MONTANA PUBLIC RETIREMENT PLANS INVESTMENT POLICY

Approved November 15, 2016

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1. Introduction:

Montana Public Retirement Plan assets are commingled for investment purposes into six investment pools created by the Board. The pools are shared, that is co-mingled funds, which operate similar to mutual funds. The use of pools allows for simplified investing and accounting, broader diversification and thus less risk than would otherwise be available for the smaller Plans and provides additional opportunities for fee savings. Each investment pool has an underlying set of investment objectives and investment guidelines. Each of the nine Plans is separately identified for accounting and record keeping purposes.

This policy is effective upon adoption and supersedes all previous Investment Policies related to the investment management of the Montana Public Retirement Plans and the policies related to the underlying Investment Pools utilized by the Montana Retirement Plans with the exception of the Short-Term Investment Pool (STIP) Policy, which is addressed under its own investment policy statement because STIP has other participants beyond the Montana Public Retirement Plans.

2. Purpose:

The purpose of this policy statement is to provide a broad strategic framework for the Montana Public Retirement Plans' investments under the guidance of the Board of Investments.

3. Legal and Constitutional Authority:

The Montana Constitution, Article VIII, Section 13, requires that the Legislature provide for a Unified Investment Program for public funds. Section 17-6-201, MCA, established the Unified Investment Program, created the Montana Board of Investments (the "Board") and gave the Board sole authority to invest state funds, including the public retirement plans (Plans) in accordance with state law and the state constitution.

The Unified Investment program for public funds must be administered by the Board of Investments in accordance with the "prudent expert principle," defined as:

1) discharging its duties with the care, skill, prudence, and diligence, under the circumstances then prevailing, that a prudent person acting in a like capacity with the same resources and familiar with like matters exercises in the conduct of an enterprise of like character with like aims;
2) diversifying the holdings of each fund to minimize the risk of loss and maximize the rate of return, unless under the circumstances it is clearly prudent not to do so; and
3) discharging its duties solely in the interest of and for the beneficiaries of the funds managed.

MCA section 17-6-201 (2) (a) states… "Retirement funds may be invested in common stocks of any corporation."

MCA section 17-6-201 (3) (b) states…"The Board is urged under the prudent expert principle to invest up to three percent (3%) of retirement funds in Venture Capital companies. Whenever possible, preferences should be given to investments in those Venture Capital companies which demonstrate an interest in making investments in Montana."

MCA section 17-6-201 (3) (c) states…"In discharging its duties, the board shall consider the preservation of purchasing power of capital during periods of high monetary inflation."

The Board, as the investment fiduciary of the Plans, is responsible for establishing the investment parameters for the Plans. The Board has the authority to allocate portfolios to any previously board-approved asset class in the proportions it considers prudent, under the prudent expert rule. There are currently no statutory or constitutional restrictions on the investment of the Plans. Asset allocation decisions made by the Board must be made in a public meeting.

4. Strategic Investment Objectives

The Board's overall objective is to achieve the highest level of investment performance that is compatible with its risk tolerance and prudent investment practices. Because of the long-term nature of the state's various pension liabilities, the Board maintains a long-term perspective in formulating and implementing its investment policies, and in evaluating its investment performance.

5. Time Horizon

The Board expects to meet or exceed these objectives over a long-term investment horizon. Over shorter periods, the anticipated market volatility and specific actions, including risk mitigation efforts of the Board, may lead to unfavorable, but expected, deviation from these objectives.

6. Performance Measurement

Investment performance is measured by three integrated long-term return objectives:

a) The ***actuarial target rate of return*** is the key actuarial assumption affecting future funding rates and liabilities. Investment performance that exceeds or underperforms the target rate may materially impact future funding rates and liabilities. The Board seeks to generate long-term investment performance that will exceed the actuarial annual target rate of return of 7.75%, as determined by the governing boards of the public retirement systems, net of all investment and administrative expenses. There may be years, or a period of years, when the Plans do not achieve this goal followed by years when the goal is exceeded. But over a long period of time, the Board seeks to achieve an average net rate of return of 7.75%, as determined by the governing boards of the public retirement systems, at risk levels (measured by expected volatility) broadly consistent with other public fund peers.

b) The ***investment policy benchmark*** is calculated by applying the investment performance of the asset class benchmarks to the Plans' actual asset allocation during the measurement period. The investment policy benchmark represents the return that would be achieved if the Plan implemented a passively managed portfolio. Deviations from the policy benchmark measure the contribution of active investment management throughout the fund, rebalancing policy and its execution, and investment implementation generally.

c) The Board also compares each Plan's total performance, before all fees, to appropriate ***public plan sponsor universes***. This process permits the Board to compare its total performance to other public pension plans. While the Board seeks to rank consistently in the top half of comparable public pension plans, the Board recognizes that other plans may have investment objectives and risk tolerances that differ substantially from the Board's.

7. Roles and Responsibilities

a) **Board of Investments** – The Board is responsible for approving the Investment Policy Statement for the Montana Public Retirement Plans and has the authority to allocate portfolios to any asset class in the proportions it considers prudent, subject to such limitations as contained in law and the Constitution. The Board reviews this document periodically and, as needed, approves any changes to the policy.

As described in the Board of Investments Governance Manual, the Board delegates authority to the Executive Director, Chief Investment Officer, and other Staff to execute the day to day duties required to carry out the Board's mission.

b) **Executive Director –** The Executive Director is empowered by the Board to sign any and all documents required to conduct Board business, unless there are specific written policies or instructions from the Board to the contrary. The Executive Director and the Chief Investment Officer are authorized jointly to contract for investment manager services and if deemed appropriate, terminate them.

c) **Chief Investment Officer –** The Chief Investment Officer (CIO) is empowered by the Board to serve as the principal staff person responsible for overseeing the investment activities under the Board's jurisdiction in compliance with the Board's policies. The CIO, with the support of other staff, is responsible for recommending investment policy changes for Board approval.

d) **Staff –** The staff is responsible for:

I. Managing day-to-day operations and delegating work to external resources as appropriate;
II. Monitoring allocations and overseeing all investment manager due diligence activities and recommending changes to the CIO;
III. Monitoring and reporting to the Board the performance of each asset class and the individual managers performance;
IV. Informing the Board of any new managers or terminations; and
V. Reporting any deviations from this Investment Policy to the Board.

e) **Investment Consultant** – The investment consultant assists the CIO and staff with policy recommendations and provides advice to the Board. The investment consultant also assists staff in monitoring all external managers and reports to the Board independently.

f) **External Managers** – Managers are responsible for all aspects of portfolio management as set forth in the contract specific to each manager. Managers must communicate with staff as needed, regarding investment strategies and results. Managers must also cooperate fully with staff regarding administrative, accounting, and reconciliation issues as well as any requests from the investment consultant and the master custodian.

8. Strategic Asset Allocation

The Board finds that it is in the best interest of the state's nine retirement Plans to set out investment policies for the Plans in one comprehensive document utilizing the same asset allocation. In the future, individual Plan requirements may vary and this common approach could change.

<u>Nine Public Retirement Plans:</u>
Public Employees Retirement System
Teachers Retirement System
Police Officers Retirement
Firefighters Retirement
Sheriffs Retirement
Highway Patrol Retirement
Game Wardens Retirement
Judges Retirement
Volunteer Firefighters Retirement

The current asset allocation ranges for the Plans are in **Appendix I**. The asset allocation ranges are subject to change as modifications are adopted by the Board, at which time **Appendix I** will be revised to reflect these changes. The Board will formally affirm or revise the asset allocation ranges for the Plans at least annually.

9. Rebalancing

The actual asset allocation mix may deviate from time to time from the approved asset allocation ranges due to financial market performance, cash flows, and manager performance. Material deviations from the asset allocation ranges can alter the expected return and risk of the Plans. Rebalancing the Plans' assets to remain within the Board-approved allocation ranges is delegated to the Chief Investment Officer (CIO), in consultation with the Executive Director. Any necessary rebalancing will be made in a timely manner and will take into consideration associated costs and current market conditions. In addition to maintaining actual allocations within the ranges, the CIO will also consider contractual investment commitments to private investments and real estate partnerships, the liquidity necessary to meet benefit payments and administrative costs for the Plans, and current market conditions. This may prompt asset rebalancing when asset allocations fall within the established ranges. The CIO shall inform the Board of rebalancing activity at the Board's next regularly scheduled quarterly meeting.

10. Risk Management

a) Monitoring Public Markets Investment Managers

The Public Markets Manager Evaluation Policy is a distinct policy that is regularly reviewed and updated separate from the Retirement Plans Investment Policy because staff utilizes this Evaluation Policy to oversee and manage other assets in addition to the Pension Plan assets. However, reference is made in this Investment Policy to recognize the importance of a disciplined and thorough assessment of relevant evaluation criteria as a means of managing risks and prior to implementing any investment manager changes within the Public Market asset classes.

b) Private Investments Evaluation Policy

INVESTMENT SELECTION PROCESS

Portfolio Management: Staff reviews and selects appropriate funds to fulfill the objectives of the pools. The management of the underlying assets will be executed by the General Partners of Fund-of-Funds and/or Direct Limited Partnerships. Fund-of-Funds managers may be chosen to manage assets where particular expertise is required and cannot be provided by Staff or where the Fund-of-Funds manager can cost-effectively provide relevant information/assistance to Staff in the selection of Direct Limited Partnership investments.

Monitoring:

I. Staff shall monitor MPEP and MTRP characteristics to ensure diversification across vintage years and other risk factors that change throughout the business cycle.
II. Staff shall continually review the pace and timing of private investment commitments, funding, and return of capital relative to expectations.
III. Staff shall assess the performance of Managers relative to the following criteria:
    a. Objectives established by the Managers or the principals managing the investment relative to their stated performance objectives;
    b. Degree of risk undertaken across sectors, industry, geography, investment style, and other dimensions as appropriate;
    c. Performance comparisons to other managers with similar investment styles and/or within the same vintage year; and
    d. The MPEP and MTRP performance versus the selected benchmark.
IV. Staff shall oversee pacing analysis for MPEP. The pacing analysis will use historical private equity data to estimate the level of new commitments needed to maintain MPEP assets at a level that is consistent with MPEP and Pension strategies. The pacing analysis will be reviewed and updated at least biennially.

Risk Considerations: Private investments typically involve the following risks:

I. Financial Risk: These investments may employ financial leverage (debt) leading to a higher degree of volatility in investment returns.
II. Operating and Business Risk: These investments typically involve operating and business

risk, due to risks associated with the underlying businesses being acquired.

III. Valuation Risk: Given the lack of public pricing of the underlying private equity investments, unrealized asset valuations are based on appraised values.
IV. Structure Risk: The funds involve extensive legal documentation which set out terms that address investment constraints, fund governance, costs, and the distribution of economic returns to investors.
V. Country Risk: Investing in international investments include all of the risks associated with the particular asset class along with political, economic, and currency risks associated with investing outside of the U.S.
VI. Manager Risk: Fund managers have significant discretion in investing partnership assets. This may lead to funds which are poorly diversified or which contain investments that had not been anticipated by investors. Private funds are often dependent on a few key investment staff, the loss of which may materially impact fund operations and performance.
VII. Industry Risk: Private equity firms are permitted to invest in a wide variety of industries without many restrictions. Diversification across industries is the means by which this risk is controlled in a private equity portfolio.

Evaluation Criteria:

I. Managers shall demonstrate relevant experience in or directly applicable to the market in which they propose to invest;
II. Managers shall demonstrate that they are specifically qualified to pursue the proposed strategy in the market in which they propose to invest;
III. Managers shall demonstrate the requisite skills and experience necessary to execute successfully the proposed strategy, including evidence from similar endeavors of their ability to work successfully with Limited Partners;
IV. Managers shall dedicate sufficient time and effort to the proposed opportunity and make, within the context of the particular investment, a meaningful personal financial commitment;
V. The Manager's proposed strategy and business plan shall be set forth in sufficient detail to permit substantive and meaningful review of the opportunity, verification of the investment concept, and of the risk factors;
VI. The risk/reward trade-off in the particular market in which the Manager proposes to invest shall be attractive based on reasonable assumptions;
VII. Uniqueness of the investment strategy relative to existing Managers;
VIII. Integrity and experience of the key principals, employees and the reputation of the firm;
IX. Quality of the partnership corporate governance, including controls and reporting systems;
X. Relationships with other Limited Partners, particularly public investment boards;
XI. Past investment performance; and
XII. Appropriateness of terms and conditions and alignment of interests of the firm's principals with the Limited Partners.

c) Liquidity

Based on the percentage of total plan assets necessary for ongoing benefit payments and other plan expenses, the liquidity needs for the Retirement Plans are generally low and participant capital is not expected to change dramatically on short notice. However, illiquidity risk still needs to be monitored and managed by staff on a regular basis to ensure that assets are not required to be sold too quickly, or at an unfavorable time, and potentially at a discount to fair value to meet the cash needs of the Retirement Plans.

Even though a portion of the Real Estate Pool investments, primarily the portion invested in open-ended funds, is usually considered to have moderate liquidity, the majority of the investments in the Real Estate and Private Equity pools are considered extremely illiquid. Due to the limited liquidity of these assets, it will typically be impractical to fund plan cash needs or correct deviations from policy ranges through the purchase or sale of assets held in MTRP or MPEP.

The investments held in MDEP, MTIP, RFBP, and STIP are categorized as publicly traded securities. In "normal market" conditions the majority of the underlying assets from these pools can be liquidated in a relatively short period of time to accommodate both expected and unexpected withdrawals as well as any repositioning of the asset allocation to stay within approved ranges.

In order to improve liquidity and manage both the expected and unexpected Retirement Plans need for cash, this Investment Policy specifies a strategic allocation to the Short-Term Investment Pool (STIP).

d) Monitoring/Reporting – Transparency

Managers shall submit periodic reports to facilitate Staff's monitoring of the Managers' conformance to investment restrictions and performance objectives.

Staff shall provide regular reporting to the Board regarding the asset allocation and performance of the pension plans as well as the characteristics and performance of the various investment pools to confirm these items are known and adhere to all Investment Policy requirements and expectations.

Staff will discuss and communicate any key information discovered as a result of the ongoing Manager monitoring process that might assist the Board in understanding the underlying investment manager structure or risks embedded in the investment characteristics of the Retirement Plan asset allocations.

e) Leverage

Leverage is a significant risk factor. Investment managers may utilize leverage only when permitted in the manager's investment guidelines approved by Staff. Staff shall monitor the use of leverage and its impact on risk and return.

The use of derivative securities can generate additional leverage even if the derivative is being used to reduce the risk in other investments. Investment managers may only use derivatives when permitted in the manager's investment guidelines approved by Staff.

f) Cash Investments

Cash investments held at the pool level, any managed account within it, or any separate account entail an element of credit risk. Thus, only approved cash investment vehicles are permitted. These include the custodian's STIF vehicle, STIP, or any SEC-registered money market fund, all of which specifically address credit risk in their respective investment guidelines.

11. Investment Pools

a) Montana Domestic Equity Pool (MDEP)

The Montana Public Retirement Plans investment in the Montana Domestic Equity Pool (MDEP) will provide the Plans with exposure to a broad and diverse spectrum of equity-related securities across different industries and market capitalization ranges. Primarily, these equity investments will be managed by external asset managers that invest in the common shares of equity for entities that have their headquarters based in the United States and are traded on eligible U.S. exchanges. MDEP will be diversified across a number of investment portfolios and investment managers that will utilize either an active or an index focused investment strategy. The specific strategic objectives, performance criteria, and investment guidelines for MDEP are detailed in Appendix II: Pool Investment Objectives and Guidelines – Schedule II-A.

b) Montana International Equity Pool (MTIP)

The Montana Public Retirement Plans investment in the Montana International Equity Pool (MTIP) will provide the Plans with exposure to a broad and diverse spectrum of equity-related securities across different industries and market capitalization ranges. Primarily, these equity investments will be managed by external asset managers that invest in the common shares of equity for entities that have their headquarters based outside of the United States. MTIP will be diversified across a number of investment portfolios and investment managers that will utilize either an active or an index focused investment strategy. The specific strategic objectives, performance criteria, and investment guidelines for MTIP are detailed in Appendix II: Pool Investment Objectives and Guidelines, Schedule II-B.

c) Montana Private Equity Pool (MPEP)

The Montana Public Retirement Plans investment in the Montana Private Equity Pool (MPEP) will provide the Plans with exposure to a diverse spectrum of private investment opportunities across different industries, both within and outside the United States. Primarily, these investments will be private equity partnership interests, which may be direct limited partnerships or vehicles that primarily invest in direct limited partnerships, including fund-of-funds and secondary funds. MPEP will be diversified across a number of funds, vintage years, investment opportunities, and geographies. The specific strategic objectives, performance criteria, and investment guidelines for MPEP are detailed in Appendix II: Pool Investment Objectives and Guidelines, Schedule II-C.

d) Montana Real Estate Pool (MTRP)

The Montana Public Retirement Plans investment in the Montana Real Estate Pool (MTRP) will provide the Plans with exposure to a diverse spectrum of real estate related investment opportunities both within and outside the United States. Primarily, these investments will be made in an open-ended institutional commingled fund or a closed-ended private investment fund. MTRP will be diversified across a number of funds, vintage years, investment opportunities, and geographies. The specific strategic objectives, performance criteria, and investment guidelines for MTRP are detailed in Appendix II: Pool Investment Objectives and Guidelines, Schedule II-D.

e) Montana Retirement Funds Bond Pool (RFBP)

The Montana Public Retirement Plans investment in the Retirement Funds Bond Pool (RFBP) will provide the Plans with exposure to a broad and diverse spectrum of fixed income-related securities across different sectors, industries, credit ratings and maturities. These fixed income investments will be managed internally as well as by external asset managers utilizing an active investment strategy. The specific strategic objectives, performance criteria, and investment guidelines for RFBP are detailed in Appendix II: Pool Investment Objectives and Guidelines, Schedule II-E.

f) Short-Term Investment Pool (STIP)

The Montana Public Retirement Plans investment in the Short-Term Investment Pool (STIP) will provide the Plans with exposure to Cash related investments. STIP will be managed internally utilizing an active investment strategy. The specific strategic objectives, performance criteria, and investment guidelines for STIP are detailed in the Short-Term Investment Pool (STIP) Investment Policy.

12. Securities Lending

Section 17-1-113, MCA, authorizes the Board to lend securities held by the state. The Board may lend its publicly traded securities held in the investment pools, through an agent, to other market participants in return for compensation. Currently, through an explicit contract, State Street Bank and Trust, the state's custodial bank, manages the state's securities lending program. The Board seeks to assess counterparty and reinvestment risk, associated with each aspect of its securities lending program. The Board requires borrowers to maintain collateral at 102 percent for domestic securities and 105 percent for international securities. To ensure that the collateral ratio is maintained, securities on loan are marked to market daily and the borrower must provide additional collateral if the value of the collateral falls below the agreed-upon ratio of over-collateralization. In addition to the strict collateral requirements imposed by the Board, the credit quality of approved borrowers is monitored continuously by the contractor. From time to time, Staff or the investment manager may restrict a security from the loan program upon notification to State Street Bank. Staff will monitor the securities lending program, and the CIO will periodically report to the Board on the status of the program. The Board’s participation in securities lending may change over time given Plan activity, market conditions and the agent agreement.

13. Exercise of Shareholder Rights

The Board recognizes that publicly traded securities and other assets of the Plans include certain ancillary rights, such as the right to vote on shareholder resolutions at companies' annual shareholders' meetings, and the right to assert claims in securities class action lawsuits or other litigation. The Board will prudently manage these assets of the Plans for the exclusive purpose of enhancing the value of the Plans for its participating systems' members and beneficiaries through such means as adopting and implementing a proxy voting policy and undertaking productive, cost-effective action to exercise its rights as shareholders or claimants in litigation.

a) Proxy Voting

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

Staff will monitor the proxy voting practices of the Board's external investment managers. External service providers may be retained by either the Board or the Managers to assist in monitoring efforts. This monitoring will be coordinated with each manager to reasonably assure the Staff that Managers are fulfilling their fiduciary responsibilities with respect to proxy voting.

b) Class Action Litigation

Claims under state and federal securities laws arising out of losses on securities under the Board's management are assets subject to the Board's fiduciary duty of prudent management. The Board shall take reasonable, cost effective steps to identify, pursue and collect upon claims under securities laws for losses suffered by the Board on its investment. Accordingly, the Board maintains a detailed litigation policy, including process steps, outlined in the Montana Board of Investments Governance Manual, Appendix F.

14. Investment Policy Review

The Board intends to keep this Policy updated as it modifies or amends the underlying contents. As stated in the Governance Policy, "the Board shall review this Investment Policy at least annually or more frequently at the request of Board staff. Statements may only be revised in a public meeting. All Statements shall be posted on the Board's web site for review by the public."

Appendix I: Montana Public Retirement Plans Asset Allocation Ranges

All nine Montana Public Retirement Plans currently share the same asset allocation ranges but this may change in the future.

Permitted Ranges:

Approved November 15, 2016

Pension Fund Asset Allocations		
Asset Class	**Range Low**	**Range High**
Domestic Equities	24	38
International Equities	12	18
Private Equity	9	15
Natural Resources [1]	0	6
Real Estate	4	12
TIPS	0	4
Broad Fixed Income [2]	1	3
US Treasury/Agency Fixed Income [2]	5	14
Investment Grade Credit [2]	2	6
Agency Mortgage-Backed Securities [2]	2	8
High Yield [2]	1	5
Diversified Strategies [3]	0	4
Cash [4]	1	6
Total		

[1] Natural Resources will invest in strategies that include Timber, Energy, Agriculture, Water, and Other Commodities.

[2] Related fixed income asset classes may not go below a minimum of 15 percent of the portfolio.

[3] Diversified Strategies will hold no investments until the Diversified Strategies objectives and guidelines are formally approved by the board.

[4] The range for cash only includes the plans' allocation to STIP.

Other Restrictions:

1. Total Plan Equities shall maintain a range between 58% and 72% of total Plan assets; and
2. Timberland Investments shall not exceed 2% of total Plan assets.

Appendix II: Investment Objectives and Guidelines

Schedule II-A:
Investment Objectives and Guidelines
Montana Domestic Equity Pool (MDEP)

Effective Date of Schedule: April 5, 2016

This Schedule is effective upon adoption by the Board of Investments and supersedes all previous Investment Objectives and Guidelines for this specific Pool.

Statement of Purpose:
The purpose of these objectives and guidelines is to:

1. Establish the investment objectives and performance standards of the Pool; and
2. Provide diversified exposure to the domestic equity market in a prudent and cost effective manner.

Investment Objective:

Strategic:
The objective of the MDEP is to attain the highest possible total return within the parameters of the Investment Guidelines set forth below.

Performance:
Success in achieving this objective will be measured by comparing the risk and after-fee return of MDEP to the **S&P 1500 Index** (the "Benchmark"). Performance results will be monitored and evaluated quarterly. However, the success in achieving the objective will be measured on a three-year, five-year, and ten-year annualized basis.

Investment Guidelines:

The Montana Board Investment Staff will have full discretion to manage MDEP consistent with the investment guidelines stated below. Compliance with the following guidelines for permitted investments and other restrictions is the sole responsibility of the Staff. Any exceptions or compliance violations are to be reported to the Board of Investments at the next scheduled quarterly Board meeting.

The majority of the MDEP investments will be managed by external investment managers.

Permitted Investments:

MDEP may invest only in the following:

1. Securities and derivatives held in separate accounts, commingled funds, limited partnerships, or limited liability companies managed by external investment managers and governed by their respective investment management contracts and investment guidelines;
2. Exchange-Traded Funds (ETFs) based on a domestic equity index that is approved by the Chief Investment Officer and purchased and monitored by Staff; and
3. Cash – either an investment in the Short-Term Investment Pool (STIP) or a vehicle available through the Custodian.

Other Restrictions:

1. The market capitalization by mandate shall adhere to the following ranges as a percentage of the Pool's total market value:
    a. Large Cap 72 - 91%
    b. Mid-Cap 6 - 17%
    c. Small-Cap 3 - 11%
2. The Pool's percentage of market value invested in passive/index strategies shall be greater than 45%;
3. Cash held at the Pool level (not including cash held by external managers in separate accounts or commingled funds) is limited to 5% of the Pool's market value;
4. The Pool's percentage of market value invested in mandates using an active investment strategy by any one Manager shall be no greater than 15%; and
5. The Pool's percentage of market value invested in any single mandate/portfolio using an active investment strategy shall be no greater than 10%.
6. The Pool's percentage of market value invested in the Large Cap mandate using a long/short investment strategy shall be no greater than 12%.

If at any time, due to market fluctuations or any other circumstances, any of the guidelines are not maintained, Staff will use its best efforts to conform to these limits in a timely manner, while taking into account current market conditions and the associated costs of rebalancing. At the Board's next regularly scheduled quarterly meeting, the CIO shall inform the Board of any cases that the Pool allocations were outside of the limits and either inform the Board of the actions that were taken to return the Pool back within guidelines or a plan to do so.

Schedule II-B:
Investment Objectives and Guidelines
Montana International Equity Pool (MTIP)

Effective Date of Schedule: April 5, 2016

This Schedule is effective upon adoption by the Board of Investments and supersedes all previous Investment Objectives and Guidelines for this specific Pool.

Statement of Purpose:
The purpose of these objectives and guidelines is to:

1. Establish the investment objectives and performance standards of the Pool; and
2. Provide diversified exposure to the international and global equity markets in a prudent and cost effective manner.

Investment Objective:

<u>Strategic:</u>
The objective of the MTIP is to attain the highest possible total return within the parameters of the Investment Guidelines set forth below.

<u>Performance:</u>
Success in achieving this objective will be measured by comparing the risk and after-fee return of MTIP to the **MSCI All Country World ex-US Investable Market Index** (the "Benchmark"). Performance results will be monitored and evaluated quarterly. However, the success in achieving the objective will be measured on a three-year, five-year, and ten-year annualized basis.

Investment Guidelines:

The Montana Board Investment Staff will have full discretion to manage MTIP consistent with the investment guidelines stated below. Compliance with the following guidelines for permitted investments and other restrictions is the sole responsibility of the Staff. Any exceptions or compliance violations are to be reported to the Board of Investments at the next scheduled quarterly Board meeting.

The majority of the MTIP investments will be managed by external investment managers.

<u>Permitted Investments</u>:

MTIP may invest only in the following:

1. Securities and derivatives held in separate accounts, commingled funds, limited partnerships, or limited liability companies managed by external investment managers and governed by their respective investment management contracts and investment guidelines;

2. Exchange-Traded Funds (ETFs) based on an international equity index that is approved by the Chief Investment Officer and purchased and monitored by Staff; and
3. Cash – either an investment in the Short-Term Investment Pool (STIP) or a vehicle available through the Custodian.

Other Restrictions:

1. The market capitalization by mandate shall adhere to the following ranges as a percentage of the Pool's total market value:
    a. Large Cap 79-92%
    b. Small-Cap 8-16%
2. The Pool's percentage of market value invested in passive/index strategies shall be greater than 42%;
3. The Pool's percentage of market value invested in dedicated Emerging Market mandates shall be no greater than 5%;
4. Cash held at the Pool level (not including cash held by external managers in separate accounts or commingled funds) is limited to 5% of the Pool's market value;
5. The Pool's percentage of market value invested in mandates using an active investment strategy by any one Manager shall be no greater than 15%; and
6. The Pool's percentage of market value invested in any single mandate/portfolio using an active investment strategy shall be no greater than 10%.

If at any time, due to market fluctuations or any other circumstances, any of the guidelines are not maintained, Staff will use its best efforts to conform to these limits in a timely manner, while taking into account current market conditions and the associated costs of rebalancing. At the Board's next regularly scheduled quarterly meeting, the CIO shall inform the Board of any cases that the Pool allocations were outside of the limits and either inform the Board of the actions that were taken to return the Pool back within guidelines or a plan to do so.

Schedule II-C:
Investment Objectives and Guidelines
Montana Private Equity Pool (MPEP)

Effective Date of Schedule: April 5, 2016

This Schedule is effective upon adoption by the Board of Investments and supersedes all previous Investment Objectives and Guidelines for this specific Pool.

Statement of Purpose:
The purpose of these objectives and guidelines is to:

1. Establish the investment objectives and performance standards of the Pool; and
2. Provide diversified exposure to the Private Investment markets in a prudent and cost effective manner.

Investment Objective:

Strategic:
The objective of the MPEP is to attain the highest possible return within the parameters of the Investment Guidelines set forth below.

Performance:
There is no generally accepted benchmark index for private equity performance comparisons. Characteristically, private equity partnership investments are impacted by the "J-curve" effect, in which fees and transaction costs create negative returns during the initial investment years before distributions are realized. Private equity investing requires a long time horizon in order to realize the value provided by the creation or restructuring of private companies.

The performance objective for MPEP is the achievement of long-term net returns (after management fees and general partner's carried interest) above a benchmark reflecting public equity market returns plus an appropriate premium to compensate for the higher degree of risk, including the illiquidity risk for Private Investments compared to Public Market Investments.

Success in achieving this objective will be measured by comparing the net return of MPEP to the **S&P 1500 Index plus 400 basis points** (the "Benchmark") on an annualized basis. Performance results will be monitored quarterly. However, the success in achieving the objective will be measured on a five-year and ten-year annualized basis.

Investment Guidelines:

The Montana Board Investment Staff will have full discretion to manage MPEP consistent with the investment guidelines stated below. Compliance with the following guidelines for permitted investments and other restrictions is the sole responsibility of the Staff. Any exceptions or compliance violations are to be reported to the Board of Investments at the next scheduled quarterly Board meeting.

The majority of the MPEP investments will be managed by external investment managers via a partnership structure in which the Montana Board of Investments will have a limited partnership interest.

Permitted Investments:

MPEP may invest only in the following:

1. Private Investment partnership interests. These private partnerships may be direct limited partnerships, limited liability companies, or vehicles that primarily invest in partnerships, including Fund-of-Funds and Secondary Funds;
2. Investments held in separate accounts or commingled funds managed by external investment managers and governed by their respective investment management contracts and investment guidelines;
3. MPEP may co-invest with private investment managers in transactions that are suitable for inclusion into a private investment partnership;
4. Individual public or private securities received as distributions from funds;
5. "Equitized" liquidity strategies that provide exposure to public equity indexes; and
6. Cash – either an investment in the Short-Term Investment Pool (STIP) or a vehicle available through the Custodian.

Other Restrictions

1. No more than 7.5% of the aggregate of MPEP net asset value plus uncalled committed capital should be in a single Direct Limited Partnership;
2. No more than 15% of the aggregate of MPEP net asset value plus uncalled committed capital should be placed with a single fund manager or General Partner;
3. No more than 30% of the aggregate of MPEP net asset value plus uncalled committed capital should considered "Non-U.S." exposure based on the primary objective of the Fund, Partnership, Separate Account, or Index;
4. Cash held at the Pool level (not including cash held in the underlying partnership interests/funds or cash that is equitized) is limited to 5% of the Pool's market value; and
5. Individual public securities received as distributions will be liquidated over a reasonable time period dependent on market conditions.

The following table provides a guideline range with respect to MPEP's strategy diversification. It is important to note that these ranges reference the sum of the pool's net asset value and uncalled commitments.

Strategy	Policy Range
Buyout and all other private equity related strategies not related to Venture Capital or Debt-Related	50% - 80%
Venture Capital	10% - 25%
Debt-related	0% - 25%

For the purpose of the ranges provided above, Special Situations and Secondary funds will be classified in the category that is most reflective of the underlying investments in the funds.

If at any time, due to market fluctuations or any other circumstances, any of the guidelines are not maintained, Staff will use its best efforts to conform to these limits in a timely manner, while taking into account current market conditions and the associated costs of rebalancing. At the Board's next regularly scheduled quarterly meeting, the CIO shall inform the Board of any cases that the Pool allocations were outside of the limits and either inform the Board of the actions that were taken to return the Pool back within guidelines or a plan to do so.

Schedule II-D:
Investment Objectives and Guidelines
Montana Real Estate Pool (MTRP)

Effective Date of Schedule: April 5, 2016

This Schedule is effective upon adoption by the Board of Investments and supersedes all previous Investment Objectives and Guidelines for this specific Pool.

Statement of Purpose:
The purpose of these objectives and guidelines is to:

1. Establish the investment objectives and performance standards of the Pool; and
2. Provide diversified exposure to Real Estate and Timberland investments in a prudent and cost effective manner.

Investment Objective:

<u>Strategic:</u>
The objective of the MTRP is to attain the highest possible return within the parameters of the Investment Guidelines set forth below.

<u>Performance:</u>
Success in achieving this objective will be measured by comparing the risk and after-fee return of MTRP to the **NCREIF Open End Diversified Core Equity Net Index** (the “Benchmark”). Performance results will be monitored and evaluated quarterly. However, the success in achieving the objective will be measured on a five-year, and ten-year annualized basis. Because MTRP’s underlying funds typically report their returns 30-90 days after quarter-end, the Benchmark will be compared on a one-quarter lagged basis.

Investment Guidelines:

The Montana Board Investment Staff will have full discretion to manage MTRP consistent with the investment guidelines stated below. Compliance with the following guidelines for permitted investments and other restrictions is the sole responsibility of the Staff. Any exceptions or compliance violations are to be reported to the Board of Investments at the next scheduled quarterly Board meeting.

The majority of the MTRP investments will be managed by external investment managers.

Permitted Investments:

MTRP may invest only in the following:

1. Open-Ended Commingled Funds investing in "Core" Real Estate. Real Estate is classified as "Core" if it is an investment in operating and substantially-leased institutional quality real estate in the traditional property types (apartments, office, retail, industrial, and hotel);
2. Private Investment partnership interests in "Non-Core" Real Estate and Timberland. These private partnerships may be direct limited partnerships, limited liability companies, or vehicles that primarily invest in partnerships, including Fund-of-Funds and Secondary Funds.
3. MTRP may co-invest with private investment managers in transactions that are suitable for inclusion into a private Real Estate investment partnership;
4. Individual public or private securities received as distributions from funds and equitized liquidity funds are also permitted to be held in MTRP;
5. Separate Accounts, Open-Ended Funds, Closed-Ended Funds, Exchange-Traded Funds (ETFs), or Master Limited Partnerships (MLPs) managing publicly traded Real Estate or Timberland related investments, where the funds are approved by the Chief Investment Officer and purchased and monitored by Staff; and
6. Cash – either an investment in the Short-Term Investment Pool (STIP) or a vehicle available through the Custodian.

Other Restrictions

1. No more than 7.5% of the aggregate of MTRP net asset value plus uncalled committed capital should be in a single Fund, Partnership, or Separate Account;
2. No more than 15% of the aggregate of MTRP net asset value plus uncalled committed capital should be placed with a single fund manager.
3. Separate Accounts, Open-Ended Funds, Closed-Ended Funds, Exchange-Traded Funds (ETFs), or Master Limited Partnerships (MLPs) managing publicly traded Real Estate or Timberland related investments may not exceed 20% of the aggregate of MTRP net asset value plus uncalled committed capital;
4. No more than 30% of the aggregate of MTRP net asset value plus uncalled committed capital should considered "Non-U.S." exposure based on the primary objective of the Fund, Partnership, Separate Account, or Index;
5. Cash held at the Pool level (not including cash held in the underlying partnership interests, funds, or accounts, or cash that is equitized) is limited to 5% of the Pool's market value; and
6. Individual public securities received as distributions will be liquidated over a reasonable time period dependent on market conditions.

The following table provides a guideline range with respect to MTRP's strategy diversification. It is important to note that these ranges reference the sum of the pool's net asset value and uncalled commitments.

Strategy	Pool Policy Range	Total Pensions Policy Range
Core Real Estate / Timber Investments	35% - 65%	
Non-Core Real Estate Investments	35% - 65%	
Timberland Investments	Included w/Core	0% - 2%

For funds with exposure across these categories, the fund will be classified in the category that is most reflective of the underlying investments in the funds.

Leverage

Leverage is a significant risk factor. On an individual fund basis, the leverage level can range up to 75.0 percent. Leverage consists of the combined borrowing at the property level and the fund level. On a select basis, the leverage may exceed 75.0 percent for a given investment, if it is determined to be reasonable to do so. Leverage shall be monitored on an individual fund level and new investments shall be made with the intention that the total MTRP portfolio leverage shall not exceed 60%.

Strategy	Leverage Policy Range
Core Real Estate Investments	0% - 50%
Non-Core Real Estate Investments	0% - 75%
Timberland Investments	0% - 30%

If at any time, due to market fluctuations or any other circumstances, any of the guidelines are not maintained, Staff will use its best efforts to conform to these limits in a timely manner, while taking into account current market conditions and the associated costs of rebalancing. At the Board's next regularly scheduled quarterly meeting, the CIO shall inform the Board of any cases that the Pool allocations were outside of the limits and either inform the Board of the actions that were taken to return the Pool back within guidelines or a plan to do so.

While no formal diversification ranges are set forth for property type diversification or regional diversification within the United States, it is expected that MTRP shall remain diversified across these factors. These and other factors shall be monitored and reported to the Board at least annually.

Schedule II-E:
Investment Objectives and Guidelines
Montana Retirement Funds Bond Pool (RFBP)

Effective Date of Schedule: April 5, 2016

This Schedule is effective upon adoption by the Board of Investments and supersedes all previous Investment Objectives and Guidelines for this specific Pool.

Statement of Purpose:
The purpose of these objectives and guidelines is to:

1. Establish the investment objectives and performance standards of the Pool; and
2. Provide diversified exposure to the Fixed Income markets in a prudent and cost effective manner.

Investment Objective:

<u>Strategic:</u>
The objective of the RFBP is to attain the highest possible total return within the parameters of the Investment Guidelines set forth below.

<u>Performance:</u>
Success in achieving this objective will be measured by comparing the risk and after-fee return of RFBP to the **Barclays US Aggregate Bond Index** (the “Benchmark”). Performance results will be monitored and evaluated quarterly. However, the success in achieving the objective will be measured on a three-year, five-year, and ten-year annualized basis.

Investment Guidelines:

The Montana Board Investment Staff will have full discretion to manage RFBP consistent with the investment guidelines stated below. Compliance with the following guidelines for permitted investments and other restrictions is the sole responsibility of the Staff. Any exceptions or compliance violations are to be reported to the Board of Investments at the next scheduled quarterly Board meeting.

<u>Permitted Investments</u>:

RFBP may invest only in the following:

1. Securities and derivatives held in separate accounts, commingled funds, limited partnerships, or limited liability companies managed by internal or external investment managers and governed by their respective investment management contracts and investment guidelines;
2. Individual securities issued and guaranteed by the U.S. Government that are approved for purchase by the Chief Investment Officer and purchased and monitored by Staff; and

3. Cash – either an investment in the Short-Term Investment Pool (STIP) or a vehicle available through the Custodian.

Other Restrictions

1. A minimum of 20% of the market value of the RFBP must be held in U.S. Treasury/Agency securities;
2. A maximum of 50% of the market value of the RFBP shall be held in corporate securities;
3. A maximum of 10% of the market value of the RFBP shall be held in Non-U.S. securities whether they are denominated in U.S. dollars or a foreign currency;
4. A maximum of 40% of the market value of the RFBP shall be held in U.S. residential Agency Mortgage-Backed Securities (MBS & CMO);
5. A maximum of 10% of the market value of the RFBP shall be held in asset backed securities (ABS);
6. A maximum of 10% of the market value of the RFBP shall be held in commercial mortgage backed securities (CMBS);
7. A maximum of 5% of the market value of the RFBP shall be held in all other Permitted Investments in the aggregate that are not classified as a Corporate, U.S. residential agency mortgage-backed, ABS, CMBS, or U.S. Treasury/Agency security;
8. The average duration of the RFBP will be maintained in a range of + or – 20% of the index duration;
9. A maximum of 15% of the market value of the RFBP shall be invested in fixed income securities either non-rated or rated lower than Baa3 by Moody's or BBB- by S&P. (In the case of split rated securities, the lowest rating will apply.);
10. A maximum of 5% of the market value of the RFBP shall be invested in dedicated Emerging Market mandates;
11. A maximum of 5% of the market value of the RFBP shall be invested in Cash held at the Pool level (not including cash held by internal or external managers in separate accounts or commingled funds);
12. The Pool's percentage of market value invested in mandates using an active investment strategy by any one Manager other than any internally managed assets shall be no greater than 15%; and
13. The Pool's percentage of market value invested in any single mandate/portfolio using an active investment strategy, other than internally managed mandates, shall be no greater than 10%.

If at any time, due to market fluctuations or any other circumstances, any of the guidelines are not maintained, Staff will use its best efforts to conform to these limits in a timely manner, while taking into account current market conditions and the associated costs of rebalancing. At the Board's next regularly scheduled quarterly meeting, the CIO shall inform the Board of any cases that the Pool allocations were outside of the limits and either inform the Board of the actions that were taken to return the Pool back within guidelines or a plan to do so.