CURTIS E. MEIER, JR.
WYOMING STATE TREASURER

DAWN A. WILLIAMS, DEPUTY STATE TREASURER

MEMORANDUM

TO: Joint Appropriations Committee
Select Committee on Capital Financing and Investments

FROM: Dawn Williams, Deputy State Treasurer

DATE: June 30, 2020

SUBJECT: Report of Internal Investment Management

Pursuant to 2018 Wyoming Session Laws, Chapter 134, Section 2, Section 004, Footnote 3 as amended by 2019 Wyoming Session Laws, Chapter 80 (Figure 1), I am pleased to provide a report of Internal Investment Management in the State Treasurer's Office.

Figure 1.

2018 Wyoming Session Laws, Chapter 134, Section 2
Amended by
2019 Wyoming Session Laws, Chapter 80, Section 2

Section 004. STATE TREASURER

3. The state treasurer shall report on the documented savings resulting from increased use of internal investment personnel and reduced payments for external investment managers to the joint appropriations committee and the select committee on capital financing and investments not later than June 30, 2019 and June 30, 2020. Reported savings shall be limited to foregone expenditures from terminated or renegotiated contracts with external investment managers and funds. The state treasurer shall also include an explanation and accounting of all expenditures relating to the work performed by internal investment personnel. The report shall outline the standards, objectives and investment policies for all funds subject to internal management, and a performance report for the funds, including benchmark comparisons, overall return on the funds, as well as comparative performance from the externally managed funds for an identical timeframe.

I. SAVINGS

Since the 2017 inception of the investment team build-out, the Investment Division (Division) of the State Treasurer's Office (STO) has generated management fee savings of over $25 million (Appendix A and B). The initial expectation of the Legislature was that STO would utilize one-half of documented savings up to $3,000,000 per year to roll-out the program. As demonstrated, the Division has consistently generated significantly more savings than were anticipated or required.

II. EXPENDITURES

The bulk of the expenditures consist of employee salaries and benefits. This amount will grow but level off in coming fiscal years as we continue to fill positions (the Legislature appropriated three new positions for the FY2021-22 biennium). In addition, asset allocations approved by the Investment Funds Committee and the State Loan and Investment Board (SLIB) are being implemented, so STO has begun the process of creating and executing the investment and financial accounting systems anticipated when the budget was originally established. We expect to see resulting growth in the contractual services line item. The biennial expenditures to date are outlined in Figure 2.

Figure 2.

State Treasurer's Office
Internal Investment Budget, Unit 0901
Fiscal Year 2019-2020 Expenditures as of 6-24-2020 (rounded)

	Expenditures
Salary and Benefits	$2,043,612
Professional Development and Training	61,616
Travel	41,041
Computer Equipment and Software	11,946
IT Maintenance Agreements	401,975
Other Support Services	5,355
IT/Telecommunications (ETS)	15,132
Contracts (Legal, Technology)	945,171
	$3,525,848

III. INTERNAL INVESTMENT STANDARDS, OBJECTIVES AND POLICIES

The internal investment program established its standards, objectives and investment policies in conjunction with the State's investment consultant RVK, the Investment Funds Committee and the SLIB. All agency investments are made in accordance with State of Wyoming SLIB Master Investment Policy and Sub-Policies (Appendix C).

IV. PERFORMANCE REPORT

The most recent report is found in Appendix D.

V. CONCLUSION

The internal investment function continues to be a success. The (3) additional investment positions are effective January 1, 2021. We are hopeful that we will be able to fill those positions, however, we are mindful of the state revenue forecast and will take that into consideration as we move forward.

Projected Fee Savings: FY 2020

- The AUM adjusted management fee uses FY ‘20 AUM as the basis to calculate the FY ’16 fees. This allows for an apples to apples comparison.

		AUM (in Billions)	Mgmt. Fee (in Millions)	Basis Points	AUM Adj. Mgmt. Fee (in Millions)
FY 2016	Actual	$19.2	$66.7	34.7	$72.8
FY 2020	Estimate	$21.0	$47.4	22.6	$47.4
Estimated Savings:					$25.4

APPENDIX B

TOTAL FUND - DIRECT (MGMT)

As of June 30, 2020 (Estimate)

	FY 2016 Mgmt Fee	FY 2020 Estimate Mgmt Fee	Difference Mgmt Fee
Wyoming State Total Fund	**$66,681,858**	**$47,410,063**	**-$19,271,794**
% of Ending WSTO FY Value	*0.347%*	*0.226%*	*-0.12%*
US Equity*	**$5,173,961**	**$1,403,443**	**-$3,770,518**
State Street All Cap	$322,832	$386,716	
Van Berkom	$1,458,389	$668,980	
State Street Russell 2000	$1,624,712	$41,999	
Internal Equity Russell 2000	$1,768,028	$305,749	
International Equity	**$6,004,408**	**$4,550,155**	**-$1,454,253**
Northern Trust	$50,996	$285,884	
Harding Loevner	$267,647	$1,343,789	
Arrowstreet	$1,275,268	$2,920,482	
	$2,015,616		
	$361,534		
	$2,033,347		
Private Equity	**$10,603,431**	**$9,880,211**	**-$723,220**
Access Venture Partners II	$188,236	$166,651	
Cheyenne Capital Fund	$6,383,776	$4,996,921	
Hamilton Lane Nowood Fund	$2,161,419	$2,316,639	
BlackRock LTPC	$0	$0	
Neuberger Berman Sauger Fund	$1,870,000	$2,400,000	
Real Estate	**$8,015,045**	**$9,316,867**	**$1,301,822**
Clarion Lion Properties Fund	$2,187,070	$5,009,167	
UBS Trumbull Property Fund	$1,541,338	$1,875,576	
Cornerstone Core Mortgage Fund I	$68,994	$17,928	
Heitman Value Partners II	$22,350	$0	
M&G Real Estate Debt Fund II	$631,787	$391,975	
Northwood Real Estate Partners IV	$2,841,424	$1,503,910	
SC Capital Core Fund	$0	$393,096	
TA Realty VIII	$114,379	$1,543	
Realterm	$0	$0	
WestRiver Real Estate Finance Fund	$607,703	$123,672	
Absolute Return	**$8,480,344**	**$5,878,106**	**-$2,602,238**
PAAMCO	$8,480,344	$604,495	
Grosvenor Class B	$0	$4,004,745	
Grosvenor Class C	$0	$1,268,866	
Convertible Bonds	**$2,823,817**	**$0**	**-$2,823,817**
Allianz Global Investors	$2,823,817	$0	
MLPs	**$0**	**$2,900,635**	**$2,900,635**
Harvest Passive	$0	$50,000	
Harvest	$0	$2,850,635	
Preferred Stock	**$0**	**$453,695**	**$453,695**
Cohen & Steers	$0	$453,695	
Fixed Income	**$24,564,366**	**$12,166,000**	**-$12,398,366**
C.S. McKee	$1,068,998	$811,691	
PIMCO Core	$2,300,895	$2,428,109	
JPM MBS	$2,312,281	$464,446	
Payden	$1,695,091	$0	
Neuberger Berman Credit	$4,120,186	$309,673	
Credit Suisse	$1,256,295	$1,484,750	
Octagon	$1,593,719	$1,158,377	
Seix	$2,132,306	$0	
Grosvenor Silvery Lupine	$5,233,330	$3,723,005	
Investec	$1,244,678	$371,009	
Global Evolution	$1,445,412	$424,297	
Goldman Sachs	$161,175	$200,000	

TOTAL FUND - DIRECT (MGMT)

As of June 30, 2020 (Estimate)

	FY 2016	FY 2020 Estimate	Difference
	Mgmt Fee	Mgmt Fee	Mgmt Fee
Ladder Portfolio	$0	$0	
Internal Long Duration	$0	$0	
Logan Circle	$0	$790,642	
Internal Low Duration	$0	$0	
Internal Fixed Income Portfolio	$0	$0	
Cash & Cash Equivalents	**$1,016,486**	**$860,952**	**-$155,534**
JP Morgan Cash Composite	$1,016,486	$860,952	

*Managers represent current managers and do not match FY 2016 managers.

APPENDIX C

STATE OF WYOMING
STATE LOAN AND INVESTMENT BOARD

MASTER INVESTMENT POLICY and SUB-POLICIES

Updated June 4, 2020

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SECTION 1. INTRODUCTION

The purpose of this document is to establish the Master Investment Policy and Sub Investment Policies for the State of Wyoming State Loan and Investment Board (the "Board"). The Board is comprised of five elected officials: Wyoming's Governor as chairman of the Board, Secretary of State, State Auditor, State Treasurer and State Superintendent of Public Instruction.

The Board is responsible for the fiduciary oversight of the invested public funds of the State of Wyoming (the "State"). The Board has chosen these policies as the most appropriate policies to achieve the investment objectives described below. Wyoming Statute ("W.S.") 9-4-716 states that the Board shall adopt investment policy statements for Wyoming State funds and shall review these investment policy statements at least annually.

SECTION 2. INVESTMENT OBJECTIVES AND PRIORITIES, DESCRIPTION OF PORTFOLIO, AND GENERAL PRINCIPLES FOR ACHIEVING RETURN OBJECTIVES

It is the policy of the Board to invest public funds of the State in a manner that strives for the highest possible risk-adjusted total return consistent with an appropriate level of safety, liquidity, and consideration of the unique circumstances for each fund. The current State portfolio consists of the following Permanent and Non-Permanent Funds:

a) Permanent Funds
- i. Permanent Mineral Trust Fund [Appendix A];
- ii. Common School Permanent Land Fund [Appendix B];
- iii. University Permanent Land Fund [Appendix C];
- iv. Permanent Land Fund Pool [Appendix D];
- v. Hathaway Scholarship Fund [Appendix E];
- vi. Excellence in Higher Education Endowment Fund [Appendix F]; and
- vii. Workers' Compensation Fund [Appendix G].

b) Non-Permanent Funds
- i. Pool A Investment Account [Appendix H];
- ii. State Agency Pool [Appendix I];
- iii. Legislative Stabilization Reserve Account ("LSRA") [Appendix J];
- iv. Wyoming State Treasurer's Asset Reserve ("WYO-STAR") [Appendix K]; and
- v. Wyoming State Treasurer's Asset Reserve II ("WYO-STAR II") [Appendix L].

Specific objectives and priorities for each of the individual pools and funds are further delineated in the sub-policies attached in the appendices. Specific objectives and priorities for individual asset managers are delineated by mandate set forth where applicable below.

All available State funds shall be invested with the following considerations:

a) Recognition of differing objectives and needs of various fund portfolios while emphasizing the highest potential for risk-adjusted total return;
b) Investments that seek to ensure the preservation of capital and safety of principal in the overall portfolio;
c) Liquidity requirements of anticipated and unanticipated expenditures;
d) Yield;
e) Conformance with State law and other pertinent legal restrictions;
f) Where appropriate, maximization of the total rate of return on investment consistent with the foregoing objectives; and
g) Diversification by asset type, security and investment manager in order to smooth the volatility of returns and improve the overall resilience of the investment portfolios.

SECTION 3. STANDARDS OF CARE

3.1 Prudence. All participants in the investment process shall act responsibly as custodians of the public trust. The standard of prudence to be applied by the employees of the State Treasurer's Office and external service providers shall be as required under W.S. 9-4-715(d). The Board, the State Treasurer, all members of the Treasurer's Investment Funds Committee, all designees of the State Treasurer, and any other fiduciary appointed by the State Treasurer shall exercise the judgment and care of a prudent investor as required under the prudent investor rule set forth in the Uniform Prudent Investor Act, W.S. 4-10-901 to 4-10-913 (the "Prudent Investor Rule"). This Act states that "[a] trustee shall invest and manage trust assets as a prudent investor would, by considering the purposes, terms, distribution requirements and other circumstances of the trust." W.S. 4-10-901. Investments or groups of investments shall not be evaluated in isolation but in the context of the entire investment portfolio and as part of an overall investment strategy of the trust or fund from which the investment is derived, consistent with the policies for such trust or fund established under W.S. 9-4-716 by the Board.

The purchase of a security or the making of any direct investment by the State Treasurer or the State Treasurer's designee in a security shall not constitute a delegation of the State Treasurer's duties. The State Treasurer may delegate investment and management functions that a prudent investor of comparable skills could properly delegate under the circumstances. The State Treasurer shall exercise reasonable care, skill and caution in:

a) Selecting an agent;
b) Establishing the scope and terms of the delegation, consistent with the purposes and terms of the trust; and
c) Periodically reviewing the agent's actions in order to monitor the agent's performance and compliance with the terms of the delegation.

3.2 Ethics and Professionalism.

a) General. Members of the Board, its staff, the State Treasurer's Office, members of the Treasurer's Investment Funds Committee, and the Consultant (as hereinafter defined) responsible for investment decisions or who influence investment decisions ("Individuals") shall be held to the highest standards of professional and ethical conduct and should be committed to a culture of honesty, integrity and accountability. Individuals shall not engage in any professional conduct involving dishonesty, fraud, deceit or misrepresentation or commit any act that reflects adversely on their honesty, trustworthiness or professional competence. Individuals shall be governed by applicable State statutes, including without limitation W.S. 6-5-118, W.S. 9-13-101 *et seq.* and W.S. 16-6-118.

b) Compliance with Laws, Rules, Regulations and Policies. Individuals must comply with both the letter and spirit of all applicable laws, rules and regulations and the terms and provisions of this investment policy.

c) Conflicts of Interest. Individuals have a duty to avoid financial, business or other relationships which might cause a conflict with the performance of their duties or could reasonably be expected to interfere with their duties or their ability to make unbiased and objective recommendations and decisions. Individuals should conduct themselves in a manner that avoids even the appearance of conflict between their personal interests and their duties as a public official or employee of the State. Conflicts of interest may arise in many ways. Examples include, but are not limited to:

i. Acceptance of gifts, payments or services from those seeking to do business with the State as described in more detail in Section 3.3 below;

ii. Placement of business with an entity owned or controlled by an Individual or an Individual's family;
iii. Ownership of, or personal interest in, a company which is a vendor of the State;
iv. Ownership of, or personal interest in, any security purchased directly by the State through the State Treasurer's Office or at the direction of the Board; and
v. Compensation to an Individual by a vendor or potential vendor of the State.

d) Confidentiality. Individuals shall not disclose to any other person official information which Individuals obtain through or in connection with their duties, unless the information is available to the general public or unless the disclosure is authorized by law.

e) Proper Use of Assets. Individuals shall endeavor to protect the State's assets and ensure their efficient use. State assets, such as funds and equipment, may only be used for legitimate State purposes.

f) Fair Dealing. Individuals should endeavor to deal fairly with the State's investment managers and vendors. Individuals should not take unfair advantage of anyone through illegal conduct, manipulation, concealment, abuse of privileged information, misrepresentation of material facts or any other unfair dealing practice.

3.3 Gifts, Benefits or Favors. The work of the Board and its staff should always be free from even the inference or perception that favorable treatment was sought, received or given on the basis of the furnishing or receipt of gifts, benefits, entertainment, favors, hospitality or other gratuities. In furtherance of this goal, the following guidelines should be observed:

a) Individuals may not accept a gift from a vendor unless the gift has a known or apparent value of $250 or less;
b) Printed informational, educational, advertising or promotional material shall not be considered a gift;
c) In no event shall gifts of cash ever be accepted in any amount;
d) Individuals may accept meals and attend receptions in connection with business discussions at which the host is present;
e) Individuals may accept invitations to attend activities, events and entertainment in connection with business discussions at which the host is present with a known or apparent value of $250 or less;
f) Individuals may not accept multiple gifts and/or invitations for activities, events or entertainment from one vendor in a consecutive 12 month period if the total known or apparent value of all such gifts, activities, events and entertainment is more than $250;
g) Individuals may accept travel, registration and lodging paid by someone other than the State for meetings or educational seminars which are necessary or relevant to the operations of the State's investment program; and
h) Loans from vendors may not be accepted in amounts in excess of $250 except for loans by recognized banks and financial institutions which are generally available at market rates and terms.

Vendor is defined as an existing or prospective provider of investment related services to the Board and/or the State Treasurer's Office including, but not limited to, brokers, investment managers, custodian bank representatives and consultants.

It is important that Individuals who make or influence investment decisions act objectively without interference from any conflict of interest. Therefore, should an Individual violate any guidelines described above in Sections 3.2 or 3.3, or otherwise have a conflict of interest, then that Individual shall be forced to abstain from any discussions, recommendations and votes involving that vendor at Board meetings or investment working meetings.

3.4 Disclosure. All Individuals must reaffirm their understanding and compliance with the policies contained in Sections 3.2 and 3.3 above in the form of an annual disclosure report to the Office of State Lands and Investments. Such disclosure shall comply fully with the provisions of W.S. 6-5-118 and shall be made a part of the minutes of the Board. The format and timing of such annual disclosure shall be as determined by the Office of State Lands and Investments. While disclosure shall be conducted on an annual basis, compliance with the policies stated in Sections 3.2 and 3.3 above is a continuing obligation and so, if a conflict of interest or other instance of non-compliance should arise at any time during the year, the Individual shall be responsible for reporting such instance to the Office of State Lands and Investments immediately.

SECTION 4. AUTHORITY AND RESPONSIBILITIES

4.1 Board Responsibilities. The Board responsibilities shall include but not be limited to the following:

a) Annual review of master investment policy and sub policies in consultation with the Investment Funds Committee;
b) Annual review, assessment, and establishment of fund asset allocations;
c) Advisor/investment consultant selection;
d) Quarterly review of the performance of the investment portfolio;
e) Approval of investments for Local Government Entities (as hereinafter defined);
f) Termination and hiring of investment managers;
g) Review and approve material terms of alternative investments upon consideration of Investment Funds Committee recommendations; and
h) Appoint members to the Selection Panel as necessary.

The Governor is Chairman of the Board but in his absence from any meeting any of the Board members may act as Chairman Pro Tempore and preside at meetings. The Director of the State Land and Investment Office is the Chief Executive Officer of the Board. Prior to April 1, 1997, the Board was known and referred to as the Farm Loan Board.

4.2 Appropriation. The Board shall receive an appropriation directed to the Office of State Land and Investments to be used to compensate an investment consultant (the "Consultant") for its services to the State.

4.3 State Treasurer Responsibilities. The State Treasurer's responsibilities are detailed in the following statutes:

a) The State Treasurer's responsibilities are detailed in the following statutes:
    i. W.S. 9-1-409 State Treasurer duties generally; Performance Compensation Plan
    ii. W.S. 9-4-715 Permissible Investments;
    iii. W.S. 9-4-716 State Investment Policy; Investment Consultant;
    iv. W.S. 9-4-717 Additional Investment Matters;
    v. W.S. 9-4-718 Investment Managers;
    vi. W.S. 9-4-720 Investment Funds Committee;
    vii. W.S. 9-4-721 Selection Panel for Investment Funds Committee; and
    viii. W.S. 9-4-831 Investment of Public Funds.

b) The State Treasurer's responsibilities and authorities shall include but not be limited to the following:
    i. Responsible for the investment of state funds;
    ii. Designate in writing those Treasury Office personnel authorized to invest on behalf of the State. Authority to manage the investment program is granted to the State Treasurer derived from the above statutes;

iii. Establish and carry out written procedures and internal controls for the operation of the State investment program consistent with this investment policy. Procedures should include references to: safekeeping, delivery vs. payment, investment accounting, repurchase agreements, wire transfer agreements, collateral/depository agreements, banking services contracts, and portfolio rebalancing;
iv. Conform State investment transactions as provided under the terms of this investment policy and the procedures established by the State Treasurer;
v. Be responsible for all transactions undertaken by the State and shall establish a system of controls to regulate the activities of subordinate officials;
vi. Monitor the commission recapture and discount brokerage programs and issue directed brokerage letters (limited to the commission recapture program) to the investment managers on an annual basis;
vii. Monitor performance reports from the Consultant;
viii. Select and review the State custodian and securities lending agent(s);
ix. Conduct due diligence in the selection of qualified State investment managers and recommend investment managers for the State to the Investment Funds Committee and the Board;
x. Recommend termination to the Board of State investment managers when appropriate;
xi. Preside over meetings of the Treasurer's Investment Funds Committee as chairman;
xii. Designate the Chief Investment Officer of the Treasurer's Office or in their absence another member of the Treasurer's Office Staff to serve as a member of the Treasurer's Investment Funds Committee; and
xiii. Implement and administer the Investment Professionals Performance Compensation Plan.

c) Internal Controls. The State Treasurer shall establish a system of internal controls and shall monitor such controls periodically. The controls shall be designed to prevent losses of funds arising from fraud, employee error, misrepresentation by third parties, or imprudent actions by staff. Such controls shall provide for but are not limited to:
i. Separation of transaction authority;
ii. Appropriate segregation of other related duties;
iii. Custodial safekeeping of securities;
iv. Clear delegation of investment authority;
v. Frequent reconciliation of investment and accounting records;
vi. Written confirmation of transactions;
vii. Supervisory controls;
viii. Securities trading controls;
ix. Control of collusion;
x. Development of electronic fund transfer agreements with lead banks and/or third party custodians;
xi. Conduct background checks on staff, interns, and applicants;
xii. Conducting regular staff training to help assure and support internal controls;
xiii. Implementation of internet and electronic security protocols;
xiv. Bonding as required by State law; and
xv. Guidelines pertaining to employment of individuals involved in the investing and financial tracking of State investments which will address security and professional qualifications.

d) The State Treasurer shall retain and authorize staff to support and maintain the integrity of the State investment program. In striving for management quality, it is the policy of the State Treasurer to attract and retain qualified investment staff and to promote, encourage,

and provide continuing education for the staff.

e) The State Treasurer, in consultation with the Investment Funds Committee, shall employ a designated Chief Investment Officer with the minimum qualifications specified in 9-4-715(a) and the State Treasurer shall consult with the designated Chief Investment Officer or the officer's designee in making any new investment of state funds or investing state or other funds.

4.4 Chief Investment Officer's Responsibilities. The Chief Investment Officer shall provide the State Treasurer with information and recommendations regarding the investment of state funds and additional information as requested by the State Treasurer, as well as complete other Treasurer's Office staff responsibilities.

4.5 Treasurer's Office Staff Responsibilities. The State Treasurer's Office staff responsibilities shall be to implement and monitor the State investment program. Those responsibilities shall include:

a) Investment research;
b) Monitoring of Consultant recommendations;
c) Monitor trade execution;
d) Accurate accounting of transactions;
e) Assist in developing and recommending policy, asset allocation and portfolio structure; and
f) Staff and support the Investment Funds Committee.

4.6 Consultant Responsibilities. Duties of the Consultant shall include, but not be limited to the following:

a) Prepare a quarterly performance report to include performance attributions on all State investment managers and total assets, including a review of investment policy guideline compliance and adherence to investment style and discipline;
b) Provide recommendations to and assist the State Treasurer, the Treasurer's Investment Funds Committee, and the Board regarding investment policy and strategic asset allocation. The recommendations regarding reaffirmation and modification of these policies shall be conducted at least on an annual basis;
c) Assist the State Treasurer and the Board in the selection of qualified State investment managers, and assist in the oversight of existing managers, including monitoring changes in personnel, ownership and the investment process;
d) Assist the State Treasurer in:
    i. The selection of a qualified custodian(s) and a securities lending agent(s) for the State;
    ii. Negotiating fee arrangements and other contract terms with the investment managers on behalf of the State; and
    iii. Negotiating and arranging for brokerage and custodial services for the State;
e) Render special projects at the discretion of the Board;
f) Handle certain other matters, primarily reporting, as described elsewhere in this investment policy;
g) Provide recommendations to and assist the State Treasurer in reviewing and suggesting potential investment benchmarks for purposes of this investment policy and the Performance Compensation Plan; and
h) Be independent with no conflicts of interests with any current or prospective service providers to the State.

4.7 Custodian Responsibilities. Duties of the custodian shall include, but not be limited to the following:

a) Provide complete custody and depository services for the designated State accounts;

b) Within 10 business days after month-end, provide a monthly report of the investment activities conducted by the investment managers for the State;
c) Provide monthly and year-end accounting statements for all State funds, including all transactions;
d) Collect all interest income, dividends, and principal realization for the State accounts and properly report it on monthly statements; and
e) Provide investment manager compliance reporting.

4.8 Internal and External Investment Manager Responsibilities. Duties of the State investment managers shall include, but not be limited to the following:

a) Adhere to the investment management style, concepts and principles for which they were hired by the State;
b) Comply with all provisions of this investment policy;
c) Execute all transactions for the benefit of the State with brokers and dealers qualified to execute institutional orders on an ongoing basis seeking the best cost of execution for the State and where appropriate, facilitate the recapture of commissions on behalf of the State; and
d) Reconcile monthly accounting, transaction and asset summary data with custodian valuations and communicate and resolve any significant discrepancies with the Consultant and the custodian.

External investment managers for the State (not employees of the State of Wyoming) responsibilities shall also include:

e) Provide the State Treasurer's Office with a written agreement to invest within the guidelines established in this investment policy and corresponding sub-policies. Alternative investment managers will provide appropriately comparable documents, such as limited partnership agreements;
f) Provide the State Treasurer's Office with proof of liability and fiduciary insurance coverage;
g) Be recognized as providing demonstrated expertise over a number of years in the management of institutional assets;
h) Maintain frequent and open communication with the State Treasurer, State Treasurer's staff, and the Consultant on all significant matters pertaining to its firm's ownership, investment style and philosophy, changes in personnel, significant client departures and periods of underperformance; and
i) Be a registered investment advisor under the Investment Advisers Act of 1940 as amended, if required to be registered by the terms of such Act.

4.9 Treasurer's Investment Funds Committee. The Treasurer's Investment Funds Committee responsibilities shall be to aid the State Treasurer and the Board to implement and monitor the State investment program. Those responsibilities shall include:

a) Provide advice in connection with investment manager selection for the State investment program;
b) Provide consultation in connection with the review of this investment policy including the review of the asset allocation developed and implemented for each fund;
c) Review portfolio performance and track adherence to target allocations quarterly;
d) Review manager performance quarterly;
e) Advise the Treasurer and staff on key economic trends and matters relevant to the efficient management of Wyoming's investments;
f) Act as a sounding board for the Treasurer and staff on matters between Board meetings pertaining to developments in the State's portfolio or the economy;
g) Establish investment benchmarks and determine whether benchmarks have been exceeded for purposes of the Performance Compensation Plan;

h) Review any new proposed investment of funds in alternative investment and submit recommendations to the Board;
i) Review investment policies and procedures and recommend statutory, rule or policy modifications consistent with 9-4-720(f); and
j) Monitor the investment of state funds in alternative investments.

4.10 State Auditor Responsibilities. Duties of the State Auditor shall include, but not be limited to the following:

a) Maintain the State's accounting records, vouchers, documents, contracts and fiscal accounts;
b) Order all payments into and out of the funds held in the State Treasury;
c) Serve as the State's controller, chief accountant, chief fiscal officer, and State payroll officer and to supervise the issuance of all warrants;
d) Audit and settle all claims against the State;
e) Draw all warrants upon the State Treasury;
f) Participate in an annual audit and provide an annual financial report to the fiscal affairs of the State, prepared in conformance with generally accepted accounting principles; and
g) Coordinate the audit of the State's federal programs to comply with federal requirements.

4.11 Selection Panel. Duties of the Selection Panel shall include the following:

a) Solicit nominations for candidates for the Investment Funds Committee from the State Treasurer's Office, other members of the Investment Funds Committee, other appropriate entities, and the Board;
b) Research and interview candidates for the Investment Funds Committee; and
c) Appoint voting members to the Investment Funds Committee.

SECTION 5. CASH HOLDINGS

Equity managers for the State shall be fully invested at all times, except in anticipation of large withdrawals instructed by the State Treasurer's Office. Equity managers should maintain less than 7.5% of their portfolios in cash equivalents except for periods of short-term portfolio repositioning not to exceed 5 trading days, unless the contract with the equity manager specifically provides otherwise. Fixed income managers for the State may maintain higher cash balances. An exception shall be made for alternative investments.

SECTION 6. PUBLIC PURPOSE INVESTMENTS

Public Purpose Investments ("PPIs") are a category of investments authorized by the Wyoming State Legislature (the "Legislature") committing State funds to projects or programs specifically chosen by the Legislature to further various public purposes or benefits for the State and its citizens. The array of these legislatively designated investments fall into two broad categories: those in which statute commits funds to specific investments and those where statute directs State agencies to exercise judgment for programs authorized by the Legislature. This latter group can be further subdivided into programs where the State Treasurer's Office has specific responsibilities and those where other agencies bear the bulk of those responsibilities.

The State Treasurer's Office, as well as other agencies with programmatic responsibilities, may have unique processes and rubrics guiding the evaluation of investment opportunities. Successful candidates are evaluated and awarded pursuant to authorizing statutes including in some cases the Prudent Investor Rule. Nevertheless, PPIs are not generally chosen for their contribution to the portfolio's performance or its overall soundness. Moreover, owing to the fact these investments are often idiosyncratic, they are not easily judged against peers and therefore do not lend themselves to treatment in an index or against other more traditional metrics.

Accordingly, their inclusion in either permanent or non-permanent portfolios adds an element which is difficult to classify and which can detract from performance as well as add risk. PPIs are included as a separate line item within the annual portfolio analysis and excluded from all fund performance calculations as there are no appropriate indices which can provide a context for peer review.

SECTION 7. POOLED/COMMINGLED INVESTMENTS

7.1 Commingled Investments. Commingled investments may be made by the State in cases where there is an operational efficiency, fee advantage, or other demonstrable benefit to the portfolio gained through such an investment.

7.2 Restricted Securities. Investments in mutual or commingled funds which invest in securities which the State could not own directly are permitted, so long as the overall characteristics of the mutual or commingled fund are generally consistent with this investment policy. While it is not expected that mutual or commingled fund guidelines will align perfectly with this investment policy, it is expected that mutual or commingled funds will be vetted to ensure a reasonably high degree of consistency with this investment policy before an investment is made. All diversified money market funds shall comply with W.S. 9-4-831(g), Investment of Public Funds.

7.3 Mutual Fund Investments. With the approval of the Board, the State Treasurer may invest in a diversified mutual fund as long as it is registered under the Securities Act of 1933 and Investment Company Act of 1940, as amended, and has qualified under state registration requirements, if any, to sell shares in this State. The diversified mutual fund must be purchased at the current net asset value.

SECTION 8. PERMISSIBLE INVESTMENTS BY THE STATE TREASURER'S OFFICE

8.1 Statutory Provisions. The investment of State funds by the State Treasurer's Office and investment managers shall comply with applicable statutory provisions. Some of these statutes are listed below:

a) W.S. 2-3-301 Standard for Fiduciaries;
b) W.S. 9-1-409(e) Performance Compensation Plan;
c) W.S. 9-4-715 Permissible Investments;
d) W.S. 9-4-716 State Investment Policy; Investment Consultants;
e) W.S. 9-4-717 Additional Investment Matters;
f) W.S. 9-4-718 Investment Managers;
g) W.S. 9-4-831 Investment of Public Funds; and
h) W.S. 9-4-1101 *et seq*.Tax and Revenue Anticipation Notes.

8.2 Public Equity Security Restrictions. All public equity investments, over-the-counter securities, and other equity related securities held by the State shall be limited to securities that are actively traded on U.S. exchanges or Non-U.S. exchanges including the NASDAQ. Public equity holdings shall be restricted to companies which have a history of more than 3 years continuous operation (current firm and/or predecessor firm), unless the contract with the investment manager specifically provides otherwise. Furthermore, securities that are acquired as the result of corporate actions are permitted.

8.3 Alternative Investment Restrictions. Alternative investments which the State obtains in the form of a security shall follow the process outlined in W.S. 9-4-715(c). Alternative investments and strategies encompass a broad range of securities and investments. No specific restrictions are made except that leverage, if utilized, must be limited to less than 50% at the limited partnership level in which the State is an investor; provided, however, for core real estate

investments, leverage should not exceed 40% across the entire portfolio and there are no specific limits on leverage for non-core real estate managers.

SECTION 9. PROHIBITED INVESTMENTS FOR SEPARATE ACCOUNT SITUATIONS

The following investments are prohibited in separate account situations (i.e., where the investment manager can tailor the investment portfolio to comply with State guidelines and the securities are not commingled with those of other clients):

9.1 Self-Dealing Transactions. Investment managers cannot purchase or hold any security that is issued by a corporation where the investment management firm may have any type of ownership relationship. An exception can be made in the case where an investment manager is attempting to replicate an index in which the investment manager's firm or parent's security is represented. Since the investment manager is simply attempting to replicate the index, such holding does not represent a self-dealing transaction. Another exception may be allowed for alternative investment managers where investments may be made in vehicles by the investment managers for the managers' account and/or the managers' professionals and/or families.

9.2 Floating Rate Securities. Floating rate securities, the interest rate of which does not reset as a result of changes in one or more reference interest rates, are prohibited. Examples of prohibited floating rate securities are those whose interest rate reset is based on an index of commodities or equity securities. Reverse floaters are also prohibited.

9.3 Individual Certificates of Deposit and Time Deposits. Individual certificates of deposit and time deposits may not exceed $250,000 unless they are 100% collateralized by eligible securities or fully covered by a surety bond.

9.4 Letter Stock. Letter stock and other unregistered equity securities are prohibited.

9.5 Real Estate. Real Estate, either private or public, is prohibited. An exception is made if an external investment manager that has been retained as a dedicated real estate investment manager manages the account, if the investment is part of an alternative investment or as provided in W.S. 9-4-715(k), or if Real Estate Investment Trusts are included in the composition of the investment manager's stated benchmark.

9.6 Short Sales and Margin Transactions. Short sales and margin transactions are prohibited except as detailed in the derivative policy below.

SECTION 10. DERIVATIVES POLICY

10.1 Allowable Use of Derivatives. Derivative instruments may be used selectively in lieu of physical securities by investment managers for the State under the following conditions:

a) Derivatives may be used (i) when they offer better liquidity (lower transaction costs), (ii) when they offer greater precision for the purposes of managing a portfolio's duration, yield curve exposure, prepayment or credit risk or (iii) to hedge foreign currency risk.
b) Derivatives may only be used primarily to reduce risk exposures, but derivatives may also be employed to increase exposure to a certain risk factor if that desired exposure is not easily obtained via physical securities.
c) Permissible derivative instruments include futures, forwards, options and swaps. Warrants are only permitted when attached to securities authorized for investment.
d) The use of derivatives by an investment manager may not materially alter their portfolio risk profile beyond that which is implied by their investment style.
e) Under no circumstances should leverage be employed in the purchase of securities.

This Section does not apply to the use of derivatives in alternative investment portfolios which is governed by Section 10.3 below.

10.2 Change in Use of Derivatives. An investment manager must obtain the approval of the State Treasurer's Office if an investment manager desires to use derivatives in a manner which is not allowed under Section 10.1 above or if, at any time, the investment manager desires to change how it utilizes derivatives in its management of the funds of the State. Each investment manager utilizing derivative securities shall prepare, maintain, and periodically deliver a written derivatives policy to the State Treasurer's Office.

10.3 Alternative Investment Portfolios. Derivatives may be utilized within alternative investment portfolios provided that the instruments and strategies utilized are consistent with this investment policy of the alternative investment vehicle and that the Consultant has reviewed, approved, and is monitoring their use. The Consultant shall monitor these instruments and strategies used to ensure that they are not expected to materially or adversely alter the portfolio risk profile in any given market cycle.

SECTION 11. PORTFOLIO GUIDELINES

11.1 Pertaining to the Overall Investment Program (exceptions may apply to Alternative Investments as detailed in their respective contracts).

- **a)** A maximum of 1% of the outstanding common shares of any corporation shall be owned by the State. An exception is made for alternative investments and for companies with a market capitalization below $5 Billion as described in Section 11.2(a)(ii).
- **b)** A maximum of 1.5% of the total book value of permanent funds and non-permanent funds that can invest in equities shall be invested in the common stock of any corporation.
- **c)** The State Treasurer or designee can invest in any class of security not otherwise authorized by law, provided the security was authorized by law at the time it was acquired and the total book value of all securities not authorized by law shall not exceed 1% of the total book value of the permanent fund accounts and the accounts of the non-permanent funds that can invest in equities, and provided further that any such investment shall be in accordance with the fiduciary standards specified in W.S. 2-3-301.
- **d)** A maximum of 70% of the total book value of permanent funds may be invested in equities and alternative investments.
- **e)** Security selection, portfolio structure and timing of purchase and sales are delegated to the investment manager.
- **f)** The Board is concerned with terrorism and human rights violations occurring worldwide, yet recognizes its fiduciary responsibility to invest only in the best economic interest of the portfolio. While the Board cannot make investments based on social or political objectives, it does consider the economic effects of social and humanitarian issues in the analysis of investments. The Board seeks to avoid investments that support terrorism or the violation of human rights. As such, the Board requires its investment managers to acknowledge that they will strive to avoid such investments. Specifically, investment managers are required to check portfolio holdings no less frequently than quarterly against the companies listed on the Specially Designated Nationals List and the countries listed on the Lists of Sanctioned Countries, maintained by the U.S. Treasury Department Office of Foreign Assets Control ("OFAC"), to ensure that the companies or countries on the list are not represented in the portfolios. If a current holding appears on the list at the time of the quarterly check, the investment manager will eliminate the position from the portfolio within a reasonable period of time and will not make additional purchases unless the issuer is removed from the OFAC list.

g) Commodities, commodity contracts, and natural resource properties are generally discouraged owing to Wyoming's native correlative exposure to natural resource development. Any investment in commodities, commodity contracts, or natural resource property such as oil or timber must take into consideration overall exposure to natural resources and commodities including Wyoming's general economy. An exception is made if the investment is part of an alternative investment.

h) The strategies described in this Section 11 may be managed (i) internally by the State Treasurer's Office,(ii) by one or more external managers, (iii) through one or more direct fund investments, and/or (iv) through one or more fund of funds arrangements; provided, however, all external managers must be selected by the Board as provided in W.S. 9-4-718 and the material terms of the instruments governing the investment for all alternative investments must be approved by the Board pursuant to W.S. 9-4-715(c).

11.2 Pertaining to Individual Strategies. The following guidelines apply to internal and external investment managers for each of the investment strategies utilized by the State, unless the contract with the investment manager specifically provides otherwise. External investment firms shall have a demonstrated record in managing institutional portfolios of strategies for which they were hired by the State.

For the purposes of these guidelines, credit quality ratings are those of Moody's, S&P, and Fitch. If rated by all three ratings agencies, the middle rating will be used. If rated by only two agencies, the lower rating will be used. Securities that are not rated will be, in the judgment of the investment manager, of credit quality equal or superior to the standards described below.

a) Public Equity. The objectives of the State's public equity investments are to provide the State with total return, capital appreciation, protection against inflation risk and consistent returns as measured by the appropriate index. The State shall employ diversification by investment style (e.g., value versus growth) and capitalization (small, mid, large). The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through exchange traded funds ("ETFs"), mutual funds and other types of index funds. The guidelines in this section apply to all active public equity managers, which are diversified across the following strategies:

a. Broad U.S. Equity
b. Small-Cap U.S. Equity
c. Broad International Equity

i. A maximum of 5% or the benchmark weighting + 2%, whichever is greater, of the total stock portfolio of the investment manager be invested in any one company.
ii. A maximum of 1% of the outstanding float of shares shall be held in companies with market capitalizations of $5 Billion or greater at the time of purchase. For companies with market capitalizations of less than $5 Billion, a maximum of 5% shall apply.
iii. The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.
iv. A minimum number of 20 securities shall be held.

b) **Preferred Stock.** The objectives of the State's preferred stock investments are to provide income to the State through dividend payments with the potential for capital appreciation and consistent returns as measured by the appropriate index. Preferred stock investments are a class of stock that provides priority over common stockholders on earnings in the event of liquidation. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active preferred stock managers.
   i. Minimum issue credit rating for preferred stock at the time of purchase will be BB or equivalent.
   ii. A maximum of 35% of the total portfolio of the investment manager may be invested in securities rated below investment grade.
   iii. A maximum of 10% of the total portfolio of the investment manager may be invested in any one issuer.

c) **Master Limited Partnerships ("MLPs").** The objectives of the State's MLP investments are to provide the State with total return, capital appreciation, protection against inflation risk and consistent returns as measured by the appropriate index. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active MLP managers.
   i. A maximum of 15% or the benchmark weighting + 2%, whichever is greater, of the total portfolio may be invested in any one company.

d) **Core Fixed Income.** The objectives of the State's core fixed income investments are to provide stable income to the State, safety of principal, diversification of the State's fixed income portfolios, yield enhancement and, consistent returns as measured by the appropriate index. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active core fixed income managers. Sector specific strategies such as Government, Investment Grade Credit, Mortgages, and Asset Backed Securities may also be used within the core fixed income allocation. In the case of sector specific mandates, additional guidelines may be delineated in the agreement with the manager; however, the aggregate core fixed income portfolio is expected to remain with the guidelines detailed in this policy.
   i. Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.
   ii. All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.
   iii. Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.
   iv. Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.
   v. Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.
   vi. Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.
   vii. Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than 5% of the portfolio market value.
   viii. Commercial paper of all issuers shall not exceed $500,000,000.
   ix. A minimum number of 25 securities shall be held.
   x. Duration must fall in the range of +/- 20% of the manager's primary benchmark, but not to exceed the duration of the Bloomberg Barclays U.S. Aggregate Bond

Index or the Bloomberg Barclays Intermediate U.S. Aggregate Bond Index by more than 20%.

xi. Average portfolio credit quality must be at least A- or equivalent.

xii. Minimum issue credit rating at time of purchase shall be:

a. A1+ or equivalent for commercial paper;

b. BBB- or equivalent for corporate bonds, Mortgage-Backed Securities, Commercial Mortgage-Backed Securities, Asset Backed Securities, Non-U.S. Dollar-Denominated Securities and Dollar-Denominated Emerging Market Securities.

xiii. Standalone private placements, including 144A securities, are not permitted as direct purchase is not currently allowed under regulations of the Securities and Exchange Commission.

e) Liability Driven Investment Fixed Income. The objectives of the State's liability driven investment fixed income portfolio are to hedge the portfolio against any adverse interest rate based changes to plan liabilities and to provide consistent returns as measured by the appropriate index. The Liability Driven Investment Fixed Income Portfolio will consist of an appropriate blend of Long Duration Fixed Income and Core Fixed Income that matches the duration profile of the liabilities that are intended for hedging evaluated on an annual basis.

f) Long Duration Fixed Income. The objectives of the State's long duration fixed income investments are to provide one of the necessary building blocks for the Liability Driven Investment Fixed Income Portfolio and to provide consistent returns as measured by an appropriate index. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active managers.

i. Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.

ii. All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.

iii. A maximum of 30% of the portfolio may be invested in U.S. dollar denominated non-U.S. fixed income securities.

iv. A maximum of 10% of the portfolio may be invested in U.S. dollar denominated emerging market securities.

v. A maximum of the appropriate benchmark plus 5% of the portfolio may be invested in convertible and municipal securities.

vi. Average portfolio quality will be BBB+ or better. Securities shall be rated investment grade at time of purchase.

g) Low Duration Fixed Income. The objectives of the State's low duration fixed income investments are to provide stable income to the State, preservation of capital, diversification of the State's fixed income portfolios, a ready source of liquidity, stable investment return, and consistent returns as measured by the appropriate index. The low duration fixed income portfolio should consist of securities which provide exposure to the low duration U.S. fixed income market including Treasury and government agency bonds, corporate debt, mortgages, asset backed securities and municipals with an overall duration similar to the Bloomberg Barclays US Gov't: 1-3 Year Bond Index. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active low duration fixed income managers.

i. Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.
ii. All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.
iii. Corporate securities will be subject to a maximum limit of 20%.
iv. Portfolio duration must be within plus or minus 30% of the Bloomberg Barclays US Gov't: 1-3 Year Bond Index.
v. Average portfolio quality will be A or better.

h) Bank Loans. The objectives of the State's bank loans investments are to provide income to the State, diversification of the State's fixed income portfolios, yield enhancement, protection against rising interest rates and consistent returns as measured by the appropriate index. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active bank loan managers.

i. Obligations of specific issuers are subject to a 5% per issuer limit, excluding investments in commingled vehicles.
ii. Duration must not exceed + 1 year of the S&P/LSTA Leveraged Loan Index.
iii. Average portfolio credit quality must be at least B or equivalent.
iv. Minimum issue credit rating at the time of purchase shall be:
    a) CCC or equivalent for individual securities; and
    b) Securities that are not rated shall be, in the judgment of the investment manager, of credit quality equal or superior to the standards described above.

i) Emerging Markets Debt Fixed Income. The objectives of the State's emerging markets debt fixed income investments are to provide diversification of the State's fixed income portfolios, yield enhancement and consistent returns as measured by the appropriate index. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active emerging markets debt fixed income managers.

i. Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.
ii. Obligations of corporate issuers are subject to a 10% per issuer limit.
iii. The investment manager, as part of managing the account, can take net investment positions of up to 20% of the portfolio in currency and currency forwards.
iv. Duration must be +/- 20% of the index.
v. Average portfolio credit quality must be BB+ or equivalent or better.
vi. Minimum Issue Credit Rating at the time of purchase shall be:
    a. A1+ or equivalent for commercial paper;
    b. B- or equivalent for individual securities
    c. Where a security is not rated at the issue level, the issuer rating shall be relied upon.

j) Tactical Cash and Operational Cash. The objectives of the Tactical Cash and Operational Cash investments are to provide liquidity, safety of principal, and stable income consistent with the maturity and risk parameters of each cash pool. Cash guidelines apply to both operational and tactical cash investments. Operational cash refers to cash that is required to be on hand for known upcoming liquidity needs, while tactical cash refers to intentional investment in cash above and beyond what is needed for operations.

i. A maximum of 5% of total assets may be placed in securities of one issuer except for government securities.
ii. Investment in any single issuer must not exceed 5% of the outstanding issues of that issuer.
iii. Operational Cash Portfolio. The portfolio's weighted average maturity shall not exceed 90 days. All securities shall have a maximum maturity of 365 days. The maximum average cash flow weighted duration of the portfolio shall not exceed 90 days. The market value of the portfolio shall remain within +/- 0.5% of 1.0% of amortized cost.
iv. Tactical Cash Portfolio. Maximum average cash flow weighted duration is not to exceed 1 year. Individual securities must not exceed a cash flow weighted duration of 2 years.

Currency must be in U.S. dollar denomination only. The cash portfolios shall seek to be invested fully as of the close of business on each day. The account may only purchase securities issued or guaranteed by a corporation or other entity organized under the laws of a State of the United States and only securities of this type referred to in the first clause of Section 3(a)(2) of the Securities Act of 1933 as amended.

The operational or extended cash portfolios' permissible investments are the following securities:

a. Asset-Backed Securities: Limited to automobile receivables, credit receivables, collateralized mortgage obligations ("CMO"") or pass-throughs, the collateral for which is securities issued by GNMA, FNMA, FHLMC or notes fully guaranteed as to principal and interest by the Small Business Administration;
b. Master Notes;
c. Bank Notes;
d. Medium Term Notes;
e. Bankers' Acceptances;
f. Municipal Bonds;
g. Certificates of Deposit;
h. Municipal Notes;
i. Commercial Paper, including unregistered Promissory Notes;
j. Called for Commercial Paper;
k. Repurchase Agreements (including term repurchase agreements)-Permitted collateral: government securities. The minimum collateral required is 102%;
l. Corporate Bonds;
m. Time Deposits - Restricted to obligations of financial institutions approved by Wyoming's Board of Deposits;
n. Corporate Notes;
o. U.S. Government Securities;
p. Floating Rate Notes including Obligations of the U.S. Treasury and Obligations of U.S. Government Agencies;
q. Floating rate Certificates of Deposit;
r. Guaranteed Investment Contracts ("GICs") or synthetic GICs; and
s. Instruments bearing floating or fixed interest rates.

The tactical cash portfolios' permissible investments are the following securities:

a. U.S. Government Securities;
b. Floating Rate Notes including Obligations of the U.S. Treasury and Obligations of U.S. Government Agencies;
c. U.S. Government Agency Securities;

d. Certificates of Deposit;
e. Commercial Paper, including unregistered Promissory Notes;
f. Repurchase Agreements (including term repurchase agreements)-Permitted collateral: government securities. The minimum collateral required is 102%;
g. Time Deposits - Restricted to obligations of financial institutions approved by Wyoming's Board of Deposits;
h. Floating Rate Certificates of Deposit.

Commercial paper must be rated A1+ or P1 or equivalent by at least one Nationally Registered Statistical Rating Organization (split ratings being permitted). The minimum long-term rating for bonds and notes is BBB/Baa2. Such ratings, however, may decline thereafter without per se requiring the sale of the security. GICs must be rated AAA or equivalent by Moody's, Standard and Poor's or Fitch, or rated A+ by A.M. Best. A security without its own rating will be considered to be rated if its user's comparable securities are rated. In addition, long term ratings shall be used only if the security is not rated and no security of the same issuer that is comparable in priority with such security is rated.

k) Private Equity. The objectives of the State's private equity investments, which are considered to be alternative investments, are to provide the State with total return, capital appreciation, portfolio diversification, protection against inflation risk and consistent returns as measured by the appropriate index. The funds shall be actively managed. The State may employ diversification by sub-asset class (private equity vs. venture capital vs. special situations) and investment style (early vs. late stage, mid-market vs. large cap market).

i. At the time of purchase, a maximum of 25% of the value of any private equity partnership may be invested in any one company or security issued by any one company. An exception may be made when a special purpose vehicle is set up as part of an overall pool where the overall pool satisfies this requirement.

l) Hedge Funds. The objectives of the State's hedge funds investments, which are considered to be alternative investments, are to provide the State with total return, portfolio diversification, certain defensive capacities, capital appreciation, moderate levels of volatility with low correlation to traditional financial assets and consistent returns measured by the appropriate index. The State Treasurer's Office may implement the strategies described in this section (i) through active management and/or (ii) passively through ETFs, mutual funds and other types of index funds. The guidelines in this section apply to all active hedge funds managers.

i. The portfolio shall be diversified across underlying hedge fund strategies and hedge fund managers.

m) Real Estate. The objectives of the State's real estate investments, which are considered to be alternative investments, are to provide the State with portfolio diversification, total return, including income and capital appreciation, as well as protection against inflation risk and consistent returns as measured by the appropriate index.

i. The core portfolio shall consist of well-leased, high quality, income producing institutional properties.
ii. The core portfolio shall be adequately diversified by geographical region, as well as by property type.
iii. The non-core portfolio may consist of properties of varying quality, investment size, property type and geographic concentration.

n) **Opportunistic.** From time to time, permanent fund investments may be made in opportunistic investments. The objective of such investments by the State shall be to enhance returns through opportunities that present themselves due to stressed conditions in the markets or other unique opportunities. The guidelines for such investments shall be determined by the investment management agreement or appropriate offering documents in the case of commingled or partnership investments. An opportunistic investment would occur in a situation where it is deemed the potential return would exceed the Total Fund performance excluding opportunistic returns and non-permanent funds, or another benchmark as deemed appropriate by the Investment Funds Committee and approved by the Board.

SECTION 12. RISK MANAGEMENT

12.1 Issuer or Secondary Source Failure. The State Treasurer shall seek to control the risk of loss due to the failure of a security issuer or secondary source. Such risk shall be controlled by constructing investment portfolios using the Prudent Investor Rule, by ensuring adequate portfolio diversification, by collateralization as required by law and by statutory guidelines. For each PPI, the risk of loss is related to the requirements and restrictions stated in the establishing legislation. The State Treasurer shall comply with such requirements and restrictions when implementing a PPI.

12.2 Policy Exceptions. Investment managers are responsible for managing the assets under their care on behalf of the State in accordance with the guidelines established in this investment policy. From time to time, it is possible that market conditions or other events outside the control of the investment manager may cause portfolios for various reasons to fall out of compliance. It is generally expected that investment managers will review any events outside their control that cause the portfolio to fall out of compliance with the best interest of the State's portfolio in mind, and provide a written recommended course of action to the State Treasurer's Office. The State Treasurer's Office shall review these written requests and may grant an exception to the investment policy guidelines if it is believed to be in the best interest of the portfolio. No investment manager is allowed to make new security purchases that would cause the portfolio to fall out of compliance or further out of compliance than it is at the time of purchase. All investment policy exceptions that are granted shall be documented in a quarterly investment policy compliance review, which shall be part of the quarterly investment report provided to the Board. In addition, investment managers will be given an exception to compliance with these investment policy guidelines when commencing the implementation of a strategy or while closing a strategy but only for a period of time as determined by the State Treasurer.

SECTION 13. SAFEKEEPING

The State Treasurer shall contract with an authorized safekeeping agent for safekeeping securities owned by the State as part of its investment portfolio or held as collateral to secure certificates of deposits or repurchase agreements. All securities transactions shall be conducted on a delivery versus payment basis to the State Treasurer's safekeeping bank or to the State Treasurer's Office. The State Treasurer's Office or custodian shall have custody of all securities purchased or held and all evidence of deposits and investments of public funds.

SECTION 14. VOTING OF PROXIES

The Board allows investment managers to vote proxies with the parameters that (i) the investment managers keep the State Treasurer's Office apprised of and annually provide their general proxy policy to the State Treasurer's Office and (ii) the investment managers notify the State Treasurer's Office of controversial matters which may be subject to proxy voting. Investment managers are

expected to vote proxies in a way that is generally consistent with the whole of this investment policy and in accordance with the best interests of Wyoming's portfolio.

SECTION 15. SECURITIES LENDING

As part of this investment strategy, the State Treasurer may retain the services of a custodial bank or an independent securities lending agent to supervise a program of securities lending in exchange for a fee or other consideration. Supervision of the program shall include:

a) Procedures to review the creditworthiness of all borrowers;
b) Requirements for full collateralization of all loans; and
c) Other methods and procedures required by the Board for securing the lending program. (W.S. 9-4-717(d) Securities Lending)

SECTION 16. COMMISSION RECAPTURE PROGRAM

The State Treasurer's Office shall monitor the commission recapture and discount brokerage programs to insure that investment managers provide the best effort to meet their commission recapture guidelines (i.e., requested amount of commission recaptured). The State Treasurer shall issue directed brokerage letters (limited to the commission recapture program) to the investment managers on an annual basis. In determining the amount to be directed, consideration should be given to the type of investment manager (i.e., small capitalization investment managers may not be able to direct as much as large capitalization managers) and the amount of external research the investment manager buys. The quality of execution should never be jeopardized and investment managers will be monitored for performance net of fees relative to the appropriate index.

SECTION 17. LIQUIDITY

Liquidity shall be achieved by investing in securities with active secondary markets with the exception of alternative investments. A security may be liquidated to meet unanticipated cash requirements, to redeploy cash into other investments expected to outperform current holdings, or to otherwise adjust the portfolio. Sufficient liquidity must be maintained to ensure payment to the State of the interest received from investments and any capital gains which occur from trading in the portfolio. This liquidity is the responsibility of the investment manager.

SECTION 18. TRADES AND EXCHANGES

18.1 Allowance to Sell or Exchange Securities. Investment managers and the State Treasurer may sell or exchange securities in the course of daily management of specific funds. Such trades may be executed to raise cash, to shift maturity, to change asset mix, to enhance yield and to improve quality. The goal of all such trades is to maximize portfolio performance while minimizing risk.

a) Security Swaps. The State Treasurer and all investment managers will take advantage of security swap opportunities to improve portfolio yield. A swap which improves portfolio yield may be selected even if the transaction results in an accounting loss but only if such transaction complies with the requirements of W.S. 9-4-717(c).

b) Marking to Market. To account for market fluctuations and volatility, the State Treasurer's Office or its agent (independent pricing agent) shall mark to market all securities at least monthly to the extent possible with exceptions made for alternative investments where values are reflected as available. If a significant market event takes place during the month that impacts the value of the portfolio, the State Treasurer's Office

or its agent shall mark the portfolio to market to determine the impact on the portfolio. The market value of all securities in the portfolio should be determined on at least a quarterly basis to the extent possible with exceptions made for alternative investments where values are reflected as available. These values should be obtained from a reputable and independent source where possible with some exceptions made for alternative investments and a report made to the Board at least quarterly by the Consultant. It is recommended that the report include the market value, book value and unrealized gain or loss of the securities in the portfolio.

18.2 Best Price and Execution. Transactions shall be executed on the basis of "best price and execution" for the sole benefit of the State and other limited partners in the case of investments made through limited partnership vehicles. Any violation of these guidelines is to be corrected immediately upon discovery and reported to the State Treasurer and the Consultant. A realized loss to the State resulting from a violation of these guidelines shall require reimbursement to the State. Other remedies may be sought if investments are made through limited partnership vehicles.

SECTION 19. PROCEDURES FOR SELECTING AND REVIEWING INVESTMENT MANAGERS AND ALTERNATIVE FUND INVESTMENTS

19.1 Investment Manager Review Process. When an investment manager is to be hired for the State, the State Treasurer shall work with the Consultant or, if appropriate, other suitable consultants to conduct all necessary and appropriate due diligence and shall utilize a competitive process to select the finalist or finalists to be presented to the Board. The State Treasurer will confer with the Investment Funds Committee, and other members of the Board and familiarize them with the extent of that due diligence. The State Treasurer will present a finalist or finalists to the Board at a public meeting. The finalist or finalists shall make an oral presentation to the board at the meeting before their selection. Evaluation factors shall include 1-year, 3-year, 5-year and if available 10-year performance records, the associated risks taken to achieve the returns, the quality and stability of the investment personnel of each investment firm, adherence to philosophy and style, and the fees charged by each investment firm. The State Treasurer shall only consider (i) investment firms that have a verifiable 5-year Chartered Financial Analyst Institute compliant track record with respect to the type of investments which the firm will manage or (ii) investment managers employed by an organization and chartered bank trust company with trust assets in excess of $1,000,000,000. An exception may be made for alternative investments.

19.2 Investment Manager Selection Process. The Board in consultation with the Investment Funds Committee shall make a selection based upon the interview and the State Treasurer shall submit a contract for review by the Attorney General. The contract shall provide for its termination by the State with 30 days' notice to the investment manager. An exception may be made for alternative investments.

19.3 Alternative Investments. When an alternative investment is to be made, the State Treasurer's Office shall provide the Board with a summary of all the material terms and conditions of the documents governing the investment. Pursuant to W.S. 9-4-715(c), the State Treasurer shall obtain the Board's approval of all material terms of the instruments governing the alternative investment prior to the investment of funds. In addition, after such alternative investment is made, any material adverse change to the terms of the instruments governing the investment must be approved by the Board.

19.4 Performance Monitoring. Each investment manager for the State shall, at least quarterly, provide a report to the State Treasurer describing the investment manager's performance relative to mutually agreed upon industry indices and reflecting all brokerage fees

and other fees or expenses paid by or fees earned by the investment manager, which are paid by the State under the contract with such investment manager. The State Treasurer shall monitor monthly statements and receive quarterly performance reports from the Consultant. The Consultant shall monitor at least quarterly the State's investment record for each investment manager under contract and for each internal investment portfolio to determine whether or not that investment manager, or the State Treasurer's Office for internal portfolios, is performing up to the standard required by the benchmark of performance specified in the investment manager's contract or determined for each of the State Treasurer's Office's internal portfolios and report to the Board. If at any time the standard required is not being met, the State Treasurer shall report to the Board and provide a recommendation. The Board may then determine an appropriate course of action.

19.5 Policy Monitoring. Each investment manager, and the State Treasurer's Office with regard to the internal portfolios, shall file a quarterly investment policy compliance report with the Consultant.

19.6 Manager Alerts. Investment managers for the State are required to apprise the Board and to keep the State Treasurer's Office and the Consultant informed of any material changes in their respective firms (i.e., change in personnel, ownership and policy).

19.7 Other Considerations. In addition to achieving benchmark expectations as described in Section 20, investment managers for the State shall be reviewed for consistency of style and client service.

19.8 Termination. Pursuant to W.S. 9-4-718(a)(iv), the Board may terminate the contract with an investment manager by a majority vote. The State Treasurer may recommend the termination of an investment manager to the Board.

19.9 Transition Management. The State Treasurer may retain the services of a firm providing transition management services to effect transitions from legacy active external investment managers to target successor investment managers. Total transition charges shall be considered in the selection and evaluation of these vendors including both commission (explicit) and market impact (implicit) costs.

SECTION 20. NOMINAL RETURN BENCHMARKS

Below are the benchmarks for the asset classes listed which have been approved by the Investment Funds Committee pursuant to W.S. 9-1-409(e)(iv) and 9-4-720. These benchmarks are intended for use in measuring asset class composite performance results, and may not fully capture the full range of benchmarks utilized for specific managers and strategies within each asset class. Additional performance benchmarks may be delineated in the agreement with each manager or relevant fund documents. Investment performance shall be evaluated against these standards over a full market cycle, approximated by the most recent 5-year period. Actively managed strategies are intended to provide investment performance above the applicable market index, net of fees. Passively managed strategies are intended to provide investment performance consistent with the applicable market index with acceptable levels of tracking error, gross of fees. Where applicable and as indicated below, investment managers for the State shall meet or exceed the top 40th percentile of a peer investment manager universe as measured by the Consultant, gross of fees.

Asset Class	**Market Index (net of fees unless passively managed, managed internally or otherwise indicated)**	**Measurable Peer Universe (gross of fees unless otherwise indicated)**
Broad U.S. Equity	S&P 500 Index	Yes
Small-Cap U.S. Equity	Russell 2000 Index	Yes
Broad International Equity	MSCI ACW Ex US Index (net)	Yes
Preferred Stock	S&P U.S. Preferred Stock Index	N/A
Master Limited Partnerships	50% Alerian MLP Index / 50% Alerian Midstream Energy Index	N/A
Core Fixed Income	Bloomberg Barclays U.S. Aggregate Bond Index	Yes
	Bloomberg Barclays U.S. Intermediate Aggregate Bond Index	
Liability Driven Investment Fixed Income	Custom blend of Bloomberg Barclays U.S. Government/Credit: Long Term Bond Index and Bloomberg Barclays U.S. Aggregate Bond Index that approximates the liability duration.	N/A
Low Duration Fixed Income	Bloomberg Barclays U.S. Government: 1-3 Year Bond Index	Yes
Bank Loans	S&P/LSTA Leveraged Loan Index	Yes
Emerging Markets Debt Fixed Income	1/3 JP Morgan GBI-EM Global Diversified Un-Hedged Index / 1/3 JP Morgan EMBI Global Diversified Index/ 1/3 JP Morgan Corporate Emerging Bond Index (CEMBI) Broad Diversified	N/A
Operational Cash	BofA ML 3 Mo U.S. T-Bill for cash equivalents allocation	N/A
Tactical Cash	BofA ML 3 Mo U.S. T-Bill for cash equivalents allocation	N/A
Private Equity	Custom Blended Vintage Year Index	Yes, net of fees
Hedge Funds	HFRI Fund of Funds Composite Index (including underlying fund investment manager fees)	Yes, net of fees

Core Real Estate	NCREIF – Open-End Diversified Core Equity Index	Yes, net of fees
Non-Core Real Estate	NCREIF – Open-End Diversified Core Equity Index	Yes, net of fees
Opportunistic	Total Fund performance excluding opportunistic returns and non-permanent funds, or another benchmark as deemed appropriate by the IFC and approved by the Board.	N/A

SECTION 21. LOCAL GOVERNMENT INVESTING

Permissible investments for the treasurers of any political subdivision, municipality or special district of Wyoming and the various boards of trustees and boards of directors of county hospitals, airports, fairs and other duly constituted boards and commissions (collectively, "Local Government Entities") include those authorized or approved by the Board. (W.S. 9-4-831(a)(xxvii)) Thus, along with the investments already approved by the Legislature in W.S. 9-4-831 (a)(i)-(xxvi), the Board authorizes and approves the following investment for Local Government Entities:

1. **Corporate Bonds:** Local Government Entities may invest in non-levered investment grade corporate bonds through a separate account arrangement or through a mutual fund or ETF that invests in investment grade corporate bonds but such account or fund must satisfy the following requirements:
   a) For investment in non-levered investment grade corporate bonds through a separate account arrangement:
      i. Must be through an investment management agreement with an SEC registered investment advisor, SEC registered investment company, or a bank exempt from registration (the "investment manager" for purposes of this section);
      ii. Investment manager must agree in writing to act in a fiduciary capacity with regards to the assets of the account;
      iii. The account must be diversified by issuer, with no more than 5% of account assets invested with a single issuer, with an exception made for obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations;
      iv. The effective duration of the account can be no greater than the duration of the Bloomberg Barclays U.S. Aggregate Bond Index by more than 0.5 years; and
      v. Only SEC registered investment grade securities are allowed for purchase.
   b) For investment in mutual funds or ETFs that invest in investment grade corporate bonds:
      i. The fund must be registered with the SEC;
      ii. The fund must be a "diversified" fund as defined by the SEC;
      iii. At time of purchase, the fund's assets must be invested in investment grade corporate bonds or other securities permitted for Local Government Entities;
      iv. The effective duration of the fund at time of purchase cannot be greater than the Bloomberg Barclays U.S. Aggregate Bond Index by more than 0.5 years at time of purchase;
      v. Average credit quality of the fund must be at least A- or equivalent at time of purchase;
      vi. The net expense ratio of the fund, as defined by the fund's most recent prospectus, cannot be greater than 0.5% annually (50 basis points), and

cannot be greater than the fund's category average as defined by a nationally recognized provider of mutual fund data such as Morningstar or Lipper; and

vii. Shares of the fund must be purchased and sold at the net asset value of the fund. Purchase and sales loads are not allowed.

When approving, acquiring, investing, reinvesting, exchanging, retaining, selling and managing investments in corporate bonds as described above, the treasurers of Local Government Entities, their designees or any other fiduciaries appointed by the treasurers shall exercise the judgment and care of a prudent investor as specified by the Prudent Investor Rule and, effective July 1, 2017, as provided in W.S. 9-4-831(m)(i).

SECTION 22. GLOSSARY OF TERMS

"Alternative investments" are investments in nontraditional asset classes or in traditional asset classes which are utilized in a nontraditional strategy.

"Capital gain" is the difference between an asset's adjusted purchase price and selling price when the difference is positive. It is a **"Capital loss"** when the difference is negative.

"**Commingled investment"** is an instrument where there is a pooling of securities owned by multiple clients for diversification and cost benefits. With commingled investments, investment managers cannot tailor the portfolio to suit client-specific guidelines.

"Derivative" is a contract or security whose value is based on the performance of an underlying financial asset, index, or other investment. The following are common types of derivatives used in the execution of fixed income strategies:

- **Forward –** An agreement which obligates one party to buy and another party to sell a specific security or currency at a specific future date, at a price agreed upon at the time of the initial transaction. Forward contracts are privately negotiated and are not standardized or transferable. Mortgage TBAs ("To Be Announced") and Forward Currency trades are examples of forward transactions.

- **Future –** An agreement to buy or sell a specific amount of a specific security or currency at a specified price and on a specified future date. Futures contracts contain standardized terms, trade on a formal exchange, are regulated by overseeing agencies, and are guaranteed by clearinghouses.

- **Option –** An agreement which conveys the right, but not the obligation, to buy (call option) or sell (put option) a specific security at a stipulated price and within a stated period of time. If the option is not exercised during that time, the money paid for the option is forfeited.

- **Swap –** An agreement between two parties to exchange one set of future cash flows for another based on a specified principal amount. Swaps are utilized as an efficient means of obtaining a desired exposure, which commonly include the exchange of interest payments, currencies, credit exposure, or specific bond characteristics such as yield, quality, or maturity. Swaps trade over the counter and can be customized in any number of ways.

"Dividend" is a distribution of earnings to shareholders, prorated by class of security and paid in the form of money, stock, scrip, or, rarely, company products or property. The amount is decided by the board of directors.

"Duration" is expressed in years. It is a measure of a bond's price change with change in yield, and is calculated by averaging the time to each interest and principal payment, weighted by each payment's present value.

"Earnings" represents money earned from activities such as investing.

"Exchange Traded Fund ("ETF")" is a marketable security that tracks an index, commodity, bonds, or a basket of assets. ETFs trade on a stock exchange and experience price changes throughout the trading day as they are bought and sold.

"Income" is comprised of interest and dividend payments.

"Interest" represents the cost of using money, expressed as a rate per period of time.

"Investment Advisers Act of 1940" is an Act that regulates investment advisers. With certain exceptions, this Act requires that firms or sole practitioners compensated for advising others about securities investments must register with the SEC and conform to regulations designed to protect investors.

"Investment Company Act of 1940" is an Act that regulates the organization of companies, including mutual funds, that engage primarily in investing, reinvesting, and trading in securities, and whose own securities are offered to the investor. The Act requires these companies to disclose their financial condition and investment policies to investors when stock is initially sold and, subsequently, on a regular basis.

"Margin transaction" is a technique involving buying or selling short securities using money borrowed from a broker. Margin is the collateral that the holder of the position is required to deposit to cover the broker against a potential loss.

"Public Purpose Investment" or **"PPI"** is an investment either mandated or permitted by the Legislature for the benefit of the State of Wyoming.

"Returns" represent the profit on a securities or capital investment.

"Risk" shall be the measurable possibility of losing or not gaining value.

"Securities Act of 1933" is the Federal law which requires registration of securities and disclosure of financial information for potential investors.

"Short sale" is a transaction where the seller sells a security not owned on the expectation that the market price will fall and the seller will be able to buy the security at a price lower than that at which it was sold.

"Total return" shall be calculated to include all dividend and income as well as realized and unrealized capital appreciation or depreciation.

SECTION 23. INDEX DEFINTIONS

Alerian MLP: The **Alerian MLP Index** is a capped, float-adjusted, capitalization-weighted index, whose constituents represent approximately 85% of the total float-adjusted market capitalization.

Bloomberg Barclays Intermediate U.S. Agg Bond: The **Bloomberg Barclays Intermediate U.S. Aggregate Bond Index** covers the U.S. dollar-denominated, investment-grade, fixed-rate, taxable bond market of SEC-registered securities: U.S. Treasury and agency bonds, domestic corporate debt, and mortgage-backed securities, with maturities from 1 up to (but not including) 10 years for all sectors except for securitized (MBS, ABS, CMBS), which does not have a maximum weighted average maturity (MBS) or remaining average life (ABS, CMBS) constraint.

Bloomberg Barclays U.S. Agg Bond: The **Bloomberg Barclays U.S. Aggregate Bond Index** covers the U.S. dollar-denominated, investment-grade, fixed-rate, taxable bond market of SEC-registered securities: U.S. Treasury and agency bonds, domestic corporate debt, and mortgage-backed securities.

Bloomberg Barclays U.S. Credit: The **Bloomberg Barclays U.S. Credit Index** covers publicly issued U.S. corporate and specified foreign debentures and secured notes that meet the specified maturity, liquidity, and quality requirements.

Bloomberg Barclays U.S. Government 1-3 Year Bond: The **Bloomberg Barclays U.S. Government/Credit: 1-3 Year Bond Index** covers all medium and larger issues of U.S. government, investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities of between one and three years and are publicly issued.

Bloomberg Barclays U.S. Government/Credit: Long Term Bond: The **Bloomberg Barclays U.S. Government/Credit: Long Term Bond Index** covers the non-securitized component of the US Aggregate Index, with maturities of 10 years or more. It includes investment grade, US dollar-denominated, fixed-rate Treasuries, government-related and corporate securities.

Bloomberg Barclays US Mortgage Backed Securities (MBS) Index. The Bloomberg Barclays US Mortgage Backed Securities (MBS) Index tracks agency mortgage pass-through securities (no longer incorporates hybrid ARM) guaranteed by Ginnie Mae (GNMA), Mae (FNMA), and Freddie Mac (FHLMC).

Bloomberg Barclays US Securitized Bond Index. The **Bloomberg Barclays US Securitized Bond Index** tracks agency mortgage backed securities (agency MBS) as well as investment grade asset-backed securities (ABS) and commercial mortgage-backed securities (CMBS).

Bloomberg Barclays US Treasury Index. The **Bloomberg Barclays US Treasury Index** measures US dollar-denominated, fixed-rate, nominal debt issued by the. US Treasury.

Consumer Price Index: The **Consumer Price Index** ("CPI") is a widely used measure of inflation and measures changes in the prices paid by urban consumers for a representative basket of goods and services in the U.S.

HFRI FoF Composite Index: The **HFRI FoF (Fund of Funds) Composite Index** is an equal-weighted index created by Hedge Fund Research that includes both domestic and offshore funds of hedge funds.

ICE BofA ML 3 Mo U.S. T-Bill: The **BofA Merrill Lynch 3-Month U.S. T-Bill Index** consists of newly issued 90-day Treasury bills.

JP Morgan GBI-EM Global Diversified Un-hedged: The **JP Morgan GBI-EM Global Diversified Un-hedged Index** is a global emerging markets index that consists of regularly traded, liquid fixed-rate, domestic currency government bonds.

MSCI ACW Ex U.S.: The **MSCI ACW (All Country World Index) Ex U.S. Index** is designed to measure equity market performance in global developed and emerging markets, excluding the US. The 22 underlying developed countries are: *Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.* The 23 emerging market countries are: *Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.*

NCREIF ODCE: The **NCREIF ODCE (Open End Diversified Core) Index** is an index of investment returns reporting on both a historical and current basis the results of 16 open-end commingled funds pursuing a core investment strategy, some of which have performance histories dating back to the 1970s. The NCREIF ODCE Index is capitalization-weighted and performance is time-weighted.

Russell 2000: The **Russell 2000 Index** measures the performance of the small-cap segment of the U.S. equity market. It includes approximately 2000 of the smallest securities by market cap from the Russell 3000 Index.

S&P 500: The **S&P 500 Index (Cap Wtd)** is a commonly recognized, market-capitalization weighted index of 500 widely held equity securities designed to measure broad U.S. equity performance.

S&P U.S. Preferred Stock: The **S&P U.S. Preferred Stock Index** covers the US market of capital stock that pays dividends at a specified rate and has a preference over common stock in the payment of dividends and the liquidation of assets.

S&P/LSTA Leveraged Loan: The **S&P/LSTA Leveraged Loan Index** reflects the market-weighted performance of institutional leveraged loans in the U.S. loan market.

APPENDICES. SUB-POLICES ON FUNDS

APPENDIX A. Permanent Mineral Trust Fund

1. **Fund Description.** This sub-policy applies to the Permanent Mineral Trust Fund (the "PMTF") administered by the State Treasurer. The corpus of the PMTF must be held inviolate and cannot be spent but only invested for income and capital gains. The fund dispenses income and capital gains.

2. **Philosophy and Investment Strategy.** The main objectives of the PMTF are to produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity. The primary investment goals are capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals. The asset allocation for the PMTF reflects these goals.

3. **History and Purpose.** The PMTF was established by a Constitutional amendment passed in 1974 and amended in 1996. It is funded by a constitutionally guaranteed 1.5% severance tax on minerals produced in Wyoming. It was intended to set aside a portion of the revenue derived from the production of the State's minerals to benefit future generations. All income from investments is deposited in the general fund on an annual basis**.** The practice of the State Treasurer's Office has been to include capital gains in addition to interest and dividends in income. A PMTF reserve account was created in 2002 in order to provide for a more predictable return outlined in a specified spending policy.

4. **Other Considerations.** The Legislature has prescribed conditions and terms under which monies in the fund can be loaned to political subdivisions of the State and has allocated, at times, portions of the PMTF to fund PPIs. Therefore, only the remaining portion is available for discretionary investments by the State Treasurer's Office. The PMTF must be managed to allow for an extensive range of investment maturities that provide for funds availability for PPIs as they come into existence as mandated by the Legislature. The PMTF is to be invested for the long-term to produce a higher return.

5. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office and as required by the State's spending policy for the PMTF. Liquidity must be maintained to move income and capital gains generated during the year out of the PMTF.

6. **Diversification.** The State Treasurer shall diversify the securities held in the PMTF to avoid a concentration of any single security type.

7. **Risk.** The PMTF should have a diversified asset allocation to limit the degree of uncertainty in the pursuit of return; however, the asset allocation for the PMTF can reflect a more long-term oriented approach and a risk profile commensurate with its long-term orientation. Total portfolio risk should be managed with a goal of avoiding annual losses greater than 22% with a 99% confidence level utilizing appropriate statistical modeling.

8. **Return Expectations.** The long-term return expectations for the PMTF shall exceed inflation by an amount sufficient to preserve the real purchasing power of the assets after spending. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably

expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

9. **Spending Policy.** The spending policy for the PMTF set by the Legislature is 5% of the trailing 5-year average market value of the PMTF, calculated on the first day of the fiscal year. (Commencing fiscal year 2021, the Legislature reduced the spending policy to 4.75% of the trailing 5-year average market value of the PMTF and commencing fiscal year 2022 and thereafter, the Legislature reduced the spending policy to 4.5% of the trailing 5-year average market value of the PMTF.) Amounts spent must be sourced from investment income (interest and dividends) and realized capital gains. Earnings in excess of the spending policy are appropriated from the general fund to the PMTF reserve account. Through June 30, 2017, when the PMTF reserve account reaches a balance that exceeds 90% of the current fiscal year's spending policy, the excess funds shall be transferred from the PMTF reserve account to the PMTF corpus. Commencing July 1, 2017, the balance must exceed 150% before transferring any excess funds to the PMTF corpus. It is through this mechanism that the PMTF is partially insulated against inflation.

10. **Target Asset Allocation.** The asset allocation is restricted by State statutes to an equities cap. The target asset allocation for the PMTF is as follows:

	Min	**Long-Term Target**	**Max**
Broad US Equity	5.50	11.00	16.50
Small Cap US Equity	1.50	3.00	4.50
Broad International Equity	9.00	18.00	27.00
MLPs	2.75	5.50	8.25
Private Equity	4.00	8.00	12.00
Core Real Estate	3.00	6.00	9.00
Non-Core Real Estate	2.50	5.00	7.50
Diversified Hedge Funds	3.75	7.50	11.25
Core Fixed Income	12.50	25.00	37.50
Bank Loans	3.00	6.00	9.00
Emerging Markets Debt	2.50	5.00	7.50
Cash Equivalents	0.00	0.00	5.00
Opportunistic Investments	0.00	0.00	5.00

The asset allocation is implemented and applies to the remainder of the PMTF after accounting for PPIs and cash that is deemed necessary for operational purposes.

The targets established above represent the long-term asset allocation objectives for the PMTF. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of the PMTF. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the PMTF to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the

PMTF if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

It is also understood that the strategic allocation to alternative investments may differ from the outlined targets for limited periods of time, due to the illiquid nature of these asset classes. Further, during the initial implementation of alternative investments, the allocation shall fall below the target until the program can be fully established.

In addition, during the implementation of a change to or modification of the asset allocation for the PMTF, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Opportunistic investments are allowable in the PMTF up to a maximum of 5% measured at the time of commitment.

APPENDIX B. Common School Permanent Land Fund

1. **Fund Description.** This sub-policy applies to the Common School Permanent Land Fund (the "CSPLF") administered by the State Treasurer. The corpus of the CSPLF is funded from mineral royalties, leases, fees, permits, and other revenue generated from state lands and must be held inviolate. The corpus of the CSPLF cannot be spent but only invested for income and capital gains. The CSPLF dispenses income and capital gains.

2. **Philosophy and Investment Strategy.** The main objectives of the CSPLF are to produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity. The primary investment goals are income generation, capital appreciation, total return and protection against inflation. Capital preservation and liquidity are important secondary goals. The asset allocation for the CSPLF reflects these goals.

3. **History and Purpose.** The CSPLF was established at Statehood and was memorialized in the Act of Admission. It was intended to "be used as a permanent fund, the interest of which only shall be expended for the support of the common schools." Act of July 10, 1890, ch. 664, 26 Stat. 222 (1890). Its income is deposited as prescribed by statute. A CSPLF reserve account was created in 2002 in order to provide for a more predictable return outlined in a specified spending policy.

4. **Other Considerations.** The Legislature may prescribe conditions and terms under which monies from the CSPLF can be loaned to political subdivisions of the State and has allocated, at times, portions of the CSPLF for specific purposes. Therefore, only the remaining portions are available for discretionary investments by the State Treasurer's Office. The CSPLF must be managed to allow for an extensive range of investment maturities. The CSPLF is to be invested for the long-term to produce a higher return.

5. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office and as required by the State's spending policy for the CSPLF. Liquidity must be maintained to move income and capital gains generated during the year out of the CSPLF. Additional liquidity may be needed to meet certain conditions and borrowing authorities prescribed by the Legislature.

6. **Diversification.** The State Treasurer shall diversify the securities held in the CSPLF to avoid a concentration of any single security type.

7. **Risk.** The CSPLF should have a diversified asset allocation to limit the degree of uncertainty in the pursuit of return; however, the asset allocation for the CSPLF can reflect a more long-term oriented approach and a risk profile commensurate with its long-term orientation. Total portfolio risk should be managed with a goal of avoiding annual losses greater than 22% with a 99% confidence level utilizing appropriate statistical modeling.

8. **Return Expectations.** The long-term return expectations for the CSPLF shall exceed inflation by an amount sufficient to preserve the real purchasing power of the assets after spending. Providing enough income on a consistent basis to fund the spending policy is also an important consideration. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an

annual basis.

9. **Spending Policy.** The spending policy for the CSPLF set by the Legislature is 5% of the trailing 5-year average market value of the CSPLF, calculated on the first day of the fiscal year. (Commencing fiscal year 2021, the Legislature reduced the spending policy to 4.75% of the trailing 5-year average market value of the CSPLF and commencing fiscal year 2022 and thereafter, the Legislature reduced the spending policy to 4.5% of the trailing 5-year average market value of the CSPLF.) Amounts spent must be sourced from investment income (interest and dividends) and realized capital gains. Earnings in excess of the spending policy are appropriated from the general fund to the CSPLF reserve account. Through June 30, 2017, when the CSPLF reserve account reaches a balance that exceeds percent 90% of the current fiscal year's spending policy, the excess funds are transferred from the CSPLF reserve account to the CSPLF corpus. Commencing July 1, 2017, the balance must exceed 150% before transferring any excess funds to the CSPLF corpus. It is through this mechanism that the CSPLF is partially insulated against inflation.

10. **Target Asset Allocation.** The asset allocation is restricted by State statutes to an equities cap. The target asset allocation for the CSPLF is as follows:

	Min	**Long-Term Target**	**Max**
Broad US Equity	4.00	8.00	12.00
Small Cap US Equity	1.00	2.00	3.00
Broad International Equity	6.00	12.00	18.00
Preferred Stock	1.50	3.00	4.50
MLPs	3.50	7.00	10.50
Core Real Estate	5.50	11.00	16.50
Non-Core Real Estate	1.50	3.00	4.50
Core Fixed Income	17.50	35.00	52.50
Bank Loans	6.00	12.00	18.00
Emerging Markets Debt	3.50	7.00	10.50
Cash Equivalents	0.00	0.00	5.00
Opportunistic Investments	0.00	0.00	5.00

The asset allocation is implemented and applies to the remainder of the CSPLF after accounting for PPIs and cash that is deemed necessary for operational purposes.

The targets established above represent the long-term asset allocation objectives for the CSPLF. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of the CSPLF. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the CSPLF to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the CSPLF if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

It is also understood that the strategic allocation to alternative investments may differ from the outlined targets for limited periods of time, due to the illiquid nature of these asset classes. Further, during the initial implementation of alternative investments, the allocation shall fall below the target until the program can be fully established.

In addition, during the implementation of a change to or modification of the asset allocation for the CSPLF, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Opportunistic investments are allowable in the CSPLF up to a maximum of 5% measured at the time of commitment.

APPENDIX C. University Permanent Land Fund

1. **Fund Description.** This sub-policy applies to the University Permanent Land Fund (the "UPLF") administered by the State Treasurer. The corpus of the UPLF is funded from mineral royalties, leases, fees, permits, and other revenue generated from state lands and must be held inviolate. The corpus of the UPLF cannot be spent but only invested for income and capital gains. This UPLF dispenses income and capital gains.

2. **Philosophy and Investment Strategy.** The main objectives of the UPLF are to produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity. The primary investment goals are capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals. The asset allocation for the UPLF reflects these goals.

3. **History and Purpose.** The UPLF was established at Statehood and was intended to provide income for the University of Wyoming in perpetuity. Its income is deposited as prescribed by the Act of Admission and statute. The Legislature has included capital gains in addition to interest and dividends in its definition of income.

4. **Other Considerations.** The UPLF is to be invested for the long-term to produce a higher return.

5. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office. Liquidity must be maintained to move income and capital gains generated during the year out of the UPLF. Additional liquidity may be needed to meet certain conditions.

6. **Diversification.** The State Treasurer shall diversify the securities held in the UPLF to avoid a concentration of any single security type.

7. **Risk.** The UPLF should have a diversified asset allocation to limit the degree of uncertainty in the pursuit of return; however, the asset allocation for the UPLF can reflect a more long-term oriented approach and a risk profile commensurate with income generation balanced against a longer-term orientation. Total portfolio risk should be managed with a goal of avoiding annual losses greater than 22% with a 99% confidence level utilizing appropriate statistical modeling.

8. **Return Expectations.** The long-term return expectations for the UPLF shall exceed inflation by an amount sufficient to preserve the real purchasing power of the assets after spending. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

9. **Target Asset Allocation.** The asset allocation is restricted by State statutes to an equities cap. The target asset allocation for the UPLF is as follows:

	Min	Long-Term Target	Max
Broad US Equity	5.50	11.00	16.50
Small Cap US Equity	1.50	3.00	4.50
Broad International Equity	9.00	18.00	27.00
MLPs	2.75	5.50	8.25
Private Equity	4.00	8.00	12.00
Core Real Estate	3.00	6.00	9.00
Non-Core Real Estate	2.50	5.00	7.50
Diversified Hedge Funds	3.75	7.50	11.25
Core Fixed Income	12.50	25.00	37.50
Bank Loans	3.00	6.00	9.00
Emerging Markets Debt	2.50	5.00	7.50
Cash Equivalents	0.00	0.00	5.00
Opportunistic Investments	0.00	0.00	5.00

The asset allocation is implemented and applies to the remainder of the UPLF after accounting for PPIs and cash that is deemed necessary for operational purposes.

The targets established above represent the long-term asset allocation objectives for the UPLF. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of the UPLF. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the UPLF to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the UPLF if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

It is also understood that the strategic allocation to alternative investments may differ from the outlined targets for limited periods of time, due to the illiquid nature of these asset classes. Further, during the initial implementation of alternative investments, the allocation shall fall below the target until the program can be fully established.

In addition, during the implementation of a change to or modification of the asset allocation for the UPLF, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Opportunistic investments are allowable in the UPLF up to a maximum of 5% measured at the time of commitment.

10. **University of Wyoming Portfolio Management Program.** To provide University of Wyoming students an opportunity to gain actual portfolio management experience under appropriate supervision of personnel of the University of Wyoming, College of Business, the University of Wyoming's Portfolio Management Program shall manage an internal equity portfolio in the amount of $1,000,000 exclusively from the UPLF (calculated on a cost basis) as a separate operating agency of the State of Wyoming. These funds shall be subject to all the requirements and conditions provided in Section 11.2(a) of this investment policy relating to public equity portfolios, as well as any restrictions stated in the Memorandum of Understanding with the University of Wyoming for the investment of these funds.

APPENDIX D. Permanent Land Funds Pool

1. **Fund Description.** This sub-policy applies to the several Permanent Land Funds which are not identified elsewhere in this investment policy (the "PLFs") and which amalgamated together are designated as the Permanent Land Fund Pool (the "PLFP") administered by the State Treasurer. The corpuses of the PLFs are funded from mineral royalties, leases, fees, permits, and other revenue generated from state lands and must be held inviolate and in one instance, the Agricultural School Permanent Fund must remain "undiminished". The corpuses of the PLFs are not to be spent but only invested for income and capital gains. The PLFP dispenses income and capital gains.

2. **Philosophy and Investment Strategy.** The main objectives of the PLFP are to produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity. The primary investment goals are capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals. The asset allocation for the PLFP reflects these goals.

3. **History and Purpose.** The PLFs were established at Statehood and were intended to provide for a variety of purposes in perpetuity. Their income is deposited as prescribed by the Wyoming Act of Admission and statute. The Legislature has included capital gains in addition to interest and dividends in its definition of income.

4. **Other Considerations.** The Legislature may prescribe conditions and terms under which monies in constituents of the PLFP can be loaned to political subdivisions of the State and has allocated, at times, portions of the PLFP for specific purposes. Therefore, only the remaining portions are available for discretionary investments by the State Treasurer's Office. The PLFP must be managed to allow for an extensive range of investment maturities. The PLFP is to be invested for the long-term to produce a higher return. The Agricultural School Permanent Fund must, by charter, remain "undiminished" in addition to being inviolate.

5. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office. Liquidity must be maintained to move income and capital gains generated during the year out of the PLFP. Additional liquidity may be needed to meet certain conditions and borrowing authorities prescribed by the Legislature.

6. **Diversification.** The State Treasurer shall diversify the securities held in the PLFP to avoid a concentration of any single security type.

7. **Risk.** The pool should have a diversified asset allocation to limit the degree of uncertainty in the pursuit of return; however, the asset allocation for the PLFP can reflect a more long-term oriented approach and a risk profile commensurate with its long-term orientation. Total portfolio risk should be managed with a goal of avoiding annual losses greater than 22% with a 99% confidence level utilizing appropriate statistical modeling.

8. **Return Expectations.** The long-term return expectations for the PLFP shall exceed inflation by an amount sufficient to preserve the real purchasing power of the assets after spending. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

9. **Target Asset Allocation.** The asset allocation is restricted by State statutes to an equities cap. The target asset allocation for the PLFP is as follows:

	Min	Long-Term Target	Max
Broad US Equity	5.50	11.00	16.50
Small Cap US Equity	1.50	3.00	4.50
Broad International Equity	9.00	18.00	27.00
MLPs	2.75	5.50	8.25
Private Equity	4.00	8.00	12.00
Core Real Estate	3.00	6.00	9.00
Non-Core Real Estate	2.50	5.00	7.50
Diversified Hedge Funds	3.75	7.50	11.25
Core Fixed Income	12.50	25.00	37.50
Bank Loans	3.00	6.00	9.00
Emerging Markets Debt	2.50	5.00	7.50
Cash Equivalents	0.00	0.00	5.00
Opportunistic Investments	0.00	0.00	5.00

The asset allocation is implemented and applies to the remainder of the PLFP after accounting for PPIs and cash that is deemed necessary for operational purposes..

The targets established above represent the long-term asset allocation objectives for the PLFP. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of the PLFP. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the PLFP to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the PLFP if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

It is also understood that the strategic allocation to alternative investments may differ from the outlined targets for limited periods of time, due to the illiquid nature of these asset classes. Further, during the initial implementation of alternative investments, the allocation shall fall below the target until the program can be fully established.

In addition, during the implementation of a change to or modification of the asset allocation for the PLFP, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Opportunistic investments are allowable in the PLFP up to a maximum of 5% measured at the time of commitment.

APPENDIX E. Hathaway Scholarship Fund

1. **Fund Description.** This sub-policy applies to the Hathaway Scholarship Fund (the "Hathaway Fund") administered by the State Treasurer. The corpus of the fund is funded from mineral royalties and must be held inviolate. The corpus of the Hathaway Fund cannot be spent but only invested for income and capital gains. The Hathaway Fund dispenses income and capital gains.

2. **Philosophy and Investment Strategy.** The main objectives of the Hathaway Fund are to produce endowment like long-term investment income while providing an appropriate level of safety and liquidity to meet scholarship expectations over time. The primary investment goals are total return, income generation, and protection against inflation. Capital preservation and liquidity are important secondary goals. The asset allocation for the Hathaway Fund reflects these goals.

3. **History and Purpose.** The Hathaway Fund was established by the Legislature in conformance with Article 15, Section 20 of the Wyoming Constitution. It is intended to provide scholarships for qualified students to the University of Wyoming. Its income is deposited as prescribed by statute. The Legislature has included capital gains in addition to interest and dividends in its definition of income.

4. **Other Considerations.** The Hathaway Fund is subject to varying demands according to the number of qualifying students, statutory eligibility and scholarship amount, and other considerations attended to periodically by the Legislature.

5. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office and as required by the State's spending policy for the Hathaway Fund. Liquidity must be maintained to move income and capital gains generated during the year out of the Hathaway Fund. Additional liquidity may be needed to meet certain conditions of the scholarship.

6. **Diversification.** The State Treasurer shall diversify the securities held in the Hathaway Fund to avoid a concentration of any single security type.

7. **Risk.** The Hathaway Fund should have a diversified asset allocation to limit the degree of uncertainty in the pursuit of return, however, the asset allocation for the Hathaway Fund should reflect the need for income generation balanced against a more long-term endowment and growth oriented approach. The risk profile should be commensurate with the income generation and longer-term growth orientation. Total portfolio risk should be managed with a goal of avoiding annual losses greater than 22% with a 99% confidence level utilizing appropriate statistical modeling.

8. **Return Expectations.** The long-term return expectations for the Hathaway Fund shall exceed inflation by an amount sufficient to preserve the real purchasing power of the assets after spending. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

9. **Spending Policy.** The spending policy for the Hathaway Fund set by the Legislature is the amount necessary to fully fund scholarships awarded under W.S. 21-16-1301 *et seq.* Amounts spent must be sourced from investment income (interest and dividends) and

realized capital gains. Earnings in excess of the spending policy are appropriated from the Hathaway expenditure account to the Hathaway Fund reserve account. The State Treasurer must transfer monies from the Hathaway Fund reserve account to the corpus of the Hathaway Fund to the extent monies within the Hathaway Fund reserve account are in excess of the greater of twelve million dollars ($12,000,000.00) or an amount equal to 4.5% of the previous 5-year average market value of the Hathaway Fund, calculated from the first day of the fiscal year.

10. **Target Asset Allocation.** The asset allocation is restricted by State statutes to an equities cap. The target asset allocation for the Hathaway Fund is as follows:

	Min	**Long-Term Target**	**Max**
Broad US Equity	5.50	11.00	16.50
Small Cap US Equity	1.50	3.00	4.50
Broad International Equity	9.00	18.00	27.00
MLPs	2.75	5.50	8.25
Private Equity	4.00	8.00	12.00
Core Real Estate	3.00	6.00	9.00
Non-Core Real Estate	2.50	5.00	7.50
Diversified Hedge Funds	3.75	7.50	11.25
Core Fixed Income	12.50	25.00	37.50
Bank Loans	3.00	6.00	9.00
Emerging Markets Debt	2.50	5.00	7.50
Cash Equivalents	0.00	0.00	5.00
Opportunistic Investments	0.00	0.00	5.00

The asset allocation is implemented and applies to the remainder of the Hathaway Fund after accounting for cash that is deemed necessary for operational purposes.

The targets established above represent the long-term asset allocation objectives for the Hathaway Fund. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of the Hathaway Fund. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the Hathaway Fund to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the Hathaway Fund if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

It is also understood that the strategic allocation to alternative investments may differ from the outlined targets for limited periods of time, due to the illiquid nature of these asset classes. Further, during the initial implementation of alternative investments, the allocation shall fall below the target until the program can be fully established.

In addition, during the implementation of a change to or modification of the asset allocation for the Hathaway Fund, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Opportunistic investments are allowable in the Hathaway Fund up to a maximum of 5% measured at the time of commitment.

APPENDIX F. Excellence in Higher Education Endowment Fund

1. **Fund Description.** This sub-policy applies to the Excellence in Higher Education Endowment Fund (the "Higher Ed Fund") administered by the State Treasurer. The corpus of the Higher Ed Fund is funded from mineral royalties and must be held inviolate. The corpus of this Higher Ed Fund cannot be spent but only invested for income and capital gains. The Higher Ed Fund dispenses income and capital gains.

2. **Philosophy and Investment Strategy.** The main objectives of the Higher Ed Fund are to produce endowment like long-term investment income while providing an appropriate level of safety and liquidity. The primary investment goals are income generation, capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals. The asset allocation for the Higher Ed Fund reflects these goals.

3. **History and Purpose.** The Higher Ed Fund was established by the Legislature in conformance with Article 15, Section 20 of the Wyoming Constitution. It is intended to aid in recruiting and retaining faculty at the University of Wyoming and Wyoming's community colleges. Its income is deposited as prescribed by statute. The Legislature has included capital gains in addition to interest and dividends in its definition of income.

4. **Other Considerations.** The Higher Ed Fund is subject to varying demands according to the number of faculty position, the demands to recruit and retain faculty, supported research and other considerations attended to periodically by the Legislature.

5. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office and as required by the State's spending policy for the Higher Ed Fund. Liquidity must be maintained to move income and capital gains generated during the year out of the Higher Ed Fund.

6. **Diversification.** The State Treasurer shall diversify the securities held in the Higher Ed Fund to avoid a concentration of any single security type.

7. **Risk.** The Higher Ed Fund should have a diversified asset allocation to limit the degree of uncertainty in the pursuit of return, however, the asset allocation for the Higher Ed Fund should reflect the need for income generation balanced against a more long-term endowment and growth oriented approach. The risk profile should be commensurate with the income generation and longer-term growth orientation. Total portfolio risk should be managed with a goal of avoiding annual losses greater than 22% with a 99% confidence level utilizing appropriate statistical modeling.

8. **Return Expectations.** The long-term return expectations for the Higher Ed Fund shall exceed inflation by an amount sufficient to preserve the real purchasing power of the assets after spending. Providing enough income on a consistent basis to fund the spending policy is also an important consideration. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

9. **Spending Policy.** The spending policy for the Higher Ed Fund set by the Legislature is 5% of the trailing 5-year average market value of the Higher Ed Fund, calculated on the

first day of the fiscal year. (Commencing fiscal year 2019 and thereafter, the Legislature reduced the spending policy to 4.75% of the trailing 5-year average market value of the Higher Ed Fund.) Amounts spent must be sourced from investment income (interest and dividends) and realized capital gains. Earnings in excess of the spending policy are appropriated from the general fund to the Higher Ed Fund reserve account. Through June 30, 2017, when the Higher Ed Fund reserve account reaches a balance that exceeds 75% of the current fiscal year's spending policy, the excess funds shall be transferred from the Higher Ed Fund reserve account to the corpus of the Higher Ed Fund. Commencing July 1, 2017, the balance must exceed 150% before transferring any excess funds to the Higher Ed Fund corpus.

10. **Target Asset Allocation.** The asset allocation is restricted by State statutes to an equities cap. The target asset allocation for the Higher Ed Fund is as follows:

	Min	**Long-Term Target**	**Max**
Broad US Equity	4.00	8.00	12.00
Small Cap US Equity	1.00	2.00	3.00
Broad International Equity	6.00	12.00	18.00
Preferred Stock	1.50	3.00	4.50
MLPs	3.50	7.00	10.50
Core Real Estate	5.50	11.00	16.50
Non-Core Real Estate	1.50	3.00	4.50
Core Fixed Income	17.50	35.00	52.50
Bank Loans	6.00	12.00	18.00
Emerging Markets Debt	3.50	7.00	10.50
Cash Equivalents	0.00	0.00	5.00
Opportunistic Investments	0.00	0.00	5.00

The asset allocation is implemented and applies to the remainder of the Higher Ed Fund after accounting for cash that is deemed necessary for operational purposes.

The targets established above represent the long-term asset allocation objectives for the Higher Ed Fund. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of the Higher Ed Fund. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the Higher Ed Fund to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the Higher Ed Fund if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

It is also understood that the strategic allocation to alternative investments may differ from the outlined targets for limited periods of time, due to the illiquid nature of these asset classes. Further, during the initial implementation of alternative investments, the allocation shall fall below the target until the program can be fully established.

In addition, during the implementation of a change to or modification of the asset allocation for the Higher Ed Fund, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Opportunistic investments are allowable in the Higher Ed Fund up to a maximum of 5% measured at the time of commitment.

APPENDIX G. Workers' Compensation Fund

1. **Fund Description.** This sub-policy applies to the Workers' Compensation Fund (the "Workers' Comp Fund") administered by the State Treasurer. The Workers' Comp Fund retains income and capital gains.

2. **Philosophy and Investment Strategy.** This is a specially managed fund of which the corpus is made up of employers' contributions to the Workers' Comp Fund. These funds are to be invested for the long-term to provide for a return that assures the Workers' Comp Fund will be self-funding or nearly self-funding in order to substantially reduce or eliminate the need for employer contributions. The Workers' Comp Fund is managed to match liability projections and for long-term return with cash flow necessary only in the case of a disaster. The primary investment goals are long-term return, safety of capital, yield and capital appreciation. The asset allocation for the Workers' Comp Fund reflects these goals.

3. **History and Purpose.** The Workers' Comp Fund was established by constitutional amendment in 1914. Its corpus is intended to provide compensation to employees who suffer job related injuries.

4. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes and to meet cash needs. The exact cash level for the Workers' Comp Fund shall be determined by the staff of the Wyoming Department of Workforce Services and dependent on the liquidity needs of the Workers' Comp Fund, and those cash estimates shall be presented to the State Treasurer's Office on an annual basis.

5. **Diversification.** The State Treasurer shall diversify the securities held in the Workers' Comp Fund to avoid a concentration of any single security type.

6. **Risk.** The Workers' Comp Fund has a diversified asset allocation to limit the degree of uncertainty in the pursuit of return. In addition to standard measures of risk which are typically focused on asset volatility, the Workers' Comp Fund should also be managed to mitigate surplus volatility (being the degree to which asset values change relative to liability values). Total portfolio risk should be managed with a goal of avoiding annual losses greater than 22% with a 99% confidence level utilizing appropriate statistical modeling.

7. **Return Expectations.** The long-term return expectations for the Workers' Comp Fund can be divided into two primary objectives. A portion of the assets will be managed in a liability driven investments fixed income portfolio that is designed to approximate the duration profile of the projected liabilities of the fund. The performance objectives for this portion of the fund are to mirror the changes in valuation that occur with the liabilities. The rest of the portfolio will be invested for longer-term returns in order to provide incremental cushion for the uncertainty that is inherent in the liability estimates and to mitigate the potential need for employer contributions. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

8. **Liability Target.** The State Treasurer's Office shall be required to review the liability driven investment portion of the Worker's Comp fund no less frequently than every 6 months.

9. Target Allocation. The asset allocation is restricted by State statutes to a common stock cap. The target asset allocation for the Workers' Comp Fund is as follows:

	Min	Long-Term Target	Max
Return Seeking Assets			
Broad US Equity	4.00	8.00	12.00
Small Cap US Equity	1.00	2.00	3.00
Broad International Equity	6.25	12.50	18.75
MLPs	2.25	4.50	6.75
Core Real Estate	2.25	4.50	6.75
Non-Core Real Estate	2.00	4.00	6.00
Emerging Markets Debt	1.25	2.50	3.75
Cash Equivalents	0.00	0.00	5.00
Opportunistic Investments	0.00	0.00	5.00
Liability Hedging Assets			
Liability Driven Investing Fixed Income	31.00	62.00	93.00

The asset allocation is implemented and applies to the remainder of the Workers' Comp Fund after accounting for cash that is deemed necessary for operational purposes.

The targets established above represent the long-term asset allocation objectives for the Workers' Comp Fund. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of the Workers' Comp Fund. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the Workers' Comp Fund to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the Workers' Comp Fund if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

It is also understood that the strategic allocation to alternative investments may differ from the outlined targets for limited periods of time, due to the illiquid nature of these asset classes. Further, during the initial implementation of alternative investments, the allocation shall fall below the target until the program can be fully established.

In addition, during the implementation of a change to or modification of the asset allocation for the Workers' Comp Fund, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Opportunistic investments are allowable in the Workers' Comp Fund up to a maximum of 5% measured at the time of commitment.

APPENDIX H. Pool A Investment Account

1. **Fund Description.** This sub-policy applies to the Pool A Investment Account ("Pool A") administered by the State Treasurer. Pool A dispenses income and capital gains. Pool A is one of two pools holding a diverse array of individual funds ranging from agency budgets to reserve accounts. Pool A may hold equities as prescribed by law.

2. **Philosophy and Investment Strategy.** Pool A consists of a pooling of money from many different agencies which are not specifically invested for that agency. The monies are invested throughout the spectrum of investment maturities and may hold equities as prescribed by law. While Pool A is intended to provide a more diverse array of securities including equities, it is nonetheless noted that because most of the monies invested represent appropriated funds, in addition to maintaining adequate liquidity from Pool A to meet the day-to-day cash flow needs of the State, Pool A should be managed for stability and return on investment. Cash is invested in a cash portfolio and an extended cash portfolio. The asset allocation for Pool A reflects these goals.

3. **History and Purpose.** Pool A was created by the Legislature in 2017 in response to the passage of a Constitutional amendment in 2016 which allowed the Legislature to specify certain non-permanent funds that can hold investments in equities as well as fixed income securities. It is one of two pools that hold a variety of funds ranging from agency budgets to reserve and savings accounts and special purpose trusts. Pool A is intended to be moderately liquid and safely invested but also be invested for return and growth. Its income is deposited as prescribed by statute.

4. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes and to meet cash needs as determined by the State Treasurer's Office.

5. **Risk.** Pool A has a diversified asset allocation to limit the degree of uncertainty in the pursuit of return. Total portfolio risk should be managed with a goal of avoiding annual losses greater than 20% with a 99% confidence level utilizing appropriate statistical modeling.

6. **Return Expectations.** The long-term return expectations for Pool A shall be a rate of return that provides moderate growth balanced against safety and liquidity. Returns will also be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

7. **Target Allocation.** The asset allocation is restricted by State statutes to an equities cap. The target asset allocation for Pool A is as follows:

	Min	Long-Term Target	Max
Broad US Equity	3.75	7.50	11.25
Small Cap US Equity	0.50	1.00	1.50
Broad International Equity	3.75	7.50	11.25
Preferred Stock	3.50	7.00	10.50
MLPs	2.50	5.00	7.50
Core Real Estate	2.00	4.00	6.00
Non-Core Real Estate	2.00	4.00	6.00
Core Fixed Income	24.50	49.00	73.50
Bank Loans	5.00	10.00	15.00
Cash Equivalents	2.50	5.00	7.50

The targets established above represent the long-term asset allocation objectives for Pool A. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of Pool A. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing Pool A to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance Pool A if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

In addition, during the implementation of a change to or modification of the asset allocation for Pool A, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

Opportunistic investments do not have a specified target allocation, as the availability of opportunities is episodic in nature, and the best opportunities tend to appear during periods of market stress. Although not specifically delineated in the target asset allocation, opportunistic investments are allowable in Pool A up to a maximum of 5% measured at the time of commitment.

APPENDIX I. State Agency Pool

1. **Fund Description.** This sub-policy applies to the State Agency Pool (the "SAP") administered by the State Treasurer. The SAP dispenses income and capital gains. The SAP is one of two pools holding a diverse array of individual funds ranging from agency budgets to reserve accounts.

2. **Philosophy and Investment Strategy.** The SAP consists of a pooling of money from many different agencies which are not specifically invested for that agency. The monies are invested throughout the spectrum of investment maturities; however, because most of the monies represent appropriated funds in addition to a requirement for liquidity from the SAP to meet the day-to-day cash flow needs of the State, the SAP should be managed for stability assuring that appropriated funds remain to the greatest extent possible intact for their intended purposes. Cash is invested in a cash portfolio and an extended cash portfolio. The asset allocation for the SAP reflects these goals.

3. **History and Purpose.** The SAP is one of two pools that hold a variety of funds ranging from agency budgets to reserve and savings accounts and special purpose trusts. This pool is intended to be moderately liquid. Its income is deposited as prescribed by statute. The Legislature has included capital gains in addition to interest and dividends in its definition of income.

4. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes and to meet cash needs as determined by the State Treasurer's Office.

5. **Risk.** The SAP utilizes a laddered short-term treasury strategy to limit the degree of uncertainty in the pursuit of return. Total portfolio risk should be managed with a goal of avoiding any permanent loss of capital.

6. **Return Expectations.** The SAP should provide a return that is competitive with short-term treasury rates. As a laddered bond strategy is utilized, a market benchmark is not appropriate.

7. **Target Allocation.** The SAP will be invested in a laddered short-term treasury portfolio.

APPENDIX J. Legislative Stabilization Reserve Account

1. **Fund Description.** This sub-policy applies to the funds of the Legislative Stabilization Reserve Account ("LSRA") administered by the State Treasurer's Office. Funds in LSRA are expended only by legislative appropriation, are invested, and all investment earnings from LSRA are credited to the State's general fund.

2. **Philosophy and Investment Strategy.** The LSRA will be invested in a manner to obtain the highest possible return while seeking to preserve the balance of the account necessary to address potential budget shortfalls or a structural budget deficit; published consensus revenue estimating group estimates of revenues that may be less than existing legislative appropriations for state government operations or support of public schools; or other emergencies and needs identified or authorized by the legislature under Wyoming statutes and session laws.

   The LSRA will be divided into three underlying portfolios representing a range of liquidity, safety, and return objectives. There will be a short-term reserve, intermediate-term reserve, and long-term reserve. The amount of the LSRA that is allocation to each of the reserve portfolios shall be determined by the State Treasurer's Office in compliance with any applicable statutory guidelines and consistent with anticipated liquidity needs.

3. **History and Purpose**. In 2019 the Legislature removed LSRA from the State Agency Pool for the purpose of enhancing returns and providing target date liquidity for legislatively mandated purposes.

4. **Liquidity Requirements.** To the extent funds are available and prior to making any other investments, five hundred million dollars ($500,000,000.00) shall be invested in the short-term reserve.

5. **Risk.** The short-term reserve will be invested 100% in low duration fixed income and should be managed with a goal of avoiding annual losses greater than 4% with a 99% confidence level utilizing appropriate statistical modeling.

   The intermediate-term reserve will be invested in 100% core fixed income and should be managed with a goal of avoiding annual losses greater than 12% with a 99% confidence level utilizing appropriate statistical modeling

   The long-term reserve has a diversified asset allocation and should be managed with a goal of avoiding annual losses greater than 32% with a 99% confidence level utilizing appropriate statistical modeling.

6. **Return Expectations.** The short-term reserve will be expected to provide returns in excess of the benchmark for low duration fixed income detailed in this policy. The intermediate-term reserve will be expected to provide returns in excess of the benchmark for core fixed income detailed in this policy. Returns for the long-term reserve will be measured against a target allocation index that reflects the returns for each asset class benchmark, weighted by the target allocations detailed below. In periods of portfolio transition where the actual allocations may not be reasonably expected to be close to the targets, shorter-term transition targets may be recommended by the Investment Funds Committee and approved by the Board on an annual basis.

7. Target Allocation. The target asset allocation for the LSRA is as follows:

Short-term Reserve: 100% Low Duration Fixed Income

Intermediate Reserve: 100% Core Fixed Income

Long-Term Reserve:

	Min	**Long-Term Target**	**Max**
Broad US Equity	17.00	22.00	27.00
Small Cap US Equity	4.00	6.00	8.00
Broad International Equity	21.00	28.00	35.00
MLPs	10.00	12.50	15.00
Hedge Funds	15.00	19.00	23.00
Bank Loans	10.00	12.50	15.00

The targets established above represent the long-term asset allocation objectives for the long-term reserve portion of the LSRA. The State Treasurer's Office shall maintain the allocation exposure to each asset class listed within a range of up to 50% of the difference between the long-term target and the upper or lower boundary for that asset class. Allocations outside of the target +/- 50% of the allowable range must be approved by either the Treasurer's Investment Funds Committee or the Board. Allocations outside of the Min and Max ranges detailed in this policy are not allowable without approval of the Board. Any periodic adjustments to the above-listed allocations should be made with consideration for the economic environment, ongoing cash flow activity, and the liquidity needs of LSRA. The State Treasurer's Office shall monitor compliance with the asset allocation on an on-going basis and will consider rebalancing the long-term reserve portion of the LSRA to comply with the asset allocation if a strategy is outside its Min and Max range. The State Treasurer's Office shall be required to rebalance the long-term reserve portion of the LSRA if a strategy is outside its Min and Max range and bring the portfolio back into compliance with this policy no less frequently than every 6 months.

In addition, during the implementation of a change to or modification of the asset allocation for LSRA, some strategies may fall outside the allocation until the revised asset allocation is fully implemented.

APPENDIX K. Wyoming State Treasurer's Asset Reserve ("WYO-STAR")

1. **Fund Description.** This sub-policy applies to the funds of WYO-STAR, a local government investment pool administered by the State Treasurer's Office.

2. **Philosophy and Investment Strategy.** WYO-STAR administers the short-term cash deposits made with the State by local entities. The actual investments are administered to provide liquid cash reserves, placing the majority portion in a cash portfolio and the rest in an extended cash portfolio according to specified guidelines. The disbursement of interest income and return of principal to the participants is managed in the State Treasurer's Office. WYO-STAR shall pursue a short-term and extended-term, fixed income strategy designed to optimize the yield on cash by investing in eligible securities that satisfy these guidelines.

3. **Target Allocation.** One hundred percent (100%) of WYO-STAR is comprised of short-term bonds and cash as denoted in Section 6 below entitled "Diversification/Permissible Investments".

4. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office. The percent invested in the extended portion of WYO-STAR shall be directed by the State Treasurer's Office, consistent with Section 5 below entitled "Maturity".

5. **Maturity.** If an instrument is subject to an unconditional put or unconditional demand feature, its final maturity shall be the earlier of the date noted on the face of the instrument as the date on which the principal amount must be paid or the date on which the principal amount of the instrument can be recovered through demand. Sinking fund securities and asset backed issues with periodic principal repayment shall be measured by their anticipated weighted average cash flows for the purpose of calculating their duration.

    a) **Cash Portfolio.** The portfolio's weighted average maturity is not to exceed 90 days. All securities must have a maximum maturity of 365 days. The maximum average cash flow weighted duration of the portfolio must not exceed 90 days. The market value of the portfolio must remain within +/- 0.5% of 1% of amortized cost.
    b) **Extended Cash Portfolio.** Maximum average cash flow weighted duration is not to exceed 3 years. Individual securities must not exceed a cash flow weighted duration of 5 years. The extended portion of WYO-STAR may not exceed 35% of the market value of the portfolio at the time of purchase.

6. **Diversification/Permissible Investments.** WYO-STAR is permitted to purchase the following securities:

    a) Asset-Backed Securities, limited to CMOs or pass-throughs; the collateral for which is securities issued by GNMA, FNMA, FHLMC or notes fully guaranteed as to principal and interest by the Small Business Administration. Automobile receivables and credit receivables shall also be considered permissible investments.
    b) Repurchase Agreements.
    c) Government Securities, including obligations of the U.S. Treasury and obligations of U.S. government agencies, bearing floating or fixed interest rates.
    d) Currency: U.S. dollar denomination only.

7. **Risk.** WYO-STAR has a diversified asset allocation to limit the degree of uncertainty in the pursuit of return.

8. **Fully Invested.** WYO-STAR shall seek to be invested fully at the close of business on each day.

9. **Repurchase Agreements (including term repurchase agreements).** The permitted collateral for repurchase agreements (including term repurchase agreements) shall be government securities. The minimum collateral required is 102%.

10. **Benchmarks.** For the cash portfolio, the benchmark shall be the Monitored Repurchase Agreement Rate and for the cash equivalents allocation, the benchmark shall be the BofA ML 3 Mo U.S. T-Bills index. For the extended cash portfolio, the benchmark shall be an equal-weighted blend of the BofA Merrill Lynch 1-3 Year Agency, 1-3 Year Treasury, and 0-3 Year Mortgage Indices.

APPENDIX L. Wyoming State Treasurer's Asset Reserve II ("WYO-STAR II")

1. **Fund Description.** This sub-policy applies to the funds of WYO-STAR II, a local government long-term investment pool administered by the State Treasurer's Office.

2. **Philosophy and Investment Strategy.** WYO-STAR II administers cash deposits made with the State by local entities. The actual investments are placed in a corporate bond portfolio according to specified guidelines. The disbursement of interest income and return of principal to the participants is managed in the State Treasurer's Office. WYO-STAR II shall pursue an extended-term, corporate fixed income strategy designed to obtain the highest return possible consistent with the preservation of corpus in eligible securities that satisfy these guidelines.

3. **Target Allocation.** One hundred percent (100%) of WYO-STAR II is comprised of corporate bonds and cash as denoted in Section 5 below entitled "Diversification/Permissible Investments".

4. **Liquidity Requirements.** Liquidity shall be maintained to facilitate trading, to move money between asset classes, and to meet cash needs as determined by the State Treasurer's Office.

5. **Diversification/Permissible Investments.** WYO-STAR II may invest in non-levered investment grade corporate bonds but they must satisfy the following guidelines and requirements:

    a) The account must be diversified by issuer, with no more than 5% of account assets invested with a single issuer.
    b) The effective duration of the account can be no greater than the duration of the Bloomberg Barclays U.S. Aggregate Bond Index by more than 0.5 years.
    c) Only SEC registered investment grade securities are allowed for purchase.
    d) Average portfolio credit quality must be at least BBB or equivalent.
    e) Standalone purchases of private placements, including 144A securities, are not permitted as direct purchase is not currently allowed under regulations of the Securities and Exchange Commission.
    f) Currency: U.S. dollar denomination only.

6. **Fully Invested.** WYO-STAR II shall seek to be invested fully at the close of business on each day.

7. **Repurchase Agreements (including term repurchase agreements).** The permitted collateral for repurchase agreements (including term repurchase agreements) shall be government securities. The minimum collateral required is 102%.

8. **Benchmarks.** The benchmark shall be the Bloomberg Barclays 1-3 Year US Corporate (Investment Grade) Bond Index.

APPENDIX D

Monthly Investment Performance Analysis

Wyoming State Treasurer's Office

Period Ended: March 31, 2020

Annual Asset Class Performance

As of March 31, 2020

Calendar Year Performance

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	CYTD (As of 03/20)
Best	35.17	15.99	18.64	38.82	14.07	15.02	21.95	27.19	10.33	31.49	3.15
	26.85	14.47	16.83	32.39	13.69	5.75	21.31	21.83	8.35	25.53	0.97
	21.77	11.20	16.76	29.75	12.50	5.47	13.44	18.39	1.87	21.51	0.58
	16.36	7.84	16.35	21.52	11.45	1.38	11.96	15.21	0.44	17.64	0.00
	15.68	2.11	16.00	15.29	7.66	0.55	10.16	14.65	0.01	13.47	-8.51
	15.06	1.52	13.48	13.94	5.97	0.18	9.94	9.11	-4.02	9.90	-13.05
	14.99	0.66	10.94	8.96	4.89	-0.27	8.77	7.77	-4.25	8.72	-14.91
	10.17	-1.16	9.66	5.29	3.37	-0.69	4.50	7.62	-4.38	8.64	-15.34
	9.28	-1.75	4.95	0.12	1.60	-4.41	2.65	4.12	-6.21	8.39	-19.60
	6.54	-4.18	4.79	-0.17	0.18	-5.66	1.94	3.54	-11.01	7.55	-23.36
	5.70	-5.72	4.21	-2.02	-3.87	-14.92	0.51	0.84	-11.67	5.34	-30.61
Worst	0.73	-13.71	0.26	-8.98	-5.72	-35.07	0.38	-5.58	-14.20	2.47	-53.23

Annualized Statistics (01/2006 - 03/2020)

	Return	Standard Deviation	Sharpe Ratio
S&P 500 Index - US Large Cap	7.47	16.01	0.45
Russell 2000 Index - US Small Cap	5.28	20.80	0.30
International Equity Custom Index - International	1.90	18.88	0.13
Cambridge US PE Index - Private Equity	12.05	8.15	1.31
NCREIF ODCE Index - Real Estate	6.76	7.29	0.78
HFRI FOF Comp Index	1.80	6.75	0.11
S&P U.S. Preferred Stock Index	4.06	18.66	0.23
MLP Custom Index	1.05	25.13	0.14
Bloomberg US Agg Bond Index - Fixed Income	4.43	3.26	0.96
S&P LSTA Lvgd Loan Index - Bank Loans	3.62	10.57	0.27
EMD Custom Index	3.96	11.61	0.29
JP Morgan Cash Custom Index - Cash Equiv	1.59	0.86	1.14

The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.
The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter.
The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020 and 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter.
The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return.
The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019,
and the ICE BofAML 3 Mo US T-Bill Index thereafter.
The Cambridge US Private Equity Index is shown for informational purposes only. Due to availability of data, current quarter performance assumes a 0.00% return.
Calculations are based on a quarterly periodicity.

RVK

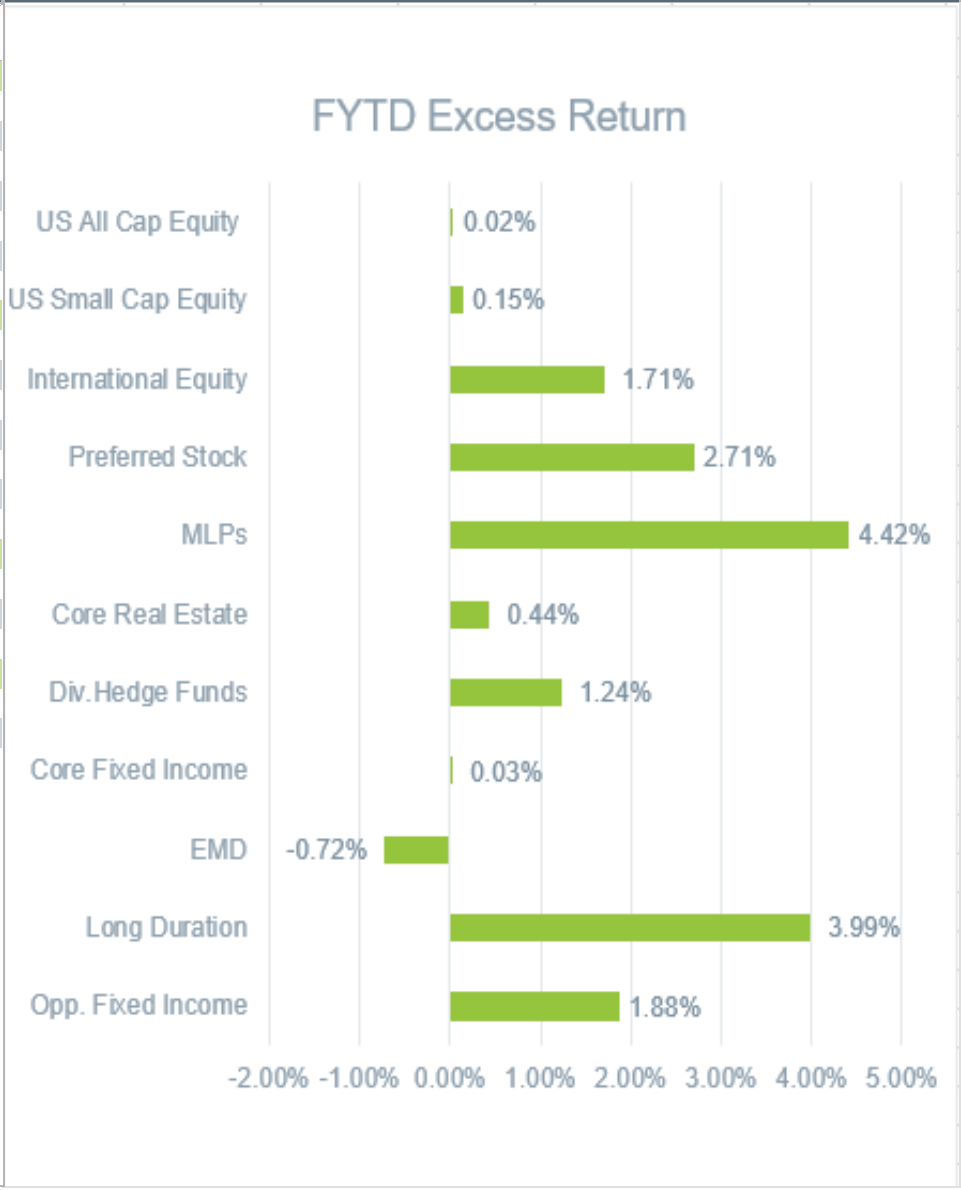
Wyoming State Treasurer's Office
Total Fund and Permanent Funds
Performance & Attribution

As of March 31, 2020

Comparative Performance

	MTD	QTD	FYTD	1 Year	3 Years	5 Years	10 Years
Permanent Mineral Trust	**-7.5**	**-10.3**	**-6.5**	**-4.4**	**1.9**	**2.5**	**4.9**
PMTF - AA Index	-7.9	-10.9	-7.3	-4.9	1.8	2.4	4.7
Difference	0.4	0.6	0.8	0.5	0.1	0.1	0.2
PMTF- TA Index	-8.3	-11.1	-7.5	-4.9	2.1	2.7	5.2
Difference	0.8	0.8	1.0	0.5	-0.2	-0.2	-0.3
60% MSCI ACW/40% B US Agg	-8.3	-12.0	-6.4	-3.1	3.1	3.3	5.4
Common School PLF	**-7.5**	**-9.5**	**-6.2**	**-4.1**	**2.0**	**2.6**	**5.1**
Common School - AA Index	-7.9	-10.3	-7.2	-4.9	1.8	2.4	4.8
Difference	0.4	0.8	1.0	0.8	0.2	0.2	0.3
Common School - TA Index	-8.7	-10.8	-7.9	-5.5	1.3	2.2	5.0
Difference	1.2	1.3	1.7	1.4	0.7	0.4	0.1
60% MSCI ACW/40% B US Agg	-8.3	-12.0	-6.4	-3.1	3.1	3.3	5.4
Permanent Funds	**-7.1**	**-9.0**	**-5.2**	**-3.0**	**2.4**	**2.7**	**5.0**
60% MSCI ACW/40% B US Agg	-8.3	-12.0	-6.4	-3.1	3.1	3.3	5.4
Total Fund	**-6.0**	**-7.0**	**-3.9**	**-1.9**	**2.4**	**2.5**	**4.3**
Wyoming State Custom Index	-6.7	-7.8	-4.9	-2.5	2.0	2.3	4.1
Difference	0.7	0.8	1.0	0.6	0.4	0.2	0.2

Attribution



Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is net of fees.

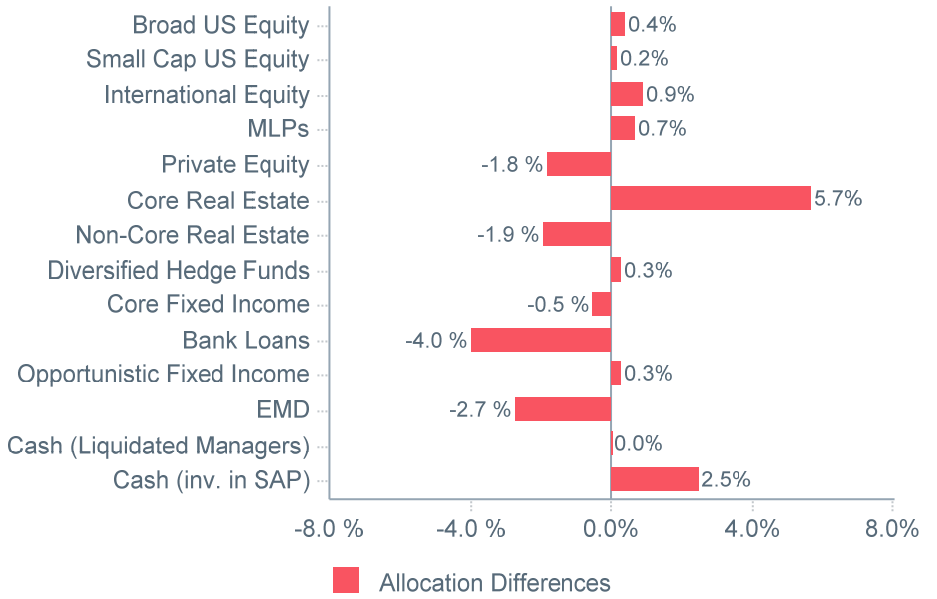
RVK

Wyoming State Treasurer's Office
Permanent Funds - PMTF and CSPLF
Asset Allocation vs. Long-Term Target

As of March 31, 2020

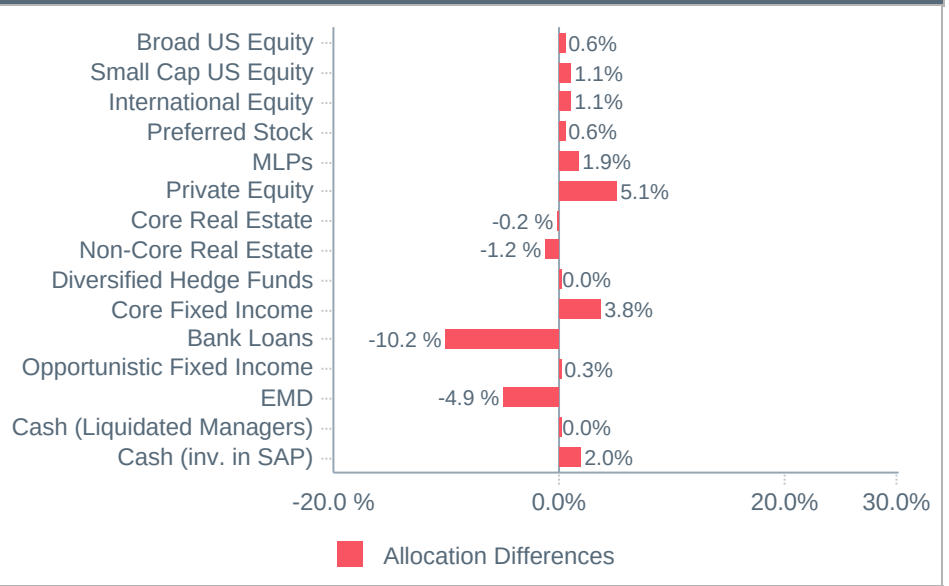
Permanent Mineral Trust Ex. PPI

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Permanent Mineral Trust Ex. PPI	7,143,370	100.0	-	100.0	-
Broad US Equity	814,448	11.4	5.5	11.0	16.5
Small Cap US Equity	226,275	3.2	1.5	3.0	4.5
International Equity	1,063,803	14.9	7.0	14.0	21.0
MLPs	442,396	6.2	2.8	5.5	8.3
Private Equity	440,979	6.2	4.0	8.0	12.0
Core Real Estate	834,736	11.7	3.0	6.0	9.0
Non-Core Real Estate	220,338	3.1	2.5	5.0	7.5
Diversified Hedge Funds	556,659	7.8	3.8	7.5	11.3
Core Fixed Income	2,036,345	28.5	14.5	29.0	43.5
Bank Loans	145,060	2.0	3.0	6.0	9.0
Opportunistic Fixed Income	19,179	0.3	0.0	0.0	5.0
EMD	163,155	2.3	2.5	5.0	7.5
Cash (Liquidated Managers)	788	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	179,209	2.5	0.0	0.0	5.0



Common School PLF Ex. PPI

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Common School PLF Ex. PPI	3,416,971	100.0	-	100.0	-
Broad US Equity	294,790	8.6	4.0	8.0	12.0
Small Cap US Equity	106,867	3.1	1.0	2.0	3.0
International Equity	379,665	11.1	5.0	10.0	15.0
Preferred Stock	122,933	3.6	1.5	3.0	4.5
MLPs	303,255	8.9	3.5	7.0	10.5
Private Equity	174,768	5.1	0.0	0.0	0.0
Core Real Estate	368,778	10.8	5.5	11.0	16.5
Non-Core Real Estate	61,656	1.8	1.5	3.0	4.5
Diversified Hedge Funds	-	0.0	0.0	0.0	0.0
Core Fixed Income	1,393,476	40.8	18.5	37.0	55.5
Bank Loans	62,983	1.8	6.0	12.0	18.0
Opportunistic Fixed Income	9,296	0.3	0.0	0.0	5.0
EMD	70,117	2.1	3.5	7.0	10.5
Cash (Liquidated Managers)	377	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	68,009	2.0	0.0	0.0	5.0



Allocations shown may not sum up to 100% exactly due to rounding. Market values shown exclude Public Purpose Investments (PPIs).

RVK

Wyoming State Treasurer's Office
Permanent Funds and Non-Permanent Funds
Performance

As of March 31, 2020

Comparative Performance	MTD	QTD	FYTD	1 Year	3 Years	5 Years	10 Years
Workers Compensation Fund	**-4.9**	**-2.9**	**1.3**	**4.9**	**4.9**	**3.9**	**4.9**
Workers Comp - AA Index	-5.6	-3.7	0.4	4.2	4.6	3.7	4.7
Difference	0.7	0.8	0.9	0.7	0.3	0.2	0.2
Workers Comp - TA Index	-6.6	-5.3	-1.0	3.0	4.2	3.5	4.9
Difference	1.7	2.4	2.3	1.9	0.7	0.4	0.0
LSRA Total Fund	**-2.4**	**-2.3**	**0.0**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA - Actual Allocation Index	-2.5	-2.5	-0.3	N/A	N/A	N/A	N/A
Difference	0.1	0.2	0.3	N/A	N/A	N/A	N/A
LSRA Long Term Reserve	**-3.9**	**-5.0**	**-2.4**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Long Term Reserve - AA Index	-4.2	-5.4	-3.0	N/A	N/A	N/A	N/A
Difference	0.3	0.4	0.6	N/A	N/A	N/A	N/A
LSRA Long Term Reserve - TA Index	-16.6	-23.2	-19.9	N/A	N/A	N/A	N/A
Difference	12.7	18.2	17.5	N/A	N/A	N/A	N/A
LSRA Intermediate Term Reserve	**-1.3**	**2.7**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Int Term Reserve - AA Index	-0.6	3.1	N/A	N/A	N/A	N/A	N/A
Difference	-0.7	-0.4	N/A	N/A	N/A	N/A	N/A
LSRA Int Term Reserve - TA Index	-0.6	3.1	5.7	N/A	N/A	N/A	N/A
Difference	-0.7	-0.4	N/A	N/A	N/A	N/A	N/A
LSRA Short Term Reserve	**1.3**	**2.7**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Short Term Reserve - AA Index	1.3	2.7	N/A	N/A	N/A	N/A	N/A
Difference	0.0	0.0	N/A	N/A	N/A	N/A	N/A
LSRA Short Term Reserve - TA Index	1.3	2.7	3.9	N/A	N/A	N/A	N/A
Difference	0.0	0.0	N/A	N/A	N/A	N/A	N/A
Pool A	**-7.8**	**-8.9**	**-6.1**	**-4.2**	**0.6**	**1.0**	**2.7**
Pool A - Actual Allocation Index	-8.4	-9.8	-7.2	-4.8	0.1	0.5	2.5
Difference	0.6	0.9	1.1	0.6	0.5	0.5	0.2
Pool A - Target Allocation Index	-6.8	-7.6	-4.7	-1.9	1.7	1.5	3.1
Difference	-1.0	-1.3	-1.4	-2.3	-1.1	-0.5	-0.4
State Agency Pool	**-1.5**	**-0.9**	**0.5**	**1.9**	**2.4**	**2.0**	**2.8**
State Agency Pool - AA Index	-1.8	-1.2	0.1	1.9	2.1	1.7	2.7
Difference	0.3	0.3	0.4	0.0	0.3	0.3	0.1

Comparative Performance	MTD	QTD	FYTD	1 Year	3 Years	5 Years	10 Years
Permanent Land Fund	**-7.3**	**-10.0**	**-6.2**	**-4.3**	**2.0**	**2.5**	**4.9**
PLF - AA Index	-7.7	-10.5	-6.9	-4.7	1.9	2.4	4.7
Difference	0.4	0.5	0.7	0.4	0.1	0.1	0.2
PLF - TA Index	-8.3	-11.1	-7.5	-4.9	2.1	2.7	5.2
Difference	1.0	1.1	1.3	0.6	-0.1	-0.2	-0.3
60% MSCI ACW/40% B US Agg	-8.3	-12.0	-6.4	-3.1	3.1	3.3	5.4
University PLF	**-7.9**	**-11.1**	**-6.7**	**-4.4**	**2.3**	**2.8**	**5.0**
University PLF - AA Index	-8.2	-11.7	-7.5	-4.9	2.3	2.7	4.9
Difference	0.3	0.6	0.8	0.5	0.0	0.1	0.1
University PLF - TA Index	-8.3	-11.1	-7.5	-4.9	2.1	2.7	5.2
Difference	0.4	0.0	0.8	0.5	0.2	0.1	-0.2
60% MSCI ACW/40% B US Agg	-8.3	-12.0	-6.4	-3.1	3.1	3.3	5.4
Hathaway Scholarship	**-7.9**	**-10.7**	**-7.0**	**-5.0**	**1.4**	**2.0**	**4.4**
Hathaway - AA Index	-8.1	-11.1	-7.6	-5.2	1.4	2.1	4.3
Difference	0.2	0.4	0.6	0.2	0.0	-0.1	0.1
Hathaway - TA Index	-8.3	-11.1	-7.5	-4.9	2.1	2.5	5.0
Difference	0.4	0.4	0.5	-0.1	-0.7	-0.5	-0.6
60% MSCI ACW/40% B US Agg	-8.3	-12.0	-6.4	-3.1	3.1	3.3	5.4
Higher Education	**-7.9**	**-9.9**	**-6.8**	**-4.7**	**1.4**	**2.0**	**4.4**
Higher Education - AA Index	-8.1	-10.5	-7.6	-5.2	1.3	2.0	4.2
Difference	0.2	0.6	0.8	0.5	0.1	0.0	0.2
Higher Education - TA Index	-8.7	-10.8	-7.9	-5.5	1.3	2.1	4.7
Difference	0.8	0.9	1.1	0.8	0.1	-0.1	-0.3
60% MSCI ACW/40% B US Agg	-8.3	-12.0	-6.4	-3.1	3.1	3.3	5.4

Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is net of fees.

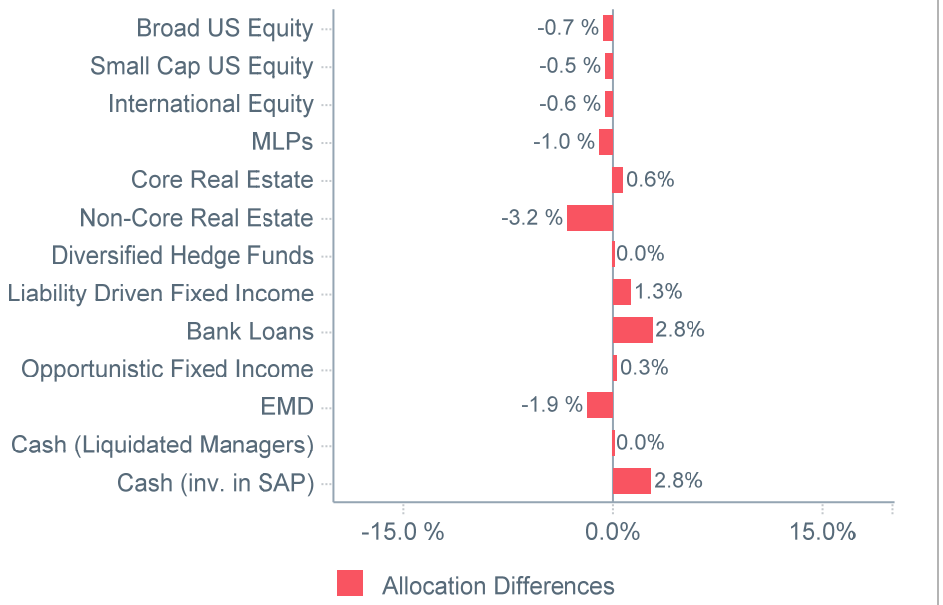
RVK

Wyoming State Treasurer's Office
Investment Funds - WC and LSRA Long Term Reserve
Asset Allocation vs. Long-Term Target

As of March 31, 2020

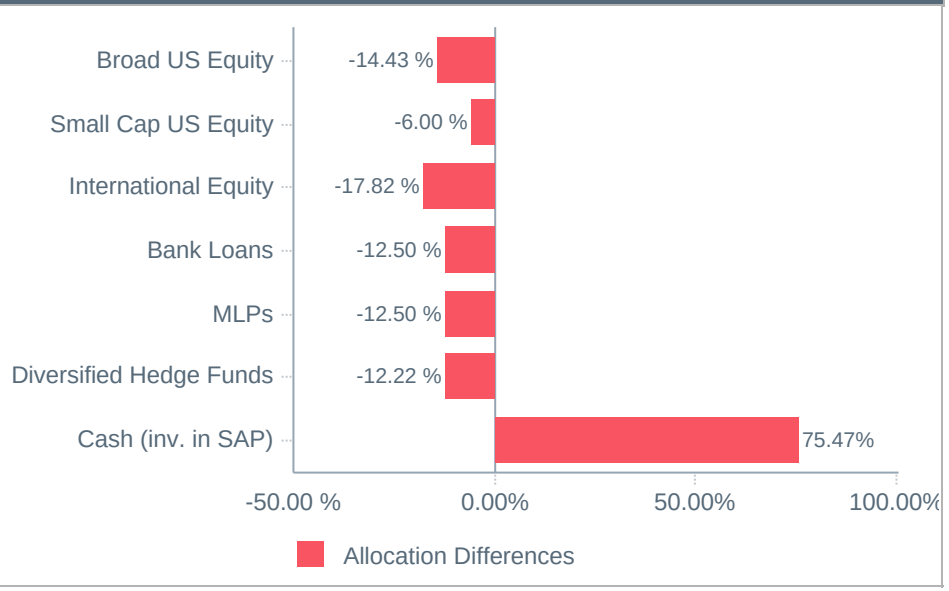
Workers Compensation Fund

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Workers Compensation Fund	2,190,772	100.00	-	100.00	-
Broad US Equity	160,389	7.32	4.00	8.00	12.00
Small Cap US Equity	32,534	1.49	1.00	2.00	3.00
International Equity	206,644	9.43	5.00	10.00	15.00
MLPs	77,183	3.52	2.25	4.50	6.75
Core Real Estate	112,786	5.15	2.25	4.50	6.75
Non-Core Real Estate	17,149	0.78	2.00	4.00	6.00
Diversified Hedge Funds	-	0.00	0.00	0.00	0.00
Liability Driven Fixed Income	1,386,565	63.29	31.00	62.00	93.00
Bank Loans	61,867	2.82	0.00	0.00	0.00
Opportunistic Fixed Income	6,742	0.31	0.00	0.00	5.00
EMD	67,943	3.10	2.50	5.00	7.50
Cash (Liquidated Managers)	123	0.01	0.00	0.00	0.00
Cash (inv. in SAP)	60,846	2.78	0.00	0.00	5.00



LSRA Long Term Reserve

	Asset Allocation ($000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Long Term Reserve	1,403,885	100.00	-	100.00	-
Broad US Equity	106,314	7.57	17.00	22.00	27.00
Small Cap US Equity	-	0.00	4.00	6.00	8.00
International Equity	142,852	10.18	21.00	28.00	35.00
Bank Loans	-	0.00	10.00	12.50	15.00
MLPs	-	0.00	10.00	12.50	15.00
Diversified Hedge Funds	95,139	6.78	15.00	19.00	23.00
Cash (inv. in SAP)	1,059,580	75.47	0.00	0.00	0.00



Allocations shown may not sum up to 100% exactly due to rounding.

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Total LSRA

	Asset Allocation ($000)	Asset Allocation (%)
LSRA	2,268,071	100.00
Broad US Equity	106,314	4.69
Small Cap US Equity	-	0.00
International Equity	142,852	6.30
Core Fixed Income	364,186	16.06
Bank Loans	-	0.00
Low Duration Fixed Income	500,000	22.05
MLPs	-	0.00
Diversified Hedge Funds	95,139	4.19
Cash (inv. in SAP)	1,059,580	46.72

LSRA Intermediate Term Reserve

	Asset Allocation ($000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Intermediate Term Reserve	364,186	100.00	-	100.00	-
Core Fixed Income	364,186	100.00	100.00	100.00	100.00

LSRA Short Term Reserve

	Asset Allocation ($000)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
LSRA Short Term Reserve	500,000	100.00	-	100.00	-
Low Duration Fixed Income	500,000	100.00	100.00	100.00	100.00

Allocations shown may not sum up to 100% exactly due to rounding. The Total LSRA pool has no target allocation.

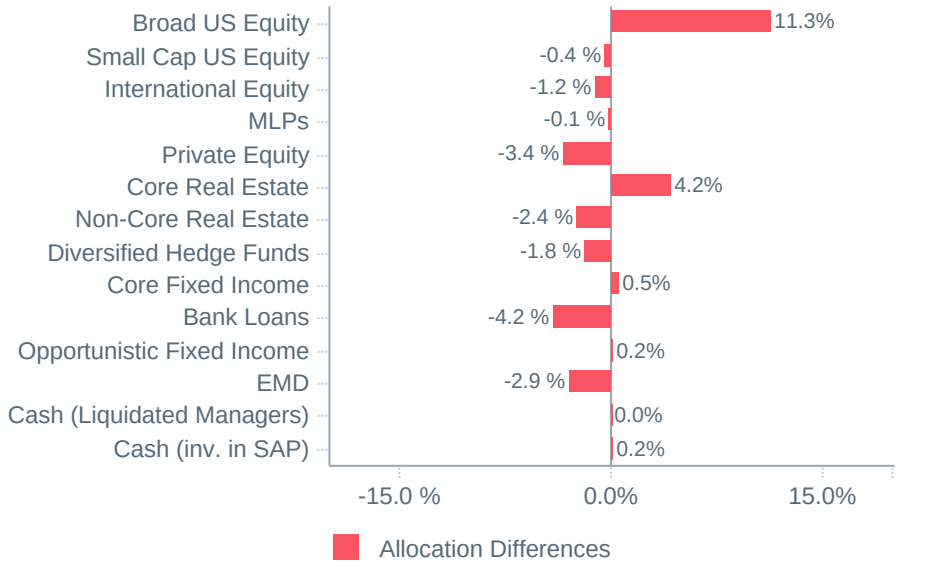
RVK

Wyoming State Treasurer's Office
Permanent Funds - Long-Term Total Return Focus
Asset Allocation vs. Long-Term Target

As of March 31, 2020

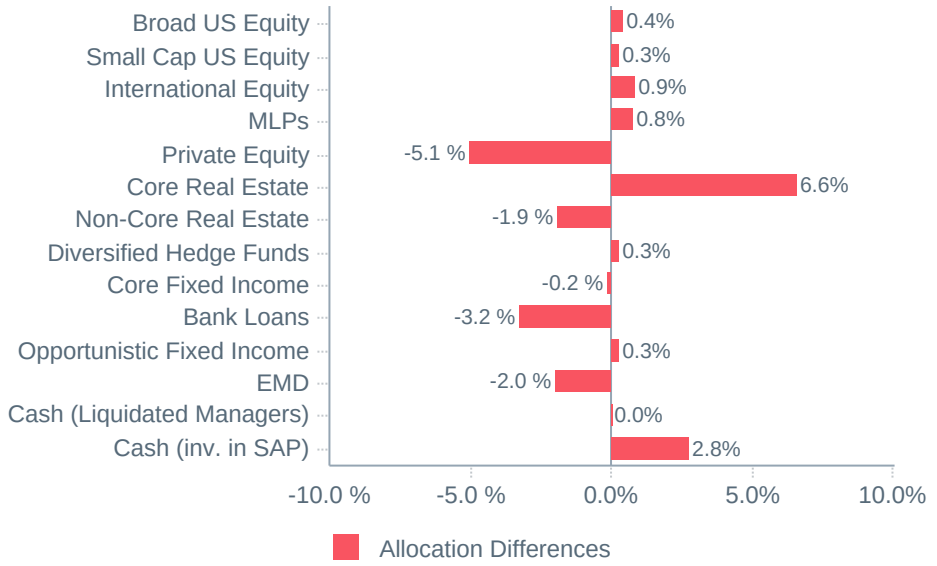
University Permanent Land Fund

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
University Permanent Land Fund	24,408	100.0	-	100.0	-
Broad US Equity	5,442	22.3	5.5	11.0	16.5
Small Cap US Equity	641	2.6	1.5	3.0	4.5
International Equity	3,133	12.8	7.0	14.0	21.0
MLPs	1,313	5.4	2.8	5.5	8.3
Private Equity	1,117	4.6	4.0	8.0	12.0
Core Real Estate	2,493	10.2	3.0	6.0	9.0
Non-Core Real Estate	629	2.6	2.5	5.0	7.5
Diversified Hedge Funds	1,389	5.7	3.8	7.5	11.3
Core Fixed Income	7,211	29.5	14.5	29.0	43.5
Bank Loans	444	1.8	3.0	6.0	9.0
Opportunistic Fixed Income	51	0.2	0.0	0.0	5.0
EMD	502	2.1	2.5	5.0	7.5
Cash (Liquidated Managers)	2	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	41	0.2	0.0	0.0	5.0



Hathaway Scholarship

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Hathaway Scholarship	528,973	100.0	-	100.0	-
Broad US Equity	60,290	11.4	5.5	11.0	16.5
Small Cap US Equity	17,309	3.3	1.5	3.0	4.5
International Equity	78,665	14.9	7.0	14.0	21.0
MLPs	33,197	6.3	2.8	5.5	8.3
Private Equity	15,563	2.9	4.0	8.0	12.0
Core Real Estate	66,676	12.6	3.0	6.0	9.0
Non-Core Real Estate	16,432	3.1	2.5	5.0	7.5
Diversified Hedge Funds	41,166	7.8	3.8	7.5	11.3
Core Fixed Income	152,582	28.8	14.5	29.0	43.5
Bank Loans	14,641	2.8	3.0	6.0	9.0
Opportunistic Fixed Income	1,498	0.3	0.0	0.0	5.0
EMD	16,112	3.0	2.5	5.0	7.5
Cash (Liquidated Managers)	59	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	14,784	2.8	0.0	0.0	5.0



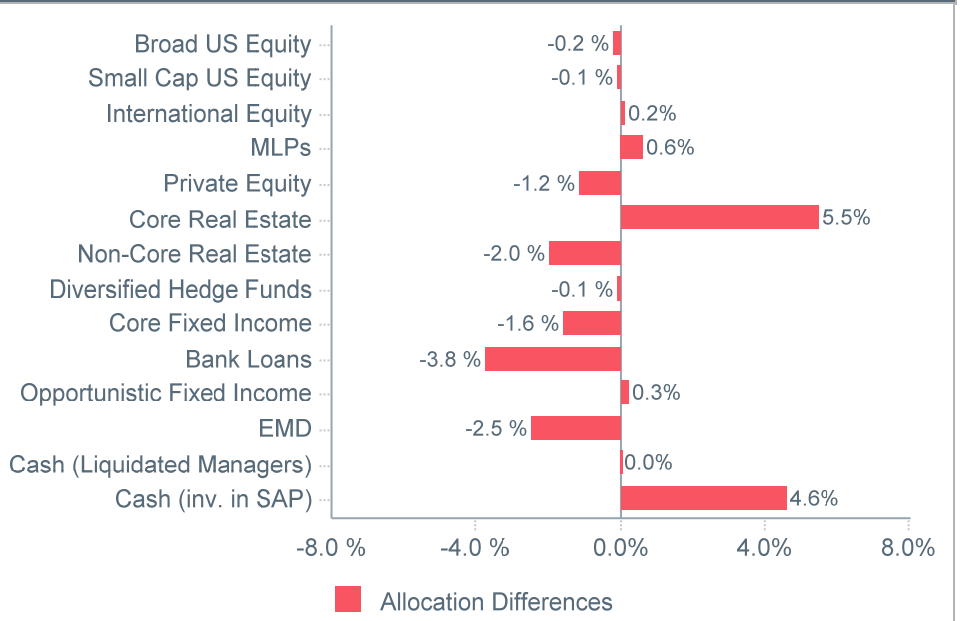
Allocations shown may not sum up to 100% exactly due to rounding.

Wyoming State Treasurer's Office
Permanent Funds - HE and PLF
Asset Allocation vs. Long-Term Target

As of March 31, 2020

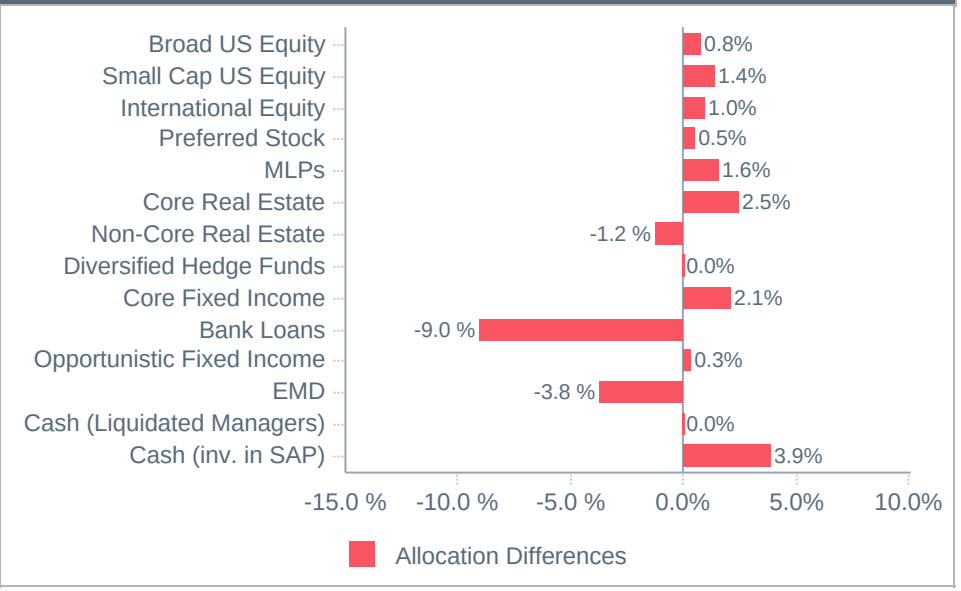
Permanent Land Fund

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Permanent Land Fund	178,892	100.0	-	100.0	-
Broad US Equity	19,376	10.8	5.5	11.0	16.5
Small Cap US Equity	5,262	2.9	1.5	3.0	4.5
International Equity	25,325	14.2	7.0	14.0	21.0
MLPs	10,930	6.1	2.8	5.5	8.3
Private Equity	12,238	6.8	4.0	8.0	12.0
Core Real Estate	20,610	11.5	3.0	6.0	9.0
Non-Core Real Estate	5,429	3.0	2.5	5.0	7.5
Diversified Hedge Funds	13,282	7.4	3.8	7.5	11.3
Core Fixed Income	49,093	27.4	14.5	29.0	43.5
Bank Loans	4,021	2.2	3.0	6.0	9.0
Opportunistic Fixed Income	457	0.3	0.0	0.0	5.0
EMD	4,534	2.5	2.5	5.0	7.5
Cash (Liquidated Managers)	18	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	8,318	4.6	0.0	0.0	5.0



Higher Education

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Higher Education	105,335	100.0	-	100.0	-
Broad US Equity	9,239	8.8	4.0	8.0	12.0
Small Cap US Equity	3,577	3.4	1.0	2.0	3.0
International Equity	11,575	11.0	5.0	10.0	15.0
Preferred Stock	3,739	3.5	1.5	3.0	4.5
MLPs	9,069	8.6	3.5	7.0	10.5
Core Real Estate	14,176	13.5	5.5	11.0	16.5
Non-Core Real Estate	1,863	1.8	1.5	3.0	4.5
Diversified Hedge Funds	-	0.0	0.0	0.0	0.0
Core Fixed Income	41,170	39.1	18.5	37.0	55.5
Bank Loans	3,113	3.0	6.0	12.0	18.0
Opportunistic Fixed Income	309	0.3	0.0	0.0	5.0
EMD	3,411	3.2	3.5	7.0	10.5
Cash (Liquidated Managers)	12	0.0	0.0	0.0	0.0
Cash (inv. in SAP)	4,080	3.9	0.0	0.0	5.0



Allocations shown may not sum up to 100% exactly due to rounding.

RVK

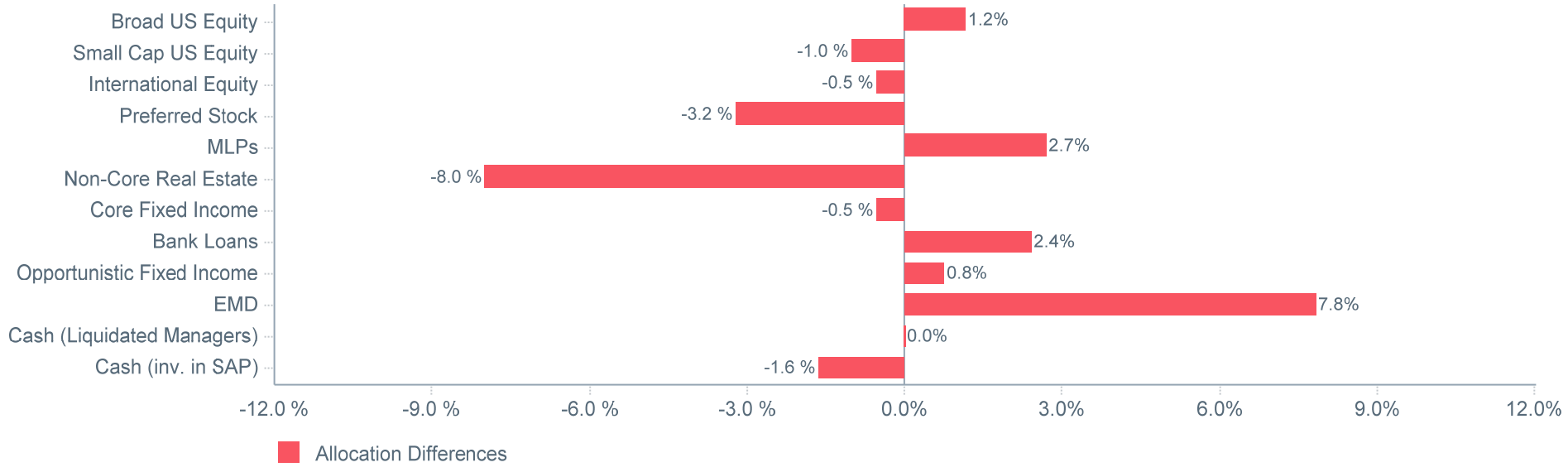
Wyoming State Treasurer's Office
Pool A Investment Account
Asset Allocation vs. Long-Term Target

As of March 31, 2020

Asset Allocation vs. Long-Term Target

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Pool A	186,908	100.00	-	100.00	-
Broad US Equity	16,217	8.68	3.75	7.50	11.25
Small Cap US Equity	-	0.00	0.50	1.00	1.50
International Equity	13,036	6.97	3.75	7.50	11.25
Preferred Stock	7,084	3.79	3.50	7.00	10.50
MLPs	14,416	7.71	2.50	5.00	7.50
Non-Core Real Estate	-	0.00	4.00	8.00	12.00
Core Fixed Income	90,563	48.45	24.50	49.00	73.50
Bank Loans	23,219	12.42	5.00	10.00	15.00
Opportunistic Fixed Income	1,402	0.75	0.00	0.00	0.00
EMD	14,666	7.85	0.00	0.00	0.00
Cash (Liquidated Managers)	1	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	6,304	3.37	2.50	5.00	7.50

Asset Allocation vs. Long-Term Target Differences

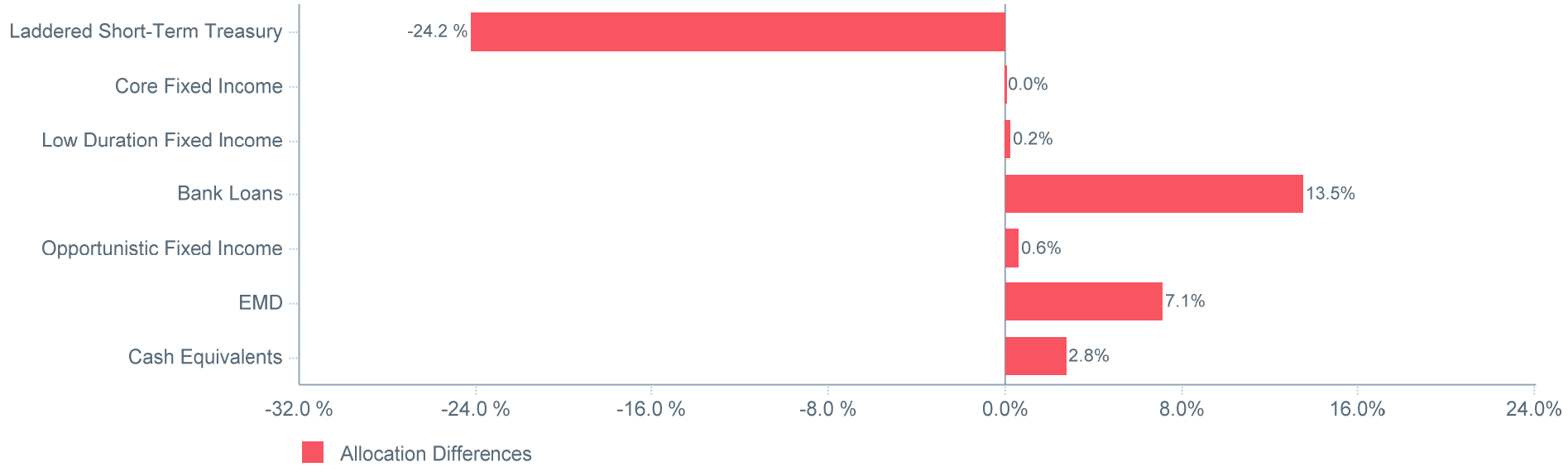


Allocations shown may not sum up to 100% exactly due to rounding.

Asset Allocation vs. Long-Term Target

	Allocation ($000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
State Agency Pool Excluding PPI	3,836,467	100.00	-	100.00	-
Laddered Short-Term Treasury	2,906,556	75.76	100.00	100.00	100.00
Core Fixed Income	-	0.00	0.00	0.00	0.00
Low Duration Fixed Income	9,483	0.25	0.00	0.00	0.00
Bank Loans	517,660	13.49	0.00	0.00	0.00
Opportunistic Fixed Income	23,734	0.62	0.00	0.00	0.00
EMD	272,424	7.10	0.00	0.00	0.00
Cash Equivalents	106,611	2.78	0.00	0.00	0.00

Asset Allocation vs. Long-Term Target Differences



Allocations shown may not sum up to 100% exactly due to rounding. Market value shown excludes Public Purpose Investments (PPIs).

Asset Allocation & Performance

	Allocation		Performance (%)
	Market Value ($)	%	FYTD
Total Fund	**20,160,657,419**	**100.00**	**-3.94**
All Cap US Equity Composite	**1,485,299,162**	**7.37**	**-11.91**
State Street All Cap	1,485,299,162	7.37	-11.91
UW Portfolio Mgmt Program	1,205,933	0.01	-10.67
Small Cap US Equity Composite	**392,463,423**	**1.95**	**-25.40**
Internal Equity Russell 2000	1,099	0.00	N/A
State Street Russell 2000	225,217,394	1.12	N/A
Van Berkom	167,244,930	0.83	N/A
Int'l Equity Composite	**1,924,699,402**	**9.55**	**-16.31**
Northern Trust	773,852,010	3.84	-17.83
Arrowstreet	592,348,879	2.94	-16.67
Harding Loevner	558,498,514	2.77	N/A
Preferred Stock Composite	**133,756,724**	**0.66**	**-7.05**
Cohen & Steers Preferred Stock	133,756,724	0.66	-7.05
MLPs Composite	**891,759,245**	**4.42**	**-52.98**
Harvest Fund Advisors	417,841,432	2.07	-51.73
Harvest Fund Advisors Passive	473,917,813	2.35	N/A
Private Equity Composite	**644,664,862**	**3.20**	**N/A**
Access Venture Partners II	1,762,794	0.01	N/A
Cheyenne Equity Capital Fund, L.P.	180,181,083	0.89	N/A
Hamilton Lane Nowood Fund, L.P.	147,851,285	0.73	N/A
Neuberger Berman Sauger Fund, L.P.	193,002,546	0.96	N/A
BlackRock LTPC, L.P.	121,867,154	0.60	N/A
Real Estate Composite	**1,743,751,197**	**8.65**	**N/A**
Clarion Lion	1,167,804,421	5.79	4.69
UBS Trumbull	252,450,567	1.25	0.84
SC Capital	106,495,263	0.53	N/A
Realterm	15,173,887	0.08	N/A
Heitman	20,020	0.00	N/A
M&G	42,915,262	0.21	N/A
Northwood	143,987,277	0.71	N/A
TA Associates Realty	31,837	0.00	N/A
WestRiver	14,872,662	0.07	N/A

Asset Allocation & Performance

	Allocation		Performance (%)
	Market Value ($)	%	FYTD
Diversified Hedge Funds Composite	**707,633,976**	**3.51**	**-5.35**
PAAMCO - Jackalope Fund	4,325,639	0.02	N/A
Grosvenor Diversified Hedge Funds	235,168,248	1.17	-4.60
Internal Diversified Hedge Funds	468,140,089	2.32	-5.45
Core Fixed Income Composite	**4,642,721,943**	**23.03**	**5.71**
PIMCO	2,054,725,936	10.19	5.27
Internal Intermediate Gov't Fixed Income	1,226,095,046	6.08	9.23
Payden & Rygel IGC	613,760,076	3.04	N/A
JP Morgan MBS	748,140,886	3.71	N/A
Laddered Treasury Composite	**3,930,050,062**	**19.49**	**N/A**
Internal Ladder Portfolio	3,930,050,062	19.49	N/A
Bank Loans Composite	**1,015,294,827**	**5.04**	**N/A**
Credit Suisse	649,339,901	3.22	N/A
Octagon	365,917,765	1.82	N/A
Seix	37,160	0.00	N/A
Emerging Market Debt Composite	**708,792,623**	**3.52**	**-12.36**
Investec	168,835,639	0.84	-12.34
Global Evolution	335,678,380	1.67	N/A
Goldman Sachs	204,278,604	1.01	N/A
Long Duration Fixed Income Composite	**878,468,917**	**4.36**	**15.93**
Internal Long Duration Fixed Income	493,869,033	2.45	25.45
Logan Circle	384,599,884	1.91	5.62
Low Duration Fixed Income Composite	**512,821,681**	**2.54**	**4.22**
Internal Low Duration Fixed Income	512,821,681	2.54	4.22
Grosvenor Silvery Lupine Fund	**71,026,445**	**0.35**	**-8.72**
Cash Equivalents	**145,532,276**	**0.72**	**1.41**
Fisher Investments	1,295,272	0.01	N/A
Stone Harbor	9,499	0.00	N/A
JP Morgan Core	-	0.00	N/A
State Street TIPS	358	0.00	N/A
State Street Low Duration	45,984	0.00	N/A
Allianz Global Investors	36,365	0.00	N/A
Neuberger Berman Credit	41,483	0.00	N/A
C.S. McKee	-	0.00	N/A
Cornerstone	48,412	0.00	N/A
Public Purpose Investments	**330,714,719**	**1.64**	**N/A**

Schedule of Investable Assets - Total Fund Composite Ex Public Purpose Investments

Periods Ending	Beginning Market Value ($)	Net Cash Flow ($)	Gain/Loss ($)	Ending Market Value ($)	% Return	Unit Value
FYTD	**21,114,239,217**	**-473,007,167**	**-811,289,350**	**19,829,942,700**	**-3.94**	**96.06**

Allocations may not sum up to 100% exactly due to rounding. Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Market value shown for Public Purpose Investments (PPIs) is as of 06/30/2019. Investment manager fees are accounted for on a quarterly basis. Wyoming State Treasurer's Office fiscal year ends on June 30th.

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)								
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Permanent Mineral Trust	**7,262,874,768**	**36.02**	**-7.53**	**-10.29**	**-10.29**	**-6.47**	**-4.40**	**1.92**	**2.48**	**3.74**	**4.94**
Permanent Mineral Trust - Actual Allocation Index			-7.86	-10.88	-10.88	-7.26	-4.91	1.80	2.38	3.74	4.73
Difference			0.33	0.59	0.59	0.79	0.51	0.12	0.10	0.00	0.21
Permanent Mineral Trust - Target Allocation Index			-8.29	-11.15	-11.15	-7.47	-4.86	2.06	2.70	4.04	5.22
Difference			0.76	0.86	0.86	1.00	0.46	-0.14	-0.22	-0.30	-0.28
Permanent Land Fund	**178,891,692**	**0.89**	**-7.34**	**-9.98**	**-9.98**	**-6.25**	**-4.27**	**1.95**	**2.47**	**3.69**	**4.86**
Permanent Land Fund - Actual Allocation Index			-7.65	-10.55	-10.55	-6.95	-4.65	1.87	2.38	3.70	4.67
Difference			0.31	0.57	0.57	0.70	0.38	0.08	0.09	-0.01	0.19
Permanent Land Fund - Target Allocation Index			-8.29	-11.15	-11.15	-7.47	-4.86	2.05	2.70	4.04	5.21
Difference			0.95	1.17	1.17	1.22	0.59	-0.10	-0.23	-0.35	-0.35
University Permanent Land Fund	**24,407,851**	**0.12**	**-7.89**	**-11.11**	**-11.11**	**-6.74**	**-4.44**	**2.34**	**2.80**	**4.03**	**5.02**
University PLF - Actual Allocation Index			-8.23	-11.72	-11.72	-7.48	-4.87	2.26	2.74	4.08	4.93
Difference			0.34	0.61	0.61	0.74	0.43	0.08	0.06	-0.05	0.09
University PLF - Target Allocation Index			-8.29	-11.15	-11.15	-7.47	-4.86	2.05	2.70	4.04	5.21
Difference			0.40	0.04	0.04	0.73	0.42	0.29	0.10	-0.01	-0.19
Hathaway Scholarship	**528,972,541**	**2.62**	**-7.93**	**-10.66**	**-10.66**	**-7.04**	**-4.96**	**1.41**	**2.04**	**3.13**	**4.39**
Hathaway Scholarship - Actual Allocation Index			-8.09	-11.06	-11.06	-7.59	-5.17	1.40	2.05	3.26	4.28
Difference			0.16	0.40	0.40	0.55	0.21	0.01	-0.01	-0.13	0.11
Hathaway Scholarship - Target Allocation Index			-8.29	-11.15	-11.15	-7.47	-4.86	2.07	2.55	3.77	4.96
Difference			0.36	0.49	0.49	0.43	-0.10	-0.66	-0.51	-0.64	-0.57

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)									
	Market Value ($)	%	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Permanent Mineral Trust	**7,262,874,768**	**36.02**	**12.48**	**-2.56**	**10.91**	**6.39**	**-0.61**	**5.72**	**9.45**	**11.05**	**0.93**	**11.65**
Permanent Mineral Trust - Actual Allocation Index			12.71	-2.59	11.07	5.59	0.01	6.04	9.50	9.83	1.33	9.74
Difference			-0.23	0.03	-0.16	0.80	-0.62	-0.32	-0.05	1.22	-0.40	1.91
Permanent Mineral Trust - Target Allocation Index			13.65	-2.02	10.59	5.69	1.04	6.43	9.46	10.05	3.33	10.14
Difference			-1.17	-0.54	0.32	0.70	-1.65	-0.71	-0.01	1.00	-2.40	1.51
Permanent Land Fund	**178,891,692**	**0.89**	**12.08**	**-2.32**	**10.62**	**6.35**	**-0.69**	**5.81**	**8.98**	**10.81**	**1.06**	**11.55**
Permanent Land Fund - Actual Allocation Index			12.42	-2.33	10.70	5.50	-0.05	6.17	9.08	9.55	1.48	9.54
Difference			-0.34	0.01	-0.08	0.85	-0.64	-0.36	-0.10	1.26	-0.42	2.01
Permanent Land Fund - Target Allocation Index			13.65	-2.02	10.59	5.69	1.03	6.42	9.47	10.04	3.30	10.11
Difference			-1.57	-0.30	0.03	0.66	-1.72	-0.61	-0.49	0.77	-2.24	1.44
University Permanent Land Fund	**24,407,851**	**0.12**	**13.76**	**-2.29**	**11.94**	**6.72**	**-0.80**	**5.97**	**9.45**	**10.38**	**0.71**	**11.44**
University PLF - Actual Allocation Index			14.27	-2.34	12.01	6.04	-0.16	6.32	9.79	9.37	1.20	9.82
Difference			-0.51	0.05	-0.07	0.68	-0.64	-0.35	-0.34	1.01	-0.49	1.62
University PLF - Target Allocation Index			13.65	-2.02	10.59	5.69	1.03	6.42	9.47	10.04	3.30	10.11
Difference			0.11	-0.27	1.35	1.03	-1.83	-0.45	-0.02	0.34	-2.59	1.33
Hathaway Scholarship	**528,972,541**	**2.62**	**12.31**	**-2.96**	**10.12**	**5.73**	**-0.49**	**5.43**	**6.99**	**10.39**	**1.51**	**11.14**
Hathaway Scholarship - Actual Allocation Index			12.66	-2.91	10.20	5.11	0.21	5.95	7.22	8.92	2.01	9.33
Difference			-0.35	-0.05	-0.08	0.62	-0.70	-0.52	-0.23	1.47	-0.50	1.81
Hathaway Scholarship - Target Allocation Index			13.65	-2.02	10.52	5.17	0.74	6.18	8.34	9.81	3.30	10.11
Difference			-1.34	-0.94	-0.40	0.56	-1.23	-0.75	-1.35	0.58	-1.79	1.03

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)								
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Common School PLF	**3,435,330,302**	**17.04**	**-7.46**	**-9.50**	**-9.50**	**-6.19**	**-4.13**	**2.02**	**2.61**	**3.85**	**5.09**
Common School - Actual Allocation Index			-7.91	-10.27	-10.27	-7.20	-4.89	1.75	2.43	3.79	4.77
Difference			0.45	0.77	0.77	1.01	0.76	0.27	0.18	0.06	0.32
Common School - Target Allocation Index			-8.70	-10.79	-10.79	-7.93	-5.46	1.25	2.22	3.69	4.97
Difference			1.24	1.29	1.29	1.74	1.33	0.77	0.39	0.16	0.12
Higher Education	**105,334,845**	**0.52**	**-7.90**	**-9.95**	**-9.95**	**-6.83**	**-4.71**	**1.44**	**2.04**	**3.14**	**4.38**
Higher Education - Actual Allocation Index			-8.15	-10.48	-10.48	-7.60	-5.19	1.33	1.99	3.22	4.24
Difference			0.25	0.53	0.53	0.77	0.48	0.11	0.05	-0.08	0.14
Higher Education -Target Allocation Index			-8.70	-10.79	-10.79	-7.93	-5.46	1.27	2.07	3.42	4.72
Difference			0.80	0.84	0.84	1.10	0.75	0.17	-0.03	-0.28	-0.34

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Wyoming State Treasurer's Office
Asset Allocation & Performance

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	Allocation		Performance (%)									
	Market Value ($)	%	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Common School PLF	**3,435,330,302**	**17.04**	**11.97**	**-2.57**	**10.82**	**6.52**	**-0.47**	**5.82**	**9.61**	**11.22**	**1.18**	**12.03**
Common School - Actual Allocation Index			12.00	-2.61	10.94	5.72	0.17	6.17	9.67	9.76	1.25	9.84
Difference			-0.03	0.04	-0.12	0.80	-0.64	-0.35	-0.06	1.46	-0.07	2.19
Common School - Target Allocation Index			12.03	-1.74	8.81	5.69	1.04	6.43	9.46	10.05	3.33	10.14
Difference			-0.06	-0.83	2.01	0.83	-1.51	-0.61	0.15	1.17	-2.15	1.89
Higher Education	**105,334,845**	**0.52**	**12.02**	**-3.31**	**10.05**	**5.73**	**-0.55**	**5.40**	**7.05**	**10.42**	**1.46**	**10.99**
Higher Education - Actual Allocation Index			12.09	-3.22	10.14	5.11	0.15	5.92	7.27	8.96	1.94	9.19
Difference			-0.07	-0.09	-0.09	0.62	-0.70	-0.52	-0.22	1.46	-0.48	1.80
Higher Education -Target Allocation Index			12.03	-1.74	8.74	5.17	0.74	6.18	8.34	9.81	3.30	10.11
Difference			-0.01	-1.57	1.31	0.56	-1.29	-0.78	-1.29	0.61	-1.84	0.88

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)								
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Workers Compensation Fund	**2,190,772,384**	**10.87**	**-4.95**	**-2.91**	**-2.91**	**1.34**	**4.89**	**4.94**	**3.90**	**4.10**	**4.88**
Workers Compensation - Actual Allocation Index			-5.57	-3.72	-3.72	0.39	4.15	4.65	3.69	4.16	4.72
Difference			0.62	0.81	0.81	0.95	0.74	0.29	0.21	-0.06	0.16
Workers Compensation - Target Allocation Index			-6.57	-5.25	-5.25	-1.00	3.05	4.23	3.52	4.10	4.88
Difference			1.62	2.34	2.34	2.34	1.84	0.71	0.38	0.00	0.00

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)									
	Market Value ($)	%	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Workers Compensation Fund	**2,190,772,384**	**10.87**	**13.78**	**-0.85**	**7.80**	**4.89**	**-0.46**	**5.06**	**4.14**	**9.03**	**2.86**	**9.68**
Workers Compensation - Actual Allocation Index			14.03	-1.02	7.70	4.18	0.15	5.91	4.59	7.23	3.60	7.98
Difference			-0.25	0.17	0.10	0.71	-0.61	-0.85	-0.45	1.80	-0.74	1.70
Workers Compensation - Target Allocation Index			15.53	-1.66	7.48	4.27	0.50	6.09	4.95	7.19	4.39	8.92
Difference			-1.75	0.81	0.32	0.62	-0.96	-1.03	-0.81	1.84	-1.53	0.76

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	Allocation		Performance (%)								
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Pool A	**186,908,137**	**0.93**	**-7.83**	**-8.88**	**-8.88**	**-6.12**	**-4.20**	**0.62**	**1.00**	**1.26**	**2.66**
Pool A - Actual Allocation Index			-8.43	-9.79	-9.79	-7.24	-4.85	0.06	0.55	1.23	2.48
Difference			0.60	0.91	0.91	1.12	0.65	0.56	0.45	0.03	0.18
Pool A - Target Allocation Index			-6.84	-7.63	-7.63	-4.72	-1.90	1.66	1.52	1.97	3.05
Difference			-0.99	-1.25	-1.25	-1.40	-2.30	-1.04	-0.52	-0.71	-0.39

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Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)									
	Market Value ($)	%	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Pool A	**186,908,137**	**0.93**	**8.89**	**-0.39**	**4.21**	**3.90**	**-0.26**	**4.76**	**-2.26**	**6.88**	**5.96**	**7.87**
Pool A - Actual Allocation Index			9.41	-1.32	3.84	2.84	0.41	6.06	-1.78	4.18	7.77	6.44
Difference			-0.52	0.93	0.37	1.06	-0.67	-1.30	-0.48	2.70	-1.81	1.43
Pool A - Target Allocation Index			12.05	-2.61	5.22	2.89	0.44	6.05	-1.28	4.52	7.41	6.82
Difference			-3.16	2.22	-1.01	1.01	-0.70	-1.29	-0.98	2.36	-1.45	1.05

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Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)								
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
State Agency Pool	**3,979,093,902**	**19.74**	**-1.52**	**-0.90**	**-0.90**	**0.48**	**1.90**	**2.40**	**1.99**	**1.88**	**2.78**
State Agency Pool - Actual Allocation Index			-1.80	-1.15	-1.15	0.14	1.95	2.14	1.73	1.96	2.74
Difference			0.28	0.25	0.25	0.34	-0.05	0.26	0.26	-0.08	0.04

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Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)									
	Market Value ($)	%	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
State Agency Pool	**3,979,093,902**	**19.74**	**5.20**	**0.64**	**3.36**	**3.46**	**-0.28**	**3.88**	**-1.88**	**5.73**	**4.82**	**6.29**
State Agency Pool - Actual Allocation Index			5.62	-0.39	3.33	2.54	0.33	5.08	-1.45	3.57	6.49	5.22
Difference			-0.42	1.03	0.03	0.92	-0.61	-1.20	-0.43	2.16	-1.67	1.07

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)								
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
LSRA	**2,268,070,998**	**11.25**	**-2.39**	**-2.28**	**-2.28**	**0.00**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA - Actual Allocation Index			-2.50	-2.49	-2.49	-0.27	N/A	N/A	N/A	N/A	N/A
Difference			0.11	0.21	0.21	0.27	N/A	N/A	N/A	N/A	N/A
LSRA Long Term Reserve	**1,403,884,830**	**6.96**	**-3.86**	**-5.01**	**-5.01**	**-2.45**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Long Term Reserve - Actual Allocation Index			-4.20	-5.42	-5.42	-2.97	N/A	N/A	N/A	N/A	N/A
Difference			0.34	0.41	0.41	0.52	N/A	N/A	N/A	N/A	N/A
LSRA Long Term Reserve - Target Allocation Index			-16.58	-23.18	-23.18	-19.90	N/A	N/A	N/A	N/A	N/A
Difference			12.72	18.17	18.17	17.45	N/A	N/A	N/A	N/A	N/A
LSRA Intermediate Term Reserve	**364,186,167**	**1.81**	**-1.34**	**2.72**	**2.72**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Intermediate Term Reserve - Actual Allocation Index			-0.59	3.15	3.15	N/A	N/A	N/A	N/A	N/A	N/A
Difference			-0.75	-0.43	-0.43	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Intermediate Term Reserve - Target Allocation Index			-0.59	3.15	3.15	5.68	N/A	N/A	N/A	N/A	N/A
Difference			-0.75	-0.43	-0.43	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Short Term Reserve	**500,000,000**	**2.48**	**1.29**	**2.74**	**2.74**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Short Term Reserve - Actual Allocation Index			1.27	2.73	2.73	N/A	N/A	N/A	N/A	N/A	N/A
Difference			0.02	0.01	0.01	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Short Term Reserve - Target Allocation Index			1.27	2.73	2.73	3.85	N/A	N/A	N/A	N/A	N/A
Difference			0.02	0.01	0.01	N/A	N/A	N/A	N/A	N/A	N/A

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	Allocation		Performance (%)									
	Market Value ($)	%	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
LSRA	**2,268,070,998**	**11.25**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA - Actual Allocation Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Long Term Reserve	**1,403,884,830**	**6.96**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Long Term Reserve - Actual Allocation Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Long Term Reserve - Target Allocation Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Intermediate Term Reserve	**364,186,167**	**1.81**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Intermediate Term Reserve - Actual Allocation Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Intermediate Term Reserve - Target Allocation Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Short Term Reserve	**500,000,000**	**2.48**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
LSRA Short Term Reserve - Actual Allocation Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LSRA Short Term Reserve - Target Allocation Index			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Performance and market values shown are preliminary and subject to change.

RVK

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)								
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Total Fund	**20,160,657,419**	**100.00**	**-5.95**	**-7.00**	**-7.00**	**-3.94**	**-1.91**	**2.36**	**2.52**	**3.26**	**4.28**
Wyoming State Custom Index			-6.66	-7.81	-7.81	-4.87	-2.54	2.03	2.28	3.17	4.09
Difference			0.71	0.81	0.81	0.93	0.63	0.33	0.24	0.09	0.19

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Performance and market values shown are preliminary and subject to change.

RVK

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)									
	Market Value ($)	%	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010
Total Fund	**20,160,657,419**	**100.00**	**10.31**	**-1.30**	**8.60**	**5.30**	**-0.36**	**5.23**	**5.19**	**9.02**	**2.64**	**9.46**
Wyoming State Custom Index			10.70	-1.58	8.16	4.65	0.26	5.59	5.34	7.82	3.25	8.12
Difference			-0.39	0.28	0.44	0.65	-0.62	-0.36	-0.15	1.20	-0.61	1.34

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Performance and market values shown are preliminary and subject to change.

RVK

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
All Cap US Equity Composite	**1,485,299,162**	**7.37**	**-12.31**	**-20.16**	**-20.16**	**-11.91**	**-8.54**	**3.40**	**5.19**	**N/A**	**N/A**	**6.79**	**11/01/2014**
All Cap US Equity Custom Index			-12.35	-20.20	-20.20	-11.93	-8.32	4.31	5.95	9.10	10.25	6.30	
Difference			0.04	0.04	0.04	0.02	-0.22	-0.91	-0.76	N/A	N/A	0.49	
State Street All Cap	**1,485,299,162**	**7.37**	**-12.31**	**-20.16**	**-20.16**	**-11.91**	**-8.54**	**3.90**	**5.76**	**N/A**	**N/A**	**5.75**	**01/01/2015**
State Street All Cap Custom Index			-12.35	-20.20	-20.20	-12.12	-8.53	3.79	5.71	8.82	10.16	5.73	
Difference			0.04	0.04	0.04	0.21	-0.01	0.11	0.05	N/A	N/A	0.02	
UW Portfolio Mgmt Program	**1,205,933**	**0.01**	**-11.24**	**-18.53**	**-18.53**	**-10.67**	**-7.99**	**2.79**	**4.95**	**8.19**	**6.97**	**2.44**	**04/01/2006**
S&P 500 Index (Cap Wtd)			-12.35	-19.60	-19.60	-10.82	-6.98	5.10	6.73	9.62	10.53	7.29	
Difference			1.11	1.07	1.07	0.15	-1.01	-2.31	-1.78	-1.43	-3.56	-4.85	
Small Cap US Equity Composite	**392,463,423**	**1.95**	**-21.51**	**-30.52**	**-30.52**	**-25.40**	**-23.97**	**-7.13**	**-2.13**	**N/A**	**N/A**	**-1.16**	**11/01/2014**
Russell 2000 Index			-21.73	-30.61	-30.61	-25.55	-23.99	-4.64	-0.25	4.21	6.90	1.09	
Difference			0.22	0.09	0.09	0.15	0.02	-2.49	-1.88	N/A	N/A	-2.25	
State Street Russell 2000	**225,217,394**	**1.12**	**-21.69**	**-30.59**	**-30.59**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-25.68**	**11/01/2019**
Russell 2000 Index			-21.73	-30.61	-30.61	-25.55	-23.99	-4.64	-0.25	4.21	6.90	-25.68	
Difference			0.04	0.02	0.02	N/A	N/A	N/A	N/A	N/A	N/A	0.00	
Van Berkom	**167,244,930**	**0.83**	**-21.22**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-21.22**	**03/01/2020**
Russell 2000 Index			-21.73	-30.61	-30.61	-25.55	-23.99	-4.64	-0.25	4.21	6.90	-21.73	
Difference			0.51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.51	
Int'l Equity Composite	**1,924,699,402**	**9.55**	**-13.56**	**-22.16**	**-22.16**	**-16.31**	**-13.51**	**-0.99**	**-0.21**	**1.52**	**2.49**	**4.16**	**01/01/2004**
International Equity Custom Index			-14.48	-23.36	-23.36	-18.02	-15.57	-1.96	-0.64	1.06	1.94	3.68	
Difference			0.92	1.20	1.20	1.71	2.06	0.97	0.43	0.46	0.55	0.48	
Northern Trust	**773,852,010**	**3.84**	**-14.29**	**-23.21**	**-23.21**	**-17.83**	**-15.25**	**-1.67**	**-0.49**	**1.21**	**N/A**	**2.76**	**08/01/2010**
MSCI ACW Ex US Index (USD) (Net)			-14.48	-23.36	-23.36	-18.02	-15.57	-1.96	-0.64	1.06	2.05	2.61	
Difference			0.19	0.15	0.15	0.19	0.32	0.29	0.15	0.15	N/A	0.15	
Arrowstreet	**592,348,879**	**2.94**	**-14.56**	**-23.17**	**-23.17**	**-16.67**	**-14.90**	**N/A**	**N/A**	**N/A**	**N/A**	**-10.71**	**03/01/2018**
MSCI ACW Ex US IM Index (USD) (Net)			-15.11	-24.11	-24.11	-18.55	-16.32	-2.34	-0.66	1.06	2.14	-11.13	
Difference			0.55	0.94	0.94	1.88	1.42	N/A	N/A	N/A	N/A	0.42	
Harding Loevner	**558,498,514**	**2.77**	**-11.54**	**-19.40**	**-19.40**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-19.40**	**01/01/2020**
MSCI ACW Ex US Index (USD) (Net)			-14.48	-23.36	-23.36	-18.02	-15.57	-1.96	-0.64	1.06	2.05	-23.36	
Difference			2.94	3.96	3.96	N/A	N/A	N/A	N/A	N/A	N/A	3.96	

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RVK

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Cohen & Steers Preferred Stock	**133,756,724**	**0.66**	**-12.89**	**-13.10**	**-13.10**	**-7.05**	**-3.27**	**N/A**	**N/A**	**N/A**	**N/A**	**0.91**	**07/01/2018**
S&P US Preferred Stock Index			-12.09	-14.91	-14.91	-9.76	-7.34	-0.22	1.77	3.14	4.91	-3.10	
Difference			-0.80	1.81	1.81	2.71	4.07	N/A	N/A	N/A	N/A	4.01	
MLP Composite	**891,759,245**	**4.42**	**-41.23**	**-49.85**	**-49.85**	**-52.98**	**-53.17**	**N/A**	**N/A**	**N/A**	**N/A**	**-38.41**	**08/01/2018**
MLP Custom Index			-44.51	-53.23	-53.23	-57.40	-57.64	-26.04	-19.27	-12.69	-3.55	-41.05	
Difference			3.28	3.38	3.38	4.42	4.47	N/A	N/A	N/A	N/A	2.64	
Harvest Fund Advisors	**417,841,432**	**2.07**	**-40.25**	**-48.52**	**-48.52**	**-51.73**	**-51.93**	**N/A**	**N/A**	**N/A**	**N/A**	**-37.43**	**08/01/2018**
MLP Custom Index			-44.51	-53.23	-53.23	-57.40	-57.64	-26.04	-19.27	-12.69	-3.55	-41.05	
Difference			4.26	4.71	4.71	5.67	5.71	N/A	N/A	N/A	N/A	3.62	
Harvest Fund Advisors Passive	**473,917,813**	**2.35**	**-42.47**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-49.29**	**02/01/2020**
MLP Custom Index			-44.51	-53.23	-53.23	-57.40	-57.64	-26.04	-19.27	-12.69	-3.55	-51.13	
Difference			2.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.84	
Core Real Estate Composite	**1,420,254,988**	**7.04**	**1.07**	**1.07**	**1.07**	**3.57**	**2.52**	**5.52**	**7.20**	**8.56**	**10.07**	**5.60**	**01/01/2006**
NCREIF ODCE Index (AWA) (Net)			0.75	0.75	0.75	3.13	3.93	5.85	7.48	8.91	10.42	5.78	
Difference			0.32	0.32	0.32	0.44	-1.41	-0.33	-0.28	-0.35	-0.35	-0.18	
Clarion Lion	**1,167,804,421**	**5.79**	**1.25**	**1.25**	**1.25**	**4.69**	**6.01**	**7.51**	**8.93**	**10.07**	**11.64**	**5.56**	**01/01/2006**
NCREIF ODCE Index (AWA) (Net)			0.75	0.75	0.75	3.13	3.93	5.85	7.48	8.91	10.42	5.78	
Difference			0.50	0.50	0.50	1.56	2.08	1.66	1.45	1.16	1.22	-0.22	
UBS Trumbull	**252,450,567**	**1.25**	**0.26**	**0.26**	**0.26**	**0.84**	**-3.05**	**2.63**	**4.74**	**6.40**	**8.10**	**4.87**	**07/01/2006**
NCREIF ODCE Index (AWA) (Net)			0.75	0.75	0.75	3.13	3.93	5.85	7.48	8.91	10.42	5.45	
Difference			-0.49	-0.49	-0.49	-2.29	-6.98	-3.22	-2.74	-2.51	-2.32	-0.58	

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RVK

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Diversified Hedge Funds Composite	**707,633,976**	**3.51**	**-7.08**	**-7.17**	**-7.17**	**-5.35**	**-5.23**	**-0.50**	**-0.62**	**1.49**	**2.48**	**1.68**	**12/01/2007**
HFRI FOF Comp Index			-7.34	-8.51	-8.51	-6.59	-5.19	0.06	0.06	1.64	1.78	0.51	
Difference			0.26	1.34	1.34	1.24	-0.04	-0.56	-0.68	-0.15	0.70	1.17	
Grosvenor Diversified Hedge Funds	**235,168,248**	**1.17**	**-7.35**	**-7.42**	**-7.42**	**-4.60**	**-4.19**	**N/A**	**N/A**	**N/A**	**N/A**	**-3.05**	**07/01/2018**
HFRI FOF Comp Index			-7.34	-8.51	-8.51	-6.59	-5.19	0.06	0.06	1.64	1.78	-3.19	
Difference			-0.01	1.09	1.09	1.99	1.00	N/A	N/A	N/A	N/A	0.14	
Internal Diversified Hedge Funds	**468,140,089**	**2.32**	**-7.01**	**-7.11**	**-7.11**	**-5.45**	**-3.21**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.34**	**07/01/2018**
HFRI FOF Comp Index			-7.34	-8.51	-8.51	-6.59	-5.19	0.06	0.06	1.64	1.78	-3.19	
Difference			0.33	1.40	1.40	1.14	1.98	N/A	N/A	N/A	N/A	2.85	
Core Fixed Income Composite	**4,642,721,943**	**23.03**	**-0.93**	**3.16**	**3.16**	**5.71**	**8.57**	**4.81**	**3.34**	**3.11**	**N/A**	**3.01**	**01/01/2013**
Bloomberg US Agg Bond Index			-0.59	3.15	3.15	5.68	8.93	4.82	3.36	3.19	3.88	3.06	
Difference			-0.34	0.01	0.01	0.03	-0.36	-0.01	-0.02	-0.08	N/A	-0.05	
PIMCO	**2,054,725,936**	**10.19**	**-1.34**	**2.72**	**2.72**	**5.27**	**7.70**	**4.63**	**3.27**	**2.98**	**N/A**	**2.91**	**01/01/2013**
PIMCO Custom Index			-0.41	3.33	3.33	5.87	8.40	4.54	3.19	3.07	3.80	2.94	
Difference			-0.93	-0.61	-0.61	-0.60	-0.70	0.09	0.08	-0.09	N/A	-0.03	
Internal Intermediate Govt Fixed Income Portfolio	**1,226,095,046**	**6.08**	**3.01**	**8.18**	**8.18**	**9.23**	**11.43**	**5.10**	**3.60**	**2.93**	**3.00**	**4.87**	**10/01/1996**
Internal Intermediate Govt Fixed Income Portfolio Index			2.89	8.20	8.20	8.97	11.52	4.95	3.25	2.65	3.03	4.86	
Difference			0.12	-0.02	-0.02	0.26	-0.09	0.15	0.35	0.28	-0.03	0.01	
Payden & Rygel IGC	**613,760,076**	**3.04**	**-7.52**	**-3.45**	**-3.45**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-3.02**	**11/01/2019**
Payden & Rygel Custom Index			-7.89	-4.47	-4.47	-0.39	4.07	3.90	3.18	3.44	4.82	-3.92	
Difference			0.37	1.02	1.02	N/A	N/A	N/A	N/A	N/A	N/A	0.90	
JP Morgan MBS	**748,140,886**	**3.71**	**0.32**	**2.86**	**2.86**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**3.05**	**11/01/2019**
Bloomberg US MBS Index (Unhgd)			1.06	2.82	2.82	4.97	7.03	4.04	2.94	2.91	3.28	3.19	
Difference			-0.74	0.04	0.04	N/A	N/A	N/A	N/A	N/A	N/A	-0.14	

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RVK

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Bank Loans Composite	**1,015,294,827**	**5.04**	**-9.73**	**-10.78**	**-10.78**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.88**	**09/01/2019**
S&P/LSTA Lvg'd Loan Index			-12.37	-13.05	-13.05	-10.66	-9.16	-0.78	1.14	1.79	3.09	-11.13	
Difference			2.64	2.27	2.27	N/A	N/A	N/A	N/A	N/A	N/A	2.25	
Credit Suisse	**649,339,901**	**3.22**	**-10.55**	**-11.72**	**-11.72**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-9.79**	**09/01/2019**
S&P/LSTA Lvg'd Loan Index			-12.37	-13.05	-13.05	-10.66	-9.16	-0.78	1.14	1.79	3.09	-11.13	
Difference			1.82	1.33	1.33	N/A	N/A	N/A	N/A	N/A	N/A	1.34	
Octagon	**365,917,765**	**1.82**	**-10.34**	**-11.40**	**-11.40**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-9.07**	**09/01/2019**
S&P/LSTA Lvg'd Loan Index			-12.37	-13.05	-13.05	-10.66	-9.16	-0.78	1.14	1.79	3.09	-11.13	
Difference			2.03	1.65	1.65	N/A	N/A	N/A	N/A	N/A	N/A	2.06	
Emerging Market Debt Fixed Income Composite	**708,792,623**	**3.52**	**-12.41**	**-15.78**	**-15.78**	**-12.36**	**-7.79**	**-2.26**	**-0.97**	**-3.72**	**N/A**	**-3.72**	**04/01/2013**
EMD Custom Benchmark			-11.21	-15.34	-15.34	-11.64	-6.66	-0.85	0.22	-2.55	0.48	-2.55	
Difference			-1.20	-0.44	-0.44	-0.72	-1.13	-1.41	-1.19	-1.17	N/A	-1.17	
Investec	**168,835,639**	**0.84**	**-12.08**	**-15.77**	**-15.77**	**-12.34**	**-7.37**	**-1.63**	**-0.67**	**-3.16**	**N/A**	**-3.16**	**04/01/2013**
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			-11.07	-15.21	-15.21	-11.51	-6.52	-0.80	0.25	-2.53	0.49	-2.53	
Difference			-1.01	-0.56	-0.56	-0.83	-0.85	-0.83	-0.92	-0.63	N/A	-0.63	
Global Evolution	**335,678,380**	**1.67**	**-11.95**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-15.12**	**02/01/2020**
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			-11.07	-15.21	-15.21	-11.51	-6.52	-0.80	0.25	-2.53	0.49	-14.11	
Difference			-0.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.01	
Goldman Sachs	**204,278,604**	**1.01**	**-13.44**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-13.44**	**03/01/2020**
JPM CEMBI Brd Dvf'd Index			-11.52	-10.17	-10.17	-6.66	-3.39	1.56	3.20	3.10	4.70	-11.52	
Difference			-1.92	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.92	

Performance shown is net of fees and excludes Public Purpose Investments (PPIs). Investment manager fees are accounted for on a quarterly basis. Performance and market values shown are preliminary and subject to change. Performance is annualized for periods greater than one year.

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	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Laddered Treasury Composite	**3,930,050,062**	**19.49**	**1.31**	**2.83**	**2.83**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**3.30**	**10/01/2019**
Internal Ladder Portfolio	**3,930,050,062**	**19.49**	**1.31**	**2.83**	**2.83**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**3.30**	**10/01/2019**
Long Duration Fixed Income Composite	**878,468,917**	**4.36**	**0.09**	**10.46**	**10.46**	**15.93**	**23.62**	**N/A**	**N/A**	**N/A**	**N/A**	**24.54**	**01/01/2019**
Bloomberg US Gov't Crdt Lng Trm Bond Index			-2.95	6.21	6.21	11.94	19.32	9.68	5.99	6.31	8.07	21.08	
Difference			3.04	4.25	4.25	3.99	4.30	N/A	N/A	N/A	N/A	3.46	
Internal Long Duration Fixed Income Portfolio	**493,869,033**	**2.45**	**6.64**	**21.53**	**21.53**	**25.45**	**33.33**	**N/A**	**N/A**	**N/A**	**N/A**	**30.35**	**01/01/2019**
Bloomberg US Gov't Lng Trm Bond Index			5.93	20.63	20.63	24.79	32.28	13.30	7.32	7.43	8.89	29.71	
Difference			0.71	0.90	0.90	0.66	1.05	N/A	N/A	N/A	N/A	0.64	
Logan Circle	**384,599,884**	**1.91**	**-7.24**	**-1.11**	**-1.11**	**5.62**	**13.13**	**N/A**	**N/A**	**N/A**	**N/A**	**16.75**	**11/01/2018**
Bloomberg US Lng Crdt Index			-10.16	-4.65	-4.65	1.89	9.05	6.58	4.67	5.27	7.26	13.75	
Difference			2.92	3.54	3.54	3.73	4.08	N/A	N/A	N/A	N/A	3.00	
Low Duration Fixed Income Composite	**512,821,681**	**2.54**	**1.29**	**2.74**	**2.74**	**4.22**	**5.57**	**N/A**	**N/A**	**N/A**	**N/A**	**5.61**	**12/01/2018**
Low Duration Fixed Income Custom Index			1.27	2.73	2.73	3.85	5.40	2.87	2.07	1.73	1.71	5.57	
Difference			0.02	0.01	0.01	0.37	0.17	N/A	N/A	N/A	N/A	0.04	
Internal Low Duration Fixed Income Portfolio	**512,821,681**	**2.54**	**1.29**	**2.74**	**2.74**	**4.22**	**5.59**	**N/A**	**N/A**	**N/A**	**N/A**	**4.07**	**03/01/2018**
Bloomberg US Gov't 1-3 Yr Bond Index			1.27	2.73	2.73	3.85	5.37	2.69	1.84	1.52	1.45	3.98	
Difference			0.02	0.01	0.01	0.37	0.22	N/A	N/A	N/A	N/A	0.09	
Grosvenor Silvery Lupine Fund	**71,026,445**	**0.35**	**-12.15**	**-11.20**	**-11.20**	**-8.72**	**-7.60**	**1.67**	**3.84**	**N/A**	**N/A**	**3.70**	**07/01/2014**
CS Western Euro Hi Yld Index			-13.45	-14.56	-14.56	-10.60	-7.91	0.79	2.89	4.20	6.00	2.90	
Difference			1.30	3.36	3.36	1.88	0.31	0.88	0.95	N/A	N/A	0.80	

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

	Allocation		Performance (%)										
	Market Value ($)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
JP Morgan Cash Composite	**145,532,276**	**0.72**	**0.11**	**0.35**	**0.35**	**1.41**	**2.09**	**1.77**	**1.19**	**0.89**	**0.73**	**1.55**	**01/01/2006**
JP Morgan Cash Custom Index			0.29	0.58	0.58	1.61	2.37	1.88	1.24	0.94	0.80	1.59	
Difference			-0.18	-0.23	-0.23	-0.20	-0.28	-0.11	-0.05	-0.05	-0.07	-0.04	
Wyo-Star Cash Composite	**713,764,769**	**3.54**	**0.34**	**0.98**	**0.98**	**2.00**	**2.82**	**1.96**	**1.30**	**1.01**	**0.84**	**3.23**	**10/01/1996**
Wyo-Star Cash Custom Index			0.48	1.11	1.11	2.22	3.15	2.12	1.39	1.08	0.93	2.67	
Difference			-0.14	-0.13	-0.13	-0.22	-0.33	-0.16	-0.09	-0.07	-0.09	0.56	
WYO STAR II Total Fund	**63,017,874**	**0.31**	**-2.34**	**-1.11**	**-1.11**	**0.54**	**2.12**	**N/A**	**N/A**	**N/A**	**N/A**	**3.03**	**01/01/2019**
Bloomberg US Corp 1-3 Yr Index			-2.65	-1.53	-1.53	0.27	1.82	2.13	1.93	1.84	2.23	2.94	
Difference			0.31	0.42	0.42	0.27	0.30	N/A	N/A	N/A	N/A	0.09	

- Wyoming State Treasurer's Office fiscal year ends on June 30th.
- Since Inception date shown represents the first full month following initial funding.
- The Wyoming State Custom Index is calculated using beginning month asset class weights applied to the appropriate asset class benchmark return through 12/31/2019. As of 01/01/2020, the Index is calculated using the weighted average of the respective Investment Funds' Target Allocation Indices.
- The All Cap US Equity Custom Index consists of the Russell 3000 Index through 12/31/2019, All Cap US Equity Composite performance through 02/29/2020, and the S&P 500 Index thereafter.
- The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter.
- The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.
- The Internal Intermediate Govt Fixed Income Portfolio Index currently consists of the Bloomberg US Treasury Index. November 2019 performance consists of the Internal Intermediate Govt Fixed Income Portfolio. Prior to November 2019, the index consists of Bloomberg US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the Bloomberg US Gov't Crdt Bond Index.
- The PIMCO Custom Index consists of the Bloomberg US Agg Bond Index through February 2018, the Bloomberg US Agg Int Index through June 2019, the Bloomberg US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, and the Bloomberg US Agg Bond Index thereafter.
- The Low Duration Fixed Income Custom Index consists of the Bloomberg US Gov't Crdt 1-3 Yr Bond Index through 06/30/2019 and the Bloomberg US Gov't 1-3 Yr Bond Index thereafter.
- The State Street All Cap Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 12/31/2019, State Street All Cap account performance through 02/29/2020, and the S&P 500 Index thereafter.
- The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020 and 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter.
- The Payden & Rygel Custom Index consists of the Bloomberg US Corp Inv Grade Index through 03/25/2020, account performance from 03/26/2020 through 03/31/2020, and Bloomberg US Corp Inv Grade Index thereafter.
- Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.
- The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.
- The Wyo-Star Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for Wyo-Star Cash is the ICE BofAML 3 Mo US T-Bill Index and for Wyo-Star Extd is the JP Morgan Blended Index.

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Wyoming State Treasurer's Office
Asset Allocation & Performance

As of March 31, 2020

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Internal Diversified Hedge Funds	**468,140,089**	**2.32**	**-7.01**	**-7.11**	**-7.11**	**-5.45**	**-3.21**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.34**	**07/01/2018**
HFRI FOF Comp Index			-7.34	-8.51	-8.51	-6.59	-5.19	0.06	0.06	1.64	1.78	-3.19	
Difference			0.33	1.40	1.40	1.14	1.98	N/A	N/A	N/A	N/A	2.85	
Internal Intermediate Govt Fixed Income Portfolio	**1,226,095,046**	**6.08**	**3.01**	**8.18**	**8.18**	**9.23**	**11.43**	**5.10**	**3.60**	**2.93**	**3.00**	**4.87**	**10/01/1996**
Internal Intermediate Govt Fixed Income Portfolio Index			2.89	8.20	8.20	8.97	11.52	4.95	3.25	2.65	3.03	4.86	
Difference			0.12	-0.02	-0.02	0.26	-0.09	0.15	0.35	0.28	-0.03	0.01	
Internal Ladder Portfolio	**3,930,050,062**	**19.49**	**1.31**	**2.83**	**2.83**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**3.30**	**10/01/2019**
Internal Long Duration Fixed Income Portfolio	**493,869,033**	**2.45**	**6.64**	**21.53**	**21.53**	**25.45**	**33.33**	**N/A**	**N/A**	**N/A**	**N/A**	**30.35**	**01/01/2019**
Bloomberg US Gov't Lng Trm Bond Index			5.93	20.63	20.63	24.79	32.28	13.30	7.32	7.43	8.89	29.71	
Difference			0.71	0.90	0.90	0.66	1.05	N/A	N/A	N/A	N/A	0.64	
Internal Low Duration Fixed Income Portfolio	**512,821,681**	**2.54**	**1.29**	**2.74**	**2.74**	**4.22**	**5.59**	**N/A**	**N/A**	**N/A**	**N/A**	**4.07**	**03/01/2018**
Bloomberg US Gov't 1-3 Yr Bond Index			1.27	2.73	2.73	3.85	5.37	2.69	1.84	1.52	1.45	3.98	
Difference			0.02	0.01	0.01	0.37	0.22	N/A	N/A	N/A	N/A	0.09	

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