

MONTANA PUBLIC RETIREMENT PLANS INVESTMENT POLICY

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1. Introduction:

Montana Public Retirement Plan assets are commingled for investment purposes into a Consolidated Asset Pension Pool (CAPP) created by the Board. The use of a commingled pool 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. The Consolidated Asset Pension Pool invests directly in the underlying Asset Classes. Each Asset Class has an underlying set of investment objectives and investment guidelines. Each of the nine Plans, CAPP, and each of the Asset Classes are separately identified for accounting and record keeping purposes.

This policy is effective upon adoption and supersedes all previous Investment Policy Statement (IPS) related to the investment management of 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 Montana Board of Investments.

3. Legal and Constitutional Authority:

Article VIII, Section 13, of the Montana Constitution requires that the Legislature provide for a Unified Investment Program for public funds. Section 17-6-201, Montana Code Annotated (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.

Section 17-6-201(1), MCA, requires the Board to operate under the "prudent expert principle," define 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."

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

Section 17-6-201 (3) (b), MCA 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."

Section 17-6-201 (3) (c), MCA 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 maximum actuarial annual target rate of return of 7.65%, 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, the Board seeks to achieve an average net rate of return of 7.65%, 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** for the Retirement Plans is calculated by applying the investment performance of the benchmarks to any of the underlying asset classes to the Plans’ actual allocation to these investments 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 management, 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 (IPS) 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 (CIO), 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 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 CIO are authorized jointly to contract for investment manager services and if deemed appropriate, terminate them.
- c) **Chief Investment Officer** – The 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 IPS 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 the IPS 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.

Nine Public Retirement Plans:

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 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, 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) **Evaluation of Investment Managers**

The Investment Manager Evaluation Policy is a distinct policy that is regularly reviewed and updated separate from the Retirement Plans Investment Policy because staff utilizes the Investment Manager Evaluation Policy to oversee and manage other assets in addition to the retirement plan assets.

b) 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.

A significant percentage of the investments in the Real Estate, Real Assets and Private Investments Asset Classes are considered 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 these assets.

The investments held in the Domestic Equity, International Equity, Core Fixed Income, and Non-Core Fixed Income Asset Classes are categorized as publicly traded securities. In “normal market” conditions many of the underlying assets from these Asset Classes can be liquidated in a relatively short period to accommodate both expected and unexpected withdrawals as well as any repositioning of the asset allocation to stay within approved ranges.

To improve liquidity and manage both the expected and unexpected Retirement Plans need for cash, this Investment Policy specifies a strategic allocation to the Cash Asset Class, which invests in approved investments including the Short-Term Investment Pool (STIP).

c) 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 Asset Classes to confirm these items are known and adhere to all IPS requirements and expectations.

Staff will discuss and communicate any key information discovered due to 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.

d) 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.

e) **Cash Investments**

Cash investments held at the Retirement Plan, CAPP level, or any managed account within it, entail an element of credit risk. Thus, only approved cash investment vehicles are permitted. These include: any cash vehicle at the Custodial Bank; STIP; or any SEC-registered money market fund approved by the CIO for internally managed funds or employed by an external asset manager which specifically address credit risk in their respective investment guidelines.

11. 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 through an agent, to other market participants in return for compensation. Currently, through an explicit contract, 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 the Custodial Bank. Staff will monitor the securities lending program, and 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.

12. 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 Board’s Governance Manual, Appendix F.

13. Investment Policy Statement Review

Per Board’s Governance Policy, “the Board shall create, maintain, and revise as necessary Investment Policy Statements (IPS) for each separate account it manages. The IPS shall cite the law establishing the account if such law exists, the permissible investments authorized by law, and establish an investment range for each of the permissible investments. The Board shall review such policies at least annually or more frequently at the request of Board staff. IPS may only be revised in a public meeting. All IPS shall be posted on the Board’s web site for review by the public.”

Appendix I: Montana Public Retirement Plans Asset Allocation Ranges

Permitted Ranges:

Approved November 19, 2020

Asset Class Allocations		
Asset Class	Range Low	Range High
Domestic Equities	24	36
International Equities	12	22
Private Investments	11	19
Real Assets	2	8
Real Estate	5	13
Core Fixed Income	10	20
Non-Core Fixed Income	4	8
Cash¹	0	6
Total		
<p>¹ The combined cash at the plan level and the CAPP level is subject to the range.</p> <p>² Montana Public Retirement Plans shall have no greater than 5% of the Net Asset Value managed by any one external manager using an active investment strategy.</p>		

Appendix II: Investment Objectives and Guidelines

Schedule II-A: Investment Objectives and Guidelines Domestic Equities Asset Class

Effective Date of Schedule: June 9, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for Domestic Equities.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

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

Investment Objective:

Strategic:

The objective of the Domestic Equities Asset Class 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 the Domestic Equity Asset Class to the **MSCI USA 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:

Staff will have full discretion to manage this Asset Class 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 at the next scheduled quarterly Board meeting.

Most of the Domestic Equity investments will be managed by external investment managers.

The Domestic Equities Asset Class may utilize public long-only and long/short strategies.

It is expected that Domestic Equities Asset Class shall invest in public market investments that provide liquidity and meaningful transparency to portfolio characteristics and risk exposures.

Permitted Investments:

The Domestic Equities Asset Class may invest only in the following:

1. Domestic equity 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 CIO and purchased and monitored by Staff; and
3. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the Custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Restrictions:

1. The Domestic Equities Asset Class percentage of Net Asset Value invested in “small-cap” equities shall not exceed +10% above the Benchmark weight in “small cap”;
2. The Domestic Equities Asset Class percentage of Net Asset Value invested in passive/index strategies shall be greater than 45%.

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 considering 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 Domestic Equity Asset Class allocations were outside of the limits and either inform the Board of the actions that were taken to return the Domestic Equities Asset Class back within guidelines or a plan to do so.

**Schedule II-B:
Investment Objectives and Guidelines
International Equities Asset Class**

Effective Date of Schedule: June 9, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for International Equities.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

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

Investment Objective:

Strategic:

The objective of the International Equities Asset Class 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 the International Equities Asset Class 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:

Staff will have full discretion to manage the International Equities Asset Class 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 at the next scheduled quarterly Board meeting.

Most of the International Equities Asset Class investments will be managed by external investment managers.

The International Equities Asset Class may utilize public long-only and long/short strategies.

It is expected that the International Equities Asset Class shall invest in public market investments that provide liquidity and meaningful transparency to portfolio characteristics and risk exposures.

Permitted Investments:

The International Equities Asset Class may invest only in the following:

1. International equity 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 CIO and purchased and monitored by Staff; and
3. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the Custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Restrictions:

1. The International Equities Asset Class percentage of Net Asset Value invested in “small-cap” equities shall not exceed +10% above the Benchmark weight in “small cap”;
2. The International Equities Asset Class percentage of Net Asset Value invested in passive/index strategies shall be greater than 42%;
3. The International Equities Asset Class percentage of Net Asset Value invested in Emerging Market securities shall not exceed + or - 10% above the Benchmark weight in Emerging Market securities.

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, considering 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 International Equities Asset Class allocations were outside of the limits and either inform the Board of the actions that were taken to return the International Equities Asset Class back within guidelines or a plan to do so.

**Schedule II-C:
Investment Objectives and Guidelines
Private Investments Asset Class**

Approved Date of Schedule: November 19, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for Private Investments.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

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

Investment Objective:

Strategic:

The objective of the Private Investments Asset Class 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 investment performance comparisons. Characteristically, private 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 investments require a long-time horizon to realize the value provided by the creation or restructuring of private companies.

The performance objective for the Private Investments Asset Class 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.

Success in achieving this objective will be measured by comparing the net return of the Private Investments Asset Class to the weighted average of the **MSCI USA Small Cap Index (Private Equity) and the S&P Leveraged Loan Index (Private Credit)** (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:

Staff will have full discretion to manage the Private Investments Asset Class 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 at the next scheduled quarterly Board meeting.

Most of the Private Investments Asset Class investments will be managed by external investment managers via a partnership structure in which the MBOI will have a limited partnership interest.

Permitted Investments:

The Private Investments Asset Class 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. The Private Investments Asset Class 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. Exchange-Traded Funds (ETFs) based on a public equity index that is approved by the CIO and purchased and monitored by Staff; and
6. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the Custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Restrictions

1. The Montana Public Retirement Plan assets as a percentage of Net Asset Value invested in a single Direct Limited Partnership shall be no greater than 2.0%;
2. No more than 30% of the aggregate of the Private Investments Asset Class net asset value plus uncalled committed capital should be considered “Non-U.S.” exposure based on the primary objective of the Fund, Partnership, Separate Account, or Index;
3. No more than 10% of the aggregate of the Private Investments Asset Class net asset value shall be invested in direct co-investments;
4. 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 Private Investments strategy diversification. It is important to note that these ranges reference the sum of the Private Investments Asset Class net asset value and uncalled commitments.

<u>Strategy</u>	<u>Policy Range</u>
Buyout and all other private equity related strategies not related to Venture Capital or Private Credit	50% - 100%
Venture Capital	0% - 25%
Private Credit	0% - 50%

For the purpose of the ranges provided above, 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 considering 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 Private Investments Asset Class allocations were outside of the limits and either inform the Board of the actions that were taken to return the Private Investments Asset Class back within guidelines or a plan to do so.

**Schedule II-D:
Investment Objectives and Guidelines
Real Assets Asset Class**

Effective Date of Schedule: November 19, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for Real Assets.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

1. Establish the investment objectives and performance standards of the Real Assets Asset Class; and
2. Provide diversified exposure to the Real Assets markets in a prudent and cost-effective manner.

Investment Objective:

Strategic:

The objective of the Real Assets Asset Class is to attain the highest possible return within the parameters of the Investment Guidelines set forth below.

Performance:

There is no generally accepted performance comparisons benchmark index for private partnership investments in Real Assets. Characteristically, private 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 partnership investments usually require a long-time horizon to realize the value provided by the creation or enhancement of private companies.

The long-term performance objective for the Real Assets Asset Class is the achievement of net returns (after management fees and general partner’s carried interest) above a benchmark reflecting public equity Real Assets market returns.

Success in achieving this objective will be measured by comparing the long-term net return of the Real Assets Asset Class to **1/3 MSCI ACWI Commodity Producers Index, 1/3 US TIPS Index, 1/3 MSCI ACWI Infrastructure Index** (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:

Staff will have full discretion to manage the Real Assets Asset Class 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 at the next scheduled quarterly Board meeting.

Most of the Real Assets Asset Class investments will be managed by external investment managers via private investment partnerships in which the MBOI will have a limited partnership interest; however, the Real Assets Asset Class may also utilize public long-only and long/short strategies.

Permitted Investments:

The Real Assets Asset Class (for the purpose of these guidelines, “Real Assets” includes investments in inflation linked bonds, infrastructure, timber, energy, agriculture, and other commodities) may invest only in the following:

1. Private investment partnership interests in Real Assets. These private investment partnerships may be direct limited partnerships, limited liability companies, or vehicles that primarily invest in partnerships, including fund-of-funds and secondary funds;
2. The Real Assets Asset Class may co-invest with private investment managers in transactions that are suitable for inclusion into a Real Assets private investment partnership;
3. Individual public or private securities received as distributions from funds;
4. Separately managed accounts, open-ended funds, closed-ended funds, or exchange-traded funds (ETFs), managing publicly traded Real Assets related investments, where the investments are approved by the CIO and purchased and monitored by Staff;
5. Inflation Linked Bonds; and
6. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Restrictions

1. The Montana Public Retirement Plan assets as a percentage of Net Asset Value invested in a single investment within Real Assets Asset Class shall be no greater than 2.0%;
2. No more than 30% of the aggregate of the Real Assets Asset Class Net Asset Value plus uncalled committed capital should be considered “Non-U.S.” exposure based on the primary objective of the fund, partnership, separately managed account, or index;
3. No more than 10% of the aggregate of the Real Assets Asset Class Net Asset Value shall be invested in direct co-investments; and
4. 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 the Real Assets Asset Class strategy diversification. It is important to note that these ranges reference the sum of the Real Assets Asset Class Net Asset Value and uncalled commitments.

<u>Strategy</u>	<u>Policy Range</u>
Commodities Related	25% - 75%
Infrastructure Related	0% - 50%
Inflation Linked Bonds	0% - 50%

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

Timber Fund Leverage

Leverage is a significant risk factor. On an individual fund basis, the leverage level can range up to 30.0%. It is important to note; however, that in aggregate, leverage consists of the combined borrowing at the property level and the fund level. On a select basis, the leverage may exceed 30.0% at the combined property and fund investment level, if it is determined to be reasonable to do so, particularly in the early stages of the fund investment cycle when a fund level credit facility is utilized to finance early fund investments on a short-term basis prior to committed capital being drawn. While Staff will monitor leverage on this combined basis, the leverage statistic Staff will focus on most for purposes of compliance with this policy is the stabilized long-term leverage at the overall fund investment level once it has completed its acquisition phase, paid down outstanding short-term credit facility balances used to fund capital calls and the investment period has ended. New investments shall be made with the intention that the total timber fund investment leverage shall not exceed 30%.

<u>Strategy</u>	<u>Leverage Policy Range</u>
Timber	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 considering 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 when the Real Assets allocations were outside of the limits and either inform the Board of the actions that were taken to return the Real Assets Asset Class back within guidelines or a plan to do so.

**Schedule II-E:
Investment Objectives and Guidelines
Real Estate Asset Class**

Effective Date of Schedule: June 9, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for Real Estate.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

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

Investment Objective:

Strategic:

The objective of the Real Estate Asset Class is to attain the highest possible 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 the Real Estate Asset Class to the **NCREIF Fund Index – Open End Diversified Core Equity (NFI-ODCE)** (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.

Investment Guidelines:

Staff will have full discretion to manage the Real Estate Asset Class 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 at the next scheduled quarterly Board meeting.

Most of the Real Estate Asset Class investments will be managed by external investment managers via private investment partnerships in which the MBOI will have a limited partnership interest; however, the Real Estate Asset Class may also utilize public long-only and long/short strategies.

Permitted Investments:

The Real Estate Asset Class may invest only in the following:

1. Separate accounts, open-ended funds, closed-ended funds, exchange-traded funds (ETFs), or real Estate investment trusts (REITs) managing publicly traded real estate, where the investments are approved by the CIO and purchased and monitored by Staff;

2. 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;
3. The Real Estate Asset Class may co-invest with private investment managers in transactions that are suitable for inclusion into a private real estate investment partnership;
4. Separate accounts investing in private real estate direct investments;
5. Individual public or private securities received as distributions from funds are also permitted to be held in the Real Estate Asset Class; and
6. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Restrictions

1. The Montana Public Retirement Plan assets as a percentage of Net Asset Value invested in a single investment within the Real Estate Asset Class shall be no greater than 2.0%;
2. No more than 30% of the aggregate of the Real Estate Asset Class Net Asset Value plus uncalled committed capital should be considered “Non-U.S.” exposure based on the dominant geographic exposure of the Fund, Partnership, Separate Account, or Index;
3. No more than 10% of the aggregate of the Real Estate Asset Class Net Asset Value shall be invested in direct co-investments; and
4. 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 the Real Estate Asset Class strategy diversification. It is important to note that these ranges reference the sum of the Real Estate Asset Class Net Asset Value and uncalled commitments.

<u>Strategy</u>	<u>Policy Range</u>
Core Real Estate	20% - 50%
Core-plus/Non-Core Real Estate	25% - 65%
Real Estate Debt	10% - 40%
Public Real Estate Securities	0% - 40%

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%. It is important to note; however, that in aggregate, leverage consists of the combined borrowing at the property level and the fund level. On a select basis, the leverage may exceed 75.0% at the combined property and fund investment level, if it is determined to be reasonable to do so, particularly in the early stages of the fund investment cycle when a fund level credit facility is utilized to finance early fund investments on a short-term basis prior to committed capital being drawn. While Staff will monitor leverage on this combined basis at the fund investment level, the leverage statistic Staff will focus on most for purposes of compliance with this policy is the stabilized long-term leverage at the overall fund investment level once it has completed its acquisition phase, paid down

outstanding short-term credit facility balances used to fund capital calls and the investment period has ended. New investments shall be made with the intention that the total Real Estate Asset Class leverage shall not exceed 60%.

<u>Strategy</u>	<u>Leverage Policy</u>
Core Real Estate Investments	0% - 50%
Core-plus/Non-Core Real Estate	0% - 75%
Real Estate Debt	0% – 75%

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 considering 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 Real Estate Asset Class allocations were outside of the limits and either inform the Board of the actions that were taken to return the Real Estate Asset Class 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 the Real Estate Asset Class shall remain diversified across these factors. These and other factors shall be monitored and reported to the Board at least annually.

**Schedule II-F:
Investment Objectives and Guidelines
Core Fixed Income**

Approved Date of Schedule: June 9, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for Core Fixed Income.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

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

Investment Objective:

Strategic:

The objective of the Core Fixed Income Asset Class 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 the Core Fixed Income Asset Class to the **Bloomberg 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:

Staff will have full discretion to manage the Core Fixed Income Asset Class consistent with the investment guidelines stated below. Core Fixed Income is defined as strategies primarily invested in marketable, publicly traded, investment grade fixed income securities denominated in U.S. dollars. 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 at the next scheduled quarterly Board meeting.

The Core Fixed Income Asset Class may invest only in the following:

Internally Managed Permitted Investments:

1. Dollar denominated debt obligations of the U.S. Government, including its agencies and instrumentalities;
2. Dollar denominated debt obligations of Quasi and Foreign Government entities;
3. Dollar denominated debt obligations of domestic and foreign corporations;

4. Dollar denominated securitized assets, including U.S. Agency mortgage backed and commercial mortgage backed securities (MBS/CMBS), U.S. Agency collateralized mortgage obligations (CMO's) and asset backed securities (ABS);
5. Dollar denominated Non-agency mortgage backed securities (RMBS) and Non-agency commercial mortgage backed securities (CMBS);
6. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the Custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Internally Managed Restrictions

1. The average duration of any internally managed portfolio will be maintained in a range of + or – 20% of the Benchmark duration;
2. A minimum of 20% of the Net Asset Value of any internally managed portfolio will be held in U.S. Government securities, including U.S. Treasuries, TIPS and Agency securities;
3. Securities must be rated investment grade by at least two nationally recognized statistical rating organizations (NRSRO), with the exception of securities issued or guaranteed by agencies or instrumentalities of the U.S. Government. In the case of split-rated securities, the lower rating is used;
4. Securities that drop below investment grade as defined above may be held to maturity, however any internally managed portfolio may not hold more than 10% of its Net Asset Value in securities rated below investment grade;
5. Securitized assets must be rated a minimum of the 4th highest rating by any nationally recognized statistical rating organization (NRSRO) at the time of purchase;
 - a. Securitized assets that drop below the 4th highest rating of any NRSRO may be held to maturity, however any internally managed portfolio may not hold more than 5% of its Net Asset Value in these securities;
6. A maximum of 10% of the Net Asset Value of any internally managed portfolio may be held in dollar denominated quasi and foreign government securities;
7. A maximum of two times the Benchmark weight may be held in Corporate securities in any internally managed portfolio;
8. A maximum of two times the Benchmark weight in U.S. Agency MBS may be held in U.S. Agency MBS and CMO securities in any internally managed portfolio;
 - a. A maximum of 20% of the Net Asset Value of any internally managed portfolio may be held in U.S. Agency CMO's;
9. A maximum of 5% of the Net Asset Value of any internally managed portfolio may be held in asset backed securities (ABS);
10. A maximum of 10% of the Net Asset Value of any internally managed portfolio may be held in U.S. Agency and Non-Agency commercial mortgage backed securities (CMBS);
11. A maximum of 10% of the Net Asset Value of any internally managed portfolio may be held in non-agency mortgage backed securities (RMBS);
12. A maximum of 3% of the Net Asset Value of any internally managed portfolio may be held in a single corporate parent issuer, foreign/quasi government issuer or securitized specific pool at the time of purchase;
 - a. A maximum of 4% of the Net Asset Value of any internally managed portfolio may be held in a single corporate parent issuer, foreign/quasi government issuer or securitized specific pool at any time;

13. A maximum of 5% of the Net Asset Value of any internally managed portfolio may be invested in Cash;
14. The use of leverage is prohibited.

Externally Managed Permitted Investments:

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. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the Custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Externally Managed Restrictions

1. The average duration of any externally managed portfolio will be maintained in a range of + or – 25% of the index duration;
2. A maximum of 20% of the Net Asset Value of any externally managed portfolio will be invested in securities rated below investment grade as defined by any nationally recognized statistical rating organizations (NRSRO). In the case of split-rated securities, the lower rating is used;
3. A maximum of 10% of the Net Asset Value of any externally managed portfolio will be invested in Non-dollar debt; either hedged or unhedged;
4. A maximum of 5% of any externally managed portfolio will be invested in Cash.

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 considering 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 Core Fixed Income Asset Class allocations were outside of the limits and either inform the Board of the actions that were taken to return the Core Fixed Income Asset Class back within guidelines or a plan to do so.

**Schedule II-G:
Investment Objectives and Guidelines
Non-Core Fixed Income Asset Class**

Approved Date of Schedule: June 9, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for Non-Core Fixed Income.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

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

Investment Objective:

Strategic:

The objective of the Non-Core Fixed Income Asset Class 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 the Non-Core Fixed Income Asset Class to the **Bloomberg Barclays US High Yield - 2% Issuer Cap 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:

Staff will have full discretion to manage the Non-Core Fixed Income Asset Class consistent with the investment guidelines stated below. Non-Core Fixed Income is defined as strategies primarily invested in High Yield Corporate Debt, Emerging Market Debt, Convertible Debt and Preferred Securities. 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 at the next scheduled quarterly Board meeting.

Permitted Investments:

The Non-Core Fixed Income Asset Class 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. Cash – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the Custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

Other Restrictions

1. A maximum of 10% of the Net Asset Value of the Non-Core Fixed Income Asset Class shall be held in Non-U.S. securities if they are denominated in a foreign currency;
2. The average duration of the Non-Core Fixed Income Asset Class will be maintained in a range of + or – 25% of the index duration.

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 considering 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 Non-Core Fixed Income Asset Class allocations were outside of the limits and either inform the Board of the actions that were taken to return the Non-Core Fixed Income Asset Class back within guidelines or a plan to do so.

**Schedule II-H:
Investment Objectives and Guidelines
Cash Asset Class**

Approved Date of Schedule: June 9, 2020

This Schedule is effective upon adoption by the Board and supersedes all previous Investment Objectives and Guidelines for the Cash Asset Class that is part of the Consolidated Asset Pension Pool.

Statement of Purpose:

The purpose of these objectives and guidelines is to:

1. Establish the investment objectives and performance standards of the Cash Asset Class; and
2. Provide exposure to the cash-equivalent markets in a prudent and cost-effective manner.

Investment Objective:

Strategic:

The objective of the Cash Asset Class 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 the Cash Asset Class to the **Federal Reserve US Treasury Constant Maturity 1-Month 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:

Staff will have full discretion to manage the Cash Asset Class 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 at the next scheduled quarterly Board meeting.

Permitted Investments:

The Cash Asset Class may invest only in the following:

1. Cash and Cash Equivalents – either an investment in the Short-Term Investment Pool (STIP), a vehicle available through the Custodian, or an SEC registered money market fund that is considered a “US Treasury” or “US Government” money market fund per the SEC regulations.

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 considering 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 Cash Asset Class allocations were outside of the limits and either inform the Board of the actions that were taken to return the Cash Asset Class back within guidelines or a plan to do so.