July 1, 1973 as an investment vehicle to manage state and local government cash. State agencies utilize STIP for accounts that are entitled to retain their interest earnings and have no other options for the investment of their cash. Local governments have other options as permitted by law and use STIP at their discretion.

The STIP investments on June 30, 2007 totaled \$2.8 billion with 479 individual accounts participating throughout the fiscal year, including 193 local government accounts. Since its creation the STIP has provided a convenient way for state and local government agencies to invest and withdraw cash with only 24-hours notice. The pool distributed \$125 million in income to state and local government agencies for Fiscal Year 2007.

Shortly after a Bloomberg news article listed the STIP as having Structured Investment Vehicles (SIV's) in its portfolio, several large local governments began withdrawing their STIP investments, essentially closing their accounts. From November 28 through December 7, local government net withdrawals totaled \$356.0 million. Board staff was able to accommodate the large withdrawals without being forced to liquidate securities for two primary reasons. 1) In August, staff began shortening the pool duration and increasing liquidity to ensure that sufficient funds were available to accommodate unpredictable local government withdrawals; and 2) the state funds component remained stable during the period. Through February 4th, local governments had withdrawn \$599 million and deposited \$219 million, for a net reduction of \$380 million. Local government participation has stabilized since the first week in December, while state funds have increased by \$200.0 million. As of February 4, state agency funds comprised 77.4 percent of the pool.

A detailed analysis of the withdrawals found that 41 local government accounts were either closed out completely or the balances reduced significantly - reflecting more than a typical "business as usual" withdrawal. In total, these accounts withdrew \$347.9 million. As of February 4, there remained in the pool 152 accounts ranging in size from \$386.00 to \$54.1 million, with an average size of \$3.4 million.

As the fiduciary for the Unified Investment Program, the Board establishes broad investment policies for each investment pool and all separate accounts. Investment staff must comply with the approved policies as they carry out the day-to-day securities trading activity. The STIP Investment Policy Statement was revised in August 2006 to include the following provisions applying to Asset Backed Securities (ABS - which includes SIV's). The maximum limit for one issuer was reduced from 5.0 percent to 4.0 percent of the portfolio. The overall limit on ABS was reduced from no limit to 70.0 percent of the portfolio

Mr. South reported that the Short Term Investment Pool Policy does authorize Structured Investment Vehicles as outlined below:

- **Investment Type** - The current STIP Investment Policy authorizes a maximum of 70.0 percent of the portfolio to be invested in Asset-Backed Securities (ABS) of any type. The policy specifically includes “structured investment vehicles” within the definition of ABS. On November 15, 2007 the SIV’s comprised 22.6 percent of the portfolio. As of February, 13, 2008 SIV exposure is 17 percent of the portfolio.
- **Investment Ratings** – The policy requires that SIV’s be rated triple-A by at least one rating service at the time of purchase. At the time of purchase these investments were rated triple-A by two rating agencies.
- **Maximum Investment per Issuer** – The policy requires that one issuer must be limited to no more than 4.0 percent of the portfolio. When the \$90.0 million Axon securities were purchased (the largest SIV), they comprised 3.67 percent of the STIP portfolio.
- **Maturity Limit** – The policy requires that, with a few exceptions for variable rate or floating rate securities, an investment may not have a maturity date exceeding 397 days from the date of purchase. The longest maturity date for any of the SIV’s currently held in the portfolio was 370 days on the purchase date.
- **Other Policy Provisions** – The policy authorizes ABS investments with the following caveat: “Asset-backed securities (ABS) collateralized by: credit cards, automobile loans, leases and other receivables acceptable to staff in their analysis of this type of structure”

There has been no material impact on the assets in the STIP portfolio due to the SIV holdings. The STIP is operated as an “amortized cost” fund, which means that the individual securities in the portfolio are not priced daily, weekly, or monthly, but are held at “cost” until maturity. This accounting methodology is based on the premise that all investments will be “purchased and held” to maturity rather than sold at a loss or gain prior to maturity. This is the only process by which a constant share price can be maintained. If securities were priced daily, there could be a different share value each business day.

All current securities in STIP are held at amortized cost until maturity. The SIV’s currently undergoing restructuring will also be held at cost until the restructuring is complete and the final outcome is known. The unpaid \$25.0 million Orion note is held on the books as a receivable and included in the pool’s Net Asset Value.

Proposed staff revisions to the policy codify the current day-to-day management policies that were implemented and updated by staff since the debt crises and ensuing market volatility began to surface in August. While the proposed revisions tighten up the day-to-day procedures and operations of the pool, they also provide sufficient flexibility and discretion to ensure that a rigid adherence to the policy would not force staff to take an action that could be deemed imprudent. For example, a forced, untimely sale of a security because of a ratings downgrade or an extended maturity due to a restructuring would not be in the best interest of pool participants. The prudent expert principle law requires the Board among other things to: *“discharge the duties solely in the interest of and for the benefit of the funds forming the unified investment program.”*

Following Mr. South’s presentation to the Board, Mr. Cliff Sheets reviewed the proposed changes to the Investment Policy Statement.

Chairman Moore opened the discussion to comments and suggestions by the Board: *Senator Weinberg* stated that there is a constitutional guarantee that local governments can withdraw funds. The Senator suggested asking local governments and municipalities to voluntarily limit their ability to pull out their money.

Mr. South stated that the guarantee seems to be in wording of the law, not the constitution. In order for a voluntary system to work, the STIP Participation agreement would have to be modified. Another consideration would be whether local governments that closed their account should be allowed to invest again. By withdrawing large sums and reinvesting, these local governments could be adversely impacting state agencies and local government that remained invested.

**Motion:** Member Terry Cohea motioned for approval of the changes recommended by staff to the Investment Policy State for the Short Term Investment Pool; Member Fleming seconded the motion and the motion was unanimously approved 7-0.

*A complete copy of the Short Term Investment Pool Investment Policy is kept on file with the documents of this meeting. This includes the proposed changes to the Investment Policy as recommended by staff. The approved policy is posted on the Board's web site.*

### Proposed STIP Legislation

Mr. Carroll South presented to the Board proposed STIP Legislation. This legislation relates to the management of the local government deposits and withdrawals in the Short Term Investment Pool. Local governments invest in STIP at their discretion. They may invest as much as they wish at any time and withdraw any or all of their deposited funds with 24 hour notice. Under current law, the Board has no control over the amount or frequency of local government deposits and withdrawals.

The proposed legislation would authorize the Board to adopt policies to better manage local government STIP deposits and withdrawals. The Board would incorporate into the STIP Investment Policy a procedure for exercising some monitoring and control of local government STIP transactions. The following legislation is being recommended:

**17-6-204. Investment of local government funds.** (1) *The governing body of any city, county, school district, or other local government unit or political subdivision having funds which are available for investment and are not required by law or by any covenant or agreement with bondholders or others to be segregated and invested in a different manner may direct its treasurer to remit such funds to the state treasurer for investment under the direction of the board of investments as part of the pooled investment fund. The amount and frequency of such remittances shall be subject to the pooled investment fund policy established by the board of investments and published on its web site.*

(2) *A separate account, designated by name and number for each such participant in the fund, shall be kept to record individual transactions and totals of all investments belonging to each participant. A monthly report shall be furnished to each participant having a beneficial interest in the pooled investment fund, showing the changes in investments made during the preceding month. Details of any investment transaction shall be furnished to any participant upon request.*

(3) *The principal and accrued income, and any part thereof, of each and every account maintained for a participant in the pooled investment fund shall be subject to payment at any time from the fund upon request, subject to the pooled investment fund policy established by the board of investments and published on its website. Accumulated income shall be remitted to each participant at least annually.*

(4) *No order or warrant shall be issued upon any account for a larger amount than the principal and accrued income of the account to which it applies, and if any such order or warrant is issued, the participant receiving it shall reimburse the excess amount to the fund from any funds not otherwise appropriated, and the state treasurer shall be liable under his official bond for any amount not so reimbursed.*

**Motion:** Member Karl Englund motioned for approval of the proposed legislation as recommended by staff; Member Satre seconded the motion.

Chairman Moore commented that he would like staff to explore the alternatives suggested by RV Kuhns during the previous day's educational presentations. It is prudent that these options be explored.

Chairman Moore called for the question and the motion was unanimously approved 7-0.

In closing, Chairman Moore complimented and thanked Carroll South, Cliff Sheets and staff. The focus and attention on the Board of Investments recently in regards to the STIP fund. Staff rose to the occasion and challenge and has done an excellent job in communicating with municipalities, the Board and the Legislative Audit Committees.

**NEXT MEETING**

The next regularly scheduled meeting of the Board will be May 13 & 14, 2008. The meeting will take place in Billings, MT.

**ADJOURNMENT**

There being no further business, the meeting was adjourned at 11:45 a.m.

**BOARD OF INVESTMENTS**

APPROVE: \_\_\_\_\_  
Terry Moore, Chairman

ATTEST: \_\_\_\_\_  
Carroll South, Executive Director

DATE: \_\_\_\_\_

# INTERCAP Loan Program

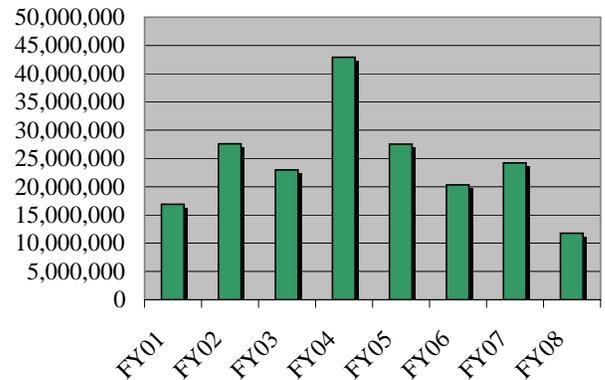
## Activity Summary

As of December 31, 2007

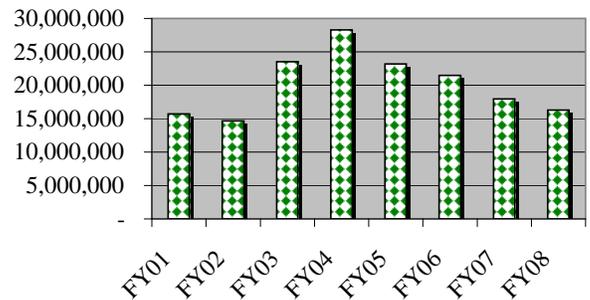
### Since Inception 1987 - December 2007

|                                 |                    |
|---------------------------------|--------------------|
| <b>Total Bonds Issued</b>       | <b>124,000,000</b> |
| <b>Total Loan Commitments</b>   | <b>298,906,430</b> |
| <b>Total Loans Funded</b>       | <b>267,654,969</b> |
| <b>Total Bonds Outstanding</b>  | <b>98,460,000</b>  |
| <b>Total Loans Outstanding</b>  | <b>74,860,283</b>  |
| <b>Loan Commitments Pending</b> | <b>31,251,461</b>  |

### Commitments FY01-Dec. 2007



### Fundings FY01- Dec. 2007



| FY2008 To Date |                      |                      |
|----------------|----------------------|----------------------|
| Month          | Commitments          | Fundings             |
| July-07        | \$ 582,285           | \$ 2,524,132         |
| August         | 6,594,010            | 1,844,850            |
| September      | 1,127,265            | 2,915,308            |
| October        | 2,081,007            | 4,183,054            |
| November       | 950,000              | 1,711,148            |
| December       | 442,200              | 3,124,922            |
| January        |                      |                      |
| February       |                      |                      |
| March          |                      |                      |
| April          |                      |                      |
| May            |                      |                      |
| June-08        |                      |                      |
| <b>To Date</b> | <b>\$ 11,776,767</b> | <b>\$ 16,303,414</b> |

Note: Commitments include withdrawn and expired loans.

### Variable Loan Rate History February 16, 2000 - February 15, 2008

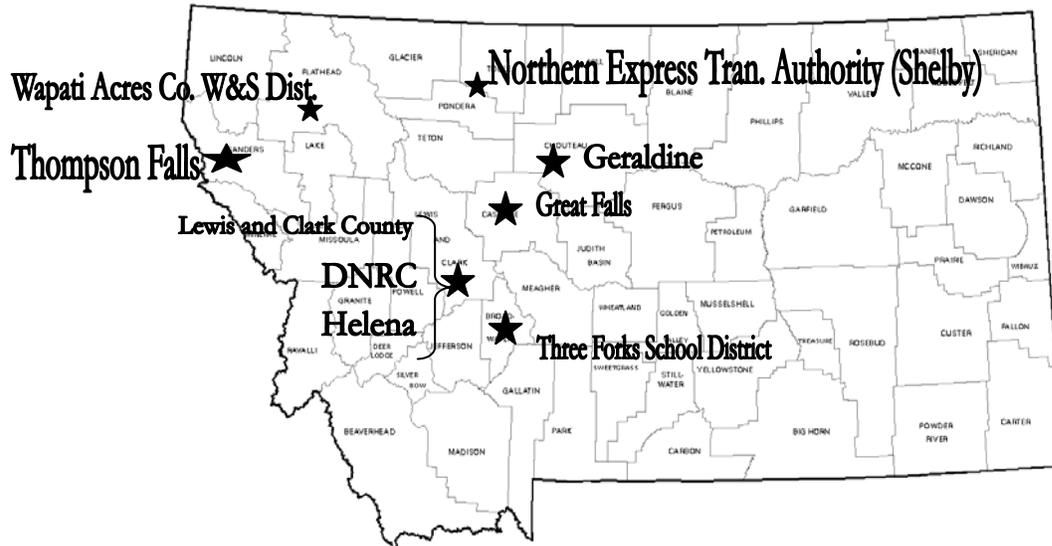
|                                       |              |                                       |              |
|---------------------------------------|--------------|---------------------------------------|--------------|
| February 16, 2000 - February 15, 2001 | <b>5.60%</b> | February 16, 2004 - February 15, 2005 | <b>2.70%</b> |
| February 16, 2001 - February 15, 2002 | <b>4.75%</b> | February 16, 2005 - February 15, 2006 | <b>3.80%</b> |
| February 16, 2002 - February 15, 2003 | <b>3.15%</b> | February 16, 2006 - February 15, 2007 | <b>4.75%</b> |
| February 16, 2003 - February 15, 2004 | <b>2.85%</b> | February 16, 2007 - February 15, 2008 | <b>4.85%</b> |

# MEMORANDUM

Montana Board of Investments  
 Department of Commerce  
 2401 Colonial Drive, 3<sup>rd</sup> Floor  
 (406) 444-0001

**To:** Members of the Board  
**From:** Louise Welsh, Bond Program Officer  
**Date:** February 4, 2008  
**Subject:** INTERCAP Staff Approved Loans Committed

Staff approved the following loans – October 1, 2007 through December 31, 2007.



|                     |   |
|---------------------|---|
| Borrower:           | City of Thompson Falls                                      |
| Purpose:            | To purchase a front end loader and two (2) police vehicles. |
| Staff Approval Date | October 19, 2007  |
| Board Loan Amount:  | \$140,000 and \$40,000                                      |
| Term:               | Ten (10) and five (5) years                                 |

|                     |  |
|---------------------|--|
| Borrower:           | Wapati Acres County Water and/or Sewer District (Kalispell)  |
| Purpose:            | To finance costs associated with a preliminary engineering report (PER) for water system upgrades. |
| Staff Approval Date | October 24, 2007   |
| Board Loan Amount:  | \$9,000  |
| Term:               | Six (6) years  |

|                     |   |
|---------------------|---|
| Borrower:           | State of Montana Department of Natural Resources and Conservation (DNRC)  |
| Purpose:            | Interim loan in anticipation of issuing state general obligation bonds (GO Bonds) for its Drinking Water State Revolving Fund (DWSRF) Loan Program. |
| Staff Approval Date | October 29, 2007  |
| Board Loan Amount:  | \$1,000,000   |
| Term:               | Three (3) years   |

|                     |   |
|---------------------|---|
| Borrower:           | State of Montana Department of Natural Resources and Conservation (DNRC)  |
| Purpose:            | Interim loan in anticipation of issuing state general obligation bonds (GO Bonds) for its Water Pollution Control State Revolving Fund (WPCSRF) Loan Program. |
| Staff Approval Date | October 29, 2007  |
| Board Loan Amount:  | \$350,000   |
| Term:               | Three (3) years   |

|                     |  |
|---------------------|--|
| Borrower:           | City of Helena   |
| Purpose:            | To finance costs associated City golf course improvements. |
| Staff Approval Date | October 30, 2007   |
| Board Loan Amount:  | \$207,000  |
| Term:               | Ten (10) year  |

|                     |  |
|---------------------|--|
| Borrower:           | Lewis and Clark County   |
| Purpose:            | To finance costs associated with elevator, air conditioning and mechanical room upgrades, roof repairs, and 2 <sup>nd</sup> floor remodel of the City-County Building. |
| Staff Approval Date | November 23, 2007  |
| Board Loan Amount:  | \$950,000  |
| Term:               | Ten (10) year  |

|                     |  |
|---------------------|--|
| Borrower:           | Northern Express Transportation Authority (Shelby) |
| Purpose:            | Land purchase.                                     |
| Staff Approval Date | November 29, 2007                                  |
| Board Loan Amount:  | \$100,000  |
| Term:               | Ten (10) year                                      |

|                     |  |
|---------------------|--|
| Borrower:           | December 6, 2007   |
| Purpose:            | Three Forks School District J-24   |
| Staff Approval Date | To finance costs associated with providing utilities and roadway to school land. |
| Board Loan Amount:  | \$240,000  |
| Term:               | Four (4) years   |

|                     |  |
|---------------------|--|
| Borrower:           | City of Great Falls  |
| Purpose:            | To finance costs associated with design and installation of Eagle Crossing II & III street lights. |
| Staff Approval Date | December 12, 2007  |
| Board Loan Amount:  | \$46,600   |
| Term:               | Fifteen (15) years   |

|                     |  |
|---------------------|--|
| Borrower:           | Town of Geraldine                                  |
| Purpose:            | To finance legal fees for a well drilling lawsuit. |
| Staff Approval Date | December 26, 2007                                  |
| Board Loan Amount:  | \$30,600   |
| Term:               | Ten (10) years                                     |



**MONTANA UNIVERSITY SYSTEM**

| <b><u>Commitment Date</u></b> | <b><u>Borrower</u></b> | <b><u>Project Description</u></b>  | <b><u>Amount</u></b> |
|-------------------------------|------------------------|--|----------------------|
| 10/24/07                      | MSU-Bozeman            | To finance the purchase of electronic medical records/lab information system software over a ten (10) year period. | \$155,000            |
| 10/26/07                      | U of M - Missoula      | To finance the purchase of two (2) buses for a term of five (5) years.   | \$387,007            |
| 12/18/07                      | MSU- Bozeman           | To finance costs associated with recreational sports and fitness equipment for a term of seven (7) years.          | \$125,000            |

# MEMORANDUM

Montana Board of Investments  
Department of Commerce  
2401 Colonial Drive, 3<sup>rd</sup> Floor  
(406) 444-0001

**To:** Members of the Board  
**From:** Louise Welsh, Bond Program Officer  
**Date:** February 4, 2008  
**Subject:** INTERCAP Loan Requests



## Department of Transportation



The Montana Department of Transportation (the “MDT”) would like to borrow \$1,420,692 to finance vehicle purchases for its Motor Pool. The request divides into two loans with terms according to vehicle life cycle as follows:

| <u>Amount</u> | <u>Term</u> | <u>Vehicle Type</u> |
|---------------|-------------|---------------------|
| \$1,112,314   | 6           | Sedans & Utilities  |
| 308,378       | 7           | Pickups & Vans      |

The MDT has used INTERCAP as their financing source for its Motor Pool vehicles since 1997. They make two purchases each year a spring purchase to add vehicles to its fleet and a fall purchase to replace existing vehicles.

Fees charged to agencies that use the Motor Pool either by leasing cars through the MDT or by using the daily-use fleet that is available on a first-come, first-served basis provide repayment for the INTERCAP loan. User fees include a loan repayment cost based on INTERCAP’s average variable interest rate.

Ordinarily this type of loan would require security by a lien on the vehicles. Given the large transactions with MDT these loans do not use titles as security. Instead, there is a specific collateral condition in the loan agreement that MDT covenants not to create, incur, or suffer to exist any lien, charge, or encumbrance of the vehicles being financed with INTERCAP loans.

January 2001, the Board authorized loans outstanding to the MDT not to exceed \$10.5 million. If approved, this request will raise MDT’s current \$8 million outstanding loan balance to approximately \$9.4 million. On an average, the MDT repays INTERCAP over \$2 million in principal every June 15. The attached 2009 Biennium Report\* relates MDT’s historical and projected financial information.

\* [http://leg.mt.gov/content/publications/fiscal/ba\\_2009/lfid\\_a/dot.pdf](http://leg.mt.gov/content/publications/fiscal/ba_2009/lfid_a/dot.pdf) (pages A128-133) provides MDT’s State Motor Pool internal service proprietary fund summary for the next 2009 biennium.

## Recommendation

It is our recommendation that the Board authorize staff to proceed with processing and closing the above loans using the Board’s standard Bond Program Office procedures.

**Montana Dept. of Transportation - State Motor Pool  
2009 Biennium Report**

| Fund  | Fund Name  | Agency # | Agency Name                  | Program Name     |        |          |
|---|------------|----------|------------------------------|------------------|--------|----------|
| 6506  | Motor Pool | 5401     | Department of Transportation | State Motor Pool |        |          |
|   |            |          |                              |                  | Actual | Budgeted |
|   |            |          |                              |                  | FY04   | FY08     |
|   |            |          |                              |                  | Actual | Budgeted |
|   |            |          |                              |                  | FY05   | FY09     |
|   |            |          |                              |                  | Actual | Budgeted |
|   |            |          |                              |                  | FY06   | FY09     |
|   |            |          |                              |                  | Actual | Budgeted |
|   |            |          |                              |                  | FY07   | FY09     |
| <b>Operating Revenues:</b>                        |            |          |                              |                  |        |          |
| Fee revenue                                       |            |          |                              |                  |        |          |
| Subsequent Injury Fund Assessment                 |            |          |                              |                  |        |          |
| Service Reimbursements [Note 3]                   |            |          |                              |                  |        |          |
| Revenue from Fee C                                |            |          |                              |                  |        |          |
| Revenue from Fee D                                |            |          |                              |                  |        |          |
| Revenue from Fee E                                |            |          |                              |                  |        |          |
| Revenue from Fee F                                |            |          |                              |                  |        |          |
| Net Fee Revenue                                   |            |          |                              |                  |        |          |
| Investment Earnings                               |            |          |                              |                  |        |          |
| Securities Lending Income                         |            |          |                              |                  |        |          |
| Premiums  |            |          |                              |                  |        |          |
| Other Operating Revenues                          |            |          |                              |                  |        |          |
| Total Operating Revenue                           |            |          |                              |                  |        |          |
| <b>Operating Expenses:</b>                        |            |          |                              |                  |        |          |
| Personal Services                                 |            |          |                              |                  |        |          |
| Other Operating Expenses                          |            |          |                              |                  |        |          |
| Total Operating Expenses                          |            |          |                              |                  |        |          |
| Operating Income (Loss)                           |            |          |                              |                  |        |          |
| <b>Nonoperating Revenues (Expenses):</b>          |            |          |                              |                  |        |          |
| Gain (Loss) Sale of Fixed Assets                  |            |          |                              |                  |        |          |
| Federal Indirect Cost Recoveries                  |            |          |                              |                  |        |          |
| Other Nonoperating Revenues (Expenses)            |            |          |                              |                  |        |          |
| Net Nonoperating Revenues (Expenses)              |            |          |                              |                  |        |          |
| Income (Loss) Before Operating Tran. [Note 1 & 2] |            |          |                              |                  |        |          |
| Contributed Capital                               |            |          |                              |                  |        |          |
| Operating Transfers In (Note 4)                   |            |          |                              |                  |        |          |
| Operating Transfers Out                           |            |          |                              |                  |        |          |
| Change in net assets                              |            |          |                              |                  |        |          |
| Total Net Assets- July 1 - As Restated            |            |          |                              |                  |        |          |
| Prior Period Adjustments                          |            |          |                              |                  |        |          |
| Cumulative effect of account change               |            |          |                              |                  |        |          |
| Total Net Assets - July 1 - As Restated           |            |          |                              |                  |        |          |
| Net Assets- June 30                               |            |          |                              |                  |        |          |
| 60 days of expenses                               |            |          |                              |                  |        |          |
| (Total Operating Expenses divided by 6)           |            |          |                              |                  |        |          |

| Requested Rates for Internal Service Funds |               |            |               |            |               |            |               |            |
|--|---------------|------------|---------------|------------|---------------|------------|---------------|------------|
| Fee/Rate Information                       |               |            |               |            |               |            |               |            |
|  | Actual        | Actual     | Actual        | Actual     | Budgeted      | Budgeted   | Budgeted      | Budgeted   |
|  | FYE 06        | FYE 06     | FYE 07        | FYE 07     | FY 08         | FY 08      | FY 09         | FY 09      |
|  | Assigned Rate | Usage Rate |
| Rental Rate Fees                           |               |            |               |            |               |            |               |            |
| Class 02 Small SUV                         | 1.377         | 0.069      | 1.408         | 0.069      | 1.547         | 0.158      | 1.637         | 0.160      |
| Class 04 Large SUV                         | 1.856         | 0.081      | 1.955         | 0.081      | 1.948         | 0.200      | 2.038         | 0.202      |
| Class 06 Passenger Car                     | 1.196         | 0.048      | 1.186         | 0.048      | 1.393         | 0.123      | 1.408         | 0.125      |
| Class 07 Small Pickup                      | 1.153         | 0.073      | 1.106         | 0.073      | 1.528         | 0.187      | 1.581         | 0.190      |
| Class 11 Large Pickup                      | 1.521         | 0.095      | 1.653         | 0.095      | 1.432         | 0.215      | 1.437         | 0.218      |
| Class 12 Vans                              | 1.399         | 0.084      | 1.432         | 0.084      | 1.453         | 0.181      | 1.420         | 0.183      |

Note: Authority MCA 2-17-411

**Note 1.** The fund had significant net income gains from 1998 to 2002. An error in interpreting the United States Office of Management and Budget (OMB) Circular A-87 Attachment C, Section G, paragraph 2 (60-day working capital rule) resulted in a Retained Earnings balance in excess of what the OMB Circular allows. To be in compliance, an adjustment to decrease the fund equity balance was included in the rates for the 2005 biennium. The program decreased fund equity by nearly \$2.0 million from FY 2004 to FY 2006.

**Note 2.** The fund experienced higher motor fuel costs than anticipated by the 2003 Legislature. The State Motor Pool pays for all gasoline and diesel fuel for vehicles leased for long-term use or rented for short-term use by state agencies. Short-term borrowing was needed to fund operations due to the higher fuel costs.

**Note 3.** The rate increase for the 2009 biennium will cover the: 1) anticipated additional lease vehicle purchases; 2) increases to direct and indirect costs; and 3) repayment of the operating loan from the general fund.

**Note 4.** The 2007 legislative session approved the \$1.33 million general fund supplemental appropriation (House Bill 2) for MDT. FY07 Actual column reflects the appropriation as an Operating Transfers In line item. This appropriation provided the necessary capital for MDT's Motor Pool to offset losses due to high fuel costs.

# MEMORANDUM

Montana Board of Investments

Department of Commerce

2401 Colonial Drive, 3<sup>rd</sup> Floor

Helena, MT 59601 (406) 444-0001

**To:** Members of the Board  
**From:** Herb Kulow, CMB  
Senior Portfolio Manager  
**Date:** February 1, 2008  
**Subject:** Commercial and Residential Loans

## Commercial Loans:

There were 259 outstanding commercial loans as of January 31, 2008, totaling \$170,402,848, a decrease of \$1,436,384 from the previous month and a decrease of \$33,002,076 from the previous year. Reservations were \$23,014,076 and commitments were \$18,713,253 as of January 31, 2008.

| Type           | Units | Amount           | % of Portfolio | Yield |
|----------------|-------|------------------|----------------|-------|
| Participation  | 102   | 78,032,021.43    | 45.79          | 5.84% |
| Guaranteed     | 113   | 51,257,615.74    | 30.08          | 5.65% |
| Infrastructure | 6     | 20,224,284.55    | 11.87          | 4.77% |
| Value Added    | 16    | 16,318,054.91    | 9.58           | 3.02% |
| IRP            | 12    | 1,938,959.37     | 1.14           | 2.00% |
| Link           | 9     | 1,695,853.81     | 1.00           | 5.45% |
| Seasoned       | 1     | 936,058.23       | 0.55           | 4.75% |
|                | 259   | \$170,402,848.04 | 100.00         | 5.33% |

The yield of 5.33% is the weighted average yield for the commercial loans.

There were no loans past due 90 days or more, nor were any loans on non-accrual. The following chart compares BOI 90-day past due percentages with the State of Montana and National commercial loan past due percentages. The comparison uses the most current FDIC statistical information, September 30, 2007.

## Commercial Past Due

| Dollars in (000) | Past due 90 days +<br>and non-accrual loans | Total commercial loans | Past due % |
|------------------|---|------------------------|------------|
| BOI              | 0   | 170,403                | 0.00%      |
| Montana          | 23,456                                      | 1,863,577              | 1.26%      |
| National         | 8,839,873                                   | 1,389,544,729          | 0.64%      |

As of December 31, 2007, the commercial loan portfolio represents 17.95% of the Coal Tax Trust.

### **Residential Loans:**

As of January 31, 2008, the residential loan portfolio was \$63,019,161. The portfolio was distributed as follows:

|              |               |         |
|--------------|---------------|---------|
| Conventional | 42,327,905.61 | 67.17%  |
| FHA          | 18,392,840.63 | 29.19%  |
| VA           | 2,298,415.08  | 3.64%   |
| Total        | 63,019,161.32 | 100.00% |

There were two residential loans past due 90 days or more as of January 31, 2008 in the amount of \$34,922 with one loan in foreclosure. The loan in foreclosure totals \$26,905. The two loans are FHA guaranteed and there should be no risk of loss of principal. The comparison uses the most current FDIC statistical information, September 30, 2007.

### **Residential Past Due**

| Dollars in (000) | <u>Past due 90 days +<br/>and non-accrual loans</u> | <u>Total residential loans</u> | <u>Past due %</u> |
|------------------|---|--------------------------------|-------------------|
| BOI              | 35  | 63,019                         | 0.05%             |
| Montana          | 15,936  | 1,894,681                      | 0.84%             |
| National         | 36,356,118  | 2,568,825,558                  | 1.42%             |

The BOI residential loan portfolio past due percentage is below those of the State of Montana and the National residential past due percentages. Staff expects the BOI past due ratio to increase slightly as the portfolio continues to contract through payoffs and refinancing, without a corresponding decrease in past due loans. BOI residential interest rates are higher than the market by approximately 25-35 basis points. BOI did not offer variable interest rate loans, interest only loans or any other non-traditional type of financing. All of the residential loans are long term with fixed interest rates.

BOI currently has 14 residential reservations outstanding with Board of Housing totaling \$1,896,020. In January 2008, BOI purchased 1 residential real estate loan totaling \$143,673.

# Montana Board of Investments

## SUMMARY OF EXTERNAL ACTIVE MANAGERS - NET MANAGER

### RATES OF RETURN

Periods Ending December 31, 2007



**STATE STREET.**  
For Everything You Invest In™

|                                    | MKT VAL<br>(\$000) | Month        | QTR          | FYTD         | 1 Year       | 3 Years | ITD          | Incept. Date |
|------------------------------------|--------------------|--------------|--------------|--------------|--------------|---------|--------------|--------------|
| <b>DOMESTIC EQUITY</b>             |                    |              |              |              |              |         |              |              |
| ENHANCED INVEST TECHNOLOGIES       | 209,429            | -0.00        | -0.56        | 1.29         | 7.15         |         | 12.63        | 07-01-06     |
| <i>S&amp;P 500 INDEX (DAILY)</i>   |                    | -0.69        | -3.33        | -1.37        | 5.49         |         | 12.22        |              |
| <b>EXCESS</b>                      |                    | <b>0.69</b>  | <b>2.77</b>  | <b>2.66</b>  | <b>1.66</b>  |         | <b>0.41</b>  |              |
| GOLDMAN SACHS ENHANCED LARGE CAP   | 142,284            | -0.66        | -4.43        | -3.64        | 2.09         |         | 9.10         | 07-01-06     |
| <i>S&amp;P 500 INDEX (DAILY)</i>   |                    | -0.69        | -3.33        | -1.37        | 5.49         |         | 12.22        |              |
| <b>EXCESS</b>                      |                    | <b>0.03</b>  | <b>-1.10</b> | <b>-2.27</b> | <b>-3.40</b> |         | <b>-3.12</b> |              |
| T. ROWE ASSOCIATES                 | 223,898            | -0.92        | -3.66        | -1.43        | 6.04         |         | 13.12        | 07-01-06     |
| <i>S&amp;P 500 INDEX (DAILY)</i>   |                    | -0.69        | -3.33        | -1.37        | 5.49         |         | 12.22        |              |
| <b>EXCESS</b>                      |                    | <b>-0.23</b> | <b>-0.33</b> | <b>-0.06</b> | <b>0.55</b>  |         | <b>0.90</b>  |              |
| WESTERN ASSET US INDEX PLUS        | 210,860            | -1.73        | -7.74        | -8.45        | -2.42        |         | 6.72         | 07-01-06     |
| <i>S&amp;P 500 INDEX (DAILY)</i>   |                    | -0.69        | -3.33        | -1.37        | 5.49         |         | 12.22        |              |
| <b>EXCESS</b>                      |                    | <b>-1.04</b> | <b>-4.41</b> | <b>-7.08</b> | <b>-7.91</b> |         | <b>-5.50</b> |              |
| BARROW HANLEY                      | 214,255            | -1.50        | -4.23        |              |              |         | -2.35        | 09-01-07     |
| <i>RUSSELL 1000 VALUE (DAILY)</i>  |                    | -0.97        | -5.80        |              |              |         | -2.56        |              |
| <b>EXCESS</b>                      |                    | <b>-0.53</b> | <b>1.57</b>  |              |              |         | <b>0.21</b>  |              |
| COLUMBUS CIRCLE INVESTORS          | 168,734            | 1.17         | 4.08         |              |              |         | 11.34        | 09-01-07     |
| <i>RUSSELL 1000 GROWTH - DAILY</i> |                    | -0.36        | -0.77        |              |              |         | 3.39         |              |
| <b>EXCESS</b>                      |                    | <b>1.53</b>  | <b>4.85</b>  |              |              |         | <b>7.95</b>  |              |
| QUANTITATIVE MANAGEMENT            | 143,682            | -0.90        | -5.58        |              |              |         | -3.02        | 09-01-07     |
| <i>RUSSELL 1000 VALUE (DAILY)</i>  |                    | -0.97        | -5.80        |              |              |         | -2.56        |              |
| <b>EXCESS</b>                      |                    | <b>0.07</b>  | <b>0.22</b>  |              |              |         | <b>-0.46</b> |              |
| RAINIER INVESTMENT MGT             | 162,732            | 1.19         | 0.79         |              |              |         | 7.80         | 09-01-07     |
| <i>RUSSELL 1000 GROWTH - DAILY</i> |                    | -0.36        | -0.77        |              |              |         | 3.39         |              |
| <b>EXCESS</b>                      |                    | <b>1.55</b>  | <b>1.56</b>  |              |              |         | <b>4.41</b>  |              |

## Montana Board of Investments

SUMMARY OF EXTERNAL ACTIVE MANAGERS - NET MANAGER

RATES OF RETURN

Periods Ending December 31, 2007



STATE STREET.  
For Everything You Invest In™

|                                      | MKT VAL<br>(\$000) | Month        | QTR          | FYTD         | 1 Year       | 3 Years     | ITD          | Incept. Date |
|--------------------------------------|--------------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|
| RENAISSANCE INVESTMENT MGT           | 158,842            | 1.83         | -1.40        |              |              |             | 3.08         | 09-01-07     |
| <i>RUSSELL 1000 GROWTH - DAILY</i>   |                    | -0.36        | -0.77        |              |              |             | 3.39         |              |
| <b>EXCESS</b>                        |                    | <b>2.19</b>  | <b>-0.63</b> |              |              |             | <b>-0.31</b> |              |
| ARTISAN PARTNERS                     | 60,797             | -0.65        | -5.58        | -10.05       |              |             | -2.59        | 03-01-07     |
| <i>RUSSELL MIDCAP VALUE (DAILY)</i>  |                    | -1.11        | -5.97        | -9.30        |              |             | -4.94        |              |
| <b>EXCESS</b>                        |                    | <b>0.46</b>  | <b>0.39</b>  | <b>-0.75</b> |              |             | <b>2.35</b>  |              |
| MARTINGALE ASSET MGMT                | 110,984            | -0.22        | -4.84        | -7.61        |              |             | -1.83        | 03-01-07     |
| <i>RUSSELL MIDCAP (DAILY)</i>        |                    | -0.32        | -3.55        | -3.92        |              |             | 1.98         |              |
| <b>EXCESS</b>                        |                    | <b>0.10</b>  | <b>-1.29</b> | <b>-3.69</b> |              |             | <b>-3.81</b> |              |
| TIMESQUARE CAP MGMT                  | 81,482             | 0.57         | -1.59        | 0.04         |              |             | 7.82         | 03-01-07     |
| <i>RUSSELL MIDCAP GROWTH (DAILY)</i> |                    | 0.27         | -1.70        | 0.41         |              |             | 7.75         |              |
| <b>EXCESS</b>                        |                    | <b>0.30</b>  | <b>0.11</b>  | <b>-0.37</b> |              |             | <b>0.07</b>  |              |
| DIMENSIONAL FUND ADVISORS            | 70,491             | -0.18        | -5.78        | -8.93        | -3.01        | 6.81        | 18.72        | 02-01-03     |
| <i>RUSSELL 2000 (DAILY)</i>          |                    | -0.06        | -4.58        | -7.53        | -1.57        | 6.80        | 17.22        |              |
| <b>EXCESS</b>                        |                    | <b>-0.12</b> | <b>-1.20</b> | <b>-1.40</b> | <b>-1.44</b> | <b>0.01</b> | <b>1.50</b>  |              |
| NORTHPOINTE CAP                      | 50,634             | 1.72         | -6.90        | -6.49        |              |             | 2.71         | 03-01-07     |
| <i>RUSSELL 2000 GROWTH DAILY</i>     |                    | 0.63         | -2.10        | -2.09        |              |             | 5.42         |              |
| <b>EXCESS</b>                        |                    | <b>1.09</b>  | <b>-4.80</b> | <b>-4.40</b> |              |             | <b>-2.71</b> |              |
| VAUGHAN NELSON MGMT                  | 47,017             | -0.09        | -1.99        | -2.63        |              |             | 6.36         | 03-01-07     |
| <i>RUSSELL 2000 VALUE DAILY</i>      |                    | -0.85        | -7.28        | -13.08       |              |             | -10.00       |              |
| <b>EXCESS</b>                        |                    | <b>0.76</b>  | <b>5.29</b>  | <b>10.45</b> |              |             | <b>16.36</b> |              |

# Montana Board of Investments

## SUMMARY OF EXTERNAL ACTIVE MANAGERS - NET MANAGER

### RATES OF RETURN

Periods Ending December 31, 2007



**STATE STREET.**  
For Everything You Invest In™

**MKT VAL**  
**(\$000)**

**Month**

**QTR**

**FYTD**

**1 Year**

**3 Years**

**ITD**

**Incept. Date**

#### INTERNATIONAL EQUITY

|                                     |         |              |              |              |              |             |              |          |
|-------------------------------------|---------|--------------|--------------|--------------|--------------|-------------|--------------|----------|
| NOMURA ASSET MANAGEMENT             | 102,886 | -2.44        | -3.90        | 4.78         | 15.41        | 18.24       | 19.83        | 12-01-03 |
| <i>MSCI AC PACIFIC (NET)</i>        |         | -2.96        | -4.20        | 2.58         | 12.36        | 16.93       | 18.75        |          |
| <b>EXCESS</b>                       |         | <b>0.52</b>  | <b>0.30</b>  | <b>2.20</b>  | <b>3.05</b>  | <b>1.31</b> | <b>1.08</b>  |          |
| MARTIN CURRIE                       | 145,814 | -2.48        | -2.04        | 5.53         | 19.21        |             | 23.19        | 11-01-06 |
| <i>MSCI ACWI ex US Growth (net)</i> |         | -1.22        | 0.60         | 7.02         | 21.03        |             | 24.36        |          |
| <b>EXCESS</b>                       |         | <b>-1.26</b> | <b>-2.64</b> | <b>-1.49</b> | <b>-1.82</b> |             | <b>-1.17</b> |          |
| HANSBERGER GLOBAL INVESTORS         | 134,611 | -1.19        | 1.14         | 5.91         | 19.96        |             | 23.68        | 11-01-06 |
| <i>MSCI ACWI ex US Growth (net)</i> |         | -1.22        | 0.60         | 7.02         | 21.03        |             | 24.36        |          |
| <b>EXCESS</b>                       |         | <b>0.03</b>  | <b>0.54</b>  | <b>-1.11</b> | <b>-1.07</b> |             | <b>-0.68</b> |          |
| PRINCIPAL GLOBAL INVESTORS          | 74,712  | -2.11        | -2.48        | 1.85         | 14.11        |             | 17.85        | 11-01-06 |
| <i>MSCI ACWI ex US Growth (net)</i> |         | -1.22        | 0.60         | 7.02         | 21.03        |             | 24.36        |          |
| <b>EXCESS</b>                       |         | <b>-0.89</b> | <b>-3.08</b> | <b>-5.17</b> | <b>-6.92</b> |             | <b>-6.51</b> |          |
| ACADIAN ASSET MANAGEMENT            | 167,134 | -2.75        | -4.35        | -1.74        | 12.73        |             | 19.58        | 11-01-06 |
| <i>MSCI ACWI ex US VALUE (NET)</i>  |         | -1.69        | -1.97        | 0.81         | 12.30        |             | 17.12        |          |
| <b>EXCESS</b>                       |         | <b>-1.06</b> | <b>-2.38</b> | <b>-2.55</b> | <b>0.43</b>  |             | <b>2.46</b>  |          |
| BERNSTEIN INV MGT & RESEARCH        | 152,403 | -1.83        | -4.13        | -0.91        | 13.09        |             | 17.89        | 11-01-06 |
| <i>MSCI ACWI ex US VALUE (NET)</i>  |         | -1.69        | -1.97        | 0.81         | 12.30        |             | 17.12        |          |
| <b>EXCESS</b>                       |         | <b>-0.14</b> | <b>-2.16</b> | <b>-1.72</b> | <b>0.79</b>  |             | <b>0.77</b>  |          |

## Montana Board of Investments

SUMMARY OF EXTERNAL ACTIVE MANAGERS - NET MANAGER

RATES OF RETURN

Periods Ending December 31, 2007



**STATE STREET.**  
For Everything You Invest In™

|  | MKT VAL<br>(\$000) | Month        | QTR          | FYTD         | 1 Year       | 3 Years     | ITD          | Incept. Date |
|--|--------------------|--------------|--------------|--------------|--------------|-------------|--------------|--------------|
| BATTERYMARCH FINANCIAL MGMT              | 211,937            | -2.72        | -2.83        | 1.95         | 14.90        |             | 19.50        | 11-01-06     |
| <i>MSCI AC WORLD ex US (NET) - DAILY</i> |                    | -1.45        | -0.66        | 3.92         | 16.65        |             | 20.75        |              |
| <b>EXCESS</b>                            |                    | <b>-1.27</b> | <b>-2.17</b> | <b>-1.97</b> | <b>-1.75</b> |             | <b>-1.25</b> |              |
| BGI GLOBAL EX US ALPHA TILT FD           | 128,394            | -1.83        | -2.18        | 1.26         | 13.84        |             | 20.42        | 10-01-06     |
| <i>MSCI AC WORLD ex US (NET) - DAILY</i> |                    | -1.45        | -0.66        | 3.92         | 16.65        |             | 23.06        |              |
| <b>EXCESS</b>                            |                    | <b>-0.38</b> | <b>-1.52</b> | <b>-2.66</b> | <b>-2.81</b> |             | <b>-2.64</b> |              |
| JULIUS BAER - INTL EQUITY II             | 204,619            | -0.18        | 2.16         | 4.64         | 18.59        |             | 24.01        | 11-01-06     |
| <i>MSCI AC WORLD ex US (NET) - DAILY</i> |                    | -1.45        | -0.66        | 3.92         | 16.65        |             | 20.75        |              |
| <b>EXCESS</b>                            |                    | <b>1.27</b>  | <b>2.82</b>  | <b>0.72</b>  | <b>1.94</b>  |             | <b>3.26</b>  |              |
| AXA ROSENBERG                            | 51,854             | -3.28        | -8.36        | -10.68       | 1.48         |             | 11.33        | 10-01-06     |
| <i>MSCI WORLD EX US SMALL CAP (NET)</i>  |                    | -2.93        | -4.90        | -8.44        | 3.28         |             | 12.05        |              |
| <b>EXCESS</b>                            |                    | <b>-0.35</b> | <b>-3.46</b> | <b>-2.24</b> | <b>-1.80</b> |             | <b>-0.72</b> |              |
| DFA INTERNATIONAL SMALL CAP              | 63,026             | -3.34        | -5.56        | -7.18        | 5.63         | 17.24       | 20.55        | 11-01-04     |
| <i>MSCI EAFE SMALL CAP (NET)</i>         |                    | -3.48        | -4.85        | -9.12        | 1.44         | 15.16       | 18.72        |              |
| <b>EXCESS</b>                            |                    | <b>0.14</b>  | <b>-0.71</b> | <b>1.94</b>  | <b>4.19</b>  | <b>2.08</b> | <b>1.83</b>  |              |

## ASSET ALLOCATION REPORT

| <b>Retirement Systems Asset Allocations as of 12/31/07</b> |              |              |             |               |              |             |             |               |               |                      |
|--|--------------|--------------|-------------|---------------|--------------|-------------|-------------|---------------|---------------|----------------------|
|  |              |              |             |               |              |             |             | Direct        | Pooled        |                      |
|  |              |              |             | Total         |              |             |             | Real          | Real          |                      |
| <b>Pension Fund</b>  | <b>MDEP</b>  | <b>MTIP</b>  | <b>MPEP</b> | <b>Equity</b> | <b>RFBP</b>  | <b>STIP</b> | <b>Mtgs</b> | <b>Estate</b> | <b>Estate</b> | <b>Total Assets</b>  |
| PUBLIC EMPLOYEES   | 41.0%        | 20.0%        | 8.6%        | 69.6%         | 24.5%        | 1.6%        | 0.8%        | 0.2%          | 3.3%          | 4,128,537,974        |
| TEACHERS   | 41.4%        | 19.9%        | 8.5%        | 69.8%         | 24.5%        | 1.1%        | 0.9%        | 0.3%          | 3.3%          | 3,191,421,346        |
| POLICE   | 41.7%        | 19.9%        | 8.6%        | 70.2%         | 25.3%        | 1.3%        |             |               | 3.2%          | 209,432,231          |
| SHERIFFS   | 41.3%        | 19.4%        | 8.4%        | 69.2%         | 25.3%        | 2.2%        |             |               | 3.3%          | 200,228,630          |
| FIREFIGHTERS   | 41.3%        | 19.7%        | 8.6%        | 69.5%         | 25.1%        | 2.1%        |             |               | 3.2%          | 201,065,187          |
| HIGHWAY PATROL   | 41.0%        | 20.0%        | 8.6%        | 69.6%         | 25.6%        | 1.5%        |             |               | 3.3%          | 103,337,276          |
| GAME WARDENS   | 40.8%        | 19.6%        | 8.5%        | 68.9%         | 25.0%        | 2.9%        |             |               | 3.2%          | 75,915,052           |
| JUDGES   | 41.2%        | 19.6%        | 8.5%        | 69.3%         | 25.4%        | 2.0%        |             |               | 3.3%          | 62,655,993           |
| VOL FIREFIGHTERS   | 41.3%        | 20.4%        | 8.6%        | 70.3%         | 25.3%        | 1.1%        |             |               | 3.4%          | 27,027,492           |
|  |              |              |             |               |              |             |             |               |               |                      |
| <b>TOTAL</b>   | <b>41.2%</b> | <b>19.9%</b> | <b>8.5%</b> | <b>69.7%</b>  | <b>24.6%</b> | <b>1.5%</b> | <b>0.8%</b> | <b>0.2%</b>   | <b>3.3%</b>   | <b>8,199,621,179</b> |
|  |              |              |             |               |              |             |             |               |               |                      |
| <b>Approved Range</b>                                      | 30.0%        | 15.0%        | 5.0%        | 60.0%         | 22.0%        | 1.0%        | 0.0%        | 0.0%          | 0.0%          |                      |
|  | 50.0%        | 30.0%        | 10.0%       | 70.0%         | 32.0%        | 5.0%        | 4.0%        | 1.0%          | 8.0%          |                      |

The table above shows the asset allocation broken down by individual plan and in aggregate. The total value of pension assets declined by \$158 million during the quarter reflecting the decline in equity markets. As compared September the following observations can be made.

- Total equity holdings declined from 69.9% to 69.7%. This decline can be attributed to the negative return in public equities offset by an increase in private equity exposure. The broad domestic equity index, the S&P 1500, was down 3.4% for the quarter.
- International equity exposure declined slightly to 19.9% versus 20.0%. Returns were slightly negative, down about 2%.
- Private Equity holdings increased noticeably from 7.9% to 8.5%, reflecting a positive return of about 1% and a continued heavy pace of capital calls. Approximately \$36 million of new purchases by the plans were made during the quarter to provide the liquidity needed to fund capital calls. This weighting is up from 5.9% at the end of last year and is now within our targeted range of 8-10%. Of course part of this increase in allocation reflects the decline in overall plan market values due to the decline in public equities.
- Fixed income holdings rose to 24.6% from 23.9% at the end of last quarter. Treasury yields fell 40-95 basis points during the quarter. Corporate bonds underperformed relative to Treasuries but still had positive returns. There were only minor purchases of the RFBP during the quarter.
- The pooled real estate holdings were virtually unchanged at 3.3% versus 3.4%. The return in MTRP was a slight positive for the quarter and additions of \$10 million were made to fund ongoing capital calls.
- Cash invested in STIP was down to 1.5% compared to 1.8% and all plans were under the 5% range cap.

The aggregate plan portfolio and each individual plan are within the approved ranges for each of the asset classes.

# MEMORANDUM

Montana Board of Investments

Department of Commerce

2401 Colonial Drive, 3<sup>rd</sup> Floor

Helena, MT 59601 (406) 444-0001

**To:** Members of the Board

**From:** Edward J. Kelly

**Date:** February 12, 2008

**Subject:** Montana Private Equity Pool [MPEP]

Attached to this memo are the following reports:

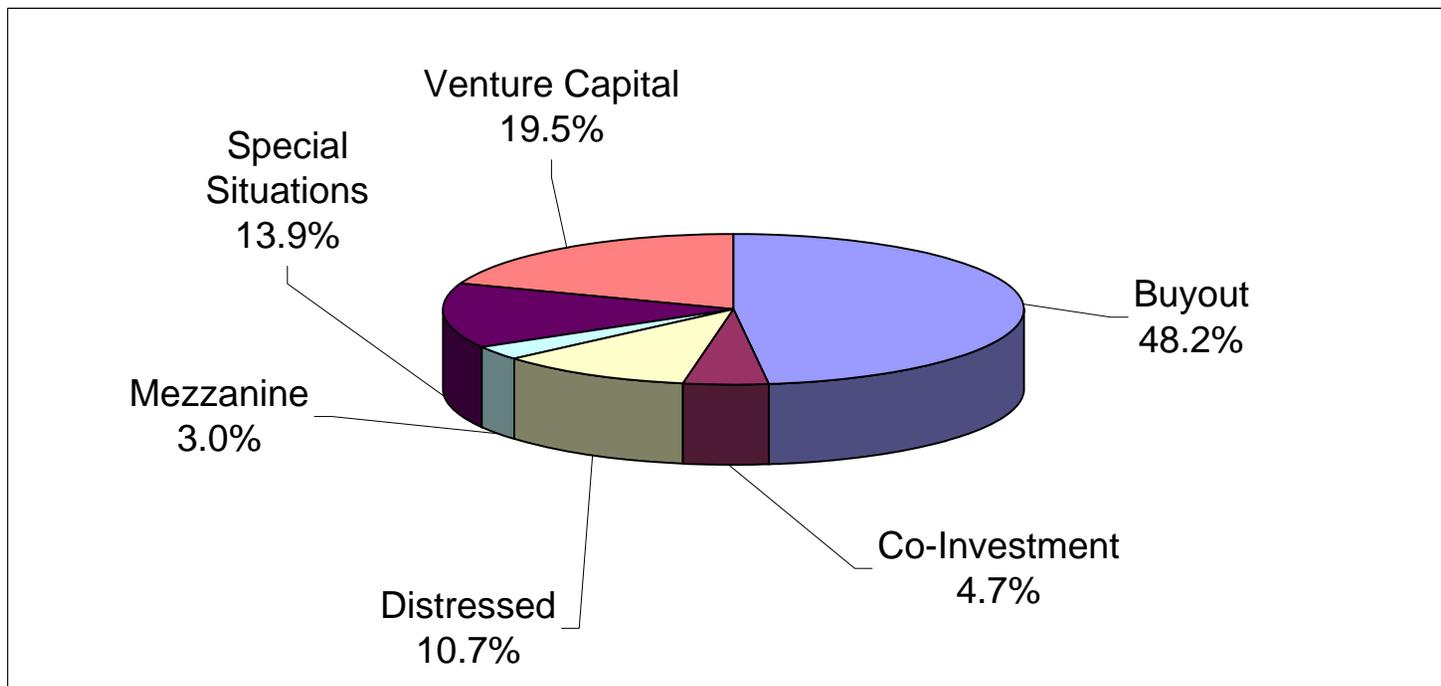
- (i) Private Edge - Graph: Strategy Total Exposure by Market Value & Remaining Commitments  
This report summarizes the total market value of invested capital commitments plus the capital commitments remaining to be invested broken out by investment strategy as of 09/30/07.
- (ii) Private Edge - Graph: Investment Geography Exposure by Market Value & Remaining Commitments  
This report summarizes the total market value of invested capital commitments plus the capital commitments remaining to be invested broken out by geography as of 09/30/07.
- (iii) Private Edge - Table: LP's by Family of Funds All Investments  
This report provides details of the underlying funds and their reported values and Investment performance from inception to 09/30/07.
- (iv) Private Equity Pool Holdings  
This report summaries all portfolio fund holdings by shares, book value and market value as of 12/31/07.
- (v) New Commitments Table [below] summarizes the investments made by Staff since the last Board Meeting.

| Fund Name                     | Vintage | Subclass | Sector  | Amount | Date     |
|-------------------------------|---------|----------|---------|--------|----------|
| Oak Hill Capital Partners III | 2008    | Buyout   | Mid Cap | \$ 20M | 01/08/08 |
| Total New Commitments         |         |          |         | \$ 20M |          |

- (vi) MBOI - Private Equity Investment Briefs.  
These reports summarize the investment attributes and the qualifications of the investment managers who are responsible for the performance of the funds selected by Staff.
  - Oak Hill Capital Partners III

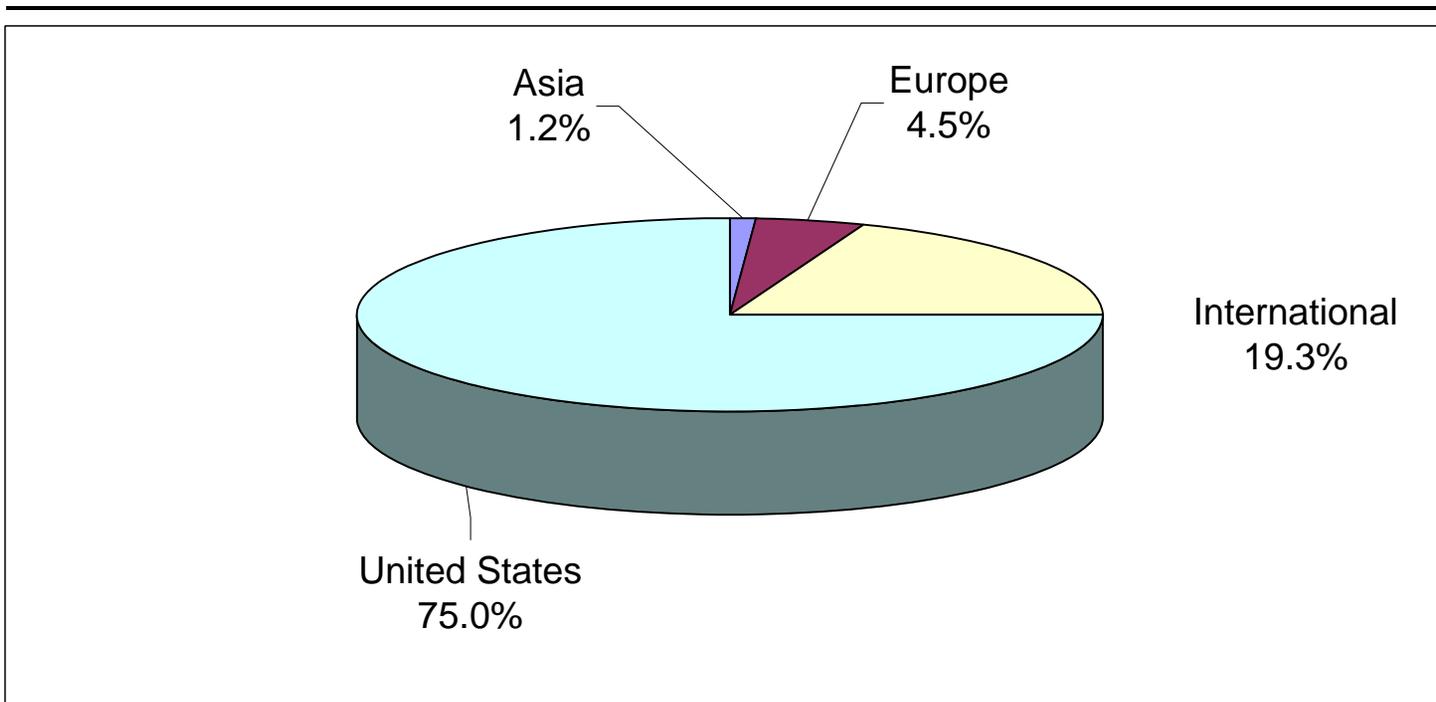
## Montana Private Equity Pool

**Strategy Total Exposure by Market Value & Remaining Commitments (Fund of Funds broken out)**  
*(since inception through September 30, 2007)*



| Strategy           | Remaining Commitments | Market Value         | Total Exposure         | Percentage    |
|--------------------|-----------------------|----------------------|------------------------|---------------|
| Buyout             | \$215,344,070         | \$374,775,793        | \$590,119,863          | 48.2%         |
| Co-Investment      | \$32,003,808          | \$25,984,430         | \$57,988,238           | 4.7%          |
| Distressed         | \$108,169,212         | \$23,224,383         | \$131,393,595          | 10.7%         |
| Mezzanine          | \$15,996,885          | \$20,293,982         | \$36,290,867           | 3.0%          |
| Special Situations | \$95,972,730          | \$74,225,882         | \$170,198,612          | 13.9%         |
| Venture Capital    | \$103,394,528         | \$135,812,680        | \$239,207,208          | 19.5%         |
| <b>Total</b>       | <b>\$570,881,233</b>  | <b>\$654,317,151</b> | <b>\$1,225,198,384</b> | <b>100.0%</b> |

**Montana Private Equity Pool**  
**Investment Geography Exposure by Market Value & Remaining Commitments**  
*(since inception through September 30, 2007)*



| Strategy      | Remaining Commitments | Market Value         | Total Exposure         | Percentage    |
|---------------|-----------------------|----------------------|------------------------|---------------|
| Asia          | \$14,216,162          | \$450,582            | \$14,666,744           | 1.2%          |
| Europe        | \$19,557,373          | \$35,762,958         | \$55,320,331           | 4.5%          |
| International | \$93,677,591          | \$143,074,700        | \$236,752,291          | 19.3%         |
| United States | \$443,430,107         | \$475,028,911        | \$918,459,018          | 75.0%         |
| <b>Total</b>  | <b>\$570,881,233</b>  | <b>\$654,317,151</b> | <b>\$1,225,198,384</b> | <b>100.0%</b> |

**Montana Board of Investments**  
**LPs by Investment Advisor**  
**All Investments**  
**As of September 30, 2007**

| Description                          | Since Inception |                        |                      |                         |                      |                      |                      |                       |                      |                   |                |                       |
|--------------------------------------|-----------------|------------------------|----------------------|-------------------------|----------------------|----------------------|----------------------|-----------------------|----------------------|-------------------|----------------|-----------------------|
|                                      | Vintage Year    | Commitment             | Total Capital Called | Capital Contributed Net | Capital Distributed  | Ending Market Value  | Realized Gain/Loss   | Unrealized Gain/Loss  | Total Gain/Loss      | % Total Gain/Loss | Net IRR        | % Contribution to IRR |
| <b>LP's by Investment Advisor</b>    |                 | <b>\$1,466,480,261</b> | <b>\$994,967,225</b> | <b>\$915,004,339</b>    | <b>\$745,717,091</b> | <b>\$654,317,151</b> | <b>\$364,090,206</b> | <b>\$120,939,698</b>  | <b>485,029,902</b>   | <b>100.00</b>     | <b>16.06</b>   | <b>16.06</b>          |
| <b>Adams Street Partners</b>         |                 | <b>\$340,747,264</b>   | <b>\$283,935,760</b> | <b>\$283,778,782</b>    | <b>\$203,483,665</b> | <b>\$225,939,169</b> | <b>\$100,432,183</b> | <b>\$45,211,871</b>   | <b>\$145,644,053</b> | <b>30.03</b>      | <b>19.23</b>   | <b>5.78</b>           |
| <b>Affinity Asia Capital</b>         |                 | <b>\$15,000,000</b>    | <b>\$783,838</b>     | <b>\$783,838</b>        | <b>(\$1,667)</b>     | <b>\$450,582</b>     | <b>(\$330,109)</b>   | <b>(\$4,814)</b>      | <b>(\$334,924)</b>   | <b>(0.07)</b>     | <b>(81.79)</b> | <b>0.06</b>           |
| Affinity Asia Pacific Fund III, LP   | 2007            | \$15,000,000           | \$783,838            | \$783,838               | (\$1,667)            | \$450,582            | (\$330,109)          | (\$4,814)             | (\$334,924)          | (0.07)            | (81.79)        | 0.06                  |
| <b>Arclight Energy Partners</b>      |                 | <b>\$50,000,000</b>    | <b>\$46,980,053</b>  | <b>\$35,269,269</b>     | <b>\$8,840,417</b>   | <b>\$33,343,990</b>  | <b>\$3,108,247</b>   | <b>\$3,806,891</b>    | <b>\$6,915,138</b>   | <b>1.43</b>       | <b>15.82</b>   | <b>0.23</b>           |
| Arclight Energy Partners Fund II     | 2004            | \$25,000,000           | \$29,096,268         | \$20,917,125            | \$7,596,084          | \$19,527,715         | \$3,017,739          | \$3,188,935           | \$6,206,674          | 1.28              | 18.04          | 0.23                  |
| Arclight Energy Partners Fund III, L | 2006            | \$25,000,000           | \$17,883,785         | \$14,352,144            | \$1,244,333          | \$13,816,275         | \$90,508             | \$617,956             | \$708,464            | 0.15              | 7.25           | 0.01                  |
| <b>Avenue Investments</b>            |                 | <b>\$35,000,000</b>    | <b>\$7,785,818</b>   | <b>\$7,785,818</b>      | <b>(\$209,897)</b>   | <b>\$7,567,554</b>   | <b>(\$554,383)</b>   | <b>\$126,222</b>      | <b>(\$428,161)</b>   | <b>(0.09)</b>     | <b>(5.35)</b>  | <b>0.00</b>           |
| Avenue Special Situations Fund V, L  | 2007            | \$35,000,000           | \$7,785,818          | \$7,785,818             | (\$209,897)          | \$7,567,554          | (\$554,383)          | \$126,222             | (\$428,161)          | (0.09)            | (5.35)         | 0.00                  |
| <b>Buerk Dale Victor</b>             |                 | <b>\$15,000,000</b>    | <b>\$3,000,000</b>   | <b>\$3,000,000</b>      | <b>\$0</b>           | <b>\$2,462,617</b>   | <b>(\$273,042)</b>   | <b>(\$264,341)</b>    | <b>(\$537,383)</b>   | <b>(0.11)</b>     | <b>(28.88)</b> | <b>0.03</b>           |
| Buerk Dale Victor Fund II, L.P.      | 2007            | \$15,000,000           | \$3,000,000          | \$3,000,000             | \$0                  | \$2,462,617          | (\$273,042)          | (\$264,341)           | (\$537,383)          | (0.11)            | (28.88)        | 0.03                  |
| <b>Carlyle Partners</b>              |                 | <b>\$60,000,000</b>    | <b>\$40,681,242</b>  | <b>\$36,984,271</b>     | <b>\$1,466,220</b>   | <b>\$41,103,736</b>  | <b>(\$657,879)</b>   | <b>\$6,243,564</b>    | <b>\$5,585,685</b>   | <b>1.15</b>       | <b>14.89</b>   | <b>0.17</b>           |
| Carlyle Partners IV, L.P.            | 2005            | \$35,000,000           | \$33,655,929         | \$31,106,210            | \$1,351,833          | \$35,498,629         | \$108,880            | \$5,635,372           | \$5,744,252          | 1.18              | 17.73          | 0.21                  |
| Carlyle Venture Partners III, LP     | 2006            | \$25,000,000           | \$7,025,313          | \$5,878,061             | \$114,387            | \$5,605,107          | (\$766,759)          | \$608,192             | (\$158,567)          | (0.03)            | (2.99)         | 0.00                  |
| <b>CCMP Associates</b>               |                 | <b>\$30,000,000</b>    | <b>\$9,494,550</b>   | <b>\$7,167,009</b>      | <b>\$19,983</b>      | <b>\$6,003,575</b>   | <b>(\$176,978)</b>   | <b>(\$966,473)</b>    | <b>(\$1,143,451)</b> | <b>(0.24)</b>     | <b>(16.20)</b> | <b>0.04</b>           |
| CCMP Capital Investors II, L.P.      | 2006            | \$30,000,000           | \$9,494,550          | \$7,167,009             | \$19,983             | \$6,003,575          | (\$176,978)          | (\$966,473)           | (\$1,143,451)        | (0.24)            | (16.20)        | 0.04                  |
| <b>First Reserve</b>                 |                 | <b>\$30,000,000</b>    | <b>\$3,675,002</b>   | <b>\$3,675,002</b>      | <b>\$0</b>           | <b>\$3,313,000</b>   | <b>(\$403,519)</b>   | <b>\$41,517</b>       | <b>(\$362,002)</b>   | <b>(0.07)</b>     | <b>(17.99)</b> | <b>0.01</b>           |
| First Reserve Fund XI, L.P.          | 2006            | \$30,000,000           | \$3,675,002          | \$3,675,002             | \$0                  | \$3,313,000          | (\$403,519)          | \$41,517              | (\$362,002)          | (0.07)            | (17.99)        | 0.01                  |
| <b>HarbourVest</b>                   |                 | <b>\$20,000,000</b>    | <b>\$1,600,000</b>   | <b>\$1,600,000</b>      | <b>\$0</b>           | <b>\$1,584,886</b>   | <b>(\$219)</b>       | <b>(\$14,895)</b>     | <b>(\$15,114)</b>    | <b>(0.00)</b>     | <b>(0.94)</b>  | <b>0.00</b>           |
| HarbourVest Direct 2007 Fund         | 2007            | \$20,000,000           | \$1,600,000          | \$1,600,000             | \$0                  | \$1,584,886          | (\$219)              | (\$14,895)            | (\$15,114)           | (0.00)            | (0.94)         | 0.00                  |
| <b>Hellman &amp; Friedman</b>        |                 | <b>\$25,000,000</b>    | <b>\$6,218,344</b>   | <b>\$6,007,650</b>      | <b>\$0</b>           | <b>\$6,126,287</b>   | <b>(\$23,436)</b>    | <b>\$142,073</b>      | <b>\$118,637</b>     | <b>0.02</b>       | <b>2.78</b>    | <b>0.00</b>           |
| Hellman & Friedman Capital Partner   | 2007            | \$25,000,000           | \$6,218,344          | \$6,007,650             | \$0                  | \$6,126,287          | (\$23,436)           | \$142,073             | \$118,637            | 0.02              | 2.78           | 0.00                  |
| <b>Highway 12 Ventures</b>           |                 | <b>\$10,000,000</b>    | <b>\$1,147,517</b>   | <b>\$1,147,517</b>      | <b>\$0</b>           | <b>\$909,279</b>     | <b>(\$214,212)</b>   | <b>(\$24,026)</b>     | <b>(\$238,238)</b>   | <b>(0.05)</b>     | <b>(24.47)</b> | <b>0.01</b>           |
| Highway 12 Venture Fund II, L.P.     | 2006            | \$10,000,000           | \$1,147,517          | \$1,147,517             | \$0                  | \$909,279            | (\$214,212)          | (\$24,026)            | (\$238,238)          | (0.05)            | (24.47)        | 0.01                  |
| <b>Industry Ventures</b>             |                 | <b>\$10,000,000</b>    | <b>\$3,769,785</b>   | <b>\$3,769,785</b>      | <b>(\$202,400)</b>   | <b>\$3,880,365</b>   | <b>(\$516,637)</b>   | <b>\$424,816</b>      | <b>(\$91,821)</b>    | <b>(0.02)</b>     | <b>(3.95)</b>  | <b>0.00</b>           |
| Industry Ventures Fund IV, L.P.      | 2006            | \$10,000,000           | \$3,769,785          | \$3,769,785             | (\$202,400)          | \$3,880,365          | (\$516,637)          | \$424,816             | (\$91,821)           | (0.02)            | (3.95)         | 0.00                  |
| <b>JCF</b>                           |                 | <b>\$25,000,000</b>    | <b>\$8,583,094</b>   | <b>\$7,745,466</b>      | <b>\$19,141</b>      | <b>\$6,378,113</b>   | <b>(\$239,362)</b>   | <b>(\$1,108,850)</b>  | <b>(\$1,348,212)</b> | <b>(0.28)</b>     | <b>(19.97)</b> | <b>0.06</b>           |
| J.C. Flowers II L.P.                 | 2006            | \$25,000,000           | \$8,583,094          | \$7,745,466             | \$19,141             | \$6,378,113          | (\$239,362)          | (\$1,108,850)         | (\$1,348,212)        | (0.28)            | (19.97)        | 0.06                  |
| <b>Joseph Littlejohn &amp; Levy</b>  |                 | <b>\$25,000,000</b>    | <b>\$15,053,769</b>  | <b>\$14,970,436</b>     | <b>\$4,210,876</b>   | <b>\$18,151,761</b>  | <b>\$2,083,550</b>   | <b>\$5,308,651</b>    | <b>\$7,392,201</b>   | <b>1.52</b>       | <b>66.57</b>   | <b>1.01</b>           |
| JLL Partners Fund V, L.P.            | 2005            | \$25,000,000           | \$15,053,769         | \$14,970,436            | \$4,210,876          | \$18,151,761         | \$2,083,550          | \$5,308,651           | \$7,392,201          | 1.52              | 66.57          | 1.01                  |
| <b>KKR</b>                           |                 | <b>\$175,300,000</b>   | <b>\$233,256,978</b> | <b>\$184,754,563</b>    | <b>\$312,819,945</b> | <b>\$45,614,587</b>  | <b>\$195,978,380</b> | <b>(\$22,298,411)</b> | <b>\$173,679,969</b> | <b>35.81</b>      | <b>12.97</b>   | <b>4.65</b>           |
| KKR 1986 Fund - Montana              | 1986            | \$300,000              | \$300,000            | \$300,000               | \$4,933,877          | \$0                  | \$4,633,877          | \$0                   | \$4,633,877          | 0.96              | 31.19          | 0.30                  |
| KKR 1987 Fund - Montana              | 1987            | \$25,000,000           | \$40,340,099         | \$27,101,164            | \$55,709,898         | \$1,135,044          | \$38,778,574         | (\$9,034,796)         | \$29,743,778         | 6.13              | 8.87           | 0.54                  |
| KKR 1993 Fund - Montana              | 1993            | \$25,000,000           | \$31,111,919         | \$26,002,236            | \$48,716,968         | \$433,521            | \$29,078,432         | (\$5,930,179)         | \$23,148,253         | 4.77              | 17.76          | 0.85                  |
| KKR 1996 Fund - Montana              | 1997            | \$100,000,000          | \$128,771,516        | \$104,602,092           | \$166,640,334        | \$22,399,243         | \$103,022,076        | (\$18,584,591)        | \$84,437,485         | 17.41             | 14.04          | 2.44                  |
| KKR European Fund - Montana          | 1999            | \$25,000,000           | \$32,733,444         | \$26,749,071            | \$36,818,868         | \$21,646,779         | \$20,465,421         | \$11,251,155          | \$31,716,576         | 6.54              | 23.17          | 1.52                  |
| <b>Lehman Brothers</b>               |                 | <b>\$50,000,000</b>    | <b>\$21,547,054</b>  | <b>\$21,396,192</b>     | <b>\$557,543</b>     | <b>\$24,399,544</b>  | <b>\$108,911</b>     | <b>\$3,451,985</b>    | <b>\$3,560,896</b>   | <b>0.73</b>       | <b>28.36</b>   | <b>0.21</b>           |
| Lehman Brothers Merchant Banking     | 2007            | \$15,000,000           | \$0                  | \$0                     | \$0                  | \$0                  | \$0                  | \$0                   | \$0                  | 0.00              | N/A            | N/A                   |
| Lehman Co-investment Partners, L.I   | 2006            | \$35,000,000           | \$21,547,054         | \$21,396,192            | \$557,543            | \$24,399,544         | \$108,911            | \$3,451,985           | \$3,560,896          | 0.73              | 28.36          | 0.21                  |
| <b>Lexington Capital Partners</b>    |                 | <b>\$100,000,000</b>   | <b>\$70,240,554</b>  | <b>\$64,442,381</b>     | <b>\$48,922,673</b>  | <b>\$48,932,959</b>  | <b>\$6,861,098</b>   | <b>\$26,552,153</b>   | <b>\$33,413,251</b>  | <b>6.89</b>       | <b>27.01</b>   | <b>1.86</b>           |
| Lexington Capital Partners V, L.P.   | 2001            | \$50,000,000           | \$51,682,554         | \$46,644,449            | \$45,827,093         | \$32,098,202         | \$5,915,736          | \$25,365,110          | \$31,280,846         | 6.45              | 27.79          | 1.79                  |
| Lexington Capital Partners VI-B, L.P | 2005            | \$50,000,000           | \$18,558,000         | \$17,797,932            | \$3,095,580          | \$16,834,757         | \$945,361            | \$1,187,044           | \$2,132,405          | 0.44              | 16.87          | 0.07                  |
| <b>Madison Dearborn Capital Part</b> |                 | <b>\$50,000,000</b>    | <b>\$43,148,272</b>  | <b>\$39,210,524</b>     | <b>\$10,751,493</b>  | <b>\$56,662,728</b>  | <b>\$4,457,052</b>   | <b>\$23,746,645</b>   | <b>\$28,203,697</b>  | <b>5.81</b>       | <b>31.06</b>   | <b>1.81</b>           |
| Madison Dearborn Capital Partners    | 2001            | \$25,000,000           | \$25,006,379         | \$23,264,121            | \$10,751,493         | \$40,368,689         | \$4,755,508          | \$23,100,553          | \$27,856,061         | 5.74              | 32.18          | 1.85                  |
| Madison Dearborn Capital Partners    | 2006            | \$25,000,000           | \$18,141,893         | \$15,946,403            | \$0                  | \$16,294,039         | (\$298,456)          | \$646,092             | \$347,636            | 0.07              | 5.71           | 0.00                  |
| <b>Matlin Patterson</b>              |                 | <b>\$30,000,000</b>    | <b>\$3,000,000</b>   | <b>\$3,000,000</b>      | <b>\$1,489</b>       | <b>\$2,723,216</b>   | <b>(\$156,807)</b>   | <b>(\$118,488)</b>    | <b>(\$275,295)</b>   | <b>(0.06)</b>     | <b>(14.63)</b> | <b>0.01</b>           |
| MatlinPatterson Global Opps. Ptnrs.  | 2007            | \$30,000,000           | \$3,000,000          | \$3,000,000             | \$1,489              | \$2,723,216          | (\$156,807)          | (\$118,488)           | (\$275,295)          | (0.06)            | (14.63)        | 0.01                  |
| <b>MHR Institutional Partners</b>    |                 | <b>\$25,000,000</b>    | <b>\$8,000,000</b>   | <b>\$7,500,000</b>      | <b>(\$125,865)</b>   | <b>\$7,652,649</b>   | <b>(\$392,882)</b>   | <b>\$419,666</b>      | <b>\$26,784</b>      | <b>0.01</b>       | <b>0.38</b>    | <b>0.00</b>           |
| MHR Institutional Partners III, L.P. | 2007            | \$25,000,000           | \$8,000,000          | \$7,500,000             | (\$125,865)          | \$7,652,649          | (\$392,882)          | \$419,666             | \$26,784             | 0.01              | 0.38           | 0.00                  |
| <b>Oak Hill Capital Partners</b>     |                 | <b>\$25,000,000</b>    | <b>\$18,049,847</b>  | <b>\$17,911,593</b>     | <b>\$1,606,356</b>   | <b>\$23,494,955</b>  | <b>(\$41,713)</b>    | <b>\$7,231,431</b>    | <b>\$7,189,718</b>   | <b>1.48</b>       | <b>34.98</b>   | <b>0.52</b>           |
| Oak Hill Capital Partners II, L.P.   | 2005            | \$25,000,000           | \$18,049,847         | \$17,911,593            | \$1,606,356          | \$23,494,955         | (\$41,713)           | \$7,231,431           | \$7,189,718          | 1.48              | 34.98          | 0.52                  |
| <b>Oaktree Capital Partners</b>      |                 | <b>\$110,000,000</b>   | <b>\$75,000,000</b>  | <b>\$75,000,000</b>     | <b>\$121,236,346</b> | <b>\$382,787</b>     | <b>\$44,356,419</b>  | <b>\$2,262,714</b>    | <b>\$46,619,133</b>  | <b>9.61</b>       | <b>44.93</b>   | <b>4.32</b>           |
| OCM Opportunities Fund IVb, L.P.     | 2002            | \$75,000,000           | \$75,000,000         | \$75,000,000            | \$121,236,346        | \$382,787            | \$44,356,419         | \$2,262,714           | \$46,619,133         | 9.61              | 44.93          | 4.32                  |
| OCM Opportunities Fund VIIb, L.P.    | 2008            | \$35,000,000           | \$0                  | \$0                     | \$0                  | \$0                  | \$0                  | \$0                   | \$0                  | 0.00              | N/A            | N/A                   |

Montana Board of Investments  
LPs by Investment Advisor  
All Investments  
As of September 30, 2007

| Description                             | Vintage Year | Commitment          | Total Capital Called | Capital Contributed Net | Since Inception     |                     |                     | Unrealized Gain/Loss | Total Gain/Loss     | % Total Gain/Loss | Net IRR        | % Contribution to IRR |
|---|--------------|---------------------|----------------------|-------------------------|---------------------|---------------------|---------------------|----------------------|---------------------|-------------------|----------------|-----------------------|
|   |              |                     |                      |                         | Capital Distributed | Ending Market Value | Realized Gain/Loss  |                      |                     |                   |                |                       |
| <b>Odyssey Partners Fund III</b>        |              | <b>\$25,000,000</b> | <b>\$14,904,345</b>  | <b>\$14,313,058</b>     | <b>\$6,387,851</b>  | <b>\$19,485,514</b> | <b>\$2,496,119</b>  | <b>\$9,064,189</b>   | <b>\$11,560,308</b> | <b>2.38</b>       | <b>40.60</b>   | <b>0.97</b>           |
| Odyssey Partners Fund III, L.P.         | 2004         | \$25,000,000        | \$14,904,345         | \$14,313,058            | \$6,387,851         | \$19,485,514        | \$2,496,119         | \$9,064,189          | \$11,560,308        | 2.38              | 40.60          | 0.97                  |
| <b>Portfolio Advisors</b>               |              | <b>\$45,000,000</b> | <b>\$11,860,972</b>  | <b>\$10,540,756</b>     | <b>\$187,134</b>    | <b>\$9,796,512</b>  | <b>(\$646,602)</b>  | <b>\$89,492</b>      | <b>(\$557,110)</b>  | <b>(0.11)</b>     | <b>(8.03)</b>  | <b>0.01</b>           |
| Port. Advisors Fund IV (B), L.P.        | 2006         | \$30,000,000        | \$10,433,998         | \$9,361,695             | \$182,403           | \$8,801,278         | (\$478,543)         | \$100,529            | (\$378,014)         | (0.08)            | (5.75)         | 0.00                  |
| Port. Advisors Fund IV (E), L.P.        | 2006         | \$15,000,000        | \$1,426,974          | \$1,179,061             | \$4,731             | \$995,234           | (\$168,059)         | (\$11,037)           | (\$179,096)         | (0.04)            | (31.21)        | 0.01                  |
| <b>Quintana Energy Partners</b>         |              | <b>\$15,000,000</b> | <b>\$6,252,119</b>   | <b>\$6,252,119</b>      | <b>(\$20,371)</b>   | <b>\$5,651,970</b>  | <b>(\$723,523)</b>  | <b>\$103,002</b>     | <b>(\$620,520)</b>  | <b>(0.13)</b>     | <b>(12.53)</b> | <b>0.02</b>           |
| Quintana Energy Partners Fund I, L.     | 2006         | \$15,000,000        | \$6,252,119          | \$6,252,119             | (\$20,371)          | \$5,651,970         | (\$723,523)         | \$103,002            | (\$620,520)         | (0.13)            | (12.53)        | 0.02                  |
| <b>Siguler Guff &amp; Company</b>       |              | <b>\$25,000,000</b> | <b>\$0</b>           | <b>\$0</b>              | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>          | <b>\$0</b>           | <b>\$0</b>          | <b>0.00</b>       | <b>N/A</b>     | <b>N/A</b>            |
| Siguler Guff Small Buyout Opportuni     | 2007         | \$25,000,000        | \$0                  | \$0                     | \$0                 | \$0                 | \$0                 | \$0                  | \$0                 | 0.00              | N/A            | N/A                   |
| <b>Terra Firma Capital Partners</b>     |              | <b>\$25,432,997</b> | <b>\$6,248,311</b>   | <b>\$6,248,311</b>      | <b>(\$17,053)</b>   | <b>\$6,410,846</b>  | <b>(\$733,319)</b>  | <b>\$878,802</b>     | <b>\$145,483</b>    | <b>0.03</b>       | <b>9.31</b>    | <b>0.00</b>           |
| Terra Firma Capital Partners III, LP    | 2007         | \$25,432,997        | \$6,248,311          | \$6,248,311             | (\$17,053)          | \$6,410,846         | (\$733,319)         | \$878,802            | \$145,483           | 0.03              | 9.31           | 0.00                  |
| <b>Welsh, Carson, Anderson &amp; St</b> |              | <b>\$75,000,000</b> | <b>\$50,750,000</b>  | <b>\$50,750,000</b>     | <b>\$25,783,212</b> | <b>\$45,893,970</b> | <b>\$10,292,871</b> | <b>\$10,634,311</b>  | <b>\$20,927,182</b> | <b>4.31</b>       | <b>14.99</b>   | <b>0.65</b>           |
| Welsh, Carson, Anderson & Stowe I       | 2004         | \$25,000,000        | \$13,500,000         | \$13,500,000            | \$1,551,476         | \$15,100,110        | \$1,226,341         | \$1,925,245          | \$3,151,586         | 0.65              | 12.02          | 0.08                  |
| Welsh, Carson, Anderson & Stowe I       | 2000         | \$25,000,000        | \$23,250,000         | \$23,250,000            | \$24,414,075        | \$16,859,938        | \$10,001,426        | \$8,022,587          | \$18,024,013        | 3.72              | 17.14          | 0.64                  |
| Welsh, Carson, Anderson & Stowe )       | 2005         | \$25,000,000        | \$14,000,000         | \$14,000,000            | (\$182,339)         | \$13,933,922        | (\$934,895)         | \$686,478            | (\$248,417)         | (0.05)            | (1.86)         | 0.00                  |

## 12/31/2007 Private Equity Pool Holdings

| <u>Fund Name</u>                 | <u>Shares</u>      | <u>Book Value</u>  | <u>Market Value</u> | <u>%</u>      |
|----------------------------------|--------------------|--------------------|---------------------|---------------|
| ADAMS NON US FUND                | 8,828,379          | 8,828,379          | 11,913,403          | 1.70%         |
| ADAMS STR GLOBAL OPPORTUNITES    | 12,564,947         | 12,564,947         | 13,399,385          | 1.91%         |
| ADAMS STREET FUND V              | 35,513,712         | 35,513,712         | 34,541,595          | 4.93%         |
| ADAMS STREET PTNR FUND           | 52,513,845         | 52,513,845         | 60,691,248          | 8.67%         |
| AUSTIN VENTURES III              | 214,255            | 214,255            | 16,238              | 0.00%         |
| BRIN VEN CAP III SECONDARY       | 1                  | 1                  | 104,920             | 0.01%         |
| BRIN VEN PART III SECONDARY      | 1,517,128          | 1,517,128          | 266,106             | 0.04%         |
| BRINSON NON US PARTNERSHIP FD    | 4,920,561          | 4,920,561          | 9,670,133           | 1.38%         |
| BRINSON TRUST                    | 64,502,942         | 64,502,942         | 78,143,508          | 11.16%        |
| BRINSON VEN CAP FUND IV          | 6,919,076          | 6,919,076          | 11,038,528          | 1.58%         |
| BRINSON VENTURE CAPITAL FD III   | 1                  | 1                  | 104,920             | 0.01%         |
| BRINSON VENTURE PARTNR FD III    | 1,285,662          | 1,285,662          | 265,697             | 0.04%         |
| SPROUT CAPITAL VI                | 244,756            | 244,756            | 7,788               | 0.00%         |
| SUMMIT VENTURE II                | 128,881            | 128,881            | 2,800               | 0.00%         |
| VENTURE PARTNERSHIP ACQUIST      | 190,080            | 190,080            | 21,774              | 0.00%         |
| WCAS CAPITAL PARTNERS II         | 261,141            | 261,141            | 100,851             | 0.01%         |
| <b>ADAMS STREET Total</b>        | <b>189,605,368</b> | <b>189,605,368</b> | <b>220,288,894</b>  | <b>31.46%</b> |
| AFFINITY ASIA PACIFIC FUND III   | 2,358,197          | 2,358,197          | 2,357,502           | 0.34%         |
| <b>AFFINITY Total</b>            | <b>2,358,197</b>   | <b>2,358,197</b>   | <b>2,357,502</b>    | <b>0.34%</b>  |
| ARCLIGHT ENERGY PTNRS FUND III   | 17,267,413         | 17,267,413         | 17,591,384          | 2.51%         |
| ARCLIGHT ENRGY PARTNERS FD II    | 12,952,278         | 12,952,278         | 10,434,303          | 1.49%         |
| <b>ARCLIGHT Total</b>            | <b>30,219,691</b>  | <b>30,219,691</b>  | <b>28,025,688</b>   | <b>4.00%</b>  |
| AVENUE SPECIAL SITUATIONS V      | 10,820,215         | 10,820,215         | 10,820,215          | 1.55%         |
| <b>AVENUE CAPITAL Total</b>      | <b>10,820,215</b>  | <b>10,820,215</b>  | <b>10,820,215</b>   | <b>1.55%</b>  |
| BUERK DALE VICOTR II L.P.        | 3,000,000          | 3,000,000          | 2,462,616           | 0.35%         |
| <b>BUERK DALE. Total</b>         | <b>3,000,000</b>   | <b>3,000,000</b>   | <b>2,462,616</b>    | <b>0.35%</b>  |
| CARLYLE PARTNERS IV, L.P.        | 27,684,491         | 27,684,491         | 31,289,206          | 4.47%         |
| CARLYLE VENTURE PARTNERS III     | 4,885,468          | 4,885,468          | 4,993,207           | 0.71%         |
| CP IV KNIGHT TE HOLDINGS         | 3,746,489          | 3,746,489          | 3,746,489           | 0.54%         |
| <b>CARLYLE Total</b>             | <b>36,316,448</b>  | <b>36,316,448</b>  | <b>40,028,902</b>   | <b>5.72%</b>  |
| CCMP II                          | 6,816,623          | 6,816,623          | 6,686,132           | 0.95%         |
| <b>CCMP Total</b>                | <b>6,816,623</b>   | <b>6,816,623</b>   | <b>6,686,132</b>    | <b>0.95%</b>  |
| FIRST RESERVE XI                 | 5,365,361          | 5,365,361          | 5,421,112           | 0.77%         |
| <b>FIRST RESERVE Total</b>       | <b>5,365,361</b>   | <b>5,365,361</b>   | <b>5,421,112</b>    | <b>0.77%</b>  |
| HARBOURVEST 2007 DIRECT          | 3,600,000          | 3,600,000          | 3,600,000           | 0.51%         |
| <b>HARBOUR VEST Total</b>        | <b>3,600,000</b>   | <b>3,600,000</b>   | <b>3,600,000</b>    | <b>0.51%</b>  |
| HELLMAN + FRIEDMAN INV VI CAY9   | 1,029,855          | 1,029,855          | 1,032,922           | 0.15%         |
| HFCP VI                          | 7,665,261          | 7,665,261          | 7,780,830           | 1.11%         |
| <b>HELLMAN FRIEDMAN Total</b>    | <b>8,695,116</b>   | <b>8,695,116</b>   | <b>8,813,752</b>    | <b>1.26%</b>  |
| HIGHWAY 12 VENTURE II            | 1,733,305          | 1,733,305          | 1,709,279           | 0.24%         |
| <b>HIGHWAY 12 VENTURES Total</b> | <b>1,733,305</b>   | <b>1,733,305</b>   | <b>1,709,279</b>    | <b>0.24%</b>  |
| INDUSTRY VENTURES FUND IV        | 6,592,511          | 6,592,511          | 6,654,282           | 0.95%         |
| <b>INDUSTRY VENTURES Total</b>   | <b>6,592,511</b>   | <b>6,592,511</b>   | <b>6,654,282</b>    | <b>0.95%</b>  |
| HSH CAYMAN PARTNERS              | 3,867,046          | 3,867,046          | 3,881,578           | 0.55%         |
| JCF II AIV A 1                   | 40,998             | 40,998             | 44,854              | 0.01%         |
| JCF II LP                        | 3,131,476          | 3,131,476          | 3,182,272           | 0.45%         |
| JCF II SIDECAR                   | 1,352,907          | 1,352,907          | 1,360,368           | 0.19%         |
| <b>J.C. FLOWERS Total</b>        | <b>8,392,427</b>   | <b>8,392,427</b>   | <b>8,469,072</b>    | <b>1.21%</b>  |
| JLL PARTNERS FUND V LP           | 13,513,348         | 13,513,348         | 14,815,210          | 2.12%         |
| <b>JLL PARTNERS Total</b>        | <b>13,513,348</b>  | <b>13,513,348</b>  | <b>14,815,210</b>   | <b>2.12%</b>  |

## 12/31/2007 Private Equity Pool Holdings

| <u>Fund Name</u>                 | <u>Shares</u>      | <u>Book Value</u>  | <u>Market Value</u> | <u>%</u>       |
|----------------------------------|--------------------|--------------------|---------------------|----------------|
| KKR 1986 1987                    | 2,021,493          | 2,021,493          | 1,135,044           | 0.16%          |
| KKR 1993                         | 1,285,300          | 1,285,300          | 433,521             | 0.06%          |
| KKR 1996                         | 19,878,747         | 19,878,747         | 20,497,652          | 2.93%          |
| KKR EUROPEAN FUND                | 9,360,194          | 9,360,194          | 21,027,245          | 3.00%          |
| <b>KKR Total</b>                 | <b>32,545,734</b>  | <b>32,545,734</b>  | <b>43,093,463</b>   | <b>6.15%</b>   |
| LEHMAN BROS MERCHANT BANK IV     | 187,476            | 187,476            | 187,476             | 0.03%          |
| LEHMAN BROTHERS CO               | 14,976,591         | 14,976,591         | 18,820,377          | 2.69%          |
| <b>LEHMAN BROTHERS Total</b>     | <b>15,164,066</b>  | <b>15,164,066</b>  | <b>19,007,853</b>   | <b>2.71%</b>   |
| LEXINGTON CAPITAL PARTNERS VIB   | 21,441,329         | 21,441,329         | 22,406,682          | 3.20%          |
| LEXINGTON CAPITAL PTRS V LP      | 7,099,293          | 7,099,293          | 30,466,261          | 4.35%          |
| <b>LEXINGTON Total</b>           | <b>28,540,622</b>  | <b>28,540,622</b>  | <b>52,872,943</b>   | <b>7.55%</b>   |
| MADISON DEARBORN CAP PART IV     | 14,216,390         | 14,216,390         | 27,428,278          | 3.92%          |
| MDCP V                           | 19,790,249         | 19,790,249         | 19,760,425          | 2.82%          |
| MDP IV GLOBAL INVESTMENTS LP     | 2,746,831          | 2,746,831          | 15,546,078          | 2.22%          |
| <b>MADISON DEARBORN Total</b>    | <b>36,753,469</b>  | <b>36,753,469</b>  | <b>62,734,781</b>   | <b>8.96%</b>   |
| MATLIN PATTERSON GLB OPP         | 3,000,000          | 3,000,000          | 2,723,217           | 0.39%          |
| <b>MATLIN PATTERSON Total</b>    | <b>3,000,000</b>   | <b>3,000,000</b>   | <b>2,723,217</b>    | <b>0.39%</b>   |
| MHR INSTITUTIONAL III            | 9,532,789          | 9,532,789          | 9,731,176           | 1.39%          |
| <b>MHR INSTITUTIONAL Total</b>   | <b>9,532,789</b>   | <b>9,532,789</b>   | <b>9,731,176</b>    | <b>1.39%</b>   |
| OAK HILL CAPITAL PARTNERS II     | 11,826,263         | 11,826,263         | 12,092,650          | 1.73%          |
| OAK HILL CP II (CAYMAN)          | 5,599,015          | 5,599,015          | 7,454,618           | 1.06%          |
| <b>OAK HILL Total</b>            | <b>17,425,279</b>  | <b>17,425,279</b>  | <b>19,547,268</b>   | <b>2.79%</b>   |
| OCM OPPORTUNITIES FD IVB LP      | 1                  | 1                  | 382,787             | 0.05%          |
| <b>OAK TREE Total</b>            | <b>1</b>           | <b>1</b>           | <b>382,787</b>      | <b>0.05%</b>   |
| ODYSSEY INVT PARTN FD III        | 14,585,318         | 14,585,318         | 19,079,288          | 2.72%          |
| <b>ODYSSEY INVESTMENTS Total</b> | <b>14,585,318</b>  | <b>14,585,318</b>  | <b>19,079,288</b>   | <b>2.72%</b>   |
| PORTFOLIO ADVISORS IV (B)        | 11,008,900         | 11,008,900         | 11,008,900          | 1.57%          |
| PORTFOLIO ADVISORS IV (E)        | 1,634,373          | 1,634,373          | 1,634,373           | 0.23%          |
| <b>PORTFOLIO ADVISORS Total</b>  | <b>12,643,273</b>  | <b>12,643,273</b>  | <b>12,643,273</b>   | <b>1.81%</b>   |
| QUINTANA ENERGY PARTNERS TE LP   | 7,757,774          | 7,757,774          | 7,757,774           | 1.11%          |
| <b>QUINTANA ENERGY Total</b>     | <b>7,757,774</b>   | <b>7,757,774</b>   | <b>7,757,774</b>    | <b>1.11%</b>   |
| SIGULER GUFF SM BUYOUT           | 4,839,858          | 4,839,858          | 4,838,019           | 0.69%          |
| <b>SIGULER GUFF Total</b>        | <b>4,839,858</b>   | <b>4,839,858</b>   | <b>4,838,019</b>    | <b>0.69%</b>   |
| TERRA FIRMA III LIMITED PART     | 7,877,193          | 11,182,657         | 11,435,773          | 1.63%          |
| <b>TERRA FIRMA Total</b>         | <b>7,877,193</b>   | <b>11,182,657</b>  | <b>11,435,773</b>   | <b>1.63%</b>   |
| WCAS CAPITAL PARTNERS FUND IV    | 13,500,000         | 13,500,000         | 14,933,511          | 2.13%          |
| WCAS IX                          | 8,287,788          | 8,287,788          | 16,793,735          | 2.40%          |
| WCAS X LP                        | 16,091,194         | 16,091,194         | 16,712,073          | 2.39%          |
| <b>WELSH CARSON Total</b>        | <b>37,878,982</b>  | <b>37,878,982</b>  | <b>48,439,318</b>   | <b>6.92%</b>   |
| STATE STREET SPIF ALT INV        | 129,355            | 25,841,265         | 25,747,109          | 3.68%          |
| <b>STATE STREET Total</b>        | <b>129,355</b>     | <b>25,841,265</b>  | <b>25,747,109</b>   | <b>3.68%</b>   |
| <b>Grand Total</b>               | <b>555,702,321</b> | <b>584,719,696</b> | <b>700,186,699</b>  | <b>100.00%</b> |

# MEMORANDUM

Montana Board of Investments

Department of Commerce

2401 Colonial Drive, 3<sup>rd</sup> Floor

Helena, MT 59601 (406) 444-0001

**To:** Members of the Board

**From:** Edward J. Kelly

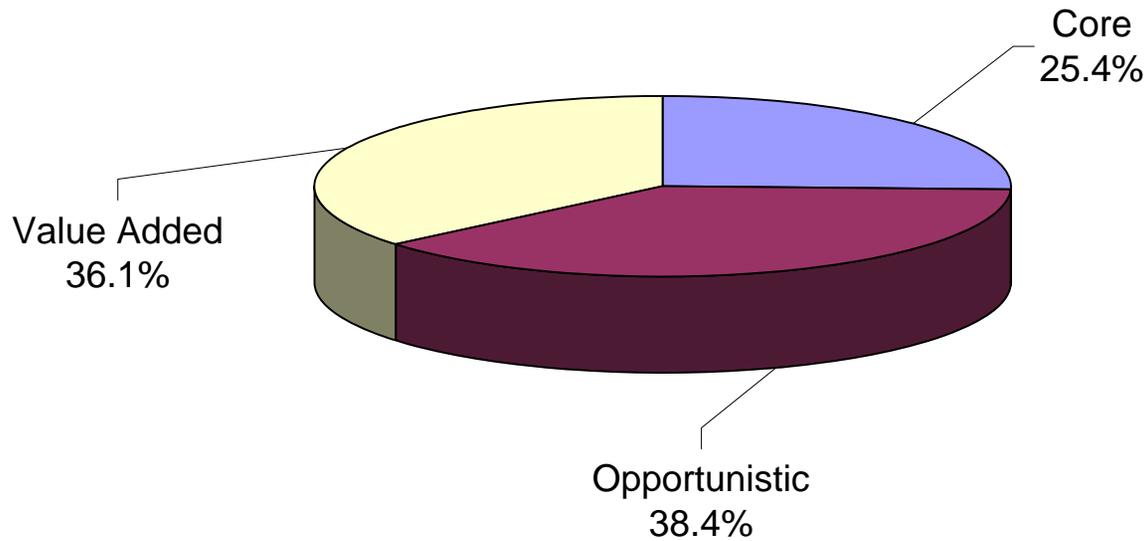
**Date:** February 12, 2008

**Subject:** Montana Real Estate Pool [MTRP]

Attached to this memo are the following reports:

- (i) Private Edge - Graph: Strategy Total Exposure by Market Value & Remaining Commitments  
This report summarizes the total market value of invested capital commitments plus the capital commitments remaining to be invested broken out by investment strategy as of 09/30/07.
- (ii) Private Edge - Table: Real Estate Portfolio Status Report.  
This report summarizes the total market value of invested capital commitments plus the capital commitments remaining to be invested broken out by investment strategy as of 09/30/07
- (iii) Real Estate Pool Holdings  
This report summaries all portfolio fund holdings by shares, book value and market value as of 12/31/07.
- (iv) New Commitments  
Investment staff has not made any new commitments to real estate funds since the last Board Meeting. However, staff is currently reviewing a co-investment fund opportunity with Hudson Capital. MBOI has a current commitment of \$20m to Hudson Capital IV. In addition, staff will be reviewing and conducting due diligence analysis of real estate funds coming to market in 2008 for potential addition to the MTRP portfolio.

**Montana Real Estate Pool**  
**Strategy Total Exposure by Market Value & Remaining Commitments**  
*(since inception through September 30, 2007)*



| Strategy      | Remaining Commitments | Market Value         | Total Exposure       | Percentage    |
|---------------|-----------------------|----------------------|----------------------|---------------|
| Core          | \$0                   | \$118,565,299        | \$118,565,299        | 25.4%         |
| Opportunistic | \$144,791,296         | \$34,382,068         | \$179,173,364        | 38.4%         |
| Value Added   | \$115,603,146         | \$52,756,687         | \$168,359,833        | 36.1%         |
| <b>Total</b>  | <b>\$260,394,442</b>  | <b>\$205,704,054</b> | <b>\$466,098,496</b> | <b>100.0%</b> |

**Real Estate Portfolio Status Report**

**All Investments**

(as of September 30, 2007)

| Description  | Vintage Year | Commitment           | Since Inception      |                      |                     | Net Asset Value      | Investment Multiple |
|--|--------------|----------------------|----------------------|----------------------|---------------------|----------------------|---------------------|
|  |              |                      | Capital Contributed  | Remaining Commitment | Capital Distributed |                      |                     |
| <b>Total</b>   |              | <b>\$464,200,000</b> | <b>\$203,805,558</b> | <b>\$260,394,442</b> | <b>\$3,436,335</b>  | <b>\$205,704,054</b> | <b>1.01</b>         |
| <b>Montana Real Estate</b>                                     |              | 464,200,000          | 203,805,558          | 260,394,442          | 3,436,335           | 205,704,054          | 1.01                |
| <b>Core</b>  |              | 110,000,000          | 110,000,000          | 0                    | 790,484             | 118,565,299          | 1.08                |
| Clarion Lion Properties Fund                                   | 2006         | 30,000,000           | 30,000,000           | 0                    | 790,484             | 33,284,788           | 1.11                |
| INVESCO Core Real Estate-USA                                   | 2007         | 30,000,000           | 30,000,000           | 0                    | 0                   | 30,612,544           | 1.02                |
| JP Morgan Strategic Property Fund                              | 2007         | 50,000,000           | 50,000,000           | 0                    | 0                   | 54,667,967           | 1.09                |
| <b>Opportunistic</b>   |              | 185,000,000          | 40,208,704           | 144,791,296          | 2,620,466           | 34,382,068           | 0.86                |
| Beacon Capital Strategic Partners V                            | 2007         | 25,000,000           | 7,500,000            | 17,500,000           | 0                   | 7,279,917            | 0.97                |
| Carlyle Europe Real Estate Partners III,<br>CIM Fund III, L.P. | 2007         | 30,000,000           | 0                    | 30,000,000           | 0                   | 0                    | 0.00                |
| JER Real Estate Partners - Fund IV                             | 2007         | 25,000,000           | 2,184,071            | 22,815,929           | 386,564             | 1,211,824            | 0.55                |
| Liquid Realty IV   | 2007         | 20,000,000           | 20,000,000           | 0                    | 2,233,902           | 17,397,218           | 0.87                |
| Macquarie Global Property Fund (Asia)                          | 2007         | 30,000,000           | 7,705,816            | 22,294,184           | 0                   | 6,334,045            | 0.82                |
| MSREF VI International   | 2007         | 30,000,000           | 0                    | 30,000,000           | 0                   | 0                    | 0.00                |
| MSREF VI International   | 2007         | 25,000,000           | 2,818,817            | 22,181,183           | 0                   | 2,159,064            | 0.77                |
| <b>Value Added</b>   |              | 169,200,000          | 53,596,854           | 115,603,146          | 25,385              | 52,756,687           | 0.98                |
| ABR Chesapeake Fund III  | 2006         | 20,000,000           | 8,000,000            | 12,000,000           | 0                   | 8,519,120            | 1.06                |
| AG Core Plus Realty Fund II                                    | 2007         | 20,000,000           | 3,000,000            | 17,000,000           | 0                   | 2,849,513            | 0.95                |
| Apollo Real Estate Finance Corp.                               | 2007         | 10,000,000           | 1,210,000            | 8,790,000            | 0                   | 1,152,223            | 0.95                |
| DRA Growth & Income Fund VI                                    | 2007         | 35,000,000           | 6,875,532            | 28,124,468           | 0                   | 6,847,018            | 1.00                |
| Hudson Realty Capital Fund IV                                  | 2007         | 15,000,000           | 6,750,000            | 8,250,000            | 0                   | 6,704,922            | 0.99                |
| Realty Associates Fund VIII                                    | 2007         | 20,000,000           | 10,014,355           | 9,985,645            | 25,385              | 9,906,419            | 0.99                |
| Rothschild FARS Fund V LP                                      | 2007         | 30,000,000           | 10,110,088           | 19,889,912           | 0                   | 10,157,793           | 1.00                |
| Strategic Partners Value Enhancement Fd                        | 2007         | 19,200,000           | 7,636,879            | 11,563,121           | 0                   | 6,619,679            | 0.87                |

Investments with no capital contributed are not subject to performance measurement.

## 12/31/2007 Private Real Estate Holdings

| <u>Fund Name</u>               | <u>Shares</u>      | <u>Book Value</u>  | <u>Market Value</u> | <u>%</u>       |
|--------------------------------|--------------------|--------------------|---------------------|----------------|
| ABR CHESAPEAKE III             | 10,000,000         | 10,000,000         | 10,000,000          | 3.70%          |
| AG REALTY FUND VII LP          | 2,400,000          | 2,400,000          | 2,400,000           | 0.89%          |
| AG CORE PLUS REALTY FD II      | 3,000,000          | 3,000,000          | 3,000,000           | 1.11%          |
| APOLLO REAL ESTATE FINANCE COR | 2,900              | 2,900,000          | 2,816,147           | 1.04%          |
| BEACON CAPITAL PARTNERS FUND V | 12,500,000         | 12,500,000         | 12,093,988          | 4.47%          |
| CIM FUND III                   | 700,432            | 700,432            | 700,432             | 0.26%          |
| CLARION LION PROPERTIES FUND   | 31,957             | 45,000,000         | 48,284,788          | 17.86%         |
| DRA ADVISORS VI                | 5,251,636          | 5,251,636          | 5,251,636           | 1.94%          |
| JP MORGAN CB                   | 38,051             | 66,671,654         | 71,295,665          | 26.37%         |
| HUDSON REALTY CAPITAL FUND IV  | 9,750,000          | 9,750,000          | 9,685,046           | 3.58%          |
| INVESCO CORE REAL ESTATE USA   | 208                | 30,000,000         | 30,612,544          | 11.32%         |
| MORGAN STANLEY REAL ESTATE     | 7,587,875          | 7,587,875          | 6,928,124           | 2.56%          |
| JER REAL EST PARTNERS FUND IV  | 15,137,977         | 15,137,977         | 14,769,095          | 5.46%          |
| LIQUID REALTY FUN IV           | 4,995,811          | 4,995,811          | 4,995,811           | 1.85%          |
| MACQUARIE GBL PROP III ASIA    | 3,794,964          | 3,794,964          | 3,794,964           | 1.40%          |
| STRATEGIC PARTNERS VALUE       | 11,297,359         | 11,297,359         | 11,006,203          | 4.07%          |
| ROTHSCHILD FIVE ARROWS REALTY  | 11,473,351         | 11,473,351         | 11,521,057          | 4.26%          |
| TA ASSOCIATES REALTY FUND      | 14,000,000         | 14,000,000         | 13,906,424          | 5.14%          |
| TREASURERS CASH                | 2,570              | 2,570              | 2,570               | 0.00%          |
| <b>REAL ESTATE Total</b>       | <b>111,965,092</b> | <b>256,463,629</b> | <b>263,064,494</b>  | <b>97.29%</b>  |
| SHORT TERM INVESTMENT POOL     | 7,341,503          | 7,341,503          | 7,341,503           | 2.71%          |
| <b>CASH EQUIVALENT Total</b>   | <b>7,341,503</b>   | <b>7,341,503</b>   | <b>7,341,503</b>    | <b>2.71%</b>   |
| <b>Grand Total</b>             | <b>119,306,595</b> | <b>263,805,132</b> | <b>270,405,997</b>  | <b>100.00%</b> |

## Montana Domestic Equity Pool

| <b>Domestic Stock Pool By Manager 12/31/2007</b> |                            |                 |                              |
|--|----------------------------|-----------------|------------------------------|
| <b><u>Manager Name</u></b>                       | <b><u>Market Value</u></b> | <b><u>%</u></b> | <b><u>Approved Range</u></b> |
| BGI EQUITY INDEX FUND                            | 1,278,931,823              | 38.0%           |                              |
| STATE STREET SPIF ALT INV                        | 4,051,248                  | 0.1%            | 0-5%                         |
| <b>LARGE CAP CORE Total</b>                      | <b>1,282,983,071</b>       | <b>38.2%</b>    | 25-40%                       |
| BARROW HANLEY MEWHINNEY + STRS                   | 214,254,730                | 6.4%            |                              |
| QUANTITATIVE MANAGEMENT ASSOC                    | 143,682,115                | 4.3%            |                              |
| <b>LARGE CAP VALUE Total</b>                     | <b>357,936,845</b>         | <b>10.6%</b>    |                              |
| COLUMBUS CIRCLE INVESTORS                        | 168,733,604                | 5.0%            |                              |
| RAINIER INVESTMENT MGMNT INC                     | 162,731,910                | 4.8%            |                              |
| RENAISSANCE GROUP LLC                            | 158,842,440                | 4.7%            |                              |
| <b>LARGE CAP GROWTH Total</b>                    | <b>490,307,954</b>         | <b>14.6%</b>    |                              |
| ENHANCED INVEST TECHNOLOGIES                     | 209,428,671                | 6.2%            |                              |
| GOLDMAN SACHS ENHANCED LARGE                     | 142,284,067                | 4.2%            |                              |
| T ROWE PRICE ASSOCIATES INC                      | 223,898,214                | 6.7%            |                              |
| WESTERN ASSET US INDX PLUS LLC                   | 210,859,932                | 6.3%            |                              |
| <b>LARGE CAP ENHANCED Total</b>                  | <b>786,470,883</b>         | <b>23.4%</b>    | 15-25%                       |
| <b>COMBINED LARGE CAP Total</b>                  | <b>2,917,698,753</b>       | <b>86.8%</b>    | 82-92%                       |
| ARTISAN MID CAP VALUE                            | 60,797,472                 | 1.8%            |                              |
| BGI MIDCAP EQUITY INDEX FUND                     | 22,413,662                 | 0.7%            |                              |
| MARTINGALE ASSET MGMT MID CAP                    | 110,983,977                | 3.3%            |                              |
| TIMESQUARE CAPITAL MGMT                          | 81,482,470                 | 2.4%            |                              |
| <b>MID CAP Total</b>                             | <b>275,677,581</b>         | <b>8.2%</b>     | 5-11%                        |
| DIMENSIONAL FUND ADVISORS INC                    | 70,491,277                 | 2.1%            |                              |
| NORTHPOINTE CAPITAL SMALL CAP                    | 50,633,775                 | 1.5%            |                              |
| VAUGHAN NELSON INV                               | 47,017,142                 | 1.4%            |                              |
| <b>SMALL CAP Total</b>                           | <b>168,142,194</b>         | <b>5.0%</b>     | 3-8%                         |
| <b>TOTAL MDEP</b>                                | <b>3,361,518,527</b>       | <b>100.0%</b>   |                              |

The table above displays the Domestic Equity Pool allocation at quarter end across market cap segments and manager styles. Note that at this time all weightings are within approved ranges. Following the upcoming transition into the partial long/short strategy, the BGI Equity Index Fund weight will be approximately 29% of the large cap allocation and 25% of the total pool. The partial long/short strategy is targeted at 15% of large cap or approximately 13% of the total pool.

During the quarter, there was no allocation activity within the respective market caps and capitalization weights in the Pool remain close to the overall market as measured by the S&P 1500 Index. Compared to the S&P 1500 Index, the pool is slightly overweight mid caps and small caps while being slightly underweight large caps.

Although returns were negative in the quarter ended, the comparative performance by capitalization size during the quarter largely continued the trend of the calendar year. Small

cap stocks underperformed larger cap stocks for the quarter and the year. The S&P 500 Index lost 3.3% during the quarter while the S&P 400 (Mid Cap) Index gave back 2.7% and the S&P 600 (Small Cap) Index lost 6.5%. For the calendar year, large caps returned 5.5%, mid caps returned 8.0%, and small caps lost 0.3%.

Page 1/ 6

**COMPARATIVE RETURNS**

Range **9/28/07** - **12/31/07** Period  Daily 94 Day Period

| Securities  | Crncy | Prc Appr | Total Ret | Difference | Annual Eq |
|-------------|-------|----------|-----------|------------|-----------|
| 1 SPX Index | USD   | -3.82 %  | -3.33 %   | -0.61 %    | -12.33 %  |
| 2 MID Index | USD   | -3.03 %  | -2.73 %   |            | -10.17 %  |
| 3 SML Index | USD   | -6.68 %  | -6.45 %   | -3.72 %    | -22.80 %  |

(\* = No dividends or coupons)



Across style categories, the comparative performance in the quarter also reflected the calendar year trend. Growth outperformed value for the quarter with the Citigroup Growth Index losing 1.2% on a total rate of return basis while the Citigroup Value Index was down 5.4%. The year ended was much the same and marked the first full year in several that growth outperformed value. The Citigroup Growth Index returned 9.3% in 2007 while the Citigroup Value Index returned 2.0%.

Page 1/ 6

**COMPARATIVE RETURNS**

Range **9/28/07** - **12/31/07** Period  Daily 94 Day Period

| Securities  | Crncy | Prc Appr | Total Ret | Difference | Annual Eq |
|-------------|-------|----------|-----------|------------|-----------|
| 1 SPX Index | USD   | -3.82 %  | -3.33 %   | -2.12 %    | -12.33 %  |
| 2 SGX Index | USD   | -1.63 %  | -1.21 %   |            | -4.61 %   |
| 3 SVX Index | USD   | -6.00 %  | -5.36 %   | -4.15 %    | -19.26 %  |

(\* = No dividends or coupons)



Australia 61 2 9777 8600 Brazil 5511 3048 4500 Europe 44 20 7330 7500 Germanu 49 69 9204 1210 Hona Kona 852 2977 6000

Within recent weeks it has become apparent that the domestic economy is in the midst of a slowdown. Volatility with a downward bias will be the nature of the domestic equity market until there is evidence that interest rate cuts, global central bank actions, assistance for homeowners, and fiscal stimulus are having the desired effect. The damage done to the financial system is being repaired but write-downs are significant and indicate the extent of the problem. With that said an easy, quick fix which the equity market appears to be pricing in at this point may be underestimating the challenges to be faced within the next six months. It will take time to repair and recover and although valuations are attractive, our portfolio managers as a whole appear to recognize the need for caution and selectivity.



# **MEMORANDUM**

**Montana Board of Investments**

**Department of Commerce**

**2401 Colonial Drive, 3<sup>rd</sup> Floor**

**Helena, MT 59601 (406) 444-0001**

**To:** Members of the Board

**From:** Rande R. Muffick

**Date:** February 12, 2008

**Subject:** Update on Domestic Equity Transition Plan – 130/30 Strategy

The funding of the partial long/short style allocation is scheduled for the second week in February. Recall that 130/30 strategies are targeted for an initial 15% weighting within domestic large cap equities.

The total amount to be allocated among three 130/30 portfolios will be approximately \$410 million and this amount will be sourced from the Barclays Global Investors (BGI) Index 500 Fund. Management firms to receive funding include: Analytic Investors \$120 million, JP Morgan Asset Management \$210 million and Martingale Asset Management \$80 million. These firms had been selected through a manager search which was concluded in June 2007.

State Street Global Markets has been selected as the transition manager based upon a low cost estimate, a short (one day) trading period, and the increased importance of having close communication between the transition manager, State Street Bank & Trust, and Citigroup due to the nature of this transition.

Citigroup Global Markets Inc. was selected in December as prime broker for the three 130/30 portfolios. As the prime broker, Citigroup will have full custody of the portfolios and therefore the assets will be transferred from State Street to Citigroup as part of this transition.

A report on the completed transition will be presented to the Board at its next meeting in May.

# MEMORANDUM

Montana Board of Investments

Department of Commerce

2401 Colonial Drive, 3<sup>rd</sup> Floor

Helena, MT 59601 (406) 444-0001

**To:** Board Members

**From:** Clifford A. Sheets, Chief Investment Officer

**Date:** February 12, 2008

**Subject:** Montana Domestic Equity Pool (MDEP) Approved Ranges Recommendation

## Background

The allocation across managers and strategies within the domestic equity pool is now based on a set of approved ranges that were set prior to last year's reorganization. After the May, 2007 Board approval of that decision, the internal portfolio was terminated and additional external managers were added. We initially increased the allocation to enhanced managers and then proposed the addition of two additional strategies – style-based (growth and value) and partial long/short or 130/30 managers. The style-based managers were funded in August and the partial long/short managers will be funded this month.

At the May, 2007 Board meeting the following table was shown as a summary of the anticipated allocation across strategies for the large cap segment of the pool which was the only portion affected by the proposed changes. This table contemplated a higher eventual allocation to the 130/30 managers than will initially be made this month. Longer term, assuming this strategy meets expectations of adding value, we may wish to increase it to a higher allocation, shown below at 30% of the large cap allocation.

| <u>Strategy category</u> | <u>As % of Large Cap Weight in Pool</u> |                         | <u>Tracking</u>   | <u>L-T Target</u>    |
|--------------------------|---|-------------------------|-------------------|----------------------|
|                          | <u>Proposed Range</u>                   | <u>Long Term Target</u> | <u>Error</u>      | <u>As % of Total</u> |
|                          |   |                         | <u>Range (bp)</u> | <u>MDEP</u>          |
| Passive                  | 10-30%                                  | 15%                     | 0 - 20            | 13.0%                |
| Enhanced Index           | 20-30%                                  | 27%                     | 50 - 250          | 23.5%                |
| Style-based (V & G)      | 25-33%                                  | 28%                     | 400 - 700         | 24.3%                |
| Partial Long/Short       | 15-33%                                  | 30%                     | 250 - 500         | 26.1%                |
| <b>Total Large Cap</b>   |   | 100%                    |                   | 86.9%                |
| <b>Total MDEP</b>        |   |                         |                   | <b>Range: 85-90%</b> |

Now that we are about to fund this new strategy it is a timely opportunity to revisit the overall pool allocation ranges by strategy. The allocation table shown above is somewhat

confusing in that it addresses these strategy categories in the context of large cap only and does not address the entire pool or existing ranges previously approved by the Board.

The table below shows the current approved ranges by strategy type and also proposed ranges. The new ranges are designed to accommodate both the immediate situation of funding the new 130/30 managers and the potential increase in this allocation in the future. It also adds a range for the style-based managers which are a combination of both the large cap value and growth managers.

| <b>Strategy</b>             | <b>Post transition weight (approx.)</b> | <b>Current Approved Range</b> | <b>Proposed Approved Range</b> |
|-----------------------------|---|-------------------------------|--------------------------------|
| Large Cap Core (passive)    | 26%                                     | 25-40%                        | 10-30%                         |
| Large Cap Enhanced          | 23%                                     | 15-25%                        | 20-30%                         |
| Large Cap Style-based       | 25%                                     |                               | 20-30%                         |
| Partial long/short (130/30) | 13%                                     |                               | 10-30%                         |
| Total Large Cap             | 87%                                     | 82-92%                        | 82-92%                         |
| Mid Cap                     | 8%                                      | 5-11%                         | 5-11%                          |
| Small Cap                   | 5%                                      | 3-8%                          | 3-8%                           |

The ranges are intentionally somewhat wide for the large cap core (passive) and partial long/short strategies for two reasons. First, this contemplates the potential increase in the partial long/short allocation in a couple of years. It also provides more flexibility to accommodate a potential reallocation from domestic to international equities. There are no immediate plans to do so, but should the opportunity present itself the allocation bias is in this direction as discussed in the recent Asset-Liability studies.

### **Summary**

Staff recommends that the Board approve new asset allocation ranges by strategy within the domestic equity pool as presented in the above table.

## Montana International Equity Pool

### International Stock Pool By Manager as of 12/31/07

| <u>Security Name</u>           | <u>Market Value</u>  | <u>%</u>       | <u>Approved Range</u> |
|--------------------------------|----------------------|----------------|-----------------------|
| BATTERYMARCH INTL EQUITY       | 211,937,274          | 12.97%         |                       |
| BGI GLOBAL EX US ALPHA TILT FD | 128,393,805          | 7.85%          |                       |
| EAFE STOCK PERFORMANCE INDEX   | 20,952,500           | 1.28%          | 0-10%                 |
| JULIUS BAER INTL EQUITY II     | 204,619,378          | 12.52%         |                       |
| <b>CORE Total</b>              | <b>565,902,956</b>   | <b>34.62%</b>  | 25-50%                |
| ACADIAN ACWI EX US VALUE       | 167,134,020          | 10.22%         |                       |
| BERNSTEIN ACWI EX              | 152,402,953          | 9.32%          |                       |
| <b>VALUE Total</b>             | <b>319,536,972</b>   | <b>19.55%</b>  | 15-25%                |
| HANSBERGER INTL EQUITY GROWTH  | 134,611,319          | 8.24%          |                       |
| MARTIN CURRIE ACWI X           | 145,814,163          | 8.92%          |                       |
| PRINCIPAL GLOBAL               | 74,712,302           | 4.57%          |                       |
| <b>GROWTH Total</b>            | <b>355,137,784</b>   | <b>21.73%</b>  | 15-25%                |
| BGI MSCI EQUITY INDEX FD EUROP | 176,253,309          | 10.78%         | 0-12%                 |
| NOMURA ASSET MGMT INC          | 102,885,553          | 6.29%          | 0-8%                  |
| <b>REGIONAL Total</b>          | <b>279,138,863</b>   | <b>17.08%</b>  |                       |
| AXA ROSENBERG INTL SMALL CAP   | 51,854,071           | 3.17%          |                       |
| DFA INTL SMALL CO PORTFOLIO    | 63,026,009           | 3.86%          |                       |
| <b>SMALL CAP Total</b>         | <b>114,880,080</b>   | <b>7.03%</b>   | 5-15%                 |
|                                |                      |                |                       |
| <b>TOTAL MTIP</b>              | <b>1,634,596,655</b> | <b>100.00%</b> |                       |

The table above reflects the quarter end allocations within the Montana International Equity Pool. The overall value of the Pool reflects the strong performance experienced by international markets, particularly emerging markets, during 2007. Despite giving back some return in the quarter just ended, MTIP's value increased \$192 million during the past year.

Note that ISPIFF (EAFE Stock Performance fund), the liquidity fund used in the pool, is relatively smaller in allocation than last quarter. Three portfolios, Martin Currie, Acadian, and Bernstein are all relatively higher in allocation. These changes reflect the shifting of \$35 million from ISPIFF to active management. Martin Currie received \$15 million, Acadian \$10 million, and Bernstein \$10 million.

The fourth quarter continued the trend for the year, with small cap stocks lagging the larger caps in developed markets while the emerging markets garnered sizeable returns. For the quarter ended, emerging market (EM) stocks returned 3.7% while in developed countries large cap stocks lost 1.7% and small cap stocks pulled back 4.7%. EM closed out another stellar year of performance with a 39.2% return for 2007. In developed markets, large caps returned 11.8% and small caps returned only 2.3% for the year.

## COMPARATIVE RETURNS

Range **9/28/07** - **12/31/07** Period  Daily  94 Day Period

| Securities     | Crcncy | Prc Appr | Total Ret | Difference | Annual Eq |
|----------------|--------|----------|-----------|------------|-----------|
| 1 MXEA Index   | USD    | -2.04 %  | -1.70 %   | -5.36 %    | -6.44 %   |
| 2 MXEF Index   | USD    | 3.38 %   | 3.66 %    |            | 14.98 %   |
| 3 MXEASC Index | USD    | -5.10 %  | -4.71 %   | -8.37 %    | -17.09 %  |

(\* = No dividends or coupons)



It is important to note that the benchmark being used for MTIP, the MSCI ACWI ex-US, does not include a small cap component, whereas the pool has historically contained a small cap allocation. Currently this small cap allocation is approximately 7% of the pool. Thus, in periods of relative small cap weakness the pool's performance will tend to lag that of the benchmark. MSCI has made revisions to its international indices which are being phased in over several months. These revisions will create discreet large cap, mid cap and small cap indices that parallel the market capitalization convention used in the U.S. market. The transition to this new market cap methodology will be finalized at the end of May, 2008. Given this development and the minor miss-match posed by our current benchmark, Staff intends to prepare a benchmark change recommendation for Board consideration at the May meeting.

As of the end of December, overall exposure to EM is estimated at 16.2%. Note the increased weighting of the EM market in the benchmark due to its phenomenal performance. At the beginning of 2007, EM accounted for less than a 14% weighting compared to 19.4% at the end of December.

Similar to the domestic managers, our international managers as a whole are implementing relatively cautious approaches to the markets within their respective styles. Most are looking to upgrade the quality of the portfolios they manage by adding stocks of companies with higher market caps, strong balance sheets, and strong competitive positions.

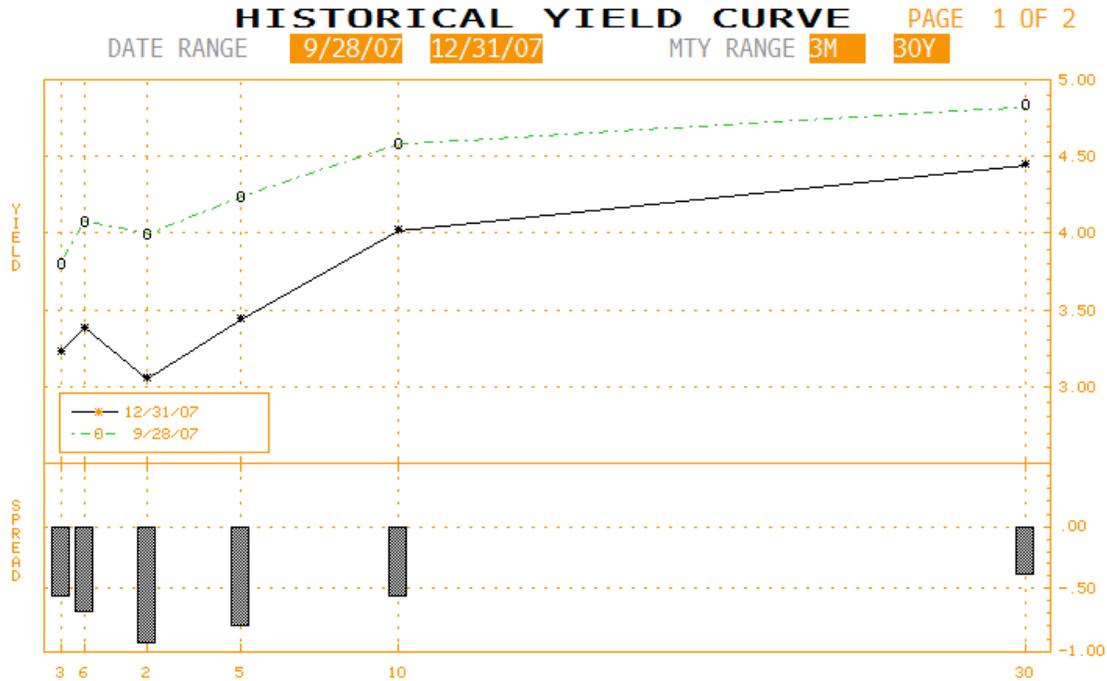
Looking forward, the "decoupling" theory of international economies and markets that was hailed by many as recently as two months ago is losing support. International economies are affected by prospects in the U.S., albeit to a somewhat lesser degree than in previous cycles. Moreover, international equity markets are more closely correlated with U.S. equities than in the past. With that said, international markets including EM have shown themselves to be vulnerable in January. They are not immune to a slowdown in the U.S. However, because the long term prospects of investing overseas are attractive, any relative weakness in these markets will be looked upon as an opportunity to increase allocations.

# FIXED INCOME OVERVIEW & STRATEGY

February 12, 2008

## RETIREMENT & TRUST FUNDS BOND POOLS

The bond market experienced dramatic change during the fourth quarter as concerns mounted over the growth of the economy and fears spread through the credit markets. What originally began as a sub-prime mortgage problem during the late summer widened to affect all spread sectors, whether structured or corporate credit. Efforts by the Fed to improve the liquidity in the money markets in December did little to stem the overall aversion to risk that developed during the quarter. The change in the Treasury yield curve during the quarter is shown below.



Treasury yields declined from 90 to 40 basis points across the curve during the fourth quarter in a flight to quality reaction to the negative news affecting the financial system. The shape of the curve steepened noticeably in reaction to actual and anticipated cuts in the Fed funds rate. The Federal Reserve began lowering the target rate for Fed funds in September and made two additional cuts in October and December. The initial moves by the Fed were welcomed by the market but deemed insufficient to cope with an imploding housing market and developing credit crunch that has continued into the current quarter. Since year-end the Fed has shifted its focus to stemming a possible recession by cutting rates more aggressively as signs of more widespread economic problems have developed. A further decline of 1.25% since year-end brought the Fed funds rate down to the current level of 3.00%. The market is anticipating further cuts in future months with the Fed funds rate now anticipated to fall to near 2% by the end of the year.

The average investment grade corporate spread widened from approximately 60 basis points during the quarter, ending near 200 basis points over Treasuries at the end of the year. This caused corporate bond yields to lag the decline in Treasury yields and undermined their relative performance. The same can be said for all structured securities, even top quality agency mortgage pass-throughs. The graph below depicts the recent trend in corporate spreads, or risk premiums, relative to Treasuries.

MERRILL LYNCH GLOBAL BOND INDICES

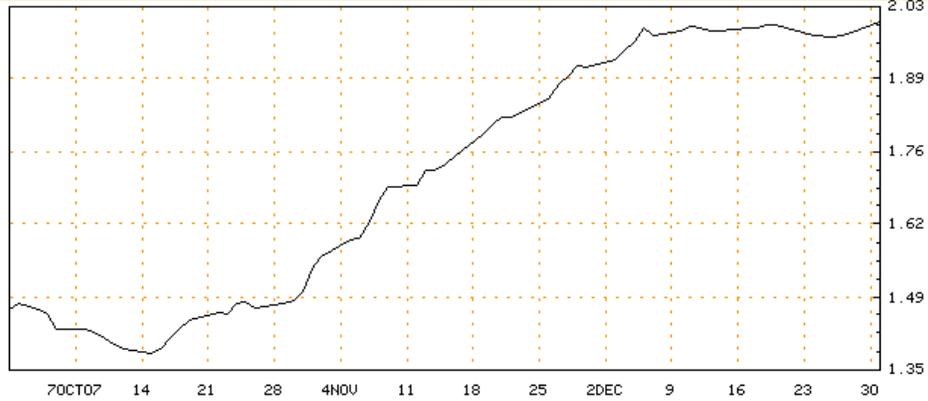
Page 2 Of 6

Selection: 22

1) COA0 in USD U.S. Corporate Master ( ) From: 9/30/07 To: 12/31/07  
 vs Freq: D D:day W:week  
 2) G602 in USD U.S. Treasuries, 5-10 Yr M:month Q:quarter Y:year

**Sprd of Yield To Worst**

H 2.00 12/31/07 L 1.38 10/15/07 AG 1.71 MD 1.72 SD 0.23 AV 14.10



The sector weightings of the two pool portfolios are shown below. As has been the case for some time, the portfolios have a combined exposure to spread sectors, both structured and credit, that is greater than the benchmark. While over time this can positively benefit performance by providing a higher relative yield, in times such as we have experienced lately this can hurt relative performance as spreads widen. Given the higher relative weight of corporate bond holdings in particular the performance of the pools has suffered when compared to the benchmark Lehman Aggregate Index.

**Asset Allocation Sectors & Ranges**

12/31/07  
(at market)

| <u>Sectors</u>                    | <u>RFBP</u>   | <u>TFBP</u>   | <u>Lehman<br/>Aggregate<br/>Index</u> | <u>Policy<br/>Ranges</u> |
|-----------------------------------|---------------|---------------|---------------------------------------|--------------------------|
| U.S. Treasury                     | 0.0%          | 0.0%          | 22.35%                                | 0-25%                    |
| U.S. Agency                       | 22.63         | 24.48         | 9.70                                  | 15-35                    |
| <b>Total Government</b>           | <b>22.63</b>  | <b>24.48</b>  | <b>32.05</b>                          | <b>20-45</b>             |
| Mortgage-Backed Securities        | 21.32         | 22.43         | 34.97                                 | 10-35                    |
| Hybrid ARMS Mortgage-Backed       | 0.00          | 0.00          | 3.60                                  | 0-5                      |
| Asset-Backed Securities/Other     | 5.74          | 3.49          | 0.87                                  | 0-10                     |
| Commercial Mortgage-Backed        | 6.78          | 5.73          | 5.66                                  | 0-10                     |
| <b>Total Structured</b>           | <b>33.84</b>  | <b>32.65</b>  | <b>45.10</b>                          | <b>20-45</b>             |
| Corporate Credit                  | 42.00         | 41.33         | 19.57                                 | 20-50                    |
| Non-Corporate Credit              | 0.00          | 0.25          | 3.28                                  | 0-10                     |
| <b>Total Credit</b>               | <b>42.00</b>  | <b>41.58</b>  | <b>22.85</b>                          | <b>20-50</b>             |
| Short-Term Investment Pool (STIP) | 1.53          | 1.29          | 0.0                                   | 0-10                     |
| <b>Total</b>                      | <b>100.0%</b> | <b>100.0%</b> | <b>100.0%</b>                         | <b>100.0%</b>            |
| Market Value (\$Mil):             | \$2,002       | \$1,469       |                                       |                          |

While this short term performance shortfall has been unfortunate, it seems late to do much about it. Corporate spreads have widened fairly quickly and to a degree that one could argue presents a buying opportunity. Yet, given the portfolios' current exposures and the ongoing uncertainty surrounding the economic outlook it would be imprudent to add additional corporate credit exposure at this time.

**Duration in years:**

|           | <u>6/02</u> | <u>6/03</u> | <u>6/04</u> | <u>6/05</u> | <u>6/06</u> | <u>6/07</u> | <u>12/07</u> |
|-----------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| RFBP      | 7.1         | 6.6         | 6.3         | 4.5         | 4.7         | 5.0         | 4.6          |
| TFBP      | 6.8         | 6.4         | 6.1         | 4.6         | 4.7         | 5.0         | 4.6          |
| Benchmark | 4.4         | 4.2         | 4.7         | 4.3         | 4.8         | 4.9         | 4.6          |

The table above shows the duration of the portfolios as compared to the Lehman Aggregate Index. This reflects a duration posture that is close to that of the benchmark. While durations are similar in an absolute sense, the portfolios' composition of holdings reflects a relative underweighting in the short-intermediate maturity range. This has also detracted from performance recently as the yield curve has steepened. The decline in duration for both the benchmark and the portfolios since June reflects the shortening average life of most mortgage-backed securities as rates declined and prepayment expectations increased.

**Other portfolio characteristics as of 12/31/07:**

|                           | <u>Benchmark</u> | <u>RFBP</u> | <u>TFBP</u> |
|---------------------------|------------------|-------------|-------------|
| Average maturity (yrs.)   | 6.6              | 6.2         | 6.1         |
| Average yield to maturity | 4.9%             | 5.4%        | 5.4%        |
| Average coupon            | 5.5%             | 5.1%        | 5.1%        |
| Average quality           | AAA              | AA          | AA          |
| Number of securities      | 9,133            | 228         | 249         |

**Summary**

There are no immediate plans to alter the portfolios' characteristics in the near term. The rally in the Treasury market is already well advanced though certainly could run further if there are setbacks that contribute to a deeper economic slowdown than already anticipated. The actions to date by the Fed and further anticipated cuts in the funds rate are already discounted in current market levels. The portfolio's overweight in the corporate credit sector is being maintained given its present valuation, though not increased any further. The pending fixed income RFP will present an opportunity to reshape the RFBP's portfolio characteristics since we will be able to selectively move certain holdings into the transition to any external portfolio. The ultimate position of the portfolio afterwards will depend on market considerations at the time.

**STATE FUND INSURANCE-** \$850 million fixed income as of 12/31/07  
(Benchmark = Lehman Government/Credit Intermediate Index)

Portfolio characteristics as of 12/31/07:

|                   | <u>Benchmark</u> | <u>State Fund*</u> |
|-------------------|------------------|--------------------|
| Duration (yrs.)   | 3.7              | 3.8                |
| Quality (S&P)     | AA+              | AA                 |
| Yield to Maturity | 4.3%             | 4.9%               |
| Credit (all)      | 38.4%            | 58.7%              |
| Governments       | 61.6%            | 39.5%              |
| Mortgage-Backed   | 0%               | 1.8%               |

\* excluding STIP

We have a 60 basis point yield advantage over the benchmark with only a one notch lower quality rating.

The strategy is to lower the STIP balance and increase the duration if interest rates rise. Given the client's preferences and risk tolerances, we need to closely monitor the credit risk. The client preferences include keeping the STIP balance of 1-3 percent and limiting holdings rated lower than A3 or A- to 20 percent of fixed income (currently 12.5%).

**TREASURER'S FUND-** \$765 million including \$130 million in fixed income as of 01/31/08  
(Fixed Income Benchmark: N/A)

Portfolio characteristics as of 12/31/07:

|                   | <u>Treasurer's Fund*</u> |
|-------------------|--------------------------|
| Duration (yrs.)   | 0.9                      |
| Quality (S&P)     | AAA                      |
| Yield to Maturity | 4.1%                     |
| U.S Treasury      | 0.0%                     |
| U.S. Agency       | 100.0%                   |

\* excluding STIP

The fixed income strategy is to let maturities roll into STIP, at which point the account will be a STIP only account.

Richard Cooley, CFA  
Portfolio Manager- STIP/Fixed Income

# **MEMORANDUM**

**Montana Board of Investments**

**Department of Commerce**  
2401 Colonial Drive, 3<sup>rd</sup> Floor  
Helena, MT 59601 (406) 444-0001

**To:** Board Members

**From:** Clifford A. Sheets, Chief Investment Officer

**Date:** February 12, 2008

**Subject:** Fixed Income Diversification Recommendation

## **Background**

The Asset-Liability studies that were recently conducted for both the Teachers' Retirement System and Public Employees Retirement System demonstrated the merits of diversification across both existing asset classes and new asset classes. Public equity assets have been significantly restructured over the past two years to reflect a broad array of markets and investment styles. The only remaining public asset class that has not yet been addressed is fixed income. The Asset-Liability studies utilized a fixed income composite as a proxy for the broad asset class. This composite contemplated further diversification within the fixed income asset class to include both below investment grade or high yield securities (at 10%), and non-U.S. securities (at 5%) which may include non-dollar denominated bonds.

At the November, 2007 Board meeting, an educational session was conducted by R.V. Kuhns which discussed the role and characteristics of the fixed income asset class. This reviewed the historical return and risk profile for "core" and non-core, or "plus" sectors of the asset class. The definition of "core" in this context refers to U.S. investment grade dollar-denominated bonds. The "plus" sectors broadly refers to everything else, but predominantly consist of high yield and non-U.S. securities, including emerging market debt. The non-U.S. component may consist of both dollar and non-dollar denominated assets and carry ratings that span both investment grade and below investment grade credit ratings.

The conclusion of this presentation was that adding "plus" sectors to a fixed income portfolio can improve the return and risk profile for the asset class as a whole. A standalone allocation to high yield or emerging market debt will have higher return and risk characteristics. But by allowing a manager to utilize these sectors opportunistically, bounded by reasonable limits, when combined with a core fixed income portfolio presents more optimal results. In other words, the added return and volatility presented by limited investment in the "plus" sectors provides a diversification benefit.

### **Asset Diversification Recommendation**

This recommendation only addresses the Retirement Funds Bond Pool (RFBP). Any application of this recommendation to the Trust Funds Bond Pool (TFBP) should await the referendum decision on the use of equity securities in the trusts scheduled for this fall.

The Board currently manages only U.S. investment grade fixed income portfolios. The addition of “plus” sector exposure would be accomplished through external management by firms with the necessary resources to effectively manage these more specialized sectors of the market.

The additional sector exposures contemplated would include U.S. High Yield and Non-U.S. Fixed Income. The Non-U.S. category would include both emerging market debt (EMD) and developed country debt. Either of these could be denominated in dollars or non-dollar currencies. The underlying holdings utilized in the non-U.S. segment of the portfolio would be expected to consist predominantly of sovereign debt, though limited exposure to corporate credit may be allowed. The U.S. High Yield sector would be restricted to predominantly corporate credits, whether in the form of bonds or loans. Specific portfolio guidelines that prohibit or constrain certain types of securities will be addressed when specific proposals are reviewed and mandates granted via the RFP process described below.

With respect to currency risk posed by non-U.S., non-dollar holdings, it is recommended this be fully hedged with respect to the major currencies where liquid instruments exist to hedge assets back into dollars at low cost. This would be the case with developed country debt instruments. It would not apply to emerging market holdings since it is generally not feasible to hedge local currency emerging market debt instruments; and in most cases the expected currency movement is also part of the fundamental credit selection decision.

The recommended ranges for use within the RFBP are as follows:

| <b>Fixed Income Sector</b>   | <b>Proposed Range*</b> |
|------------------------------|------------------------|
| U.S. High Yield              | 0 – 15%                |
| Non-U.S. (including EMD)     | 0 – 10%                |
| Total “Plus” Sectors         | 0 – 20%                |
| Core (U.S. Investment Grade) | 80 – 100%              |

\* % of total RFBP

There is no specific target recommended since the valuation of these asset classes can be highly cyclical and establishing an arbitrary target suggests a minimum allocation that may not be desirable at times when they are trading at extremely rich valuations compared to the Core component of the portfolio.

Making this change now in the composition of the RFBP makes sense given current valuations in the riskier sectors of the fixed income market. In particular, the U.S. high yield and emerging market debt sectors have performed poorly in recent months as risk

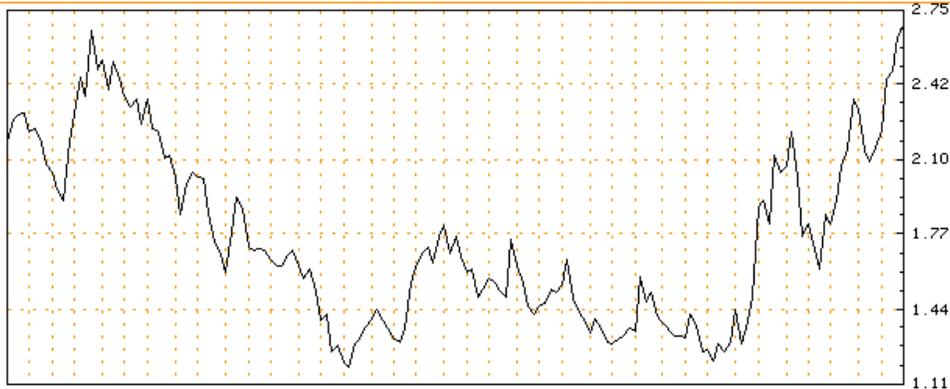
premiums increased in the wake of the aversion to risk that has engulfed global capital markets since last summer. This is evidenced by the increase in spreads or relative yields for these sectors versus U.S. Treasury securities. The spread relationship for U.S. high yield over the past three years is shown below. This indicates that high yield securities are a much more attractive alternative at this point than they have been for many years. Spreads last peaked in October, 2002, at 11 percentage points above U.S. Treasury yields during the last period of significant economic weakness when defaults were approaching a cyclical high. Now, at nearly 7 percentage points over Treasuries, this sector is providing an above average risk premium to most “core” or investment grade segments of the U.S. bond market.



A similar story can be said for emerging market debt. Spreads have widened significantly since last summer as depicted in the next graph. Compared to the U.S. high yield sector, EMD has held up relatively well. This sector traded much cheaper at their prior cyclical peak in September, 2002 when EMD yields were 8 percentage points higher than U.S. Treasury yields. Since then there has been a dramatic improvement in the acceptance of these credits within the global credit markets as economic conditions in many developing countries have improved, leading to a general improvement in their credit quality. Much as we’ve seen with emerging market equities, EMD has become a more conventional asset class. Limited use within a broadly diversified fixed income portfolio as part of the “plus” sectors allocation makes sense.

MERRILL LYNCH GLOBAL BOND INDICES

|                               |        |                             |  |
|-------------------------------|--------|-----------------------------|--|
| Selection: 22                 |        | Page 2 Of 9                 |  |
| 1) IQ00                       | in USD | Global BBB-B Sovereigns ( ) | From: 12/30/04 To: 1/25/08                     |
|                               | vs     |                             | Freq: W D:day W:week                           |
| 2) G402                       | in USD | U.S. Treasuries, 7-10 Yr    | M:month Q:quarter Y:year                       |
| <b>Sprd of Yield To Worst</b> |        |                             |  |
| H                             | 2.68   | 01/25/08 L                  | 1.19 03/03/06 AG 1.76 MD 1.68 SD 0.39 AV 44.53 |



Australia 61 2 9277 8600 Brazil 5511 3048 4500 Europe 44 20 2330 2500 Germany 49 69 9204 1210 Hong Kong 852 2927 6000

**Fixed Income RFP**

A Request for Proposal has recently been written and is expected to be issued by the time of the Board meeting. This RFP requests responses in three strategy categories: Core, Core Plus, and High Yield. The RFP also requests respondents provide detail on the contribution to performance provided by non-U.S. and high yield allocations within a Core Plus strategy. The request for both core and non-core proposals is designed to provide a range of choices and thus more flexibility in any eventual manager assignments.

The responses are due back by early March, with the review and selection of managers expected to occur during the spring, with eventual funding of any selected managers during the summer months. The amount and timing of any transition to external managers will depend on the acceptability of the proposals submitted, including cost considerations and, in part, market conditions as they may impact the “plus” sectors of the market.

Although it is premature to specify an exact amount of assets that would be out-sourced under this plan, an estimate would be between one-fourth and one-third of the RFBP, depending on the mix of mandates.

**Summary**

Staff recommends that the Board approve the utilization of non-core sectors of the bond market as part of the Retirement Funds Bond Pool portfolio and adopt the proposed ranges for these sectors as discussed above.

# EXTERNAL MANAGERS PRESENTATIONS

## Artisan Partners, LP

Emily Collella, Institutional Client Services  
Darren DeVore, Managing Director, Client Services  
James Kieffer, CFA, Managing Director, Portfolio Manager

## Western Asset Management

Steve Fulton, Product Specialist  
Joseph Carieri, Client Service Executive

Presentation material is distributed at Board Meeting.  
Material available upon request.

# QUARTERLY PERFORMANCE REPORTS

## Pension Funds and Investment Pools

Presentation material is distributed at Board Meeting.  
Material available upon request.

# REVIEW OF THE SHORT TERM INVESTMENT POOL

Presentation material is distributed at Board Meeting.  
Material available upon request.

**EDUCATIONAL PRESENTATIONS**  
**Hedge Funds - Fund of Funds**

**BlackRock Alternative Advisors**

Neil Collins, Managing Director  
Dan McLaughlin, Managing Director

**Grosvenor Capital Management, LP.**

Stephen Brewster, Managing Director  
Brad Meyers, Vice President, Investments

Presentation material is distributed at Board Meeting.  
Material available upon request.

# MEMORANDUM

Montana Board of Investments

Department of Commerce

2401 Colonial Drive, 3<sup>rd</sup> Floor

Helena, MT 59601 (406) 444-0001

**To:** Board Members  
**From:** Carroll South, Executive Director  
**Date:** January 28, 2008  
**Subject:** Fixed Income Portfolio Manager Search

**History** – Bob Bugni, one of the Board’s two fixed income Portfolio Managers, retired on December 31, 2007. Bob managed the Trust Funds Bond Pool, the Retirement Funds Bond Pool, and several individual fixed-income accounts. This position is “exempt” from the state classification and pay policy. State law authorizes the Executive Director and Chief Investment Officer to hire the incumbent in this position, while requiring that the Board prescribe the duties and set the salary as follows:

*“The board may employ a chief investment officer and an executive director who have general responsibility for selection and management of the board’s staff and for direct investment and economic development activities. The board shall prescribe the duties and annual salaries of the chief investment officer, executive director, and six professional staff positions. The chief investment officer, executive director, and six professional staff serve at the pleasure of the board.”*

**The Search** - The Executive Director and Chief Investment Officer are currently searching for a fixed-income Portfolio Manager and have placed advertisements on the Chartered Financial Analyst web site and the Wall Street Journal web job posting site. A professional search firm is not being utilized due to the time required to issue and process a Request for Proposals (RFP) for such services.

**Job Description** – For purposes of posting job advertisements, a very general job description was written that differs from the current job description in only one material respect. In addition to managing fixed-income portfolios, the new incumbent in this position will be required to manage the external fixed-income managers to be hired through the current fixed-income RFP process. Staff will present a detailed job description to the Human Resource Committee for review and approval prior to submitting it the full Board at the May meeting.

**Compensation** – While the Board is required to set the salary of this position, staff will not know what salary must be offered to a successful applicant until the interview process is completed and finalists are selected. However, given the urgency of filling the position, staff would like hire prior to the May Board meeting. The Board may at its discretion delegate the salary setting approval to the Human Resources Committee as it did with the Research Director’s position.

**Recommendation** – Staff recommend that the Board authorize the Human Resources Committee to approve a salary for the successful applicant based on a staff recommendation and report its approval to the Board at its May meeting.

# MEMORANDUM

Montana Board of Investments

Department of Commerce

2401 Colonial Drive, 3<sup>rd</sup> Floor

Helena, MT 59601 (406) 444-0001

**To:** Board Members

**From:** Carroll South, Executive Director  
Clifford Sheets, Chief Investment Officer

**Date:** February 13, 2008

**Subject:** STIP Update & Policy Revision Recommendations

## HISTORY

The Short Term Investment Pool (STIP) was created by the Legislature on July 1, 1973 as an investment vehicle to manage state and local government cash. State agencies utilize STIP for accounts that are entitled to retain their interest earnings and have no other options for the investment of their cash. Local governments have other options as permitted by law and use STIP at their discretion.

The STIP investments on June 30, 2007 totaled \$2.8 billion with 479 individual accounts participating throughout the fiscal year, including 193 local government accounts. Since its creation the STIP has provided a convenient way for state and local government agencies to invest and withdraw cash with only 24-hours notice. The pool distributed \$125 million in income to state and local government agencies for Fiscal Year 2007.

***Local Government Participation*** – The law creating STIP and permitting local governments to participate was one of 10 sections contained in legislation to enact the unified investment program required by the new Constitution. There is no “statement of intent” to determine the original legislative intent of the following provision of the law.

**“17-6-204(3) The principal and accrued income, and any part thereof, of each and every account maintained for a participant in the pooled investment fund shall be subject to payment at any time from the fund upon request. Accumulated income shall be remitted to each participant at least annually.”**

This language seems to provide an implicit guarantee of local government principal held in the STIP. The Board’s legal counsel believes that “principal” in this context means that local governments are entitled to receive their full principal upon request. This provision prevents the Board from taking any action to mitigate the impact of large local government withdrawals.

While the law permits local government to invest in the STIP at their discretion, it appears that the Board has no discretion as to whether it accepts and manages local government funds. This section of the law states:

**17-6-204. Investment of local government funds. (1) The governing body of any city, county, school district, or other local government unit or political subdivision having funds which are available for investment and are not required by law or by any covenant or agreement with bondholders or others to be segregated and invested in a different manner may direct its treasurer to remit such funds to the state treasurer for investment under the direction of the board of investments as part of the pooled investment fund.**

The net effect of these provisions is that the Board has no control over the deposits or withdrawals of local government funds in the STIP.

### **LOCAL GOVERNMENT WITHDRAWALS**

Shortly after a Bloomberg news article listed the STIP as having Structured Investment Vehicles (SIV's) in its portfolio, several large local governments began withdrawing their STIP investments, essentially closing their accounts. From November 28 through December 7, local government net withdrawals totaled \$356.0. Board staff were able to accommodate the large withdrawals without being forced to liquidate securities for two primary reasons. 1) In August, staff began shortening the pool duration and increasing liquidity to ensure that sufficient funds were available to accommodate unpredictable local government withdrawals; and 2) the state funds component remained stable during the period. Through February 4th, local governments had withdrawn \$599 million and deposited \$219 million, for a net reduction of \$380 million. Local government participation has stabilized since the first week in December, while state funds have increased by \$200.0 million. As of February 4, state agency funds comprised 77.4 percent of the pool.

A detailed analysis of the withdrawals found that 41 local government accounts were either closed out completely or the balances reduced significantly - reflecting more than a typical "business as usual" withdrawal. In total, these accounts withdrew \$347.9 million. As of February 4, there remained in the pool 152 accounts ranging in size from \$386.00 to \$54.1 million, with an average size of \$3.4 million.

### **THE STIP INVESTMENT PORTFOLIO**

***Sub-prime Mortgages*** - There has been much media discussion recently of the "sub-prime" mortgage crisis and its impact on both private and public money market type funds. The implication is that funds such as the STIP have large holdings of "sub-prime" mortgages that are defaulting. While the sub-prime problem may have precipitated a much larger global credit problem, sub-prime mortgage exposure has little impact on the STIP portfolio. The portfolio holds no direct sub-prime mortgages and of the total assets backing structured investments, approximately \$12.7 million is comprised of securitized sub-prime mortgages - less than 1.0 percent of the pool.

***Structured Investment Vehicles*** - These investments, usually called SIV's, are now one of the hottest subjects in the financial media. The first SIVs were created in the mid-1980s as bankruptcy-remote entities and were sponsored by large banks or investment managers for the purpose of generating leveraged returns. They do this by earning the spread (differences in yields) between the longer-dated assets purchased and the short-term liabilities issued. The balance sheet of a structured investment vehicle typically contains assets such financial institution debt, commercial and residential mortgages, and other receivables.

Maintaining a high quality asset portfolio is a fundamental part of running a SIV. The purchase of these assets is funded through issued liabilities in the form of commercial paper (CP), medium-term notes (MTNs) and subordinate capital notes. The CP and MTN are given the highest credit ratings (A1/P1 or AAA) from one or more of the three major rating agencies. However, in order to maintain the AAA-rating, SIVs have to demonstrate compliance to a stringent set of operating guidelines that cover a wide range of performance characteristics including projected cash-flows, diversification risks, market rate sensitivity and capital adequacy.

As of February 13, 2008, the STIP portfolio holds \$385.0 million in SIV's. The table below shows the date they were purchased, the investment rating at the time of purchase, the broker, the sponsor, and the maturity date.

| <u>Purchase Date</u> | <u>Issue</u> | <u>Ratings</u> |                | <u>Par</u>                | <u>Maturity</u> | <u>Broker</u> | <u>Sponsor</u>            |
|----------------------|--------------|----------------|----------------|---------------------------|-----------------|---------------|---------------------------|
|                      |              | <u>Moodys</u>  | <u>S&amp;P</u> |                           |                 |               |                           |
| 01/16/07             | Orion        | Aaa            | AAA            | 25,000,000                | 01/16/08        | Merrill       | Orion                     |
| 04/20/07             | Orion        | Aaa            | AAA            | 25,000,000                | 04/21/08        | Merrill       | Orion                     |
| 02/28/07             | Parkland     | Aaa            | AAA            | 25,000,000                | 02/28/08        | JP Morgan     | Bank of Montreal          |
| 05/25/07             | Parkland     | Aaa            | AAA            | 25,000,000                | 05/27/08        | JP Morgan     | Bank of Montreal          |
| 03/13/07             | Courtland    | Aaa            | AAA            | 50,000,000                | 03/13/08        | Merrill       | Ontario Teacher's Pension |
| 04/30/07             | Courtland    | Aaa            | AAA            | 25,000,000                | 04/15/08        | Merrill       | Ontario Teacher's Pension |
| 04/12/07             | Axon         | Aaa            | AAA            | 40,000,000                | 04/14/08        | Merrill       | Axon                      |
| 04/16/07             | Axon         | Aaa            | AAA            | 50,000,000                | 04/15/08        | Merrill       | Axon                      |
| 05/29/07             | Harrier      | Aaa            | AAA            | 40,000,000                | 05/29/08        | JP Morgan     | WestLB                    |
| 06/06/07             | Harrier      | Aaa            | AAA            | 40,000,000                | 06/06/08        | JP Morgan     | WestLB                    |
| 06/20/07             | Vetra        | Aaa            | AAA            | <u>40,000,000</u>         | 06/20/08        | Lehman        | Citibank                  |
| <b>Total</b>         |              |                |                | <b><u>385,000,000</u></b> |                 |               |                           |

The ratings of these investments when purchased were the highest rating possible and are identical to the ratings for bonds issued by the United States Government. The two rating agencies providing initial ratings for these investments continue to track them closely through the turmoil in the debt markets. The agencies rate not only the investment itself but the assets backing the investments.

The current ratings are shown in the adjacent table. The Axon and Orion investments are currently in a restructuring phase while the trustee holds all the underlying assets. The Harrier and Vetra investments have a direct line of support from bank sponsors that effectively make them a de facto bank obligation, providing significant credit support beyond that derived from the underlying assets

| <u>Investment</u>                    | <u>Moody's</u> | <u>S&amp;P</u> |
|--------------------------------------|----------------|----------------|
| Axon Financial                       | B2             | D              |
| Cortland Capital                     | Aaa            | AAA            |
| Harrier Finance                      | Aa1            | AAA*           |
| Orion Finance                        | B1             | D              |
| Parkland Finance                     | Aaa            | AAA            |
| Vetra Finance                        | Aaa            | AAA            |
| * Under review with a negative watch |                |                |

**Type of Assets Backing the SIV's** – The SIV investments are backed by the underlying assets listed on the following page.

| <u>Asset Type</u>          | <u>Amount</u>     | <u>Percent</u> |
|----------------------------|-------------------|----------------|
| Financial Institution Debt | \$ 169,139        | 43.93%         |
| Prime Res Mortgage         | 78,519            | 20.39%         |
| CDO/CLO/CBO*               | 53,975            | 14.02%         |
| Commercial Mortgage        | 41,637            | 10.81%         |
| Subprime Res Mortgage      | 12,730            | 3.31%          |
| Student Loans              | 8,823             | 2.29%          |
| Other                      | 8,667             | 2.25%          |
| CC Receivables             | 8,432             | 2.19%          |
| Plant & Equip Loan/Lease   | 2,112             | 0.55%          |
| Corporate Debt             | 500               | 0.13%          |
| Consumer Loans             | 466               | 0.12%          |
| <b>Total</b>               | <b>\$ 385,000</b> | <b>100.00%</b> |

\* Collateralized Debt Obligations/Loan Obligations/Bond/Bank Obligations

All of the underlying assets continue to have “investment grade” ratings as shown below.

| <u>Investment</u> | <u>AAA</u>        | <u>AA</u>        | <u>A</u>         | <u>BBB</u>    | <u>Total</u>      |
|-------------------|-------------------|------------------|------------------|---------------|-------------------|
| Axon Financial    | 86,580.00         | 2,610.00         | 450.00           | 360.00        | 90,000.00         |
| Cortland Capital  | 55,747.50         | 19,252.50        | -                | -             | 75,000.00         |
| Harrier Finance   | 51,920.00         | 21,680.00        | 6,400.00         | -             | 80,000.00         |
| Orion Finance     | 30,450.00         | 17,050.00        | 2,500.00         | -             | 50,000.00         |
| Parkland Finance  | 22,500.00         | 25,000.00        | 2,000.00         | 500.00        | 50,000.00         |
| Vetra Finance     | 38,640.00         | 1,360.00         | -                | -             | 40,000.00         |
| <b>Total</b>      | <b>\$ 285,838</b> | <b>\$ 86,953</b> | <b>\$ 11,350</b> | <b>\$ 860</b> | <b>\$ 385,000</b> |

## **SCHEDULE OF SUBSTANTIVE SIV EVENTS**

### Axon

- October 30, 2007 – S&P downgrades Axon to BBB.
- November 7, 2007 - Staff in a formal report to the Board note that Axon was placed on negative watch by all three rating agencies.
- November 9, 2007 – S&P downgrades Axon further to CCC by S&P.
- November 15, 2007 - Staff send a memorandum to Board members informing them of the downgrade and give a general update of all SIV’s, noting that others had been placed on watch but were still investment grade.
- November 19 – Axon breaches a “NAV” trigger resulting in an automatic liquidation event.
- November 27, 2007 - S&P downgrades Axon to D
- November 28, 2008 - Staff inform the Board of the downgrade and note that all other SIV’s are still investment grade. The memorandum is posted on the Board’s website.
- November 30, 2007 - The Executive Director and Chairman issue a joint press release assuring local governments that the Board would not suspend their withdrawals from the STIP as Florida had done.

- December 11, 2007 - Staff present a report to the Legislative Finance Committee providing an update on local government withdrawals and noted that Axon had been downgraded to D and that a steering committee of senior creditors was being formed. The report was posted on the Board's web site that day.
- December 14 – Moody's downgrades Axon to B2
- January 7, 2008 - Staff presented a STIP report to the State Administration and Veterans' Affairs Committee providing another update on local government withdrawals and reiterated that the Axon investment was in a restructuring phase. The report was posted on the Board's web site that day.
- February 13, 2008 – The underlying Axon portfolio is currently undergoing extensive evaluation by a financial advisor hired by the Security Trustee. All underlying assets are held by the Security Trustee and the vehicle will likely be restructured in some manner.

### Orion

- November 30, 2007 – Moody's downgrades Orion to Baa3, which triggers an Automatic Enforcement Event placing the underlying assets in the control of the Security Trustee.
- December 7, 2007 – S&P's maintains an AAA rating but places Orion on negative watch.
- December 11, 2007 - Staff present a report to the Legislative Finance Committee noting that Orion had been placed on watch by S&P's and downgraded to Baa3 by Moody's. The report is sent to the Board, members of the Legislative Audit Committee, and posted on the Board's web site that day.
- January 7, 2008 - Staff present a report to the State Administration and Veterans' Affairs Committee noting that Orion was in a "restructuring mode." The report is sent to the Board, Legislative Audit Committee members, and posted on the Board's web site that day.
- January 14, 2008 – Orion fails to pay notes due on January 14, 2008.
- January 16, 2008 – S&P down grades Orion to "D" due to a technical default triggered by not paying the January 14 note when due.
- January 17, 2008 – Board staff confirm that its \$25.0 million note due on January 16 was not paid and the \$25.0 million is booked as a receivable.
- January 18, 2008 – The Lee Newspapers reports on the Orion default and other STIP issues.
- January 23, 2008 – Moody's downgrades Orion from Baa3 to B1. The downgrade statement notes that the B1 rating reflects the likelihood of a high or full recovery of the notes if the vehicle avoided assets sales. The downgrade notice is sent to the Board.
- January 23, 2008 - Staff appear before the Legislative Audit Committee for approval of the Board's annual financial audit and have a lengthy discussion of the STIP. The downgrade notice is sent to Legislative Audit Committee members.

### **WHAT IS A SIV RESTRUCTURING?**

The SIV documents are complex instruments that generally contain certain provisions that trigger "events." In order to maintain an investment grade rating, the vehicles must demonstrate compliance to a stringent set of operating guidelines that cover a wide range of performance characteristics including projected cash-flows, diversification risks, market rate sensitivity, and pricing of the underlying assets in relation to the liabilities. Once the instrument falls out of compliance with the terms of the guidelines, the security trustee may be required to "take over" the collateral portfolio and exercise total discretion. A restructuring may be driven by a senior creditors' steering committee working closely with the security trustee. The Board is a member of the Orion steering committee but is not a member of the Axon steering committee.

## **THE STIP INVESTMENT POLICY**

As the fiduciary for the Unified Investment Program, the Board establishes broad investment policies for each investment pool and all separate accounts. Investment staff must comply with the approved policies as they carry out the day-to-day securities trading activity. The STIP Investment Policy Statement was revised in August 2006 to include the following provisions applying to Asset Backed Securities (ABS - which includes SIV's). The maximum limit for one issuer was reduced from 5.0 percent to 4.0 percent of the portfolio. The overall limit on ABS was reduced from no limit to 70.0 percent of the portfolio

## **DID THE POLICY AUTHORIZE STRUCTURED INVESTMENT VEHICLES?**

**Investment Type** - The current STIP Investment Policy authorizes a maximum of 70.0 percent of the portfolio to be invested in Asset-Backed Securities (ABS) of any type. The policy specifically includes "structured investment vehicles" within the definition of ABS. On November 15, 2007 the SIV's comprised 22.6 percent of the portfolio. As of February, 13, 2008 SIV exposure is 17 percent of the portfolio.

**Investment Ratings** – The policy requires that SIV's be rated triple-A by at least one rating service at the time of purchase. At the time of purchase these investments were rated triple-A by two rating agencies.

**Maximum Investment per Issuer** – The policy requires that one issuer must be limited to no more than 4.0 percent of the portfolio. When the \$90.0 million Axon securities were purchased (the largest SIV), they comprised 3.67 percent of the STIP portfolio.

**Maturity Limit** – The policy requires that, with a few exceptions for variable rate or floating rate securities, an investment may not have a maturity date exceeding 397 days from the date of purchase. The longest maturity date for any of the SIV's currently held in the portfolio was 370 days on the purchase date.

**Other Policy Provisions** – The policy authorizes ABS investments with the following caveat:

**"Asset-backed securities (ABS) collateralized by: credit cards, automobile loans, leases and other receivables acceptable to staff in their analysis of this type of structure"**

In retrospect, the portfolio manager placed too much confidence in the rating agencies as the primary judges of ABS quality, rather than analyzing the structure and the underlying assets backing the investment. There was a perception that the highest-rated structured securities (AAA-rated SIVs) were impregnable and would not have credit quality problems because the investment ratings were equivalent to US Treasury obligations. Unlike an unsecured corporate credit, there were high quality assets backing the instrument that would maintain their value and ensure the payment of principal at maturity. There was little, if any, look-through or monitoring of the specific underlying collateral and its current status as reported monthly by the investment administrator. The documentation for many of the issues held was not current, or not readily accessible. Also, there was not an approved list per se, but a working list of issuers that were available in the market and met the portfolio manager's personal level of comfort.

## IS THE PORTFOLIO CURRENTLY IN COMPLIANCE WITH POLICY?

Recent events beyond the control of Board staff have resulted in the portfolio being out of technical compliance with the Investment Policy. The rating agencies have downgraded two securities in the portfolio to less than “investment grade”, which means they no longer meet the minimum rating requirement.

The policy addresses these contingency events as follows:

### **“DIVERSIFICATION AND LIMITATIONS OF THE STIP PORTFOLIO**

**These limitations shall apply at the time of purchase of a security. Should the portfolio fall out of compliance due to downgrades or shrinkage of the total portfolio size, a reasonable cure period (not to exceed 90 days) will be allowed so that compliance can be obtained via maturities or sales at fair market value.”**

The Axon investment was downgraded to CCC by S&P on November 9, just two days after the Board last met. The 90 days permitted in the current policy to exercise a reasonable cure expired on February 7, five days before February Board meeting. Given that this investment is in a restructuring phase, staff do not believe it would be prudent to attempt to sell it in the current distressed debt environment. Staff will recommend revisions to this section of the policy to permit some staff discretion under the type of unpredictable environment encountered recently.

The STIP portfolio as of February 1 is shown by sector below in millions.

| <u>Sector</u>                  | <u>Amount</u>             | <u>%</u>              |
|--------------------------------|---------------------------|-----------------------|
| Asset-Backed Corporate Paper   | \$628,763                 | 27.78%                |
| Structured Investment Vehicles | 454,997                   | 20.10%                |
| Corporate Commercial Paper     | 528,886                   | 23.37%                |
| Corporate Notes                | 155,000                   | 6.85%                 |
| Certificate of Deposits        | 129,995                   | 5.74%                 |
| Government Agencies            | 274,198                   | 12.12%                |
| Money Market Funds             | 90,896                    | 4.02%                 |
| Repurchase Agreement           | <u>502</u>                | <u>0.02%</u>          |
| <b>Total</b>                   | <b><u>\$2,263,237</u></b> | <b><u>100.00%</u></b> |

## IMPACT ON THE STIP INVESTMENT PORTFOLIO

There has been no material impact on the assets in the STIP portfolio due to the SIV holdings. The STIP is operated as an “amortized cost” fund, which means that the individual securities in the portfolio are not priced daily, weekly, or monthly, but are held at “cost” until maturity. This accounting methodology is based on the premise that all investments will be “purchased and held” to maturity rather than sold at a loss or gain prior to maturity. This is the only process by which a constant share price can be maintained. If securities were priced daily, there could be a different share value each business day.

All current securities in STIP are held at amortized cost until maturity. The SIV’s currently undergoing restructuring will also be held at cost until the restructuring is complete and the final outcome is known. The unpaid \$25.0 million Orion note is held on the books as a receivable and included in the pool’s Net Asset Value.

## **RECOMMENDED INVESTMENT POLICY REVISIONS**

Proposed staff revisions to the policy are attached. For the most part, the recommendations codify the current day-to-day management policies that were implemented and updated by staff since the debt crises and ensuing market volatility began to surface in August. While the proposed revisions tighten up the day-to-day procedures and operations of the pool, they also provide sufficient flexibility and discretion to ensure that a rigid adherence to the policy would not force staff to take an action that could be deemed imprudent. For example, a forced, untimely sale of a security because of a ratings downgrade or an extended maturity due to a restructuring would not be in the best interest of pool participants. The prudent expert principle law requires the Board among other things to:

*“discharge the duties solely in the interest of and for the benefit of the funds forming the unified investment program.”*

The first enclosure is a “marked” version that shows the suggested deletions and additions to the existing policy. The second enclosure is a clean copy incorporating the proposed revisions. Also added to the clean copy is a set of definitions describing the different type of investments referenced in the policy.

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

### PURPOSE

The purpose of this document is to establish policies that will govern the investment activities of the Montana Board of Investments (MBOI) with regard to the management of the Short-term Investment Pool (STIP). These policies are adopted by, and can be changed only by a majority of Board members at a publicly-noticed meeting.

These policies are designed to ensure the prudent management of public funds, conformance to Montana Constitution and law, the availability of operating and capital funds when needed, and an investment return competitive with comparable funds and financial market indices.

All participants in the investment process shall act responsibly as custodians of the public trust and shall recognize that the STIP portfolio is subject to public review and evaluation. The pool shall be designed and managed in accordance with the standards of a "prudent expert" and managed as a "2(a)-7-like" portfolio.

### SCOPE

This Investment Policy applies to the investment of short-term operating funds of the State of Montana, participating local government entity funds, and the liquidity requirements of the various pension and trust funds managed by the MBOI.

1. **Pooling of Funds.** Each participant choosing to invest in STIP must provide a legal opinion that it is authorized by law to participate. The STIP will consolidate cash balances from all participating funds to maximize investment earnings. Investment income ~~will be~~ is accrued daily and allocated monthly to participants based on their pro rata participation and in accordance with generally accepted accounting principles.
2. **Amortized Cost.** STIP holdings ~~will be~~ are carried at amortized cost.

### DELEGATION OF AUTHORITY

1. **Board.** The Board, as a quasi-judicial body under state law is legally responsible for the prudent investment of the STIP program. The Board is responsible for approving and amending this policy and delegates the responsibility for administering the STIP program as outlined below ~~follows~~:
2. **Staff.** Responsibility for the daily operation of the STIP is delegated to Board Staff, who shall act in accordance with this policy. Staff's duties include, but are not limited to, the following:
  - a. **The Executive Director (ED)** is responsible for the creation of the STIP investment program and the establishment of investment and financial reporting procedures consistent with this policy. The ED is also responsible for the following:
    - i. ~~the~~ collection and reporting of all income;
    - ii. ~~for~~ reconciling all transactions with the records of brokers and custodians; and,
    - iii. ~~for~~ monitoring compliance with statute and this policy.
  - b. **The Chief Investment Officer (CIO)** ~~is responsible for all trades undertaken and~~ shall establish a system to review and regulate the activities of subordinate investment officers and shall exercise authority over the entire investment staff and investment process.
  - c. **The Portfolio Manager (PM)** assigned to the STIP portfolio is responsible for, but not limited to, the following:
    - i. ~~D~~developing and recommending amendments to the STIP policy to the CIO;
    - ii. ~~I~~implementing and adhering to the STIP policy;
    - iii. structuring the portfolio to meet investment objectives;
    - iv. all trades undertaken in the portfolio; and
    - v. ~~R~~eporting to the Board at least quarterly on the results and investment strategy for the pool.

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

- d. **The Board Internal Auditor (BIA)**, if the Board chooses to employ one, will periodically review the STIP internal controls. The audit will be designed to measure Board Staff compliance with this policy.
3. **General Investment Consultant.** The General Investment Consultant shall provide assistance to the Board's Staff as ~~needed and~~ requested in conjunction with the management of the STIP.

### OBJECTIVES

1. **Investment Objective.** The STIP shall be managed to accomplish the following hierarchy of objectives:
- a. **Preservation of Principal.** The STIP portfolio investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective will be to mitigate the inherent risks associated with short-term money market investments, primarily credit risk and interest rate risk
    - i. **Credit Risk.** The STIP portfolio will minimize credit risk, the risk of loss due to the failure of the security issuer or backer by means of the following:
      1. limiting investments to those securities with high credit ratings ~~safest types of securities~~;
      2. pre-qualifying the financial institutions, broker/dealers, intermediaries and advisers with whom the STIP will conduct business; and
      3. diversifying the investment portfolio so that potential losses on individual securities will be minimized.
    - ii. **Interest Rate Risk.** The STIP portfolio will minimize the risk that the market value of the securities will deviate significantly from cost due to changes in the general level of interest rate by means of the following:
      1. structuring the investment portfolio so that securities mature to meet cash requirements for ongoing operations thereby normally avoiding the need to sell securities on the open market prior to maturity;
      2. investing funds primarily in short-term maturities of money market securities; and
      3. maintaining a dollar-weighted average portfolio maturity of ~~90~~ 60 days or less (for this purpose, the date to the next coupon reset date will be used for all floating or variable rate securities).
  - b. **Maintenance of Liquidity.** The STIP portfolio will maintain sufficient liquidity to meet all state agency and local government operating requirements and STIP participant investment cash flow needs that ~~can may~~ be reasonably anticipated; and
  - c. **Return.** The STIP investment portfolio shall be managed ~~designated~~ with the objective of attaining a money market rate of return throughout market and economic cycles, taking into account the investment risk constraints and liquidity needs of the participants.

### AUTHORIZED & SUITABLE INVESTMENTS ~~FOR THE STIP PORTFOLIO~~

1. **Permissible Securities.** The following securities and investment vehicles are approved for purchase for the STIP:
- a. U.S. Treasury and U.S. Governmental Agencies, or corporations wholly owned by the U.S. Government;
  - b. Publicly traded domestic corporate bonds, notes and medium term notes (MTNs);
  - c. Asset-backed securities (ABS) collateralized by: credit cards, automobile loans, leases and other receivables acceptable to staff in their analysis of this type of structure;

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

- d. Publicly and privately traded ~~domestic~~ U.S. dollar denominated money market securities, including, but not limited to:
    - i. Bankers' Acceptances (BA),
    - ii. Commercial Paper (CP), and
    - iii. Certificates of Deposits (CD), including Eurodollar and Yankee obligations which include CDs issued in U.S. dollars by foreign banks and foreign branches of U.S. banks.
  - e. Floating rate securities tied to LIBOR, Fed Funds, Treasury Bills or commercial paper indices;
  - f. Repurchase Agreements and Reverse Repurchase Agreements;
  - g. U.S. Dollar bonds and money market securities issued in the United States by foreign borrowers (Yankees);
  - h. U.S. Dollar bonds and money market securities issued outside the United States by domestic or foreign borrowers; and
  - i. Institutional money market funds.
2. **Approved List.** Purchases of securities other than U.S. government or U.S. Agency obligations are restricted to those which are pre-approved. The approved list shall be maintained by Staff with issuers added or removed from time to time depending on an analysis of their risk characteristics and suitability for use in the portfolio. At least two investment staff must approve names on the list. Issuers on the list shall be reviewed at least semi-annually for continued inclusion on the approved list.

### DIVERSIFICATION AND LIMITATIONS OF THE STIP PORTFOLIO

These limitations shall apply at the time of purchase of a permissible security. Should the portfolio fall out of compliance due to downgrades or shrinkage of the total portfolio size, a reasonable cure period (~~not to exceed 90 days~~) will be allowed so that compliance can be obtained via through normal maturities or sales at fair market value. Sales will be considered as a means of curing any out-of-compliance condition only if deemed prudent by Staff in light of prevailing market conditions.

1. **U.S. Government Securities**
  - a. 100% of portfolio may be invested in U.S. Treasury Securities;
  - b. 65% maximum of portfolio may be invested in U.S. Government Agency Securities;
  - c. 25% maximum of portfolio per single U.S. Agency issuer.
2. **~~Domestic~~ Commercial paper, corporate bonds, notes and medium-term notes (MTNs)**
  - a. ~~50%~~40% maximum of portfolio in corporate indebtedness;
    - i. ~~50%~~ Up to 100% maximum of this corporate debt limit may consist of ~~portfolio in~~ commercial paper; and
    - ii. ~~33%~~ Up to 50% maximum of this corporate debt limit may consist of bonds, notes or ~~portfolio in corporate notes~~ MTNs.
  - b. ~~3.5%~~2% maximum of portfolio per issuer in ~~domestic~~ commercial paper and corporate bonds, notes, and MTN's except that up to 3% per issuer may be invested in CP maturing in seven days or less at times of restricted supply such as during calendar year-end. Repurchase agreement obligations of a financial institution shall not be considered in this limit;
  - c. CP, ~~and~~ corporate notes and MTNs ~~medium-term notes~~ must have a minimum of ~~2~~ two separate credit ratings (either short or long term) by Standard & Poor's, Moody's or Fitch;
    - i. CP must be rated a minimum of A1 (S&P), P1 (Moody's) or F1 (Fitch) at the time of purchase; and

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

- ii. Corporate notes & medium-term notes must be rated, by at least one rating agency, a  
at minimum of AA- (S&P), Aa3 (Moody) or AA3 (Fitch) at the time of purchase.

### 3. Asset-backed Securities (ABS)

- a. ~~70%~~40% maximum of portfolio in Asset Backed Commercial Paper (ABCP); ABS of any type, including CP, notes, bonds, and structured investment vehicles (SIV's).
- b. ~~4%~~2% maximum of portfolio per issuer in ABCP; ~~notes, bonds, and SIV's.~~
- c. ABCP must carry at least two separate credit ratings and be rated a minimum of A1 (S&P), P1 (Moody's) or F1 (Fitch) at the time of purchase;
- d. ABCP purchases shall be limited to maturities of 30 days, except that up to 10% of the portfolio may be invested in maturities of up to 60 days;
- e. 20% maximum of the portfolio may be invested in senior notes issued by Structured Investment Vehicles (SIV), however purchases as of the effective date of this policy may only be made if the issuer carries the explicit support of an approved financial institution that otherwise meets the criteria established for bank obligations listed below;
- f. ~~Notes, bonds, and SIV's~~ must be rated AAA or Aaa by at least ~~one~~ two rating services (S&P, Moody's or Fitch) at the time of purchase; and
- g. No more than 10% of the portfolio may be invested in any one financial sponsor of ABS of any type. In measuring exposure to a financial sponsor for this purpose, both holdings in the ABS sponsored by the firm as well as its direct obligations shall be considered. Repurchase agreement obligations of a financial institution shall not be considered in this limit.

### 4. Bankers Acceptances and Certificates of Deposit

- a. 30% maximum of portfolio may be invested in the combination of BA's and CD's;
- b. ~~5%~~2% maximum of portfolio invested in any one issuer, except that up to 3% per issuer may be invested in CD's maturing in seven days or less at times of restricted supply such as during calendar year-end. Repurchase agreement obligations of a financial institution shall not be considered in this limit;
- c. BA's and CD's must carry at least two separate credit ratings and be rated ~~at~~ a minimum of A1, P1 or F1 at the time of purchase; and
- d. If ~~not~~ rated by only one rating agency, the issuer's parent must also carry a minimum long-term unsecured senior debt rating of AA- or Aa3 or higher by a different rating agency.

### 5. Repurchase and Reverse Repurchase Agreements

- a. Transactions will be conducted only with approved primary dealers or the master custodial bank, and under the terms of a written master repurchase agreement;
- b. ~~50%~~ 30% maximum of the portfolio may be invested in repurchase agreements;
- c. ~~40%~~ 5% maximum of the portfolio with any single primary dealer or financial institution;
- d. The maximum term of any repurchase agreement will be ~~180~~90 days;
- e. Acceptable forms of collateral under repurchase agreements will consist of U.S. Treasury and/or U.S. Agency securities which will be required to be maintained at a market value of 102% of the value of the repurchase agreement;
- f. The maximum term of any reverse repurchase agreement will be 90 days and must be matched to anticipated cash flows adequate to liquidate the transaction; and
- g. A maximum of fifteen percent (15%) maximum of the portfolio may be ~~allocated~~ pledged to secure reverse repurchase agreements; transactions will be used only to secure borrowings for temporary or emergency purposes.
- h. ~~Only securities authorized in statute for the investment of public funds will be accepted as collateral;~~

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

~~i. The market value plus accrued income of U.S. Treasury, U.S. Agency and money market securities utilized as collateral in repurchase agreements will be 102% of the value of the repurchase agreement.~~

### 6. Institutional Money Market Funds (MMF's)

- a. Registered 2(a)7 investment companies only;
- b. 10% maximum of portfolio may be invested in institutional MMF's; and
- c. 5% maximum of portfolio invested in any one MMF

### 7. Industry and Collateral Concentration Limitation

- a. No more than 15% of the portfolio will be invested in companies whose principal business activities are in the same industry except that holdings in financial service companies are not limited; and
- b. No more than 10% of the portfolio will be invested in any one type of receivable or collateral type via asset backed securities with the exception of financial institution obligations. These underlying types of collateral include such assets as trade receivables, student loans, residential mortgages, commercial mortgages, auto loans and leases, plant and equipment loans and leases, repurchase agreements, collateralized debt obligations of all types, credit card receivables, and other forms of collateral acceptable as part of the approval process for a specific issuer.

8. **Maximum Maturities.** To the extent possible, investment in the STIP portfolio shall attempt to match the anticipated cash flow requirements. For the purposes of the STIP portfolio, selection of investment maturities must be consistent with SEC Rule 2(a)-7 which requires a maximum final maturity of any security not to exceed 397 days, with the following exceptions:

- a. Securities used as collateral in repurchase agreements;
- b. A variable rate security which on any reset date can reasonably be expected to have a market value that approximates its amortized cost; and
- c. Securities received as settlement in exchange for an originally purchased security.
- d. ~~A floating rate security which at all times can reasonably be expected to have a market value that approximates its amortized cost.~~

### 9. Liquidity

- a. Minimum one-day maturities equal to ~~3%~~5% or greater and minimum maturities within one week equal to 10% or greater of the total fund value including MMF holdings and balances in the U.S. Bank sweep account which is held by the Treasurer's Fund;
- b. The fund may not acquire any security if, or as a result, more than 10% of the fund's net assets would be invested in securities that are illiquid; and
- c. ~~Illiquid securities are securities that cannot be sold or disposed of in the ordinary course of business within seven business days at approximately the value at which they are being carried on the fund's books. Illiquid securities may shall include repurchase agreements maturing in more than seven days, and restricted, privately placed securities that are not registered under the Securities Act of 1933, with the exception that certain restricted securities eligible for resale to qualified institutional investors, including Rule 144a securities, are not subject to this limitation on illiquid securities. under the federal securities laws, generally may be resold only to qualified institutional buyers in accordance with Rule 144A under the 1933 Act.~~

## BENCHMARK

**SHORT-TERM INVESTMENT POOL (STIP)  
INVESTMENT POLICY**

The STIP portfolio performance results will be compared to the return of a one month LIBOR index as a market benchmark, and the iMoneyNet First Tier Institutional only (gross) return as a peer group measure.

**SHORT-TERM INVESTMENT POOL (STIP)  
INVESTMENT POLICY**

| <b>Short-term Investment Pool (STIP)<br/>Summary of Investment Restrictions<br/>[Policy Composite]</b> |                         |   |  |                                |                                |
|--|-------------------------|---|--|--------------------------------|--------------------------------|
| <u>Investment Type</u>   | <u>Maximum Maturity</u> | <u>Maximum Specified Percentage By Issuer</u> | <u>Maximum Specified Percentage of Portfolio</u> | <u>ST Quality Requirements</u> | <u>LT Quality Requirements</u> |
| Asset-backed Securities  | 397                     | 2%  | 50%  | A1/P1/F1                       | “AAA”                          |
| Bankers Acceptances  | 397                     | 2%  | 30%  | A1/P1/F1                       | Aa3/AA-                        |
| Corporate Commercial Paper   | 270                     | 2%  | 40%  | A1/P1/F1                       | None                           |
| Corporate Notes  | 397                     | 2%  | 20%  | N/A                            | Aa3/AA-                        |
| Money Market Mutual Funds  | 397                     | 5%  | 10%  | A1/P1/F1                       | N/A                            |
| Negotiable CD's  | 397                     | 2%  | 30%  | A1/P1/F1                       | “AA /Aa3”                      |
| Repurchase Agreements  | 90                      | 10%   | 50%  | None                           | “AAA”                          |
| Reverse Repurchase Agreements  | 90                      | 10%   | 15%  | None                           | “AAA”                          |
| U.S. Agencies  | 397                     | 25%   | 65%  | None                           | “AAA”                          |
| U.S. Treasury  | 397                     | None  | None   | None                           | “AAA”                          |

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

### PURPOSE

The purpose of this document is to establish policies that will govern the investment activities of the Montana Board of Investments (MBOI) with regard to the management of the Short-term Investment Pool (STIP). These policies are adopted by, and can be changed only by a majority of Board members at a publicly-noticed meeting.

These policies are designed to ensure the prudent management of public funds, conformance to Montana Constitution and law, the availability of operating and capital funds when needed, and an investment return competitive with comparable funds and financial market indices.

All participants in the investment process shall act responsibly as custodians of the public trust and shall recognize that the STIP portfolio is subject to public review and evaluation. The pool shall be designed and managed in accordance with the standards of a “prudent expert” and managed as a “2a-7-like” portfolio.

### SCOPE

This Investment Policy applies to the investment of short-term operating funds of the State of Montana, participating local government entity funds, and the liquidity requirements of the various pension and trust funds managed by the MBOI.

1. **Pooling of Funds.** Each participant choosing to invest in the STIP must provide a legal opinion that it is authorized by law to participate. The STIP will consolidate cash balances from all participating funds to maximize investment earnings. Investment income is accrued daily and allocated monthly to participants based on their pro rata participation and in accordance with generally accepted accounting principles.
2. **Amortized Cost.** STIP holdings are carried at amortized cost.

### DELEGATION OF AUTHORITY

1. **Board.** The Board, as a quasi-judicial body under state law is legally responsible for the prudent investment of the STIP. The Board is responsible for approving and amending this policy and delegates the responsibility for administering the STIP as outlined below:
2. **Staff.** Responsibility for the daily operation of the STIP is delegated to Board Staff, who shall act in accordance with this policy. Staff’s duties include, but are not limited to, the following:
  - a. **The Executive Director** (ED) is responsible for the creation of the STIP investment program and the establishment of investment and financial reporting procedures consistent with this policy. The ED is also responsible for the following:
    - i. collection and reporting of all income;
    - ii. reconciling all transactions with the records of brokers and custodians; and,
    - iii. monitoring compliance with statute and this policy.
  - b. **The Chief Investment Officer** (CIO) shall establish a system to review and regulate the activities of subordinate investment officers and shall exercise authority over the entire investment staff and investment process.
  - c. **The Portfolio Manager** (PM) assigned to the STIP portfolio is responsible for, but not limited to, the following:
    - i. developing and recommending amendments to the STIP policy to the CIO;
    - ii. implementing and adhering to the STIP policy;
    - iii. structuring the portfolio to meet investment objectives;
    - iv. all trades undertaken in the portfolio; and,
    - v. reporting to the Board at least quarterly on the results and investment strategy for the pool.

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

- d. **The Board Internal Auditor (BIA)**, if the Board chooses to employ one, will periodically review the STIP internal controls. The audit will be designed to measure Board Staff compliance with this policy.
3. **General Investment Consultant.** The General Investment Consultant shall provide assistance to the Board's Staff as requested in conjunction with the management of the STIP.

### OBJECTIVES

1. **Investment Objective.** The STIP shall be managed to accomplish the following hierarchy of objectives:
  - a. **Preservation of Principal.** The STIP portfolio investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. The objective will be to mitigate the inherent risks associated with short-term money market investments, primarily credit risk and interest rate risk
    - i. **Credit Risk.** The STIP portfolio will minimize credit risk, the risk of loss due to the failure of the security issuer or backer by means of the following:
      1. limiting investments to those securities with high credit ratings;
      2. pre-qualifying the financial institutions, broker/dealers, intermediaries and advisers with whom the STIP will conduct business; and
      3. diversifying the investment portfolio so that potential losses on individual securities will be minimized.
    - ii. **Interest Rate Risk.** The STIP portfolio will minimize the risk that the market value of the securities will deviate significantly from cost due to changes in the general level of interest rate by means of the following:
      1. structuring the investment portfolio so that securities mature to meet cash requirements for ongoing operations thereby normally avoiding the need to sell securities on the open market prior to maturity;
      2. investing funds primarily in short-term maturities of money market securities; and
      3. maintaining a dollar-weighted average portfolio maturity of 60 days or less (for this purpose, the date to the next coupon reset date will be used for all floating or variable rate securities).
  - b. **Maintenance of Liquidity.** The STIP portfolio will maintain sufficient liquidity to meet all state agency and local government operating requirements and STIP participant investment cash flow needs that can be reasonably anticipated; and
  - c. **Return.** The STIP investment portfolio shall be managed with the objective of attaining a money market rate of return throughout market and economic cycles, taking into account the investment risk constraints and liquidity needs of the participants.

### AUTHORIZED & SUITABLE INVESTMENTS

1. **Permissible Securities.** The following securities and investment vehicles are approved for purchase for the STIP:
  - a. U.S. Treasury and U.S. Governmental Agencies, or corporations wholly owned by the U.S. Government;
  - b. Publicly traded domestic corporate bonds, notes and medium term notes (MTNs);
  - c. Asset-backed securities (ABS) collateralized by: credit cards, automobile loans, leases and other receivables acceptable to staff in their analysis of this type of structure;
  - d. Publicly and privately traded U.S. dollar denominated money market securities, including, but not limited to:

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

- i. Bankers' Acceptances (BA),
    - ii. Commercial Paper (CP), and
    - iii. Certificates of Deposits (CD), including Eurodollar and Yankee obligations which include CDs issued in U.S. dollars by foreign banks and foreign branches of U.S. banks.
  - e. Floating rate securities tied to LIBOR, Fed Funds, Treasury Bills or commercial paper indices;
  - f. Repurchase Agreements and Reverse Repurchase Agreements;
  - g. U.S. Dollar bonds and money market securities issued in the United States by foreign borrowers (Yankees);
  - h. U.S. Dollar bonds and money market securities issued outside the United States by domestic or foreign borrowers; and
  - i. Institutional money market funds.
2. **Approved List.** Purchases of securities other than U.S. government or U.S. Agency obligations are restricted to those which are pre-approved. The approved list shall be maintained by Staff with issuers added or removed from time to time depending on an analysis of their risk characteristics and suitability for use in the portfolio. At least two investment staff must approve names on the list. Issuers on the list shall be reviewed at least semi-annually for continued inclusion on the approved list.

|  |
|--|
| <b>DIVERSIFICATION AND LIMITATIONS</b> |
|--|

These limitations shall apply at the time of purchase of a permissible security. Should the portfolio fall out of compliance due to downgrades or shrinkage of the total portfolio size, a reasonable cure period will be allowed so that compliance can be obtained through normal maturities or sales at fair market value. Sales will be considered as a means of curing any out-of-compliance condition only if deemed prudent by Staff in light of prevailing market conditions.

1. **U.S. Government Securities**
  - a. 100% of portfolio may be invested in U.S. Treasury Securities;
  - b. 65% maximum of portfolio may be invested in U.S. Government Agency Securities;
  - c. 25% maximum of portfolio per single U.S. Agency issuer.
2. **Commercial paper, corporate bonds, notes and medium-term notes (MTNs)**
  - a. 40% maximum of portfolio in corporate indebtedness;
    - i. Up to 100% of this corporate debt limit may consist of commercial paper; and
    - ii. Up to 50% of this corporate debt limit may consist of bonds, notes or MTNs.
    - iii. 2% maximum of portfolio per issuer in commercial paper and corporate bonds, notes, and MTN's except that up to 3% per issuer may be invested in CP maturing in seven days or less at times of restricted supply such as during calendar year-end. Repurchase agreement obligations of a financial institution shall not be considered in this limit;
  - b. CP, corporate notes, and MTNs must have a minimum of two separate credit ratings (either short or long term) by Standard & Poor's, Moody's or Fitch;
    - i. CP must be rated a minimum of A1 (S&P), P1 (Moody's) or F1 (Fitch) at the time of purchase; and
    - ii. Corporate notes & medium-term notes must be rated, by at least one rating agency, a minimum of AA- (S&P), Aa3 (Moody) or AA3 (Fitch) at the time of purchase.
3. **Asset-backed Securities (ABS)**
  - a. 40% maximum of portfolio in Asset Backed Commercial Paper (ABCP);
  - b. 2% maximum of portfolio per issuer in ABCP;

## **SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY**

- c. ABCP must carry at least two separate credit ratings and be rated a minimum of A1 (S&P), P1 (Moody's) or F1 (Fitch) at the time of purchase;
  - d. ABCP purchases shall be limited to maturities of 30 days, except that up to 10% of the portfolio may be invested in maturities of up to 60 days;
  - e. 20% maximum of the portfolio may be invested in senior notes issued by Structured Investment Vehicles (SIV), however purchases as of the effective date of this policy may only be made if the issuer carries the explicit support of an approved financial institution that otherwise meets the criteria established for bank obligations listed below;
  - f. SIV's must be rated AAA or Aaa by at least two rating services (S&P, Moody's or Fitch) at the time of purchase; and
  - g. No more than 10% of the portfolio may be invested in any one financial sponsor of ABS of any type. In measuring exposure to a financial sponsor for this purpose, both holdings in the ABS sponsored by the firm as well as its direct obligations shall be considered. Repurchase agreement obligations of a financial institution shall not be considered in this limit.
- 4. Bankers Acceptances and Certificates of Deposit**
- a. 30% maximum of portfolio may be invested in the combination of BA's and CD's;
  - b. 2% maximum of portfolio invested in any one issuer, except that up to 3% per issuer may be invested in CD's maturing in seven days or less at times of restricted supply such as during calendar year-end. Repurchase agreement obligations of a financial institution shall not be considered in this limit;
  - c. BA's and CD's must carry at least two separate credit ratings and be rated a minimum of A1, P1 or F1 at the time of purchase; and
  - d. If rated by only one rating agency, the issuer's parent must also carry a minimum long-term unsecured senior debt rating of AA- or Aa3 or higher by a different rating agency.
- 5. Repurchase and Reverse Repurchase Agreements**
- a. Transactions will be conducted only with approved primary dealers or the master custodial bank, and under the terms of a written master repurchase agreement;
  - b. 30% maximum of the portfolio may be invested in repurchase agreements;
  - c. 5% maximum of the portfolio with any single primary dealer or financial institution;
  - d. The maximum term of any repurchase agreement will be 90 days;
  - e. Acceptable forms of collateral under repurchase agreements will consist of U.S. Treasury and/or U.S. Agency securities which will be required to be maintained at a market value of 102% of the value of the repurchase agreement;
  - f. The maximum term of any reverse repurchase agreement will be 90 days and must be matched to anticipated cash flows adequate to liquidate the transaction; and
  - g. A maximum of fifteen percent (15%) of the portfolio may be pledged to secure reverse repurchase agreements. Transactions will be used only to secure borrowings for temporary or emergency purposes.
- 6. Institutional Money Market Funds (MMF's)**
- a. Registered 2a-7 investment companies only;
  - b. 10% maximum of portfolio may be invested in institutional MMF's; and
  - c. 5% maximum of portfolio invested in any one MMF
- 7. Industry and Collateral Concentration Limitation**

## SHORT-TERM INVESTMENT POOL (STIP) INVESTMENT POLICY

- a. No more than 15% of the portfolio will be invested in companies whose principal business activities are in the same industry except that holdings in financial service companies are not limited; and
- b. No more than 10% of the portfolio will be invested in any one type of receivable or collateral type via asset backed securities with the exception of financial institution obligations. These underlying types of collateral include such assets as trade receivables, student loans, residential mortgages, commercial mortgages, auto loans and leases, plant and equipment loans and leases, repurchase agreements, collateralized debt obligations of all types, credit card receivables, and other forms of collateral acceptable as part of the approval process for a specific issuer.

8. **Maximum Maturities.** To the extent possible, investment in the STIP portfolio shall attempt to match the anticipated cash flow requirements. For the purposes of the STIP portfolio, selection of investment maturities must be consistent with SEC Rule 2a-7 which requires a maximum final maturity of any security not to exceed 397 days, with the following exceptions:

- a. Securities used as collateral in repurchase agreements;
- b. A variable rate security which on any reset date can reasonably be expected to have a market value that approximates its amortized cost; and
- c. Securities received as settlement in exchange for an originally purchased security.

### 9. Liquidity

- a. Minimum one-day maturities equal to 5% or greater and minimum maturities within one week equal to 10% or greater of the total fund value including MMF holdings and balances in the U.S. Bank sweep account which is held by the Treasurer's Fund;
- b. The fund may not acquire any security if, or as a result, more than 10% of the fund's net assets would be invested in securities that are illiquid; and
- c. Illiquid securities shall include repurchase agreements maturing in more than seven days, and restricted, privately placed securities that are not registered under the Securities Act of 1933, with the exception that certain restricted securities eligible for resale to qualified institutional investors, including Rule 144a securities, are not subject to this limitation on illiquid securities.

### BENCHMARK

The STIP portfolio performance results will be compared to the return of a one month LIBOR index as a market benchmark, and the iMoneyNet First Tier Institutional only (gross) return as a peer group measure.

### DEFINITIONS

1. **2a-7-like** – A reference to a rule promulgated under the Investment Company Act of 1940 which defines the requirements of SEC-registered money market mutual funds.
2. **Asset-Backed Security** - Bonds or notes backed by loan paper or accounts receivable originated by banks, credit card companies, or other providers of credit; not mortgages.
3. **Banker's Acceptance** - A short-term credit investment which is created by a non-financial firm and whose payment is guaranteed by a bank. Often used in importing and exporting, and as a discount money market fund investment.

**SHORT-TERM INVESTMENT POOL (STIP)  
INVESTMENT POLICY**

4. **Certificate of Deposit** – A short-or medium-term, interest-bearing, deposit obligation offered by banks and savings and loans.
5. **Commercial Paper** - An unsecured obligation issued by a corporation or bank to finance its short-term credit needs, such as accounts receivable and inventory. Maturities typically range from 2 to 270 days. Commercial paper is available in a wide range of denominations, can be either discounted or interest-bearing, and usually have a limited or nonexistent secondary market. Commercial paper is usually issued by companies with high credit ratings, meaning that the investment is almost always relatively low risk.
6. **Corporate Note** - A type of unsecured debt issued by a corporation that may be longer-term than Commercial Paper, but shorter-term than a typical Corporate Bond.
7. **Repurchase Agreement** - A contract in which the seller of securities, such as Treasury Bills, agrees to buy them back at a specified time and price. May also be called “Repo” or “Buyback.” Typically used a short term form of collateralized borrowing by a bank or securities dealer.
8. **Reverse Repurchase Agreement** - A purchase of securities with an agreement to resell them at a higher price at a specific future date. The investor essentially borrows money and allows its securities to be held as collateral. Reverse Repurchase Agreements occur most often in government securities or other securities that are highly valued and thus considered a good form of collateral.
9. **Structured Investment Vehicle** - Bankruptcy-remote entities sponsored by large banks or investment managers for the purpose of generating leveraged returns. The sponsor earns the spread (differences in yields) between the longer-dated assets purchased and the short-term liabilities issued. The balance sheet of a structured investment vehicle typically contains assets such as residential mortgage-backed securities (RMBS), asset-backed securities (ABS) and other high-grade securities.

# **MEMORANDUM**

**Montana Board of Investments**

**Department of Commerce**

**2401 Colonial Drive, 3<sup>rd</sup> Floor**

**Helena, MT 59601 (406) 444-0001**

**To:** Board Members

**From:** Carroll South, Executive Director

**Date:** February 13, 2008

**Subject:** Proposed STIP Legislation

All proposed legislation to be introduced in the 2009 Legislature must be submitted to the Governor's Budget Office by April 14, 2008. The only legislation staff is recommending relates to the management of local government deposits and withdrawals in the Short Term Investment Pool (STIP). State agencies have no investment alternatives other than STIP. However, local governments invest in STIP totally at their discretion and do have other investment alternatives. They may invest as much as they wish at any time and withdraw any or all their deposited funds with 24 hours notice. Under current law, the Board has no control over the amount or frequency of local government deposits and withdrawals.

Attached is proposed legislation that would authorize the Board to adopt policies to better manage local government STIP deposits and withdrawals. Rather than place specific criteria or thresholds in law, the Board would be able to incorporate into the STIP Investment Policy a procedure for exercising some monitoring and control of local government STIP transactions.

**17-6-204. Investment of local government funds.** (1) The governing body of any city, county, school district, or other local government unit or political subdivision having funds which are available for investment and are not required by law or by any covenant or agreement with bondholders or others to be segregated and invested in a different manner may direct its treasurer to remit such funds to the state treasurer for investment under the direction of the board of investments as part of the pooled investment fund. The amount and frequency of such remittances shall be subject to the pooled investment fund policy established by the board of investments and published on its web site.

(2) A separate account, designated by name and number for each such participant in the fund, shall be kept to record individual transactions and totals of all investments belonging to each participant. A monthly report shall be furnished to each participant having a beneficial interest in the pooled investment fund, showing the changes in investments made during the preceding month. Details of any investment transaction shall be furnished to any participant upon request.

(3) The principal and accrued income, and any part thereof, of each and every account maintained for a participant in the pooled investment fund shall be subject to payment at any time from the fund upon request, subject to the pooled investment fund policy established by the board of investments and published on its website. Accumulated income shall be remitted to each participant at least annually.

(4) No order or warrant shall be issued upon any account for a larger amount than the principal and accrued income of the account to which it applies, and if any such order or warrant is issued, the participant receiving it shall reimburse the excess amount to the fund from any funds not otherwise appropriated, and the state treasurer shall be liable under his official bond for any amount not so reimbursed.