



# Quarterly Investment Performance Analysis

Wyoming State Treasurer's Office

Period Ended: March 31, 2024





## Memorandum

To	Wyoming State Loan and Investment Board
From	RVK, Inc.
Subject	Investment Performance Analysis Commentary
Date	March 31, 2024

Outlined below please find a summary of significant observations regarding performance of the State's Funds for the quarter ended March 31, 2024. We hope this summary will facilitate your review of our Investment Performance Analysis Report.

The Total Fund returned 3.0%, net of fees, during the quarter led by equity, MLP, and opportunistic assets. Long-term performance for the Total Fund remains strong, with the State earning returns of 5.4% and 4.9% per annum over the trailing seven- and ten-year periods.

Each of the State's permanent fund investment pools outpaced their respective benchmarks during the quarter, cumulatively returning 3.7%. The State's non-permanent generated 1.1%, also exceeding their respective benchmarks in each pool.

In Q1, market expectations aligned with the FOMC in anticipating rate cuts through the calendar year and the 10-year treasury yield rose by 32 basis points to end the quarter at 4.2%. The yield 2 and 10-year yield curve remained inverted, standing at 39 basis points at quarter end. Against this backdrop, the Bloomberg US aggregate Bond Index posted a return of -0.8% in Q1. The State's core fixed income managers beat the broad market index by 30 basis points, collectively returning -0.48%. Emerging Market Debt and Bank Loans sectors provided strong positive returns for the quarter, 2.03% and 2.72% respectively, outpacing their benchmarks. Long Duration Fixed Income returned -2.47%, closely tracking the Bloomberg US Govt Credit Long Term Bond Index.

In Q1, US equity markets posted significant gains, with the Russell 3000 Index up 10%. Large-cap stocks outperformed small-cap stocks with the Russell 1000 Index returning 10.3% to the Russell 2000 Index's 5.2%. The State's All Cap Domestic Equity composite provided a 10.64% return, tracking the benchmark within a few basis points, and the Small Cap composite returned 4.80%, trailing the Russell 2000 Index by 38 basis points.

Emerging market equities continued the trend of lagging developed markets in Q1. Active managers outperformed in this sector and China led lower with sentiment impacted by concerns regarding debt and its property sector. The State's International Equity composite returned 6.26% over the quarter. Arrowstreet led in performance during the quarter, generating 10.08%.

MLPs generated 13.12% for the period, net of fees. The Harvest Active fund led the MLP custom bench by 214 basis points, returning 14.17% to 12.03%, while Harvest Passive closely tracked it, lagging by only 7 basis points. Cohen & Steers Preferred Stock outpaced the



Preferred Stock Custom Index by 0.54%, with 4.30% for the quarter.

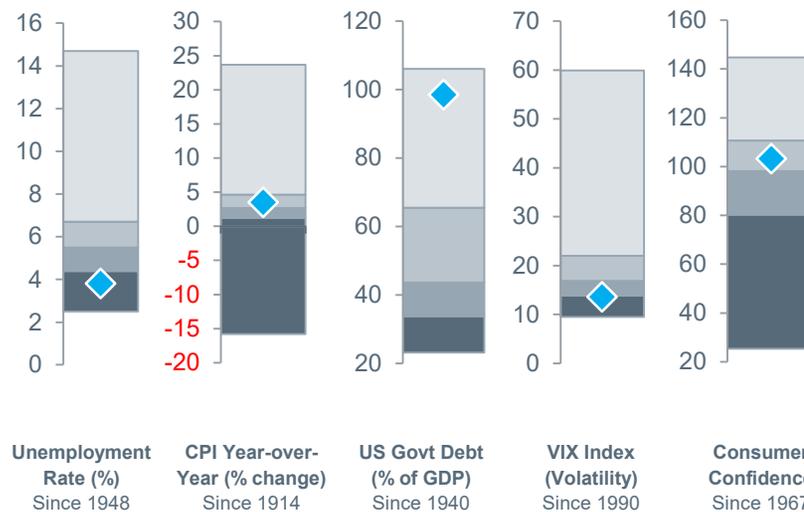
In Q1, core private real estate generated a negative return of -2.4%, as reported by the NFI-ODCE Index, with the total return comprising of 1.0% from income and -3.3% from price appreciation. The State's core real estate composite earned -2.25% during the quarter, outperforming the NCREIF ODCE Index by 0.33%. Clarion and UBS returned -2.80% and -1.82%, while MS Prime returned -1.34%, leading the benchmark by 1.24 basis points.

Diversified hedge funds finished the quarter returning 5.01%, outperforming the HFRI FOF Composite Index by 0.83%. Grosvenor Diversified Hedge Funds and Internal Diversified Hedge Funds returned 5.37% and 4.77%, respectively. The Infrastructure Composite was closely paced the benchmark, returning 1.84%, to the bench's 1.83%. This was led by a strong return in the Grosvenor E fund, 21.35%.

**First Quarter Economic Environment**

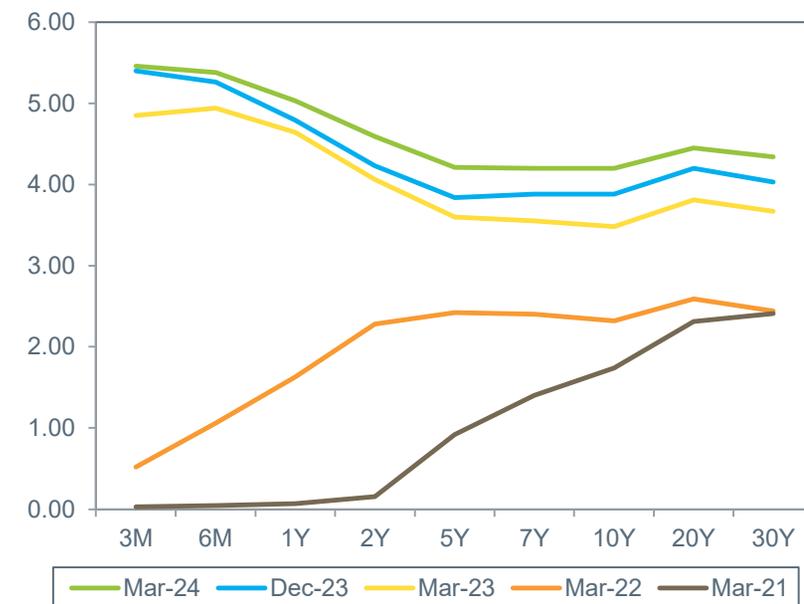
In Q1, risk assets built on their impressive performance in 2023 amid a resilient US economy and strong labor market despite rising uncertainty regarding the timing of future monetary policy changes and elevated geopolitical tensions. Both US and developed international equities, across all capitalizations and styles, posted gains. The public fixed income market posted mixed results with strong economic data and moderating expectations for future rate cuts contributing to increasing yields in Q1. The broad fixed income market experienced negative returns with shorter duration bonds outperforming longer maturity bonds, representing a trend change from late-2023. The more credit sensitive sectors, such as bank loans, high yield, and emerging market debt, posted positive returns. While moderating, inflation levels above target ranges has led investors to carefully monitor comments from the Federal Open Market Committee (FOMC). In late March, the FOMC communicated its intention to maintain the plan for three rate cuts during the year. Overall, indicators currently point to stable economic activity with purchasing manager indexes for manufacturing and services remaining in expansionary territory in Q1. In its February economic outlook, the Organisation for Economic Co-operation and Development (OECD) forecasted world GDP growth of 2.9% and 3.0% in 2024 and 2025, respectively, and projected headline inflation of 6.6% in 2024 before moderating down to 3.8% in 2025.

**Key Economic Indicators**



Economic Indicators	Mar-24	Dec-23	Mar-23	Mar-21	20 Yr
Federal Funds Rate (%)	5.33 =	5.33	4.83	0.06	1.55
Breakeven Infl. - 5 Yr (%)	2.44 ▲	2.14	2.47	2.60	1.94
Breakeven Infl. - 10 Yr (%)	2.32 ▲	2.17	2.33	2.37	2.10
CPI YoY (Headline) (%)	3.5 ▲	3.4	5.0	2.6	2.6
Unemployment Rate (%)	3.8 ▲	3.7	3.5	6.0	5.9
Real GDP YoY (%)	2.9 ▼	3.1	1.7	1.6	2.0
PMI - Manufacturing	50.3 ▲	47.4	46.3	63.7	53.3
USD Total Wtd Idx	121.41 ▲	118.77	119.46	113.86	104.14
WTI Crude Oil per Barrel (\$)	83.2 ▲	71.7	75.7	59.2	70.7
Gold Spot per Oz (\$)	2,230 ▲	2,068	1,979	1,708	1,259

**Treasury Yield Curve (%)**



Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	10.56	10.56	29.88	15.05	12.96
Russell 2000	5.18	5.18	19.71	8.10	7.58
MSCI EAFE (Net)	5.78	5.78	15.32	7.33	4.80
MSCI EAFE SC (Net)	2.40	2.40	10.45	4.94	4.70
MSCI Emg Mkts (Net)	2.37	2.37	8.15	2.22	2.95
Bloomberg US Agg Bond	-0.78	-0.78	1.70	0.36	1.54
ICE BofAML 3 Mo US T-Bill	1.29	1.29	5.24	2.02	1.38
NCREIF ODCE (Gross)	-2.37	-2.37	-11.29	3.46	6.76
FTSE NAREIT Eq REIT (TR)	-0.20	-0.20	10.54	4.15	6.61
HFRI FOF Comp	4.17	4.17	9.68	5.00	3.59
Bloomberg Cmdty (TR)	2.19	2.19	-0.56	6.38	-1.56

**First Quarter Review**

**Broad Market**

In Q1, US equity markets posted significant gains with the Russell 3000 Index returning 10.0%, although there was increased dispersion among the Magnificent 7. In general, companies that directly tied to the development of artificial intelligence (AI) have benefited from a sentiment tailwind.

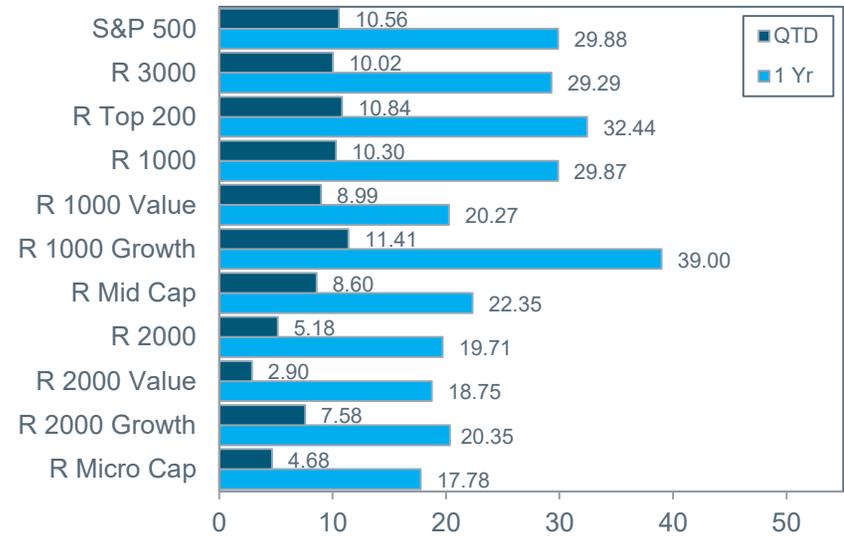
**Market Cap**

During the quarter, large-cap stocks outperformed small-cap stocks with the Russell 1000 Index returning 10.3% compared to the Russell 2000 Index returning 5.2%. Value-oriented indexes and managers trailed their core- and growth-oriented peers, with the Russell 3000 Growth Index returning 11.2% in Q1 compared to 8.6% for the Russell 3000 Value Index.

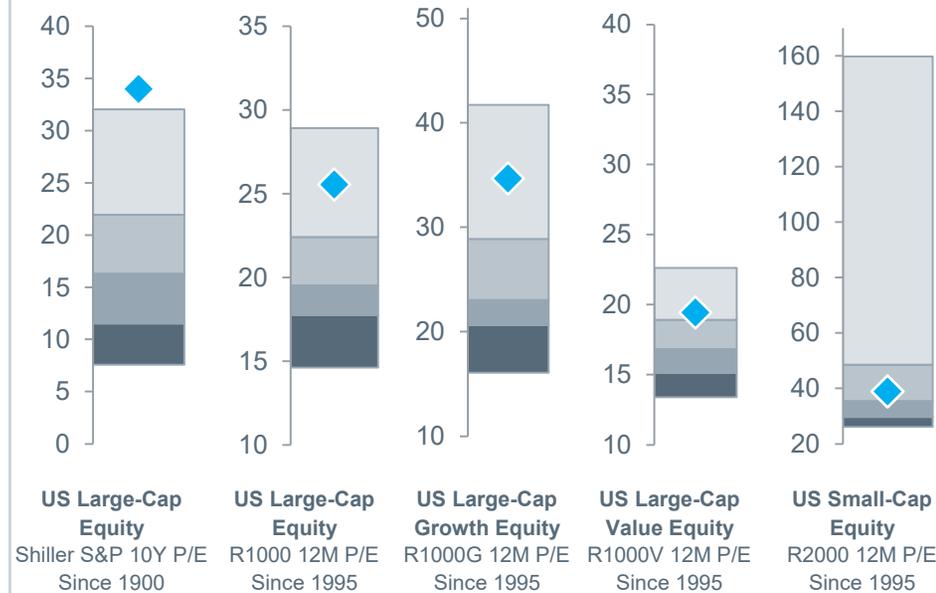
**Style and Sector**

In a reversal of a recent trend, median manager excess returns were positive for active large-cap growth managers, suggesting the increased dispersion among the Magnificent 7 has provided increased opportunities for alpha generation. The best benchmark-relative results were reported by active small-cap value managers while active mid- and small-cap growth managers had more difficulty outpacing strong benchmark returns.

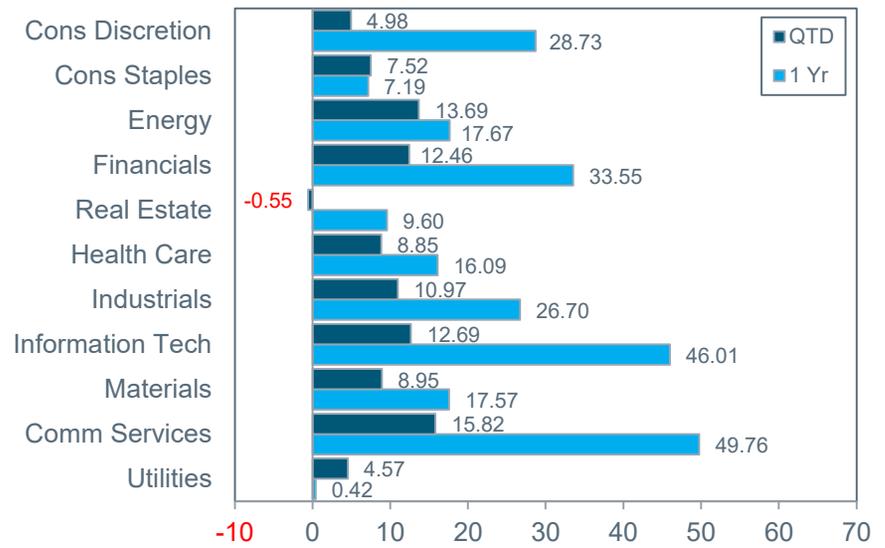
**Style and Capitalization Market Performance (%)**



**Valuations**



**S&P 500 Index Sector Performance (%)**



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.

First Quarter Review

Developed Markets

Developed international markets trailed their US counterparts in Q1 with the MSCI EAFE returning 5.8%. In similar fashion to the US markets, large-cap stocks outpaced small-cap stocks with the MSCI EAFE Index returning 5.8% compared to the MSCI EAFE Small Cap Index returning 2.4%.

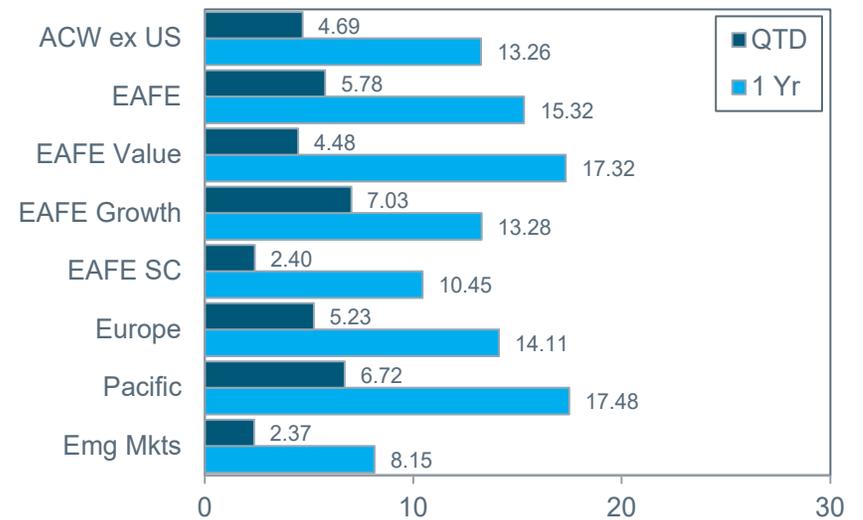
Emerging Markets

In a continuation of a theme in Q4 2023, emerging market equities lagged developed markets with the MSCI Emerging Market Index returning 2.4% during the quarter. The majority of active emerging market managers outperformed in Q1 amid a lower return environment. Equity returns from China were led lower with sentiment impacted by concerns regarding debt and issues within its property sector, combined with stimulus levels falling below the expectations of some investors.

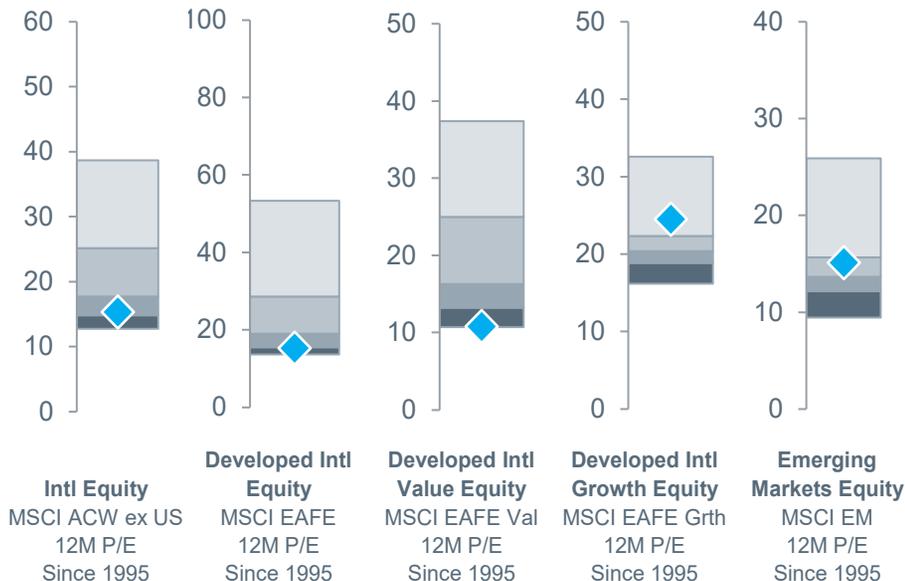
Market Cap & Style

According to median manager excess returns, the quarter represented a favorable environment for active management across most sub-asset classes. One exception was the international small-cap growth space. Among developed international equity managers with positive excess returns in Q1, allocations to Japan and stock selection within the country was a common theme observed across portfolios.

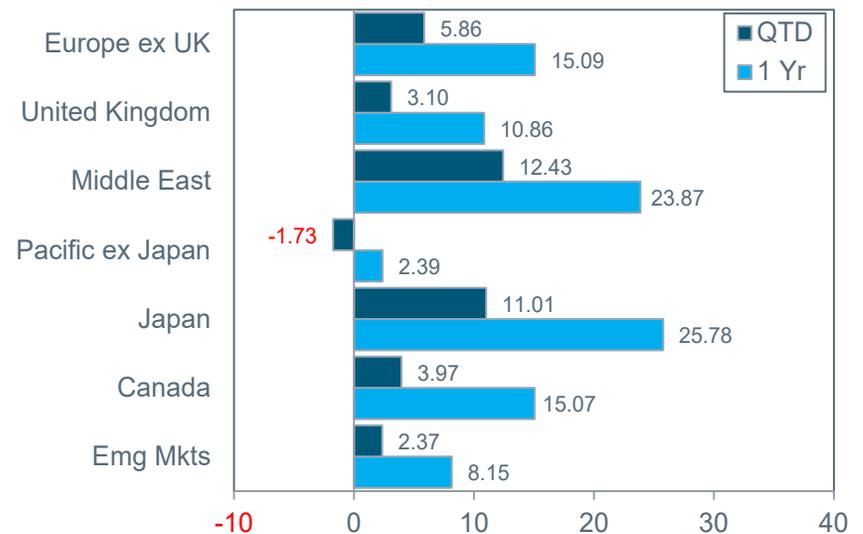
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.

All returns are shown net of foreign taxes on dividends.



First Quarter Review

**Broad Market**

In Q1, investor expectations related to monetary policy actions shifted due to persistent inflation, a strong labor market, and stable economic conditions. Market expectations of rate cuts now align with that of FOMC members, anticipating three rate cuts totaling 75 basis points in 2024. US Treasury yields experienced a steady increase across the curve, with the 10-year yield rising by 32 basis points to end the quarter at 4.2%. The yield curve remained inverted with the spread between 2-year and 10-year Treasury yields standing at 39 basis points at quarter-end. Against this backdrop, the Bloomberg US Aggregate Bond Index posted a return of -0.8% in Q1.

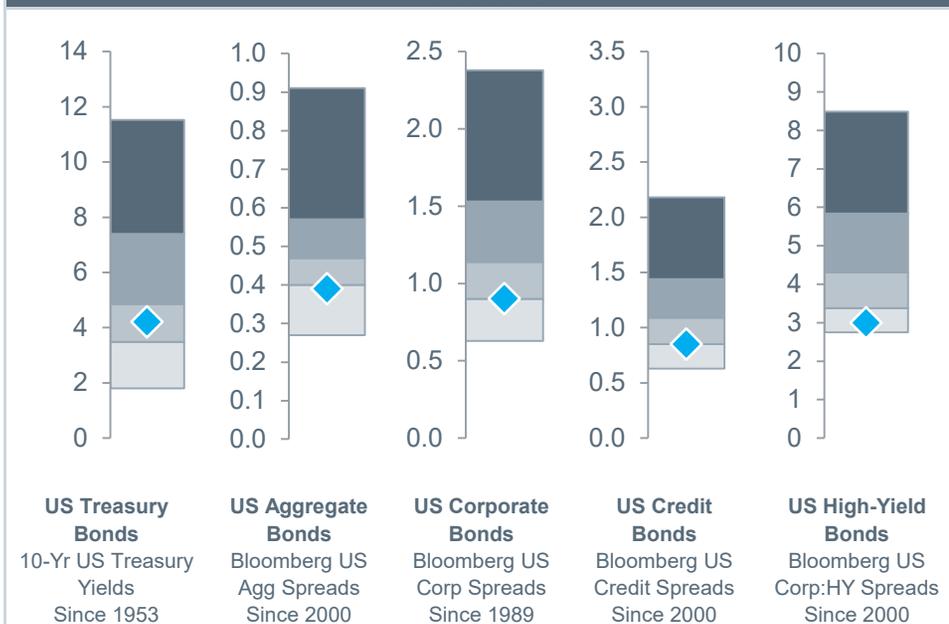
**Credit Market**

Risk assets weathered rising rates, with lower-rated bonds outperforming. The Bloomberg US Corporate Investment Grade Index returned -0.4%, while the Bloomberg US Corporate High Yield Index returned 1.5%.

**Emerging Market Debt**

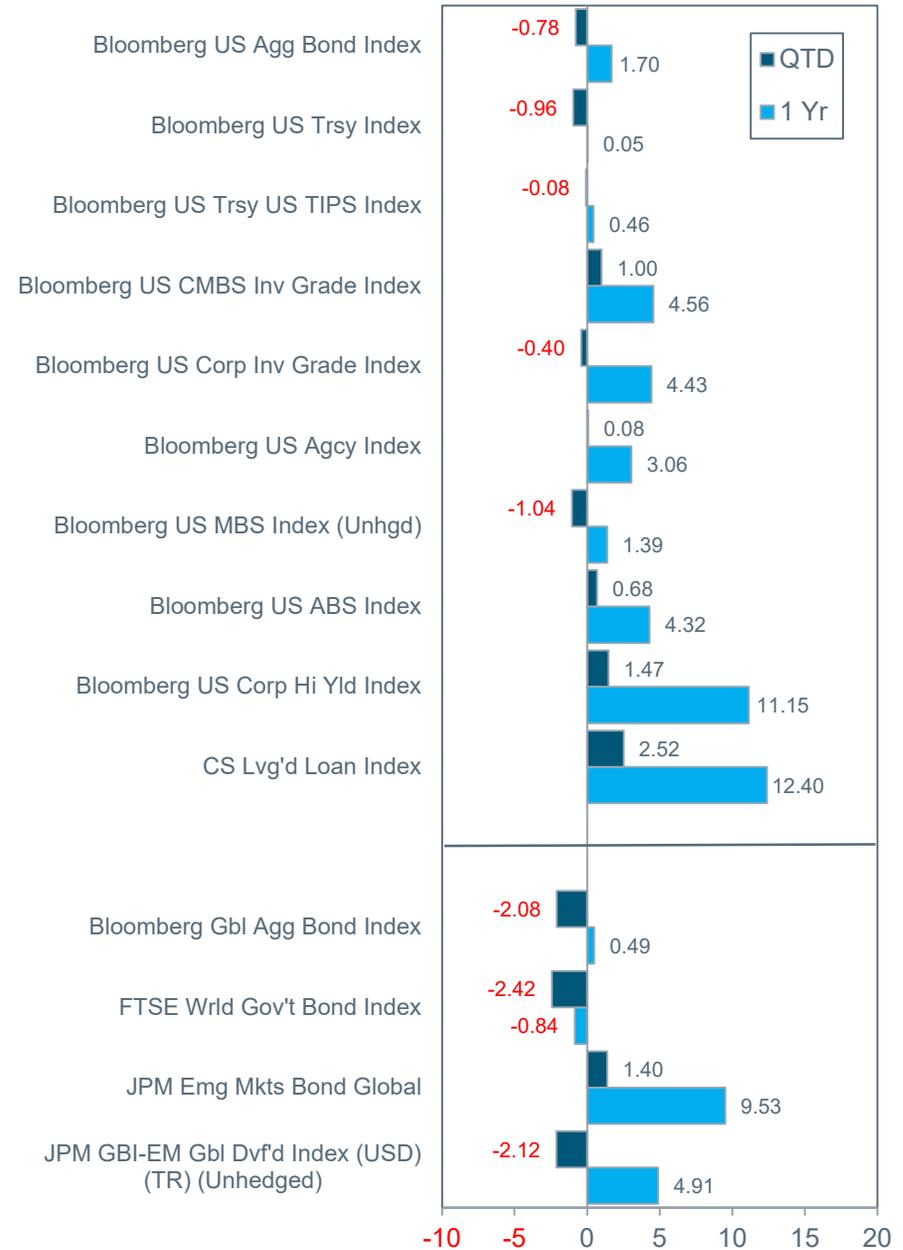
Emerging market debt delivered mixed results. The JPMorgan EMBI Global Diversified Index—tracking hard currency bonds in emerging markets—posted a 2.0% return in Q1. However, the strength of the US dollar put downward pressure on foreign exchange rates, leading to the underperformance of the JPMorgan GBI-EM Global Diversified Index, which tracks local currency bond markets, declining -2.1% in Q1.

Valuations



Valuation data courtesy of Bloomberg Professional Service. Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.

Fixed Income Performance (%)



**First Quarter Review - Absolute Return**

**General Market - Hedge Funds**

In Q1, hedge funds delivered positive results across the spectrum of major strategy groups. The HFRI Asset Weighted Composite Index delivered a return of 5.0%. The only outlier was seen across Merger Arbitrage managers, which broadly ended the quarter in flat territory. This has been driven by a continuation of sluggish deal flows due to muted activity from corporate management teams. Long-biased Equity Long/Short managers fared well on both a market capture and alpha basis, driven by the tailwinds of strong returns across nearly all public market sectors.

**General Market - Global Tactical Asset Allocation (GTAA)**

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely posted positive returns with moderate dispersion in Q1. All active managers targeting significant diversification underperformed a US-centric 60% equity and 40% fixed income blend (60/40 blend) as stocks were buoyed by strong earnings and investor appetite for names associated with the AI theme. The top performing long-biased GTAA strategies featured a higher allocation to US equities, Japanese equities, and exposure to the technology sector, while those who trailed peers tended to hold larger emerging market equity and fixed income exposures.

**First Quarter Review - Real Assets**

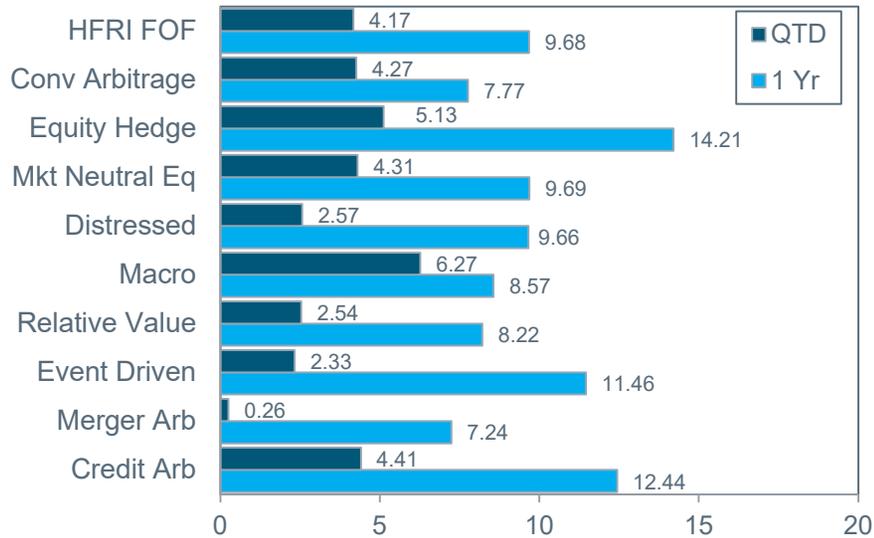
**General Market - Diversified Inflation Strategies (DIS)**

Diversified Inflation Strategy managers that RVK follows closely reported positive performance in Q1, but still underperformed a 60/40 blend. Managers with larger exposures to energy and gold within commodities outperformed peers while those with higher allocations to US bonds and REITs lagged behind.

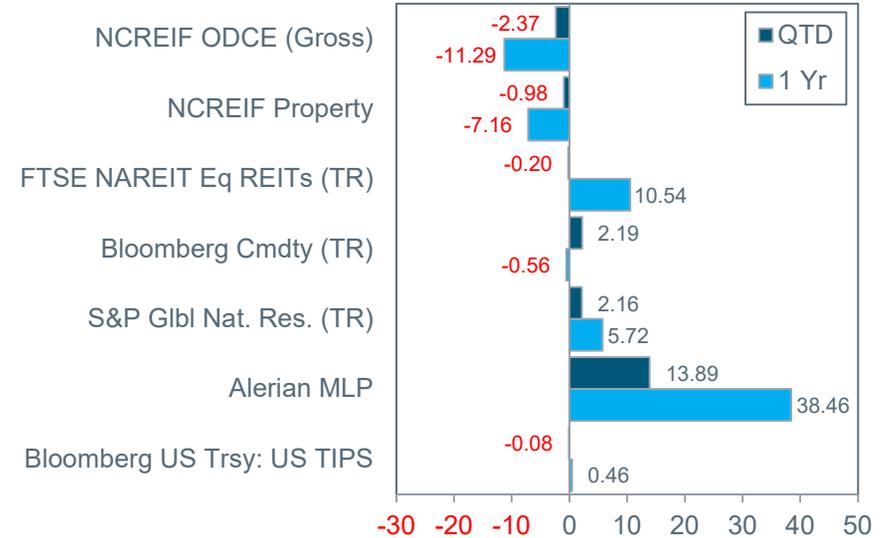
**General Market - Real Estate**

In Q1, core private real estate generated a return of -2.4% (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with the total return comprising of 1.0% from income and -3.3% from price appreciation. Income returns continued to trend at the lower end of historical levels due to elevated borrowing costs and expenses. Regarding price appreciation, this marks the sixth consecutive quarter of negative returns. While also reporting negative returns, publicly traded real estate outperformed private market counterparts with a total return of -1.3% in Q1, as measured by the FTSE/NAREIT All REITs Index. Recent REIT performance has given some private real estate investors a sense of anticipation that the negative appreciation trend in private real estate may be nearing a bottom. Historically, the direction of the public REIT market has served as a leading indicator for private market counterparts.

**HFRI Hedge Fund Performance (%)**



**Real Asset Performance (%)**



	2016	2017	2018	2019	2020	2021	2022	2023	CYTD (As of 03/24)	Sharpe Ratio		Annualized Statistics (02/2006 - 03/2024)				
										Asset Class	Historical 10 Years Sharpe Ratio	Forecasted Sharpe Ratio	Return	Standard Deviation	Sharpe Ratio	
Best	21.95	27.19	10.40	31.49	21.68	39.92	26.26	26.29	12.03	S&P 500 Index - US Large Cap	0.80	0.16	S&P 500 Index - US Large Cap	10.36	15.41	0.63
	21.31	21.83	8.35	25.53	19.96	39.33	7.47	20.23	10.56	Russell 2000 Index - US Small Cap	0.40	0.14	Russell 2000 Index - US Small Cap	7.96	20.36	0.41
	13.24	18.44	1.87	21.51	18.40	28.71	1.46	16.93	5.18	International Equity Custom Index - International	0.27	0.26	International Equity Custom Index - International	4.11	17.12	0.24
	11.96	15.21	0.44	17.64	10.88	22.17	-0.68	16.28	4.97	Cambridge US PE Index - Private Equity	1.18	0.22	Cambridge US PE Index - Private Equity	13.13	10.69	1.08
	10.16	14.65	0.01	13.82	10.65	14.82	-3.34	13.09	4.18	NCREIF ODCE Index - Real Estate	0.84	Core 0.18 / Non-Core 0.17	NCREIF ODCE Index - Real Estate	5.95	7.95	0.59
	9.94	9.11	-4.02	13.47	7.97	7.82	-5.27	10.99	3.76	HFRI FOF Comp Index	0.46	0.25	HFRI FOF Comp Index	3.07	5.37	0.32
	8.77	7.77	-4.25	8.72	7.51	6.17	-12.04	8.57	2.52	Preferred Stock Custom Index	0.43	0.20	Preferred Stock Custom Index	4.78	15.43	0.29
	4.50	7.62	-4.38	8.64	3.12	5.71	-13.01	6.59	1.87	MLP Custom Index	0.20	0.14	MLP Custom Index	8.42	24.03	0.40
	2.65	4.12	-6.21	8.39	1.50	4.66	-13.90	6.06	1.29	Bloomberg US Agg Bond Index - Fixed Income	0.06	0.23	Bloomberg US Agg Bond Index - Fixed Income	3.06	4.19	0.40
	1.94	3.54	-11.01	7.55	1.19	0.05	-16.00	5.53	0.74	Bank Loans Custom Index	0.56	0.38	Bank Loans Custom Index	4.83	7.22	0.49
	0.51	0.84	-11.67	5.34	0.67	-1.85	-18.11	5.02	-0.78	EMD Custom Index	-0.07	0.19	EMD Custom Index	3.71	11.89	0.25
Worst	0.38	-5.58	-14.20	2.47	-25.60	-3.26	-20.44	-12.02	-2.37	JP Morgan Cash Custom Index - Cash Equiv	0.57	0.00	JP Morgan Cash Custom Index - Cash Equiv	1.67	0.57	1.08

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 Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital 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 Bank Loans Custom Index consists of S&P LSTA Lvqd Loan Index through 06/30/2021, the S&P LSTA US Lvqd Loan 100 Index through 6/30/2023, and the Credit Suisse Leveraged Loan Index thereafter.

The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl 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.



## ASSET CLASS SUMMARY

**US Equity:** The **US Equity** structure employs a core-satellite approach, which gains passive, low-cost beta exposure at its core. The core component of the portfolio utilizes passive management intended to replicate a broad market index. The Small Cap investment managers include active management intended to provide alpha. Similarly, the asset class recently added internally managed portfolios within large cap and small cap, which draw upon staff expertise in managing equity portfolios.

**International Equity:** The **International Equity** structure follows an ACWI Ex US approach, which offers coverage of the broad international equity market, including developed and emerging markets. The International Equity portfolio is comprised of both passive and active management styles. The mix of passive and active management helps to minimize costs, while striving to maximize the probability of alpha generation at a similar absolute risk level.

**Private Equity:** The **Private Equity** asset class has primarily been accessed through fund of funds and customized fund of one structure. Investments also include exposure to direct co-investments and secondaries. Recent commitments within this asset class have added global diversification to the portfolio.

**Private Credit:** The **Private Credit** portfolio provides access to unique economic drivers and is generally less correlated to traditional markets. The composite is comprised of funds that limit exposure to default risk through unlevered portfolios and are limited in size to mitigate manager or vintage year concentration.

**Real Estate:** The **Real Estate** portfolio currently consists of Core and Non-Core Real Estate investments. The overall asset class structure has remained relatively conservative with regard to asset types and the use of financial leverage. Core Real Estate has historically been focused on diversified US markets, lower leverage, and higher occupancy rates, while Non-Core Real Estate investments allow for greater investment flexibility.

**Diversified Hedge Funds:** The **Diversified Hedge Funds** structure historically consisted of multi-Hedge Fund of Fund investments. In 2015, the portfolio began a transition to a core-satellite approach, utilizing a single Fund of Fund manager and satellite direct Hedge Funds. Initial funding was completed in July 2018 for a custom fund of one, consisting of a discretionary multi-strategy FoF portfolio and a non-discretionary portfolio of direct hedge funds managed by the Treasurer's Office. An increase in the use of direct Hedge Funds is anticipated to lower external management expenses and allow for greater control over the program.

**Infrastructure:** The **Infrastructure** portfolio consists of open-end core infrastructure funds investing in private infrastructure assets globally. The funds will invest in existing infrastructure assets across primarily OECD countries, which includes North America, Western Europe, and the developed countries of Asia Pacific.

**Opportunistic:** The **Opportunistic Investment** sleeve is currently comprised of a specialized investment fund and internally managed investment fund. Opportunistic investments are episodic in nature and are intended to capitalize on market dislocations or rare investment opportunities.

**Preferred Stock:** The **Preferred Stock** portfolio consists of a single, specialized preferred stock investment manager. The portfolio invests in a diversified portfolio of preferred securities including exchange-traded and over-the-counter preferreds and contingent convertibles (CoCos). The investment team seeks to take advantage of the various term structures of preferreds in order to optimize the yield and interest rate sensitivity of the portfolio.

**MLPs:** The **MLPs** portfolio consists of two portfolios with a specialized investment manager. The passive strategy is designed to replicate the market index, whereas the active strategy investment objective is to deliver both high yield and stable growth through the disciplined application of its fundamental bottom-up analysis as well as its trading strategies and investments in MLP and energy infrastructure assets.

**Fixed Income:** The **Fixed Income** portfolio employs a core-satellite approach. Serving as “the anchor” to the portfolio, Core Fixed Income aims to preserve capital, by providing relatively “safe” investments and stable income. Core Fixed Income has disaggregated segments comprised of investment grade corporate, MBS, and government. The Internally Managed Portfolio also provides liquidity and safety of capital. The satellite portfolios serve as dedicated specialists. Bank Loans provide diversification from traditional fixed income investments and the potential for enhanced return. Investments in Emerging Market Debt diversify US Dollar exposure and provide opportunities to capitalize on global growth trends. Opportunistic Fixed Income is employed to capitalize on market dislocations, such as European Debt.

## INDEX GLOSSARY

**MSCI ACW:** The **MSCI All Country World Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed and emerging markets. The index consists of the 23 developed countries that make up the MSCI World Index as well as the following emerging market countries: *Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, Qatar, South Africa, Taiwan, Thailand, Turkey, and United Arab Emirates.*

**Russell 3000:** The **Russell 3000 Index** is a market-capitalization weighted index of 3,000 widely held equity securities designed to measure performance of the entire US stock market.

**State Street All Cap Custom Index:** 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 02/27/2020, State Street All Cap account performance on 02/28/2020, and the S&P 500 Index thereafter.

**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 US equity performance.

**All Cap US Equity Custom Index:** The **All Cap US Equity Custom Index** consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter.

**Russell 2000:** The **Russell 2000 Index** measures the performance of the small-cap segment of the US equity market. It includes approximately 2,000 of the smallest securities by market cap from the Russell 3000 Index.

**International Equity Custom Index:** The **International Equity Custom Index** consists of the MSCI EAFE Index through July 2010, the MSCI ACW Ex US Index through July 2023, and an active blend of the MSCI ACW Ex US Index and MSCI ACW Ex US Ex China Index thereafter.

**MSCI EAFE:** The **MSCI EAFE (Europe, Australasia, Far East) Index** is designed to measure equity market performance of 21 developed countries, excluding the US & Canada: *Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom.*

**MSCI ACW Ex US:** The **MSCI ACW (All Country World) Ex US Index** consists of large cap and mid cap representation within the same countries that comprise the MSCI ACW Index, excluding the United States.

**MSCI ACW Ex US ex China:** The **MSCI ACW (All Country World) Ex US Ex China Index** consists of large cap and mid cap representation within the same countries that comprise the MSCI ACW Index, excluding the United States and China.

**MSCI ACW Ex US IM:** The **MSCI ACW (All Country World) Ex US Investable Market Index** consists of large cap, mid cap, and small cap representation within the same countries that comprise the MSCI ACW Index, excluding the United States.

**S&P US Preferred Stock:** The **S&P US 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.

**Preferred Stock Custom Index:** The **Preferred Stock Custom Index** consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index thereafter.

**S&P MLP:** The **S&P MLP Index** is a float-adjusted, cap-weighted index of energy MLPs and publicly traded limited liability companies, which have a similar legal structure to MLPs and share the same tax benefits. Constituents must have a minimum float-adjusted market cap of USD 300 million.

**MLP Custom Index:** 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.

**Alerian MLP Index:** The **Alerian MLP Index** is an index of energy infrastructure Master Limited Partnerships (MLPs). It is a capped, float-adjusted, capitalization-weighted index, whose constituents represent approximately 85% of the total float-adjusted market capitalization.

**Alerian Midstream Energy Index:** The **Alerian Midstream Energy Index** is an index of energy infrastructure Master Limited Partnerships (MLPs), whose constituents earn the majority of their cash flow from midstream activities involving energy commodities.

**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 38 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.

**NCREIF Property:** The **NCREIF Property Index** prepared by the National Council of Real Estate Investment Fiduciaries is a quarterly time series composite return measure for over 6,000 individual commercial real estate properties acquired in the private market for investment purposes. Total performance represents returns from appreciation and income, and includes multi-family, office, retail, and industrial properties.

**HFRI FOF Comp Index:** The **HFRI FOF (Fund of Funds) Comp Index** average is created by Hedge Fund Research, Inc. and contains over 800 funds of hedge funds that are each invested in multiple investment strategies.

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

**Bloomberg US Agg Int Index:** The **Bloomberg US Aggregate Intermediate Index** covers the sub-section of the Bloomberg US Aggregate Bond Index with remaining maturities between one and ten years.

**PIMCO Custom 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, the BB US Agg Index through 11/29/21, account performance from 11/29/21 through 12/07/21, and the Bloomberg US Agg Bond Index through 06/30/2022, account performance on 07/01/2022, and the Bloomberg US Agg Bond Index thereafter.

**Payden & Rygel Custom Index:** 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.

**Internal Intermediate Govt Fixed Income Portfolio Index:** 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.

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

**Bank Loans Custom Index:** The **Bank Loans Custom Index** performance consists of S&P LSTA Lvgd Loan Index through 06/30/2021, and the S&P LSTA US Lvgd Loan 100 Index thereafter. The portfolio holdings characteristics consist of the Credit Suisse Leveraged Loan Index as of 03/31/2023.

**CS Western European Hi Yld:** The **Credit Suisse Western European High Yield Index** is designed to mirror the investable universe of the Western European high yield debt market. The index includes issues denominated in \$US and Western European currencies.

**EMD Custom Index:** The **EMD Custom Index** consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter.

**JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50:** The **JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50** consists of 50% JPM GBI-EM Gbl Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25% JPM EMBI Gbl Dvf'd Index.

**Goldman Sachs Index:** The **Goldman Sachs Index** consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter.

**JP Morgan GBI-EM Gbl Dvf'd:** The **JPMorgan GBI-EM Global Diversified Total Return Index (Unhedged)** is a global emerging markets index that consists of regularly traded, liquid fixed-rate, domestic currency government bonds.

**JP Morgan CEMBI Broad Diversified Index:** The **JP Morgan CEMBI Broad Diversified Index** is an index that is comprised of the corporate segment of emerging markets debt.

**JP Morgan Emerging Markets Bond Global Diversified Index:** The **JP Morgan Global Diversified Index** is an index comprised of the hard currency segment of emerging markets debt.

**Bloomberg US Govt/Credit: Long Trm Bond:** The **Bloomberg US Gov't/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 US Govt: Long Trm Bond:** The **Bloomberg US Gov't Long Term Bond Index** covers public US government obligations with remaining maturities of ten years or more.

**Bloomberg US Credit: Long Trm Bond:** The **Bloomberg US Credit Long Term Bond Index** covers public US investment grade corporate bonds with remaining maturities of ten years or more.

**Bloomberg US Govt: Int Trm Bond:** The **Bloomberg US Gov't Intermediate Term Bond Index** covers public US government obligations with remaining maturities between one and ten years.

**Bloomberg US Corp Int Trm Bond:** The **Bloomberg US Corporate Intermediate Term Bond Index** covers US investment grade corporate bonds with remaining maturities between one and ten years.

**Bloomberg US Gov't/Credit 1-3 Yr Bond Index:** The **Bloomberg US Gov't/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 US Gov't 1-3 Yr Bond Index:** The **Bloomberg US Gov't 1-3 Year Bond Index** covers public US government obligations with remaining maturities between one and three years.

**Bloomberg US Credit 1-3 Yr Bond Index:** The **Bloomberg US Credit 1-3 Year Bond Index** covers public investment-grade corporate, and investment-grade international dollar-denominated bonds that have maturities of between one and three years.

**Bloomberg US MBS Index:** The **Bloomberg US MBS Index** covers the public U.S. mortgage backed securities market.

**Bloomberg US Corp Inv Grade Index:** The **Bloomberg US Corp Inv Grade Index** covers the public U.S. investment grade corporate bond market.

**Low Duration Fixed Income Custom Index:** 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.

**Transition Fixed Income Custom Index:** The **Transition Fixed Income Custom Index** consists of 50% JPM CLOIE IG Idx, 40% BB 1 – 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index.

**PIMCO Low Duration Custom Index:** The **PIMCO Low Duration Custom Index** consists of 50% JPM CLOIE IG Idx, 40% BB 1 – 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index through 11/30/2021, account performance on 12/1/2021-12/13/2021, and 50% JPM CLOIE IG Idx, 40% BB 1 – 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index thereafter.

**Opportunistic Investments Index:** The **Opportunistic Investments Index** is the weighted average of the permanent funds' target allocation indices, excluding the opportunistic allocation.

**JP Morgan Cash Custom Index:** 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.

**JP Morgan Blended Index:** The **JP Morgan Blended Index** consists of an equal-weighted allocation to the ICE BofAML 1-3 Year US Treasury Index, ICE BofAML 1-3 Year Agencies Index, and ICE BofAML 0-3 Year Weighted Average Life Mortgage Index.

**Total Fund Performance**

	Allocation		Performance (%)							
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>Total Fund</b>	<b>28,900,229,565</b>	<b>100.0</b>	<b>3.0</b>	<b>3.0</b>	<b>7.8</b>	<b>9.7</b>	<b>4.5</b>	<b>5.7</b>	<b>5.4</b>	<b>4.9</b>
Wyoming State Total Fund Index			2.4	2.4	6.6	8.1	3.5	5.1	4.9	4.5
Difference			0.6	0.6	1.2	1.6	1.0	0.6	0.5	0.4
<b>Permanent Funds</b>	<b>20,172,783,476</b>	<b>69.8</b>	<b>3.7</b>	<b>3.7</b>	<b>9.0</b>	<b>11.6</b>	<b>5.5</b>	<b>7.0</b>	<b>6.5</b>	<b>5.8</b>
<b>Non-Permanent Funds</b>	<b>8,727,446,089</b>	<b>30.2</b>	<b>1.1</b>	<b>1.1</b>	<b>4.7</b>	<b>5.0</b>	<b>1.5</b>	<b>2.3</b>	<b>2.4</b>	<b>2.3</b>

**Asset Class Performance**

	Allocation		Performance (%)						
	Market Value (\$)	%	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	
<b>All Cap US Equity</b>	<b>2,339</b>	<b>8.1</b>	<b>10.6</b>	<b>19.5</b>	<b>29.9</b>	<b>11.3</b>	<b>14.5</b>	<b>N/A</b>	
All Cap Custom Index			10.6	19.4	29.9	11.5	14.9	12.6	
Difference			0.0	0.1	0.0	-0.2	-0.4	N/A	
<b>Small Cap US Equity</b>	<b>555</b>	<b>1.9</b>	<b>4.8</b>	<b>12.8</b>	<b>17.2</b>	<b>3.8</b>	<b>9.4</b>	<b>N/A</b>	
Russell 2000 Index			5.2	13.8	19.7	-0.1	8.1	7.6	
Difference			-0.4	-1.0	-2.5	3.9	1.3	N/A	
<b>Int'l Equity</b>	<b>3,671</b>	<b>12.7</b>	<b>6.2</b>	<b>13.2</b>	<b>17.3</b>	<b>4.2</b>	<b>8.9</b>	<b>5.7</b>	
Int'l Equity Custom Index			5.0	11.5	14.2	2.2	6.1	4.3	
Difference			1.2	1.7	3.1	2.0	2.8	1.4	
<b>Hybrid Assets</b>	<b>1,313</b>	<b>4.5</b>	<b>12.5</b>	<b>24.7</b>	<b>28.0</b>	<b>21.6</b>	<b>10.1</b>	<b>N/A</b>	
<b>Core Real Estate</b>	<b>1,239</b>	<b>4.3</b>	<b>-2.3</b>	<b>-6.9</b>	<b>-11.3</b>	<b>3.0</b>	<b>2.5</b>	<b>5.9</b>	
NCREIF ODCE Index (AWA)			-2.6	-9.4	-12.0	2.5	2.6	5.8	
Difference			0.3	2.5	0.7	0.5	-0.1	0.1	
<b>Diversified Hedge Funds</b>	<b>1,286</b>	<b>4.4</b>	<b>5.0</b>	<b>9.6</b>	<b>13.4</b>	<b>3.5</b>	<b>3.8</b>	<b>2.5</b>	
HFRI FOF Comp Index			4.2	8.0	9.7	2.9	5.0	3.6	
Difference			0.8	1.6	3.7	0.6	-1.2	-1.1	
<b>Infrastructure</b>	<b>500</b>	<b>1.7</b>	<b>1.8</b>	<b>22.7</b>	<b>26.7</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	
10 Yr Treas+350 bps			1.8	5.7	7.5	N/A	N/A	N/A	
Difference			0.0	17.0	19.2	N/A	N/A	N/A	
<b>Core Fixed Income</b>	<b>3,558</b>	<b>12.3</b>	<b>-0.5</b>	<b>3.0</b>	<b>2.2</b>	<b>-2.2</b>	<b>0.6</b>	<b>1.7</b>	
BB US Agg Bond Index			-0.8	2.6	1.7	-2.5	0.4	1.5	
Difference			0.3	0.4	0.5	0.3	0.2	0.2	
<b>Opportunistic Fixed Income</b>	<b>10</b>	<b>0.0</b>	<b>0.0</b>	<b>-15.9</b>	<b>-16.0</b>	<b>-6.2</b>	<b>-4.5</b>	<b>N/A</b>	
Credit Suisse Western Euro Hi Yld Index			1.6	9.9	12.4	2.9	4.4	5.0	
Difference			-1.6	-25.8	-28.4	-9.1	-8.9	N/A	
<b>Bank Loans</b>	<b>612</b>	<b>2.1</b>	<b>2.7</b>	<b>8.2</b>	<b>11.4</b>	<b>5.6</b>	<b>N/A</b>	<b>N/A</b>	
Bank Loans Custom Index			2.5	8.6	12.3	5.7	5.3	4.5	
Difference			0.2	-0.4	-0.9	-0.1	N/A	N/A	
<b>EMD</b>	<b>1,101</b>	<b>3.8</b>	<b>2.0</b>	<b>7.4</b>	<b>10.7</b>	<b>0.5</b>	<b>2.1</b>	<b>0.1</b>	
EMD Custom Benchmark			0.7	6.3	8.5	-1.0	0.8	0.0	
Difference			1.3	1.1	2.2	1.5	1.3	0.1	
<b>Long Duration Fixed Income</b>	<b>762</b>	<b>2.6</b>	<b>-2.5</b>	<b>0.0</b>	<b>-1.5</b>	<b>-6.1</b>	<b>-0.5</b>	<b>N/A</b>	
BB US Gov't Crdt LT Bond Index			-2.4	0.2	-1.1	-6.0	-0.6	2.3	
Difference			-0.1	-0.2	-0.4	-0.1	0.1	N/A	
<b>Laddered Treasury</b>	<b>4,768</b>	<b>16.5</b>	<b>0.5</b>	<b>3.6</b>	<b>3.5</b>	<b>0.8</b>	<b>N/A</b>	<b>N/A</b>	

**Market Value by Investment Pool**

	Market Value (\$)
Permanent Mineral Trust	11,059,414,154
Common School Permanent Land Fund	5,277,143,997
Permanent Land Fund	312,014,056
University Permanent Land Fund	34,216,516
Hathaway Scholarship	771,804,850
Higher Education	145,050,217
Workers Compensation Fund	2,573,139,684
Pool A	426,217,064
State Agency Pool	6,740,506,436
LSRA	1,560,722,589
LSRA Long Term Reserve	501,442,562
LSRA Intermediate Term Reserve	434,634,670
LSRA Short Term Reserve	624,645,357

**Schedule of Inv. Assets - Total Fund Ex Public Purpose Investments**

Beginning MV (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending MV (\$)	Unit Value
26,446,922,883	99,341,178	1,988,215,548	28,534,479,609	107.52

**Asset Class Performance (Cont.)**

	Allocation		Performance (%)							
	Market Value (\$)	%	QTD	FYTD	1 Year	3 Years	5 Years	10 Years		
<b>Transition Low Duration</b>	<b>1,562</b>	<b>5.4</b>	<b>1.7</b>	<b>6.1</b>	<b>7.8</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>		
Transition Fixed Income Custom Index			1.5	6.3	7.8	2.9	3.1	2.8		
Difference			0.2	-0.2	0.0	N/A	N/A	N/A		
<b>Low Duration Fixed Income</b>	<b>657</b>	<b>2.3</b>	<b>0.4</b>	<b>3.9</b>	<b>3.5</b>	<b>0.7</b>	<b>1.6</b>	<b>N/A</b>		
Low Duration FI Custom Index			0.3	3.6	3.0	0.0	1.1	1.2		
Difference			0.1	0.3	0.5	0.7	0.5	N/A		
<b>Opportunistic Investments</b>	<b>191</b>	<b>0.7</b>	<b>12.6</b>	<b>31.6</b>	<b>38.2</b>	<b>2.8</b>	<b>N/A</b>	<b>N/A</b>		
Opportunistic Custom Benchmark			3.1	7.9	10.1	3.7	N/A	N/A		
Difference			9.5	23.7	28.1	-0.9	N/A	N/A		
<b>Cash Equivalents</b>	<b>2,159</b>	<b>7.5</b>	<b>1.3</b>	<b>4.1</b>	<b>5.4</b>	<b>2.7</b>	<b>2.0</b>	<b>1.4</b>		
JPM Cash Custom Index			1.3	4.0	5.2	2.6	2.0	1.4		
Difference			0.0	0.1	0.2	0.1	0.0	0.0		
<b>Public Purpose Investments</b>	<b>366</b>	<b>1.3</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>		

Performance shown is net of fees and excludes Public Purpose Investments and operational cash. Pooled investment performance and market values shown reflect State Agency participation and are calculated on a capital-weighted basis using beginning-period allocations and does not reflect net cash flows. Hybrid Assets includes preferred stock and MLPs. Performance for Private Equity and Non-Core Real Estate are calculated on an IRR basis.



Wyoming State Treasurer's Office  
Asset Allocation & Performance

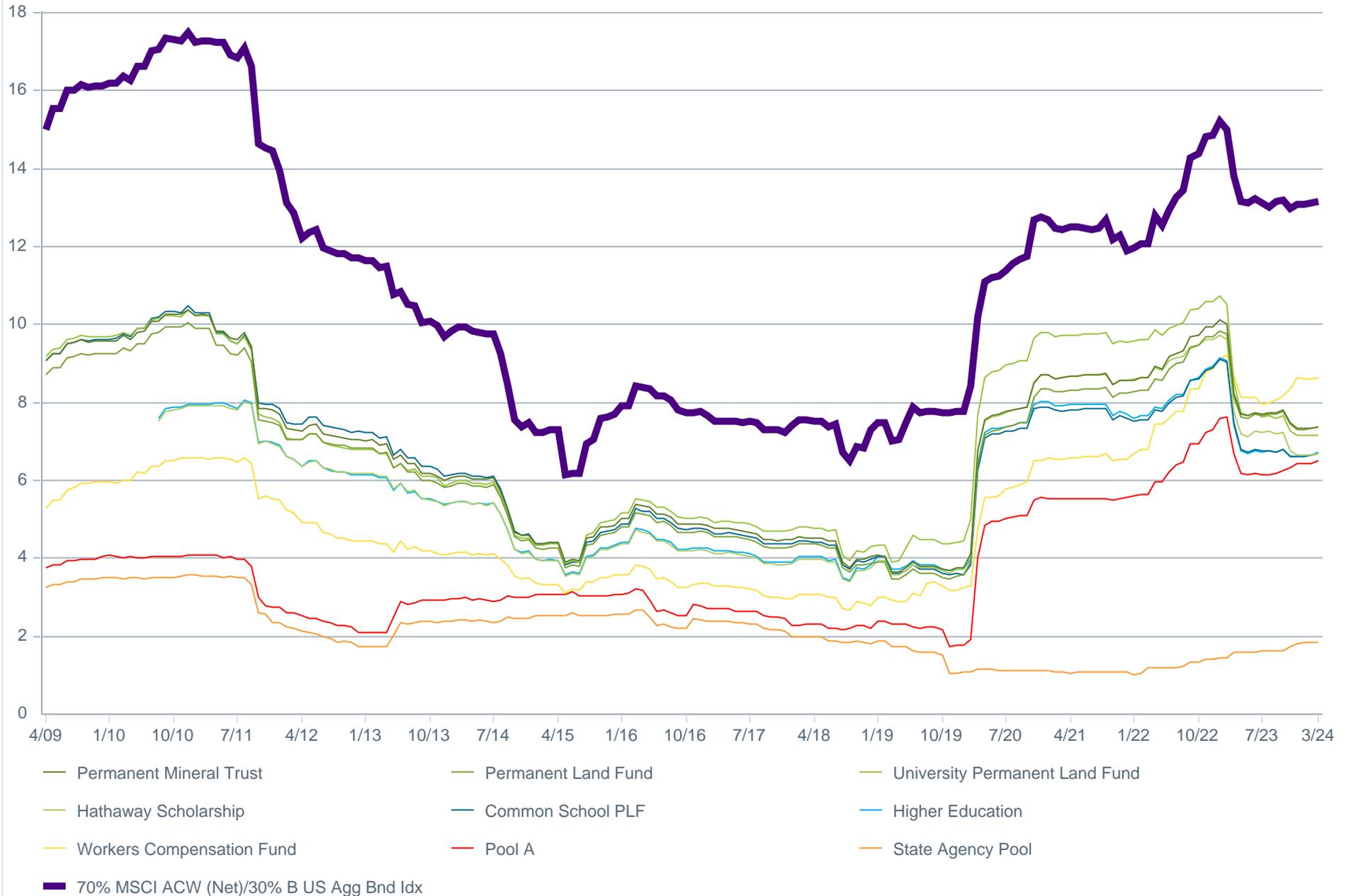
As of March 31, 2024

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Permanent Funds</b>	<b>20,172,783,476</b>	<b>69.8</b>	<b>3.7</b>	<b>9.0</b>	<b>3.7</b>	<b>11.6</b>	<b>5.5</b>	<b>7.0</b>	<b>6.5</b>	<b>5.8</b>	<b>6.2</b>	<b>07/01/2002</b>
Permanent Mineral Trust	11,059,414,154	38.3	4.3	9.7	4.3	13.1	6.5	8.0	7.2	6.3	6.4	06/01/2001
PMTF - Total Fund Index			3.4	8.0	3.4	10.5	5.1	7.0	6.5	5.9	5.7	
Difference			0.9	1.7	0.9	2.6	1.4	1.0	0.7	0.4	0.7	
<b>Common School Permanent Land Fund</b>	<b>5,277,143,997</b>	<b>18.3</b>	<b>3.9</b>	<b>9.4</b>	<b>3.9</b>	<b>11.5</b>	<b>5.4</b>	<b>6.3</b>	<b>6.0</b>	<b>5.5</b>	<b>6.2</b>	<b>06/01/2001</b>
Common School - Total Fund Index			3.0	7.5	3.0	9.6	4.4	5.5	5.4	5.1	5.4	
Difference			0.9	1.9	0.9	1.9	1.0	0.8	0.6	0.4	0.8	
<b>Permanent Land Fund</b>	<b>312,014,056</b>	<b>1.1</b>	<b>4.3</b>	<b>10.0</b>	<b>4.3</b>	<b>13.5</b>	<b>6.9</b>	<b>8.2</b>	<b>7.3</b>	<b>6.4</b>	<b>6.0</b>	<b>02/01/2006</b>
PLF - Total Fund Index			3.4	8.0	3.4	10.5	5.1	7.0	6.5	5.8	5.4	
Difference			0.9	2.0	0.9	3.0	1.8	1.2	0.8	0.6	0.6	
<b>University Permanent Land Fund</b>	<b>34,216,516</b>	<b>0.1</b>	<b>3.8</b>	<b>9.1</b>	<b>3.8</b>	<b>12.2</b>	<b>6.6</b>	<b>8.0</b>	<b>7.4</b>	<b>6.5</b>	<b>5.9</b>	<b>05/01/2006</b>
University PLF - Total Fund Index			3.4	8.0	3.4	10.5	5.1	7.0	6.7	6.1	5.6	
Difference			0.4	1.1	0.4	1.7	1.5	1.0	0.7	0.4	0.3	
<b>Hathaway Scholarship</b>	<b>771,804,850</b>	<b>2.7</b>	<b>4.0</b>	<b>9.7</b>	<b>4.0</b>	<b>13.5</b>	<b>7.6</b>	<b>8.6</b>	<b>7.5</b>	<b>6.4</b>	<b>6.2</b>	<b>09/01/2007</b>
Hathaway - Total Fund Index			3.4	8.0	3.4	10.5	5.1	7.0	6.4	5.7	5.6	
Difference			0.6	1.7	0.6	3.0	2.5	1.6	1.1	0.7	0.6	
<b>Higher Education</b>	<b>145,050,217</b>	<b>0.5</b>	<b>3.9</b>	<b>9.2</b>	<b>3.9</b>	<b>11.4</b>	<b>5.4</b>	<b>6.2</b>	<b>5.8</b>	<b>5.2</b>	<b>5.5</b>	<b>09/01/2007</b>
Higher Education - Total Fund Index			3.0	7.5	3.0	9.6	4.4	5.5	5.3	4.9	5.1	
Difference			0.9	1.7	0.9	1.8	1.0	0.7	0.5	0.3	0.4	
<b>Workers Compensation Fund</b>	<b>2,573,139,684</b>	<b>8.9</b>	<b>0.8</b>	<b>5.0</b>	<b>0.8</b>	<b>5.5</b>	<b>1.1</b>	<b>4.3</b>	<b>4.5</b>	<b>4.1</b>	<b>5.2</b>	<b>06/01/2001</b>
Workers Comp - Total Fund Index			0.5	4.3	0.5	4.7	0.3	3.6	4.0	3.8	4.8	
Difference			0.3	0.7	0.3	0.8	0.8	0.7	0.5	0.3	0.4	
<b>Workers Comp Long-Term Reserve</b>	<b>1,132,746,728</b>	<b>3.9</b>	<b>4.1</b>	<b>9.3</b>	<b>4.1</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.3</b>	<b>07/01/2023</b>
Workers Comp Reserve Assets Target Allocation Index			3.5	7.8	3.5	N/A	N/A	N/A	N/A	N/A	7.8	
Difference			0.6	1.5	0.6	N/A	N/A	N/A	N/A	N/A	1.5	
<b>Workers Comp Liability Hedging Assets</b>	<b>1,380,152,830</b>	<b>4.8</b>	<b>-1.6</b>	<b>1.4</b>	<b>-1.6</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.4</b>	<b>07/01/2023</b>
Workers Comp LHA Target Allocation Index			-1.7	1.7	-1.7	0.6	-3.9	0.0	1.1	1.9	1.7	
Difference			0.1	-0.3	0.1	N/A	N/A	N/A	N/A	N/A	-0.3	
<b>Non-Permanent Funds</b>	<b>8,727,446,089</b>	<b>30.2</b>	<b>1.1</b>	<b>4.7</b>	<b>1.1</b>	<b>5.0</b>	<b>1.5</b>	<b>2.3</b>	<b>2.4</b>	<b>2.3</b>	<b>3.5</b>	<b>07/01/2002</b>
<b>Pool A</b>	<b>426,217,064</b>	<b>1.5</b>	<b>2.9</b>	<b>7.8</b>	<b>2.9</b>	<b>9.3</b>	<b>3.7</b>	<b>5.0</b>	<b>4.5</b>	<b>3.9</b>	<b>4.4</b>	<b>01/01/2000</b>
Pool A - Total Fund Index			1.9	5.7	1.9	7.0	2.6	4.1	3.7	3.4	4.8	
Difference			1.0	2.1	1.0	2.3	1.1	0.9	0.8	0.5	-0.4	
<b>LSRA</b>	<b>1,560,722,589</b>	<b>5.4</b>	<b>2.3</b>	<b>7.1</b>	<b>2.3</b>	<b>8.4</b>	<b>2.6</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>3.5</b>	<b>07/01/2019</b>
LSRA - Total Fund Index			1.8	6.5	1.8	7.4	1.9	N/A	N/A	N/A	3.2	
Difference			0.5	0.6	0.5	1.0	0.7	N/A	N/A	N/A	0.3	
<b>LSRA Long Term Reserve</b>	<b>501,442,562</b>	<b>1.7</b>	<b>7.6</b>	<b>15.6</b>	<b>7.6</b>	<b>21.1</b>	<b>8.8</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.3</b>	<b>07/01/2019</b>
LSRA Long Term Reserve - Total Fund Index			6.6	14.2	6.6	19.0	7.7	N/A	N/A	N/A	9.0	
Difference			1.0	1.4	1.0	2.1	1.1	N/A	N/A	N/A	0.3	
<b>LSRA Intermediate Term Reserve</b>	<b>434,634,670</b>	<b>1.5</b>	<b>-0.5</b>	<b>3.0</b>	<b>-0.5</b>	<b>2.3</b>	<b>-2.4</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.1</b>	<b>08/01/2019</b>
LSRA Int Term Reserve - Total Fund Index			-0.8	2.6	-0.8	1.7	-2.5	N/A	N/A	N/A	-0.3	
Difference			0.3	0.4	0.3	0.6	0.1	N/A	N/A	N/A	0.2	
<b>LSRA Short Term Reserve</b>	<b>624,645,357</b>	<b>2.2</b>	<b>0.3</b>	<b>3.9</b>	<b>0.3</b>	<b>3.5</b>	<b>0.7</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.2</b>	<b>01/01/2020</b>
LSRA Short Term Reserve - Total Fund Index			0.3	3.6	0.3	3.0	0.0	N/A	N/A	N/A	0.7	
Difference			0.0	0.3	0.0	0.5	0.7	N/A	N/A	N/A	0.5	
<b>State Agency Pool</b>	<b>6,740,506,436</b>	<b>23.3</b>	<b>0.5</b>	<b>3.6</b>	<b>0.5</b>	<b>3.5</b>	<b>0.8</b>	<b>1.6</b>	<b>1.9</b>	<b>2.0</b>	<b>3.4</b>	<b>06/01/2001</b>
State Agency Pool - Actual Allocation Index			0.5	3.7	0.5	3.6	0.8	1.6	1.8	2.0	3.3	
Difference			0.0	-0.1	0.0	-0.1	0.0	0.0	0.1	0.0	0.1	
<b>Total Fund</b>	<b>28,900,229,565</b>	<b>100.0</b>	<b>3.0</b>	<b>7.8</b>	<b>3.0</b>	<b>9.7</b>	<b>4.5</b>	<b>5.7</b>	<b>5.4</b>	<b>4.9</b>	<b>5.5</b>	<b>10/01/1996</b>
Wyoming State Total Fund Index			2.4	6.6	2.4	8.1	3.5	5.1	4.9	4.5	5.3	
Difference			0.6	1.2	0.6	1.6	1.0	0.6	0.5	0.4	0.2	

Performance shown is net of fees and excludes PPIs and operational cash. Wyoming State Treasurer's Office fiscal year ends on June 30th.

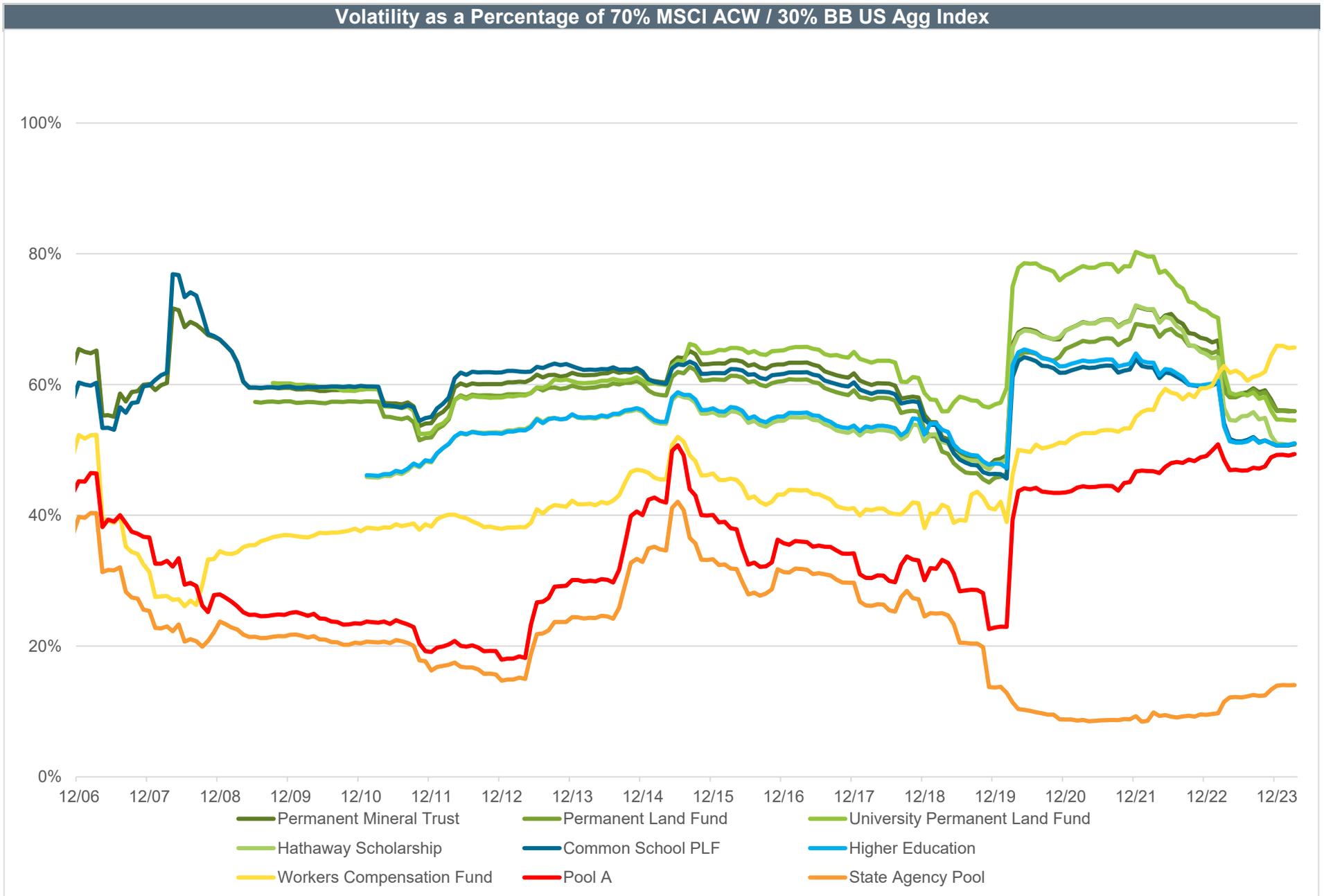


Standard Deviation



Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Calculation is based on monthly periodicity.

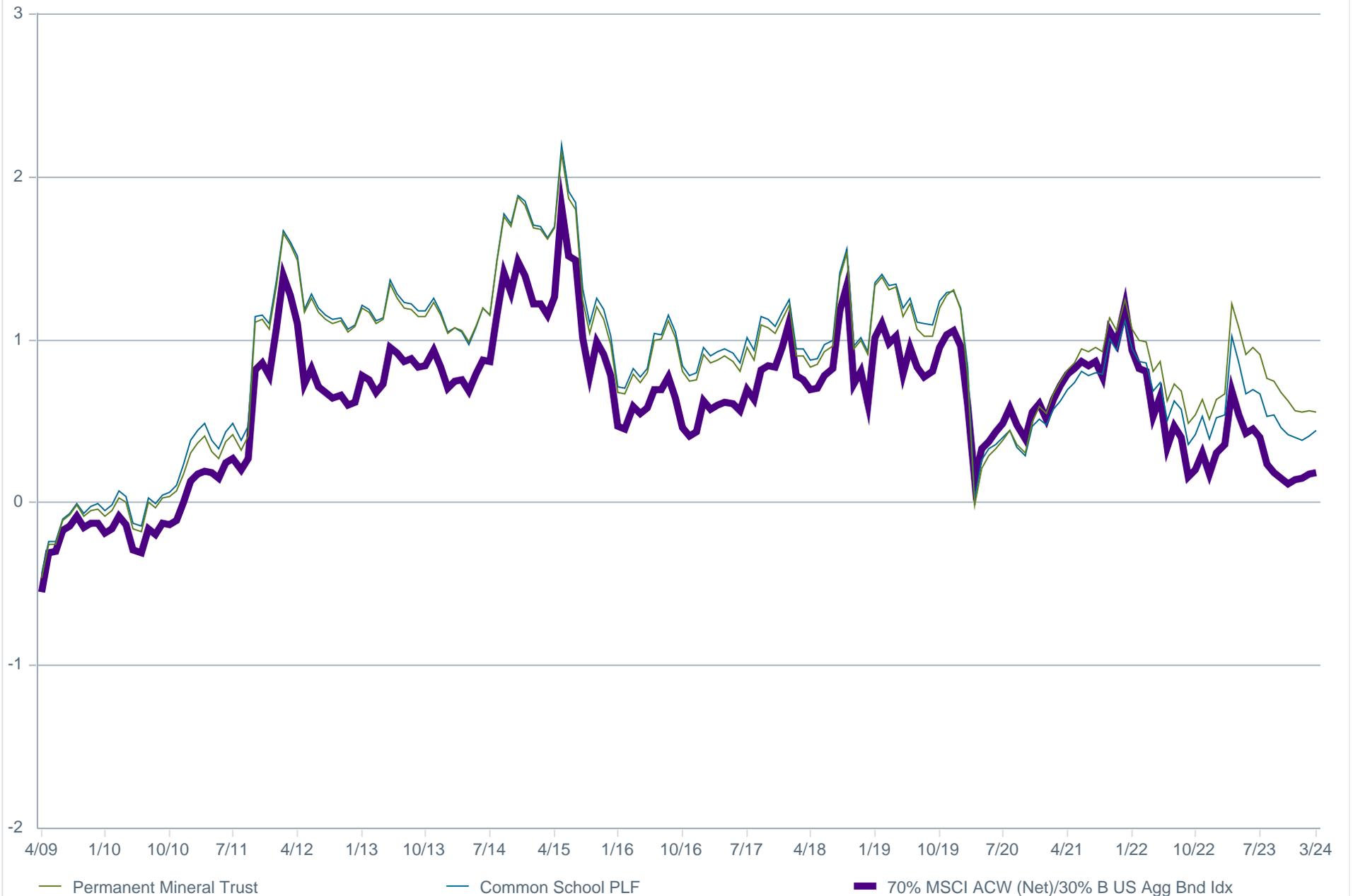




Performance shown is net of fees and excludes PPIs and operational cash. Calculation is based on monthly periodicity.



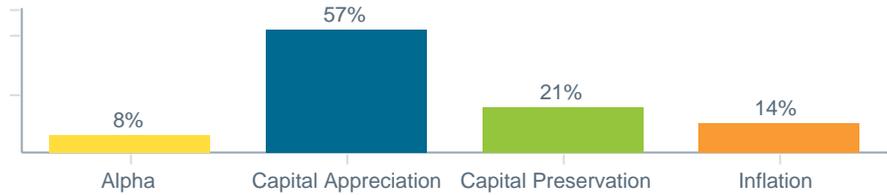
Sharpe Ratio



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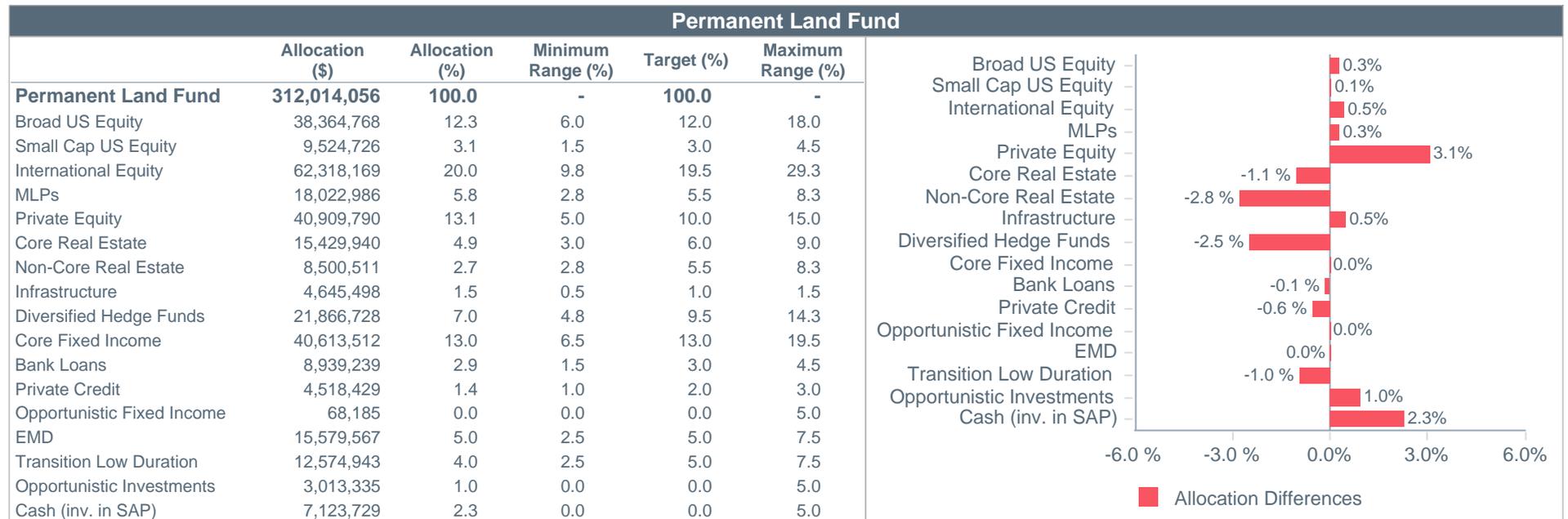
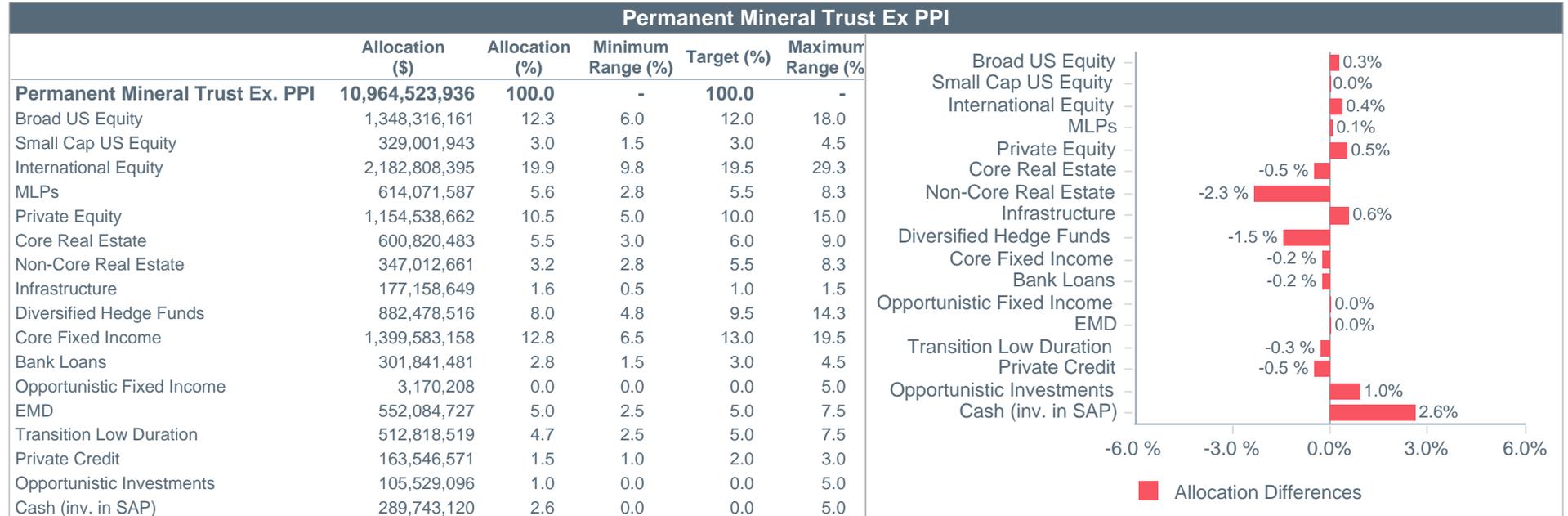


Investment Profile	Target Allocation												
<p><b>Fund Type:</b> Permanent Fund</p> <p><b>Main Objective:</b> Produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity.</p> <p><b>Primary Investment Goals:</b> Capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals.</p> <p><b>Long-Term Target Equity Allocation:</b> 73%</p> <p><b>Spending Policy</b></p> <ul style="list-style-type: none"> <li>• <b>Permanent Mineral Trust Fund:</b> 5% of the five-year trailing average market value, calculated on the first day of the fiscal year. In fiscal year 2023, the spending rate will be 4.75%. In fiscal year 2024 and thereafter, the spending rate will be 4.5%.</li> <li>• <b>Hathaway Scholarship:</b> The amount necessary to fully fund scholarships awarded under W.S. 21-16-1301 <i>et seq.</i></li> </ul>	Minimum Range (%)		Target (%)		Maximum Range (%)								
	<b>Permanent Mineral Trust</b>								-	100.00	-		
	Broad US Equity	6.00	12.00	18.00									
	Small Cap US Equity	1.50	3.00	4.50									
	International Equity	9.75	19.50	29.25									
	MLPs	2.75	5.50	8.25									
	Private Equity	5.00	10.00	15.00									
	Core Real Estate	3.00	6.00	9.00									
	Non-Core Real Estate	2.75	5.50	8.25									
	Infrastructure	0.50	1.00	1.50									
	Diversified Hedge Funds	4.75	9.50	14.25									
	Core Fixed Income	6.50	13.00	19.50									
	Bank Loans	1.50	3.00	4.50									
Opportunistic Fixed Income	0.00	0.00	5.00										
EMD	2.50	5.00	7.50										
Transition Low Duration	2.50	5.00	7.50										
Private Credit	1.00	2.00	3.00										
Risk Metrics													
	5 Years				10 Years								
	PMTF	PLF	UPLF	Hath	PMTF	PLF	UPLF	Hath					
Sharpe Ratio	0.6	0.7	0.6	0.7	0.7	0.7	0.6	0.7					
Standard Deviation	9.8	9.5	10.5	9.4	7.7	7.4	8.2	7.4					
Comparative Performance													
	Allocation			Performance (%)									
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years				
<b>Permanent Mineral Trust</b>	<b>11,059,414,154</b>	<b>4.3</b>	<b>9.7</b>	<b>4.3</b>	<b>13.1</b>	<b>6.5</b>	<b>8.0</b>	<b>7.2</b>	<b>6.3</b>				
PMTF - Total Fund Index		3.4	8.0	3.4	10.5	5.1	7.0	6.5	5.9				
Difference		0.9	1.7	0.9	2.6	1.4	1.0	0.7	0.4				
<b>Permanent Land Fund</b>	<b>312,014,056</b>	<b>4.3</b>	<b>10.0</b>	<b>4.3</b>	<b>13.5</b>	<b>6.9</b>	<b>8.2</b>	<b>7.3</b>	<b>6.4</b>				
PLF - Total Fund Index		3.4	8.0	3.4	10.5	5.1	7.0	6.5	5.8				
Difference		0.9	2.0	0.9	3.0	1.8	1.2	0.8	0.6				
<b>University Permanent Land Fund</b>	<b>34,216,516</b>	<b>3.8</b>	<b>9.1</b>	<b>3.8</b>	<b>12.2</b>	<b>6.6</b>	<b>8.0</b>	<b>7.4</b>	<b>6.5</b>				
UPLF - Total Fund Index		3.4	8.0	3.4	10.5	5.1	7.0	6.7	6.1				
Difference		0.4	1.1	0.4	1.7	1.5	1.0	0.7	0.4				
<b>Hathaway Scholarship</b>	<b>771,804,850</b>	<b>4.0</b>	<b>9.7</b>	<b>4.0</b>	<b>13.5</b>	<b>7.6</b>	<b>8.6</b>	<b>7.5</b>	<b>6.4</b>				
Hathaway - Total Fund Index		3.4	8.0	3.4	10.5	5.1	7.0	6.4	5.7				
Difference		0.6	1.7	0.6	3.0	2.5	1.6	1.1	0.7				

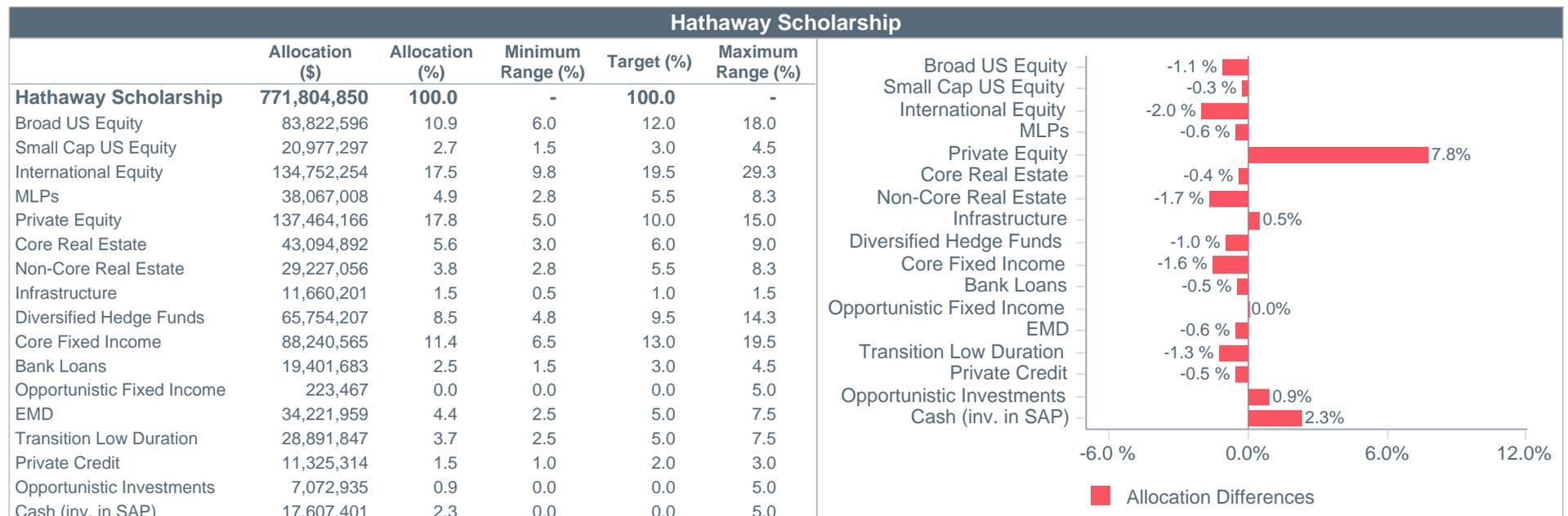
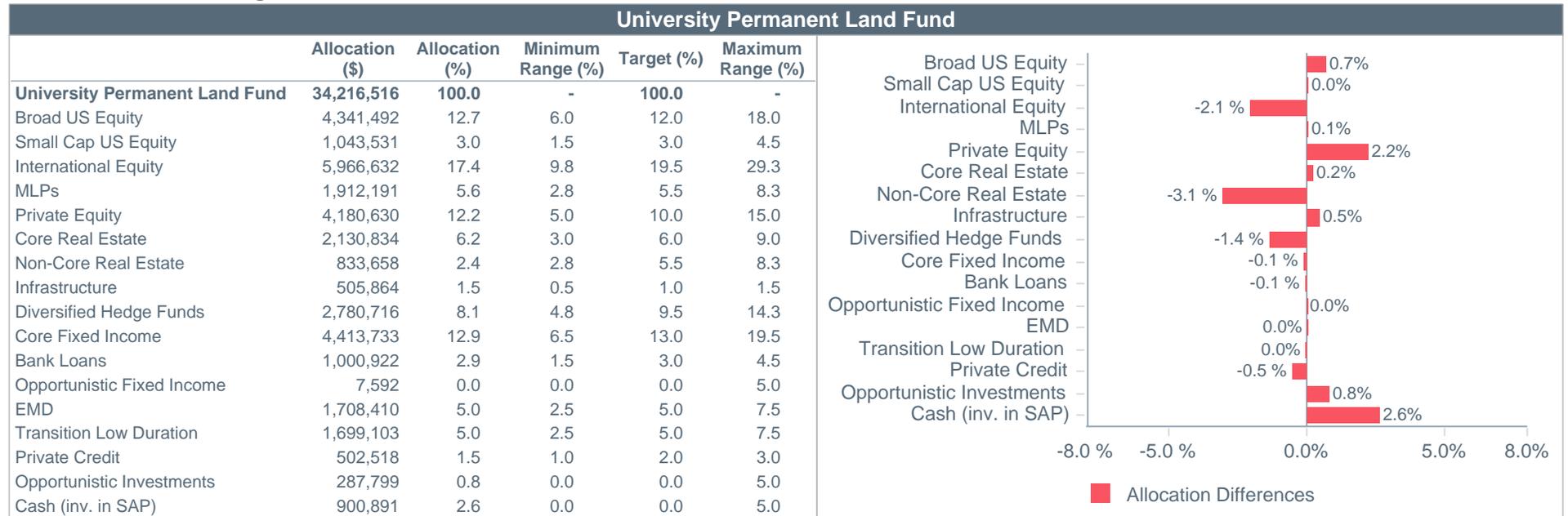


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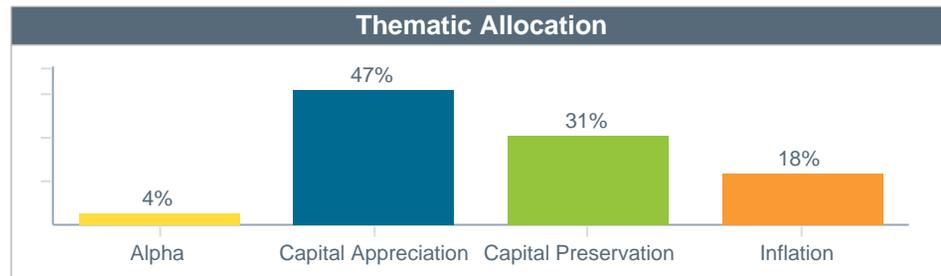
Allocations shown may not sum up to 100% exactly due to rounding. Market value shown for PMTF excludes Public Purpose Investments (PPIs). Asset class targets shown represent 03/01/2021 interim targets.



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 03/01/2024 interim targets.

Investment Profile
<b>Fund Type:</b> Permanent Fund
<b>Main Objective:</b> Produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity.
<b>Primary Investment Goals:</b> Income generation, capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals.
<b>Long-Term Target Equity Allocation:</b> 62%
<b>Spending Policy</b>
<ul style="list-style-type: none"> <li>• <b>Common School Permanent Land Fund:</b> 5% of the five-year trailing average market value, calculated on the first day of the fiscal year. In fiscal year 2025, the spending rate will be 4.75%. In fiscal year 2026 and thereafter, the spending rate will be 4.5%.</li> <li>• <b>Higher Education:</b> 4.75% of the five-year trailing average market value, calculated on the first day of the fiscal year.</li> </ul>

Target Allocation			
	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>Common School PLF</b>	-	<b>100.00</b>	-
Broad US Equity	5.50	11.00	16.50
Small Cap US Equity	1.25	2.50	3.75
International Equity	8.50	17.00	25.50
Preferred Stock	0.00	0.00	0.50
MLPs	3.50	7.00	10.50
Core Real Estate	5.25	10.50	15.75
Non-Core Real Estate	1.75	3.50	5.25
Infrastructure	1.00	2.00	3.00
Diversified Hedge Funds	2.50	5.00	7.50
Core Fixed Income	7.25	14.50	21.75
Bank Loans	1.50	3.00	4.50
Opportunistic Fixed Income	0.00	0.00	5.00
EMD	3.50	7.00	10.50
Transition Low Duration	7.50	15.00	22.50
Private Credit	1.00	2.00	3.00



Risk Metrics				
	5 Years		10 Years	
	CSPLF	HiEd	CSPLF	HiEd
Sharpe Ratio	0.5	0.5	0.6	0.6
Standard Deviation	8.3	8.3	6.7	6.7
Beta	0.4	0.4	0.4	0.4

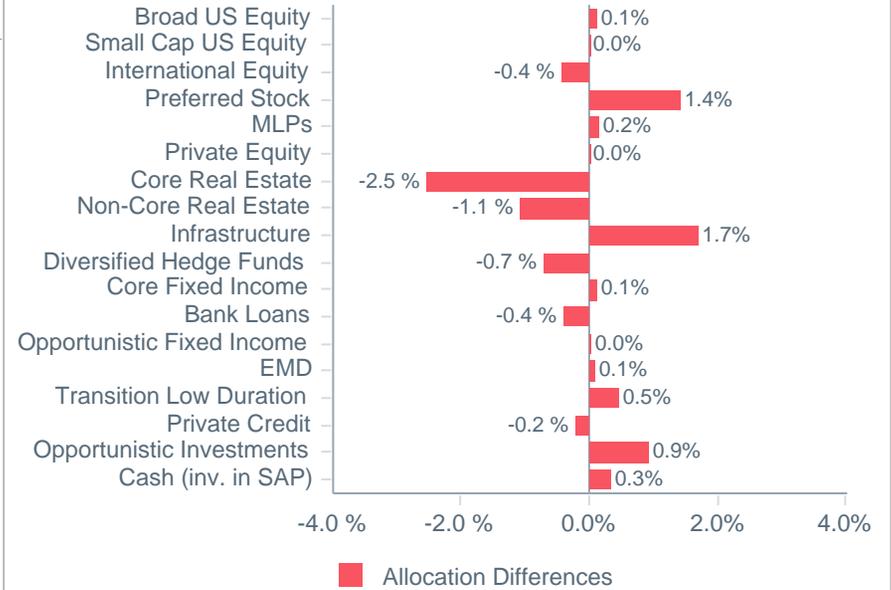
Comparative Performance									
	Allocation			Performance (%)					
	Market Value (\$ (\$))	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>Common School Perm Land Fund</b>	<b>5,277,143,997</b>	<b>3.9</b>	<b>9.4</b>	<b>3.9</b>	<b>11.5</b>	<b>5.4</b>	<b>6.3</b>	<b>6.0</b>	<b>5.5</b>
CSPLF - Total Fund Index		3.0	7.5	3.0	9.6	4.4	5.5	5.4	5.1
Difference		0.9	1.9	0.9	1.9	1.0	0.8	0.6	0.4
<b>Higher Education</b>	<b>145,050,217</b>	<b>3.9</b>	<b>9.2</b>	<b>3.9</b>	<b>11.4</b>	<b>5.4</b>	<b>6.2</b>	<b>5.8</b>	<b>5.2</b>
Higher Education - Total Fund Index		3.0	7.5	3.0	9.6	4.4	5.5	5.3	4.9
Difference		0.9	1.7	0.9	1.8	1.0	0.7	0.5	0.3

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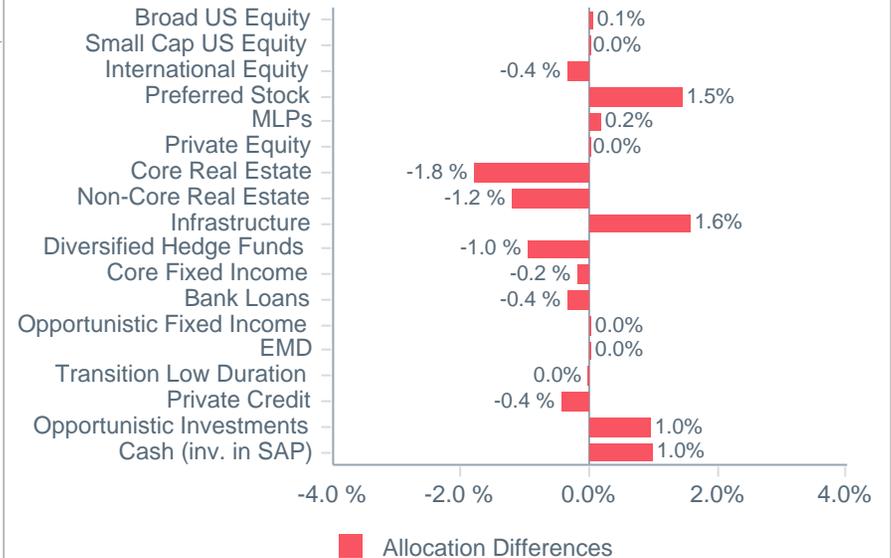
**Common School PLF Ex. PPI**

	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>Common School PLF Ex. PPI</b>	<b>5,258,784,260</b>	<b>100.0</b>	<b>-</b>	<b>100.0</b>	<b>-</b>
Broad US Equity	585,377,571	11.1	5.5	11.0	16.5
Small Cap US Equity	131,588,377	2.5	1.3	2.5	3.8
International Equity	871,058,273	16.6	8.5	17.0	22.5
Preferred Stock	74,360,700	1.4	0.0	0.0	0.5
MLPs	376,304,445	7.2	3.5	7.0	10.5
Private Equity	120,979	0.0	0.0	0.0	0.0
Core Real Estate	419,113,639	8.0	5.3	10.5	15.8
Non-Core Real Estate	126,926,089	2.4	1.8	3.5	5.3
Infrastructure	194,350,253	3.7	1.0	2.0	3.0
Diversified Hedge Funds	225,958,403	4.3	2.5	5.0	7.5
Core Fixed Income	769,306,983	14.6	7.3	14.5	21.8
Bank Loans	136,617,977	2.6	1.5	3.0	4.5
Opportunistic Fixed Income	1,387,188	0.0	0.0	0.0	5.0
EMD	372,905,498	7.1	3.5	7.0	10.5
Transition Low Duration	813,590,210	15.5	7.5	15.0	22.5
Private Credit	94,121,012	1.8	1.0	2.0	3.0
Opportunistic Investments	48,306,745	0.9	0.0	0.0	5.0
Cash (inv. in SAP)	17,389,919	0.3	0.0	0.0	5.0



**Higher Education**

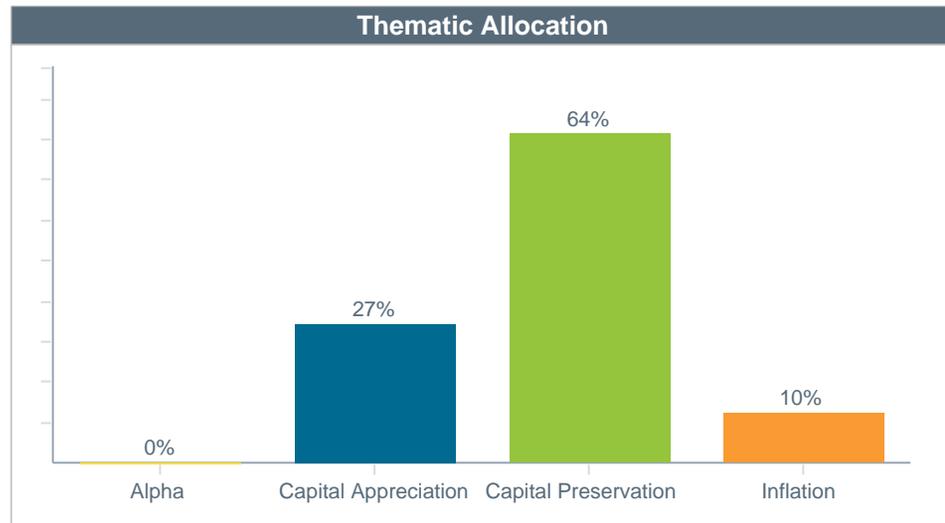
	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>Higher Education</b>	<b>145,050,217</b>	<b>100.0</b>	<b>-</b>	<b>100.0</b>	<b>-</b>
Broad US Equity	16,056,551	11.1	5.5	11.0	16.5
Small Cap US Equity	3,627,047	2.5	1.3	2.5	3.8
International Equity	24,141,966	16.6	8.5	17.0	25.5
Preferred Stock	2,105,394	1.5	0.0	0.0	0.5
MLPs	10,445,598	7.2	3.5	7.0	10.5
Private Equity	4,566	0.0	0.0	0.0	0.0
Core Real Estate	12,609,449	8.7	5.3	10.5	15.8
Non-Core Real Estate	3,343,532	2.3	1.8	3.5	5.3
Infrastructure	5,199,099	3.6	1.0	2.0	3.0
Diversified Hedge Funds	5,840,179	4.0	2.5	5.0	7.5
Core Fixed Income	20,766,238	14.3	7.3	14.5	21.8
Bank Loans	3,839,951	2.6	1.5	3.0	4.5
Opportunistic Fixed Income	46,156	0.0	0.0	0.0	5.0
EMD	10,194,766	7.0	3.5	7.0	10.5
Transition Low Duration	21,695,935	15.0	7.5	15.0	22.5
Private Credit	2,286,455	1.6	1.0	2.0	3.0
Opportunistic Investments	1,403,672	1.0	0.0	0.0	5.0
Cash (inv. in SAP)	1,443,665	1.0	0.0	0.0	5.0



Allocations shown may not sum up to 100% exactly due to rounding. Market value shown for CSPLF excludes Public Purpose Investments (PPIs). Asset class targets shown represent 03/01/2024 interim targets.

Investment Profile
<p><b>Fund Type:</b> Permanent Fund</p> <p><b>Main Objective:</b> Provide a return that assures the Workers' Compensation Fund will be self-funding or nearly self-funding in order to substantially reduce or eliminate the need for employer contributions.</p> <p><b>Primary Investment Goals:</b> Long-term return, safety of capital, yield and capital appreciation.</p> <p><b>Long-Term Target Equity Allocation:</b> 34%</p> <p><b>Actuarial Discount Rate:</b> 2.5%*</p> <p><b>Funded Status:</b> &gt;100%*</p> <p><b>Duration of Liabilities:</b> 11.4 years*</p> <p>*As of the most recent report.</p>

Target Allocation			
	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>Workers Comp Long-Term Reserve</b>	-	<b>100.00</b>	-
Broad US Equity	6.50	13.00	19.50
Small Cap US Equity	1.00	2.00	3.00
International Equity	10.00	20.00	30.00
Private Equity	0.00	0.00	1.00
Private Credit	1.50	3.00	4.50
MLP	4.50	9.00	13.50
Opportunistic Investments	0.00	0.00	2.00
Infrastructure	1.50	3.00	4.50
Real Estate Core	5.50	11.00	16.50
Real Estate Value Added	4.50	9.00	13.50
Core Fixed Income	1.50	3.00	4.50
EMD	5.50	11.00	16.50



Fixed Income Characteristics vs. BB US Agg Bond Index		
	Portfolio	Benchmark
Effective Duration	N/A	6.2
Avg. Quality	N/A	Aa2/Aa3
Yield To Maturity (%)	N/A	4.9
Coupon Rate (%)	N/A	3.2

Risk Metrics		
	5 Years	10 Years
Sharpe Ratio	0.3	0.5
Standard Deviation	8.2	6.3
Beta	0.4	0.3

Comparative Performance									
	Allocation				Performance (%)				
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>Workers' Compensation Fund</b>	<b>2,573,139,684</b>	<b>0.8</b>	<b>5.0</b>	<b>0.8</b>	<b>5.5</b>	<b>1.1</b>	<b>4.3</b>	<b>4.5</b>	<b>4.1</b>
WC - Total Fund Index		0.5	4.3	0.5	4.7	0.3	3.6	4.0	3.8
Difference		0.3	0.7	0.3	0.8	0.8	0.7	0.5	0.3

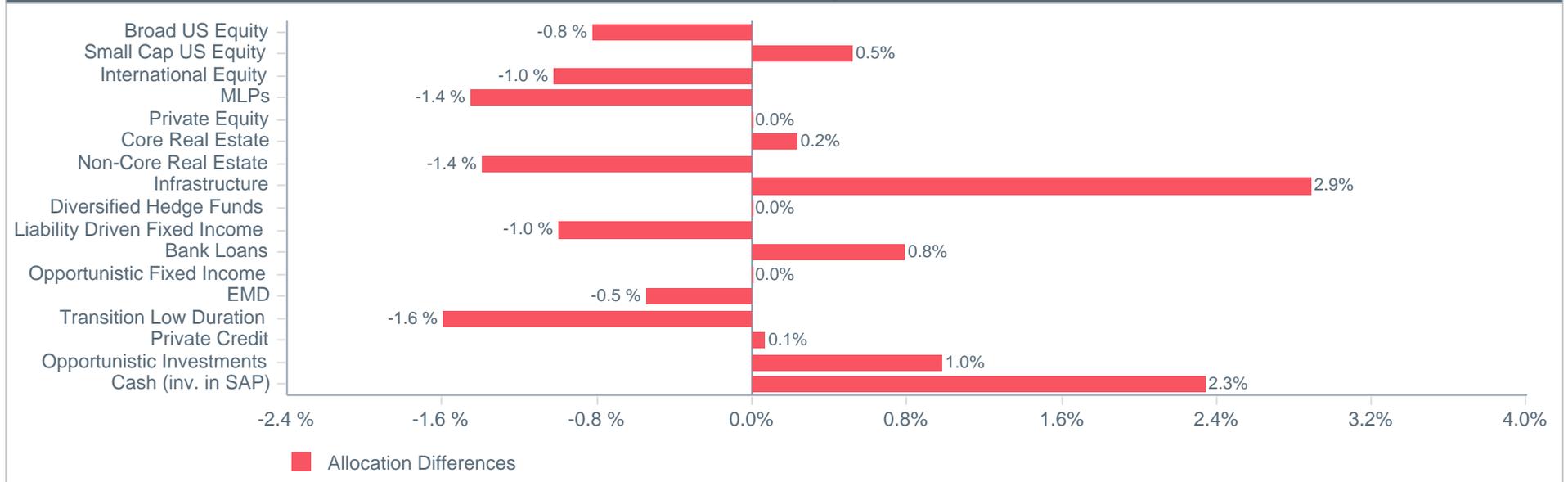
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Asset Allocation vs. Target

	Allocation (\$)	Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
<b>Workers Comp Long-Term Reserve</b>	<b>1,132,746,728</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>
Broad US Equity	133,162,935	11.76	6.50	13.00	19.50
Small Cap US Equity	13,433,363	1.19	1.00	2.00	3.00
International Equity	205,313,133	18.13	10.00	20.00	30.00
Private Equity	79,047	0.01	0.00	0.00	1.00
Private Credit	33,882,034	2.99	1.50	3.00	4.50
MLP	91,376,275	8.07	4.50	9.00	13.50
Opportunistic Investments	25,215,756	2.23	0.00	0.00	2.00
Infrastructure	106,606,290	9.41	1.50	3.00	4.50
Real Estate Core	134,728,271	11.89	5.50	11.00	16.50
Real Estate Value Added	67,056,586	5.92	4.50	9.00	13.50
Core Fixed Income	35,051,451	3.09	1.50	3.00	4.50
EMD	114,658,388	10.12	5.50	11.00	16.50
Opportunistic Fixed Income	9,972	0.00	0.00	0.00	1.00
Transition Low Duration Fixed Income	151,858,391	13.41	6.50	13.00	19.50
Bank Loans	20,314,837	1.79	1.50	3.00	4.50
Cash (inv. in SAP)	-	0.00	0.00	0.00	1.00

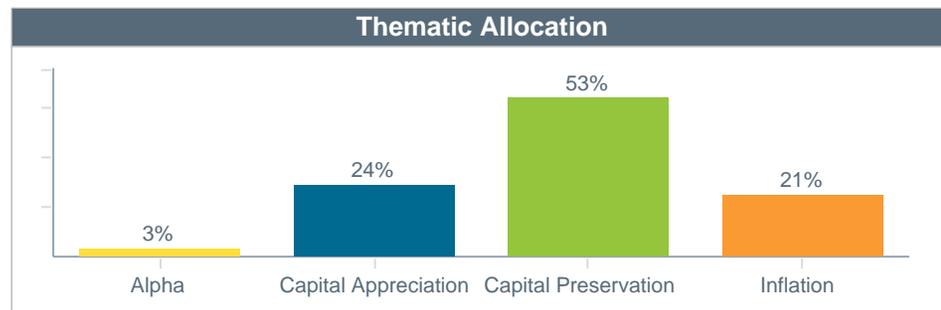
Asset Allocation vs. Target Differences



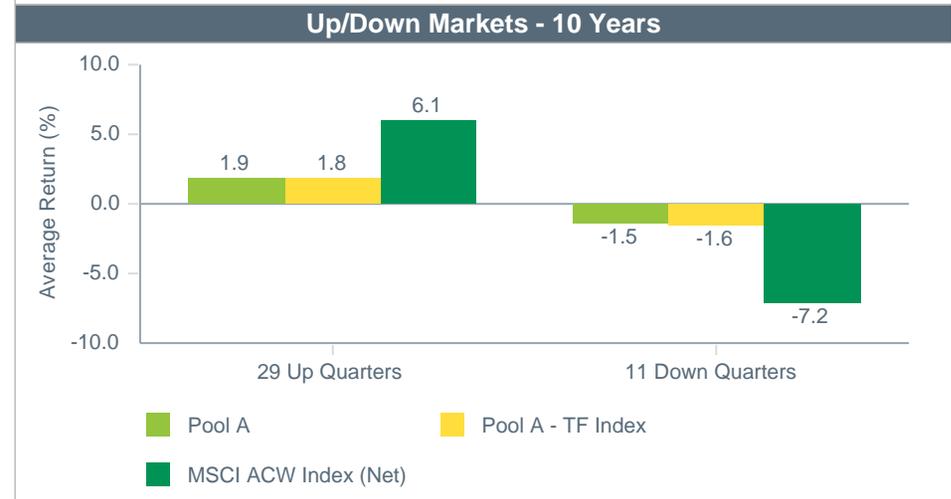
Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 03/01/2024 interim targets.

Investment Profile	
<b>Fund Type:</b>	Non-Permanent Fund
<b>Main Objective:</b>	Provide a diverse array of securities including equities, while maintaining adequate liquidity, stability, and return on investment.
<b>Primary Investment Goal:</b>	Pool A is intended to be moderately liquid and safely invested but also be invested for return and growth.
<b>Target Equity Allocation:</b>	50%
<b>Participating Funds:</b>	<ul style="list-style-type: none"> <li>• Tobacco Settlement Trust Fund</li> <li>• Wildlife and Natural Resource Trust Account</li> <li>• Cultural Trust Fund</li> <li>• Public Television Matching Fund Account</li> <li>• Game and Fish Fund Trust Account</li> </ul>

Risk Metrics		
	5 Years	10 Years
Sharpe Ratio	0.5	0.5
Standard Deviation	6.8	5.2
Beta	0.3	0.3



Target Allocation			
	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>Pool A</b>	-	<b>100.00</b>	-
Broad US Equity	2.50	5.00	7.50
Small Cap US Equity	1.00	2.00	3.00
International Equity	5.00	10.00	15.00
Preferred Stock	0.00	0.00	0.50
MLPs	2.50	5.00	7.50
Core Real Estate	3.50	7.00	10.50
Non-Core Real Estate	2.50	5.00	7.50
Diversified Hedge Funds	2.50	5.00	7.50
Core Fixed Income	15.63	31.25	64.88
Bank Loans	5.63	11.25	16.88
Transition Low Duration	2.00	4.00	6.00
Low Duration Fixed Income	3.50	7.00	10.50
Private Credit	1.25	2.50	3.75

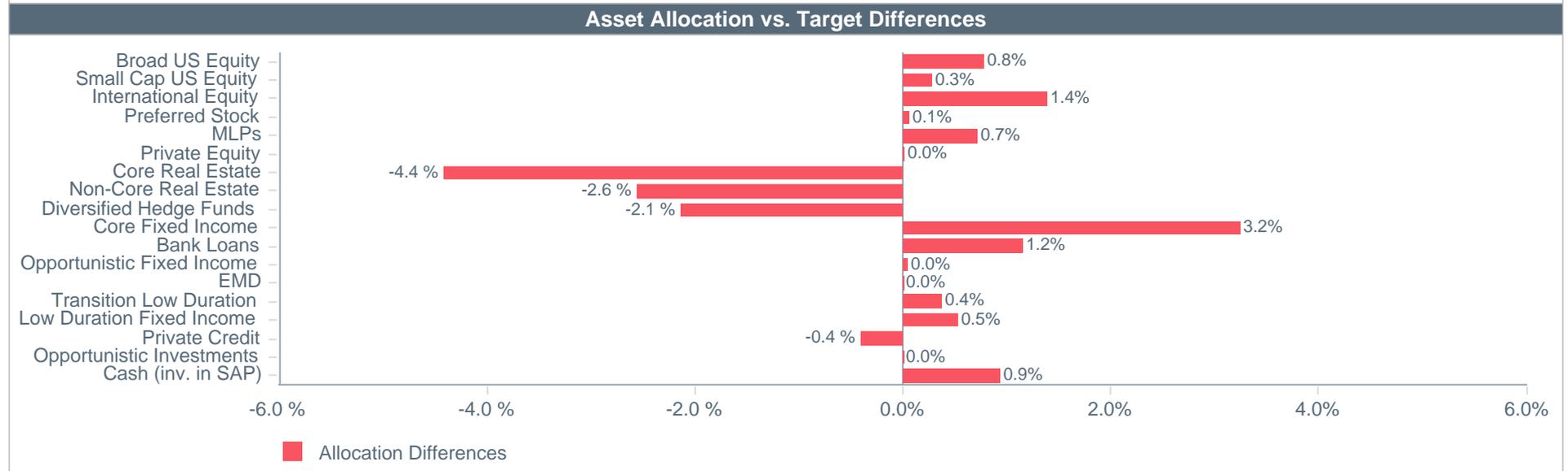


Comparative Performance									
	Allocation				Performance (%)				
	Market Value (\$) (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>Pool A</b>	<b>426,217,064</b>	<b>2.9</b>	<b>7.8</b>	<b>2.9</b>	<b>9.3</b>	<b>3.7</b>	<b>5.0</b>	<b>4.5</b>	<b>3.9</b>
Pool A - Total Fund Index		1.9	5.7	1.9	7.0	2.6	4.1	3.7	3.4
Difference		1.0	2.1	1.0	2.3	1.1	0.9	0.8	0.5

Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 03/01/2024 interim targets.



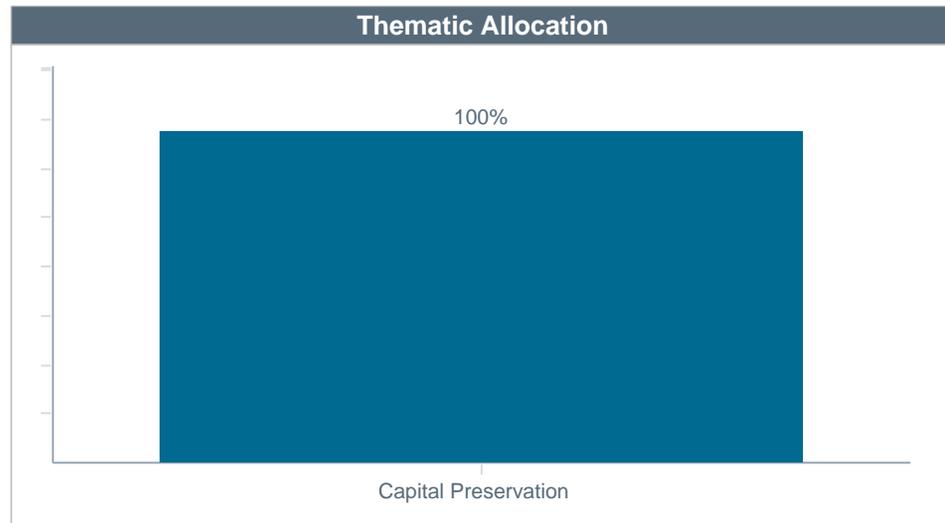
Asset Allocation vs. Target					
	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>Pool A</b>	<b>426,217,064</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>
Broad US Equity	24,629,656	5.78	2.50	5.00	7.50
Small Cap US Equity	9,691,247	2.27	1.00	2.00	3.00
International Equity	48,520,060	11.38	5.00	10.00	15.00
Preferred Stock	292,617	0.07	0.00	0.00	0.50
MLPs	24,394,473	5.72	2.50	5.00	7.50
Private Equity	47,230	0.01	0.00	0.00	0.00
Core Real Estate	10,991,295	2.58	3.50	7.00	10.50
Non-Core Real Estate	10,386,094	2.44	2.50	5.00	7.50
Diversified Hedge Funds	12,214,259	2.87	2.50	5.00	7.50
Core Fixed Income	146,999,794	34.49	15.63	31.25	46.88
Bank Loans	52,851,991	12.40	5.63	11.25	16.88
Opportunistic Fixed Income	209,195	0.05	0.00	0.00	5.00
EMD	-	0.00	0.00	0.00	0.00
Transition Low Duration	18,638,396	4.37	2.00	4.00	6.00
Low Duration Fixed Income	32,106,765	7.53	3.50	7.00	10.50
Private Credit	8,948,816	2.10	1.25	2.50	3.75
Opportunistic Investments	-	0.00	0.00	0.00	5.00



Allocations shown may not sum up to 100% exactly due to rounding. Asset class targets shown represent 03/01/2024 interim targets.

Investment Profile
<p><b>Fund Type:</b> Non-Permanent Fund</p> <p><b>Main Objective:</b> Produce an investment return so that State agencies have the advantage of better income from their invested funds, while maintaining stability.</p> <p><b>Primary Investment Goal:</b> Capital preservation, yield, and liquidity</p> <p><b>Liquidity Constraints:</b> The Fund must meet the day-to-day cash flow needs of the State</p> <p><b>Maximum Equity Allocation:</b> 0%</p> <p><b>Current Target Equity Allocation:</b> 0%</p>

Target Allocation			
	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
<b>State Agency Pool Excluding PPI</b>	-	<b>100.00</b>	-
SAP Fixed Income	100.00	100.00	100.00
Core Fixed Income	0.00	0.00	0.00
Low Duration Fixed Income	0.00	0.00	0.00
Bank Loans	0.00	0.00	0.00
Opportunistic Fixed Income	0.00	0.00	0.00
EMD	0.00	0.00	0.00
Cash Equivalents	0.00	0.00	0.00



Fixed Income Characteristics vs. BB US Agg Bond Index		
	Portfolio	Benchmark
Effective Duration	N/A	6.2
Avg. Quality	N/A	Aa2/Aa3
Yield To Maturity (%)	N/A	4.9
Coupon Rate (%)	N/A	3.2

Risk Metrics		
	5 Years	10 Years
Sharpe Ratio	-0.3	0.3
Standard Deviation	2.0	2.1
Beta	0.0	0.0

Comparative Performance									
	Allocation			Performance (%)					
	Market Value (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>State Agency Pool</b>	<b>6,740,506,436</b>	<b>0.5</b>	<b>3.6</b>	<b>0.5</b>	<b>3.5</b>	<b>0.8</b>	<b>1.6</b>	<b>1.9</b>	<b>2.0</b>
State Agency Pool - Actual Allocation Index		0.5	3.7	0.5	3.6	0.8	1.6	1.8	2.0
Difference		0.0	-0.1	0.0	-0.1	0.0	0.0	0.1	0.0

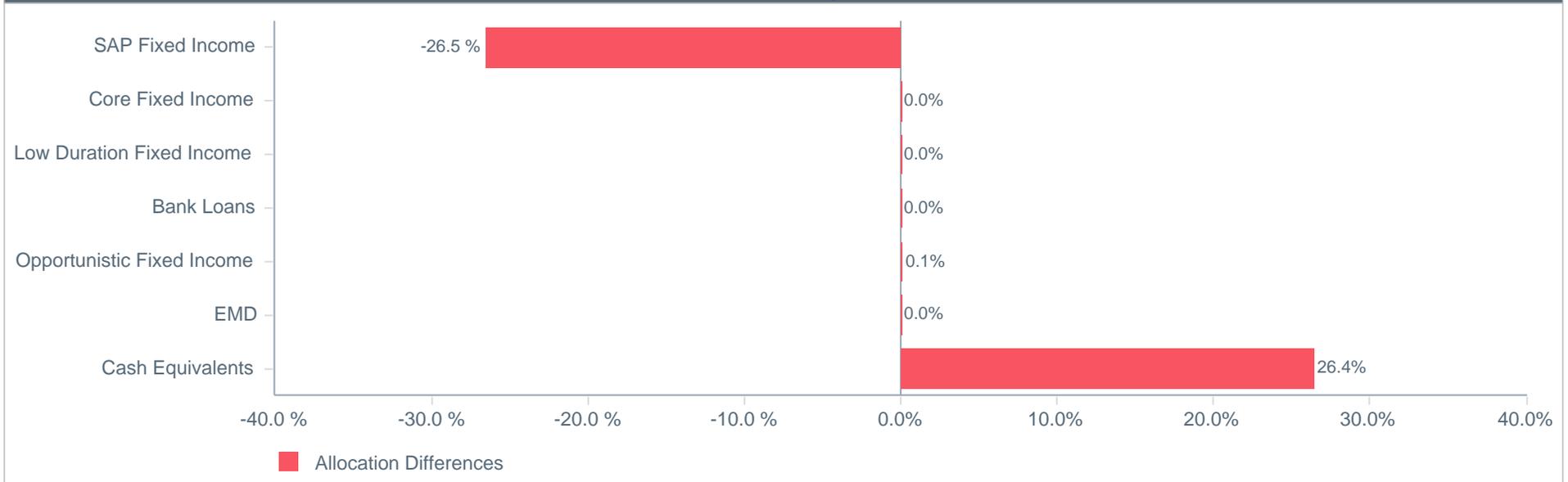
Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding.



**Asset Allocation vs. Target**

	Allocation (\$)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>State Agency Pool Excluding PPI</b>	<b>6,488,006,436</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>
SAP Fixed Income	4,767,523,355	73.48	100.00	100.00	100.00
Core Fixed Income	-	0.00	0.00	0.00	0.00
Low Duration Fixed Income	-	0.00	0.00	0.00	0.00
Bank Loans	-	0.00	0.00	0.00	0.00
Opportunistic Fixed Income	4,788,876	0.07	0.00	0.00	0.00
EMD	-	0.00	0.00	0.00	0.00
Cash Equivalents	1,715,694,206	26.44	0.00	0.00	0.00

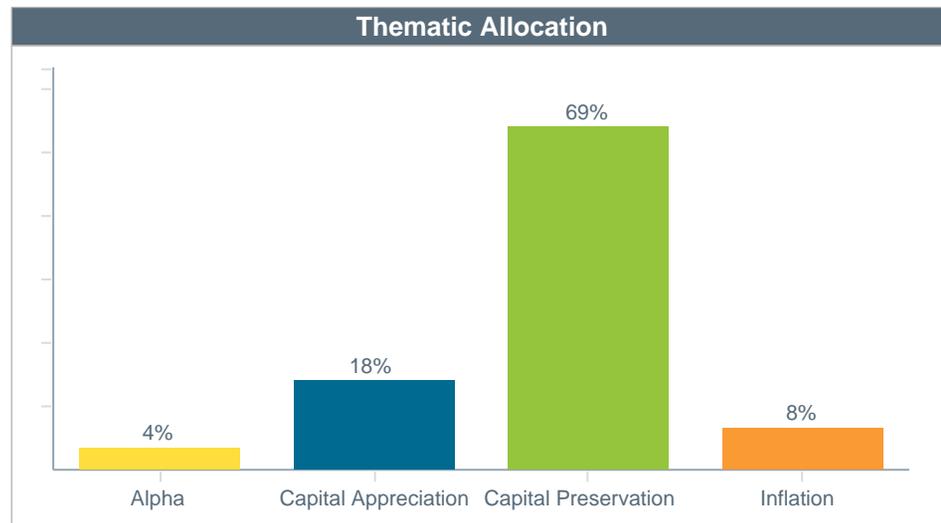
**Asset Allocation vs. Target Differences**



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

Investment Profile
<p><b>Fund Type:</b> Non-Permanent Fund</p> <p><b>Main Objective:</b> LSRA will be invested to obtain the highest possible return while seeking to preserve the balance necessary to address potential budget shortfalls or a budget deficit.</p> <p><b>Primary Investment Goal:</b> liquidity, capital preservation, and capital appreciation.</p> <p><b>LSRA LT Reserve Target Equity Allocation:</b> 87.5%</p> <p><b>Spending Policy:</b> Legislative Appropriation</p> <p><b>Participating Funds:</b></p> <ul style="list-style-type: none"> <li>• Long Term Reserve</li> <li>• Intermediate Term Reserve: 100% Core Fixed Income</li> <li>• Short Term Reserve: 100% Low Duration Fixed Income</li> </ul>

Target Allocation			
	Minimum Range (%)	Target (%)	Maximum Range (%)
<b>LSRA Long Term Reserve</b>	-	<b>100.00</b>	-
Broad US Equity	17.00	22.00	27.00
Small Cap US Equity	4.00	6.00	8.00
International Equity	21.00	28.00	35.00
Bank Loans	10.00	12.50	15.00
Private Equity	0.00	0.00	0.00
MLPs	10.00	12.50	15.00
Diversified Hedge Funds	15.00	19.00	23.00
Opportunistic Investments	0.00	0.00	0.00
Cash (inv. in SAP)	0.00	0.00	0.00



Risk Metrics		
	Since Incep.	Inception Date
Standard Deviation	6.8	07/01/2019
Beta	0.3	
Sharpe Ratio	0.3	

Comparative Performance									
	Allocation			Performance (%)					
	Market Value (\$) (\$)	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years
<b>LSRA</b>	<b>1,560,722,589</b>	<b>2.3</b>	<b>7.1</b>	<b>2.3</b>	<b>8.4</b>	<b>2.6</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>
LSRA - Total Fund Index		1.8	6.5	1.8	7.4	1.9	N/A	N/A	N/A
Difference		0.5	0.6	0.5	1.0	0.7	N/A	N/A	N/A

Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding. Target Allocation represents long term reserve.



Wyoming State Treasurer's Office  
Asset Allocation

As of March 31, 2024

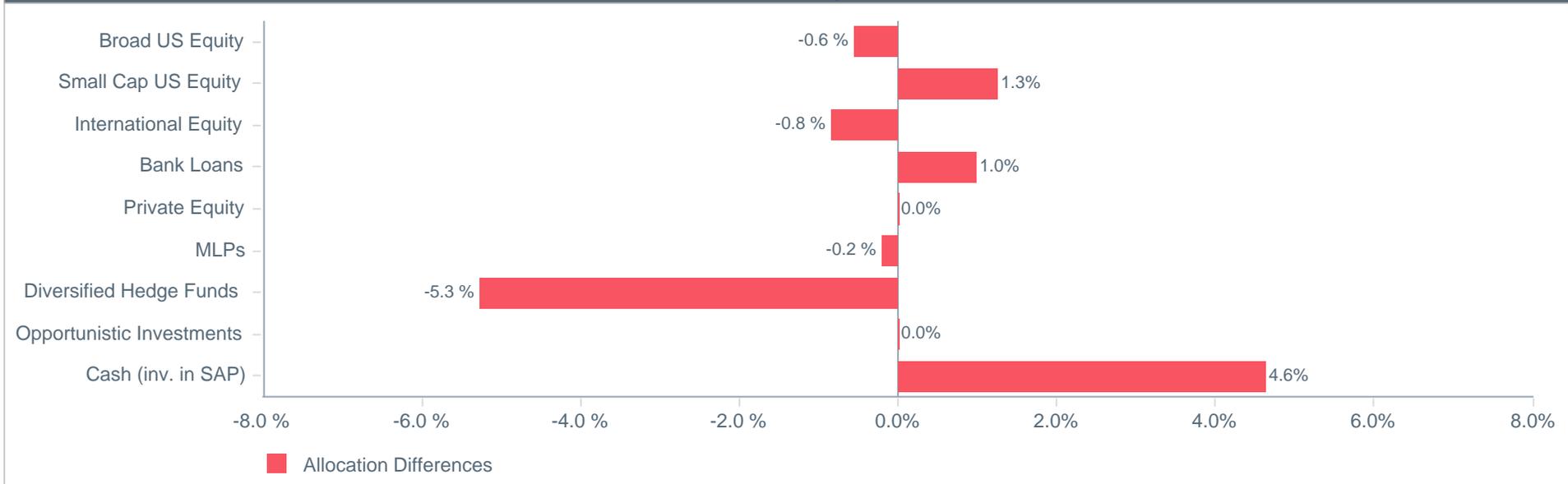
	Asset Allocation (\$)	Asset Allocation (%)
<b>LSRA</b>	<b>1,560,722,589</b>	<b>100.00</b>
Broad US Equity	107,498,290	6.89
Small Cap US Equity	36,396,468	2.33
International Equity	136,192,871	8.73
Core Fixed Income	434,634,670	27.85
Bank Loans	67,630,633	4.33
Low Duration Fixed Income	624,645,357	40.02
Private Equity	35,304	0.00
MLPs	61,601,764	3.95
Diversified Hedge Funds	68,839,800	4.41
Opportunistic Investments	-	0.00
Cash (inv. in SAP)	23,247,433	1.49

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

Asset Allocation vs. Target

	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)
<b>LSRA Long Term Reserve</b>	<b>501,442,562</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>
Broad US Equity	107,498,290	21.44	17.00	22.00	27.00
Small Cap US Equity	36,396,468	7.26	4.00	6.00	8.00
International Equity	136,192,871	27.16	21.00	28.00	35.00
Bank Loans	67,630,633	13.49	10.00	12.50	15.00
Private Equity	35,304	0.01	0.00	0.00	0.00
MLPs	61,601,764	12.28	10.00	12.50	15.00
Diversified Hedge Funds	68,839,800	13.73	15.00	19.00	23.00
Opportunistic Investments	-	0.00	0.00	0.00	0.00
Cash (inv. in SAP)	23,247,433	4.64	0.00	0.00	0.00

Asset Allocation vs. Target Differences



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

**Wyoming State Treasurer's Office  
Asset Allocation**

**As of March 31, 2024**

	<b>Asset Allocation (\$)</b>	<b>Asset Allocation (%)</b>	<b>Minimum Allocation (%)</b>	<b>Target Allocation (%)</b>	<b>Maximum Allocation (%)</b>
<b>LSRA Intermediate Term Reserve</b>	<b>434,634,670</b>	<b>100.00</b>	-	<b>100.00</b>	-
Core Fixed Income	434,634,670	100.00	100.00	100.00	100.00

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

**Wyoming State Treasurer's Office  
Asset Allocation**

**As of March 31, 2024**

	<b>Asset Allocation (\$)</b>	<b>Asset Allocation (%)</b>	<b>Minimum Allocation (%)</b>	<b>Target Allocation (%)</b>	<b>Maximum Allocation (%)</b>
<b>LSRA Short Term Reserve</b>	<b>624,645,357</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>	<b>-</b>
Low Duration Fixed Income	624,645,357	100.00	100.00	100.00	100.00

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



	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	Since Incep.	Inception Date
<b>All Cap US Equity</b>	<b>2,339,393,971</b>	<b>8.1</b>	<b>10.6</b>	<b>10.6</b>	<b>19.5</b>	<b>29.9</b>	<b>11.3</b>	<b>14.5</b>	<b>13.2</b>	<b>N/A</b>	<b>26.2</b>	<b>12.7</b>	<b>11/01/2014</b>
All Cap US Equity Custom Index			10.6	10.6	19.4	29.9	11.5	14.9	13.8	12.6	26.3	12.5	
Difference			0.0	0.0	0.1	0.0	-0.2	-0.4	-0.6	N/A	-0.1	0.2	
<b>Small Cap US Equity</b>	<b>555,283,999</b>	<b>1.9</b>	<b>4.8</b>	<b>4.8</b>	<b>12.8</b>	<b>17.2</b>	<b>3.8</b>	<b>9.4</b>	<b>7.5</b>	<b>N/A</b>	<b>20.7</b>	<b>7.3</b>	<b>11/01/2014</b>
Russell 2000 Index			5.2	5.2	13.8	19.7	-0.1	8.1	7.7	7.6	16.9	8.0	
Difference			-0.4	-0.4	-1.0	-2.5	3.9	1.3	-0.2	N/A	3.8	-0.7	
<b>Int'l Equity</b>	<b>3,671,071,753</b>	<b>12.7</b>	<b>6.2</b>	<b>6.2</b>	<b>13.2</b>	<b>17.3</b>	<b>4.2</b>	<b>8.9</b>	<b>8.1</b>	<b>5.7</b>	<b>18.4</b>	<b>6.3</b>	<b>01/01/2004</b>
International Equity Custom Index			5.0	5.0	11.5	14.2	2.2	6.1	6.0	4.3	16.3	5.3	
Difference			1.2	1.2	1.7	3.1	2.0	2.8	2.1	1.4	2.1	1.0	
<b>Preferred Stock</b>	<b>76,758,711</b>	<b>0.3</b>	<b>4.1</b>	<b>4.1</b>	<b>12.0</b>	<b>14.4</b>	<b>0.9</b>	<b>4.2</b>	<b>N/A</b>	<b>N/A</b>	<b>7.0</b>	<b>4.5</b>	<b>07/01/2018</b>
Preferred Stock Custom Index			3.8	3.8	10.8	13.1	1.3	4.3	4.1	4.8	8.6	4.1	
Difference			0.3	0.3	1.2	1.3	-0.4	-0.1	N/A	N/A	-1.6	0.4	
<b>MLPs</b>	<b>1,236,196,328</b>	<b>4.3</b>	<b>13.1</b>	<b>13.1</b>	<b>26.6</b>	<b>30.1</b>	<b>26.4</b>	<b>11.3</b>	<b>N/A</b>	<b>N/A</b>	<b>18.6</b>	<b>9.0</b>	<b>08/01/2018</b>
MLP Custom Index			12.0	12.0	25.7	31.5	25.0	9.8	6.2	2.8	20.2	8.2	
Difference			1.1	1.1	0.9	-1.4	1.4	1.5	N/A	N/A	-1.6	0.8	
<b>Private Equity</b>	<b>1,337,380,373</b>	<b>4.6</b>	<b>1.8</b>	<b>1.8</b>	<b>8.2</b>	<b>15.3</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>19.2</b>	<b>12.6</b>	<b>07/01/2021</b>
Cambridge US Private Equity Index			1.9	1.9	5.6	8.4	11.5	15.4	15.3	13.9	9.1	7.7	
Difference			-0.1	-0.1	2.6	6.9	N/A	N/A	N/A	N/A	10.1	4.9	
<b>Private Credit</b>	<b>319,131,149</b>	<b>1.1</b>	<b>2.8</b>	<b>2.8</b>	<b>8.7</b>	<b>11.0</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10.4</b>	<b>10.1</b>	<b>10/01/2022</b>
BB US Intermediate Agg + 400 bps			0.6	0.6	6.2	6.4	2.3	4.6	5.2	5.5	9.4	8.5	
Difference			2.2	2.2	2.5	4.6	N/A	N/A	N/A	N/A	1.0	1.6	
<b>Core Real Estate</b>	<b>1,238,918,802</b>	<b>4.3</b>	<b>-2.3</b>	<b>-2.3</b>	<b>-6.9</b>	<b>-11.3</b>	<b>3.0</b>	<b>2.5</b>	<b>3.8</b>	<b>5.9</b>	<b>-13.2</b>	<b>4.9</b>	<b>01/01/2006</b>
NCREIF ODCE Index (AWA) (Net)			-2.6	-2.6	-9.4	-12.0	2.5	2.6	3.8	5.8	-12.7	5.0	
Difference			0.3	0.3	2.5	0.7	0.5	-0.1	0.0	0.1	-0.5	-0.1	
<b>Non-Core Real Estate</b>	<b>593,286,188</b>	<b>2.1</b>	<b>-1.6</b>	<b>-1.6</b>	<b>-5.8</b>	<b>-5.7</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-6.2</b>	<b>3.8</b>	<b>07/01/2021</b>
NCREIF ODCE Index (AWA) (Net)			-2.6	-2.6	-9.4	-12.0	2.5	2.6	3.8	5.8	-12.7	1.4	
Difference			1.0	1.0	3.6	6.3	N/A	N/A	N/A	N/A	6.5	2.4	
<b>Diversified Hedge Funds</b>	<b>1,285,732,808</b>	<b>4.4</b>	<b>5.0</b>	<b>5.0</b>	<b>9.6</b>	<b>13.4</b>	<b>3.5</b>	<b>3.8</b>	<b>3.3</b>	<b>2.5</b>	<b>9.8</b>	<b>2.8</b>	<b>12/01/2007</b>
HFRI FOF Comp Index			4.2	4.2	8.0	9.7	2.9	5.0	4.4	3.6	6.1	2.2	
Difference			0.8	0.8	1.6	3.7	0.6	-1.2	-1.1	-1.1	3.7	0.6	

Wyoming State Treasurer's Office  
Asset Allocation & Performance

As of March 31, 2024

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	Since Incep.	Inception Date
<b>Infrastructure</b>	<b>500,125,854</b>	<b>1.7</b>	<b>1.8</b>	<b>1.8</b>	<b>22.7</b>	<b>26.7</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>26.7</b>	<b>12.1</b>	<b>04/01/2022</b>
10 Year US Treasury Yield + 350 bps			1.8	1.8	5.7	7.5	N/A	N/A	N/A	N/A	7.5	7.2	
Difference			0.0	0.0	17.0	19.2	N/A	N/A	N/A	N/A	19.2	4.9	
<b>Core Fixed Income</b>	<b>3,557,728,714</b>	<b>12.3</b>	<b>-0.5</b>	<b>-0.5</b>	<b>3.0</b>	<b>2.2</b>	<b>-2.2</b>	<b>0.6</b>	<b>1.3</b>	<b>1.7</b>	<b>5.9</b>	<b>1.5</b>	<b>01/01/2013</b>
Bloomberg US Agg Bond Index			-0.8	-0.8	2.6	1.7	-2.5	0.4	1.1	1.5	5.5	1.4	
Difference			0.3	0.3	0.4	0.5	0.3	0.2	0.2	0.2	0.4	0.1	
<b>Bank Loans</b>	<b>612,438,714</b>	<b>2.1</b>	<b>2.7</b>	<b>2.7</b>	<b>8.2</b>	<b>11.4</b>	<b>5.6</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>12.4</b>	<b>5.4</b>	<b>09/01/2019</b>
Bank Loans Custom Index			2.5	2.5	8.6	12.3	5.7	5.3	4.8	4.5	12.7	5.3	
Difference			0.2	0.2	-0.4	-0.9	-0.1	N/A	N/A	N/A	-0.3	0.1	
<b>Opportunistic Fixed Income</b>	<b>9,910,838</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>-15.9</b>	<b>-16.0</b>	<b>-6.2</b>	<b>-4.5</b>	<b>-1.4</b>	<b>N/A</b>	<b>-16.3</b>	<b>0.6</b>	<b>07/01/2014</b>
Credit Suisse Western Euro Hi Yld Index			1.6	1.6	9.9	12.4	2.9	4.4	4.7	5.0	15.0	4.8	
Difference			-1.6	-1.6	-25.8	-28.4	-9.1	-8.9	-6.1	N/A	-31.3	-4.2	
<b>Emerging Market Debt</b>	<b>1,101,353,315</b>	<b>3.8</b>	<b>2.0</b>	<b>2.0</b>	<b>7.4</b>	<b>10.7</b>	<b>0.5</b>	<b>2.1</b>	<b>1.7</b>	<b>0.1</b>	<b>11.3</b>	<b>-0.7</b>	<b>04/01/2013</b>
EMD Custom Benchmark			0.7	0.7	6.3	8.5	-1.0	0.8	1.2	0.0	11.0	-0.6	
Difference			1.3	1.3	1.1	2.2	1.5	1.3	0.5	0.1	0.3	-0.1	
<b>SAP Treasury Composite</b>	<b>4,767,523,355</b>	<b>16.5</b>	<b>0.5</b>	<b>0.5</b>	<b>3.6</b>	<b>3.5</b>	<b>0.8</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>4.7</b>	<b>1.3</b>	<b>10/01/2019</b>
<b>Long Duration Fixed Income</b>	<b>762,034,220</b>	<b>2.6</b>	<b>-2.5</b>	<b>-2.5</b>	<b>0.0</b>	<b>-1.5</b>	<b>-6.1</b>	<b>-0.5</b>	<b>N/A</b>	<b>N/A</b>	<b>7.1</b>	<b>0.7</b>	<b>01/01/2019</b>
Bloomberg US Govt Crdt Lng Trm Bond Index			-2.4	-2.4	0.2	-1.1	-6.0	-0.6	1.0	2.3	7.1	0.6	
Difference			-0.1	-0.1	-0.2	-0.4	-0.1	0.1	N/A	N/A	0.0	0.1	
<b>Low Duration Fixed Income</b>	<b>656,752,122</b>	<b>2.3</b>	<b>0.4</b>	<b>0.4</b>	<b>3.9</b>	<b>3.5</b>	<b>0.7</b>	<b>1.6</b>	<b>N/A</b>	<b>N/A</b>	<b>4.7</b>	<b>1.8</b>	<b>12/01/2018</b>
Low Duration Fixed Income Custom Index			0.3	0.3	3.6	3.0	0.0	1.1	1.3	1.2	4.3	1.4	
Difference			0.1	0.1	0.3	0.5	0.7	0.5	N/A	N/A	0.4	0.4	
<b>Transition Low Duration Fixed Income</b>	<b>1,561,767,344</b>	<b>5.4</b>	<b>1.7</b>	<b>1.7</b>	<b>6.1</b>	<b>7.8</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>7.7</b>	<b>3.3</b>	<b>11/01/2021</b>
Transition Fixed Income Custom Index			1.5	1.5	6.3	7.8	2.9	3.1	3.0	2.8	8.0	3.3	
Difference			0.2	0.2	-0.2	0.0	N/A	N/A	N/A	N/A	-0.3	0.0	
<b>Opportunistic Investments</b>	<b>190,776,870</b>	<b>0.7</b>	<b>12.6</b>	<b>12.6</b>	<b>31.6</b>	<b>38.2</b>	<b>2.8</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>20.8</b>	<b>16.7</b>	<b>07/01/2020</b>
Opportunistic Custom Benchmark			3.1	3.1	7.9	10.1	3.7	N/A	N/A	N/A	10.2	6.5	
Difference			9.5	9.5	23.7	28.1	-0.9	N/A	N/A	N/A	10.6	10.2	
<b>Public Purpose Investments</b>	<b>365,749,956</b>	<b>1.3</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	

Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Wyoming State Treasurer's Office fiscal year ends on June 30th.



Wyoming State Treasurer's Office  
 Asset Allocation & Performance

As of March 31, 2024

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	Since Incep.	Inception Date
<b>Cash Equivalents</b>	<b>2,158,685,665</b>	<b>7.5</b>	<b>1.3</b>	<b>1.3</b>	<b>4.1</b>	<b>5.4</b>	<b>2.7</b>	<b>2.0</b>	<b>1.9</b>	<b>1.4</b>	<b>5.2</b>	<b>1.7</b>	<b>01/01/2006</b>
JP Morgan Cash Custom Index			1.3	1.3	4.0	5.2	2.6	2.0	1.9	1.4	5.0	1.7	
Difference			0.0	0.0	0.1	0.2	0.1	0.0	0.0	0.0	0.2	0.0	
<b>Total Fund</b>	<b>28,900,229,565</b>	<b>100.0</b>	<b>3.0</b>	<b>3.0</b>	<b>7.8</b>	<b>9.7</b>	<b>4.5</b>	<b>5.7</b>	<b>5.4</b>	<b>4.9</b>	<b>9.9</b>	<b>5.5</b>	<b>10/01/1996</b>
Wyoming State Total Fund Index			2.4	2.4	6.6	8.1	3.5	5.1	4.9	4.5	8.6	5.3	
Difference			0.6	0.6	1.2	1.6	1.0	0.6	0.5	0.4	1.3	0.2	

Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Wyoming State Treasurer's Office fiscal year ends on June 30th.



	Allocation	Performance (%)									
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Public Equity</b>											
<b>All Cap US Equity Composite</b>	<b>2,339,393,971</b>	<b>10.64</b>	<b>10.64</b>	<b>19.51</b>	<b>29.90</b>	<b>11.32</b>	<b>14.53</b>	<b>13.20</b>	<b>N/A</b>	<b>12.67</b>	<b>11/01/2014</b>
All Cap US Equity Custom Index		10.56	10.56	19.44	29.88	11.49	14.88	13.84	12.60	12.53	
Difference		0.08	0.08	0.07	0.02	-0.17	-0.35	-0.64	N/A	0.14	
<b>State Street All Cap</b>	<b>2,102,962,182</b>	<b>10.52</b>	<b>10.52</b>	<b>19.37</b>	<b>29.77</b>	<b>11.44</b>	<b>14.62</b>	<b>13.50</b>	<b>N/A</b>	<b>12.20</b>	<b>01/01/2015</b>
State Street All Cap Custom Index		10.56	10.56	19.44	29.88	11.49	14.69	13.49	12.38	12.22	
Difference		-0.04	-0.04	-0.07	-0.11	-0.05	-0.07	0.01	N/A	-0.02	
<b>Internal Domestic Equity Quantitative</b>	<b>102,028,108</b>	<b>13.98</b>	<b>13.98</b>	<b>23.86</b>	<b>34.06</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>10.54</b>	<b>06/01/2021</b>
S&P 500 Index (Cap Wtd)		10.56	10.56	19.44	29.88	11.49	15.05	14.09	12.96	9.90	
Difference		3.42	3.42	4.42	4.18	N/A	N/A	N/A	N/A	0.64	
<b>SPDR S&amp;P 500 ETF Trust</b>	<b>134,372,443</b>	<b>10.30</b>	<b>10.30</b>	<b>19.33</b>	<b>29.68</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>532.08</b>	<b>09/01/2022</b>
S&P 500 Index (Cap Wtd)		10.56	10.56	19.44	29.88	11.49	15.05	14.09	12.96	21.63	
Difference		-0.26	-0.26	-0.11	-0.20	N/A	N/A	N/A	N/A	510.45	
<b>UW Portfolio Mgmt Program</b>	<b>2,176,049</b>	<b>8.83</b>	<b>8.83</b>	<b>15.93</b>	<b>24.17</b>	<b>8.08</b>	<b>11.29</b>	<b>10.53</b>	<b>10.26</b>	<b>6.68</b>	<b>04/01/2006</b>
S&P 500 Index (Cap Wtd)		10.56	10.56	19.44	29.88	11.49	15.05	14.09	12.96	10.26	
Difference		-1.73	-1.73	-3.51	-5.71	-3.41	-3.76	-3.56	-2.70	-3.58	
<b>Small Cap US Equity Composite</b>	<b>555,283,999</b>	<b>4.80</b>	<b>4.80</b>	<b>12.79</b>	<b>17.22</b>	<b>3.81</b>	<b>9.45</b>	<b>7.46</b>	<b>N/A</b>	<b>7.29</b>	<b>11/01/2014</b>
Russell 2000 Index		5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	7.98	
Difference		-0.38	-0.38	-1.00	-2.49	3.91	1.35	-0.27	N/A	-0.69	
<b>Van Berkomp</b>	<b>288,214,174</b>	<b>3.63</b>	<b>3.63</b>	<b>11.19</b>	<b>14.39</b>	<b>5.47</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.89</b>	<b>03/01/2020</b>
Russell 2000 Index		5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	10.81	
Difference		-1.55	-1.55	-2.60	-5.32	5.57	N/A	N/A	N/A	1.08	
<b>BlackRock Small Cap</b>	<b>480,372</b>	<b>3.12</b>	<b>3.12</b>	<b>12.57</b>	<b>16.71</b>	<b>-0.23</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.93</b>	<b>08/01/2020</b>
Russell 2000 Index		5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	11.84	
Difference		-2.06	-2.06	-1.22	-3.00	-0.13	N/A	N/A	N/A	0.09	
<b>Internal Small Cap Equity Quantamental</b>	<b>138,171,449</b>	<b>8.43</b>	<b>8.43</b>	<b>17.80</b>	<b>27.18</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>3.86</b>	<b>06/01/2021</b>
Russell 2000 Index		5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	-0.91	
Difference		3.25	3.25	4.01	7.47	N/A	N/A	N/A	N/A	4.77	

Performance shown is net of fees. The All Cap US Equity Custom Index consists of the Russell 3000 Index through 02/29/2020, and the S&P 500 Index thereafter. The SSGA Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 02/27/2020, SSGA account performance on 02/28/2020, and the S&P 500 Index thereafter. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office  
Asset Allocation & Performance

As of March 31, 2024

	Allocation				Performance (%)						
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Internal Small Cap Equity Quantitative</b>	<b>128,418,005</b>	<b>4.08</b>	<b>4.08</b>	<b>12.11</b>	<b>16.64</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.67</b>	<b>11/01/2021</b>
Russell 2000 Index		5.18	5.18	13.79	19.71	-0.10	8.10	7.73	7.58	-1.73	
Difference		-1.10	-1.10	-1.68	-3.07	N/A	N/A	N/A	N/A	3.40	
<b>International Equity Composite</b>	<b>3,671,071,753</b>	<b>6.21</b>	<b>6.21</b>	<b>13.16</b>	<b>17.26</b>	<b>4.21</b>	<b>8.94</b>	<b>8.07</b>	<b>5.68</b>	<b>6.30</b>	<b>01/01/2004</b>
International Equity Custom Index		4.97	4.97	11.50	14.21	2.22	6.14	6.00	4.34	5.34	
Difference		1.24	1.24	1.66	3.05	1.99	2.80	2.07	1.34	0.96	
<b>Northern Trust</b>	<b>1,723,366,563</b>	<b>5.22</b>	<b>5.22</b>	<b>12.24</b>	<b>15.16</b>	<b>2.56</b>	<b>6.43</b>	<b>6.28</b>	<b>4.55</b>	<b>5.56</b>	<b>08/01/2010</b>
MSCI All Country World Ex US Ux China Index		5.24	5.24	12.41	15.15	2.50	6.32	6.13	4.43	5.45	
Difference		-0.02	-0.02	-0.17	0.01	0.06	0.11	0.15	0.12	0.11	
<b>Arrowstreet</b>	<b>1,244,288,898</b>	<b>10.08</b>	<b>10.08</b>	<b>19.50</b>	<b>25.96</b>	<b>8.24</b>	<b>13.29</b>	<b>N/A</b>	<b>N/A</b>	<b>9.45</b>	<b>03/01/2018</b>
MSCI ACW Ex US IM Index (USD) (Net)		4.33	4.33	10.56	13.20	1.72	6.00	5.85	4.32	3.74	
Difference		5.75	5.75	8.94	12.76	6.52	7.29	N/A	N/A	5.71	
<b>Harding Loevner</b>	<b>487,406,286</b>	<b>1.72</b>	<b>1.72</b>	<b>5.29</b>	<b>8.71</b>	<b>1.41</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.71</b>	<b>01/01/2020</b>
MSCI ACW Ex US Index (USD) (Net)		4.69	4.69	10.56	13.26	1.94	5.97	5.88	4.25	4.65	
Difference		-2.97	-2.97	-5.27	-4.55	-0.53	N/A	N/A	N/A	1.06	
<b>Internal International Equity Quantitative</b>	<b>103,165,689</b>	<b>5.74</b>	<b>5.74</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.53</b>	<b>08/01/2023</b>
MSCI ACW Ex US Index (USD) (Net)		4.69	4.69	10.56	13.26	1.94	5.97	5.88	4.25	6.24	
Difference		1.05	1.05	N/A	N/A	N/A	N/A	N/A	N/A	-0.71	
<b>Internal International Equity ETF Account</b>	<b>60,067,510</b>	<b>5.39</b>	<b>5.39</b>	<b>12.48</b>	<b>15.77</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>24.60</b>	<b>10/01/2022</b>
MSCI All Country World Ex US Ux China Index		5.24	5.24	12.42	15.16	2.50	6.32	6.13	4.43	25.53	
Difference		0.15	0.15	0.06	0.61	N/A	N/A	N/A	N/A	-0.93	
<b>Hybrid Assets</b>											
<b>Cohen &amp; Steers</b>	<b>76,758,711</b>	<b>4.30</b>	<b>4.30</b>	<b>12.80</b>	<b>15.22</b>	<b>1.09</b>	<b>4.35</b>	<b>N/A</b>	<b>N/A</b>	<b>4.66</b>	<b>07/01/2018</b>
Preferred Stock Custom Index		3.76	3.76	10.76	13.09	1.31	4.26	4.06	4.78	4.08	
Difference		0.54	0.54	2.04	2.13	-0.22	0.09	N/A	N/A	0.58	
<b>MLP</b>	<b>1,236,196,328</b>	<b>13.12</b>	<b>13.12</b>	<b>26.59</b>	<b>30.12</b>	<b>26.36</b>	<b>11.31</b>	<b>N/A</b>	<b>N/A</b>	<b>8.97</b>	<b>08/01/2018</b>
MLP Custom Index		12.03	12.03	25.73	31.49	24.97	9.81	6.21	2.75	8.19	
Difference		1.09	1.09	0.86	-1.37	1.39	1.50	N/A	N/A	0.78	

Performance shown is net of fees. The International Equity Custom Index consists of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter. The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% BB Dev Market USD Contingent Capital 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.



	Allocation	Performance (%)									
	Market Value (\$) (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Harvest Fund Advisors</b>	<b>686,518,297</b>	<b>14.17</b>	<b>14.17</b>	<b>27.76</b>	<b>30.37</b>	<b>28.28</b>	<b>12.07</b>	<b>N/A</b>	<b>N/A</b>	<b>9.62</b>	<b>08/01/2018</b>
MLP Custom Index		12.03	12.03	25.73	31.49	24.97	9.81	6.21	2.75	8.19	
Difference		2.14	2.14	2.03	-1.12	3.31	2.26	N/A	N/A	1.43	
<b>Harvest Fund Advisors Passive</b>	<b>549,678,032</b>	<b>11.96</b>	<b>11.96</b>	<b>25.38</b>	<b>30.02</b>	<b>24.95</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>15.91</b>	<b>02/01/2020</b>
MLP Custom Index		12.03	12.03	25.73	31.49	24.97	9.81	6.21	2.75	15.79	
Difference		-0.07	-0.07	-0.35	-1.47	-0.02	N/A	N/A	N/A	0.12	
<b>Real Estate</b>											
<b>Core Real Estate</b>	<b>1,238,918,802</b>	<b>-2.25</b>	<b>-2.25</b>	<b>-6.87</b>	<b>-11.26</b>	<b>2.96</b>	<b>2.54</b>	<b>3.81</b>	<b>5.87</b>	<b>4.93</b>	<b>01/01/2006</b>
NCREIF ODCE Index (AWA) (Net)		-2.58	-2.58	-9.39	-12.00	2.47	2.56	3.76	5.82	4.99	
Difference		0.33	0.33	2.52	0.74	0.49	-0.02	0.05	0.05	-0.06	
<b>Clarion Lion Properties LP</b>	<b>712,386,062</b>	<b>-2.80</b>	<b>-2.80</b>	<b>-8.31</b>	<b>-13.87</b>	<b>2.28</b>	<b>3.06</b>	<b>4.52</b>	<b>6.74</b>	<b>4.84</b>	<b>01/01/2006</b>
NCREIF ODCE Index (AWA) (Net)		-2.58	-2.58	-9.39	-12.00	2.47	2.56	3.76	5.82	4.99	
Difference		-0.22	-0.22	1.08	-1.87	-0.19	0.50	0.76	0.92	-0.15	
<b>UBS Trumbull</b>	<b>143,106,641</b>	<b>-1.82</b>	<b>-1.82</b>	<b>-7.36</b>	<b>-10.60</b>	<b>-0.12</b>	<b>-1.49</b>	<b>0.49</b>	<b>2.97</b>	<b>3.50</b>	<b>07/01/2006</b>
NCREIF ODCE Index (AWA) (Net)		-2.58	-2.58	-9.39	-12.00	2.47	2.56	3.76	5.82	4.71	
Difference		0.76	0.76	2.03	1.40	-2.59	-4.05	-3.27	-2.85	-1.21	
<b>Morgan Stanley Prime Property LLC</b>	<b>383,426,100</b>	<b>-1.34</b>	<b>-1.34</b>	<b>-3.72</b>	<b>-5.88</b>	<b>5.56</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.75</b>	<b>10/01/2020</b>
NCREIF ODCE Index (AWA) (Net)		-2.58	-2.58	-9.39	-12.00	2.47	2.56	3.76	5.82	2.98	
Difference		1.24	1.24	5.67	6.12	3.09	N/A	N/A	N/A	2.77	
<b>Diversified Hedge Funds</b>											
<b>Diversified Hedge Funds Composite</b>	<b>1,285,732,808</b>	<b>5.01</b>	<b>5.01</b>	<b>9.63</b>	<b>13.36</b>	<b>3.53</b>	<b>3.79</b>	<b>3.26</b>	<b>2.53</b>	<b>2.76</b>	<b>12/01/2007</b>
HFRI FOF Comp Index		4.18	4.18	8.03	9.68	2.88	5.00	4.37	3.59	2.23	
Difference		0.83	0.83	1.60	3.68	0.65	-1.21	-1.11	-1.06	0.53	
<b>Grosvenor Diversified Hedge Funds</b>	<b>517,520,937</b>	<b>5.37</b>	<b>5.37</b>	<b>9.92</b>	<b>13.76</b>	<b>4.34</b>	<b>5.10</b>	<b>N/A</b>	<b>N/A</b>	<b>4.21</b>	<b>07/01/2018</b>
HFRI FOF Comp Index		4.18	4.18	8.03	9.68	2.88	5.00	4.37	3.59	4.28	
Difference		1.19	1.19	1.89	4.08	1.46	0.10	N/A	N/A	-0.07	

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office  
 Asset Allocation & Performance

As of March 31, 2024

	Allocation				Performance (%)						
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Internal Diversified Hedge Funds	768,211,726	4.77	4.77	9.44	13.10	2.98	3.61	N/A	N/A	3.61	07/01/2018
HFRI FOF Comp Index		4.18	4.18	8.03	9.68	2.88	5.00	4.37	3.59	4.28	
Difference		0.59	0.59	1.41	3.42	0.10	-1.39	N/A	N/A	-0.67	

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.



	Allocation	Performance (%)									
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Infrastructure</b>											
<b>Infrastructure</b>	<b>500,125,854</b>	<b>1.84</b>	<b>1.84</b>	<b>22.70</b>	<b>26.67</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>12.12</b>	<b>04/01/2022</b>
10 Year US Treasury Yield + 350 bps		1.83	1.83	5.72	7.53	N/A	N/A	N/A	N/A	7.17	
Difference		0.01	0.01	16.98	19.14	N/A	N/A	N/A	N/A	4.95	
<b>Macquarie Infrastructure</b>	<b>219,271,597</b>	<b>-0.72</b>	<b>-0.72</b>	<b>8.24</b>	<b>10.74</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.83</b>	<b>04/01/2022</b>
10 Year US Treasury Yield + 350 bps		1.83	1.83	5.72	7.53	N/A	N/A	N/A	N/A	7.17	
Difference		-2.55	-2.55	2.52	3.21	N/A	N/A	N/A	N/A	-1.34	
<b>MGIF Co-Investment 3</b>	<b>26,625,175</b>	<b>-1.08</b>	<b>-1.08</b>	<b>1.54</b>	<b>4.09</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>4.76</b>	<b>10/01/2022</b>
10 Year US Treasury Yield + 350 bps		1.83	1.83	5.72	7.53	N/A	N/A	N/A	N/A	7.46	
Difference		-2.91	-2.91	-4.18	-3.44	N/A	N/A	N/A	N/A	-2.70	
<b>Grosvenor Silvery Lupine Fund Class E LLC</b>	<b>105,876,465</b>	<b>21.35</b>	<b>21.35</b>	<b>119.25</b>	<b>136.51</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>120.31</b>	<b>03/01/2023</b>
10 Year US Treasury Yield + 350 bps		1.83	1.83	5.72	7.53	N/A	N/A	N/A	N/A	7.52	
Difference		19.52	19.52	113.53	128.98	N/A	N/A	N/A	N/A	112.79	
<b>Opportunistic Investments</b>											
<b>Opportunistic Investments</b>	<b>190,829,338</b>	<b>12.56</b>	<b>12.56</b>	<b>31.59</b>	<b>38.21</b>	<b>2.75</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>16.66</b>	<b>07/01/2020</b>
Opportunistic Custom Benchmark		3.14	3.14	7.93	10.14	3.72	N/A	N/A	N/A	6.52	
Difference		9.42	9.42	23.66	28.07	-0.97	N/A	N/A	N/A	10.14	
<b>Grosvenor Opportunistic Class D</b>	<b>190,776,870</b>	<b>12.56</b>	<b>12.56</b>	<b>31.59</b>	<b>38.22</b>	<b>2.76</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>16.67</b>	<b>07/01/2020</b>
Opportunistic Custom Benchmark		3.14	3.14	7.93	10.14	3.72	N/A	N/A	N/A	6.52	
Difference		9.42	9.42	23.66	28.08	-0.96	N/A	N/A	N/A	10.15	
<b>Internal Opportunistic</b>	<b>52,468</b>	<b>10.36</b>	<b>10.36</b>	<b>19.22</b>	<b>29.56</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>21.35</b>	<b>09/01/2022</b>
Opportunistic Custom Benchmark		3.14	3.14	7.93	10.14	3.72	N/A	N/A	N/A	7.84	
Difference		7.22	7.22	11.29	19.42	N/A	N/A	N/A	N/A	13.51	

Performance shown is net of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

	Allocation	Performance (%)									
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Fixed Income</b>											
<b>Core Fixed Income</b>	<b>3,557,728,714</b>	<b>-0.48</b>	<b>-0.48</b>	<b>2.97</b>	<b>2.18</b>	<b>-2.19</b>	<b>0.61</b>	<b>1.28</b>	<b>1.69</b>	<b>1.46</b>	<b>01/01/2013</b>
Bloomberg US Agg Bond Index		-0.78	-0.78	2.56	1.70	-2.46	0.36	1.06	1.54	1.35	
Difference		0.30	0.30	0.41	0.48	0.27	0.25	0.22	0.15	0.11	
<b>Internal Aggregate Core Fixed Income</b>	<b>2,370,717,909</b>	<b>-0.51</b>	<b>-0.51</b>	<b>2.86</b>	<b>2.01</b>	<b>-2.15</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.45</b>	<b>11/01/2019</b>
Bloomberg US Agg Bond Index		-0.78	-0.78	2.56	1.70	-2.46	0.36	1.06	1.54	-0.85	
Difference		0.27	0.27	0.30	0.31	0.31	N/A	N/A	N/A	0.40	
<b>Internal Intermediate Govt Fixed Income Portfolio</b>	<b>1,095,177,120</b>	<b>-0.84</b>	<b>-0.84</b>	<b>1.56</b>	<b>0.44</b>	<b>-2.33</b>	<b>-0.19</b>	<b>0.45</b>	<b>1.01</b>	<b>3.70</b>	<b>10/01/1996</b>
Internal Intermediate Govt Fixed Income Portfolio Index		-0.96	-0.96	1.45	0.05	-2.73	-0.38	0.24	0.63	3.65	
Difference		0.12	0.12	0.11	0.39	0.40	0.19	0.21	0.38	0.05	
<b>Payden &amp; Rygel IGC</b>	<b>510,605,819</b>	<b>-0.26</b>	<b>-0.26</b>	<b>4.70</b>	<b>4.42</b>	<b>-1.99</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.15</b>	<b>11/01/2019</b>
Payden & Rygel Custom Index		-0.40	-0.40	4.73	4.43	-1.87	1.35	2.05	2.52	-0.29	
Difference		0.14	0.14	-0.03	-0.01	-0.12	N/A	N/A	N/A	0.14	
<b>JP Morgan MBS</b>	<b>764,925,146</b>	<b>-0.15</b>	<b>-0.15</b>	<b>3.54</b>	<b>2.68</b>	<b>-1.67</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.14</b>	<b>11/01/2019</b>
Bloomberg US MBS Index (Unhgd)		-1.04	-1.04	2.05	1.39	-2.84	-0.39	0.45	1.12	-1.26	
Difference		0.89	0.89	1.49	1.29	1.17	N/A	N/A	N/A	1.40	
<b>iShares Core US Agg Bond ETF</b>	<b>9,825</b>	<b>-0.73</b>	<b>-0.73</b>	<b>2.56</b>	<b>1.60</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.34</b>	<b>09/01/2022</b>
Bloomberg US Agg Bond Index		-0.78	-0.78	2.56	1.70	-2.46	0.36	1.06	1.54	1.30	
Difference		0.05	0.05	0.00	-0.10	N/A	N/A	N/A	N/A	0.04	
<b>PIMCO</b>	<b>1,187,010,804</b>	<b>-0.41</b>	<b>-0.41</b>	<b>3.15</b>	<b>2.54</b>	<b>-2.30</b>	<b>0.48</b>	<b>1.23</b>	<b>1.70</b>	<b>1.41</b>	<b>01/01/2013</b>
PIMCO Custom Index		-0.78	-0.78	2.56	1.70	-2.49	0.32	0.98	1.49	1.30	
Difference		0.37	0.37	0.59	0.84	0.19	0.16	0.25	0.21	0.11	
<b>Bank Loans Composite</b>	<b>612,438,714</b>	<b>2.72</b>	<b>2.72</b>	<b>8.21</b>	<b>11.42</b>	<b>5.58</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>5.38</b>	<b>09/01/2019</b>
Bank Loans Custom Index		2.52	2.52	8.64	12.27	5.68	5.29	4.83	4.45	5.28	
Difference		0.20	0.20	-0.43	-0.85	-0.10	N/A	N/A	N/A	0.10	
<b>Credit Suisse SMA</b>	<b>178,714,632</b>	<b>1.75</b>	<b>1.75</b>	<b>7.89</b>	<b>11.37</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11.37</b>	<b>04/01/2023</b>
Bank Loans Custom Index		2.52	2.52	8.64	12.27	5.68	5.29	4.83	4.45	12.27	
Difference		-0.77	-0.77	-0.75	-0.90	N/A	N/A	N/A	N/A	-0.90	

Performance shown is net of fees. Custom index composition can be found in the addendum.

	Allocation		Performance (%)									
	Market Value (\$)	(\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Octagon SMA</b>	<b>201,958,923</b>		<b>2.65</b>	<b>2.65</b>	<b>7.45</b>	<b>10.37</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>11/01/2022</b>
Bank Loans Custom Index			2.52	2.52	8.64	12.27	5.68	5.29	4.83	4.45	12.39	
Difference			0.13	0.13	-1.19	-1.90	N/A	N/A	N/A	N/A	N/A	
<b>KKR</b>	<b>231,765,159</b>		<b>3.63</b>	<b>3.63</b>	<b>9.42</b>	<b>12.86</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>6.62</b>	<b>10/01/2021</b>
Bank Loans Custom Index			2.52	2.52	8.64	12.27	5.68	5.29	4.83	4.45	5.82	
Difference			1.11	1.11	0.78	0.59	N/A	N/A	N/A	N/A	0.80	
<b>Emerging Market Debt Fixed Income</b>	<b>1,101,353,315</b>		<b>2.03</b>	<b>2.03</b>	<b>7.43</b>	<b>10.71</b>	<b>0.53</b>	<b>2.07</b>	<b>1.65</b>	<b>0.07</b>	<b>-0.74</b>	<b>04/01/2013</b>
EMD Custom Benchmark			0.74	0.74	6.30	8.46	-1.00	0.83	1.22	0.03	-0.64	
Difference			1.29	1.29	1.13	2.25	1.53	1.24	0.43	0.04	-0.10	
<b>Global Evolution</b>	<b>104,932,589</b>		<b>-2.09</b>	<b>-2.09</b>	<b>3.17</b>	<b>7.29</b>	<b>1.15</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.12</b>	<b>02/01/2020</b>
JPM GBI-EM Gbl Dvf'd Index (Unhedged)			-2.12	-2.12	2.34	4.91	-1.60	0.13	0.71	-0.32	-1.86	
Difference			0.03	0.03	0.83	2.38	2.75	N/A	N/A	N/A	1.98	
<b>Goldman Sachs</b>	<b>201,331,107</b>		<b>2.09</b>	<b>2.09</b>	<b>8.00</b>	<b>9.90</b>	<b>-0.06</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>1.09</b>	<b>03/01/2020</b>
Goldman Sachs Custom Index			2.32	2.32	7.69	9.17	-0.13	2.66	3.08	3.74	1.07	
Difference			-0.23	-0.23	0.31	0.73	0.07	N/A	N/A	N/A	0.02	
<b>Eaton Vance</b>	<b>264,791,828</b>		<b>6.06</b>	<b>6.06</b>	<b>11.34</b>	<b>16.63</b>	<b>3.45</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>3.00</b>	<b>01/01/2021</b>
JP Morgan EMB (JEMB) Hard /Local 50/50			0.02	0.02	5.31	7.57	-1.14	0.95	1.60	1.59	-2.50	
Difference			6.04	6.04	6.03	9.06	4.59	N/A	N/A	N/A	5.50	
<b>Global Evolution Hard</b>	<b>144,376,574</b>		<b>1.34</b>	<b>1.34</b>	<b>8.61</b>	<b>10.30</b>	<b>-1.10</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-2.01</b>	<b>12/01/2020</b>
JP Morgan EMBIG Div Ex CCC (USD) (TR) Index			0.42	0.42	6.57	7.74	-2.28	0.45	1.57	2.90	-2.95	
Difference			0.92	0.92	2.04	2.56	1.18	N/A	N/A	N/A	0.94	
<b>Finisterre</b>	<b>256,090,203</b>		<b>1.00</b>	<b>1.00</b>	<b>4.98</b>	<b>8.06</b>	<b>0.40</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.10</b>	<b>03/01/2021</b>
Custom EMD Benchmark (1/3 each)			0.74	0.74	6.30	8.46	-1.00	1.20	1.88	2.20	-1.47	
Difference			0.26	0.26	-1.32	-0.40	1.40	N/A	N/A	N/A	1.37	
<b>Wellington EMD</b>	<b>129,831,014</b>		<b>-0.37</b>	<b>-0.37</b>	<b>5.36</b>	<b>8.37</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>-2.91</b>	<b>09/01/2021</b>
50% JPM GBI-EM Gbl Div / 50% JPM EMBI Gbl Div			-0.05	-0.05	5.59	8.07	-1.47	0.46	1.26	1.41	-3.44	
Difference			-0.32	-0.32	-0.23	0.30	N/A	N/A	N/A	N/A	0.53	

Performance shown is net of fees. The EMD Custom Index consists of the JPM GBI-EM Gbl Dvf'd Index through 02/29/2020, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter. The Goldman Sachs Index consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter.

	Allocation				Performance (%)						
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>SAP Treasury Composite</b>	4,767,523,355	0.53	0.53	3.65	3.52	0.80	N/A	N/A	N/A	1.33	10/01/2019
<b>Internal SAP Fixed Income Portfolio</b>	4,767,523,355	0.53	0.53	3.65	3.52	0.79	N/A	N/A	N/A	1.32	10/01/2019
<b>Long Duration Fixed Income Composite</b>	762,034,220	-2.47	-2.47	-0.02	-1.45	-6.12	-0.51	N/A	N/A	0.70	01/01/2019
Bloomberg US Govt Crdt Lng Trm Bond Index		-2.41	-2.41	0.15	-1.15	-6.04	-0.62	1.00	2.32	0.60	
Difference		-0.06	-0.06	-0.17	-0.30	-0.08	0.11	N/A	N/A	0.10	
<b>Internal Long Duration Govt Fixed Income Portfolio</b>	380,608,623	-3.39	-3.39	-4.10	-6.11	-7.97	-2.84	N/A	N/A	-1.90	01/01/2019
Bloomberg US Govt Lng Trm Bond Index		-3.24	-3.24	-3.82	-6.03	-8.01	-2.77	-0.65	1.25	-1.79	
Difference		-0.15	-0.15	-0.28	-0.08	0.04	-0.07	N/A	N/A	-0.11	
<b>Metlife</b>	381,425,597	-1.56	-1.56	3.76	2.94	-4.19	1.28	N/A	N/A	2.99	11/01/2018
Bloomberg US Lng Crdt Index		-1.65	-1.65	3.75	3.31	-4.26	0.83	2.10	3.08	2.56	
Difference		0.09	0.09	0.01	-0.37	0.07	0.45	N/A	N/A	0.43	
<b>Low Duration Fixed Income</b>	656,752,122	0.35	0.35	3.87	3.48	0.66	1.57	N/A	N/A	1.83	12/01/2018
Low Duration Fixed Income Custom Index		0.29	0.29	3.58	2.98	0.03	1.15	1.28	1.19	1.45	
Difference		0.06	0.06	0.29	0.50	0.63	0.42	N/A	N/A	0.38	
<b>Internal Low Duration Govt Fixed Income Portfolio</b>	656,752,122	0.35	0.35	3.87	3.48	0.66	1.58	N/A	N/A	1.77	03/01/2018
Bloomberg US Govt 1-3 Yr Bond Index		0.29	0.29	3.58	2.98	0.03	1.14	1.21	1.07	1.42	
Difference		0.06	0.06	0.29	0.50	0.63	0.44	N/A	N/A	0.35	
<b>Transition Low Duration Fixed Income Composite</b>	1,561,767,344	1.72	1.72	6.10	7.78	N/A	N/A	N/A	N/A	3.32	11/01/2021
Transition Fixed Income Custom Index		1.52	1.52	6.29	7.79	2.92	3.11	3.00	2.76	3.33	
Difference		0.20	0.20	-0.19	-0.01	N/A	N/A	N/A	N/A	-0.01	
<b>PIMCO Transition Low Duration</b>	1,561,767,344	1.72	1.72	6.13	7.80	N/A	N/A	N/A	N/A	3.32	11/01/2021
PIMCO Low Duration Custom Index		1.52	1.52	6.32	7.81	3.07	3.20	3.06	2.80	3.51	
Difference		0.20	0.20	-0.19	-0.01	N/A	N/A	N/A	N/A	-0.19	
<b>Opportunistic Fixed Income</b>											
<b>Grosvenor Silvery Lupine Fund</b>	9,910,838	0.00	0.00	-15.90	-15.96	-6.25	-4.48	-1.42	N/A	0.61	07/01/2014
Credit Suisse Western Euro Hi Yld Index		1.57	1.57	9.88	12.42	2.91	4.38	4.68	4.97	4.84	
Difference		-1.57	-1.57	-25.78	-28.38	-9.16	-8.86	-6.10	N/A	-4.23	

Performance shown is net of fees. 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.

	Allocation	Performance (%)									
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Cash Equivalents</b>											
<b>JP Morgan Cash Composite</b>	<b>2,158,685,665</b>	<b>1.31</b>	<b>1.31</b>	<b>4.07</b>	<b>5.37</b>	<b>2.68</b>	<b>2.04</b>	<b>1.91</b>	<b>1.43</b>	<b>1.66</b>	<b>01/01/2006</b>
JP Morgan Cash Custom Index		1.29	1.29	4.03	5.24	2.58	2.04	1.92	1.43	1.67	
Difference		0.02	0.02	0.04	0.13	0.10	0.00	-0.01	0.00	-0.01	
<b>Wyo-Star Cash Composite</b>	<b>533,814,256</b>	<b>1.02</b>	<b>1.02</b>	<b>4.07</b>	<b>4.90</b>	<b>2.04</b>	<b>1.81</b>	<b>1.73</b>	<b>1.31</b>	<b>2.99</b>	<b>10/01/1996</b>
Wyo-Star Cash Custom Index		1.02	1.02	3.97	4.66	1.85	1.78	1.73	1.31	2.49	
Difference		0.00	0.00	0.10	0.24	0.19	0.03	0.00	0.00	0.50	
<b>WYO STAR II Total Fund</b>	<b>58,424,641</b>	<b>0.80</b>	<b>0.80</b>	<b>4.78</b>	<b>5.25</b>	<b>1.14</b>	<b>1.97</b>	<b>N/A</b>	<b>N/A</b>	<b>2.20</b>	<b>01/01/2019</b>
Bloomberg US Corp 1-3 Yr Index		0.79	0.79	4.72	5.01	0.88	1.96	2.05	1.91	2.22	
Difference		0.01	0.01	0.06	0.24	0.26	0.01	N/A	N/A	-0.02	

Performance shown is net of fees.

## Wyoming State Treasurer's Office

### Investment Values by Fund

March 31, 2024

	Total Investment Value	Fiscal Year Ending 06/30/23 Market Value	Current Market Value	% of MV
<b>Wyoming State Total Fund</b>	<b>\$25,963,874,654</b>	<b>\$26,695,668,439</b>	<b>28,900,229,565</b>	<b>100.0%</b>
<b>Permanent Mineral Trust</b>	<b>\$8,945,355,581</b>	<b>\$10,189,098,036</b>	<b>\$11,059,414,155</b>	<b>100.0%</b>
US Equity	\$1,067,301,341	\$1,449,445,338	\$1,677,318,104	15.2%
International Equity	\$1,619,473,263	\$1,836,058,876	\$2,182,808,396	19.7%
MLPs	\$414,222,482	\$512,489,890	\$614,071,587	5.6%
Private Equity	\$634,148,158	\$1,078,485,424	\$1,154,538,662	10.4%
Real Estate	\$825,312,287	\$1,059,019,731	\$947,833,144	8.6%
Diversified Hedge Funds	\$746,306,668	\$805,127,261	\$882,478,516	8.0%
Infrastructure	\$155,389,722	\$89,095,128	\$177,158,649	1.6%
Fixed Income	\$2,864,861,838	\$2,636,677,920	\$2,769,498,093	25.0%
Private Credit	\$151,233,659	\$96,897,778	\$163,546,571	1.5%
Opportunistic	\$81,784,072	\$68,252,816	\$105,529,096	1.0%
Public Purpose Investments	\$94,890,218	\$96,247,874	\$94,890,218	0.9%
Cash (invested in State Agency Pool)	\$290,431,872	\$461,299,999	\$289,743,120	2.6%
<b>Common School Perm Land Fund</b>	<b>\$4,663,685,917</b>	<b>\$4,830,651,001</b>	<b>\$5,277,143,997</b>	<b>100.0%</b>
US Equity	\$473,851,795	\$499,168,614	\$716,965,948	13.6%
International Equity	\$669,186,998	\$728,571,779	\$871,058,272	16.5%
Preferred Stock	\$53,573,761	\$262,713,540	\$74,360,700	1.4%
MLPs	\$249,272,679	\$335,644,931	\$376,304,445	7.1%
Private Equity	\$0	\$107,703	\$120,979	0.0%
Real Estate	\$495,739,602	\$624,133,081	\$546,039,727	10.3%
Diversified Hedge Funds	\$211,418,145	\$206,144,298	\$225,958,403	4.3%
Infrastructure	\$167,763,795	\$97,975,463	\$194,350,253	3.7%
Fixed Income	\$2,182,879,868	\$1,868,780,936	\$2,093,807,857	39.7%
Private Credit	\$87,091,125	\$64,003,230	\$94,121,012	1.8%
Opportunistic	\$37,117,154	\$31,293,625	\$48,306,745	0.9%
Public Purpose Investments	\$18,359,738	\$18,359,738	\$18,359,738	0.3%
Cash (invested in State Agency Pool)	\$17,431,256	\$93,754,064	\$17,389,919	0.3%
<b>Permanent Land Fund</b>	<b>\$257,368,656</b>	<b>\$285,106,143</b>	<b>\$312,014,056</b>	<b>100.0%</b>
US Equity	\$36,208,493	\$40,412,494	\$47,889,493	15.3%
International Equity	\$47,159,552	\$51,562,792	\$62,318,169	20.0%
MLPs	\$12,355,171	\$15,495,731	\$18,022,986	5.8%
Private Equity	\$23,828,354	\$37,340,318	\$40,909,790	13.1%
Real Estate	\$20,903,493	\$26,702,502	\$23,930,452	7.7%
Diversified Hedge Funds	\$18,309,049	\$19,952,160	\$21,866,728	7.0%
Infrastructure	\$4,083,632	\$2,098,435	\$4,645,498	1.5%
Fixed Income	\$80,847,719	\$71,289,215	\$77,775,446	24.9%
Private Credit	\$4,178,542	\$2,495,266	\$4,518,429	1.4%
Opportunistic	\$2,353,988	\$1,945,978	\$3,013,335	1.0%
Cash (invested in State Agency Pool)	\$7,140,663	\$15,811,252	\$7,123,729	2.3%
<b>University Permanent Land Fund</b>	<b>\$26,332,843</b>	<b>\$32,028,774</b>	<b>\$34,216,516</b>	<b>100.0%</b>
US Equity	\$2,058,992	\$4,542,454	\$5,385,023	15.7%
International Equity	\$4,755,164	\$5,236,737	\$5,966,632	17.4%
MLPs	\$1,251,762	\$1,609,166	\$1,912,191	5.6%
Private Equity	\$2,123,246	\$3,830,684	\$4,180,630	12.2%
Real Estate	\$2,625,739	\$3,340,254	\$2,964,493	8.7%
Diversified Hedge Funds	\$2,191,866	\$2,539,115	\$2,780,716	8.1%
Infrastructure	\$452,781	\$237,596	\$505,864	1.5%
Fixed Income	\$9,294,018	\$8,045,183	\$8,829,760	25.8%
Private Credit	\$463,644	\$276,325	\$502,518	1.5%
Opportunistic	\$212,597	\$187,745	\$287,799	0.8%
Cash (invested in State Agency Pool)	\$903,033	\$2,183,516	\$900,891	2.6%



**Wyoming State Treasurer's Office**  
**Investment Values by Fund**  
March 31, 2024

	Total Investment Value	Fiscal Year Ending 06/30/23 Market Value	Current Market Value	% of MV
<b>Wyoming State Total Fund</b>	<b>\$25,963,874,654</b>	<b>\$26,695,668,439</b>	<b>\$28,900,229,565</b>	<b>100.0%</b>
<b>Hathaway Scholarship</b>	<b>\$589,928,000</b>	<b>\$716,449,070</b>	<b>\$771,804,851</b>	<b>100.0%</b>
US Equity	\$62,878,023	\$94,660,218	\$104,799,894	13.6%
International Equity	\$93,017,370	\$123,122,113	\$134,752,254	17.5%
MLPs	\$24,414,708	\$33,818,411	\$38,067,008	4.9%
Private Equity	\$72,602,023	\$126,100,536	\$137,464,166	17.8%
Real Estate	\$63,135,773	\$80,722,843	\$72,321,948	9.4%
Diversified Hedge Funds	\$55,628,092	\$59,985,188	\$65,754,207	8.5%
Infrastructure	\$10,211,121	\$5,771,740	\$11,660,201	1.5%
Fixed Income	\$174,540,264	\$172,351,003	\$170,979,520	22.2%
Private Credit	\$10,515,387	\$6,665,755	\$11,325,314	1.5%
Opportunistic	\$5,335,983	\$4,596,859	\$7,072,935	0.9%
Cash (invested in State Agency Pool)	\$17,649,256	\$8,654,404	\$17,607,401	2.3%
<b>Higher Education</b>	<b>\$126,483,289</b>	<b>\$136,632,551</b>	<b>\$145,050,217</b>	<b>100.0%</b>
US Equity	\$12,862,355	\$14,381,894	\$19,683,598	13.6%
International Equity	\$18,984,628	\$20,994,020	\$24,141,966	16.6%
Preferred Stock	\$1,572,437	\$7,549,225	\$2,105,394	1.5%
MLPs	\$6,913,411	\$9,676,467	\$10,445,598	7.2%
Private Equity	\$0	\$4,065	\$4,566	0.0%
Real Estate	\$14,272,109	\$18,125,845	\$15,952,981	11.0%
Diversified Hedge Funds	\$5,611,035	\$5,322,634	\$5,840,179	4.0%
Infrastructure	\$4,441,759	\$2,613,823	\$5,199,099	3.6%
Fixed Income	\$57,181,251	\$53,893,749	\$56,543,045	39.0%
Private Credit	\$2,140,255	\$1,355,398	\$2,286,455	1.6%
Opportunistic	\$1,056,952	\$912,588	\$1,403,672	1.0%
Cash (invested in State Agency Pool)	\$1,447,096	\$1,802,843	\$1,443,665	1.0%
<b>Workers Compensation Fund</b>	<b>\$2,662,046,265</b>	<b>\$2,447,720,120</b>	<b>\$2,573,139,684</b>	<b>100.0%</b>
US Equity	\$129,289,285	\$144,658,658	\$146,596,298	5.7%
International Equity	\$146,523,745	\$212,468,821	\$205,313,133	8.0%
MLPs	\$57,100,604	\$114,005,156	\$91,376,275	3.6%
Private Equity	\$0	\$70,372	\$79,047	0.0%
Real Estate	\$183,278,317	\$228,418,467	\$201,784,857	7.8%
Infrastructure	\$92,375,552	\$57,571,098	\$106,606,290	4.1%
Fixed Income	\$1,942,202,828	\$1,582,062,126	\$1,702,045,868	66.1%
Private Credit	\$31,441,333	\$24,028,836	\$33,882,034	1.3%
Opportunistic	\$19,451,276	\$16,322,198	\$25,215,756	1.0%
Cash (invested in State Agency Pool)	\$60,383,323	\$68,114,388	\$60,240,126	2.3%
<b>Pool A</b>	<b>\$413,585,410</b>	<b>\$395,966,615</b>	<b>\$426,217,064</b>	<b>100.0%</b>
US Equity	\$26,020,416	\$32,329,778	\$34,320,903	8.1%
International Equity	\$37,936,787	\$43,892,340	\$48,520,060	11.4%
Preferred Stock	\$8,592,546	\$28,084,666	\$292,617	0.1%
MLPs	\$17,314,657	\$21,410,931	\$24,394,473	5.7%
Private Equity	\$0	\$42,047	\$47,230	0.0%
Real Estate	\$20,600,924	\$23,972,118	\$21,377,389	5.0%
Diversified Hedge Funds	\$11,653,145	\$11,133,662	\$12,214,259	2.9%
Fixed Income	\$257,844,714	\$203,640,238	\$250,806,140	58.8%
Private Credit	\$8,266,914	\$3,628,810	\$8,948,816	2.1%
Cash (invested in State Agency Pool)	\$25,355,306	\$27,832,024	\$25,295,176	5.9%
<b>LSRA</b>	<b>\$1,528,142,431</b>	<b>\$1,921,029,044</b>	<b>\$1,560,722,589</b>	<b>100.0%</b>
US Equity	\$139,728,073	\$208,422,255	\$143,894,758	9.2%
International Equity	\$93,471,431	\$203,283,390	\$136,192,871	8.7%
MLPs	\$52,093,920	\$93,408,478	\$61,601,764	3.9%
Private Equity	\$0	\$31,430	\$35,304	0.0%
Diversified Hedge Funds	\$57,655,487	\$62,839,293	\$68,839,800	4.4%
Fixed Income	\$1,161,890,825	\$1,341,918,687	\$1,126,910,660	72.2%
Cash (invested in State Agency Pool)	\$23,302,695	\$11,125,510	\$23,247,433	1.5%
<b>State Agency Pool</b>	<b>\$6,750,946,263</b>	<b>\$5,740,987,084</b>	<b>\$6,740,506,436</b>	<b>100.0%</b>
Fixed Income	\$4,506,575,219	\$4,546,207,998	\$4,772,312,230	70.8%
Public Purpose Investments	\$236,916,764	\$133,950,000	\$252,500,000	3.7%
Cash Equivalents	\$2,007,454,280	\$1,055,127,020	\$1,715,694,206	25.5%



**Wyoming State Treasurer's Office**  
**Investment Values by Manager**  
 March 31, 2024

	Total Investment Value	Fiscal Year Ending 06/30/23 Market Value	Current Market Value	% of MV
<b>Wyoming State Total Fund</b>	<b>\$25,963,874,654</b>	<b>\$26,695,668,439</b>	<b>\$28,900,229,565</b>	<b>100.0%</b>
<b>US Equity</b>	<b>\$1,950,198,773</b>	<b>\$2,488,021,702</b>	<b>\$2,896,854,019</b>	<b>10.0%</b>
State Street All Cap	\$1,269,956,612	\$1,886,449,748	\$2,102,962,182	
UW Portfolio Management Program	\$1,000,000	\$1,907,749	\$2,176,049	
Wyoming Internal Domestic Equity	\$31,074	\$31,232	\$31,238	
Wyoming Internal Domestic Equity - QT	\$81,871,564	\$90,926,450	\$102,028,108	
Van Berkom	\$246,191,817	\$262,919,291	\$288,214,174	
BlackRock Small Cap	\$5,745,443	\$55,230,729	\$480,372	
Wyoming Internal Small Cap - QT	\$115,948,928	\$89,549,473	\$128,418,005	
Wyoming Internal Small Cap	\$115,309,335	\$74,081,949	\$138,171,449	
Wyoming Internal Large Cap Equity	\$114,144,000	\$26,925,081	\$134,372,443	
<b>International Equity</b>	<b>\$2,730,465,940</b>	<b>\$3,225,190,869</b>	<b>\$3,671,071,753</b>	<b>12.7%</b>
Northern Trust	\$1,417,632,889	\$1,454,998,337	\$1,723,366,563	
Harding Loevner	\$424,805,669	\$666,783,579	\$487,406,286	
Arrowstreet	\$688,800,975	\$1,041,286,454	\$1,244,288,898	
Internal International ETF	\$53,416,974	\$62,122,498	\$60,067,510	
Internal International Equity	\$95,809,433	\$0	\$52,776,808	
Internal International Equity - QT	\$50,000,000	\$0	\$103,165,689	
<b>Mixed Assets</b>	<b>\$898,678,138</b>	<b>\$1,435,906,592</b>	<b>\$1,312,955,039</b>	<b>4.5%</b>
Cohen & Steers	\$63,738,744	\$298,347,430	\$76,758,711	
Harvest	\$465,687,396	\$610,280,049	\$686,518,297	
Harvest Passive	\$369,251,998	\$527,279,112	\$549,678,032	
<b>Private Equity</b>	<b>\$732,701,781</b>	<b>\$1,246,012,579</b>	<b>\$1,337,380,373</b>	<b>4.6%</b>
Access Venture Partners II	\$2,188,472	\$478,045	\$212,116	
Accel-KKR Growth IV	\$9,079,900	\$7,767,291	\$10,001,192	
Cheyenne Capital Fund, L.P.	\$83,438,565	\$87,708,864	\$82,677,709	
Hamilton Lane Nowood Fund, L.P.	\$108,417,941	\$118,566,860	\$113,935,442	
BlackRock LTPC	\$175,058,447	\$621,054,607	\$596,632,013	
Valor PE	\$42,204,088	\$61,977,389	\$66,737,458	
GTCR	\$43,958,693	\$49,852,995	\$58,413,496	
Nautic	\$25,677,053	\$21,971,388	\$36,435,423	
Veritas	\$15,443,866	\$16,307,385	\$21,833,237	
Veritas Capital VIII	\$26,671,563	\$20,537,317	\$31,123,301	
Stepstone V	\$31,379,519	\$24,596,711	\$33,496,817	
Dragoneer	\$15,719,793	\$8,696,815	\$16,754,413	
Neuberger Berman Sauger	\$36,242,305	\$147,317,943	\$118,485,357	
Ashbridge	\$49,627,500	\$57,594,854	\$66,033,670	
BVP Forge	\$19,504,630	\$1,584,115	\$23,029,063	
Banner Ridge	\$4,720,225	\$0	\$9,569,263	
Arlington VI	\$42,086,239	\$0	\$50,727,416	
Bessemer XII	\$1,282,981	\$0	\$1,282,987	
<b>Real Estate</b>	<b>\$1,625,842,124</b>	<b>\$2,064,434,842</b>	<b>\$1,832,204,991</b>	<b>6.3%</b>
Clarion Lion	\$639,494,160	\$856,987,508	\$712,386,062	
Morgan Stanley Prime	\$360,000,000	\$414,659,759	\$383,426,100	
UBS Trumbull	\$142,111,829	\$162,934,267	\$143,106,641	
M&G	\$3,447,746	\$1,777,140	\$1,589,567	
Northwood	\$129,609,204	\$203,966,100	\$197,566,432	
SC Capital	\$99,592,288	\$104,021,266	\$96,182,204	
Realterm	\$249,999,982	\$311,795,710	\$297,175,509	
WestRiver	\$0	\$8,293,093	\$0	
Hammes	\$1,586,914	\$0	\$772,477	
<b>Diversified Hedge Funds</b>	<b>\$1,108,773,487</b>	<b>\$1,173,043,611</b>	<b>\$1,285,732,808</b>	<b>4.4%</b>
PAAMCO - Jackalope	(\$69,744)	\$75,148	\$145	
Grosvenor Diversified Hedge Funds	\$454,141,087	\$470,818,610	\$517,520,937	
Internal Diversified Hedge Funds	\$654,702,144	\$702,149,853	\$768,211,726	



**Wyoming State Treasurer's Office**  
**Investment Values by Manager**  
 March 31, 2024

	Total Investment Value	Fiscal Year Ending 06/30/23 Market Value	Current Market Value	% of MV
<b>Wyoming State Total Fund</b>	<b>\$25,963,874,654</b>	<b>\$26,695,668,439</b>	<b>\$28,900,229,565</b>	<b>100.0%</b>
<b>Infrastructure</b>	<b>\$434,718,363</b>	<b>\$255,363,284</b>	<b>\$500,125,854</b>	<b>1.7%</b>
Macquarie	\$33,602,429	\$185,514,618	\$219,271,597	
MGIF	\$25,000,000	\$26,400,302	\$26,625,175	
Grosvenor E	\$226,115,934	\$43,448,364	\$105,876,465	
IFM	\$150,000,000	\$0	\$148,352,617	
<b>Fixed Income</b>	<b>\$13,514,466,157</b>	<b>\$12,484,867,055</b>	<b>\$13,019,597,783</b>	<b>45.1%</b>
PIMCO	\$1,295,538,620	\$878,003,270	\$1,187,010,804	
Payden & Rygel	\$553,957,971	\$596,111,140	\$510,605,819	
JPM MBS	\$829,384,735	\$745,250,127	\$764,925,146	
Credit Suisse	\$177,773,811	\$396,540,641	\$178,714,632	
Octagon	\$196,018,592	\$658,633,598	\$201,958,923	
KKR	\$228,776,549	\$485,624,351	\$231,765,159	
Global Evolution	\$117,915,093	\$121,937,644	\$104,932,589	
Eaton Vance EMD	\$242,704,960	\$240,000,000	\$264,791,828	
Global Evolution Hard	\$177,836,372	\$138,566,991	\$144,376,574	
Finisterre	\$245,190,365	\$243,931,127	\$256,090,203	
Goldman Sachs	\$198,397,875	\$200,705,003	\$201,331,107	
Wellington	\$149,725,817	\$89,413,124	\$129,831,014	
Internal Long Duration Govt Portfolio	\$449,916,111	\$320,511,853	\$380,608,623	
Logan Circle	\$400,109,909	\$338,611,949	\$381,425,597	
Internal Int. Duration Govt Portfolio	\$1,238,651,287	\$1,142,300,366	\$1,095,177,120	
Internal Low Duration Govt Portfolio	\$669,209,689	\$645,426,117	\$656,752,122	
Pimco Low	\$1,546,746,350	\$697,081,934	\$1,561,767,344	
Wyoming Internal Ladder Portfolio	\$4,796,601,751	\$4,546,207,998	\$4,767,523,355	
Internal Passive Core Fixed Income	\$10,300	\$9,821	\$9,825	
<b>Private Credit</b>	<b>\$304,501,393</b>	<b>\$205,053,465</b>	<b>\$329,041,986</b>	<b>1.1%</b>
Atalaya	\$67,115,213	\$60,080,983	\$68,415,186	
BlackRock GCO II	\$74,918,797	\$68,658,225	\$79,344,733	
AG Direct	\$52,500,000	\$31,560,810	\$55,056,816	
Kennedy Lewis	\$58,037,119	\$32,952,710	\$69,510,784	
Grosvenor Silvery Lupine Fund	\$9,170,533	\$11,800,736	\$9,910,838	
SVP Solutions II	\$27,500,000	\$0	\$30,268,154	
Ares Pathfinder Fund II	\$15,259,731	\$0	\$16,535,475	
<b>Opportunistic</b>	<b>\$147,355,023</b>	<b>\$123,511,809</b>	<b>\$190,829,338</b>	<b>0.7%</b>
Grosvenor D	\$147,312,023	\$123,467,316	\$190,776,870	
Wyoming Internal Opportunistic Portfolio	\$43,000	\$44,493	\$52,468	
<b>Public Purpose Investments</b>	<b>\$365,749,956</b>	<b>\$248,557,612</b>	<b>\$365,749,956</b>	<b>1.3%</b>
<b>Cash &amp; Cash Equivalents</b>	<b>\$2,150,423,519</b>	<b>\$1,745,705,019</b>	<b>\$2,158,685,665</b>	<b>7.5%</b>
Cornerstone	(\$0)	\$0	\$0	
TA Realty	\$26,120	\$0	\$0	
C.S. McKee	\$8,953,177	\$0	\$0	
State Street TIPS	\$1,798,617	\$0	\$0	
Stone Harbor	\$150,719	\$0	\$0	
JP Morgan Cash Composite	\$2,139,494,885	\$1,745,705,019	\$2,158,685,665	

Investment Policy Guidelines	Meeting Objective			Explanation
	Yes	No	N/A	
<b>1. Total Fund</b>				
Exceed the rate of inflation (C.P.I.) over a market cycle of 5-years.	✓			Wyoming returned 5.7% vs. 4.2% for the C.P.I. for the current 5-year period
Exceed a weighted index of the total fund's asset allocation and component benchmarks over rolling 5-year periods by an appropriate amount.	✓			Wyoming returned 5.7% vs. 5.1% for the Total Fund Index for the current 5-year period
Not more than 1% of the outstanding common shares of any corporation shall be owned by the State. An exception may be made for Alternative Investments.	✓			
Not more than 1.5% of the total book value of permanent funds shall be invested in the common stock of any corporation. An exception may be made for Alternative Investments.	✓			

	Yes	No	N/A	Explanation
<b>2. Investment Funds</b>				
<b>a) Permanent Mineral Trust Fund</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Permanent Mineral Trust Fund return was 8.0% vs. 7.0% for the Total Fund Index
<b>b) Common School Permanent Land Fund</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Common School Permanent Land Fund return was 6.3% vs. 5.5% for the Total Fund Index
<b>c) Permanent Land Fund</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Permanent Land Fund return was 8.2% vs. 7.0% for the Total Fund Index
<b>d) University Permanent Land Fund</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: University Permanent Land Fund return was 8.0% vs. 7.0% for the Total Fund Index
<b>e) Hathaway Scholarship Endowment Fund</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Hathaway Scholarship Endowment Fund return was 8.6% vs. 7.0% for the Total Fund Index
<b>f) Higher Education Endowment Fund</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Higher Education Endowment Fund return was 6.2% vs. 5.5% for the Total Fund Index
<b>g) Workers Compensation Fund</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Workers Compensation Fund return was 4.3% vs. 3.6% for the Total Fund Index
<b>h) Pool A</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Pool A return was 5.0% vs. 4.1% for the Total Fund Index
<b>i) LSRA</b>				
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.			N/A	LSRA was funded during 2019.
<b>j) State Agency Pool</b>				
No public and/or private equities are permitted.	✓			
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: State Agency Pool return was 1.6% vs. 1.6% for the Actual Allocation Index

	Yes	No	N/A	Explanation
<b>3. US Equity Portfolios</b>				
<b>a) State Street Global Advisors – All Cap – Passive</b>				
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.	✓			Largest Holding: Microsoft = 7.1%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Meet performance of the State Street All Cap Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: State Street return was 14.7% vs. 14.7% for the index
<b>b) Internal Domestic Equity Quantamental – Broad US Equity</b>				
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.		✗		Largest Holding: Apple = 8.75%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Exceed performance of the S&P 500 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 04/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 04/2021
<b>b) Internal Domestic Equity Quantitative – Broad US Equity</b>				
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.	✓			Largest Holding: Microsoft = 8.8%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Exceed performance of the S&P 500 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021

	Yes	No	N/A	Explanation
<b>c) Van Berkom – Small Cap - Active</b>				
The portfolio will achieve its goal primarily through the investment in a portfolio of 35 to 55 U.S. small-cap equity securities.	✓			
At the time of initial purchase, the market capitalization of the company's common stocks purchased will not exceed 0.023% of the total market capitalization of the S&P 500 Index. Furthermore, the Portfolio Manager may own up to 25% of the portfolio at market value in U.S. stocks that exceed 0.023% of the total market capitalization of the S&P 500 Index.	✓			
Individual Security = no more than 7% of account value Cash Position = no more than 5% of account value Sub-sector Limit = no more than 15% of the account value invested in a single sub-sector (Level IV of GICS sectors) GICS Sectors = minimum of 5 different GICS sectors (Level 1 GICS sectors)	✓			
Outperform the Russell 2000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2020
<b>d) Internal Small Cap Quantamental – Small Cap</b>				
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.		✗		Largest Holding: IES Holdings Inc = 7.5%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Exceed performance of the Russell 2000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 06/2021
<b>e) Internal Small Cap Quantitative – Small Cap</b>				
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.	✓			Largest Holding: Paymentus Holdings Inc. = 0.5%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Exceed performance of the Russell 2000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 11/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 11/2021

	Yes	No	N/A	Explanation
<b>4. International Equity Portfolios</b>				
<b>a) Northern Trust – Int'l – Passive</b>				
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.	✓			Largest Holding: Tawain Semiconductor Mfg = 1.8%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Meet performance of the MSCI ACW Ex US Ex China Index (Net), before fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: Northern Trust gross of fees return was 6.5% vs. 6.3% for the MSCI ACW Ex US Ex China Index (Net)
<b>b) Arrowstreet – Int'l Active</b>				
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.	✓			Largest Holding: ASML Holding NV = 3.0%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Outperform the MSCI ACW Ex US IM Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: Arrowstreet net of fees return was 13.8% vs. 6.0% for the MSCI ACW Ex US Index (Net)
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: Arrowstreet ranked in the 1st percentile for IM All ACWI Ex US
<b>c) Harding Loevner – Int'l Active</b>				
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.	✓			Largest Holding: Samsung Electronics = 4.0%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Outperform the MSCI ACW Ex US Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 01/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 01/2020

	Yes	No	N/A	Explanation
<b>d) Internal International Equity Quantamental – Int'l Active</b>				
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.		✗		Largest Holding: TSMC = 7.0%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Outperform the MSCI ACW Ex US Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 02/2024
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 02/2024
<b>e) Internal International Equity Quantitative – Int'l Active</b>				
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.	✓			Largest Holding: Norvo Nordisk = 4.2%
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.	✓			
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.	✓			
A minimum number of 20 securities shall be held.	✓			
Outperform the MSCI ACW Ex US Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 07/2023
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 07/2023
	Yes	No	N/A	Explanation
<b>5. Preferred Stock</b>				
<b>a) Cohen &amp; Steers</b>				
Minimum issue credit rating for preferred stock at the time of purchase will be BB or equivalent.	✓			The portfolio currently holds securities which are rated below BB. Retention of these securities in the portfolio is permitted pursuant to Section 7.2 of the Investment Policy.
A maximum of 35% of the total portfolio of the investment manager may be invested in securities rated below investment grade.	✓			
A maximum of 10% of the total portfolio of the investment manager may be invested in any one issuer.	✓			
Outperform the Preferred Stock Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: Cohen and Steers net of fees return was 4.4% vs. 4.3% for the Preferred Stock Custom Index (Net)

	Yes	No	N/A	Explanation
<b>6. MLPs</b>				
<b>a) Harvest</b>				
A maximum of 15% or the benchmark weighting + 2%, whichever is greater, of the total portfolio may be invested in any one company.	✓			
Outperform the MLP Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: Harvest net of fees return was 12.1% vs. 9.8% for the MLP Custom Index (Net)
<b>b) Harvest Passive</b>				
A maximum of 15% or the benchmark weighting + 2%, whichever is greater, of the total portfolio may be invested in any one company.	✓			
Meet the MLP Custom Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 02/2020
	Yes	No	N/A	Explanation
<b>7. Alternative Strategies</b>				
<b>Core Real Estate</b>				
<b>a) Clarion Lion</b>				
Outperform the NCREIF Fund Index – Open-End Diversified Core Equity (ODCE), net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Clarion Lion net of fees return was 3.1% vs. 2.6% for the NCREIF ODCE Index (Net) (AWA)
The core portfolio shall consist of well-leased, high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			
<b>b) UBS Trumbull</b>				
Outperform the NCREIF Fund Index – Open-End Diversified Core Equity (ODCE), net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: UBS Trumbull net of fees return was -1.5% vs. 2.6% for the NCREIF ODCE Index (Net) (AWA)
The core portfolio shall consist of well-leased, high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			
<b>c) MS Prime</b>				
Outperform the NCREIF Fund Index – Open-End Diversified Core Equity (ODCE), net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 10/2020
The core portfolio shall consist of well-leased, high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			

	Yes	No	N/A	Explanation
<b>Diversified Hedge Funds</b>				
<b>d) Grosvenor Diversified Hedge Funds</b>				
Outperform the HFRI FOF Comp Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Grosvenor Diversified Hedge Fund net of fees return was 5.1% vs. 5.0% for the HFRI FOF Comp Index
The portfolio shall be diversified across underlying hedge fund strategies and hedge fund managers.	✓			
<b>e) Internal Diversified Hedge Funds</b>				
Outperform the HFRI FOF Comp Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: Internal Diversified Hedge Fund net of fees return was 3.6% vs. 5.0% for the HFRI FOF Comp Index
The portfolio shall be diversified across underlying hedge fund strategies and hedge fund managers.	✓			
	Yes	No	N/A	Explanation
<b>8. Infrastructure</b>				
<b>a) Macquarie</b>				
Outperform the 10 Yr Treasury + 350 bps, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 04/2022
The core portfolio shall consist of high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			
<b>b) Grosvenor Fund Class E</b>				
Outperform the 10 Yr Treasury + 350 bps, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 03/2023
The core portfolio shall consist of high quality, income producing institutional properties.	✓			
The core portfolio shall be adequately diversified by geographical region, as well as by property type.	✓			

	Yes	No	N/A	Explanation
<b>9. Fixed Income Portfolios</b>				
<b>a) PIMCO – Core</b>				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
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.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.	✓			
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; 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.	✓			
Outperform its Custom Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: PIMCO net of fees return was 0.5% vs. 0.3% for the PIMCO Custom Index
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.		✗		5-year: PIMCO ranked in the 74th percentile for Core Fixed Income

	Yes	No	N/A	Explanation
<b>b) Internal Int. Govt Fixed Income Portfolio – Core</b>				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
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.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.	✓			
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; 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.	✓			
Outperform the Internal Int. Gov Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: Int. Govt Fixed Income Portfolio net of fees return was -0.2% vs. return of -0.4% for the Internal Int. Gov Index
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.		✗		5-year: Int. Govt Fixed Income Portfolio ranked in the 59th percentile for Government Fixed Income

	Yes	No	N/A	Explanation
<b>c) Payden &amp; Rygel – Core</b>				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
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.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.	✓			
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; 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.	✓			
Outperform the Payden & Rygel Custom Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 11/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 11/2019

	Yes	No	N/A	Explanation
<b>d) JPM MBS – Core</b>				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles.	✓			
Non-U.S. dollar denominated securities are permitted, but shall comprise no more than 10% of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to 10% of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than 10% of the portfolio market value.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than 10% of the portfolio market value.			N/A	
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.	✓			
Commercial paper of all issuers shall not exceed \$500,000,000.			N/A	
A minimum number of 25 securities shall be held.	✓			
Duration may not exceed 120% of the manager's primary benchmark, and overall core fixed income portfolio duration may not exceed 120% of the Bloomberg Barclays U.S. Aggregate Bond Index.	✓			
Average portfolio credit quality must be at least A- or equivalent.	✓			
Minimum issue credit rating at time of purchase shall be: A1+ or equivalent for commercial paper; 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.	✓			
Outperform the Bloomberg US MBS Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 11/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 11/2019

	Yes	No	N/A	Explanation
<b>e) Credit Suisse – Bank Loans</b>				
Obligations of specific issuers are subject to a 5% per issuer limit, excluding investments in commingled vehicles.	✓			
Duration must not exceed + 1 year of the S&P/LSTA Leveraged Loan 100 Index.	✓			
Average portfolio credit quality must be at least B or equivalent.	✓			
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.	✓			
Outperform the Bank Loans Index., net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 09/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 09/2019
<b>f) Octagon – Bank Loans</b>				
Obligations of specific issuers are subject to a 5% per issuer limit, excluding investments in commingled vehicles.	✓			
Duration must not exceed + 1 year of the S&P/LSTA Leveraged Loan 100 Index.	✓			
Average portfolio credit quality must be at least B or equivalent.	✓			
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.	✓			
Outperform the Bank Loans Index., net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 09/2019
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 09/2019

	Yes	No	N/A	Explanation
<b>g) KKR – Bank Loans</b>				
Obligations of specific issuers are subject to a 5% per issuer limit, excluding investments in commingled vehicles.	✓			
Duration must not exceed + 1 year of the S&P/LSTA Leveraged Loan 100 Index.	✓			
Average portfolio credit quality must be at least B or equivalent.	✓			
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.	✓			
Outperform the Bank Loans Index., net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 10/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 10/2021
<b>h) Grosvenor Silvery Lupine Fund – Opportunistic Fixed Income</b>				
Outperform the CS Western European Hi Yld Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: net of fees return was -4.5% vs 4.4% for the index
<b>i) Global Evolution – Emerging Market Debt (Local Currency)</b>				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
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.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM GBI-EM Gbl Dv'd Index (USD) (TR) (Unhedged), net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 02/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 02/2020

	Yes	No	N/A	Explanation
<b>j) Global Evolution – Emerging Market Debt (Hard Currency)</b>				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
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.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM EMBIG Div Ex CCC (USD) Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 12/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 12/2020
<b>k) Eaton Vance – Emerging Market Debt</b>				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
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.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM EMB (JEMB) Hard/Local 50/50 Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 01/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 01/2021

	Yes	No	N/A	Explanation
<b>l) Goldman Sachs – Emerging Market Debt (Corporate)</b>				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
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.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities  Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the JPM CEMBI Broad Div Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 03/2020
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2020
<b>m) Finissterre – Emerging Market Debt</b>				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
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.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the EMD 1/3 Blend Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 03/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2021

	Yes	No	N/A	Explanation
<b>n) Wellington – Emerging Market Debt</b>				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	✓			
Obligations of corporate issuers are subject to a 10% per issuer limit.	✓			
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.	✓			
Duration must not be more than + 20% of the index.	✓			
Average portfolio credit quality must be BB or equivalent or better.	✓			
Minimum Issue Credit Rating at the time of purchase shall be: A1+ or equivalent for commercial paper; B- or equivalent for individual securities Where a security is not rated at the issue level, the issuer rating shall be relied upon.	✓			
Outperform the 50% JPM GBI-EM G1b Div / 50% JPM EMBI G1b Div, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 09/2021
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 09/2021
<b>o) Metlife – Long Duration Credit</b>				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles	✓			
A maximum of 30% of the portfolio may be invested in U.S. dollar denominated non-U.S. fixed income securities.	✓			
A maximum of 10% of the portfolio may be invested in U.S. dollar denominated emerging market securities.	✓			
A maximum of the appropriate benchmark plus 5% of the portfolio may be invested in convertible and municipal securities.	✓			
Average portfolio quality will be BBB+ or better. Securities shall be rated investment grade at time of purchase.	✓			
Outperform the Bloomberg US Long Credit Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: net of fees return was 1.3% vs 0.8% for the index
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.	✓			5-year: Metlife - Long Duration Credit ranked in the 22nd percentile for IM US Long Duration

	Yes	No	N/A	Explanation
<b>p) Internal Long Duration – Long Duration Government</b>				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles	✓			
A maximum of 30% of the portfolio may be invested in U.S. dollar denominated non-U.S. fixed income securities.	✓			
A maximum of 10% of the portfolio may be invested in U.S. dollar denominated emerging market securities.	✓			
A maximum of the appropriate benchmark plus 5% of the portfolio may be invested in convertible and municipal securities.	✓			
Average portfolio quality will be BBB+ or better. Securities shall be rated investment grade at time of purchase.	✓			
Outperform the Bloomberg US Gov Long Term Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: net of fees return was -2.8% vs -2.8% for the index
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.		✗		5-year: Internal Long Duration ranked in the 100th percentile for IM US Long Duration
<b>q) Internal Low Duration – Low Duration Government</b>				
Obligations issued or guaranteed by the U.S. government, U.S. agencies or U.S. government-sponsored corporations and agencies are eligible without limit.	✓			
All other issuers are subject to a 5% per issuer limit excluding investments in commingled vehicles	✓			
Corporate securities will be subject to a maximum limit of 20%.	✓			
Portfolio duration must be within plus or minus 30% of the Bloomberg Barclays US Gov't: 1-3 Year Bond Index.	✓			
Average portfolio quality will be A or better.	✓			
Outperform the Bloomberg US Gov 1-3 Year Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: net of fees return was 1.6% vs 1.1% for the index
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.		✗		5-year: Int. Low Duration ranked in the 80th percentile for US Short Duration Fixed Income

	Yes	No	N/A	Explanation
<b>10. Cash and Cash Equivalents Portfolios</b>				
<b>JP Morgan Cash Composite*</b>				
<b>a) JP Morgan Treasury Cash</b>				
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.	✓			
A maximum of 5% of total assets may be placed in securities of one issuer except for government securities.	✓			
Investment in any single issuer must not exceed 5% of the outstanding issues of that issuer.	✓			
Investment performance must exceed Monitored Repurchase Agreement Rate and the cash equivalents allocation by the 90-day T-Bill rate, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: JP Morgan Treasury Cash net of fees return was 2.1% vs. 2.0% for the ICE BofAML 3 Mo US T-Bill Index
<b>JP Morgan Wyo-Star Cash Composite*</b>				
<b>b) JP Morgan Wyo-Star Cash</b>				
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.	✓			
A maximum of 5% of total assets may be placed in securities of one issuer except for government securities.	✓			
Investment performance must exceed Monitored Repurchase Agreement Rate and the cash equivalents allocation by the 90-day T-Bill rate, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: JP Morgan Wyo-Star Cash net of fees return was 1.8% vs. 1.8% for the ICE BofAML 3 Mo US T-Bill Index
<b>c) JP Morgan Wyo-Star Extended Cash</b>				
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.	✓			
A maximum of 5% of total assets may be placed in securities of one issuer except for government securities.	✓			
Investment Performance must exceed an Equal Weighted Blend of the BofA Merrill Lynch 1-3 Year Agency, 1-3 Year Treasury, and a 0-3 Year Mortgage Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: JP Morgan Wyo-Star Extended Cash net of fees return was 2.0% vs. 2.0% for the Blended Index
The extended portion of WYO-STAR may not exceed 35% of the market value of the portfolio at the time of purchase.	✓			

\*During the fourth quarter of 2011, JP Morgan Wyo-Star Cash and JP Morgan Wyo-Star Extended Cash were combined. Net of fees performance shown consists of performance calculated by RVK, Inc. prior to 12/31/2011 and performance calculated by JP Morgan thereafter.

**Custom Benchmark Comments**

The Wyoming State Total Fund Index and Pool Total Fund Indices are calculated using target asset class weights applied to the appropriate asset class benchmark return, using the S&P 500 Index for US all cap equities, the Russell 2000 Index for US small cap equity, MSCI ACW Ex US Index (Net) for international equities, MLP Custom Index for MLPs, Bloomberg US Agg Bond Index for core fixed income, S&P/LSTA Lvg'd Loan 100 Index for bank loans, EMD Blended Benchmark for EMD, NCREIF Open-End Diversified Core Equity Index for real estate, Cambridge Index for private equity, HFRI FOF Comp Index for Diversified Hedge Funds, and ICE BofA Merrill Lynch 90 day US T-Bill rate for cash equivalents.

- The Wyoming State Total Fund 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.
- Pool Total Fund Indices consist of the actual allocation index through 12/31/2019, and the target allocation index thereafter.
- The All Cap US Equity Custom Index consists of the Russell 3000 Index 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, the MSCI ACW Ex US Index (USD) (Net) through July 2023, and actively weighted blend of MSCI ACW Ex US Index (USD) (Net) and MSCI ACW Ex US Ex China Index thereafter.
- The Preferred Stock Custom Index consists of S&P U.S. Preferred Stock Index through 06/30/2021, and 60% ICE BofAML US IG Inst Capital Securities Index, 20% ICE BofAML Core Fixed Rate Preferred Securities Index, and 20% Bloomberg Barclays Developed Market USD Contingent Capital Index 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, the BB US Agg Index through 11/29/21, account performance from 11/29/21 through 12/07/21, the Bloomberg US Agg Bond Index through 06/30/2022, account performance on 7/1/2022, 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.
- Transition Fixed Income Custom Index consists of 50% JPM CLOIE IG Idx, 40% BB 1 – 3 Yr Crdt, and 10% ICE BofA 0-2 Yr Dur BB-B Index.
- 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 02/27/2020, State Street All Cap account performance on 02/28/2020, 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, 70% JPM GBI-EM Gbl Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM Gbl Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI Gbl Dvf'd Index thereafter.
- The JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50 consists of 50% JPM GBI-EM Gbl Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25% JPM EMBI Gbl Dvf'd Index.
- The Goldman Sachs Index consists of JPM CEMBI Brd Dvf'd Index through 11/22/2020, account performance from 11/23/2020 through 11/30/2020, and the JPM CEMBI Brd Dvf'd Index thereafter.
- The Bank Loans Custom Index consists of S&P LSTA Lvg'd Loan Index through 06/30/2021, and the S&P LSTA US Lvg'd Loan 100 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.

**Performance & Holding Comments**

RVK, Inc. shows performance beginning with the first full month following inception. Inception date shown for the Int'l Equity and JP Morgan Cash Composites represents the first date of performance calculated by RVK, Inc.

Performance shown for Pooled Funds is calculated on a capital-weighted basis using beginning-period allocations and does not reflect net cash flows.

Performance shown for the UW Portfolio Management Program prior to 07/01/2009 includes their participation in the State Agency Pool. Performance calculated for the UW Portfolio Management Program after 02/01/2013 has not been verified by RVK as the assets have been moved to a platform in which the custodian does not provide a reconcilable return.

Performance for the Internal Intermediate Govt Fixed Income Portfolio excludes distressed securities taken in-kind following the liquidation of WAMCO Core Plus.

Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.

Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark.

Composite performance shown for Fixed Income is historically exclusive of convertibles.

**Alternative Investment Comments**

Reporting for Private Equity performance was changed from cost basis to the latest portfolio valuation adjusted for cash flows, consistent with the supplementary alternatives report. This methodology change involved reflecting the difference between cost value and the most recent valuation, resulting in a significant positive performance impact on the total fund during 2nd quarter 2008.

Valuations for non-core real estate and private equity were changed from a one-quarter lag to as of the most recent valuation, adjusted for subsequent cash flows. This methodology change involved reflecting all cash flows occurring during 4th quarter 2011 as of January 2012, resulting in a minor positive performance impact on the total fund during 1st quarter 2012. Investment (Cost) Values are not lagged.

Performance for non-core real estate and private equity investments is calculated on an IRR basis. For further analysis, please refer to the supplementary alternatives performance report.

Cheyenne Capital Fund valuations set forth herein could be materially different once underlying investments are realized. Market conditions at the time of exit could be substantially different than at the reporting period, resulting in valuations different than those represented above.

**Miscellaneous Comments**

Wyoming State Treasurer's Office fiscal year ends on June 30th.

Fixed Income style peer groups have low populations, and may cause ranks to change significantly from quarter to quarter.

"IM" is the acronym for Investment Metrics, the provider of peer group data used in ranking investment manager and asset class performance.

During the 4th quarter of 2012, WAMCO Core Plus, Neuberger Berman Core Plus, PIMCO Core Plus, PIMCO Mortgages, JP Morgan Mortgages, WAMCO Corporates, Logan Circle, and PIMCO Global/EM began the liquidation process to transition assets to the State's new fixed income asset class structure. The proceeds were used to fund State Street TIPS, C.S. McKee, JP Morgan Core, MacKay Shields, Neuberger Berman Core, PIMCO Core, and Wells Capital. During the 1st quarter of 2013, additional assets were transitioned to Neuberger Berman Credit, Seix, Investec, and Stone Harbor.

During the 4th quarter of 2014, State Street S&P 500 and Gabelli began the liquidation process to transition assets to the State's new US equity asset class structure. The proceeds were used to fund State Street All Cap, Epoch, Lazard, and RBC. During the 1st quarter of 2015, additional assets were transitioned to Arrowstreet.

During the 4th quarter of 2015, the Workers Compensation Fund was reclassified as a Permanent Fund.

During the 1st quarter of 2016, the State funded the Internal International Equity Portfolio, using proceeds from the liquidation of The Boston Company.

During the 3rd quarter of 2016, Bloomberg acquired the Barclays Global Family of Fixed Income Indices. Naming conventions have been updated to "Bloomberg" to reflect the acquisition.

During the 3rd quarter of 2016, MacKay Shields began the liquidation process, with proceeds used to increase allocations to C.S. McKee and the Internal Intermediate Govt Fixed Income Portfolio.

During the 1st quarter of 2017, Neuberger Berman Core and Wells Capital began their respective liquidation processes.

During the 2nd quarter of 2017, Manning & Napier began the liquidation process.

During the 4th quarter of 2017, Lazard began the liquidation process.

During the 4th quarter of 2017, Intercontinental Exchange (ICE) acquired the BofA Merrill Lynch Global Research FICC index platform. As a result, all BofA Merrill Lynch indices have been rebranded to "ICE BofA Merrill Lynch".

During the 1st quarter of 2018, Arrowstreet was reclassified as International Equity and the Internal Low Duration portfolio was funded.

During the 2nd quarter of 2018, Cohen & Steers, Grosvenor Diversified Hedge Funds, and Internal Diversified Hedge Funds were funded.

During the 2nd quarter of 2018, the Hybrid Assets Composite was created for convertibles, preferred stock, and MLPs.

During the 2nd quarter of 2018, RBC began the liquidation process.

During the 3rd quarter of 2018, Internal Equity Russell 2000 was funded.

During the 3rd quarter of 2018, Harvest was funded.

During the 4th quarter of 2018, Logan Circle, Internal Long Duration Fixed Income Portfolio, and State Street Low Duration were funded.

During the 1st quarter of 2019, Epoch began the liquidation process.

During the 2nd quarter of 2019, Allianz, Stone Harbor, Fisher, JPM Core, NB Credit, Seix, State Street TIPS, and State Street Low Duration began the liquidation process.

During the 3rd quarter of 2019, Credit Suisse, Octagon, and Internal Ladder Portfolio were funded.

During the 4th quarter of 2019, Harding Loevner, State Street Russell 2000, Harvest Passive, Payden & Rygel, and JPM MBS were funded, and CS McKee began the liquidation process.

During the 1st quarter of 2020, Van Berkomp was funded.

During the 2nd quarter of 2020, Grosvenor D was funded.

During the 3rd quarter of 2020, MS Prime and BlackRock Small Cap were funded.

During the 4th quarter of 2020, Eaton Vance and Global Evolution Hard were funded.

During the 1st quarter of 2021, Finisterre was funded.

During the 2nd quarter of 2021, Domestic Equity Quantamental, Domestic Equity Quantitative, and Small Cap Equity Quantamental were funded.

During the 3rd quarter of 2021, KKR and Wellington were funded.

During the 4th quarter of 2021, Pimco Low Duration was funded.

During the 1st quarter of 2022, Macquarie was funded.

During the 2nd quarter of 2022, Accel KKR was funded.

During the 3rd quarter of 2022, Morgan Stanley Ashbridge Secondaries II, Passive Large Cap Equity, Passive Core Fixed Income, International Equity ETF, Opportunistic, and MGIF were funded.

During the 4th quarter of 2022, Atalaya Evergreen Fund, BlackRock Global Credit Opportunities Fund II, and Octagon SMA were funded.

During the 1st quarter of 2023, AG Direct Lending Evergreen LP, Grosvenor Class E LLC, and Credit Suisse SMA were funded.

During the 2nd quarter of 2023, Kennedy Lewis Capital Partners Fund III LP and BVP Forge Institutional Fund LP were funded.

During the 3rd quarter of 2023, International Equity Quantitative, Banner Ridge Secondaries Fund V, Hammes Partners IV LP, and Strategic Value Capital Solutions Fund II were funded.

**Addendum**

During the 4th quarter of 2023, Ares Pathfinder Fund II was funded.

During the 1st quarter of 2024, Arlington Capital Partners VI LP, IFM Global Infrastructure, Internal International Equity Quantamental, and Bessemer Venture Partners XII LP were funded.

## Glossary

**Active Return** - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark.

**Active Share** - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two.

**Alpha** - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

**Alpha Ratio** - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

**Average Quality** - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers), such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters, such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

<u>S&amp;P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&amp;P</u>	<u>Moody's</u>	<u>Explanation</u>
<b>Higher Credit Quality – Investment Grade</b>			<b>Lower Credit Quality – Below Investment Grade</b>		
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

**Benchmark Effect** - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

**Beta** - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

**Box Plots** - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1<sup>st</sup> quartile, 2<sup>nd</sup> quartile, 3<sup>rd</sup> quartile, and 4<sup>th</sup> quartile). The median observation is where the 2<sup>nd</sup> quartile and 3<sup>rd</sup> quartile meet.

**Buy and Hold Attribution** - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

**Sector** - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data. Attribution to "other" is the result of securities based in industries that do not fit into any GICS classification.

**Country/Region** - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider. Attribution to "EMEA" represents securities based in Europe, the Middle East, and Africa. Attribution to "Other" is the result of securities based in countries/regions that do not fit into any MSCI classification.

**Style** - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, and names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.

## Glossary

### Capital Markets Review -

**Breakeven Inflation** - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

**Consumer Confidence** - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

**Consumer Price Index (CPI)** - Measures the change in the price level of consumer goods and services.

**Federal Funds Rate** - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.

**Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.

**Purchasing Managers Index (PMI)** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.

**Real Gross Domestic Product (Real GDP)** - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.

**Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.

**US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.

**VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."

**Cash Flow Effect** – The composite's active return minus the sum of each managers' active return minus the benchmark effect.

**Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

**Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.

**Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.

**Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.

**Current Yield** - The annual income of a security divided by the security's current price.

**Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.

**Downside Risk** - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.

**Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.

**Effective Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.

**Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.

**Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.

**Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.

**Expense Ratios** - Morningstar is the source for mutual fund expense ratios.

**Gain/Loss** - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.

**Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.

**Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.

## Glossary

**Liability Driven Investing (LDI)** - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.

**Estimated Funded Status** - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.

**Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.

**Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.

**Duration of Assets** - The dollar-weighted average duration of all the individual Plan assets.

**Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

**Modified Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

**Mutual Fund Performance** - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

**Net Cash Flow** - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

### Peer Groups -

**Plan Sponsor Peer Groups** - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans.

**Investment Manager Peer Groups** - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

**Percentile Rankings** - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value                      100 - Lowest Statistical Value

*Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4<sup>th</sup> percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.*

**Performance Methodology** - RVK calculates performance for investment managers and composites using different methodologies.

**Investment Managers** - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of  $\geq 10\%$  of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

**Composites** - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

**Portfolio Characteristics & Distribution (%)** - Due to disclosure guidelines set by each investment manager, portfolio characteristics and distribution percentages shown are as of the most recent date available.

**Price to Earnings Ratio** - The ratio valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

**Private Equity Quartile Ranks** - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

**R-Squared** - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

**Return** - Compounded rate of return for the period.

**% Return** - The time-weighted rate of return of a portfolio for a given period.

**Risk Free Benchmark** - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.



## Glossary

**RVK Liquidity Rating** - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Stable Value (Plan Sponsor Directed)	50
TIPS	95	Hedge Funds of Funds	35
US Large Cap Equity	95		
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Global Equity	90	<u>Not Liquid Investments</u>	
Non-US Large Cap Equity	90	Core Real Estate	25
Global Tactical Asset Allocation	88	Core Plus Real Estate	15
MLPs	85	Non-Core Real Estate	5
US Mid Cap Equity	85	Private Equity	5
US SMid Cap Equity	85	Private Credit	5
US Small Cap Equity	85		
REITs	85		
Non-US Small Cap Equity	85		
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

**Sector Allocation** - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

**Sharpe Ratio** - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

**Simple Alpha** - The difference between the manager's return and the benchmark's return.

**Spread Duration** - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

**Standard Deviation** - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

**Thematic Classification** - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

<u>Alpha</u>	<u>Capital Appreciation</u>	<u>Capital Preservation</u>	<u>Inflation</u>
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Bank Loans
	Preferred Securities	Asset Backed Fixed Income	Core Real Estate
	High Yield	Domestic Core Plus Fixed Income	Real Return
	Convertible Fixed Income	Mortgage Backed Fixed Income	Inflation Hedges
	TALF Funds	International Developed Fixed Income	REITs
	Distressed Debt	Cash Equivalents	Commodities
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

**Time Period Abbreviations** - **QTD** - Quarter-to-Date. **CYTD** - Calendar Year-to-Date. **FYTD** - Fiscal Year-to-Date. **YOY** - Year Over Year.

**Total Fund Attribution** - The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

**Strategic Asset Allocation (SAA)** - The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns.

**Tactical Asset Allocation (TAA)** - The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

**Style Selection (SS)** - The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

**Manager's Skill (MS)** - The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.

**Total Fund Beta** - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.



## Glossary

**Tracking Error** - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

**Treynor Ratio** - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

**Unit Value** - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

**Up Market Capture** - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolio's return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

**Yield to Maturity** - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

**Yield to Worst** - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

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