



Memorandum

То	Wyoming State Loan and Investment Board
From	RVK, Inc.
Subject	Investment Performance Analysis – Summary of Contents
Date	June 30, 2021

To assist in your review of the Investment Performance Analysis for the quarter ended June 30, 2021, we have provided below an outline and summary of the information contained within each section of this report.

MEMORANDUM – Investment Performance Analysis Commentary

 This three-page memo provides a written summary of significant observations regarding performance of the State's Funds and an overview of performance during the quarter for each of the State's asset classes.

TAB 1 – Market Environment

• This section is intended to review capital markets in general (i.e. not specific to Wyoming), and includes a written summary of events during the quarter, including economic influences and review of equity and bond markets as a whole. This section also includes various charts and exhibits displaying key characteristics of major market indices representing the broad range of available asset classes, including alternative investments such as absolute return and real estate. Also included is an asset class summary that describes the structure of each of the State's composites. Lastly, this section includes a review of the benchmarks referenced within the quarterly report.

TAB 2 - Total Fund

 This section provides an overview of all of the State's investments, both permanent and non-permanent. Exhibits include an outline of the aggregate asset allocation – by manager, by investment fund, by asset class, and compared to peers. This section also includes Total Fund performance compared to other plan sponsors and highlights the risk and return profile of the State.

TAB 3 - Investment Funds

 This section details the asset allocation versus target of each of the State's investment funds. In addition, a summary page highlighting the performance of each fund compared to the respective total fund index is included.

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TAB 4 – Total Equity

This section summarizes the State's allocation to traditional equity managers – both
domestic and international – and details the performance of each manager versus both their
corresponding benchmark as well as their direct peer universe. Attribution pages are also
incorporated, which outline the allocation by sector (or region) for each sub-composite and
the corresponding performance.

TAB 5 – Alternative Assets

• This section includes allocation and performance information for the State's alternative investments, which include real estate, absolute return, and private equity strategies.

TAB 6 - Total Fixed Income

 Similar to the equity section, this section summarizes the allocation to and performance of each of the State's fixed income managers, including the internally managed portfolio. Characteristics pages are also included for each sub-composite.

TAB 7 – Cash and Cash Equivalents

• This two-page summary outlines the performance of the State's cash portfolios compared to current T-Bill rates and a custom blended index for JP Morgan.

Tab 8 – Investment Manager Profile Pages

This section contains a number of portfolio characteristic pages for the State's investment
managers, including historical strategy performance prior to the State's investment. These
pages include such characteristics as risk, upside/downside capture, market capitalization,
allocation by sector and more.

TAB 9 – Investment Policy Objective Review

• The section provides a compliance check for the Total Fund, and for each individual manager portfolio, versus the guidelines and expectations outlined in the State's Master Investment Policy and Sub-Policies.

APPENDIX

The appendix includes a glossary, providing definitions and other information on data
included throughout the report, including financial terms and ratios, indices, and peers
groups. The addendum page in the appendix includes important comments specific to
Wyoming regarding market value, performance, and allocation information provided
throughout the report.

WYOMING STATE TREASURER'S OFFICE

SECOND QUARTER 2021

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Memorandum

То	Wyoming State Loan and Investment Board
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Outlined below please find a summary of significant observations regarding performance of the State's Funds for the period ended June 30, 2021. We hope this summary will facilitate your review of our Investment Performance Analysis Report.

The Total Fund returned 4.3% net of fees during the second quarter as risk assets produced positive returns. Long-term performance for the Total Fund remains strong, with the State earning returns of 5.2% and 5.4% per annum over the trailing seven- and ten-year periods.

Absolute results were positive for most of the State's investment pools, with each pool keeping pace with, or modestly outperforming, their respective benchmarks during the quarter. The State's non-permanent funds with larger strategic allocations to fixed income investments generated lower returns on an absolute basis, but similar returns on a relative basis, compared to the State's permanent funds.

The Bloomberg US Aggregate Bond Index increased by 1.8% in the quarter, as treasury yields declined this quarter. Diversification away from core US bonds had mixed results as EMD and long duration outperformed the broad market, while bank loans and low duration underperformed. The State's core fixed income managers outperformed the broad market index, collectively returning 2.0%. Long duration and low duration outperformed their respective benchmarks, while EMD and bank loans modestly underperformed their respective benchmarks during the quarter.

US equity markets had a strong recovery across all market capitalizations and styles during the second quarter. Major US equity indices finished the quarter in positive territory, with the Russell 3000 Index returning 8.2% for the quarter. The State's All Cap and Small Cap US equity composites had positive returns during the second quarter, keeping pace with or modestly underperforming their respective indices.

Developed international markets outperformed emerging markets during the quarter, with the MSCI EAFE Index returning 5.2% and the MSCI Emerging Markets Index returning 5.0%. The State's international equity composite returned 5.3% during the quarter, underperforming the MSCI ACW Ex US Index by 0.2%. Passively managed strategies within the State's international

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equity portfolio kept pace with their respective benchmarks, while Arrowstreet underperformed its respective benchmark by 0.4%. Harding Loevner had underperformance of 0.7%.

Mixed assets, including preferred stock and MLPs, generated positive absolute returns during the quarter. Cohen & Steers returned 3.2% in the quarter, but underperformed its benchmark by 1.4%. MLPs had strong positive performance as Harvest Active and Harvest Passive returned 18.0% and 19.1%, respectively, but Harvest Active underperformed the index.

Core real estate generated a positive return during the quarter, with capital appreciation outpacing income. The State's core real estate composite earned 4.6% in the quarter, outperforming the NCREIF ODCE Index. Clarion earned 5.4%, while UBS returned 2.7%. MS Prime also had a positive return of 2.8%.

Diversified hedge funds returned 3.2% during the quarter, outperforming the HFRI FOF Composite Index by 0.3%. Grosvenor Diversified Hedge Funds and Internal Diversified Hedge Funds returned 3.1% and 3.3%, respectively.

Fiscal Year Ended June 30, 2021

In a year marked by very strong performance for risk assets but modest performance for core fixed income, each of the State's investment pools earned positive absolute returns ranging from 0.2% to 23.3%. A majority of the investment pools outperformed their respective benchmarks during the year. Relative returns were supported by the State's Fixed Income portfolio, which outperformed the Bloomberg US Agg Bond Index amidst a strong return environment for credit, high yield, and international bond market sectors. However, the longer maturity range of the yield curve saw yields increase significantly over the course of the year, causing negative returns for intermediate and long duration portfolios. Public equities and alternatives also contributed to positive absolute results for the permanent funds as the fiscal year saw meaningfully positive performance among risk assets. Small-cap equity and MLPs outperformed domestic large-cap and international equities during the fiscal year as a risk-on environment supported a meaningful recovery in public equity markets. Core real estate and hedge funds also produced positive fiscal year returns. The re-opening of economies, the development and distribution of vaccines, and positive economic growth supported a strong market recovery over the course of the fiscal year.

• The Permanent Mineral Trust and Common School Permanent Land Fund ended the fiscal year with returns of 23.1% and 16.1%, respectively. The Permanent Land Fund and University Permanent Land Fund ended the fiscal year with returns of 22.4% and 23.3%, respectively. Of these four Permanent Funds, PMTF, CSPLF, and UPLF outperformed their respective total fund benchmarks. Hathaway Scholarship Endowment and Higher Education Endowment returned 22.5% and 16.2%, respectively. The HE Fund outperformed its respective benchmark. The Workers Compensation Fund returned 11.8%, outperforming its fund benchmark by 0.9%.



• Absolute performance for the Non-Permanent Funds (Pool A, LSRA and State Agency Pool) was well below that of the Permanent Funds, but the Non-Permanent Funds had similar returns relative to their fund benchmarks. Pool A returned 12.4% versus 11.4% for its fund benchmark, LSRA returned 10.7% versus 10.4% for its fund benchmark, and the State Agency Pool returned 0.2% versus 0.3% for its fund benchmark.

Fixed income markets experienced positive returns as short duration and non-core increased during the year.

- Core Fixed Income: The Core Fixed Income Portfolio produced a positive fiscal year return of 0.1% compared to the Bloomberg US Aggregate Bond Index return of -0.3%.
- Non-Core Fixed Income: Diversification away from core US bonds had mixed results as long duration underperformed the broad market, while bank loans, EMD, and low duration outperformed. Non-US fixed income exposures had a positive impact to relative and absolute returns within the fixed income portfolio. Opportunistic European credit earned 4.9% over the trailing one-year period, while emerging market debt returned 9.6%.

Consistent with global markets, the State's equity and alternative investment managers produced positive absolute results and mixed relative results, as shown below:

- The All Cap US equity portfolio returned 40.7% compared to 40.8% for the All Cap Custom Index.
- The Small Cap US equity portfolio returned 53.6% compared to 62.0% for the Russell 2000 Index.
- The international equity portfolio returned 39.7% compared to 35.7% for the MSCI ACW Ex US Index.
- The core real estate portfolio returned 8.2%, compared to 7.1% for the NCREIF ODCE Index.
- The diversified hedge funds portfolio returned 13.3%, compared to 18.3% for the HFRI FOF Comp Index.
- The MLP portfolio returned 57.6%, compared to 58.6% for the MLP Custom Index.

Capital Markets Review



Capital Markets Review As of June 30, 2021

Second Quarter Economic Environment

Optimism stemming from reopening efforts, lifted mask mandates, and a proposed bipartisan infrastructure spending bill in the US was balanced with concerns regarding emerging variants of the coronavirus and increasing inflation. Global equity markets provided strong gains in Q2 led by the US equity market. Joining equity markets in positive territory were commodities and REITs. Aggregate fixed income markets generally trailed, although issues with longer dated maturities or that are inflation-linked fared better. Key inflation indicators experienced significant year-over-year increases in Q2, but many forecasters view these elevated levels as transitory. Currently, Fed officials are projecting two rate increases by the end of 2023 but remain sensitive to repeating the taper tantrum experienced in 2013. Inflation is also rising outside of the US which notably led both the Bank of Canada and Bank of England to announce the tapering of their bond purchasing programs. Progress in the US labor market recovery was mixed in Q2. The jobs reports in April and May failed to meet expectations, but the gains in the June report outpaced most forecasts. The unemployment rate remains above target levels, although the Congressional Budget Office projected that the rate would decline to 3.6% by the end of 2022. Overall, the economic recovery continues to advance, with the International Monetary Fund forecasting global GDP growth of 6.0% and 4.4% in 2021 and 2022, respectively.

Economic Indicators Jun-21 Mar-21 Jun-20 Jun-18 20 Vr

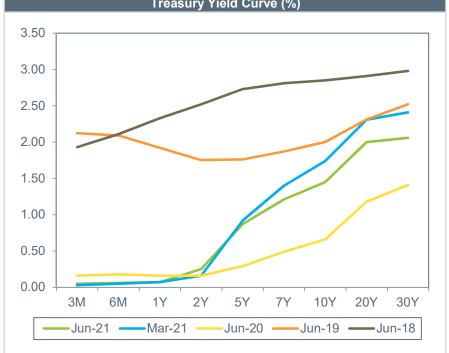
16]	30 7	120]	70]	160]
14 -	25 - 20 -	100 -	60	140 -
12 -	15 -		50 -	120 -
10 -	10 -	80 -	40 -	100 -
8 - 6 -	5 - 0	60	30 -	80 -
4 -	-5 -		20 -	60 -
2 -	-10 - -15 -	40 -	10 -	40 -
0	-20	20	0	20
Unemploymer Rate (%)	nt CPI Year-over- Year (% change)	US Govt Debt (% of GDP)	VIX Index (Volatility)	Consumer Confidence
Since 1948	Since 1914	Since 1940	Since 1990	Since 1967
	Treas	surv Yield Cur	vo (%)	

Key Economic Indicators

Economic indicators	Jun-21	IVIAT-21	Jun-∠∪	Jun-18	∠U Yr
Federal Funds Rate (%)	0.08	0.06	0.08	1.91	1.37
Breakeven Infl 5 Yr (%)	2.50 🔻	2.60	1.17	2.08	1.83
Breakeven Infl 10 Yr (%)	2.34	2.37	1.34	2.13	2.02
CPI YoY (Headline) (%)	5.4	2.6	0.6	2.9	2.1
Unemployment Rate (%)	5.9	6.0	11.1	4.0	6.1
Real GDP YoY (%)	12.2	0.5		3.3	1.8
PMI - Manufacturing	60.6	64.7	52.2		53.1
USD Total Wtd Idx	112.85	114.13	120.78		103.17
WTI Crude Oil per Barrel (\$)	73.5 ▲	59.2	39.3	74.2	63.2
Gold Spot per Oz (\$)	1,770 🔺	1,708	1,781	1,253	1,048
Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
Market Performance (%) S&P 500 (Cap Wtd)	QTD 8.55	15.25	1 Yr 40.79	5 Yr 17.65	10 Yr 14.84
· ,					
S&P 500 (Cap Wtd)	8.55	15.25	40.79	17.65	14.84
S&P 500 (Cap Wtd) Russell 2000	8.55 4.29	15.25 17.54	40.79 62.03	17.65 16.47	14.84 12.34
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net)	8.55 4.29 5.17	15.25 17.54 8.83	40.79 62.03 32.35	17.65 16.47 10.28	14.84 12.34 5.89
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net) MSCI EAFE SC (Net)	8.55 4.29 5.17 4.34	15.25 17.54 8.83 9.04	40.79 62.03 32.35 40.98	17.65 16.47 10.28 12.03 13.03	14.84 12.34 5.89 8.38
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net) MSCI EAFE SC (Net) MSCI Emg Mkts (Net)	8.55 4.29 5.17 4.34 5.05	15.25 17.54 8.83 9.04 7.45	40.79 62.03 32.35 40.98 40.90 -0.34	17.65 16.47 10.28 12.03 13.03 3.03	14.84 12.34 5.89 8.38 4.29
S&P 500 (Cap Wtd) Russell 2000 MSCI EAFE (Net) MSCI EAFE SC (Net) MSCI Emg Mkts (Net) Bloomberg US Agg Bond	8.55 4.29 5.17 4.34 5.05 1.83	15.25 17.54 8.83 9.04 7.45 -1.61	40.79 62.03 32.35 40.98 40.90 -0.34	17.65 16.47 10.28 12.03 13.03 3.03	14.84 12.34 5.89 8.38 4.29 3.39

HFRI FOF Comp

Bloomberg Cmdty (TR)





18.28

45.61

4.94

21.15

6.12

2.40

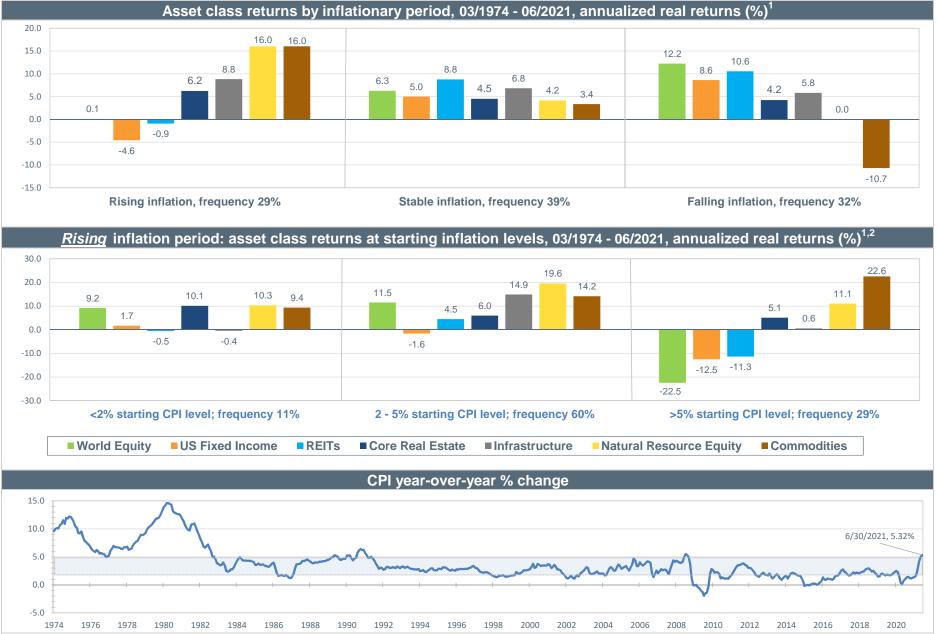
2.86

13.30

3.85

-4.44

Asset Class Returns by Inflation Period As of June 30, 2021



^{1.} Real returns are based on US CPI and are calculated using quarterly periodicity. A rising inflation period is defined as any quarter when Y/Y US CPI rose by 0.3% or more; a falling inflation period when Y/Y CPI fell by -0.3% or more in a quarter; the remaining periods are classified as stable inflation. Starting date for Core Real Estate is March 1978. 2: Starting CPI level is based on Y/Y US CPI in a given quarter; rising inflation period in Footnote 1.

Data: World Equity: MSCI World Index (net). US Fixed Income: BB US Gov Bond Index through 12/31/1975, and BB US Agg Index thereafter. REIT: FTSE NAREIT Equity REITs Index through 12/31/1995, and MSCI World/Real Estate GR USD Index thereafter. Infrastructure: 50/50 Blend of Datastream World Pipelines and Datastream World Gas, Water & Multi-Utilities through 12/31/2001, and S&P Global Infrastructure thereafter. Natural Resource Equity: 50/50 Datastream World Oil & Gas and Datastream World Basic Materials through 11/30/2002, and S&P Global Natural Resources thereafter. Commodity: S&P GSCI through 12/31/1991, and BB Commodity Index thereafter.



US Equity Review As of June 30, 2021

Second Quarter Review

Broad Market

US equity markets built on the solid start to 2021, with strong performance in Q2 driven by continued monetary and fiscal stimulus, along with increasing vaccination rates leading to economic reopening efforts across the country. The S&P 500 Index finished Q2 up 8.5%. The forward P/E ratio of the S&P 500 Index continues to be above historical levels; however, it has seen a slight decrease relative to Q1.

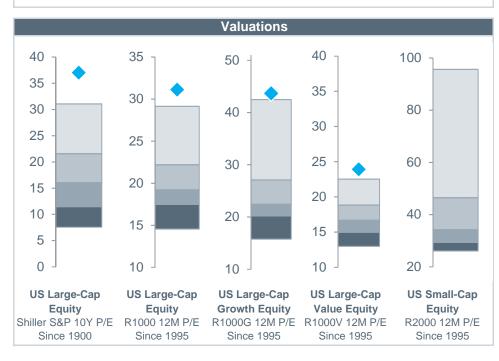
Market Cap

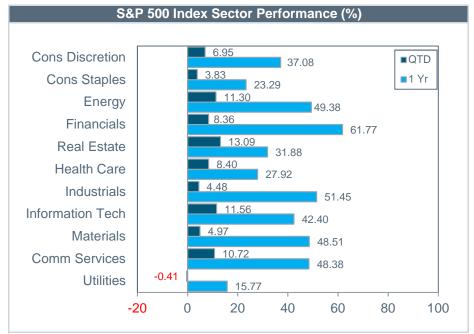
Large-cap stocks significantly outperformed their smaller-cap counterparts. The Russell 2000 Index returned 4.29% compared to 8.55% for the S&P 500.

Style and Sector

Large- and mid-cap growth stocks outperformed value in Q2, however, value stocks continued to lead growth stocks in the small-cap space. The Russell 1000 Growth Index returned 11.9% versus 5.2% for the Russell 1000 Value Index.







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. Current R2000 P/E is unavailable due to negative earnings per share as of 6/30/2021.



Non-US Equity Review
As of June 30, 2021

Second Quarter Review

Developed Markets

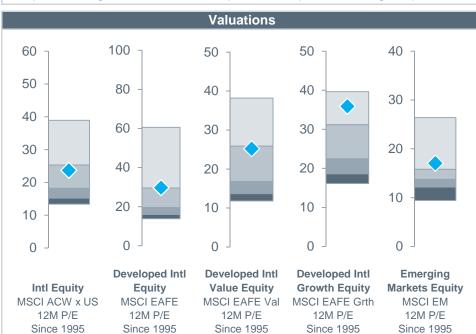
Developed international markets delivered positive returns in Q2, as growth outperformed value in a reversal of the value rally experienced in Q1, while small-cap stocks slightly trailed their large counterparts. Active management did well this quarter, with a majority of developed international equity managers beating their benchmarks in the large- and small-cap universes.

Emerging Markets

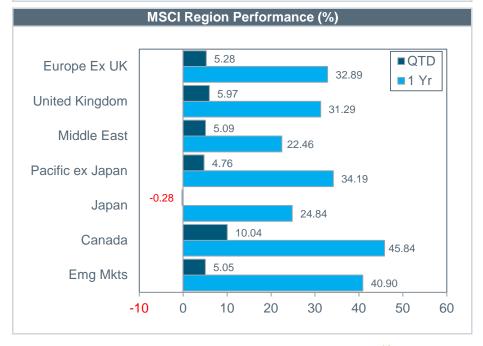
Emerging markets lagged developed markets in Q2 but still continued a trend of positive performance. Contrary to the reversal seen in developed markets, emerging market value stocks continued to outperform growth while small-cap stocks also continued their outperformance over large. Active manager results in emerging markets were mixed, with just under half outpacing their benchmarks for the quarter.

Market Cap & Style

In international markets, growth stocks outperformed value, while large-cap stocks outperformed small-cap. In emerging markets, value stocks outperformed growth, while small-cap stocks outperformed large-cap.









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.



Fixed Income Review
As of June 30, 2021

Second Quarter Review

Broad Market

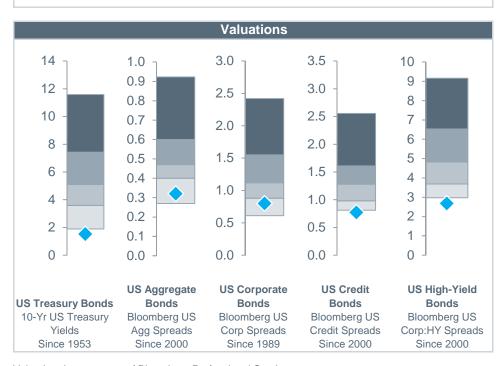
The Bloomberg US Aggregate Index returned 1.8% in Q2, partially retracing losses from Q1, while overall remaining down -1.6% YTD. Treasury yields fell back despite an easing of pandemic related restrictions which supported economic growth and rising inflationary pressures.

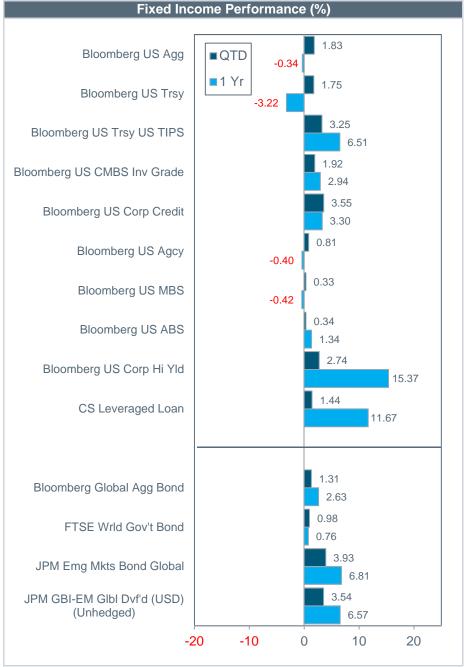
Credit Market

Lower quality investment grade debt rated BBB outperformed both the investment grade and high yield credit markets, a departure from the trend in past quarters of lowest quality credit outperforming higher grade debt. In Q2, the Bloomberg US Credit Index returned 3.3%, with the Bloomberg BBB Credit Index returning 3.7%.

Emerging Market Debt

Emerging market debt saw improved performance compared to Q1 on the heels of falling US Treasury yields and rising commodity prices, contributing to broadly positive emerging market debt performance.







Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.



Alternatives Review As of June 30, 2021

Second Quarter Review - Absolute Return

General Market - Hedge Funds

Diversified hedge funds posted another strong quarter, returning 4.0% and bringing YTD returns to 10.0% according to the HFRI Fund Weighted Composite Index. Heightened levels of activity across convertible bond issuance, IPOs, SPACs, and M&A provided fertile ground for event-driven funds, and equity beta tailwinds continued to add to returns in the hedged equity space. Event-driven strategies have outperformed relative value YTD, and directional strategies have outperformed low net exposure and market neutral approaches.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation strategies that RVK follows closely largely generated positive absolute returns in Q2, ranging from the low- to midsingle digits. Long-biased strategies produced mixed results versus a less diversified blended benchmark of 60% US equity and 40% US fixed income, which returned 5.8% in Q2. Generally, strategies that have maintained a value bias, especially within emerging markets, outperformed relative to peers.

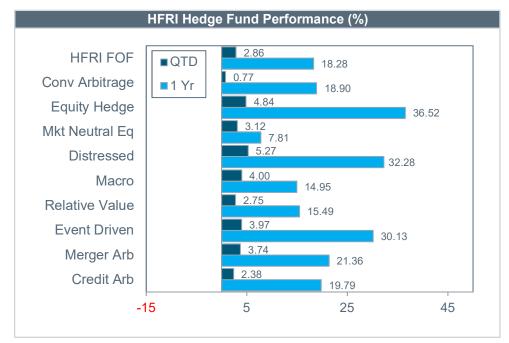
Second Quarter Review - Real Assets

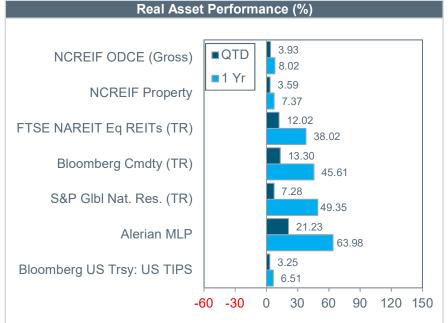
General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategies that RVK follows closely primarily generated strong positive absolute performance, ranging from the midsingle digits to low double-digits. In Q2, commodities, listed infrastructure, natural resource equities, REITs, and TIPS all posted positive absolute returns. Commodities led the way, with the Bloomberg Commodity Index posting a 13.3% return, largely driven by energy, with metals and agriculture also posting strong returns.

General Market - Real Estate

Core private real estate generated a positive 3.9% return in Q2, as reported by the NFI-ODCE Index, with the total return comprising of 1.0% income and 2.9% price appreciation. While the income trends in line with historical levels, price appreciation rebounded meaningfully by 1.8% from the level recorded in Q1. Publicly traded real estate investments outperformed their private market counterparts by a meaningful margin.







Annual Asset Class Performance As of June 30, 2021

Calendar Year Performance									Annualized Statis	tics (01/2	2006 - 06/20)21)			
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	CYTD (As of 06/21)		Return	Standard Deviation	Sharpe Ratio
Best	15.99	18.64	38.82	14.07	15.02	21.95	27.19	10.19	31.49	21.32	44.23	S&P 500 Index - US Large Cap	10.56	14.92	0.67
	14.47	16.83	32.39	13.69	5.74	21.31	21.83	8.35	25.53	19.96	26.18	Russell 2000 Index - US Small Cap	9.75	20.03	0.51
	11.29	16.76	29.75	12.50	5.47	13.33	18.01	1.87	21.51	18.40	17.54	International Equity Custom Index - International	4.77	17.17	0.29
	7.84	16.35	21.52	11.32	1.38	11.96	15.21	0.44	17.64	10.88	15.25	Cambridge US PE Index - Private Equity	13.97	11.14	1.13
	2.11	16.00	15.29	7.66	0.55	10.16	14.65	0.01	13.88	10.65	9.16	NCREIF ODCE Index - Real Estate	6.62	7.59	0.73
	1.52	13.57	13.94	5.97	0.18	9.94	9.11	-4.02	13.47	7.97	6.12	HFRI FOF Comp Index	3.25	5.55	0.39
	0.66	10.94	8.96	4.89	-0.27	8.77	7.77	-4.25	8.72	7.51	5.38	S&P U.S. Preferred Stock Index	5.69	16.27	0.35
	-1.16	9.66	5.29	3.37	-0.69	4.50	7.62	-4.38	8.64	3.12	4.94	MLP Custom Index	6.52	24.74	0.34
	-1.75	4.95	0.12	1.60	-4.41	2.65	4.12	-6.21	8.39	1.50	3.28	Bloomberg US Agg Bond Index - Fixed Income	4.23	3.20	0.94
	-4.18	4.79	-0.17	0.18	-5.66	1.94	3.54	-11.01	7.55	1.19	0.02	S&P LSTA Lvgd Loan Index - Bank Loans	4.69	7.59	0.48
ļ	-5.72	4.21	-2.02	-3.87	-14.92	0.51	0.84	-11.67	5.34	0.67	-0.92	EMD Custom Index	4.79	12.26	0.35
Worst	-13.71	0.26	-8.98	-5.72	-35.07	0.38	-5.58	-14.20	2.47	-25.60	-1.61	JP Morgan Cash Custom Index - Cash Equiv	1.46	0.54	1.18

The International Equity Custom Index consists of the MSCI EAFE Index (USD) (Gross) through July 2010 and the MSCI ACW Ex US Index (USD) (Net) thereafter.

The MLP Custom Index consists of the S&P MLP Index (TR) through 06/30/2019, the Alerian MLP Index through 12/31/2019, and 50% Alerian MLP Index / 50% Alerian Midstream Energy Index thereafter.

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

The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return.

The primary benchmark for JP Morgan Cash is the ICE BofAML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index through 06/30/2019, and the ICE BofAML 3 Mo US T-Bill Index thereafter.

The Cambridge US Private Equity Index is shown for informational purposes only. Due to availability of data, current quarter performance assumes a 0.00% return.



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 structures. Investments also include exposure to direct co-investments and secondaries. Recent commitments within this asset class have added global diversification to the portfolio.

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.

Opportunistic: The **Opportunistic Investment** sleeve is currently comprised of a single specialized 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 and the MSCI ACW Ex US 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 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.

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 subsection 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, 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.

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 GbI Dvf'd Index through 02/29/2020, 70% JPM GBI-EM GbI Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM GbI Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI GbI 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 GbI Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25% JPM EMBI GbI 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 GlbI 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.

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



Wyoming State Treasurer's Office Asset Allocation, Performance & Schedule of Investable Assets

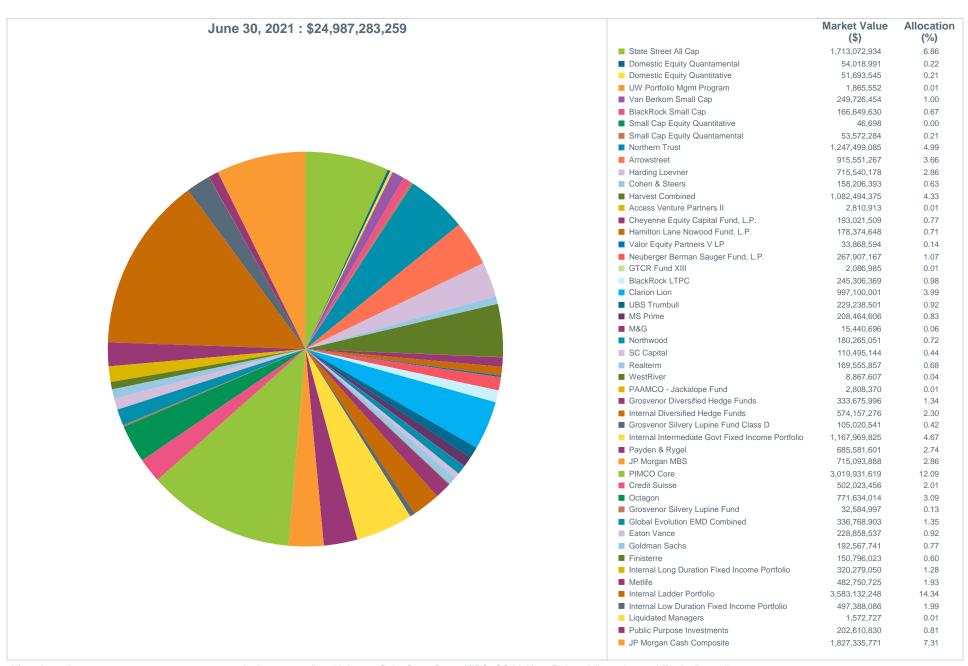
Asset Allocation & Performance							
	Allocation		Performance (%)				
	Market Value (\$)	%	FYTD				
Total Fund	24,987,283,259	100.00	14.94				
All Cap US Equity Composite	1,818,785,471	7.28	40.68				
State Street All Cap	1,713,072,934	6.86	40.73				
Domestic Equity Quantamental	54,018,991	0.22	N/A				
Domestic Equity Quantitative	51,693,545	0.21	N/A				
UW Portfolio Mgmt Program	1,865,552	0.01	35.98				
Small Cap US Equity Composite	469,995,066	1.88	53.57				
Van Berkom	249,726,454	1.00	42.00				
BlackRock Small Cap	166,649,630	0.67	N/A				
Small Cap Equity Quantamental	53,572,284	0.21	N/A				
Small Cap Equity Quantitative	46,698	0.00	N/A				
Int'l Equity Composite	2,878,590,529	11.52	39.74				
Northern Trust	1,247,499,085	4.99	35.57				
Arrowstreet	915,551,267	3.66	50.28				
Harding Loevner	715,540,178	2.86	33.69				
Preferred Stock Composite	158,206,393	0.63	14.74				
Cohen & Steers Preferred Stock	158,206,393	0.63	14.74				
MLPs Composite	1,082,494,375	4.33	57.60				
Harvest Fund Advisors	541,678,027	2.17	54.98				
Harvest Fund Advisors Passive	540,816,348	2.16	60.13				
Private Equity Composite	923,376,185	3.70	N/A				
Access Venture Partners II	2,810,913	0.01	N/A				
Cheyenne Equity Capital Fund, L.P.	193,021,509	0.77	N/A				
Hamilton Lane Nowood Fund, L.P.	178,374,648	0.71	N/A				
Neuberger Berman Sauger Fund, L.P.	267,907,167	1.07	N/A				
BlackRock LTPC, L.P.	245,306,369	0.98	N/A				
Valor Equity Partners V LP	33,868,594	0.14	N/A				
GTCR Fund XIII	2,086,985	0.01	N/A				
Real Estate Composite	1,919,427,462	7.68	N/A				
Clarion Lion	997,100,001	3.99	10.20				
UBS Trumbull	229,238,501	0.92	1.27				
MS Prime	208,464,606	0.83	N/A				
SC Capital	110,495,144	0.44	N/A				
Realterm	169,555,857	0.68	N/A				
M&G	15,440,696	0.06	N/A				
Northwood	180,265,051	0.72	N/A				
WestRiver	8,867,607	0.04	N/A				

Asset Allocation & Performance							
	Allocation		Performance (%)				
	Market Value (\$)	%	FYTD				
Diversified Hedge Funds Composite	910,641,643	3.64	13.25				
PAAMCO - Jackalope Fund	2,808,370	0.01	N/A				
Grosvenor Diversified Hedge Funds	333,675,996	1.34	14.01				
Internal Diversified Hedge Funds	574,157,276	2.30	12.93				
Core Fixed Income Composite	5,588,576,933	22.37	0.11				
Internal Intermediate Gov't Fixed Income	1,167,969,825	4.67	-3.14				
Payden & Rygel IGC	685,581,601	2.74	3.25				
JP Morgan MBS	715,093,888	2.86	1.17				
PIMCO	3,019,931,619	12.09	0.33				
Laddered Treasury Composite	3,583,132,248	14.34	0.10				
Internal Ladder Portfolio	3,583,132,248	14.34	0.10				
Bank Loans Composite	1,273,657,471	5.10	10.59				
Credit Suisse	502,023,456	2.01	10.64				
Octagon	771,634,014	3.09	10.69				
Emerging Market Debt Composite	908,991,204	3.64	9.64				
Global Evolution	142,351,773	0.57	7.54				
Global Evolution Hard	194,417,130	0.78	N/A				
Goldman Sachs	192,567,741	0.77	9.18				
Eaton Vance	228,858,537	0.92	N/A				
inisterre	150,796,023	0.60	N/A				
Long Duration Fixed Income Composite	803,029,775	3.21	-2.74				
Internal Long Duration Fixed Income	320,279,050	1.28	-10.50				
Metlife	482,750,725	1.93	3.11				
Low Duration Fixed Income Composite	497,388,086	1.99	0.25				
nternal Low Duration Fixed Income	497,388,086	1.99	0.25				
Grosvenor Silvery Lupine Fund	32,584,997	0.13	4.95				
Grosvenor Opportunistic Class D	105,020,541	0.42	66.42				
Cash Equivalents	1,828,908,498	7.32	0.04				
Fisher Investments	901,588	0.00	N/A				
State Street Low Duration	29,699	0.00	N/A				
Allianz Global Investors	36,297	0.00	N/A				
Neuberger Berman Credit	574,056	0.00	N/A				
Cornerstone	2.354	0.00	N/A				
TA Associates Realty	26.117	0.00	N/A				
Seix	1,520	0.00	N/A				
Internal Equity Russell 2000	1,095	0.00	N/A				
Public Purpose Investments	202,610,830	0.00	N/A				
rubiic rui pose ilivestifietits	202,010,030	0.01	IN/A				

	Schedule of Investabl	e Assets - Total Fund Co	omposite Ex Public Purpo	ose Investments	
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	Unit Value
FYTD	22,455,329,030	-708,240,858	3,037,584,257	24,784,672,429	114.11

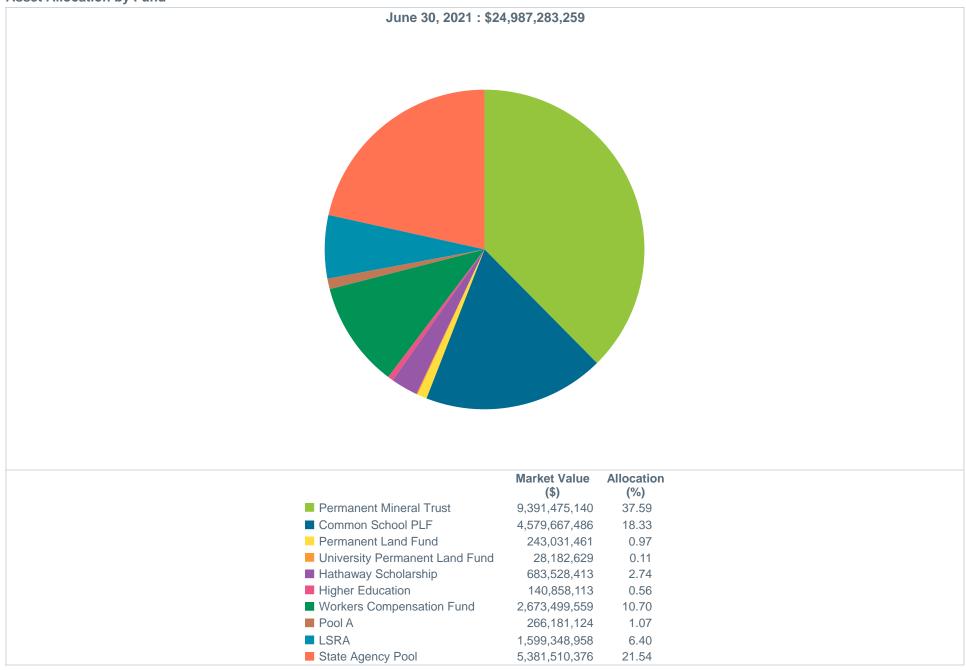
Allocations may not sum up to 100% exactly due to rounding. Performance shown is net of fees and excludes Public Purpose Investments (PPIs) and operational cash. Market value shown for Public Purpose Investments (PPIs) is as of 6/30/2021. Investment manager fees are accounted for on a quarterly basis. Wyoming State Treasurer's Office fiscal year ends on June 30th.





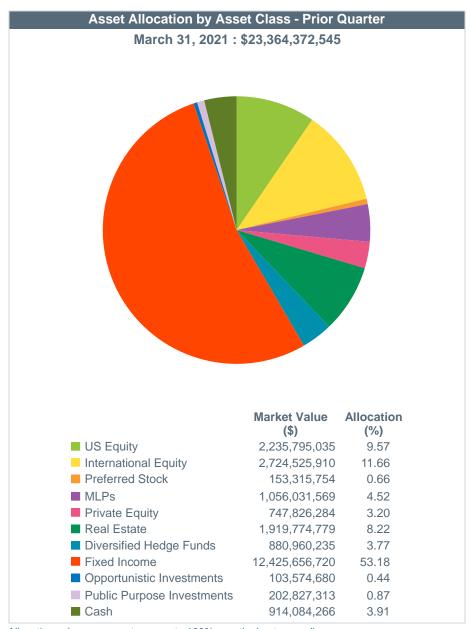
Allocations shown may not sum up to 100% exactly due to rounding. Heitman, Seix, State Street TIPS, CS McKee, Fisher, Allianz, Internal Equity Russell 2000, TA Realty, Cornerstone, NB Credit and State Street Low Duration are combined because the page shown only allows 50 managers to be included.

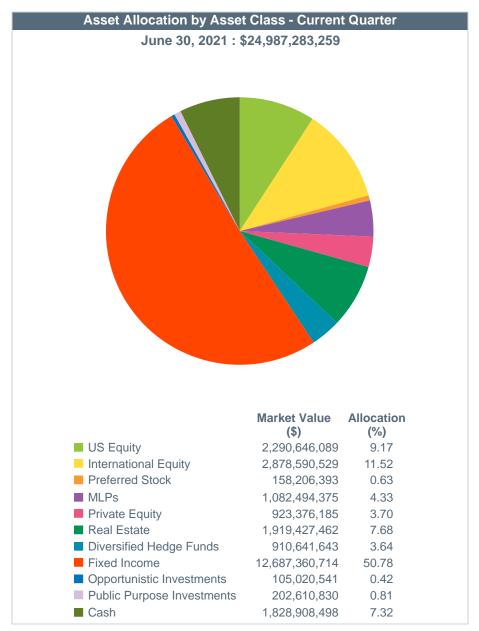




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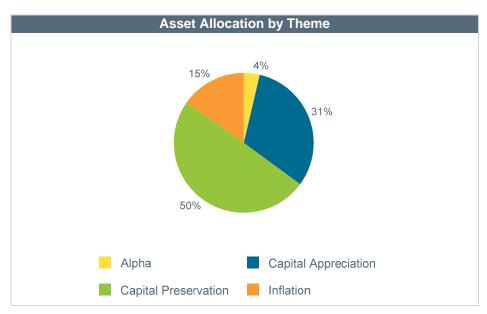


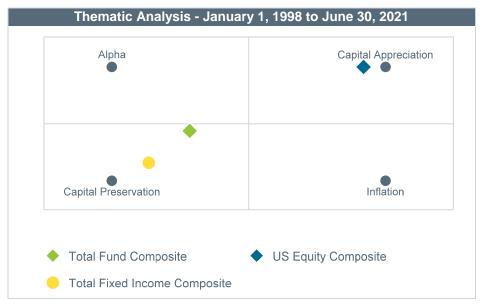


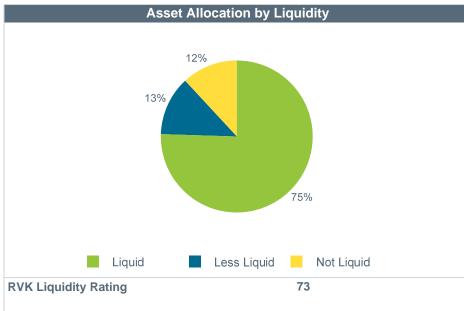


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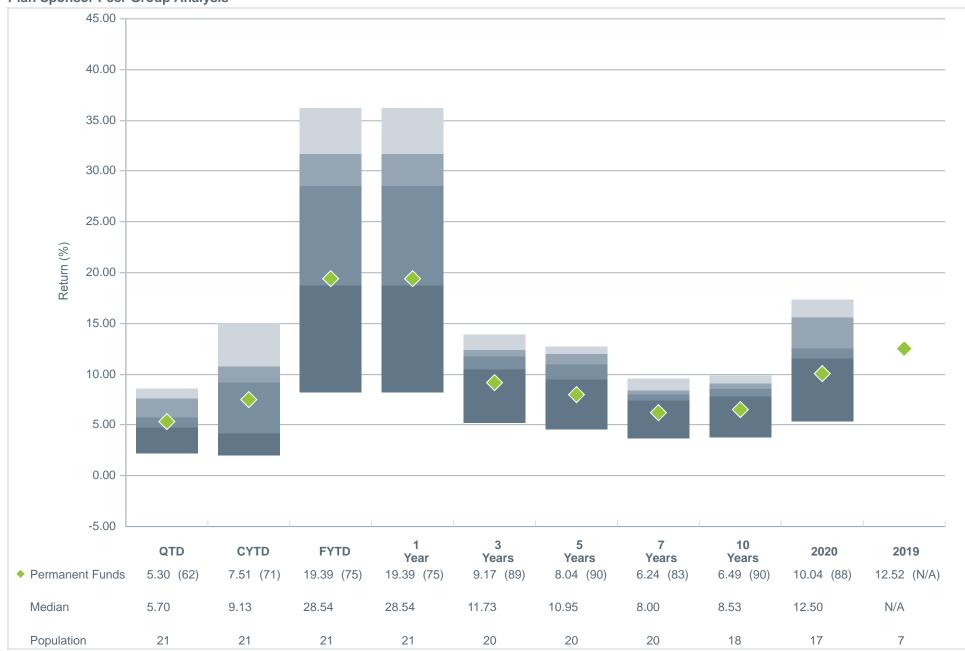


	Correlation Matrix - 10 Years									
	Α	В	С	D						
Α	1.00									
В	0.70	1.00								
С	-0.26	-0.39	1.00							
D	0.62	0.79	-0.11	1.00						
A B C D	= = = =	HFRI EH: Equity Market Not MSCI ACW Index (USD) (Considered Bloomberg US Gov't Bond Real Return Custom Index	Gross) (Capital Appre Index (Capital Prese							

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding these metrics. Allocations may not sum to 100% exactly due to rounding.

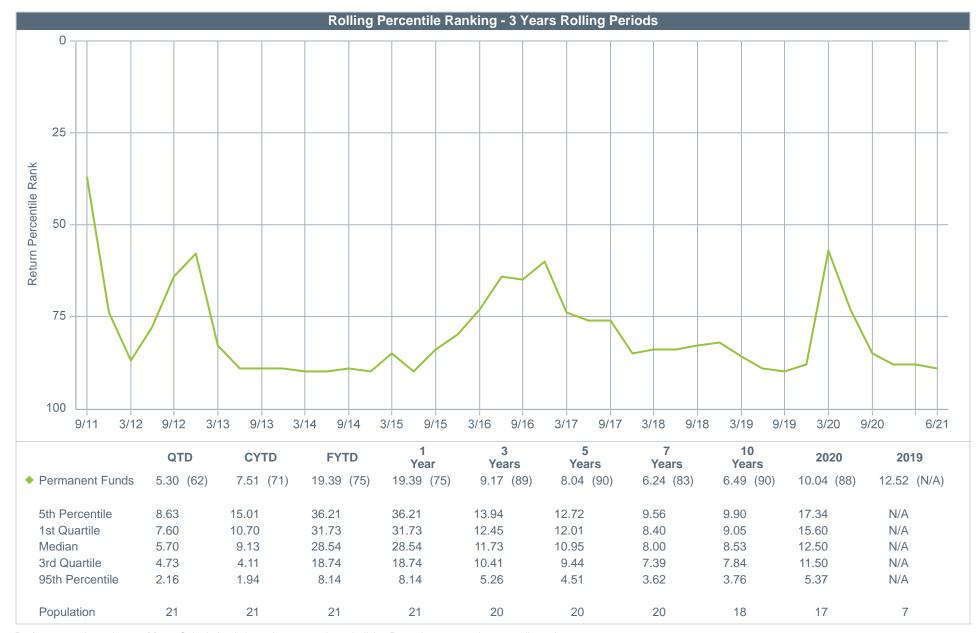


Wyoming State Treasurer's Office All Endowment&Foundation > \$1B-Total Fund Plan Sponsor Peer Group Analysis



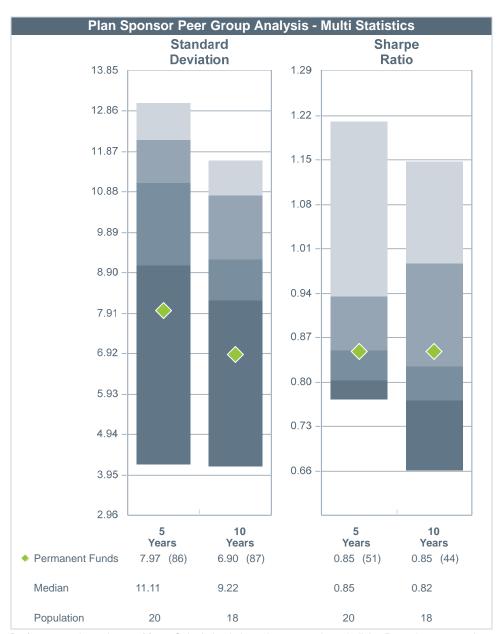
Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks. Wyoming State Treasurer's Office fiscal year ends on June 30th.





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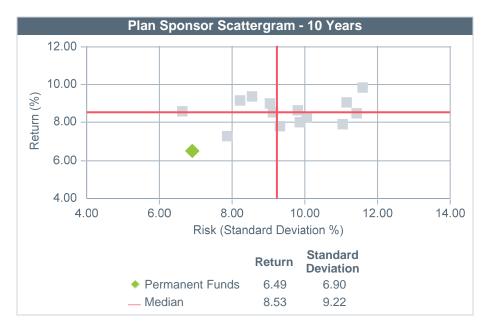


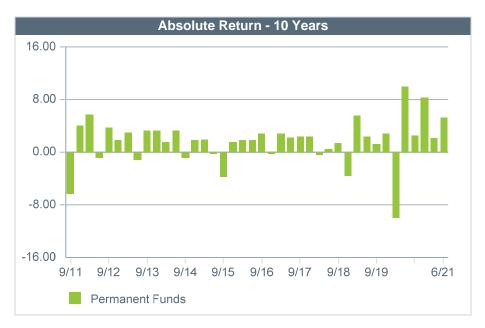


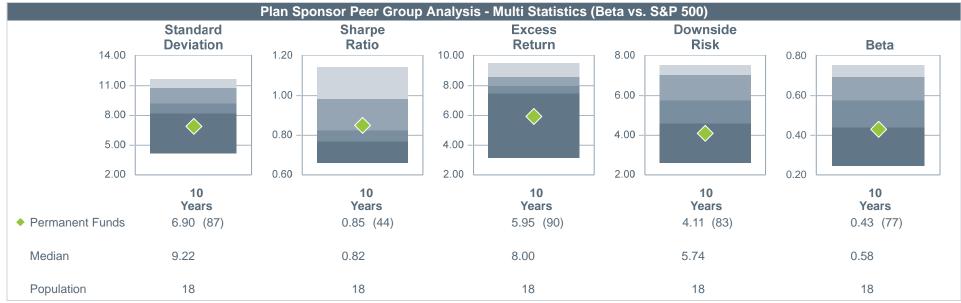


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Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.



Wyoming State Treasurer's Office Permanent Funds - Long-Term Total Return Focus

	Investme	nt Profile			Lo	ong-Te	rm Targ	et Allo	cation			
Fund Type: Permaner		erm investment income	and capital gains				Minimul Range (Target (%)	Maxim Range	
•	ain Objective: Produce maximized long-term investment income and capital gains lile providing an appropriate level of safety and liquidity.						-			100.00		-
		ation, total return, and p	protection against	Broad US Equity			5.50		11.00		16.5	50
		e important secondary		Small Cap US Equity			1.50		3.0	00	4.5	50
Maximum Equity Allo		1	5	International Equity			9.00		18.0	00	27.0)0
Current Long-Term T		ion: 64%		MLPs			2.75		5.5	50	8.2	25
Spending Policy	got =quity /oo			Private Equity			4.00		8.0	00	12.0)0
	Trust Fund: 5% of th	e five-year trailing avera	age market value	Core Real Estate			3.00		6.0	00	9.0)0
		r. In fiscal year 2023, the		Non-Core Real Estate			2.50 3.75		5.00 7.50		7.50	
		er, the spending rate wil		Diversified Hedge Funds							11.2	25
		essary to fully fund scho		Core Fixed Income 12.50 Bank Loans 3.00			12.50		25.00		37.50	
		essary to fully fulld scric	naisilips awaided					6.00		9.0)0	
under W.S. 21-16-13	so i et seq.			Opportunistic Fixed Income	е		0.00		0.00		5.00	
				EMD			2.50		5.0	00	7.5	50
	Thematic	Allocation		Opportunistic Investments			0.00		0.0		5.0	
				Cash (inv. in SAP)			0.00		0.0	00	5.0)0
	48%						Risk Me	trics				
		26%				5 Y	ears			10 Y	ears	
7%			18%		PMTF	PLF	UPLF	Hath	PMTF	PLF	UPLF	Hath
1 70			Sharpe Ratio	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	
Alpha			Inflation	Standard Deviation	8.9	8.5	9.9	8.8	7.6	7.3	8.2	7.3
Aipria Capital AppleGation Capital Freservation IIIIIation				Beta	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5
			Comparative	e Performance								
	·	Allocation			Perfo	rmance	(%)					

		Comp	arative Perfo	ormance					
	Allocation		Performance (%)						
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Permanent Mineral Trust	9,391,475,140	5.6	9.1	23.1	23.1	9.7	8.6	6.6	6.8
PMTF - Total Fund Index		5.7	9.1	22.7	22.7	9.6	8.3	6.6	6.8
Difference		-0.1	0.0	0.4	0.4	0.1	0.3	0.0	0.0
Permanent Land Fund	243,031,461	5.5	8.7	22.4	22.4	9.6	8.4	6.5	6.7
PLF - Total Fund Index		5.7	9.1	22.7	22.7	9.6	8.2	6.5	6.7
Difference		-0.2	-0.4	-0.3	-0.3	0.0	0.2	0.0	0.0
University Permanent Land Fund	28,182,629	5.5	8.6	23.3	23.3	9.7	8.9	6.8	6.9
UPLF - Total Fund Index		5.7	9.1	22.7	22.7	9.6	8.7	6.9	6.9
Difference		-0.2	-0.5	0.6	0.6	0.1	0.2	-0.1	0.0
Hathaway Scholarship	683,528,413	5.7	9.0	22.5	22.5	9.6	8.0	6.3	6.3
Hathaway - Total Fund Index		5.7	9.1	22.7	22.7	9.5	7.9	6.3	6.4
Difference		0.0	-0.1	-0.2	-0.2	0.1	0.1	0.0	-0.1

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. Thematic Allocation shown represents the Permanent Mineral Trust.

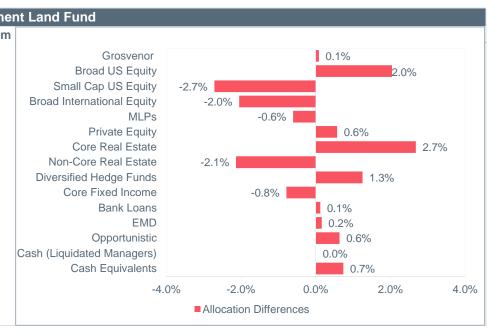


				Perma	nent Miner	al Trust				
	Allocation	Allocation	Minimum	Target	Maximum					
	(\$)	(%)	(%)	(%)	(%)	Grosvenor		0.19	6	
Grosvenor	11,465,069	0.1	0.0	0.0	0.0	Broad US Equity	-0.	5%		
Broad US Equity	975,269,853	10.5	5.5	11.0	16.5	Small Cap US Equity	-0.	4%		
Small Cap US Equity	241,005,548	2.6	1.5	3.0	4.5	Broad International Equity	-0	.4%		
Broad International Equity	1,632,354,836	17.6	9.0	18.0	27.0	MLPs	-(0.2%		
MLPs	488,549,023	5.3	2.8	5.5	8.3	Private Equity			1.1%	
Private Equity	846,257,219	9.1	4.0	8.0	12.0	Core Real Estate			1.1%	
Core Real Estate	654,467,683	7.1	3.0	6.0	9.0	Non-Core Real Estate	-1.9%			
Non-Core Real Estate	287,145,246	3.1	2.5	5.0	7.5	Diversified Hedge Funds	0.1	0.0%		
Diversified Hedge Funds	699,066,141	7.5	3.8	7.5	11.3	Core Fixed Income Bank Loans		5% -0.1%		
Core Fixed Income	2,267,794,916	24.5	12.5	25.0	37.5	EMD		0.0%		
Bank Loans	549,755,396	5.9	3.0	6.0	9.0	Opportunistic			0.7%	
EMD	462,213,640	5.0	2.5	5.0	7.5	Cash (Liquidated Managers)		0.0%		
Opportunistic	61,751,569	0.7	0.0	0.0	5.0	Cash Equivalents			1.0%	
Cash (Liquidated Managers)	657,872	0.0	0.0	0.0	0.0	-4.0%	-2.0%	0.0%	2.0%	4.0%
Cash Equivalents	89,120,036	1.0	0.0	0.0	5.0	11070	■ Allocation Diffe		070	1.070
Total	9,266,874,048	100.0		100.0			- Allocation Dille	ielices		

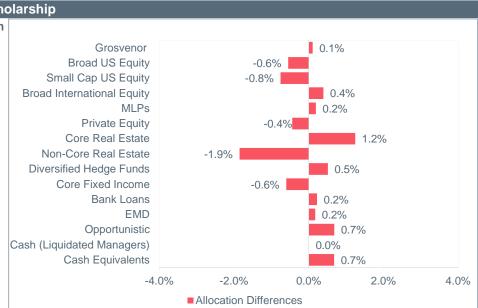
				Perm	nanent Lan	d Fund				
	Allocation	Allocation	Minimum	Target	Maximum					
	(\$)	(%)	(%)	(%)	(%)	Grosvenor		0.1%	1	
Grosvenor	213,823	0.1	0.0	0.0	0.0	Broad US Equity	-0.4%		,	
Broad US Equity	25,656,845	10.6	5.5	11.0	16.5	Small Cap US Equity		0.1%		
Small Cap US Equity	7,451,674	3.1	1.5	3.0	4.5	Broad International Equity	-0.2%	6 1		
Broad International Equity	43,144,286	17.8	9.0	18.0	27.0	MLPs	-0.5%			
MLPs	12,044,605	5.0	2.8	5.5	8.3	Private Equity		0.1%		
Private Equity	19,573,163	8.1	4.0	8.0	12.0	Core Real Estate			1.0%	
Core Real Estate	16,931,977	7.0	3.0	6.0	9.0	Non-Core Real Estate	-1.9%			
Non-Core Real Estate	7,418,924	3.1	2.5	5.0	7.5	Diversified Hedge Funds		0.	5%	
Diversified Hedge Funds	19,347,015	8.0	3.8	7.5	11.3	Core Fixed Income	-1.2%	0.40	,	
Core Fixed Income	57,872,705	23.8	12.5	25.0	37.5	Bank Loans EMD		0.1%		
Bank Loans	14,915,321	6.1	3.0	6.0	9.0	Opportunistic		0.176	0.9%	
EMD	12,396,437	5.1	2.5	5.0	7.5	Cash (Liquidated Managers)		0.0%		
Opportunistic	2,131,090	0.9	0.0	0.0	5.0	Cash Equivalents		0.070	1.6%	
Cash (Liquidated Managers)	15,403	0.0	0.0	0.0	0.0	-4.0%	-2.0%	0.0%	2.0%	4.0%
Cash Equivalents	3,918,192	1.6	0.0	0.0	5.0	-4.0%			2.0 /0	4.070
Total	243.031.461	100.0		100.0			Allocation Difference	ces		



			U	Iniversity	y Perman
	Allocation	Allocation	Minimum	Target	Maximun
	(\$)	(%)	(%)	(%)	(%)
Grosvenor	23,807	0.1	0.0	0.0	0.0
Broad US Equity	3,674,564	13.0	5.5	11.0	16.5
Small Cap US Equity	80,345	0.3	1.5	3.0	4.5
Broad International Equity	4,495,355	16.0	9.0	18.0	27.0
MLPs	1,378,959	4.9	2.8	5.5	8.3
Private Equity	2,415,362	8.6	4.0	8.0	12.0
Core Real Estate	2,445,353	8.7	3.0	6.0	9.0
Non-Core Real Estate	807,979	2.9	2.5	5.0	7.5
Diversified Hedge Funds	2,466,920	8.8	3.8	7.5	11.3
Core Fixed Income	6,824,181	24.2	12.5	25.0	37.5
Bank Loans	1,725,638	6.1	3.0	6.0	9.0
EMD	1,454,340	5.2	2.5	5.0	7.5
Opportunistic	179,670	0.6	0.0	0.0	5.0
Cash (Liquidated Managers)	1,778	0.0	0.0	0.0	0.0
Cash Equivalents	208,380	0.7	0.0	0.0	5.0
Total	28,182,629	100.0		100.0	



				Hath	naway Scho
	Allocation	Allocation	Minimum	Target	Maximum
	(\$)	(%)	(%)	(%)	(%)
Grosvenor	700,780	0.1	0.0	0.0	0.0
Broad US Equity	71,425,626	10.4	5.5	11.0	16.5
Small Cap US Equity	15,349,788	2.2	1.5	3.0	4.5
Broad International Equity	125,717,739	18.4	9.0	18.0	27.0
MLPs	38,893,127	5.7	2.8	5.5	8.3
Private Equity	51,653,520	7.6	4.0	8.0	12.0
Core Real Estate	49,513,935	7.2	3.0	6.0	9.0
Non-Core Real Estate	21,522,857	3.1	2.5	5.0	7.5
Diversified Hedge Funds	54,751,940	8.0	3.8	7.5	11.3
Core Fixed Income	166,776,951	24.4	12.5	25.0	37.5
Bank Loans	42,514,597	6.2	3.0	6.0	9.0
EMD	35,360,448	5.2	2.5	5.0	7.5
Opportunistic	4,658,506	0.7	0.0	0.0	5.0
Cash (Liquidated Managers)	49,771	0.0	0.0	0.0	0.0
Cash Equivalents	4,638,828	0.7	0.0	0.0	5.0
Total	683,528,413	100.0		100.0	





Wyoming State Treasurer's Office Permanent Funds - Income Focus

Fund Type: Permanent Fund

Main Objective: Produce maximized long-term investment income and capital gains while providing an appropriate level of safety and liquidity.

Investment Profile

Primary Investment Goals: Income generation, capital appreciation, total return, and protection against inflation. Capital preservation and liquidity are important secondary goals.

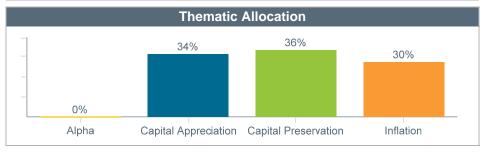
Maximum Equity Allocation: 70%

Current Long-Term Target Equity Allocation: 46%

Spending Policy

- Common School Permanent Land Fund: 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%.
- **Higher Education:** 4.75% of the five-year trailing average market value, calculated on the first day of the fiscal year.

Long-T	erm Target Allo	cation	
	Minimum Range (%)	Target (%)	Maximum Range (%)
Common School PLF	-	100.00	-
Broad US Equity	4.00	8.00	12.00
Small Cap US Equity	1.00	2.00	3.00
International Equity	6.00	12.00	18.00
Preferred Stock	1.50	3.00	4.50
MLPs	3.50	7.00	10.50
Core Real Estate	5.50	11.00	16.50
Non-Core Real Estate	1.50	3.00	4.50
Core Fixed Income	17.50	35.00	52.50
Bank Loans	6.00	12.00	18.00
Opportunistic Fixed Income	0.00	0.00	5.00
EMD	3.50	7.00	10.50
Opportunistic Investments	0.00	0.00	5.00
Cash (inv. in SAP)	0.00	0.00	5.00



Risk Metrics							
	5 Ye	ars	10 Ye	ears			
_	CSPLF	HiEd	CSPLF	HiEd			
Sharpe Ratio	0.8	0.7	0.8	0.8			
Standard Deviation	7.8	7.9	6.9	6.7			
Beta	0.4	0.4	0.4	0.4			

Comparative Performance									
	Allocation				Perform	ance (%)			
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Common School Perm Land Fund	4,579,667,486	4.5	6.4	16.1	16.1	7.7	7.4	5.8	6.3
CSPLF - Total Fund Index		4.4	6.1	15.4	15.4	7.3	6.9	5.6	6.1
Difference		0.1	0.3	0.7	0.7	0.4	0.5	0.2	0.2
Higher Education	140,858,113	4.5	6.4	16.2	16.2	7.4	6.7	5.3	5.7
Higher Education - Total Fund Index		4.4	6.1	15.4	15.4	7.3	6.5	5.4	5.7
Difference		0.1	0.3	0.8	0.8	0.1	0.2	-0.1	0.0

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			Co	ommon S	School Per	m Land Fund		
	Allocation	Allocation	Minimum	Target	Maximum			
	(\$)	(%)	(%)	(%)	(%)	Grosvenor		0.1%
Grosvenor	4,350,207	0.1	0.0	0.0	0.0	Broad US Equity	-0.7%	0.170
Broad US Equity	333,085,360	7.3	4.0	8.0	12.0	Small Cap US Equity		0.0%
Small Cap US Equity	91,612,003	2.0	1.0	2.0	3.0	International Equity	0.0%	
International Equity	547,205,723	12.0	6.0	12.0	18.0	Preferred Stock	-0.1%	
Preferred Stock	134,447,870	2.9	1.5	3.0	4.5	MLPs	-0.2%	
MLPs	309,453,596	6.8	3.5	7.0	10.5	Private Equity		0.0%
Private Equity	1,711,684	0.0	0.0	0.0	0.0	Core Real Estate		0.1%
Core Real Estate	507,210,953	11.1	5.5	11.0	16.5	Non-Core Real Estate	-0.7%	
Non-Core Real Estate	105,689,486	2.3	1.5	3.0	4.5	Core Fixed Income	-0.7%	
Core Fixed Income	1,565,411,476	34.3	17.5	35.0	52.5	Bank Loans EMD	0.0%	
Bank Loans	547,133,619	12.0	6.0	12.0	18.0	Opportunistic	0.0%	0.4%
EMD	319,159,058	7.0	3.5	7.0	10.5	Cash (Liquidated Managers)		0.0%
Opportunistic	16,615,535	0.4	0.0	0.0	5.0	Cash Equivalents		1.7%
Cash (Liquidated Managers)	316,882	0.0	0.0	0.0	0.0	-3.0%	-2.0% -1.0% 0.0	0% 1.0% 2.0% 3.0%
Cash Equivalents	77,904,296	1.7	0.0	0.0	5.0	-3.0%		0.00 0 2.00 0 3.00
Total	4,561,307,748	100.0		100.0			Allocation Differences	

				Hi	gher Educ	ation
	Allocation	Allocation	Minimum	Target	Maximum	
	(\$)	(%)	(%)	(%)	(%)	Grosvenor 0.1%
Grosvenor	144,742	0.1	0.0	0.0	0.0	Broad US Equity 0.4%
Broad US Equity	11,861,356	8.4	4.0	8.0	12.0	Small Cap US Equity -0.3%
Small Cap US Equity	2,393,184	1.7	1.0	2.0	3.0	International Equity 1.4%
International Equity	18,891,116	13.4	6.0	12.0	18.0	Preferred Stock -0.3%
Preferred Stock	3,733,596	2.7	1.5	3.0	4.5	MLPs 0.5%
MLPs	10,630,726	7.5	3.5	7.0	10.5	Private Equity 0.0%
Private Equity	64,598	0.0	0.0	0.0	0.0	Core Real Estate -0.4%
Core Real Estate	14,898,388	10.6	5.5	11.0	16.5	Non-Core Real Estate -0.8%
Non-Core Real Estate	3,093,315	2.2	1.5	3.0	4.5	Core Fixed Income -2.3% -0.5%
Core Fixed Income	46,033,978	32.7	17.5	35.0	52.5	Bank Loans -0.5% -0.3% -0.3%
Bank Loans	16,234,137	11.5	6.0	12.0	18.0	Opportunistic 0.4%
EMD	9,464,193	6.7	3.5	7.0	10.5	Cash (Liquidated Managers) 0.0%
Opportunistic	548,108	0.4	0.0	0.0	5.0	Cash Equivalents 2.0%
Cash (Liquidated Managers)	10,236	0.0	0.0	0.0	0.0	-3.0% -2.0% -1.0% 0.0% 1.0% 2.0% 3.0%
Cash Equivalents	2,856,440	2.0	0.0	0.0	5.0	
Total	140,858,113	100.0		100.0		■ Allocation Differences



Wyoming State Treasurer's Office Permanent Funds - Workers' Compensation Fund

Fund	Type:	Permanent	Fund

Main Objective: 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.

Investment Profile

Primary Investment Goals: Long-term return, safety of capital, yield and capital appreciation.

Maximum Equity Allocation: 70%

Current Long-Term Target Equity Allocation: 38%

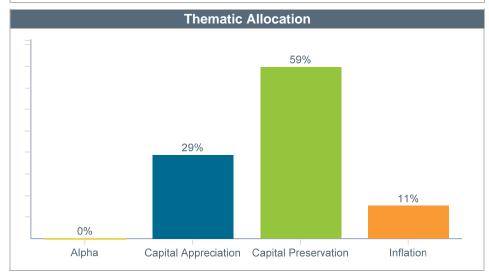
Actuarial Discount Rate: 2.5%*

Funded Status: >100%*

Duration of Liabilities: 11.4 years*

*As of the most recent report.

Long-Ter	Long-Term Target Allocation							
	Minimum Range (%)	Target (%)	Maximum Range (%)					
Workers Compensation Fund	-	100.00	-					
Broad US Equity	4.00	8.00	12.00					
Small Cap US Equity	1.00	2.00	3.00					
International Equity	6.25	12.50	18.75					
MLPs	2.25	4.50	6.75					
Core Real Estate	2.25	4.50	6.75					
Non-Core Real Estate	2.00	4.00	6.00					
Liability Driven Fixed Income	31.00	62.00	93.00					
Opportunistic Fixed Income	0.00	0.00	5.00					
EMD	1.25	2.50	3.75					
Opportunistic Investments	0.00	0.00	5.00					
Cash (inv. in SAP)	0.00	0.00	5.00					



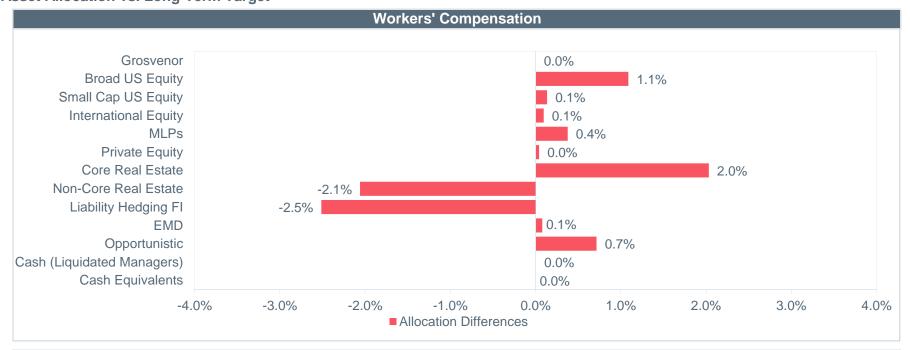
Fixed Income Characteristics vs. BB US Agg Bond Index						
	Portfolio	Benchmark				
Effective Duration	10.9	6.6				
Avg. Quality	Aa3	Aa1/Aa2				
Yield To Maturity (%)	2.2	1.5				
Coupon Rate (%)	2.9	2.6				

Risk Metrics							
	5	10					
	Years	Years					
Sharpe Ratio	1.1	1.1					
Standard Deviation	5.6	4.9					
Beta	0.3	0.3					

Comparative Performance											
	Allocation	Allocation Perf					rmance (%)				
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years		
Workers' Compensation Fund	2,673,499,559	5.5	3.7	11.8	11.8	9.8	7.4	5.9	5.8		
WC - Total Fund Index		5.1	3.0	10.9	10.9	9.2	6.9	5.7	5.7		
Difference		0.4	0.7	0.9	0.9	0.6	0.5	0.2	0.1		

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	Market Value	Allocation	Minimum	Target	Maximum
	(\$)	(%)	(%)	(%)	(%)
Grosvenor	12,925	0.0	0.0	0.0	0.0
Broad US Equity	243,006,777	9.1	4.0	8.0	12.0
Small Cap US Equity	57,093,160	2.1	1.0	2.0	3.0
International Equity	336,730,567	12.6	6.3	12.5	18.8
MLPs	130,387,728	4.9	2.3	4.5	6.8
Private Equity	1,118,404	0.0	0.0	0.0	0.0
Core Real Estate	174,648,457	6.5	2.3	4.5	6.8
Non-Core Real Estate	51,886,718	1.9	2.0	4.0	6.0
Liability Hedging FI	1,590,369,545	59.5	31.0	62.0	93.0
EMD	68,943,088	2.6	1.3	2.5	3.8
Opportunistic	19,136,062	0.7	0.0	0.0	5.0
Cash (Liquidated Managers)	119,868	0.0	0.0	0.0	0.0
Cash Equivalents	46,261	0.0	0.0	0.0	5.0
Total	2,673,499,559	100.0		100.0	



Wyoming State Treasurer's Office Pool A Investment Account

	Investment Profile
Fund Type: Non-Permanent Fu	und

Main Objective: Provide a diverse array of securities including equities, while

maintaining adequate liquidity, stability, and return on investment.

Primary Investment Goal: Pool A is intended to be moderately liquid and safely

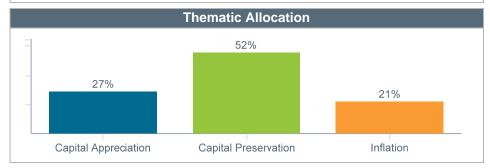
invested but also be invested for return and growth.

Maximum Equity Allocation: 60% Current Target Equity Allocation: 36% Participating Funds:

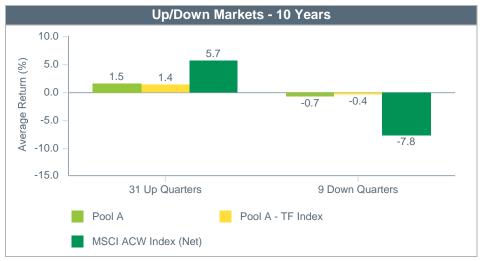
Tobacco Settlement Trust Fund

- Wildlife and Natural Resource Trust Account
- Cultural Trust Fund
- Public Television Matching Fund Account
- Game and Fish Fund Trust Account

Risk Metrics					
	5 Years	10 Years			
Sharpe Ratio	0.7	0.8			
Standard Deviation	5.5	4.4			
Beta	0.3	0.2			



Long-Term Target Allocation						
	Minimum Range (%)	Target (%)	Maximum Range (%)			
Pool A	-	100.00	-			
Broad US Equity	3.75	7.50	11.25			
Small Cap US Equity	0.50	1.00	1.50			
International Equity	3.75	7.50	11.25			
Preferred Stock	3.50	7.00	10.50			
MLPs	2.50	5.00	7.50			
Core Real Estate	2.00	4.00	6.00			
Non-Core Real Estate	2.00	4.00	6.00			
Core Fixed Income	24.50	49.00	73.50			
Bank Loans	5.00	10.00	15.00			
Opportunistic Investments	0.00	0.00	5.00			
Cash (inv. in SAP)	2.50	5.00	7.50			

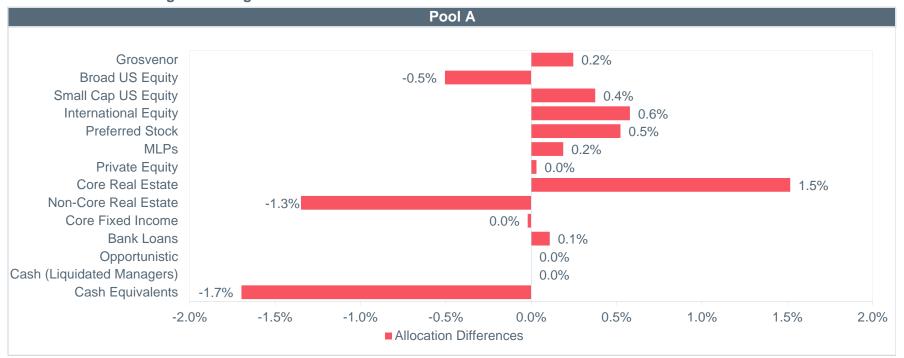


Comparative Performance									
	Allocation	Allocation Performance (%)							
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
Pool A	266,181,124	4.0	4.7	12.4	12.4	7.3	4.9	4.2	4.1
Pool A - Total Fund Index		3.7	4.2	11.4	11.4	6.8	4.1	4.0	3.9
Difference		0.3	0.5	1.0	1.0	0.5	0.8	0.2	0.2

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Asset Allocation vs. Long-Term Target



	Market Value	Allocation	Minimum	Target	Maximum
	(\$)	(%)	(%)	(%)	(%)
Grosvenor	656,023	0.2	0.0	0.0	0.0
Broad US Equity	18,619,600	7.0	3.8	7.5	11.3
Small Cap US Equity	3,660,242	1.4	0.5	1.0	1.5
International Equity	21,503,413	8.1	3.8	7.5	11.3
Preferred Stock	20,024,927	7.5	3.5	7.0	10.5
MLPs	13,809,340	5.2	2.5	5.0	7.5
Private Equity	82,735	0.0	0.0	0.0	0.0
Core Real Estate	14,686,362	5.5	2.0	4.0	6.0
Non-Core Real Estate	7,059,830	2.7	2.0	4.0	6.0
Core Fixed Income	130,375,005	49.0	24.5	49.0	73.5
Bank Loans	26,909,061	10.1	5.0	10.0	15.0
Opportunistic	0	0.0	0.0	0.0	5.0
Cash (Liquidated Managers)	677	0.0	0.0	0.0	0.0
Cash Equivalents	8,793,907	3.3	2.5	5.0	7.5
Total	266,181,124	100.0		100.0	



Wyoming State Treasurer's Office State Agency Pool

Fund	Type:	Non-Permanent	Fund

Main Objective: Produce an investment return so that State agencies have the advantage of better income from their invested funds, while maintaining stability.

Primary Investment Goal: Capital preservation, yield, and liquidity

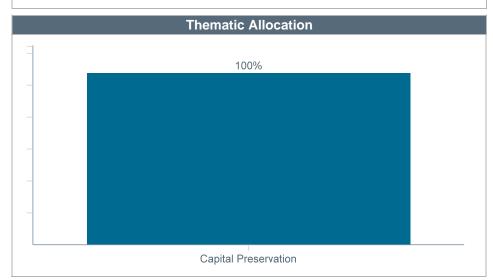
Liquidity Constraints: The Fund must meet the day-to-day cash flow needs of the

Investment Profile

State

Maximum Equity Allocation: 0% Current Target Equity Allocation: 0%

Long-Term Target Allocation							
	Minimum Allocation (%)	Target Allocation (%)	Maximum Allocation (%)				
State Agency Pool Excluding PPI	-	100.00	-				
Laddered Short-Term Treasury	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	1.6	6.6			
Avg. Quality	Aa1	Aa1/Aa2			
Yield To Maturity (%)	0.2	1.5			
Coupon Rate (%)	1.0	2.6			

	Risk Metrics	
	5	10
	Years	Years
Sharpe Ratio	0.6	0.9
Standard Deviation	1.8	2.1
Beta	0.0	0.0

Comparative Performance									
	Allocation				Perform	ance (%)			
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years
State Agency Pool	5,381,510,376	0.0	-0.1	0.2	0.2	2.8	2.1	2.2	2.5
State Agency Pool - Actual Allocation Index		0.0	0.0	0.3	0.3	2.8	1.8	2.2	2.5
Difference		0.0	-0.1	-0.1	-0.1	0.0	0.3	0.0	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.



Wyoming State Treasurer's Office LSRA Investment Account

Fund	Type:	Non-Permanent	Fund

Main Objective: 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.

Investment Profile

Primary Investment Goal: liquidity, capital preservation, and capital appreciation.

Maximum Equity Allocation: 36%

Current Target Equity Allocation: 29.17% Spending Policy: Legislative Appropriation

Participating Funds:
• Long Term Reserve

• Intermediate Term Reserve

• Short Term Reserve

Long-Te	rm Target Allo	cation	
	Minimum Range (%)	Target (%)	Maximum Range (%)
LSRA Long Term Reserve	-	100.00	-
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

	Thematic Allocation
-	61%
- 8%	21% 9%
Alpha	Capital Appreciation Capital Preservation Inflation

	Risk Metrics	
	Since Incep.	Inception Date
Standard Deviation	7.8	07/01/2019
Beta	0.3	
Sharpe Ratio	0.7	

	Comparative Performance													
	Allocation				Perform	ance (%)								
	Market Value (\$)	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years					
LSRA	1,599,348,958	3.0	3.6	10.7	10.7	N/A	N/A	N/A	N/A					
LSRA - Total Fund Index		2.8	3.7	10.4	10.4	N/A	N/A	N/A	N/A					
Difference		0.2	-0.1	0.3	0.3	N/A	N/A	N/A	N/A					

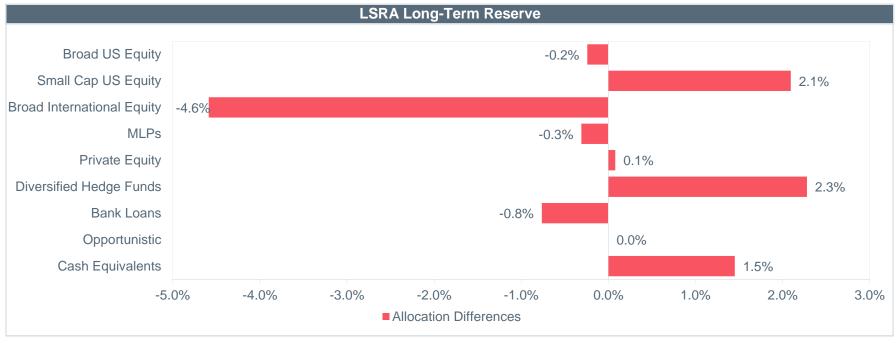
Performance shown is net of fees and annualized for periods greater than one year. Wyoming State Treasurer's Office fiscal year ends on June 30th. Beta is calculated relative to the MSCI ACW Index (Net). Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly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



Wyoming State Treasurer's Office Total LSRA Asset Allocation vs. Long-Term Target

	Total LS	RA	
	Market Value	Allocation	Target
	(\$)	(%)	(%)
Broad US Equity	138,051,041	8.6	N/A
Small Cap US Equity	51,349,122	3.2	N/A
Broad International Equity	148,547,493	9.3	N/A
MLPs	77,347,272	4.8	N/A
Private Equity	499,500	0.0	N/A
Diversified Hedge Funds	135,009,626	8.4	N/A
Core Fixed Income	467,536,329	29.2	N/A
Low Duration Fixed Income	497,328,240	31.1	N/A
Bank Loans	74,469,702	4.7	N/A
Opportunistic	0	0.0	N/A
Cash Equivalents	9,210,634	0.6	N/A
Total	1,599,348,958	100.0	N/A





	Market Value	Allocation	Minimum	Target	Maximum
	(\$)	(%)	(%)	(%)	(%)
Broad US Equity	138,051,041	21.8	17.0	22.0	27.0
Small Cap US Equity	51,349,122	8.1	4.0	6.0	8.0
Broad International Equity	148,547,493	23.4	21.0	28.0	35.0
MLPs	77,347,272	12.2	10.0	12.5	15.0
Private Equity	499,500	0.1	0.0	0.0	0.0
Diversified Hedge Funds	135,009,626	21.3	15.0	19.0	23.0
Bank Loans	74,469,702	11.7	10.0	12.5	15.0
Opportunistic	0	0.0	0.0	0.0	0.0
Cash Equivalents	9,210,634	1.5	0.0	0.0	0.0
Total	634,484,390	100.0		100.0	





	Market Value	Allocation	Minimum	Target	Maximum
	(\$)	(%)	(%)	(%)	(%)
Core Fixed Income	467,536,329	100.0	100.0	100.0	100.0
Total	467,536,329	100.0		100.0	

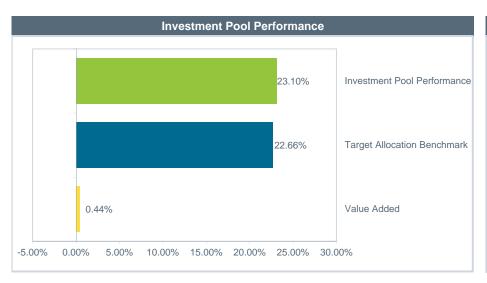


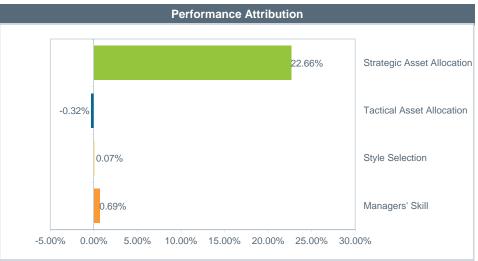


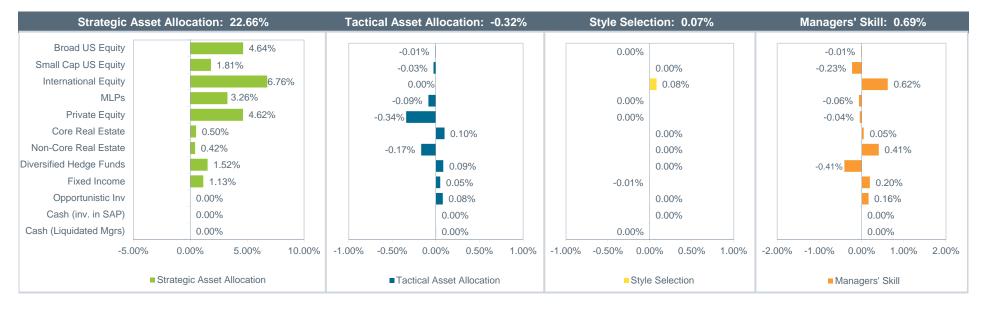
	warket value	Allocation	wiinimum	ı arget	Maximum
	(\$)	(%)	(%)	(%)	(%)
Low Duration Fixed Income	497,328,240	100.0	100.0	100.0	100.0
Total	497,328,240	100.0		100.0	



Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Permanent Mineral Trust Fund vs. Target Allocation Index FYTD Ending June 30, 2021

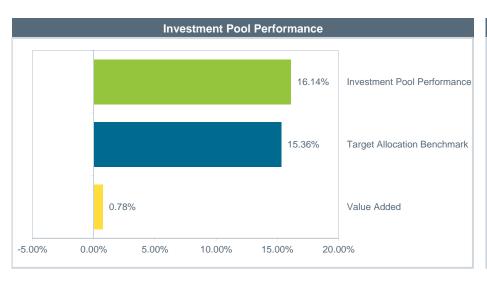


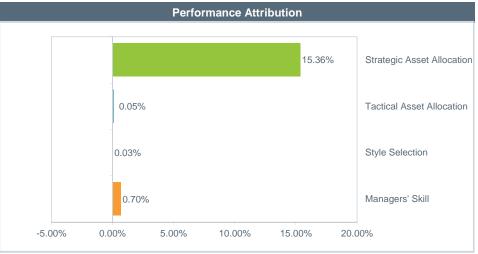


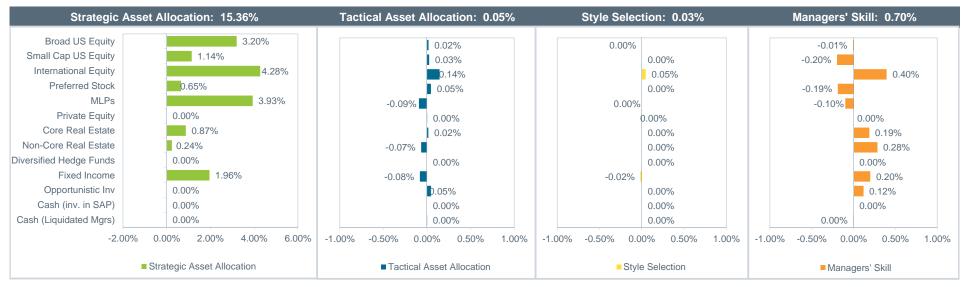




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Common School Permanent Land Fund vs. Target Allocation Index FYTD Ending June 30, 2021

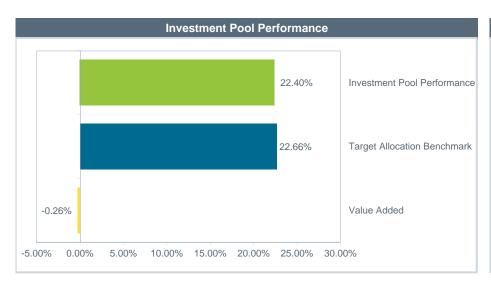


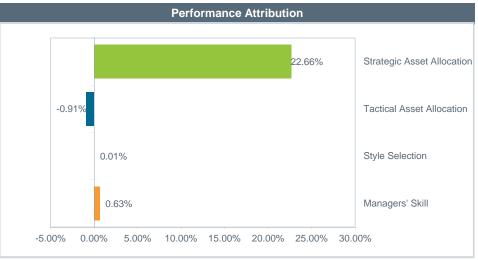


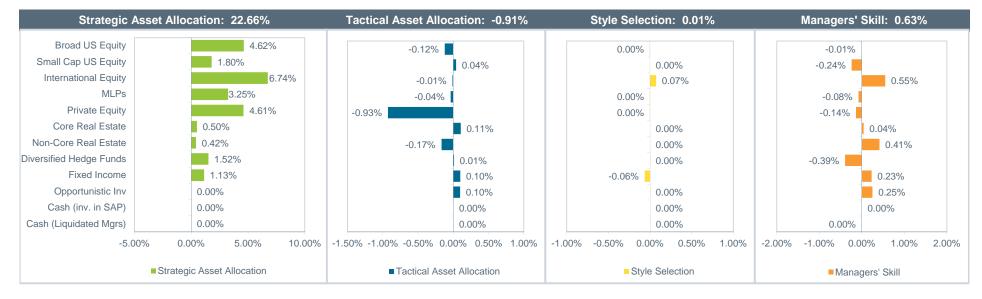




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Permanent Land Fund vs. Target Allocation Index FYTD Ending June 30, 2021

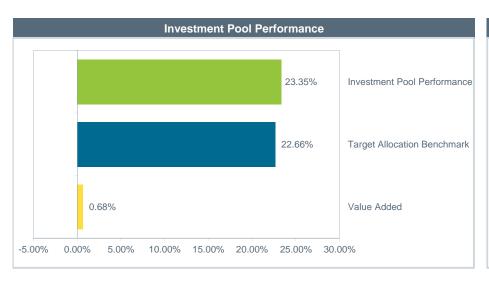


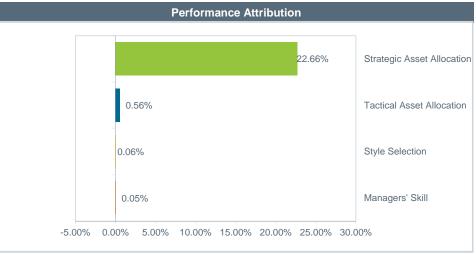


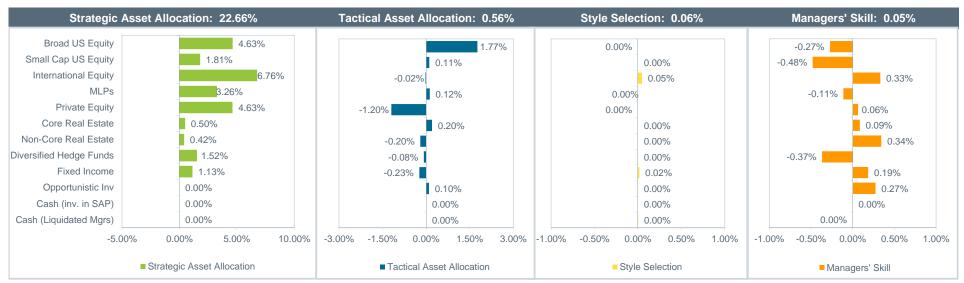




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology University Permanent Land Fund vs. Target Allocation Index FYTD Ending June 30, 2021

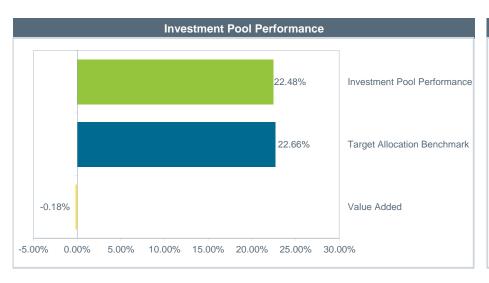


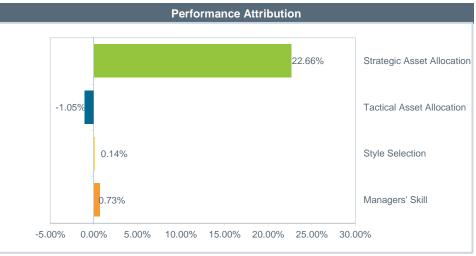


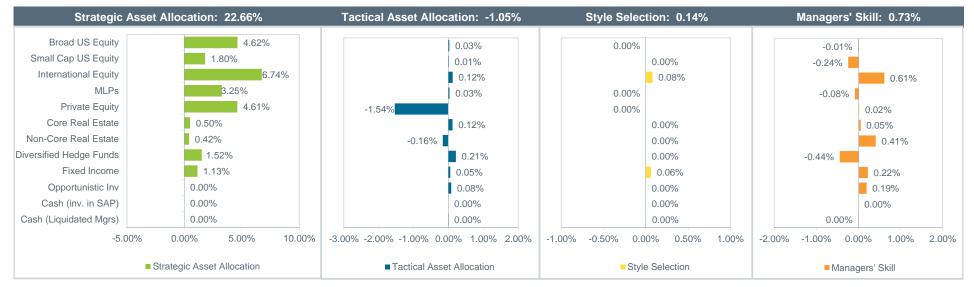




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Hathaway Scholarship Endowment Fund vs. Target Allocation Index FYTD Ending June 30, 2021

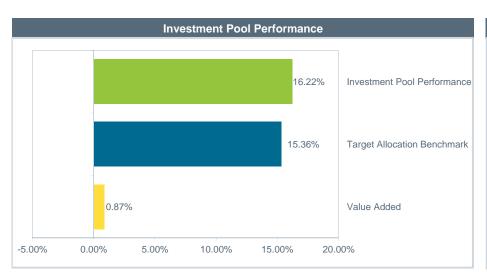


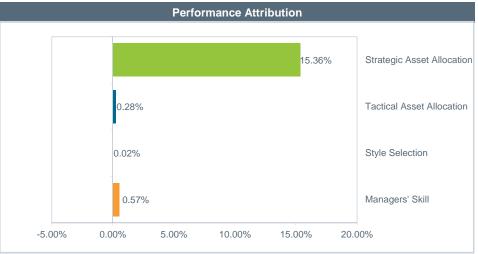


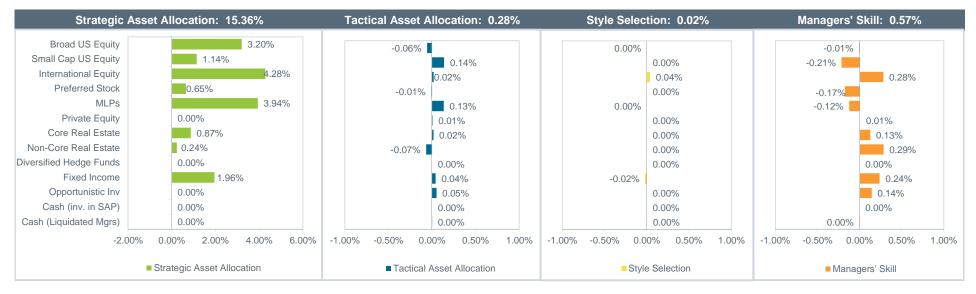




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Higher Education Endowment Fund vs. Target Allocation Index FYTD Ending June 30, 2021

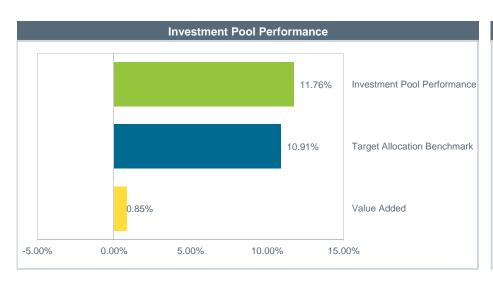


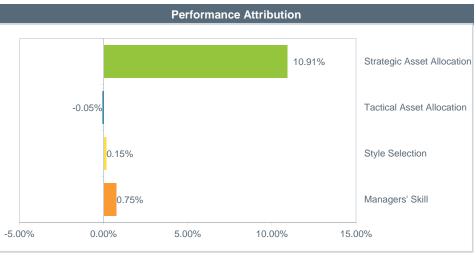


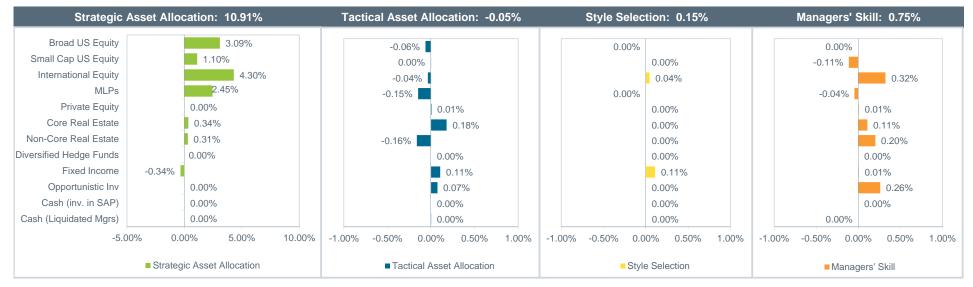




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Workers Compensation Fund vs. Target Allocation Index FYTD Ending June 30, 2021

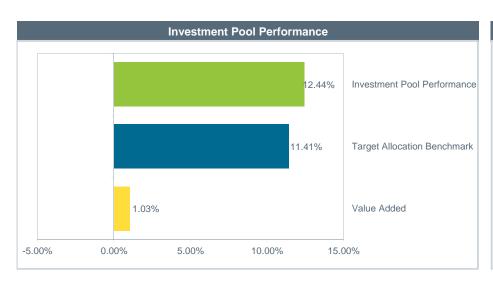


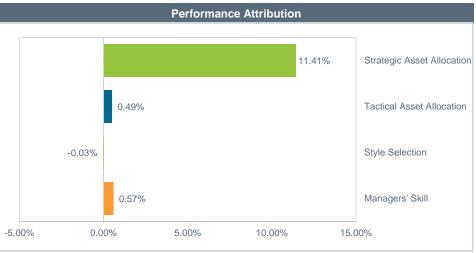


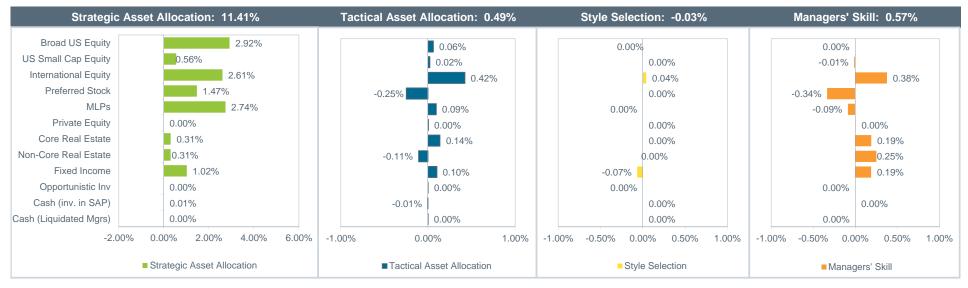




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology Pool A vs. Target Allocation Index FYTD Ending June 30, 2021

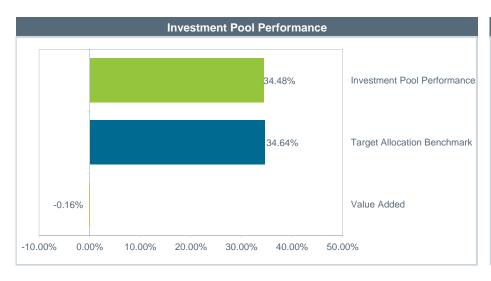


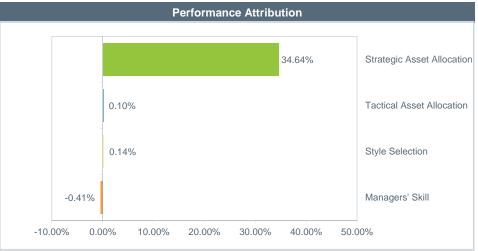


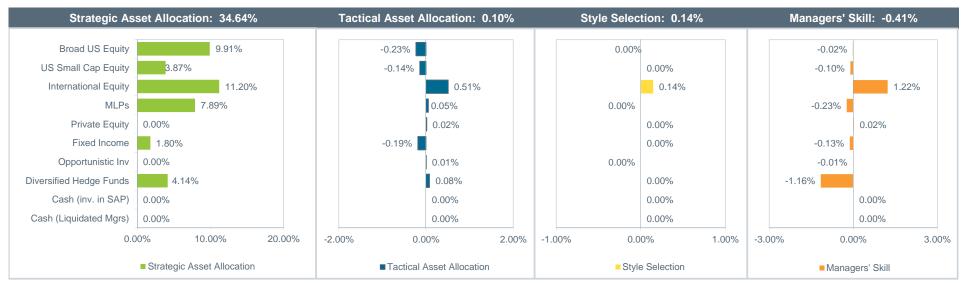




Wyoming State Treasurer's Office Pool Attribution - IDP Methodology LSRA LT Reserve vs. Target Allocation Index FYTD Ending June 30, 2021



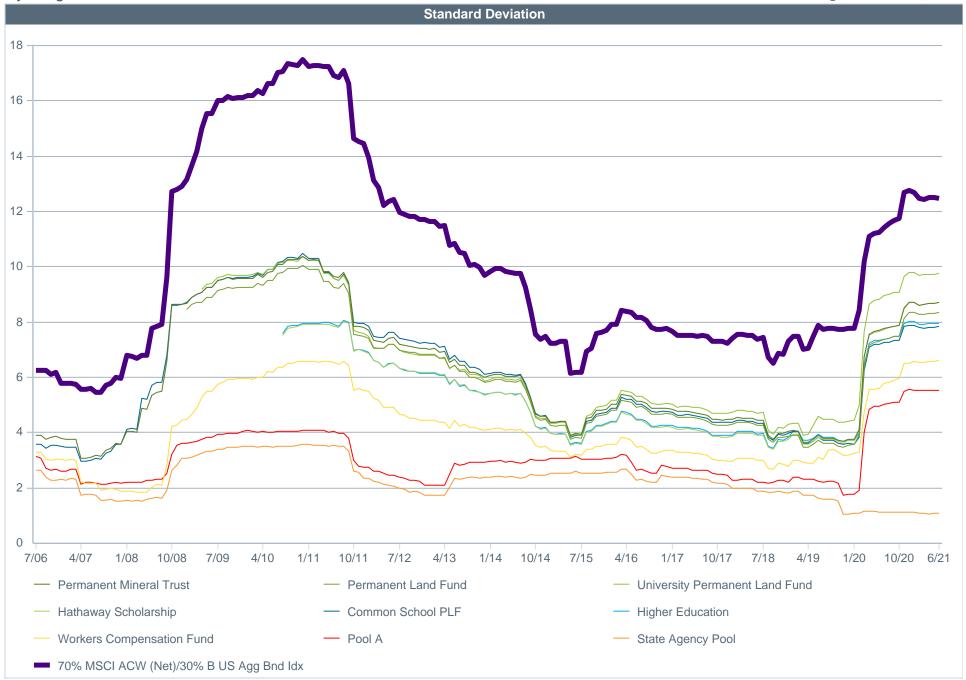






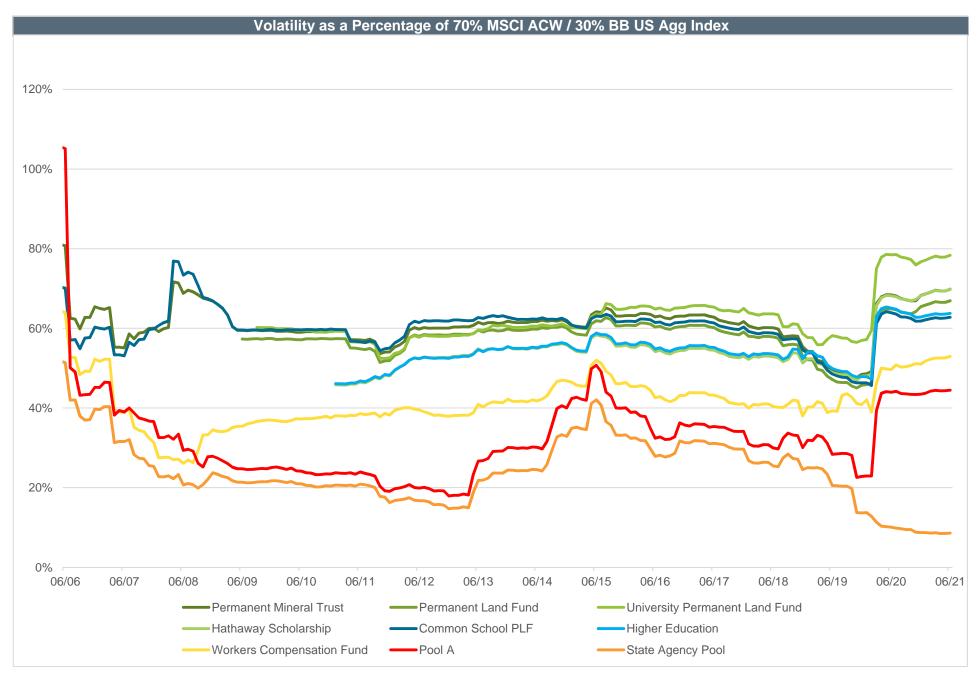
	Allocation	1	Performance (%)										
	Market	%	QTD	CYTD	FYTD	1	3	5	7	10	Since	Inception	
	Value (\$)	/0				Year	Years	Years	Years	Years	Incep.	Date	
Permanent Funds	17,740,242,801	71.0	5.3	7.5	19.4	19.4	9.2	8.0	6.2	6.5	6.6	07/01/2002	
Permanent Mineral Trust	9,391,475,140	37.6	5.6	9.1	23.1	23.1	9.7	8.6	6.6	6.8	6.6	06/01/200	
PMTF - Total Fund Index			5.7	9.1	22.7	22.7	9.6	8.3	6.6	6.8	6.0		
Difference			-0.1	0.0	0.4	0.4	0.1	0.3	0.0	0.0	0.6		
Common School Permanent Land Fund	4,579,667,486	18.3	4.5	6.4	16.1	16.1	7.7	7.4	5.8	6.3	6.5	06/01/200	
Common School - Total Fund Index			4.4	6.1	15.4	15.4	7.3	6.9	5.6	6.1	5.7		
Difference			0.1	0.3	0.7	0.7	0.4	0.5	0.2	0.2	0.8		
Permanent Land Fund	243,031,461	1.0	5.5	8.7	22.4	22.4	9.6	8.4	6.5	6.7	6.1	02/01/200	
PLF - Total Fund Index			5.7	9.1	22.7	22.7	9.6	8.2	6.5	6.7	5.8		
Difference			-0.2	-0.4	-0.3	-0.3	0.0	0.2	0.0	0.0	0.3		
Iniversity Permanent Land Fund	28,182,629	0.1	5.5	8.6	23.3	23.3	9.7	8.9	6.8	6.9	6.1	05/01/200	
Iniversity PLF - Total Fund Index			5.7	9.1	22.7	22.7	9.6	8.7	6.9	6.9	6.0		
Difference			-0.2	-0.5	0.6	0.6	0.1	0.2	-0.1	0.0	0.1		
lathaway Scholarship	683,528,413	2.7	5.7	9.0	22.5	22.5	9.6	8.0	6.3	6.3	6.2	09/01/200	
lathaway - Total Fund Index			5.7	9.1	22.7	22.7	9.5	7.9	6.3	6.4	6.0		
Difference			0.0	-0.1	-0.2	-0.2	0.1	0.1	0.0	-0.1	0.2		
ligher Education	140,858,113	0.6	4.5	6.4	16.2	16.2	7.4	6.7	5.3	5.7	5.7	09/01/200	
ligher Education - Total Fund Index			4.4	6.1	15.4	15.4	7.3	6.5	5.4	5.7	5.5		
Difference			0.1	0.3	0.8	0.8	0.1	0.2	-0.1	0.0	0.2		
Vorkers Compensation Fund	2,673,499,559	10.7	5.5	3.7	11.8	11.8	9.8	7.4	5.9	5.8	6.0	06/01/200	
Vorkers Comp - Total Fund Index			5.1	3.0	10.9	10.9	9.2	6.9	5.7	5.7	5.7		
Difference			0.4	0.7	0.9	0.9	0.6	0.5	0.2	0.1	0.3		
Ion-Permanent Funds	7,247,040,458	29.0	1.0	1.1	3.4	3.4	3.6	2.6	2.5	2.7	3.8	07/01/200	
Pool A	266,181,124	1.1	4.0	4.7	12.4	12.4	7.3	4.9	4.2	4.1	4.6	01/01/200	
ool A - Total Fund Index			3.7	4.2	11.4	11.4	6.8	4.1	4.0	3.9	5.2		
Difference			0.3	0.5	1.0	1.0	0.5	0.8	0.2	0.2	-0.6		
SRA	1,599,348,958	6.4	3.0	3.6	10.7	10.7	N/A	N/A	N/A	N/A	6.0	07/01/201	
SRA - Total Fund Index			2.8	3.7	10.4	10.4	N/A	N/A	N/A	N/A	6.1		
Difference			0.2	-0.1	0.3	0.3	N/A	N/A	N/A	N/A	-0.1		
SRA Long Term Reserve	634,484,390	2.5	6.7	12.8	34.5	34.5	N/A	N/A	N/A	N/A	12.5	07/01/201	
SRA Long Term Reserve - Total Fund Index	, , , , , , , , , , , , , , , , , , , ,		6.7	13.4	34.6	34.6	N/A	N/A	N/A	N/A	13.3		
Difference			0.0	-0.6	-0.1	-0.1	N/A	N/A	N/A	N/A	-0.8		
SRA Intermediate Term Reserve	467,536,329	1.9	2.3	-1.5	0.3	0.3	N/A	N/A	N/A	N/A	4.9	08/01/201	
SRA Int Term Reserve - Total Fund Index	,,		1.8	-1.6	-0.3	-0.3	N/A	N/A	N/A	N/A	4.2	00,0.,20	
Difference			0.5	0.1	0.6	0.6	N/A	N/A	N/A	N/A	0.7		
SRA Short Term Reserve	497,328,240	2.0	0.1	0.1	0.3	0.3	N/A	N/A	N/A	N/A	2.1	01/01/202	
SRA Short Term Reserve - Total Fund Index	101,020,210	2.0	0.0	-0.1	0.1	0.1	N/A	N/A	N/A	N/A	2.0	0.7017202	
Difference			0.0	0.2	0.1	0.1	N/A	N/A	N/A	N/A	0.1		
State Agency Pool	5,381,510,376	21.5	0.1	-0.1	0.2	0.2	2.8	2.1	2.2	2.5	3.8	06/01/200	
State Agency Pool - Actual Allocation Index	3,301,310,370	21.0	0.0	0.0	0.2	0.2	2.8	1.8	2.2	2.5	3.6	00/01/20	
Difference			0.0	-0.1	-0.1	-0.1	0.0	0.3	0.0	0.0	0.2		
otal Fund	24,987,283,259	100.0	4.3	5.9	14.9	14.9	7.6	6.5	5.2	5.4	5.7	10/01/199	
Vyoming State Total Fund Index	24,307,203,239	100.0	4.3	5.9 5.8			7.6	6.3	5.2	5.4 5.4	5.7 5.7	10/01/198	
vvormno State Total Euro INGEX			4.4	ე.გ	14.7	14.7	7.0	ი.პ	5.2	5.4	5.7		





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



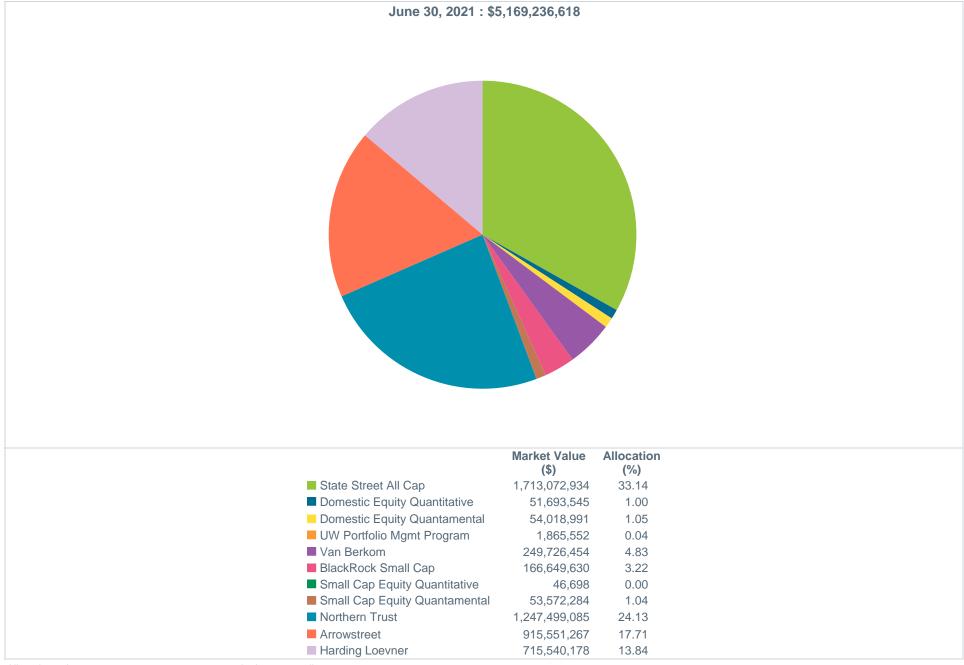












Allocations shown may not sum up to 100% exactly due to rounding.



	Allocatio	n					Р	erformar	rce (%)				
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
All Cap US Equity Composite	1,818,785,471	35.18	8.54	15.17	40.68	40.68	17.51	16.43	N/A	N/A	17.54	14.18	11/01/2014
All Cap US Equity Custom Index			8.55	15.25	40.79	40.79	17.95	17.42	13.63	14.47	18.37	13.89	
Difference			-0.01	-0.08	-0.11	-0.11	-0.44	-0.99	N/A	N/A	-0.83	0.29	
State Street All Cap	1,713,072,934	33.14	8.54	15.22	40.73	40.73	17.71	16.81	N/A	N/A	17.54	13.48	01/01/2015
State Street All Cap Custom Index			8.55	15.25	40.79	40.79	17.63	16.79	13.32	14.30	17.65	13.49	
Difference			-0.01	-0.03	-0.06	-0.06	0.08	0.02	N/A	N/A	-0.11	-0.01	
Domestic Equity Quantamental	54,018,991	1.05	10.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.43	04/01/2021
S&P 500 Index (Cap Wtd)			8.55	15.25	40.79	40.79	18.67	17.65	14.10	14.84	18.40	8.55	
Difference			1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.88	
Domestic Equity Quantitative	51,693,545	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.56	06/01/2021
S&P 500 Index (Cap Wtd)			8.55	15.25	40.79	40.79	18.67	17.65	14.10	14.84	18.40	2.33	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.77	
UW Portfolio Mgmt Program	1,865,552	0.04	7.14	11.83	35.98	35.98	13.78	14.07	11.47	11.59	14.73	6.77	04/01/2006
S&P 500 Index (Cap Wtd)			8.55	15.25	40.79	40.79	18.67	17.65	14.10	14.84	18.40	10.44	
Difference			-1.41	-3.42	-4.81	-4.81	-4.89	-3.58	-2.63	-3.25	-3.67	-3.67	
Small Cap US Equity Composite	469,995,066	9.09	3.05	15.45	53.57	53.57	11.00	12.72	N/A	N/A	14.53	9.10	11/01/2014
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	12.21	
Difference			-1.24	-2.09	-8.46	-8.46	-2.52	-3.75	N/A	N/A	-5.43	-3.11	
Van Berkom	249,726,454	4.83	1.54	10.93	42.00	42.00	N/A	N/A	N/A	N/A	N/A	26.58	03/01/2020
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	41.63	
Difference			-2.75	-6.61	-20.03	-20.03	N/A	N/A	N/A	N/A	N/A	-15.05	
BlackRock Small Cap	166,649,630	3.22	4.31	17.82	N/A	N/A	N/A	N/A	N/A	N/A	N/A	58.78	08/01/2020
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	57.66	
Difference			0.02	0.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.12	
Small Cap Equity Quantamental	53,572,284	1.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.94	06/01/2021
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	1.94	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	

Performance shown is net of fees. International Equity Custom Index consists of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) 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. 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, State Street All Cap 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.



	Allocation	1		Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Small Cap Equity Quantitative	46,698	0.00											
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	5.34	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	





	Allocatio	n					Р	erforman	ce (%)				
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Int'l Equity Composite	2,878,590,529	55.69	5.26	9.92	39.74	39.74	12.10	12.56	6.43	6.18	16.88	6.88	01/01/2004
International Equity Custom Index			5.48	9.16	35.72	35.72	9.38	11.08	5.33	5.45	10.65	6.13	
Difference			-0.22	0.76	4.02	4.02	2.72	1.48	1.10	0.73	6.23	0.75	
Northern Trust	1,247,499,085	24.13	5.32	9.16	35.57	35.57	9.48	11.16	5.42	5.58	10.66	6.78	08/01/2010
MSCI ACW Ex US Index (USD) (Net)			5.48	9.16	35.72	35.72	9.38	11.08	5.33	5.45	10.65	6.66	
Difference			-0.16	0.00	-0.15	-0.15	0.10	0.08	0.09	0.13	0.01	0.12	
Arrowstreet	915,551,267	17.71	5.25	13.88	50.28	50.28	15.12	N/A	N/A	N/A	22.78	11.49	03/01/2018
MSCI ACW Ex US IM Index (USD) (Net)			5.60	9.58	37.18	37.18	9.42	11.20	5.56	5.65	11.12	7.04	
Difference			-0.35	4.30	13.10	13.10	5.70	N/A	N/A	N/A	11.66	4.45	
Harding Loevner	715,540,178	13.84	4.77	5.74	33.69	33.69	N/A	N/A	N/A	N/A	20.31	17.40	01/01/2020
MSCI ACW Ex US Index (USD) (Net)			5.48	9.16	35.72	35.72	9.38	11.08	5.33	5.45	10.65	13.42	
Difference			-0.71	-3.42	-2.03	-2.03	N/A	N/A	N/A	N/A	9.66	3.98	





	Allocation			Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
All Cap US Equity Composite	1,818,785,471	35.18	8.55	15.20	40.73	40.73	17.58	16.53	N/A	N/A	17.58	14.32	11/01/2014
All Cap US Equity Custom Index			8.55	15.25	40.79	40.79	17.95	17.42	13.63	14.47	18.37	13.89	
Difference			0.00	-0.05	-0.06	-0.06	-0.37	-0.89	N/A	N/A	-0.79	0.43	
State Street All Cap	1,713,072,934	33.14	8.55	15.24	40.79	40.79	17.76	16.85	N/A	N/A	17.58	13.52	01/01/2015
State Street All Cap Custom Index			8.55	15.25	40.79	40.79	17.63	16.79	13.32	14.30	17.65	13.49	
Difference			0.00	-0.01	0.00	0.00	0.13	0.06	N/A	N/A	-0.07	0.03	
IM U.S. All Cap Equity (SA+CF) Median			7.08	16.01	45.58	45.58	17.31	17.25	12.90	14.08	16.05	13.20	
State Street All Cap Rank			33	56	74	74	49	55	N/A	N/A	47	47	
Domestic Equity Quantamental	54,018,991	1.05	10.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	10.43	04/01/2021
S&P 500 Index (Cap Wtd)			8.55	15.25	40.79	40.79	18.67	17.65	14.10	14.84	18.40	8.55	
Difference			1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.88	
IM U.S. All Cap Equity (SA+CF) Median			7.08	16.01	45.58	45.58	17.31	17.25	12.90	14.08	16.05	7.08	
Domestic Equity Quantamental Rank			13	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13	
Domestic Equity Quantitative	51,693,545	1.00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.56	06/01/2021
S&P 500 Index (Cap Wtd)			8.55	15.25	40.79	40.79	18.67	17.65	14.10	14.84	18.40	2.33	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.77	
IM U.S. All Cap Equity (SA+CF) Median			7.08	16.01	45.58	45.58	17.31	17.25	12.90	14.08	16.05	1.00	
Domestic Equity Quantitative Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	44	
UW Portfolio Mgmt Program	1,865,552	0.04	7.14	11.83	35.98	35.98	13.78	14.07	11.47	11.59	14.73	6.77	04/01/2006
S&P 500 Index (Cap Wtd)			8.55	15.25	40.79	40.79	18.67	17.65	14.10	14.84	18.40	10.44	
Difference			-1.41	-3.42	-4.81	-4.81	-4.89	-3.58	-2.63	-3.25	-3.67	-3.67	
IM U.S. Large Cap Core Equity (SA+CF) Median			8.01	15.42	41.00	41.00	17.82	17.52	13.73	14.61	17.19	10.53	
UW Portfolio Mgmt Program Rank			69	87	81	81	84	81	83	90	59	99	

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	Allocation			Performance (%)									
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Small Cap US Equity Composite	469,995,066	9.09	3.22	15.80	54.43	54.43	11.37	13.22	N/A	N/A	14.96	9.63	11/01/2014
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	12.21	
Difference			-1.07	-1.74	-7.60	-7.60	-2.15	-3.25	N/A	N/A	-5.00	-2.58	
Van Berkom	249,726,454	4.83	1.78	11.42	43.18	43.18	N/A	N/A	N/A	N/A	N/A	27.59	03/01/2020
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	41.63	
Difference			-2.51	-6.12	-18.85	-18.85	N/A	N/A	N/A	N/A	N/A	-14.04	
IM U.S. Small Cap Core Equity (SA+CF) Median			5.01	19.28	61.18	61.18	14.01	16.53	12.28	13.46	18.37	40.28	
Van Berkom Rank			96	91	96	96	N/A	N/A	N/A	N/A	N/A	96	
BlackRock Small Cap	166,649,630	3.22	4.43	18.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	59.44	08/01/2020
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	57.66	
Difference			0.14	0.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.78	
IM U.S. Small Cap Core Equity (SA+CF) Median			5.01	19.28	61.18	61.18	14.01	16.53	12.28	13.46	18.37	55.20	
BlackRock Small Cap Rank			60	56	N/A	N/A	N/A	N/A	N/A	N/A	N/A	27	
Small Cap Equity Quantamental	53,572,284	1.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.94	06/01/2021
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	1.94	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.00	
IM U.S. Small Cap Core Equity (SA+CF) Median			5.01	19.28	61.18	61.18	14.01	16.53	12.28	13.46	18.37	0.79	
Small Cap Equity Quantamental Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5	
Small Cap Equity Quantitative	46,698	0.00											
Russell 2000 Index			4.29	17.54	62.03	62.03	13.52	16.47	11.39	12.34	19.96	5.34	
Difference			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM U.S. Small Cap Core Equity (SA+CF) Median			5.01	19.28	61.18	61.18	14.01	16.53	12.28	13.46	18.37	7.49	
Small Cap Equity Quantitative Rank			N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

Performance shown is gross of fees. International Equity Custom Index consists of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) 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. 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, State Street All Cap 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.



		Performance (%)										
Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
2,878,590,529	55.69	5.33	10.05	40.09	40.09	12.35	12.80	6.66	6.44	17.18	7.08	01/01/2004
		5.48	9.16	35.72	35.72	9.38	11.08	5.33	5.45	10.65	6.13	
		-0.15	0.89	4.37	4.37	2.97	1.72	1.33	0.99	6.53	0.95	
1,247,499,085	24.13	5.32	9.17	35.61	35.61	9.52	11.19	5.46	5.61	10.69	6.82	08/01/2010
		5.48	9.16	35.72	35.72	9.38	11.08	5.33	5.45	10.65	6.66	
		-0.16	0.01	-0.11	-0.11	0.14	0.11	0.13	0.16	0.04	0.16	
915,551,267	17.71	5.35	14.10	50.88	50.88	15.62	N/A	N/A	N/A	23.28	11.97	03/01/2018
		5.60	9.58	37.18	37.18	9.42	11.20	5.56	5.65	11.12	7.04	
		-0.25	4.52	13.70	13.70	6.20	N/A	N/A	N/A	12.16	4.93	
		5.49	9.36	38.47	38.47	11.26	12.49	6.95	7.44	14.71	8.73	
		52	11	4	4	18	N/A	N/A	N/A	22	24	
715,540,178	13.84	4.88	5.96	34.25	34.25	N/A	N/A	N/A	N/A	20.86	17.93	01/01/2020
		5.48	9.16	35.72	35.72	9.38	11.08	5.33	5.45	10.65	13.42	
		-0.60	-3.20	-1.47	-1.47	N/A	N/A	N/A	N/A	10.21	4.51	
		5.49	9.36	38.47	38.47	11.26	12.49	6.95	7.44	14.71	16.76	
		61	88	76	76	N/A	N/A	N/A	N/A	32	43	
	Value (\$) 2,878,590,529 1,247,499,085 915,551,267	Value (\$) 2,878,590,529 55.69 1,247,499,085 24.13 915,551,267 17.71	Value (\$) 2,878,590,529 5.48 -0.15 1,247,499,085 24.13 5.48 -0.16 915,551,267 17.71 5.35 5.60 -0.25 5.49 52 715,540,178 13.84 4.88 5.48 -0.60 5.49	Value (\$) % QTD CYTD 2,878,590,529 55.69 5.33 10.05 5.48 9.16 -0.15 0.89 1,247,499,085 24.13 5.32 9.17 5.48 9.16 -0.16 0.01 915,551,267 17.71 5.35 14.10 5.60 9.58 -0.25 4.52 5.49 9.36 52 11 715,540,178 13.84 4.88 5.96 5.48 9.16 -0.60 -3.20 5.49 9.36	Value (\$) % QTD CYTD FYTD 2,878,590,529 55.69 5.33 10.05 40.09 5.48 9.16 35.72 -0.15 0.89 4.37 1,247,499,085 24.13 5.32 9.17 35.61 5.48 9.16 35.72 -0.16 0.01 -0.11 915,551,267 17.71 5.35 14.10 50.88 5.60 9.58 37.18 -0.25 4.52 13.70 5.49 9.36 38.47 52 11 4 715,540,178 13.84 4.88 5.96 34.25 5.48 9.16 35.72 -0.60 -3.20 -1.47 5.49 9.36 38.47	Value (\$) % QTD CYTD FYTD Year 2,878,590,529 55.69 5.33 10.05 40.09 40.09 5.48 9.16 35.72 35.72 -0.15 0.89 4.37 4.37 1,247,499,085 24.13 5.32 9.17 35.61 35.61 5.48 9.16 35.72 35.72 35.72 -0.16 0.01 -0.11 -0.11 915,551,267 17.71 5.35 14.10 50.88 50.88 5.60 9.58 37.18 37.18 37.18 -0.25 4.52 13.70 13.70 5.49 9.36 38.47 38.47 52 11 4 4 715,540,178 13.84 4.88 5.96 34.25 35.72 -0.60 -3.20 -1.47 -1.47 -1.47 -0.60 -3.20 -1.47 -1.47 5.49 9.36 38.47 38	Value (\$) % Q1D CY1D FY1D Year Years 2,878,590,529 55.69 5.33 10.05 40.09 40.09 12.35 5.48 9.16 35.72 35.72 9.38 -0.15 0.89 4.37 4.37 2.97 1,247,499,085 24.13 5.32 9.17 35.61 35.61 9.52 5.48 9.16 35.72 35.72 9.38 -0.16 0.01 -0.11 -0.11 0.14 915,551,267 17.71 5.35 14.10 50.88 50.88 15.62 5.60 9.58 37.18 37.18 9.42 -0.25 4.52 13.70 13.70 6.20 5.49 9.36 38.47 38.47 11.26 5.48 9.16 35.72 35.72 9.38 715,540,178 13.84 4.88 5.96 34.25 34.25 N/A 5.48 9.16 35.72	Value (\$) % QTD CYTD FYTD Year Years Years 2,878,590,529 55.69 5.33 10.05 40.09 40.09 12.35 12.80 5.48 9.16 35.72 35.72 9.38 11.08 -0.15 0.89 4.37 4.37 2.97 1.72 1,247,499,085 24.13 5.32 9.17 35.61 35.61 9.52 11.19 5.48 9.16 35.72 35.72 9.38 11.08 -0.16 0.01 -0.11 -0.11 0.14 0.11 915,551,267 17.71 5.35 14.10 50.88 50.88 15.62 N/A 5.60 9.58 37.18 37.18 9.42 11.20 -0.25 4.52 13.70 13.70 6.20 N/A 5.49 9.36 38.47 38.47 11.26 12.49 52 11 4 4 18 N/A	Value (\$) % QTD CYTD FYTD Year Years Years Years 2,878,590,529 55.69 5.33 10.05 40.09 40.09 12.35 12.80 6.66 5.48 9.16 35.72 35.72 9.38 11.08 5.33 -0.15 0.89 4.37 4.37 2.97 1.72 1.33 1,247,499,085 24.13 5.32 9.17 35.61 35.61 9.52 11.19 5.46 5.48 9.16 35.72 35.72 9.38 11.08 5.33 -0.16 0.01 -0.11 -0.11 0.14 0.11 0.13 915,551,267 17.71 5.35 14.10 50.88 50.88 15.62 N/A N/A 915,551,267 17.71 5.35 14.10 50.88 50.88 15.62 N/A N/A 9.42 11.20 5.56 4.52 13.70 13.70 6.20 N/A N/A <td>Value (\$) % Q1D CY1D FY1D Year Years Year</td> <td>Value (\$) % Q1D CY1D FY1D Year Years Year</td> <td>Value (\$) 76 G15 C115 F115 Year Years Years Years Years Years Loce. 2,878,590,529 55.69 5.33 10.05 40.09 40.09 12.35 12.80 6.66 6.44 17.18 7.08 5.48 9.16 35.72 35.72 9.38 11.08 5.33 5.45 10.65 6.13 -0.15 0.89 4.37 4.37 2.97 1.72 1.33 0.99 6.53 0.95 1,247,499,085 24.13 5.32 9.17 35.61 35.72 35.72 1.72 1.33 0.99 6.53 0.95 1,247,499,085 24.13 5.32 9.17 35.61 35.61 9.52 11.19 5.46 5.61 10.69 6.82 4.94 9.16 35.72 35.72 9.38 11.08 5.33 5.45 10.65 6.66 915,551,267 17.71 5.35 14.10 50.88</td>	Value (\$) % Q1D CY1D FY1D Year Years Year	Value (\$) % Q1D CY1D FY1D Year Years Year	Value (\$) 76 G15 C115 F115 Year Years Years Years Years Years Loce. 2,878,590,529 55.69 5.33 10.05 40.09 40.09 12.35 12.80 6.66 6.44 17.18 7.08 5.48 9.16 35.72 35.72 9.38 11.08 5.33 5.45 10.65 6.13 -0.15 0.89 4.37 4.37 2.97 1.72 1.33 0.99 6.53 0.95 1,247,499,085 24.13 5.32 9.17 35.61 35.72 35.72 1.72 1.33 0.99 6.53 0.95 1,247,499,085 24.13 5.32 9.17 35.61 35.61 9.52 11.19 5.46 5.61 10.69 6.82 4.94 9.16 35.72 35.72 9.38 11.08 5.33 5.45 10.65 6.66 915,551,267 17.71 5.35 14.10 50.88

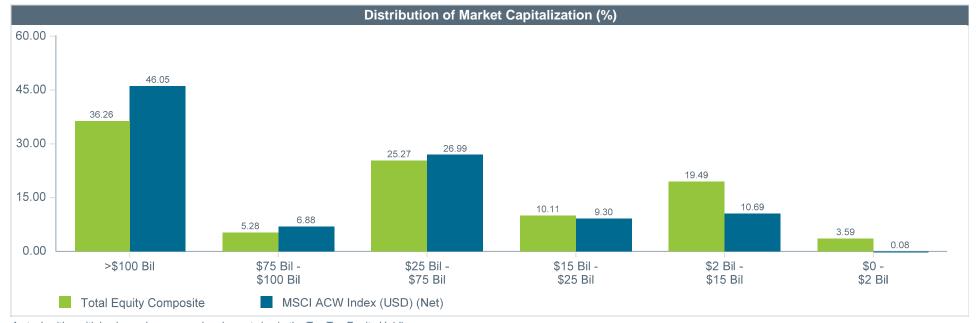
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Wyoming State Treasurer's Office Total Equity Composite vs. MSCI ACW Index (USD) (Net) Portfolio Characteristics

Top Ten Equity Holdings						
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)		
Microsoft Corp	2.01	2.92	-0.91	15.17		
Apple Inc	1.97	3.46	-1.49	12.31		
Amazon.com Inc	1.35	2.22	-0.87	11.19		
Taiwan Semiconductor Mfg (ADR)	1.27	0.79	0.48	1.97		
Roche Holding AG	1.00	0.40	0.60	18.16		
Facebook Inc	0.83	1.26	-0.43	18.06		
Tencent Holdings LTD	0.82	0.65	0.17	-3.82		
Samsung Electronics Co Ltd	0.76	0.51	0.25	0.03		
Alphabet Inc	0.72	1.11	-0.39	21.16		
ASML Holding NV	0.71	0.43	0.28	15.39		
% of Portfolio	11.44	13.75	-2.31			

·	Portfolio	Benchmark
Vtd. Avg. Mkt. Cap (\$M)	243,035	337,460
Median Mkt. Cap (\$M)	2,606	13,982
Price/Earnings Ratio	21.17	23.03
Price/Book Ratio	3.46	3.74
Yr. EPS Growth Rate (%)	15.07	16.82
Current Yield (%)	1.93	1.77
Beta (5 Years, Monthly)	1.01	1.00
Number of Securities	8,377	2,969



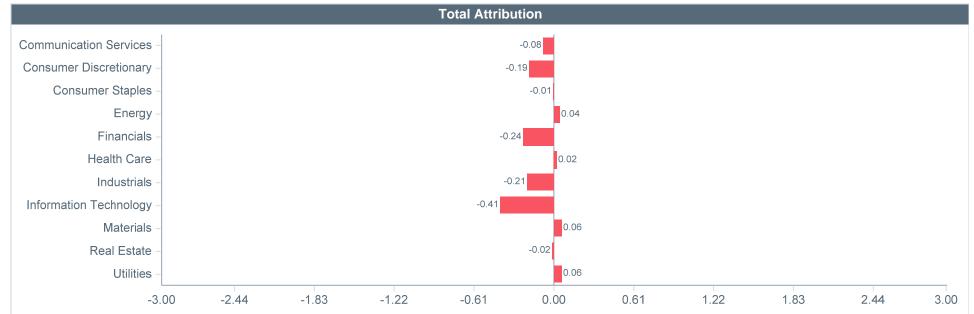
A stock with multiple share classes may be shown twice in the Top Ten Equity Holdings.



Wyoming State Treasurer's Office Total Equity Composite vs. MSCI ACW Index (USD) (Net) Buy and Hold Sector Attribution Graph

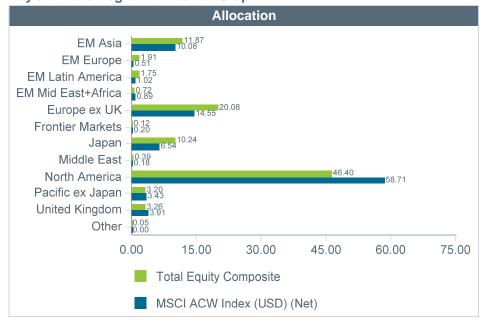


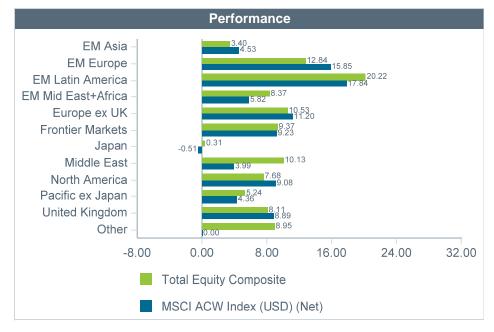


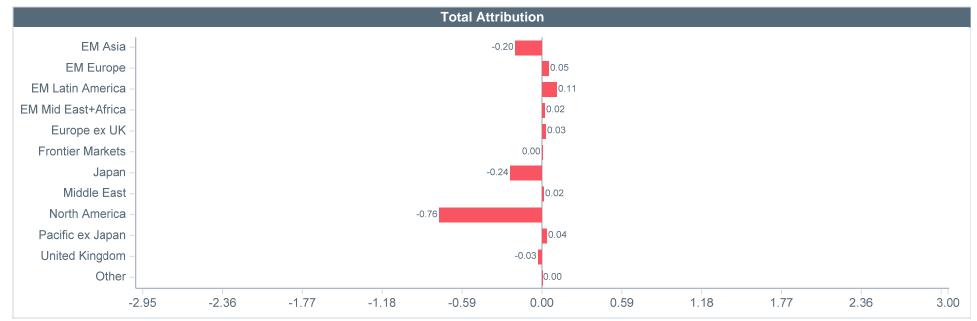




Wyoming State Treasurer's Office Total Equity Composite vs. MSCI ACW Index (USD) (Net) Buy and Hold Region Attribution Graph





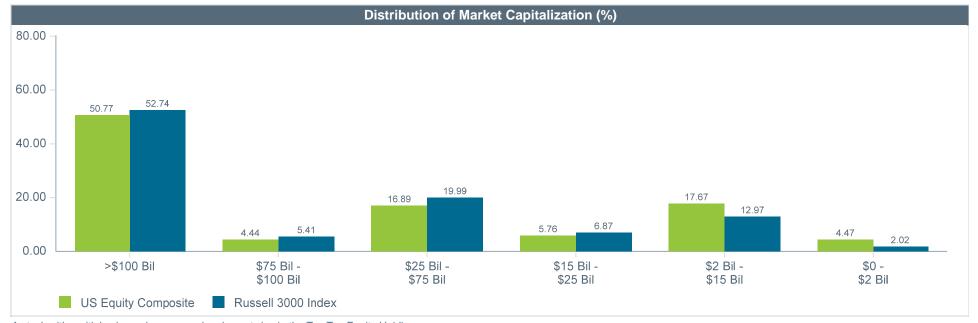




Wyoming State Treasurer's Office US Equity Composite vs. Russell 3000 Index Portfolio Characteristics

Top Ten Equity Holdings							
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)			
Microsoft Corp	4.60	4.62	-0.02	15.17			
Apple Inc	4.50	4.86	-0.36	12.31			
Amazon.com Inc	3.10	3.38	-0.28	11.19			
Facebook Inc	1.91	1.88	0.03	18.06			
Alphabet Inc	1.64	1.61	0.03	21.16			
Alphabet Inc	1.59	1.66	-0.07	18.39			
Tesla Inc	1.13	1.19	-0.06	1.76			
Berkshire Hathaway Inc	1.10	1.18	-0.08	8.79			
NVIDIA Corporation	1.07	1.08	-0.01	49.88			
JPMorgan Chase & Co	1.01	1.06	-0.05	2.77			
% of Portfolio	21.65	22.52	-0.87				

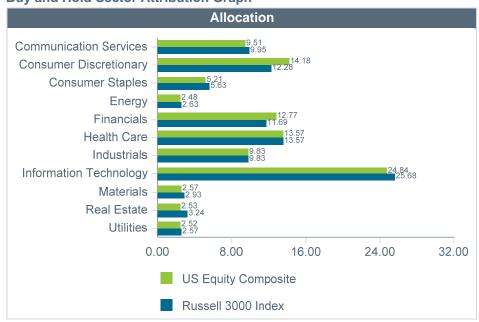
Portfo	folio	Benchmarl
421,5	,548	441,345
2,1	,183	2,653
25	5.46	26.20
4	4.25	4.48
20	0.23	21.08
1	1.23	1.28
1	1.01	1.00
3,0	,059	3,009

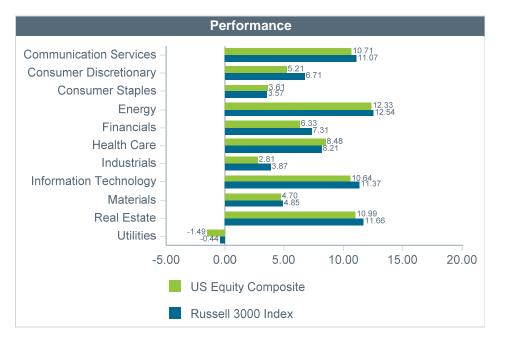


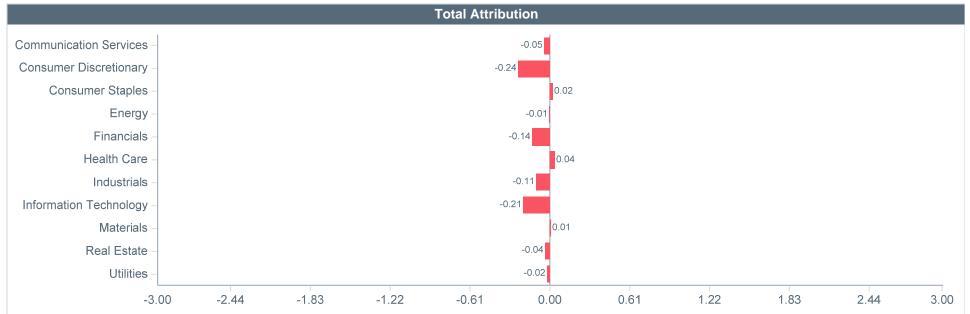
A stock with multiple share classes may be shown twice in the Top Ten Equity Holdings.



Wyoming State Treasurer's Office US Equity Composite vs. Russell 3000 Index Buy and Hold Sector Attribution Graph





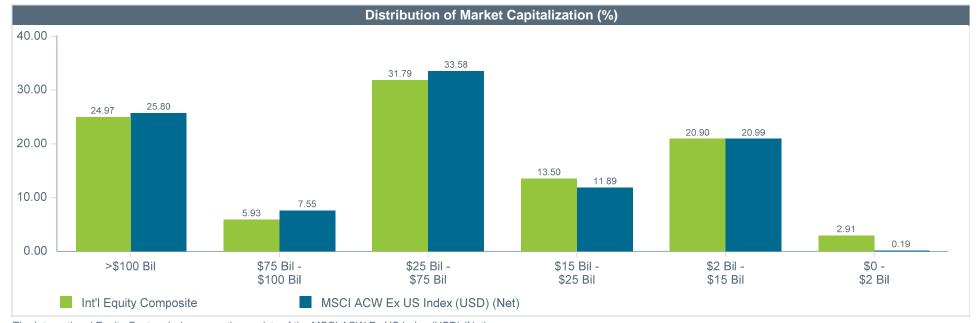




Wyoming State Treasurer's Office Int'l Equity Composite vs. MSCI ACW Ex US Index (USD) (Net) Portfolio Characteristics

D 46 H			
Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
2.26	1.92	0.34	1.97
1.78	0.97	0.81	18.16
1.46	1.58	-0.12	-3.82
1.35	1.24	0.11	0.03
1.26	1.05	0.21	15.39
1.11	0.23	0.88	-16.08
1.06	0.19	0.87	-3.96
1.04	0.18	0.86	11.14
1.02	0.41	0.61	19.47
0.95	0.26	0.69	9.06
13.29	8.03	5.26	
	Weight (%) 2.26 1.78 1.46 1.35 1.26 1.11 1.06 1.04 1.02 0.95	Weight (%) Weight (%) 2.26 1.92 1.78 0.97 1.46 1.58 1.35 1.24 1.26 1.05 1.11 0.23 1.06 0.19 1.04 0.18 1.02 0.41 0.95 0.26	Weight (%) Weight (%) Weight (%) 2.26 1.92 0.34 1.78 0.97 0.81 1.46 1.58 -0.12 1.35 1.24 0.11 1.26 1.05 0.21 1.11 0.23 0.88 1.06 0.19 0.87 1.04 0.18 0.86 1.02 0.41 0.61 0.95 0.26 0.69

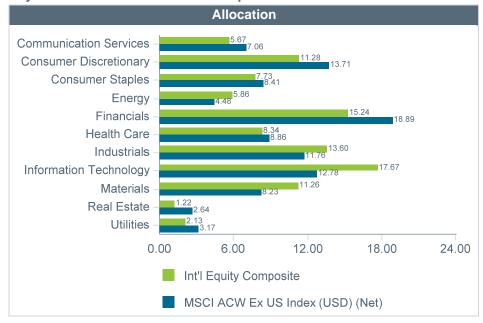
	lio Characteristics	
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	104,146	102,831
Median Mkt. Cap (\$M)	2,885	10,291
Price/Earnings Ratio	18.44	18.52
Price/Book Ratio	2.92	2.74
5 Yr. EPS Growth Rate (%)	10.47	9.54
Current Yield (%)	2.48	2.40
Beta (5 Years, Monthly)	1.01	1.00
Number of Securities	5,374	2,340

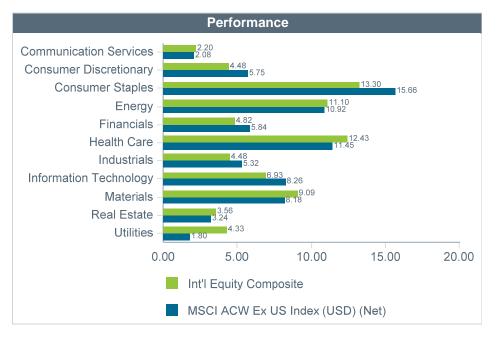


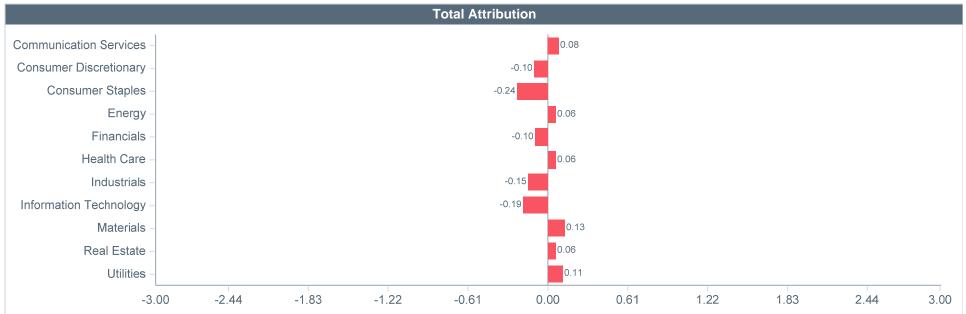
The International Equity Custom Index currently consists of the MSCI ACW Ex US Index (USD) (Net).



Wyoming State Treasurer's Office Int'l Equity Composite vs. MSCI ACW Ex US Index (USD) (Net) Buy and Hold Sector Attribution Graph



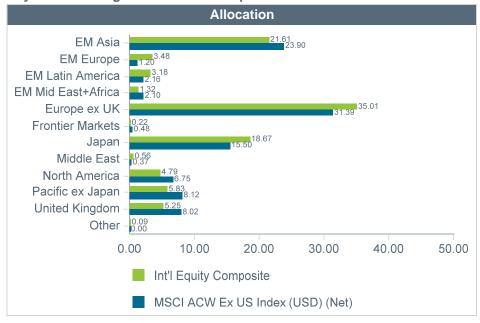


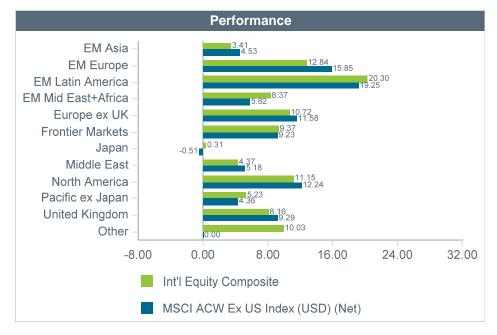


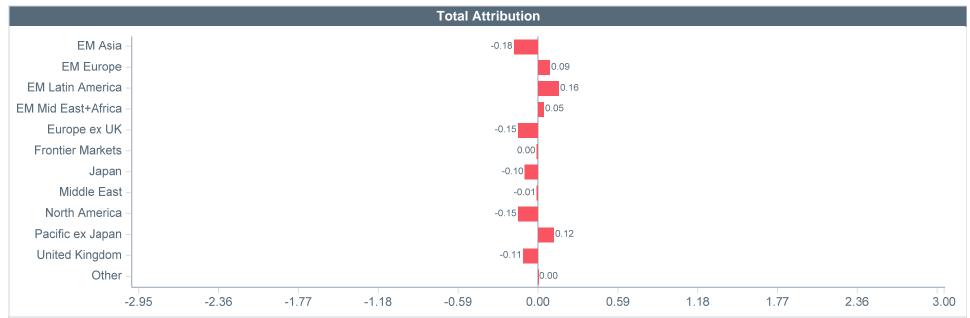
The International Equity Custom Index currently consists of the MSCI ACW Ex US Index (USD) (Net).



Wyoming State Treasurer's Office Int'l Equity Composite vs. MSCI ACW Ex US Index (USD) (Net) Buy and Hold Region Attribution Graph

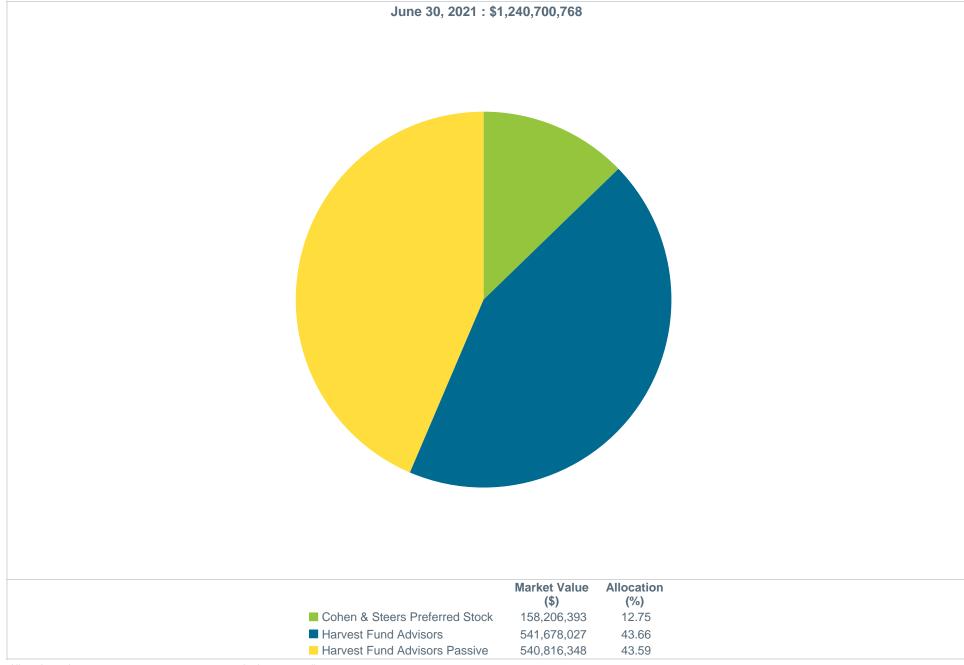






The International Equity Custom Index currently consists of the MSCI ACW Ex US Index (USD) (Net).



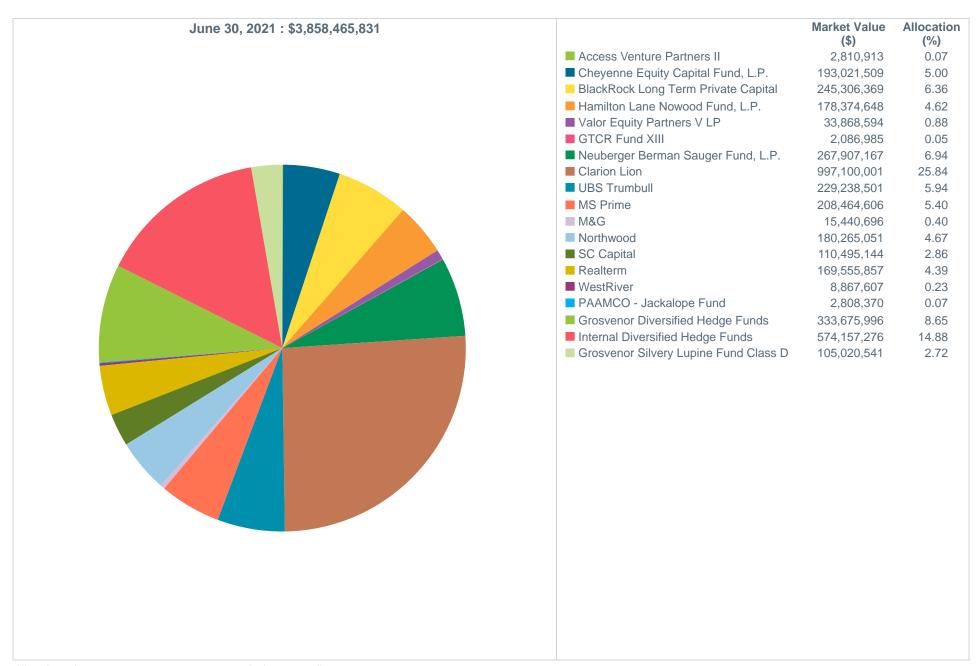


Allocations shown may not sum up to 100% exactly due to rounding.



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Cohen & Steers Preferred Stock	3.19	3.12	14.74	14.74	9.09	N/A	N/A	N/A	7.68	9.09	07/01/2018
S&P US Preferred Stock Index	4.56	5.38	20.70	20.70	8.17	6.28	6.41	6.69	7.97	8.17	
Difference	-1.37	-2.26	-5.96	-5.96	0.92	N/A	N/A	N/A	-0.29	0.92	
MLP Composite	18.60	42.27	57.60	57.60	N/A	N/A	N/A	N/A	-24.38	-1.51	08/01/2018
MLP Custom Index	18.79	44.23	58.60	58.60	0.31	0.47	-5.10	1.90	-25.60	-1.71	
Difference	-0.19	-1.96	-1.00	-1.00	N/A	N/A	N/A	N/A	1.22	0.20	
Harvest Fund Advisors	18.05	39.99	54.98	54.98	N/A	N/A	N/A	N/A	-24.38	-2.06	08/01/2018
MLP Custom Index	18.79	44.23	58.60	58.60	0.31	0.47	-5.10	1.90	-25.60	-1.71	
Difference	-0.74	-4.24	-3.62	-3.62	N/A	N/A	N/A	N/A	1.22	-0.35	
Harvest Fund Advisors Passive	19.09	44.47	60.13	60.13	N/A	N/A	N/A	N/A	N/A	8.97	02/01/2020
MLP Custom Index	18.79	44.23	58.60	58.60	0.31	0.47	-5.10	1.90	-25.60	8.42	
Difference	0.30	0.24	1.53	1.53	N/A	N/A	N/A	N/A	N/A	0.55	

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Cohen & Steers Preferred Stock	3.27	3.27	15.09	15.09	9.43	N/A	N/A	N/A	8.01	9.43	07/01/2018
S&P US Preferred Stock Index	4.56	5.38	20.70	20.70	8.17	6.28	6.41	6.69	7.97	8.17	
Difference	-1.29	-2.11	-5.61	-5.61	1.26	N/A	N/A	N/A	0.04	1.26	
MLP Composite	18.68	42.47	58.06	58.06	N/A	N/A	N/A	N/A	-24.16	-1.06	08/01/2018
MLP Custom Index	18.79	44.23	58.60	58.60	0.31	0.47	-5.10	1.90	-25.60	-1.71	
Difference	-0.11	-1.76	-0.54	-0.54	N/A	N/A	N/A	N/A	1.44	0.65	
Harvest Fund Advisors	18.21	40.39	55.88	55.88	N/A	N/A	N/A	N/A	-23.94	-1.46	08/01/2018
MLP Custom Index	18.79	44.23	58.60	58.60	0.31	0.47	-5.10	1.90	-25.60	-1.71	
Difference	-0.58	-3.84	-2.72	-2.72	N/A	N/A	N/A	N/A	1.66	0.25	
Harvest Fund Advisors Passive	19.09	44.48	60.14	60.14	N/A	N/A	N/A	N/A	N/A	8.98	02/01/2020
MLP Custom Index	18.79	44.23	58.60	58.60	0.31	0.47	-5.10	1.90	-25.60	8.42	
Difference	0.30	0.25	1.54	1.54	N/A	N/A	N/A	N/A	N/A	0.56	



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



Wyoming State Treasurer's Office Comparative Performance

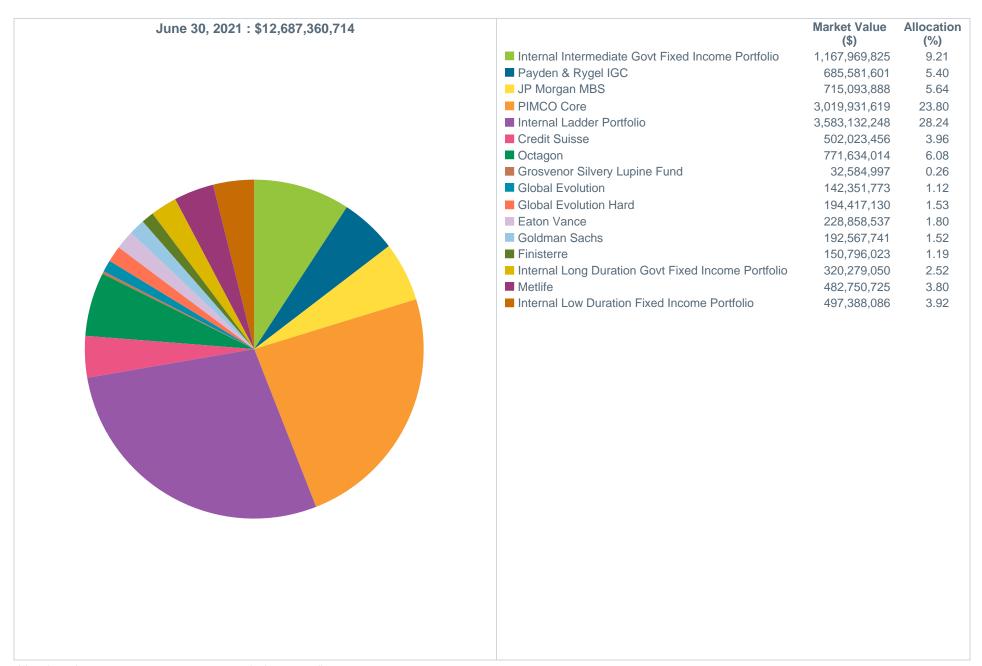
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Core Real Estate Composite	4.57	6.55	8.21	8.21	4.36	5.46	7.47	8.29	0.51	5.53	01/01/2006
NCREIF ODCE Index (AWA) (Net)	3.68	5.64	7.09	7.09	4.60	5.62	7.43	8.60	0.34	5.65	
Difference	0.89	0.91	1.12	1.12	-0.24	-0.16	0.04	-0.31	0.17	-0.12	
Clarion Lion	5.40	7.60	10.20	10.20	6.58	7.26	9.14	9.72	1.67	5.62	01/01/2006
NCREIF ODCE Index (AWA) (Net)	3.68	5.64	7.09	7.09	4.60	5.62	7.43	8.60	0.34	5.65	
Difference	1.72	1.96	3.11	3.11	1.98	1.64	1.71	1.12	1.33	-0.03	
UBS Trumbull	2.69	3.80	1.27	1.27	-0.40	2.01	4.39	5.85	-4.74	4.36	07/01/2006
NCREIF ODCE Index (AWA) (Net)	3.68	5.64	7.09	7.09	4.60	5.62	7.43	8.60	0.34	5.34	
Difference	-0.99	-1.84	-5.82	-5.82	-5.00	-3.61	-3.04	-2.75	-5.08	-0.98	
MS Prime	2.78	4.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.29	10/01/2020
NCREIF ODCE Index (AWA) (Net)	3.68	5.64	7.09	7.09	4.60	5.62	7.43	8.60	0.34	6.80	
Difference	-0.90	-0.90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.51	
Diversified Hedge Funds Composite	3.21	2.44	13.25	13.25	3.83	4.19	2.32	3.47	7.14	2.78	12/01/2007
HFRI FOF Comp Index	2.86	4.94	18.28	18.28	6.32	6.12	4.09	3.85	10.88	2.26	
Difference	0.35	-2.50	-5.03	-5.03	-2.49	-1.93	-1.77	-0.38	-3.74	0.52	
Grosvenor Diversified Hedge Funds	3.13	2.54	14.01	14.01	4.80	N/A	N/A	N/A	9.70	4.80	07/01/2018
HFRI FOF Comp Index	2.86	4.94	18.28	18.28	6.32	6.12	4.09	3.85	10.88	6.32	
Difference	0.27	-2.40	-4.27	-4.27	-1.52	N/A	N/A	N/A	-1.18	-1.52	
Internal Diversified Hedge Funds	3.27	2.39	12.93	12.93	5.05	N/A	N/A	N/A	5.83	5.05	07/01/2018
HFRI FOF Comp Index	2.86	4.94	18.28	18.28	6.32	6.12	4.09	3.85	10.88	6.32	
Difference	0.41	-2.55	-5.35	-5.35	-1.27	N/A	N/A	N/A	-5.05	-1.27	
Grosvenor Opportunistic Class D	1.30	28.41	66.42	66.42	N/A	N/A	N/A	N/A	N/A	66.42	07/01/2020
Grosvenor Opportunistic Class D Custom Benchmark	4.69	6.75	18.89	18.89	N/A	N/A	N/A	N/A	N/A	18.89	
Difference	-3.39	21.66	47.53	47.53	N/A	N/A	N/A	N/A	N/A	47.53	



Wyoming State Treasurer's Office Comparative Performance

	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Core Real Estate Composite	4.77	6.93	8.92	8.92	5.03	6.19	8.25	9.13	1.11	6.37	01/01/2006
NCREIF ODCE Index (AWA) (Gross)	3.93	6.12	8.02	8.02	5.52	6.57	8.40	9.60	1.19	6.62	
Difference	0.84	0.81	0.90	0.90	-0.49	-0.38	-0.15	-0.47	-0.08	-0.25	
Clarion Lion	5.55	7.89	10.80	10.80	7.21	7.93	9.86	10.48	2.23	6.39	01/01/2006
NCREIF ODCE Index (AWA) (Gross)	3.93	6.12	8.02	8.02	5.52	6.57	8.40	9.60	1.19	6.62	
Difference	1.62	1.77	2.78	2.78	1.69	1.36	1.46	0.88	1.04	-0.23	
UBS Trumbull	2.87	4.17	2.00	2.00	0.32	2.81	5.26	6.79	-4.05	5.30	07/01/2006
NCREIF ODCE Index (AWA) (Gross)	3.93	6.12	8.02	8.02	5.52	6.57	8.40	9.60	1.19	6.30	
Difference	-1.06	-1.95	-6.02	-6.02	-5.20	-3.76	-3.14	-2.81	-5.24	-1.00	
MS Prime	3.27	5.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.32	10/01/2020
NCREIF ODCE Index (AWA) (Gross)	3.93	6.12	8.02	8.02	5.52	6.57	8.40	9.60	1.19	7.50	
Difference	-0.66	-0.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.18	
Diversified Hedge Funds Composite	3.21	2.44	13.25	13.25	3.83	4.19	2.32	3.47	7.14	2.78	12/01/2007
HFRI FOF Comp Index	2.86	4.94	18.28	18.28	6.32	6.12	4.09	3.85	10.88	2.26	
Difference	0.35	-2.50	-5.03	-5.03	-2.49	-1.93	-1.77	-0.38	-3.74	0.52	
Grosvenor Diversified Hedge Funds	3.13	2.54	14.01	14.01	4.80	N/A	N/A	N/A	9.70	4.80	07/01/2018
HFRI FOF Comp Index	2.86	4.94	18.28	18.28	6.32	6.12	4.09	3.85	10.88	6.32	
Difference	0.27	-2.40	-4.27	-4.27	-1.52	N/A	N/A	N/A	-1.18	-1.52	
Internal Diversified Hedge Funds	3.27	2.39	12.93	12.93	5.05	N/A	N/A	N/A	5.83	5.05	07/01/2018
HFRI FOF Comp Index	2.86	4.94	18.28	18.28	6.32	6.12	4.09	3.85	10.88	6.32	
Difference	0.41	-2.55	-5.35	-5.35	-1.27	N/A	N/A	N/A	-5.05	-1.27	
Grosvenor Opportunistic Class D	1.30	28.41	66.42	66.42	N/A	N/A	N/A	N/A	N/A	66.42	07/01/2020
Grosvenor Opportunistic Class D Custom Benchmark	4.69	6.75	18.89	18.89	N/A	N/A	N/A	N/A	N/A	18.89	
Difference	-3.39	21.66	47.53	47.53	N/A	N/A	N/A	N/A	N/A	47.53	





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



	Allocation						F	erforma	ance (%)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Core Fixed Income Composite	5,588,576,933	44.05	2.01	-1.50	0.11	0.11	5.47	3.23	3.39	N/A	8.40	2.98	01/01/2013
Bloomberg US Agg Bond Index			1.83	-1.61	-0.34	-0.34	5.34	3.03	3.28	3.39	7.51	2.91	
Difference			0.18	0.11	0.45	0.45	0.13	0.20	0.11	N/A	0.89	0.07	
Internal Aggregate Core Fixed Income	2,568,645,314	20.25	1.72	-1.44	-0.10	-0.10	N/A	N/A	N/A	N/A	8.14	3.82	11/01/2019
Bloomberg US Agg Bond Index			1.83	-1.61	-0.34	-0.34	5.34	3.03	3.28	3.39	7.51	3.35	
Difference			-0.11	0.17	0.24	0.24	N/A	N/A	N/A	N/A	0.63	0.47	
Internal Intermediate Govt Fixed Income Portfolio	1,167,969,825	9.21	1.79	-2.59	-3.14	-3.14	3.85	2.42	2.48	2.37	7.85	4.50	10/01/1996
Internal Intermediate Govt Fixed Income Portfolio Index			1.75	-2.58	-3.22	-3.22	4.00	1.98	2.22	2.14	8.00	4.49	
Difference			0.04	-0.01	0.08	0.08	-0.15	0.44	0.26	0.23	-0.15	0.01	
Payden & Rygel IGC	685,581,601	5.40	3.57	-1.22	3.25	3.25	N/A	N/A	N/A	N/A	10.15	5.48	11/01/2019
Payden & Rygel Custom Index			3.55	-1.27	3.30	3.30	7.48	4.72	4.60	5.08	8.94	4.83	
Difference			0.02	0.05	-0.05	-0.05	N/A	N/A	N/A	N/A	1.21	0.65	
JP Morgan MBS	715,093,888	5.64	-0.09	-0.09	1.17	1.17	N/A	N/A	N/A	N/A	5.64	3.40	11/01/2019
Bloomberg US MBS Index (Unhgd)			0.33	-0.77	-0.42	-0.42	3.78	2.27	2.56	2.64	3.87	2.05	
Difference			-0.42	0.68	1.59	1.59	N/A	N/A	N/A	N/A	1.77	1.35	
PIMCO Core	3,019,931,619	23.80	2.29	-1.55	0.33	0.33	5.45	3.38	3.50	N/A	8.82	2.99	01/01/2013
PIMCO Custom Index			1.83	-1.61	-0.34	-0.34	5.18	2.94	3.22	3.35	8.14	2.86	
Difference			0.46	0.06	0.67	0.67	0.27	0.44	0.28	N/A	0.68	0.13	
Opportunistic Fixed Income													
Grosvenor Silvery Lupine Fund	32,584,997	0.26	0.35	0.62	4.95	4.95	0.05	3.77	3.72	N/A	-7.50	3.72	07/01/2014
CS Western Euro Hi Yld Index			1.80	3.64	12.89	12.89	6.73	7.07	5.77	7.29	3.59	5.77	
Difference			-1.45	-3.02	-7.94	-7.94	-6.68	-3.30	-2.05	N/A	-11.09	-2.05	





	Allocatio	ion Performance (%)											
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Bank Loans	1,273,657,471	10.04	1.37	3.14	10.59	10.59	N/A	N/A	N/A	N/A	3.95	5.07	09/01/2019
S&P/LSTA Lvg'd Loan Index			1.47	3.28	11.65	11.65	4.39	4.99	3.94	4.39	3.12	4.74	
Difference			-0.10	-0.14	-1.06	-1.06	N/A	N/A	N/A	N/A	0.83	0.33	
Credit Suisse	502,023,456	3.96	1.49	3.28	10.64	10.64	N/A	N/A	N/A	N/A	2.82	4.56	09/01/2019
S&P/LSTA Lvg'd Loan Index			1.47	3.28	11.65	11.65	4.39	4.99	3.94	4.39	3.12	4.74	
Difference			0.02	0.00	-1.01	-1.01	N/A	N/A	N/A	N/A	-0.30	-0.18	
Octagon	771,634,014	6.08	1.31	3.07	10.69	10.69	N/A	N/A	N/A	N/A	3.27	4.94	09/01/2019
S&P/LSTA Lvg'd Loan Index			1.47	3.28	11.65	11.65	4.39	4.99	3.94	4.39	3.12	4.74	
Difference			-0.16	-0.21	-0.96	-0.96	N/A	N/A	N/A	N/A	0.15	0.20	
Emerging Market Debt Fixed Income Composite	908,991,204	7.16	3.01	-0.22	9.64	9.64	4.43	3.20	-0.24	N/A	2.81	-0.82	04/01/2013
EMD Custom Benchmark			3.24	-0.92	7.78	7.78	4.59	3.52	0.37	0.60	1.50	-0.11	
Difference			-0.23	0.70	1.86	1.86	-0.16	-0.32	-0.61	N/A	1.31	-0.71	
Global Evolution	142,351,773	1.12	3.78	-2.87	7.54	7.54	N/A	N/A	N/A	N/A	N/A	0.55	02/01/2020
JPM GBI-EM GbI Dvf'd Index (USD) (TR) (Unhedged)			3.54	-3.38	6.57	6.57	4.12	3.25	0.18	0.47	2.69	0.37	
Difference			0.24	0.51	0.97	0.97	N/A	N/A	N/A	N/A	N/A	0.18	
Goldman Sachs	192,567,741	1.52	1.79	0.20	9.18	9.18	N/A	N/A	N/A	N/A	N/A	4.90	03/01/2020
Goldman Sachs Custom Index			2.10	1.28	8.85	8.85	7.56	5.83	5.25	5.60	7.31	5.24	
Difference			-0.31	-1.08	0.33	0.33	N/A	N/A	N/A	N/A	N/A	-0.34	
Eaton Vance	228,858,537	1.80	3.57	2.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2.97	01/01/2021
JP Morgan EMB (JEMB) Hard/Local 50/50			3.32	-1.53	7.37	7.37	5.67	4.35	2.67	3.09	4.49	-1.53	
Difference			0.25	4.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.50	
Global Evolution Hard	194,417,130	1.53	3.82	-1.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.29	12/01/2020
JP Morgan EMBIG Div Ex CCC (USD) (TR) Index			3.90	-1.00	7.21	7.21	7.14	5.10	5.09	5.67	6.09	0.77	
Difference			-0.08	-0.47	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.48	
Finisterre	150,796,023	1.19	2.08	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.53	03/01/2021
Custom EMD Benchmark (1/3 blend)			3.24	-0.92	7.63	7.63	6.17	4.69	3.48	3.95	5.07	1.63	
Difference			-1.16	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.10	

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



	Allocatio	Allocation					F	erforma	ance (%)			
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Laddered Treasury Composite	3,583,132,248	28.24	-0.01	-0.06	0.10	0.10	N/A	N/A	N/A	N/A	3.20	2.05	10/01/2019
Internal Ladder Portfolio	3,583,132,248	28.24	-0.01	-0.06	0.10	0.10	N/A	N/A	N/A	N/A	3.20	2.05	10/01/2019
Long Duration Fixed Income Composite	803,029,775	6.33	6.66	-4.89	-2.74	-2.74	N/A	N/A	N/A	N/A	18.08	12.34	01/01/2019
Bloomberg US Gov't Crdt Lng Trm Bond Index			6.44	-4.64	-1.86	-1.86	9.92	5.45	6.34	7.30	16.12	11.89	
Difference			0.22	-0.25	-0.88	-0.88	N/A	N/A	N/A	N/A	1.96	0.45	
Internal Long Duration Govt Fixed Income Portfolio Bloomberg US Gov't Lng Trm Bond Index	320,279,050	2.52	6.59 6.43	-7.83 -7.82	-10.50 -10.42	-10.50 -10.42	N/A 7.97	N/A 3.18	N/A 5.74	N/A 6.62	17.06 17.55	8.86 9.10	01/01/2019
Difference			0.16	-0.01	-0.08	-0.08	N/A	N/A	N/A	N/A	-0.49	-0.24	
Metlife	482,750,725	3.80	6.71	-2.68	3.11	3.11	N/A	N/A	N/A	N/A	16.14	14.16	11/01/2018
Bloomberg US Lng Crdt Index			6.45	-2.49	4.32	4.32	10.73	6.65	6.60	7.55	13.32	13.17	
Difference			0.26	-0.19	-1.21	-1.21	N/A	N/A	N/A	N/A	2.82	0.99	
Low Duration Fixed Income Composite	497,388,086	3.92	0.06	0.07	0.25	0.25	N/A	N/A	N/A	N/A	3.14	3.04	12/01/2018
Low Duration Fixed Income Custom Index			-0.04	-0.09	0.06	0.06	2.80	1.78	1.63	1.44	3.14	2.96	
Difference			0.10	0.16	0.19	0.19	N/A	N/A	N/A	N/A	0.00	0.08	
Internal Low Duration Fixed Income Portfolio	497,388,086	3.92	0.06	0.07	0.25	0.25	2.83	N/A	N/A	N/A	3.14	2.67	03/01/2018
Bloomberg US Gov't 1-3 Yr Bond Index			-0.04	-0.09	0.06	0.06	2.72	1.61	1.47	1.23	3.14	2.57	
Difference			0.10	0.16	0.19	0.19	0.11	N/A	N/A	N/A	0.00	0.10	





	Allocation Performance (%)												
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Core Fixed Income Composite	5,588,576,933	44.05	2.03	-1.45	0.20	0.20	5.57	3.34	3.52	N/A	8.50	3.11	01/01/2013
Bloomberg US Agg Bond Index			1.83	-1.61	-0.34	-0.34	5.34	3.03	3.28	3.39	7.51	2.91	
Difference			0.20	0.16	0.54	0.54	0.23	0.31	0.24	N/A	0.99	0.20	
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			1.98	-1.24	0.98	0.98	6.04	3.66	3.78	3.95	8.51	3.41	
Core Fixed Income Composite Rank			44	65	69	69	78	72	73	N/A	51	76	
Internal Aggregate Core Fixed Income	2,568,645,314	20.25	1.74	-1.41	-0.03	-0.03	N/A	N/A	N/A	N/A	8.23	3.89	11/01/2019
Bloomberg US Agg Bond Index			1.83	-1.61	-0.34	-0.34	5.34	3.03	3.28	3.39	7.51	3.35	
Difference			-0.09	0.20	0.31	0.31	N/A	N/A	N/A	N/A	0.72	0.54	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median			1.98	-1.24	0.98	0.98	6.04	3.66	3.78	3.95	8.51	4.26	
Internal Aggregate Core Fixed Income Rank			91	62	76	76	N/A	N/A	N/A	N/A	58	68	
Internal Intermediate Govt Fixed Income Portfolio	1,167,969,825	9.21	1.79	-2.59	-3.14	-3.14	3.85	2.42	2.48	2.37	7.85	4.50	10/01/1996
Internal Intermediate Govt Fixed Income Portfolio Index			1.75	-2.58	-3.22	-3.22	4.00	1.98	2.22	2.14	8.00	4.49	
Difference			0.04	-0.01	0.08	0.08	-0.15	0.44	0.26	0.23	-0.15	0.01	
IM U.S. Government Bonds (SA+CF) Median			0.72	-1.66	-1.52	-1.52	4.19	2.20	2.41	2.31	6.39	4.43	
Internal Intermediate Govt Fixed Income Portfolio Rank			44	58	58	58	71	44	49	46	47	49	
Payden & Rygel IGC	685,581,601	5.40	3.62	-1.13	3.44	3.44	N/A	N/A	N/A	N/A	10.37	5.66	11/01/2019
Payden & Rygel Custom Index			3.55	-1.27	3.30	3.30	7.48	4.72	4.60	5.08	8.94	4.83	
Difference			0.07	0.14	0.14	0.14	N/A	N/A	N/A	N/A	1.43	0.83	
IM U.S. Corporate Bonds (SA+CF) Median			3.65	-0.96	4.44	4.44	8.62	5.76	5.43	6.02	11.35	6.65	
Payden & Rygel IGC Rank			52	59	71	71	N/A	N/A	N/A	N/A	66	71	
JP Morgan MBS	715,093,888	5.64	-0.07	-0.05	1.26	1.26	N/A	N/A	N/A	N/A	5.73	3.48	11/01/2019
Bloomberg US MBS Index (Unhgd)			0.33	-0.77	-0.42	-0.42	3.78	2.27	2.56	2.64	3.87	2.05	
Difference			-0.40	0.72	1.68	1.68	N/A	N/A	N/A	N/A	1.86	1.43	
IM U.S. Mortgage Backed Bonds (SA+CF) Median			0.51	-0.18	1.08	1.08	4.21	3.03	2.99	3.54	4.24	2.71	
JP Morgan MBS Rank			87	47	48	48	N/A	N/A	N/A	N/A	13	24	
PIMCO Core	3,019,931,619	23.80	2.32	-1.50	0.43	0.43	5.56	3.48	3.63	N/A	8.93	3.13	01/01/2013
PIMCO Custom Index			1.83	-1.61	-0.34	-0.34	5.18	2.94	3.22	3.35	8.14	2.86	
Difference			0.49	0.11	0.77	0.77	0.38	0.54	0.41	N/A	0.79	0.27	
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			1.98	-1.24	0.98	0.98	6.04	3.66	3.78	3.95	8.51	3.41	
PIMCO Core Rank			18	68	64	64	78	63	62	N/A	33	74	

Performance shown is gross of fees. Fiscal year ends on June 30th. The Internal Int Govt Fixed Income Portfolio Index currently consists of the BB US Treasury Index. Nov 2019 performance consists of the Internal Int Govt Fixed Income Portfolio. Prior to November 2019, the index consists of BB US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the BB US Gov't Crdt Bond Index. The PIMCO Custom Index consists of the BB US Agg Bond Index through February 2018, the BB US Agg Int Index through June 2019, the BB US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, and the BB US Agg Bond Index through 03/25/2020, account performance from 03/26/2020 through 03/31/2020, and BB US Corp Inv Grade Index thereafter.



	Allocation						Р	erforma	nce (%)				
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Opportunistic Fixed Income													
Grosvenor Silvery Lupine Fund	32,584,997	0.26	0.35	0.62	4.95	4.95	0.05	3.77	3.72	N/A	-7.50	3.72	07/01/2014
CS Western Euro Hi Yld Index			1.80	3.64	12.89	12.89	6.73	7.07	5.77	7.29	3.59	5.77	
Difference			-1.45	-3.02	-7.94	-7.94	-6.68	-3.30	-2.05	N/A	-11.09	-2.05	
Bank Loans	1,273,657,471	10.04	1.44	3.29	10.92	10.92	N/A	N/A	N/A	N/A	4.29	5.37	09/01/2019
S&P/LSTA Lvg'd Loan Index			1.47	3.28	11.65	11.65	4.39	4.99	3.94	4.39	3.12	4.74	
Difference			-0.03	0.01	-0.73	-0.73	N/A	N/A	N/A	N/A	1.17	0.63	
IM U.S. Bank Loans (SA+CF) Median			1.58	3.30	10.89	10.89	4.28	4.91	4.00	4.63	2.45	4.46	
Bank Loans Rank			74	52	49	49	N/A	N/A	N/A	N/A	10	19	
Credit Suisse	502,023,456	3.96	1.55	3.41	10.91	10.91	N/A	N/A	N/A	N/A	3.11	4.80	09/01/2019
S&P/LSTA Lvg'd Loan Index			1.47	3.28	11.65	11.65	4.39	4.99	3.94	4.39	3.12	4.74	
Difference			0.08	0.13	-0.74	-0.74	N/A	N/A	N/A	N/A	-0.01	0.06	
IM U.S. Bank Loans (SA+CF) Median			1.58	3.30	10.89	10.89	4.28	4.91	4.00	4.63	2.45	4.46	
Credit Suisse Rank			58	45	49	49	N/A	N/A	N/A	N/A	29	33	
Octagon	771,634,014	6.08	1.38	3.22	11.10	11.10	N/A	N/A	N/A	N/A	3.72	5.34	09/01/2019
S&P/LSTA Lvg'd Loan Index			1.47	3.28	11.65	11.65	4.39	4.99	3.94	4.39	3.12	4.74	
Difference			-0.09	-0.06	-0.55	-0.55	N/A	N/A	N/A	N/A	0.60	0.60	
IM U.S. Bank Loans (SA+CF) Median			1.58	3.30	10.89	10.89	4.28	4.91	4.00	4.63	2.45	4.46	
Octagon Rank			81	55	43	43	N/A	N/A	N/A	N/A	16	20	

Performance shown is gross of fees with the exception of Grosvenor SLF, which is shown 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	2020	Since Incep.	Inception Date
Emerging Market Debt Fixed Income Composite	908,991,204	7.16	3.11	-0.07	9.96	9.96	4.77	3.63	0.24	N/A	3.04	-0.33	04/01/2013
EMD Custom Benchmark			3.24	-0.92	7.78	7.78	4.59	3.52	0.37	0.60	1.50	-0.11	
Difference			-0.13	0.85	2.18	2.18	0.18	0.11	-0.13	N/A	1.54	-0.22	
IM Emerging Markets Debt (SA+CF) Median			3.89	-0.69	9.91	9.91	6.73	5.30	4.27	5.03	6.72	3.92	
Emerging Market Debt Fixed Income Composite Rank			75	39	48	48	81	88	95	N/A	92	95	
Global Evolution	142,351,773	1.12	3.82	-2.80	7.69	7.69	N/A	N/A	N/A	N/A	N/A	0.74	02/01/2020
JPM GBI-EM GbI Dvf'd Index (USD) (TR) (Unhedged)			3.54	-3.38	6.57	6.57	4.12	3.25	0.18	0.47	2.69	0.37	
Difference			0.28	0.58	1.12	1.12	N/A	N/A	N/A	N/A	N/A	0.37	
IM Emerging Markets Debt (SA+CF) Median			3.89	-0.69	9.91	9.91	6.73	5.30	4.27	5.03	6.72	3.59	
Global Evolution Rank			53	75	84	84	N/A	N/A	N/A	N/A	N/A	90	
Goldman Sachs	192,567,741	1.52	1.96	0.37	9.51	9.51	N/A	N/A	N/A	N/A	N/A	5.13	03/01/2020
Goldman Sachs Custom Index			2.10	1.28	8.85	8.85	7.56	5.83	5.25	5.60	7.31	5.24	
Difference			-0.14	-0.91	0.66	0.66	N/A	N/A	N/A	N/A	N/A	-0.11	
IM Emerging Markets Debt (SA+CF) Median			3.89	-0.69	9.91	9.91	6.73	5.30	4.27	5.03	6.72	4.79	
Goldman Sachs Rank			95	32	63	63	N/A	N/A	N/A	N/A	N/A	41	
Eaton Vance	228,858,537	1.80	3.68	3.20	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.20	01/01/2021
JP Morgan EMB (JEMB) Hard /Local 50/50			3.32	-1.53	7.37	7.37	5.67	4.35	2.67	3.09	4.49	-1.53	
Difference			0.36	4.73	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.73	
IM Emerging Markets Debt (SA+CF) Median			3.89	-0.69	9.91	9.91	6.73	5.30	4.27	5.03	6.72	-0.69	
Eaton Vance Rank			58	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6	
Global Evolution Hard	194,417,130	1.53	3.87	-1.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.41	12/01/2020
JP Morgan EMBIG Div Ex CCC (USD) (TR) Index			3.90	-1.00	7.21	7.21	7.14	5.10	5.09	5.67	6.09	0.77	
Difference			-0.03	-0.38	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.36	
IM Emerging Markets Debt (SA+CF) Median			3.89	-0.69	9.91	9.91	6.73	5.30	4.27	5.03	6.72	1.89	
Global Evolution Hard Rank			51	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	89	
Finisterre	150,796,023	1.19	2.19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.67	03/01/2021
Custom EMD Benchmark (1/3 blend)			3.24	-0.92	7.63	7.63	6.17	4.69	3.48	3.95	5.07	1.63	
Difference			-1.05	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.96	
IM Emerging Markets Debt (SA+CF) Median			3.89	-0.69	9.91	9.91	6.73	5.30	4.27	5.03	6.72	1.65	
Finisterre Rank			91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	81	

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



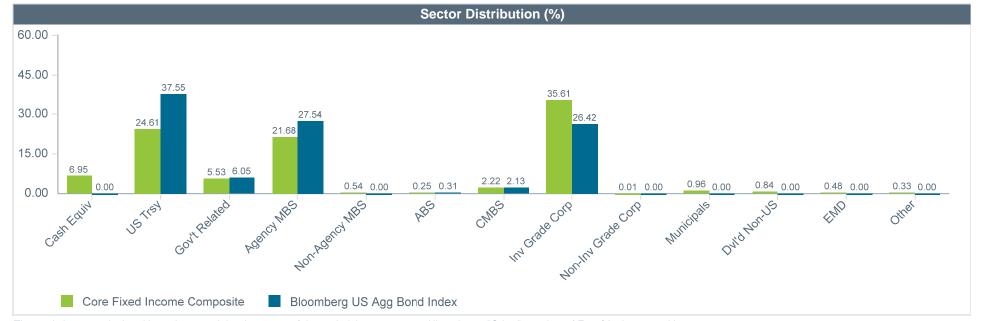
	Allocation	Performance (%)											
	Market Value (\$)	%	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
Laddered Treasury Composite	3,583,132,248	28.24	-0.01	-0.06	0.10	0.10	N/A	N/A	N/A	N/A	3.20	2.05	10/01/2019
Internal Ladder Portfolio	3,583,132,248	28.24	-0.01	-0.06	0.10	0.10	N/A	N/A	N/A	N/A	3.20	2.05	10/01/2019
Long Duration Fixed Income Composite	803,029,775	6.33	6.70	-4.83	-2.62	-2.62	N/A	N/A	N/A	N/A	18.20	12.46	01/01/2019
Bloomberg US Gov't Crdt Lng Trm Bond Index			6.44	-4.64	-1.86	-1.86	9.92	5.45	6.34	7.30	16.12	11.89	
Difference			0.26	-0.19	-0.76	-0.76	N/A	N/A	N/A	N/A	2.08	0.57	
IM U.S. Long Duration (SA+CF) Median			6.63	-3.65	1.04	1.04	10.88	6.35	6.99	7.91	16.98	13.22	
Long Duration Fixed Income Composite Rank			40	97	98	98	N/A	N/A	N/A	N/A	27	80	
Internal Long Duration Govt Fixed Income Portfolio	320,279,050	2.52	6.59	-7.83	-10.50	-10.50	N/A	N/A	N/A	N/A	17.06	8.86	01/01/2019
Bloomberg US Gov't Lng Trm Bond Index			6.43	-7.82	-10.42	-10.42	7.97	3.18	5.74	6.62	17.55	9.10	
Difference			0.16	-0.01	-0.08	-0.08	N/A	N/A	N/A	N/A	-0.49	-0.24	
IM U.S. Long Duration (SA+CF) Median			6.63	-3.65	1.04	1.04	10.88	6.35	6.99	7.91	16.98	13.22	
Internal Long Duration Govt Fixed Income Portfolio Rank			58	100	100	100	N/A	N/A	N/A	N/A	50	99	
Metlife	482,750,725	3.80	6.76	-2.58	3.32	3.32	N/A	N/A	N/A	N/A	16.37	14.39	11/01/2018
Bloomberg US Lng Crdt Index			6.45	-2.49	4.32	4.32	10.73	6.65	6.60	7.55	13.32	13.17	
Difference			0.31	-0.09	-1.00	-1.00	N/A	N/A	N/A	N/A	3.05	1.22	
IM U.S. Long Duration (SA+CF) Median			6.63	-3.65	1.04	1.04	10.88	6.35	6.99	7.91	16.98	13.78	
Metlife Rank			34	35	26	26	N/A	N/A	N/A	N/A	57	24	
Low Duration Fixed Income Composite	497,388,086	3.92	0.06	0.07	0.25	0.25	N/A	N/A	N/A	N/A	3.14	3.04	12/01/2018
Low Duration Fixed Income Custom Index			-0.04	-0.09	0.06	0.06	2.80	1.78	1.63	1.44	3.14	2.96	
Difference			0.10	0.16	0.19	0.19	N/A	N/A	N/A	N/A	0.00	0.08	
IM U.S. Short Duration Fixed Income (SA+CF) Median			0.27	0.17	1.16	1.16	3.32	2.30	2.08	1.98	3.85	3.56	
Low Duration Fixed Income Composite Rank			90	65	94	94	N/A	N/A	N/A	N/A	83	80	
Internal Low Duration Fixed Income Portfolio	497,388,086	3.92	0.06	0.07	0.25	0.25	2.83	N/A	N/A	N/A	3.14	2.67	03/01/2018
Bloomberg US Gov't 1-3 Yr Bond Index			-0.04	-0.09	0.06	0.06	2.72	1.61	1.47	1.23	3.14	2.57	
Difference			0.10	0.16	0.19	0.19	0.11	N/A	N/A	N/A	0.00	0.10	
IM U.S. Short Duration Fixed Income (SA+CF) Median			0.27	0.17	1.16	1.16	3.32	2.30	2.08	1.98	3.85	3.14	
Internal Low Duration Fixed Income Portfolio Rank			90	65	94	94	85	N/A	N/A	N/A	83	86	

Performance shown is gross 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. 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.



Wyoming State Treasurer's Office Core Fixed Income Composite vs. Bloomberg US Agg Bond Index Portfolio Characteristics

	Portfolio Characteristics	
	Portfolio	Benchmark
Effective Duration	6.06	6.58
Convexity	0.24	0.28
Avg. Maturity	7.91	8.53
Avg. Quality	Aa2	Aa1/Aa2
Yield To Maturity (%)	1.54	1.51
Coupon Rate (%)	2.31	2.55
Current Yield (%)	2.32	N/A

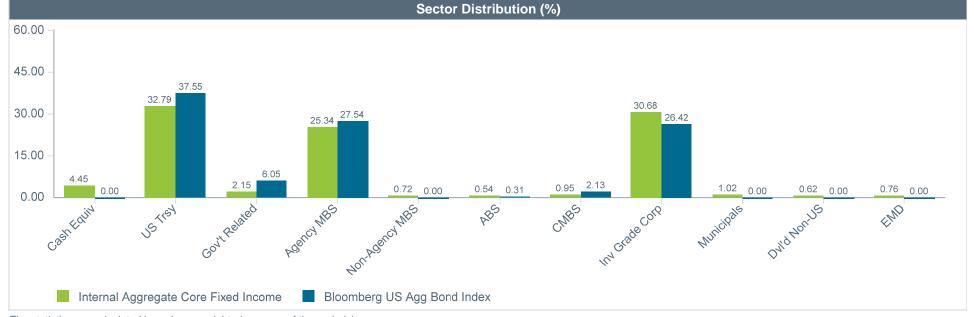


The statistics are calculated based on a weighted average of the underlying managers. Allocation to "Other" consists of Euro/Yankee securities.



Wyoming State Treasurer's Office Internal Aggregate Core Fixed Income vs. Bloomberg US Agg Bond Index Portfolio Characteristics

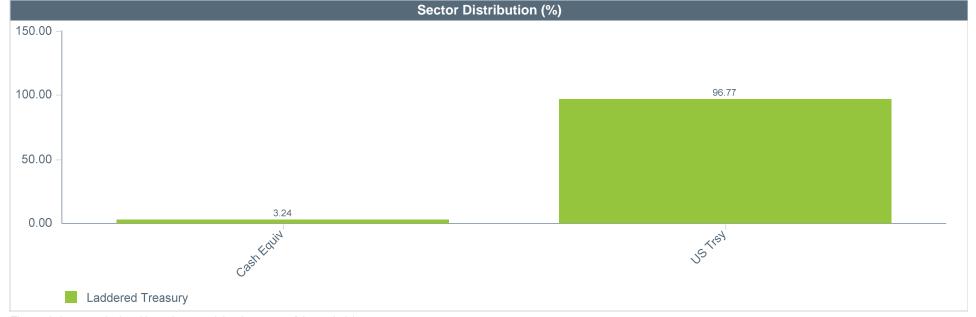
Portfolio Characteristics						
	Portfolio	Benchmark				
Effective Duration	5.95	6.58				
Convexity	0.33	0.28				
Avg. Maturity	8.30	8.53				
Avg. Quality	Aa2	Aa1/Aa2				
Yield To Maturity (%)	1.48	1.51				
Coupon Rate (%)	2.75	2.55				
Current Yield (%)	2.84	N/A				





Wyoming State Treasurer's Office Laddered Treasury Portfolio Characteristics

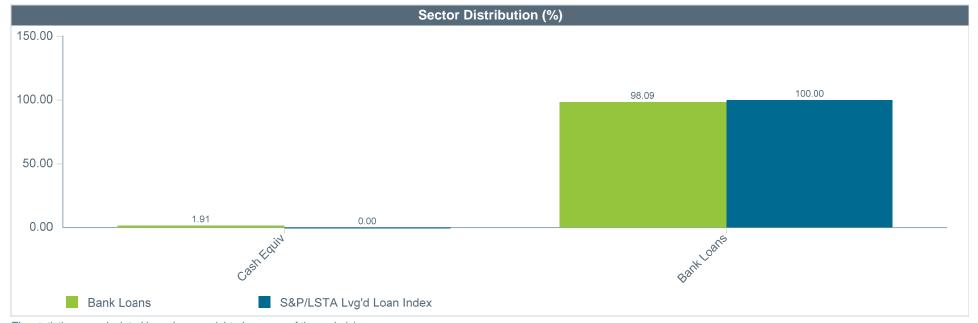
Portfolio Characteristics					
	Portfolio				
Effective Duration	1.45				
Convexity	0.03				
Avg. Maturity	1.53				
Avg. Quality	Aaa				
Yield To Maturity (%)	0.19				
Coupon Rate (%)	0.93				





Wyoming State Treasurer's Office Bank Loans vs. S&P/LSTA Lvg'd Loan Index Portfolio Characteristics

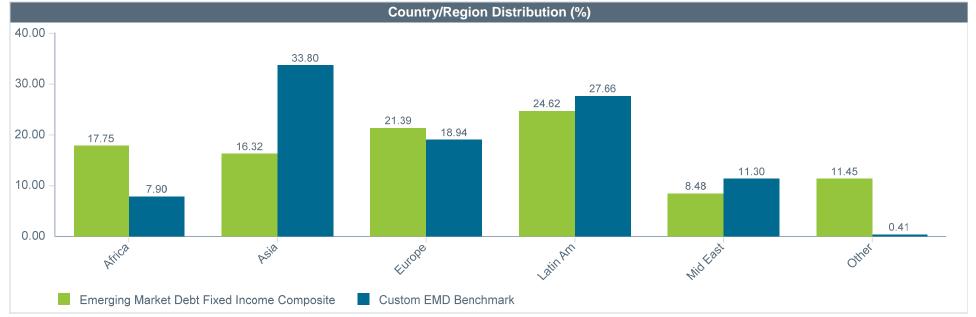
Portfolio Characteristics						
	Portfolio	Benchmark				
Effective Duration	0.25	N/A				
Avg. Maturity	5.14	4.79				
Avg. Quality	B2	B1				
Yield To Maturity (%)	4.50	4.39				
Coupon Rate (%)	4.09	3.92				
Current Yield (%)	4.12	4.39				





Wyoming State Treasurer's Office Emerging Market Debt Fixed Income Composite vs. Custom EMD Benchmark Portfolio Characteristics

Portfolio Characteristics						
	Portfolio	Benchmark				
Effective Duration	4.56	5.96				
Convexity	N/A	0.60				
Avg. Maturity	10.16	10.18				
Avg. Quality	Ba2	Ba2				
Yield To Maturity (%)	5.26	4.30				
Coupon Rate (%)	5.76	5.09				
Yield To Worst (%)	N/A	4.15				
Current Yield (%)	5.21	4.84				

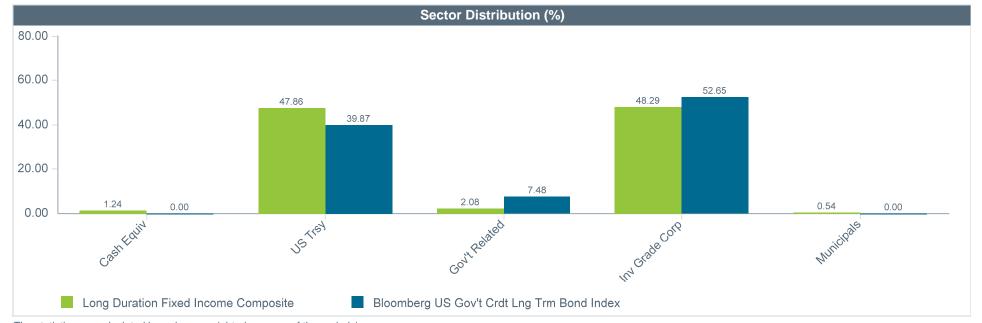


The statistics are calculated based on a weighted average of the underlying managers. Region allocation to "Other" consists of cash. The EMD Custom Index consists of the JPM GBI-EM GbI Dvf'd Index through 02/29/2020, 70% JPM GBI-EM GbI Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM GbI Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI GbI Dvf'd Index thereafter.



Wyoming State Treasurer's Office Long Duration Fixed Income Composite vs. Bloomberg US Gov't Crdt Lng Trm Bond Index Portfolio Characteristics

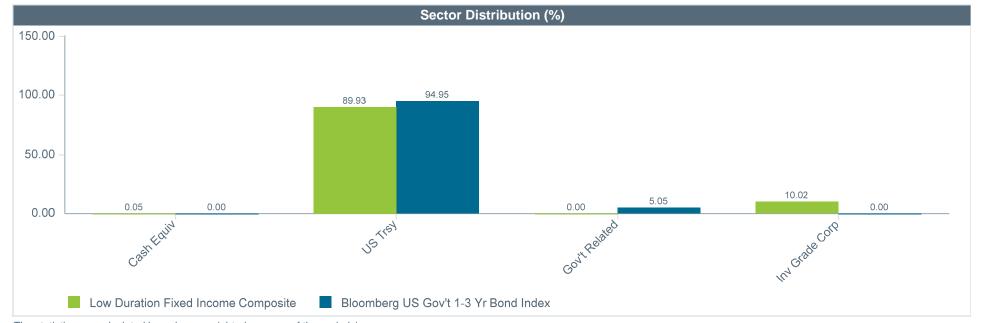
Portfolio Characteristics						
	Portfolio	Benchmark				
Effective Duration	16.08	16.58				
Convexity	3.31	3.66				
Avg. Quality	A1	Aa3/A1				
Yield To Maturity (%)	2.67	2.67				
Coupon Rate (%)	3.50	3.69				





Wyoming State Treasurer's Office Low Duration Fixed Income Composite vs. Bloomberg US Gov't 1-3 Yr Bond Index Portfolio Characteristics

	Portfolio Characteristics	
	Portfolio	Benchmark
Effective Duration	1.29	1.96
Convexity	0.03	0.01
Avg. Quality	Aaa	Aaa/Aa1
Yield To Maturity (%)	0.11	0.26
Coupon Rate (%)	1.43	1.25





•											
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
JP Morgan Cash Composite	0.02	0.02	0.04	0.04	1.32	1.13	0.88	0.68	0.43	1.43	01/01/2006
JP Morgan Cash Custom Index	0.00	0.02	0.09	0.09	1.43	1.18	0.93	0.73	0.67	1.46	
Difference	0.02	0.00	-0.05	-0.05	-0.11	-0.05	-0.05	-0.05	-0.24	-0.03	
Wyo-Star Cash Composite	-0.02	-0.02	0.04	0.04	1.61	1.23	0.99	0.76	1.13	3.07	10/01/1996
Wyo-Star Cash Custom Index	-0.08	-0.10	0.04	0.04	1.74	1.31	1.05	0.84	1.36	2.54	
Difference	0.06	0.08	0.00	0.00	-0.13	-0.08	-0.06	-0.08	-0.23	0.53	
WYO STAR II Total Fund	0.28	-0.03	0.89	0.89	N/A	N/A	N/A	N/A	3.53	3.37	01/01/2019
Bloomberg US Corp 1-3 Yr Index	0.27	0.25	1.54	1.54	3.60	2.56	2.32	2.32	3.79	3.72	
Difference	0.01	-0.28	-0.65	-0.65	N/A	N/A	N/A	N/A	-0.26	-0.35	

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.



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	Since Incep.	Inception Date
JP Morgan Cash Composite	0.02	0.02	0.04	0.04	1.35	1.17	0.95	0.76	0.44	1.51	01/01/2006
JP Morgan Cash Custom Index	0.00	0.02	0.09	0.09	1.43	1.18	0.93	0.73	0.67	1.46	
Difference	0.02	0.00	-0.05	-0.05	-0.08	-0.01	0.02	0.03	-0.23	0.05	
Wyo-Star Cash Composite	-0.01	0.01	0.10	0.10	1.67	1.29	1.05	0.84	1.20	3.11	10/01/1996
Wyo-Star Cash Custom Index	-0.08	-0.10	0.04	0.04	1.74	1.31	1.05	0.84	1.36	2.54	
Difference	0.07	0.11	0.06	0.06	-0.07	-0.02	0.00	0.00	-0.16	0.57	
WYO STAR II Total Fund	0.29	0.00	0.96	0.96	N/A	N/A	N/A	N/A	3.60	3.43	01/01/2019
Bloomberg US Corp 1-3 Yr Index	0.27	0.25	1.54	1.54	3.60	2.56	2.32	2.32	3.79	3.72	
Difference	0.02	-0.25	-0.58	-0.58	N/A	N/A	N/A	N/A	-0.19	-0.29	

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.



Wyoming State Treasurer's Office Investment Values by Fund June 30, 2021 **Total** Fiscal Year Ending Current % of **Investment Value** 06/30/20 Market Value **Market Value** MV **Wyoming State Total Fund** \$22,201,347,447 \$22.741.032.950 \$24,987,283,259 100.0% **Permanent Mineral Trust** \$7.711.188.357 \$7.990.956.831 \$9.391.475.140 100.0% 13.0% **US** Equity \$776,561,057 \$1,120,037,056 \$1,216,275,401 International Equity \$1,173,461,199 \$1,450,187,580 \$1,632,354,836 17.4% 5.2% MLPs \$359,229,594 \$411,164,093 \$488,549,023 Private Equity 9.0% \$448,484,825 \$504,572,829 \$846,257,219 \$817,221,309 Real Estate \$807.410.357 \$941.612.928 10.0% Diversified Hedge Funds \$626.093.040 \$611,293,123 \$699,066,141 7.4% \$3,259,591,256 35.0% Fixed Income \$2,881,829,152 \$3,291,229,021 0.7% Opportunistic \$47,521,504 \$8,284,086 \$61,751,569 \$124,601,092 Public Purpose Investments \$134.894.182 1.3% \$124.601.092 Cash Equivalents (Liquidated Managers) \$0 \$775,904 \$657,872 0.0% Cash (invested in State Agency Pool) \$88,234,434 \$89,120,036 0.9% \$50,697,517 **Common School Perm Land Fund** \$4,061,967,085 \$4,125,664,118 \$4,579,667,486 100.0% **US** Equity \$259,971,250 \$431,786,613 \$424,697,364 9.3% International Equity \$392,657,836 \$571,017,771 \$547,205,723 11.9% Preferred Stock \$102,677,880 \$136,896,867 \$134,447,870 2.9% MLPs \$228,004,984 \$264,856,326 \$309,453,596 6.8% Private Equity \$1,251,818 \$106,894,965 \$1,711,684 0.0% Real Estate \$543,588,361 \$569,776,232 \$612,900,438 13.4% Diversified Hedge Funds 0.0% \$0 \$0 \$2,426,000,123 \$1,984,541,051 \$2,436,054,361 53.2% Fixed Income Opportunistic \$12,324,950 \$3,029,610 \$16,615,535 0.4% Public Purpose Investments \$18,359,738 \$18,359,738 \$18,359,738 0.4% Cash Equivalents (Liquidated Managers) \$0 \$373,592 \$316,882 0.0% Cash (invested in State Agency Pool) \$77,130,147 \$38,131,354 \$77,904,296 1.7% **Permanent Land Fund** \$204,857,994 \$202,823,913 \$243,031,461 100.0% **US** Equity \$26,199,627 \$26,357,892 \$33,108,519 13.6% \$43,144,286 17.8% International Equity \$31,223,186 \$36,024,093 5.0% MLPs \$8,875,636 \$10,174,773 \$12,044,605 Private Equity \$10,500,318 \$12,533,798 \$19,573,163 8.1% Real Estate 10.0% \$20,961,856 \$20,345,582 \$24,350,901 Diversified Hedge Funds 8.0% \$17,337,141 \$14,496,493 \$19,347,015 Fixed Income 35.1% \$84.207.606 \$80.418.728 \$85.398.287 Opportunistic \$1,673,369 \$192,157 \$2,131,090 0.9% Cash Equivalents (Liquidated Managers) 0.0% \$0 \$18,107 \$15,403 Cash (invested in State Agency Pool) \$3,879,256 \$2,262,290 \$3,918,192 1.6% **University Permanent Land Fund** \$22,302,579 \$26,615,611 \$28.182.629 100.0% **US** Equity \$1.156.448 \$7.746.560 \$3.754.909 13.3% 16.0% International Equity \$3.352.848 \$5,026,537 \$4,495,355 MLPs 4.9% \$1,378,959 \$1,002,460 \$1,121,367 Private Equity \$1,326,883 8.6% \$1,413,897 \$2,415,362 Real Estate \$2,836,129 \$2,712,270 \$3,253,332 11.5% Diversified Hedge Funds \$2,209,657 \$1,524,638 \$2,466,920 8.8% \$6,421,657 \$10,027,966 35.6% Fixed Income \$10,083,595 \$128,249 \$46,271 \$179,670 0.6% Opportunistic Cash Equivalents (Liquidated Managers) \$0 \$2,103 \$1,778 0.0% Cash (invested in State Agency Pool) \$206,309 \$600,311 \$208,380 0.7%



Wyoming State Treasurer's Office									
Investment Values by Fund June 30, 2021									
Wyoming State Total Fund	\$22,201,347,447	\$22,741,032,950	\$24,987,283,259	100.09					
Hathaway Scholarship	\$565,429,568	\$592,278,846	\$683,528,413	100.09					
US Equity	\$55,561,620	\$83,725,477	\$86,775,414	12.79					
International Equity	\$89,561,229	\$109,180,435	\$125,717,739	18.4					
MLPs	\$28,907,093	\$30,044,142	\$38,893,127	5.7					
Private Equity	\$31,487,257	\$29,805,233	\$51,653,520	7.6					
Real Estate	\$60,683,649	\$61,310,651	\$71,036,792	10.4 8.0					
Diversified Hedge Funds Fixed Income	\$49,259,961 \$241,796,523	\$56,302,857 \$217,927,539	\$54,751,940 \$245,352,775	35.9					
Opportunistic	\$3,579,506	\$613,228	\$4,658,506	0.7					
Cash Equivalents (Liquidated Managers)	\$0	\$58,480	\$49,771	0.0					
Cash (invested in State Agency Pool)	\$4,592,731	\$3,310,805	\$4,638,828	0.7					
Higher Education	\$124,742,115	\$119,493,551	\$140,858,113	100.0					
US Equity	\$9,102,911	\$11,880,131	\$14,254,540	10.19					
International Equity	\$14,632,391	\$16,098,931	\$18,891,116	13.4					
Preferred Stock	\$2,823,866	\$3,615,540	\$3,733,596	2.7					
MLPs	\$7,843,186	\$6,858,964	\$10,630,726	7.5					
Private Equity	\$47,243	\$0	\$64,598	0.0					
Real Estate	\$15,840,989	\$15,055,391	\$17,991,703	12.8					
Diversified Hedge Funds	\$0	\$0	\$0	0.0					
Fixed Income	\$71,214,822	\$65,489,749	\$71,877,050	51.0					
Opportunistic Cash Equivalents (Liquidated Managers)	\$408,652 \$0	\$94,921 \$12,032	\$548,108 \$10,236	0.4					
Cash (invested in State Agency Pool)	\$2,828,055	\$387,893	\$2,856,440	2.0					
Workers Compensation Fund	\$2,402,237,523	\$2,435,825,765	\$2,673,499,559	100.0					
US Equity	\$233,903,159	\$225,494,197	\$300,099,937	11.2					
International Equity	\$254,263,793	\$298,231,850	\$336,730,567	12.6					
MLPs	\$101,926,682	\$92,124,054	\$130,387,728	4.9					
Private Equity Real Estate	\$817,931 \$202,658,438	\$0 \$188,888,293	\$1,118,404 \$226,535,175	0.0° 8.5°					
Diversified Hedge Funds	\$202,030,430	\$100,000,293	\$220,535,175	0.0					
Fixed Income	\$1,593,726,643	\$1,508,044,796	\$1,659,325,557	62.1					
Opportunistic	\$14.895.077	\$1,624,788	\$19,136,062	0.7					
Cash Equivalents (Liquidated Managers)	\$0	\$138,257	\$119,868	0.0					
Cash (invested in State Agency Pool)	\$45,801	\$121,279,529	\$46,261	0.0					
Pool A	\$255,878,944	\$241,213,542	\$266,181,124	100.0					
US Equity	\$17,978,026	\$19,934,042	\$22,279,842	8.4					
International Equity	\$15,836,233	\$24,783,825	\$21,503,413	8.1					
Preferred Stock	\$27,562,849	\$8,437,326	\$20,024,927	7.5					
MLPs	\$9,848,021	\$11,195,190	\$13,809,340	5.2					
Private Equity	\$60,507	\$0	\$82,735	0.0					
Real Estate	\$20,227,437	\$20,352,153	\$21,746,193	8.2					
Fixed Income	\$155,659,350	\$153,198,832	\$157,940,089	59.3					
Opportunistic Cash Equivalents (Liquidated Managers)	\$0 \$0	\$160,988 \$677	\$0 \$677	0.0					
Cash (invested in State Agency Pool)	\$8,706,520	\$3,150,508	\$8,793,907	3.3					
LSRA	\$1,524,709,977	\$1,551,541,169	\$1,599,348,958	100.0					
US Equity	\$1,524,709,977	\$1,331,341,169	\$189,400,162	11.8					
International Equity	\$111,385,950	\$156,854,672	\$148,547,493	9.3					
MLPs	\$57,289,031	\$49,912,298	\$77,347,272	4.8					
Private Equity	\$365,303	\$0	\$499,500	0.0					
Diversified Hedge Funds	\$124,857,520	\$82,102,235	\$135,009,626	8.4					
Fixed Income	\$1,062,711,794	\$955,309,111	\$1,039,334,270	65.0					
Opportunistic Cash (invested in State Agency Pool)	\$0 \$9,119,107	\$1,050,876 \$183,091,827	\$0 \$9,210,634	0.0					
,				0.0					
State Agency Pool	\$5,328,033,305	\$5,454,619,605	\$5,381,510,376	100.0					
Fixed Income	\$3,507,512,747	\$3,874,466,372	\$3,690,821,338	68.6					
Public Purpose Investments	\$57,546,641	\$123,339,388	\$59,650,000	1.1					
Cash Equivalents	\$1,762,973,917	\$1,456,813,845	\$1,631,039,037	30.3					



	Wyoming State Tre			
	Investment Values June 30, 2			
	Total	Fiscal Year Ending	Current	% of
	Investment Value	06/30/20 Market Value	Market Value	MV
Wyoming State Total Fund	\$22,201,347,447	\$22,741,032,950	\$24,987,283,259	100.0%
US Equity	\$1,539,415,369	\$2,050,182,117	\$2,290,646,089	9.29
State Street All Cap	\$1,052,897,450	\$1,614,943,234	\$1,713,072,934	0.2
UW Portfolio Management Program	\$1,000,000	\$1,389,900	\$1,865,552	
Wyoming Internal Domestic Equity	\$48,056,199	\$0	\$54,018,991	
Wyoming Internal Domestic Equity - QT	\$53,002,518	\$0	\$51,693,545	
Van Berkom	\$193,263,598	\$202,424,251	\$249,726,454	
State Street Small Cap BlackRock Small Cap	\$0	\$231,424,731	\$0	
Wyoming Internal Small Cap - QT	\$140,864,076 \$44,013	\$0 \$0	\$166,649,630 \$46,698	
Wyoming Internal Small Cap	\$50,287,515	\$0	\$53,572,284	
nternational Equity	\$2,086,374,665	\$2,667,405,694	\$2,878,590,529	11.5%
Northern Trust Harding Loevner	\$943,252,118 \$554,321,572	\$1,295,468,268 \$654,671,093	\$1,247,499,085 \$715,540,178	
Arrowstreet	\$588,800,975	\$717,266,333	\$915,551,267	
Mixed Assets	\$935,991,281	\$1,026,400,941	\$1,240,700,768	5.0%
Cohen & Steers	\$133,064,594	\$148,949,732	\$158,206,393	
Harvest Pessive	\$408,307,237	\$419,163,914	\$541,678,027	
Harvest Passive	\$394,619,450	\$458,287,294	\$540,816,348	
Private Equity	\$494,342,086	\$655,220,721	\$923,376,185	3.7%
Access Venture Partners II	\$2,205,145	\$1,755,169	\$2,810,913	
Cheyenne Capital Fund, L.P.	\$92,670,854	\$165,839,306	\$193,021,509	
Hamilton Lane Nowood Fund, L.P.	\$125,398,043	\$142,888,665	\$178,374,648	
BlackRock LTPC	\$156,378,204	\$147,953,066	\$245,306,369	
Valor PE GTCR	\$22,873,948 \$0	\$0 \$0	\$33,868,594	
Neuberger Berman Sauger	\$94,815,891	\$196,784,515	\$2,086,985 \$267,907,167	
Neuberger Berman Sauger	\$54,013,091	\$190,704,313	\$207,907,107	
Real Estate	\$1,670,791,644	\$1,695,661,881	\$1,919,427,462	7.7%
Clarion Lion	\$857,251,390	\$1,136,011,809	\$997,100,001	
Morgan Stanley Prime	\$200,000,000	\$0	\$208,464,606	
UBS Trumbull M&G	\$215,468,793	\$243,815,177	\$229,238,501	
Northwood	\$38,661,659 \$106,539,576	\$36,244,862 \$133,728,445	\$15,440,696 \$180,265,051	
SC Capital	\$99,592,288	\$102,534,813	\$110,495,144	
Realterm	\$150,000,000	\$31,519,959	\$169,555,857	
WestRiver	\$3,277,938	\$11,806,817	\$8,867,607	
Discouling at the days Francis				0.00
Diversified Hedge Funds	\$819,757,319	\$765,719,345	\$910,641,643	3.6%
PAAMCO - Jackalope Grosvenor Diversified Hedge Funds	\$6,433,236 \$295,191,087	\$4,277,742 \$274,987,673	\$2,808,370 \$333,675,996	
Internal Diversified Hedge Funds	\$518,132,995	\$486,453,930	\$574,157,276	
Fixed Income	\$12,521,691,375	\$12,013,839,104	\$12,687,360,714	50.8%
PIMCO	\$3,001,062,874	\$2,261,419,729	\$3,019,931,619	
Payden & Rygel JPM MBS	\$661,311,013	\$716,381,745	\$685,581,601	
Credit Suisse	\$707,968,994 \$501,482,951	\$807,441,873 \$655,626,364	\$715,093,888 \$502,023,456	
Octagon	\$736,722,981	\$465,803,874	\$771,634,014	
Grosvenor Silvery Lupine Fund	\$24,851,966	\$70,930,128	\$32,584,997	
Investec	\$0	\$228,135,522	\$0	
Global Evolution	\$149,794,714	\$345,149,949	\$142,351,773	
Eaton Vance EMD	\$223,000,000	\$0	\$228,858,537	
Global Evolution Hard	\$196,000,000	\$0	\$194,417,130	
Finisterre	\$150,032,970	\$0	\$150,796,023	
Goldman Sachs	\$184,716,170	\$250,884,818	\$192,567,741	
Internal Long Duration Govt Portfolio	\$301,337,047	\$308,589,453	\$320,279,050	
Logan Circle Internal Int. Duration Govt Portfolio	\$436,247,239 \$1,206,684,291	\$428,906,762 \$1,170,677,551	\$482,750,725 \$1,167,969,825	
Internal Low Duration Govt Portfolio	\$510,070,951	\$485,244,029	\$497,388,086	
Wyoming Internal Ladder Portfolio	\$3,530,407,214.24	\$3,818,647,307	\$3,583,132,248	
Neuberger Berman Core	\$0	\$0	\$0	
	-	-	**	
Opportunistic	\$80,531,307	\$15,096,925	\$105,020,541	0.4%
Grosvenor D	\$80,531,307	\$15,096,925	\$105,020,541	
Public Purpose Investments	\$202,610,830	\$285,703,920	\$202,610,830	0.8%
Cash & Cash Equivalents	\$1,849,841,572	\$1,565,802,302	\$1,828,908,498	7.3%
Epoch	\$0	\$0	\$0	
Internal Equity Russell 2000	\$0	\$1,095	\$1,095	
Fisher Investments Cornerstone	\$0	\$1,108,212 \$2,363	\$901,588 \$2,354	
Heitman	\$83,682 \$1,759,375	\$3	\$2,354	
TA Realty	\$1,572,513	\$26,122	\$26,117	
Allianz Global Investors	\$1,372,313	\$36,305	\$36,297	
C.S. McKee	\$4,588,726	\$2	\$0	
JP Morgan Core	\$12,476,418	\$0	\$0	
Neuberger Berman Credit	\$0	\$574,113	\$574,056	
	\$0	\$1,520	\$1,520	
Seix		\$1,020		
Seix State Street TIPS	\$1,798,617	\$0	\$0	
Seix State Street TIPS State Street Low Duration	\$1,798,617 \$0	\$0 \$29,707	\$0 \$29,699	
Seix State Street TIPS	\$1,798,617	\$0	\$0	



Investment Manager Profiles

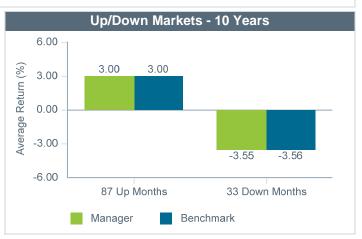


Manager: State Street All Cap

Benchmark: State Street All Cap Custom Index **Peer Group:** IM U.S. All Cap Equity (SA+CF)

			,								
Performance Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	8.55	40.79	17.76	16.85	13.35	14.33	17.58	30.34	-5.25	19.79	13.77
Benchmark	8.55	40.79	17.63	16.79	13.32	14.30	17.65	30.11	-5.50	19.85	13.78
Difference	0.00	0.00	0.13	0.06	0.03	0.03	-0.07	0.23	0.25	-0.06	-0.01
Peer Group Median	7.08	45.52	17.27	17.24	12.89	14.08	16.05	28.99	-5.82	20.23	12.73
Rank	33	74	48	55	45	46	47	44	46	54	44
Population	149	148	144	139	129	116	160	176	182	188	201







Portfolio Characteristi	cs and Dist. of	Market Cap (%)
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	535,779	533,607
Median Mkt. Cap (\$M)	30,174	30,247
Price/Earnings Ratio	27.02	27.05
Price/Book Ratio	4.70	4.67
5 Yr. EPS Growth Rate (%)	21.20	21.30
Current Yield (%)	1.38	1.38
Beta (5 Years, Monthly)	0.99	1.00
Number of Securities	513	505
Active Share	0.56	N/A
100.00 - 75.00 - 50.00 - 25.00 -	21.06 21.05	
5.62 5.59	6.04	6.01 2.58 2.59
>\$100 Bil \$75 Bil - \$100 Bil	\$25 Bil - \$15 I \$75 Bil \$25	



Performance shown is gross of fees. Performance prior to client inception consists of the State Street All Cap Custom Index. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

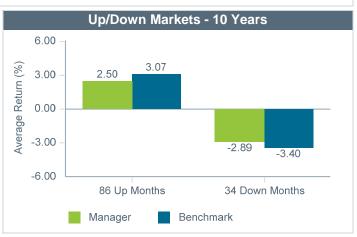


Manager: UW Portfolio Mgmt Program Benchmark: S&P 500 Index (Cap Wtd)

Peer Group: IM U.S. Large Cap Core Equity (SA+CF)

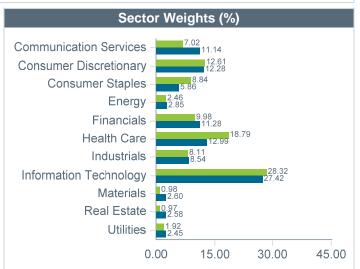
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	7.14	35.98	13.78	14.07	11.47	11.59	14.73	25.88	-8.04	21.83	10.87
Benchmark	8.55	40.79	18.67	17.65	14.10	14.84	18.40	31.49	-4.38	21.83	11.96
Difference	-1.41	-4.81	-4.89	-3.58	-2.63	-3.25	-3.67	-5.61	-3.66	0.00	-1.09
Peer Group Median	8.01	41.00	17.82	17.52	13.74	14.63	17.25	30.00	-5.20	21.84	10.63
Rank	69	81	85	82	84	91	59	81	84	51	48
Population	205	204	198	193	185	169	221	249	274	297	317







			Portfolio		Benchmark
Wtd. Avg. Mkt. Cap (\$M)			398,584		533,607
Median Mkt. Cap (\$M)			30,086		30,247
Price/Earnings Ratio			23.97		27.05
Price/Book Ratio			4.71		4.67
5 Yr. EPS Growth Rate (%)		19.05		21.30
Current Yield (%)			1.22		1.38
Beta (5 Years, Monthly)			0.93		1.00
Number of Securities			513		505
Active Share			42.88		N/A
100.00 – 75.00 – 50.00 – 64.75 54.68					
25.00 —	7.00	23.75 21.05	0.04		
0.00	7.83 5.59		5.51 6.01	4.89 2.59	3.33 0.00
>\$100 Bil	\$75 Bil -	\$25 Bil -	\$15 Bil -	\$2 Bil -	\$0 -
	\$100 Bil	\$75 Bil	\$25 Bil	\$15 Bil	\$2 Bil



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

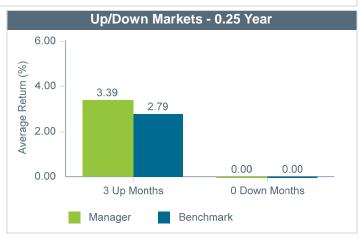


Manager: Domestic Equity Quantamental Benchmark: S&P 500 Index (Cap Wtd)

Peer Group: IM U.S. Large Cap Core Equity (SA+CF)

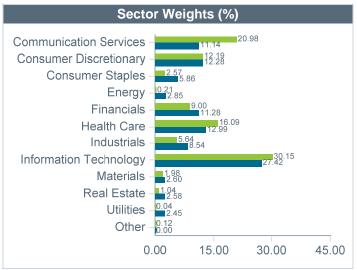
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	10.43	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	8.55	40.79	18.67	17.65	14.10	14.84	18.40	31.49	-4.38	21.83	11.96
Difference	1.88	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	8.01	41.00	17.82	17.52	13.74	14.63	17.25	30.00	-5.20	21.84	10.63
Rank	4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	205	204	198	193	185	169	221	249	274	297	317







	Portfolio	Benchmark
Vtd. Avg. Mkt. Cap (\$M)	354,411	533,607
Median Mkt. Cap (\$M)	13,424	30,247
Price/Earnings Ratio	30.81	27.05
Price/Book Ratio	5.67	4.67
5 Yr. EPS Growth Rate (%)	24.11	21.30
Current Yield (%)	0.50	1.38
Beta	N/A	1.00
Number of Securities	603	505
Active Share	61.33	N/A
00.00 — 75.00 — 64.75 50.00 —		
25.00 - 5.52 5.59	9.06 6.01	15.18 2.59 2.83 _{0.00}
>\$100 Bil \$75 Bil - \$100 Bil	\$25 Bil - \$15 Bil - \$75 Bil \$25 Bil	\$2 Bil - \$0 - \$15 Bil \$2 Bil





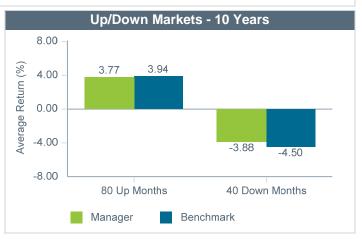
Manager: Van Berkom

Benchmark: Russell 2000 Index

Peer Group: IM U.S. Small Cap Core Equity (SA+CF)

Performance Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.78	43.18	12.66	16.29	12.68	13.89	9.22	29.96	-2.61	16.57	25.90
Benchmark	4.29	62.03	13.52	16.47	11.39	12.34	19.96	25.53	-11.01	14.65	21.31
Difference	-2.51	-18.85	-0.86	-0.18	1.29	1.55	-10.74	4.43	8.40	1.92	4.59
Peer Group Median	5.01	61.18	14.01	16.53	12.27	13.43	18.37	25.48	-10.47	15.07	20.77
Rank	96	96	69	53	44	42	83	22	8	36	15
Population	110	110	109	107	100	93	119	130	148	152	153







	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	5,242	3,406
Median Mkt. Cap (\$M)	4,204	1,264
Price/Earnings Ratio	20.75	18.33
Price/Book Ratio	3.16	2.88
5 Yr. EPS Growth Rate (%)	15.03	12.81
Current Yield (%)	0.70	0.96
Beta (5 Years, Monthly)	0.89	1.00
Number of Securities	44	1,984
Active Share	97.49	N/A
75.00 - 74.68 50.00 - 25.00 - 20.00	1 2.90 ^{8.10} 0.00 ^{3.68}	0.00 0.02 0.00 0.00
>\$3 Bil \$1 Bil \$3 B	\$500 Mil - \$200 Mil - \$1 Bil \$500 Mil	\$100 Mil - \$0 - \$200 Mil \$100 Mil



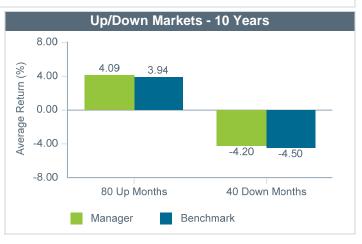


Manager: BlackRock Small Cap Benchmark: Russell 2000 Index

Peer Group: IM U.S. Small Cap Core Equity (SA+CF)

		·									
				P	erformar	nce					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	4.43	64.50	17.04	18.65	12.97	14.98	22.25	33.43	-9.09	11.38	23.63
Benchmark	4.29	62.03	13.52	16.47	11.39	12.34	19.96	25.53	-11.01	14.65	21.31
Difference	0.14	2.47	3.52	2.18	1.58	2.64	2.29	7.90	1.92	-3.27	2.32
Peer Group Median	5.01	61.18	14.01	16.53	12.27	13.43	18.37	25.48	-10.47	15.07	20.77
Rank	60	38	22	29	42	22	29	8	36	79	29
Population	110	110	109	107	100	93	119	130	148	152	153







			Portfolio	I	Benchmark
Wtd. Avg. Mkt. Cap (\$N	1)		3,838		3,406
Median Mkt. Cap (\$M)			1,775		1,264
Price/Earnings Ratio			18.16		18.33
Price/Book Ratio			2.80		2.88
5 Yr. EPS Growth Rate	(%)		14.58		12.81
Current Yield (%)			0.91		0.96
Beta (5 Years, Monthly)			1.03		1.00
Number of Securities			657		1,984
Active Share			66.53		N/A
80.00 - 60.00 - 56.37 50.18 40.00 - 20.00 - 0.00	38.01	7.21 8.10	4.91 3.68	0.61 0.02	0.00 0.00
>\$3 Bil	\$1 Bil - \$3 Bil	\$500 Mil - \$1 Bil	\$200 Mil - \$500 Mil	\$100 Mil - \$200 Mil	\$0 - \$100 Mil





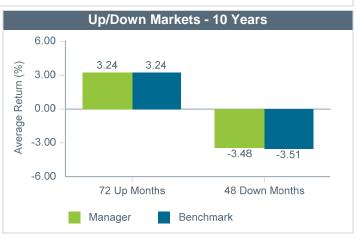
Manager: Northern Trust

Benchmark: MSCI ACW Ex US Index (USD) (Net)

Peer Group: IM All ACWI Ex US (SA+CF)

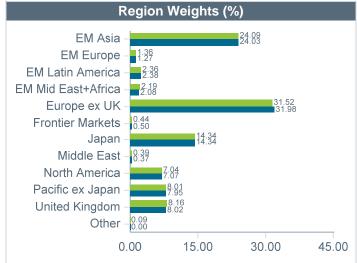
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	5.32	35.61	9.52	11.19	5.46	5.61	10.69	21.66	-13.81	27.51	4.48
Benchmark	5.48	35.72	9.38	11.08	5.33	5.45	10.65	21.51	-14.20	27.19	4.50
Difference	-0.16	-0.11	0.14	0.11	0.13	0.16	0.04	0.15	0.39	0.32	-0.02
Peer Group Median	5.49	38.47	11.26	12.49	6.95	7.44	14.71	24.97	-14.64	28.74	2.12
Rank	52	69	64	69	77	90	61	68	40	62	30
Population	153	153	153	153	149	126	163	171	181	191	205







Portfolio Characte	ristics and	Dist. of Ma	arket Cap (%)
	Po	rtfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	10	04,101	102,831
Median Mkt. Cap (\$M)	1	10,018	10,291
Price/Earnings Ratio		18.58	18.52
Price/Book Ratio		2.75	2.74
5 Yr. EPS Growth Rate (%)		9.79	9.54
Current Yield (%)		2.38	2.40
Beta (5 Years, Monthly)		0.99	1.00
Number of Securities		2,186	2,340
Active Share		7.12	N/A
40.00 —	33.17 33.58		
30.00 - 26.14 25.80		21.19	20.00
20.00 —		21.19	20.99
10.00		61 <u>11.89</u>	
10.00 – 7.56 7.5			
0.00			0.34 0.19
>\$100 Bil \$75 Bil		15 Bil - \$2 E 325 Bil \$15	



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to other consists of Luxembourg.



As of June 30, 2021

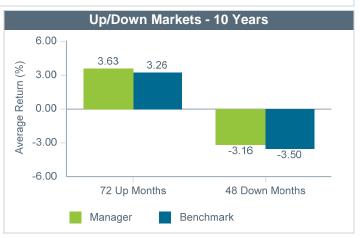
Manager: Arrowstreet

Benchmark: MSCI ACW Ex US IM Index (USD) (Net)

Peer Group: IM All ACWI Ex US (SA+CF)

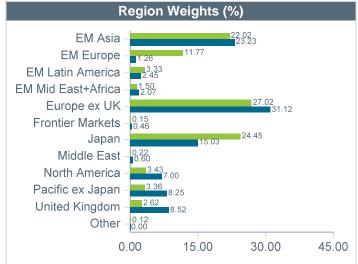
Performance Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016	
Manager	5.35	50.88	15.62	15.24	10.01	10.17	23.28	23.43	-13.84	29.12	8.06	
Benchmark	5.60	37.18	9.42	11.20	5.56	5.65	11.12	21.63	-14.76	27.81	4.41	
Difference	-0.25	13.70	6.20	4.04	4.45	4.52	12.16	1.80	0.92	1.31	3.65	
Peer Group Median	5.49	38.47	11.26	12.49	6.95	7.44	14.71	24.97	-14.64	28.74	2.12	
Rank	52	4	18	23	18	11	22	58	41	48	10	
Population	153	153	153	153	149	126	163	171	181	191	205	







Portfolio Character	ristics ar	nd Dist. o	of Mark	et Cap (%)
		Portfolio		Benchmark
Wtd. Avg. Mkt. Cap (\$M)		69,410		88,431
Median Mkt. Cap (\$M)		2,164		1,887
Price/Earnings Ratio		14.98		18.34
Price/Book Ratio		2.65		2.69
5 Yr. EPS Growth Rate (%)		12.94		9.48
Current Yield (%)		3.02		2.35
Beta (5 Years, Monthly)		1.05		1.00
Number of Securities		4,184		6,747
Active Share		80.57		N/A
40.00 —			33.86	
30.00 -	28.75		26.46	
20.00 - 22.08	24.90			
10.00 - 5.52 6.46		11.21 10.18		8.26 6.07
0.00				
>\$100 Bil \$75 Bil - \$100 Bil	\$25 Bil - \$75 Bil	\$15 Bil - \$25 Bil	\$2 Bil - \$15 Bil	\$0 - \$2 Bil
ψ100 Dii	Ţ. O D.II		+ - 3 5	



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to other consists of Cyprus.

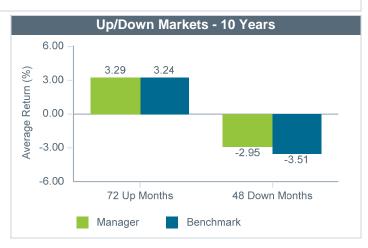


Manager: Harding Loevner

Benchmark: MSCI ACW Ex US Index (USD) (Net) **Peer Group:** IM All ACWI Ex US (SA+CF)

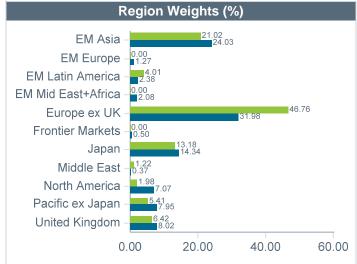
	Performance										
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	4.88	34.25	11.94	13.50	9.23	8.79	20.86	26.27	-13.24	30.86	6.19
Benchmark	5.48	35.72	9.38	11.08	5.33	5.45	10.65	21.51	-14.20	27.19	4.50
Difference	-0.60	-1.47	2.56	2.42	3.90	3.34	10.21	4.76	0.96	3.67	1.69
Peer Group Median	5.49	38.47	11.26	12.49	6.95	7.44	14.71	24.97	-14.64	28.74	2.12
Rank	61	76	44	37	23	30	32	43	33	38	17
Population	153	153	153	153	149	126	163	171	181	191	205







			Portfolio		Benchmark		
Wtd. Avg. Mkt. Cap (\$N	1)		153,362		102,831		
Median Mkt. Cap (\$M)			54,144		10,291		
Price/Earnings Ratio			24.17		18.52		
Price/Book Ratio			3.68		2.74		
5 Yr. EPS Growth Rate		8.94		9.54			
Current Yield (%)			1.90		2.40		
Beta (5 Years, Monthly)			0.96		1.00		
Number of Securities			56		2,340		
Active Share			91.35		N/A		
60.00 – 45.00 – 35.28		38.94 33.58					
30.00 – 25.80 15.00 – 0.00	3.59		20.15 11.89	20.99	0.00 0.19		
>\$100 Bil	\$75 Bil - \$100 Bil	\$25 Bil - \$75 Bil	\$15 Bil - \$25 Bil	\$2 Bil - \$15 Bil	\$0 - \$2 Bil		

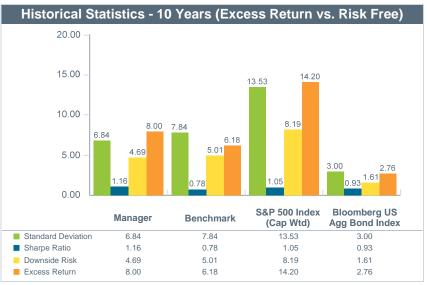




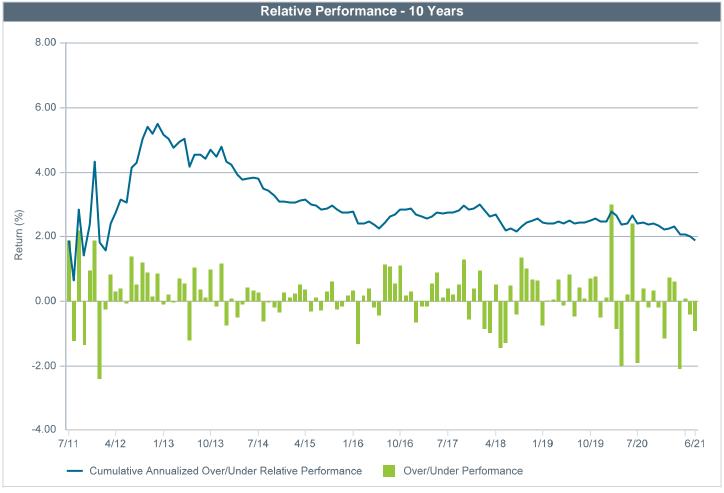
Manager: Cohen & Steers

Benchmark: S&P US Preferred Stock Index

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	3.27	15.09	9.43	7.91	7.55	8.72	8.01	19.68	-3.68	12.31	5.43
Benchmark	4.56	20.70	8.17	6.28	6.41	6.69	7.97	17.64	-4.25	9.11	1.94
Difference	-1.29	-5.61	1.26	1.63	1.14	2.03	0.04	2.04	0.57	3.20	3.49



Actual Correlation - 10	Years
	Actual Correlation
S&P US Preferred Stock Index	0.96
S&P 500 Index (Cap Wtd)	0.80
Russell 2000 Index	0.72
MSCI EAFE Index (USD) (Net)	0.80
MSCI Emg Mkts Index (USD) (Net)	0.77
Bloomberg US Agg Bond Index	0.14
Bloomberg US Trsy US TIPS Index	0.30
NCREIF ODCE Index (AWA) (Gross)	-0.26
Wilshire US REIT Index	0.75
HFRI FOF Comp Index	0.79
Bloomberg Cmdty Index (TR)	0.58
ICE BofAML 3 Mo US T-Bill Index	-0.25
Cons Price Index (Unadjusted)	0.12



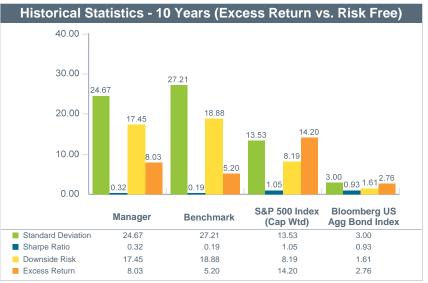
Performance shown is gross of fees and product specific prior to client inception. Calculation is based on quarterly periodicity.



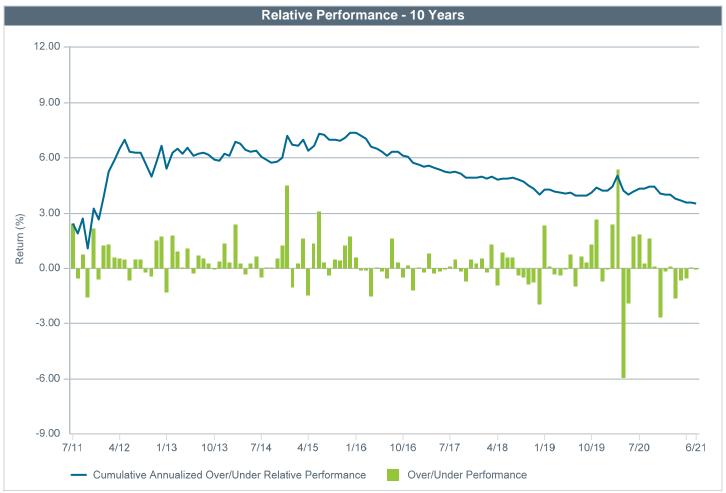
Manager: Harvest

Benchmark: MLP Custom Index

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	18.21	55.88	0.76	1.28	-2.88	5.51	-23.94	13.82	-13.12	-4.98	20.34
Benchmark	18.79	58.60	0.31	0.47	-5.10	1.90	-25.60	7.55	-11.67	-5.58	21.95
Difference	-0.58	-2.72	0.45	0.81	2.22	3.61	1.66	6.27	-1.45	0.60	-1.61



Actual Correlation - 10	Years
	Actual Correlation
MLP Custom Index	0.99
S&P 500 Index (Cap Wtd)	0.79
Russell 2000 Index	0.79
MSCI EAFE Index (USD) (Net)	0.68
MSCI Emg Mkts Index (USD) (Net)	0.59
Bloomberg US Agg Bond Index	-0.12
Bloomberg US Trsy US TIPS Index	0.16
NCREIF ODCE Index (AWA) (Gross)	-0.09
Wilshire US REIT Index	0.68
HFRI FOF Comp Index	0.75
Bloomberg Cmdty Index (TR)	0.69
ICE BofAML 3 Mo US T-Bill Index	-0.31
Cons Price Index (Unadjusted)	0.29



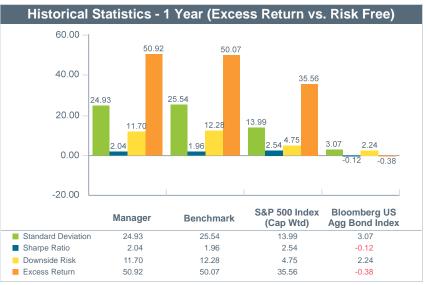




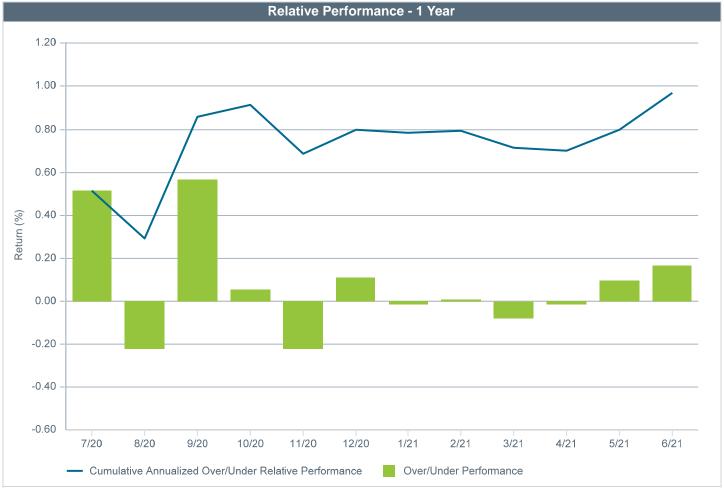
Manager: Harvest Fund Advisors Passive

Benchmark: MLP Custom Index

				Pe	rforman	ce					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	19.09	60.14	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	18.79	58.60	0.31	0.47	-5.10	1.90	-25.60	7.55	-11.67	-5.58	21.95
Difference	0.30	1.54	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Actual Correlation - 1 Year				
	Actual Correlation			
MLP Custom Index	1.00			
S&P 500 Index (Cap Wtd)	0.13			
Russell 2000 Index	0.59			
MSCI EAFE Index (USD) (Net)	0.44			
MSCI Emg Mkts Index (USD) (Net)	0.12			
Bloomberg US Agg Bond Index	-0.20			
Bloomberg US Trsy US TIPS Index	-0.45			
NCREIF ODCE Index (AWA) (Gross)	0.54			
Wilshire US REIT Index	0.91			
HFRI FOF Comp Index	0.17			
Bloomberg Cmdty Index (TR)	0.15			
ICE BofAML 3 Mo US T-Bill Index	-0.52			
Cons Price Index (Unadjusted)	0.06			
MLP Custom Index	1.00			

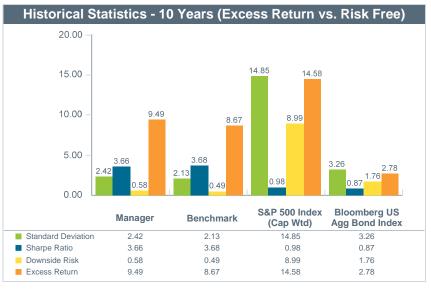


Performance shown is gross of fees and client specific. Calculation is based on quarterly periodicity.

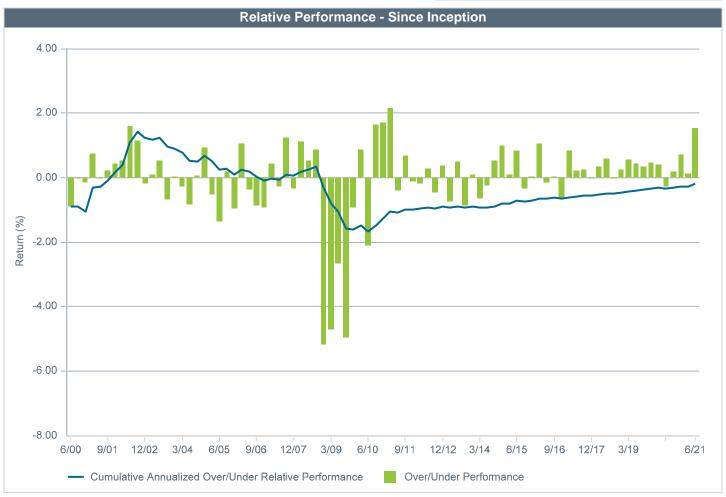


Manager: Clarion Lion Properties (CF)
Benchmark: NCREIF ODCE Index (AWA) (Gross)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	5.54	10.80	7.21	7.93	9.86	10.47	2.24	7.26	9.66	8.99	9.09
Benchmark	3.93	8.02	5.52	6.57	8.40	9.60	1.19	5.34	8.35	7.62	8.77
Difference	1.61	2.78	1.69	1.36	1.46	0.87	1.05	1.92	1.31	1.37	0.32



Actual Correlation - 10	Years
	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.90
S&P 500 Index (Cap Wtd)	-0.26
Russell 2000 Index	-0.26
MSCI EAFE Index (USD) (Net)	-0.27
MSCI Emg Mkts Index (USD) (Net)	-0.33
Bloomberg US Agg Bond Index	-0.16
Bloomberg US Trsy US TIPS Index	-0.27
Wilshire US REIT Index	-0.04
HFRI FOF Comp Index	-0.29
Bloomberg Cmdty Index (TR)	-0.22
ICE BofAML 3 Mo US T-Bill Index	-0.33
Cons Price Index (Unadjusted)	0.05



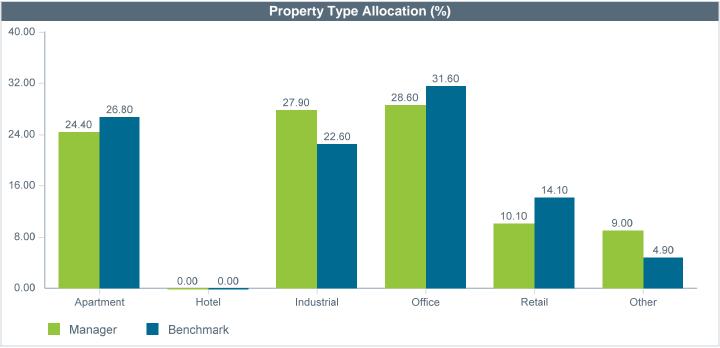


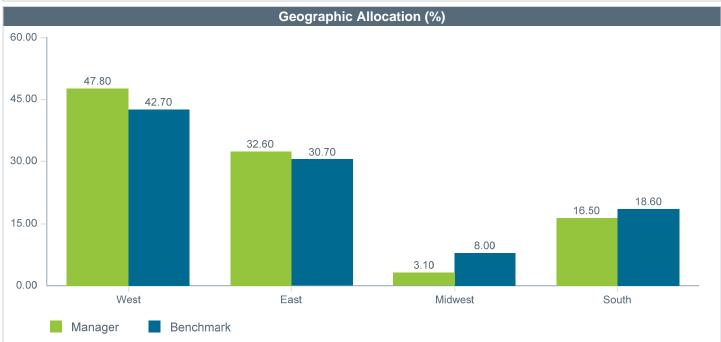
Manager: Clarion Lion Properties (CF)
Benchmark: NCREIF ODCE Index (AWA) (Gross)

Invest	ment :	Strategy

The Fund pursues a diversified core real estate strategy and seeks to provide its investors with a reliable total investment gross return of approximately 8% to 10% over a market cycle, with between 40% and 60% of return expected to be generated by the income component. The Fund manages a portfolio of institutional quality real estate assets diversified across the four major property types (office, industrial, retail and multi-family) and across major metropolitan areas. The Fund operates with moderate leverage and may invest up to 15% of its gross assets in higher risk, noncore type real estate investment opportunities.

Investment Profile	
Fund Inception	2000
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	18,025
Fund Leverage %	24.76
Portfolio Occupancy %	93.60
Cash Reserve %	3.00
Number of Investments	165
Number of Limited Partners	531



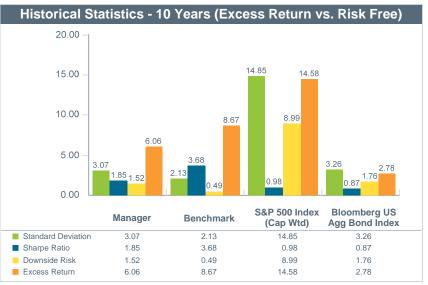


Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of lab-office properties. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

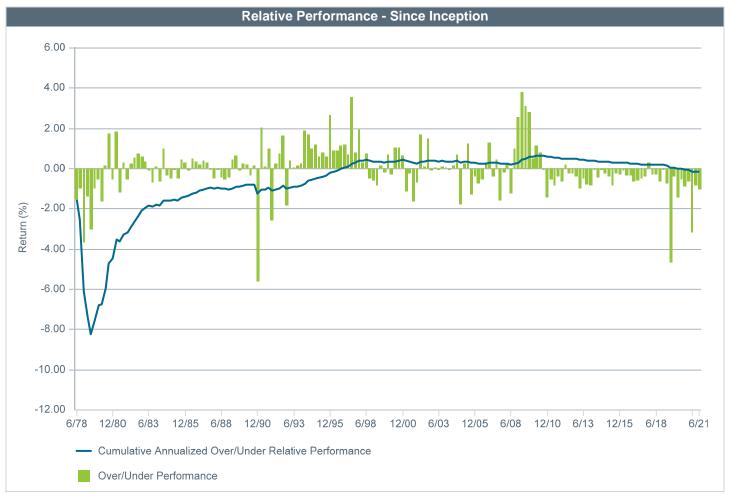


Manager: UBS Trumbull Property (CF)
Benchmark: NCREIF ODCE Index (AWA) (Gross)

Performance 1 3 5 10 7 **QTD** 2020 2019 2018 2017 2016 Year **Years Years** Years **Years** Manager 2.87 2.01 0.32 2.81 5.27 6.80 -4.04 -2.10 6.99 6.30 7.21 Benchmark 3.93 8.02 5.52 6.57 8.40 9.60 1.19 5.34 8.35 7.62 8.77 Difference -6.01 -5.20 -5.23 -1.56 -1.06 -3.76 -3.13 -2.80 -7.44 -1.36 -1.32



Actual Correlation - 10	Years
	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.85
S&P 500 Index (Cap Wtd)	-0.28
Russell 2000 Index	-0.32
MSCI EAFE Index (USD) (Net)	-0.31
MSCI Emg Mkts Index (USD) (Net)	-0.36
Bloomberg US Agg Bond Index	-0.23
Bloomberg US Trsy US TIPS Index	-0.32
Wilshire US REIT Index	-0.06
HFRI FOF Comp Index	-0.37
Bloomberg Cmdty Index (TR)	-0.27
ICE BofAML 3 Mo US T-Bill Index	-0.45
Cons Price Index (Unadjusted)	-0.03



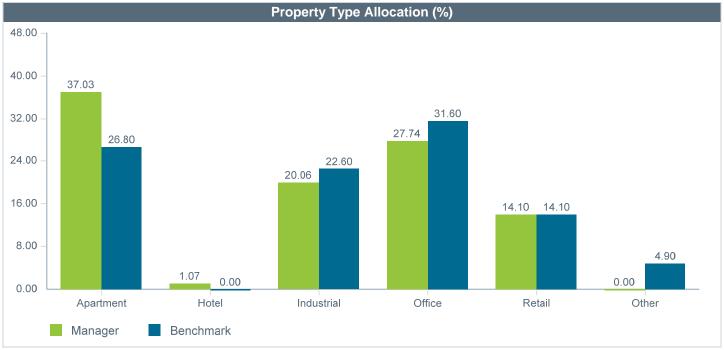


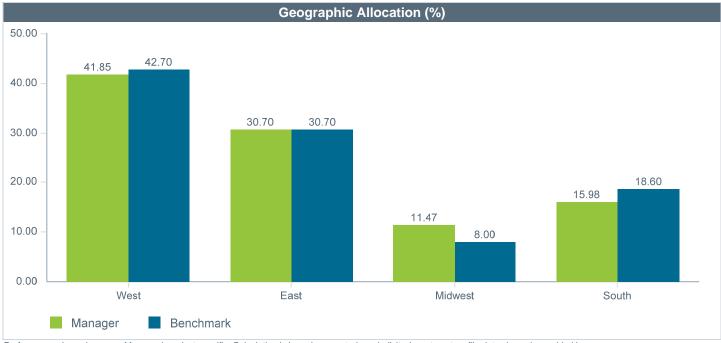
Manager: UBS Trumbull Property (CF)
Benchmark: NCREIF ODCE Index (AWA) (Gross)

Investment Strategy

The Fund pursues a diversified core real estate strategy that seeks to produce attractive risk-adjusted returns by focusing on selective acquisitions, diversification, active portfolio management, and asset management. The Fund invests in well-leased, stabilized assets in major US metropolitan markets and receives the majority of its return from the income component. Diversification for the Fund is consistently pursued on many levels, including geographic region, property type, and economic sector. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in value-added type real estate investment opportunities.

Investment Profile						
Fund Inception	1978					
Legal Structure	LP					
Fund Structure	Open-End					
Gross Real Estate Assets (\$M)	18,020					
Fund Leverage %	19.00					
Portfolio Occupancy %	91.10					
Cash Reserve %	3.40					
Number of Investments	178					
Number of Limited Partners	446					



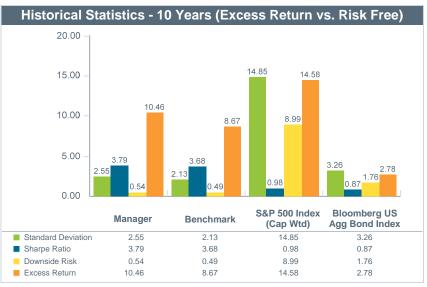


Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

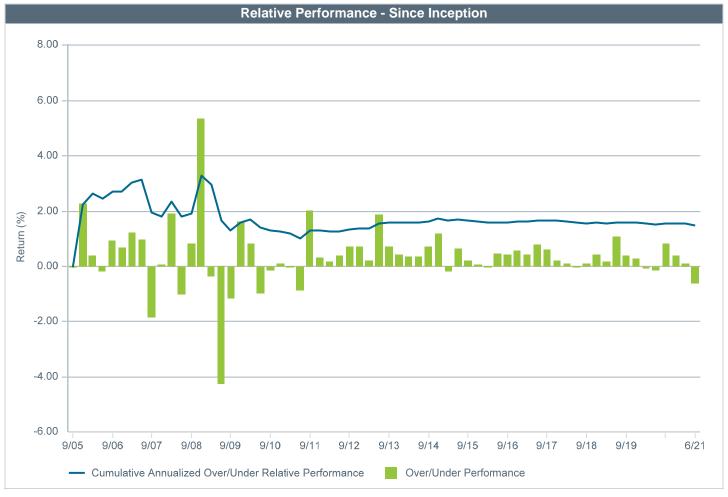


Manager: Morgan Stanley Prime Property (CF)
Benchmark: NCREIF ODCE Index (AWA) (Gross)

				Pe	rforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	3.30	8.76	6.56	7.86	9.83	11.53	2.18	7.40	8.99	9.84	10.38
Benchmark	3.93	8.02	5.52	6.57	8.40	9.60	1.19	5.34	8.35	7.62	8.77
Difference	-0.63	0.74	1.04	1.29	1.43	1.93	0.99	2.06	0.64	2.22	1.61



Actual Correlation - 10	Years
	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.92
S&P 500 Index (Cap Wtd)	-0.29
Russell 2000 Index	-0.26
MSCI EAFE Index (USD) (Net)	-0.27
MSCI Emg Mkts Index (USD) (Net)	-0.40
Bloomberg US Agg Bond Index	-0.23
Bloomberg US Trsy US TIPS Index	-0.41
Wilshire US REIT Index	-0.15
HFRI FOF Comp Index	-0.30
Bloomberg Cmdty Index (TR)	-0.28
ICE BofAML 3 Mo US T-Bill Index	-0.44
Cons Price Index (Unadjusted)	-0.09



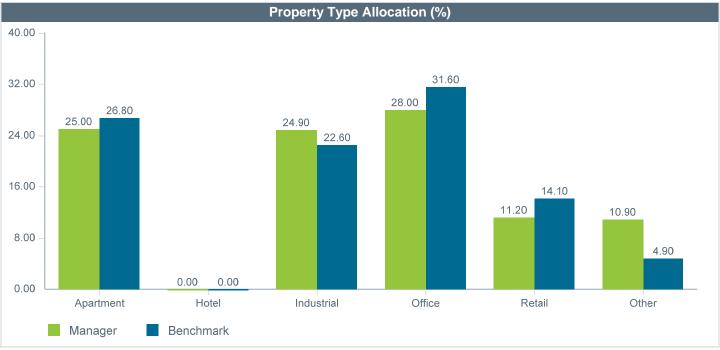


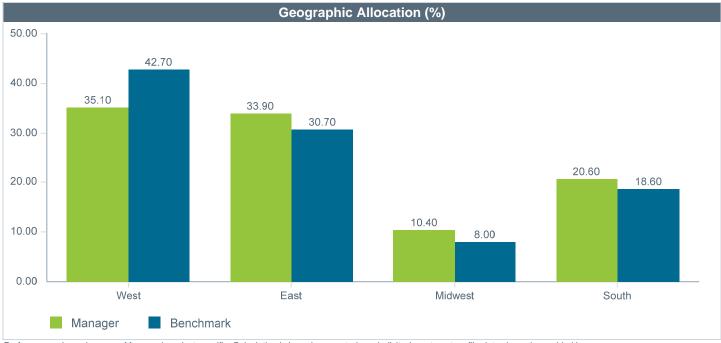
Manager: Morgan Stanley Prime Property (CF)
Benchmark: NCREIF ODCE Index (AWA) (Gross)

Investment Strategy

The Fund pursues a diversified core real estate strategy that invests in assets with stable, highly predictable cash flow returns. The Fund targets high quality office, Class A multifamily, warehouse distribution, and top-tier super regional malls in addition to storage facilities in targeted primary markets. The Fund favors investing in major metropolitan markets and secondary markets expected to achieve above-average economic performance and believes that those cities offer better liquidity, more diverse tenant bases, and stronger resilience to market cycles. It operates with leverage of 50% or less and may invest up to 15% of its gross assets in higher-risk, value-added real estate investment opportunities.

Investment Profile	
Fund Inception	1973
Legal Structure	LLC
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	34,113
Fund Leverage %	18.50
Portfolio Occupancy %	92.60
Cash Reserve %	0.60
Number of Investments	469
Number of Limited Partners	409





Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of self-storage, health care land held for potential development, and hotel. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.



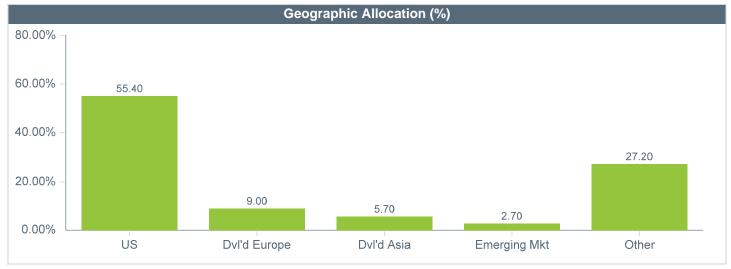
Investment Strategy

The Fund's investment objectives are to generate superior absolute and risk adjusted rates of return with low performance volatility and low correlation with global equity and fixed-income markets over a full market cycle. The Fund is also designed to preserve capital in challenging market environments. It does this through investment in a diversified pool of hedge fund strategies.

Firm Statistics	
Year Firm Established	1971
Firm AUM (\$M)	26,626
Percentage Employee Owned %	78.00

Fund Statistics	
Fund Inception	2018
Fund Size(\$M)	333
Number of Underlying Managers	25
Maximum Weighting of an Underlying Manager %	10.00
Current Leverage (Assets/Equity)	4.00
Annual Manager Turnover %	40.00
Annual Management Fee %	0.60
Performance Fee %	5
Hurdle %	T-bills+2%
Initial Lock-Up Periods	N/A
Redemption Frequency	N/A
Notification Period	N/A





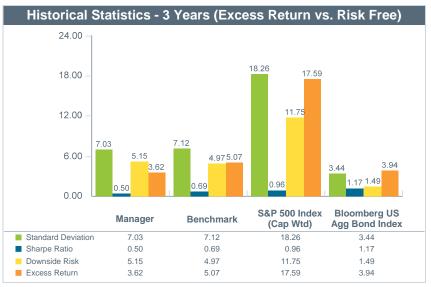
Strategy allocation to other consists of cash, expenses, management fees, and net receivable. Geographic allocation to other consists of cash or funds where geographic data are unavailable. Fund statistics shown are provided by the investment manager and are as of the most recently available quarter end.



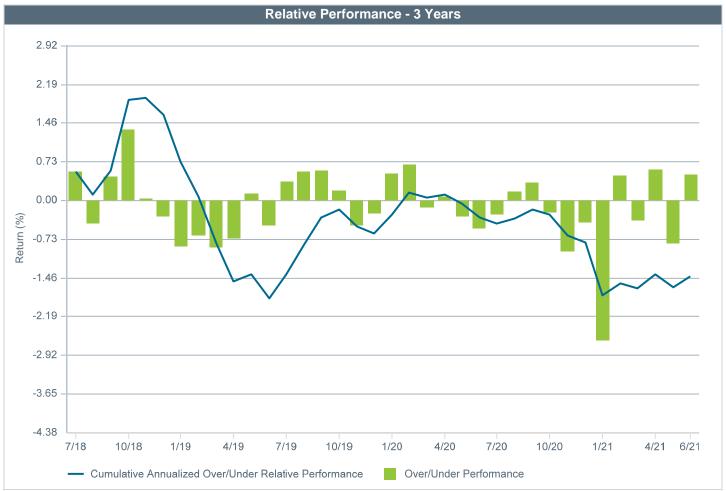
Manager: Grosvenor Diversified Hedge Funds

Benchmark: HFRI FOF Comp Index

				Pe	rforman	ce					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	3.13	14.01	4.80	N/A	N/A	N/A	9.70	5.67	N/A	N/A	N/A
Benchmark	2.86	18.28	6.32	6.12	4.09	3.85	10.88	8.39	-4.02	7.77	0.51
Difference	0.27	-4.27	-1.52	N/A	N/A	N/A	-1.18	-2.72	N/A	N/A	N/A



Actual Correlation - 3	Years
	Actual Correlation
HFRI FOF Comp Index	0.97
S&P 500 Index (Cap Wtd)	0.93
Russell 2000 Index	0.91
MSCI EAFE Index (USD) (Net)	0.95
MSCI Emg Mkts Index (USD) (Net)	0.95
Bloomberg US Agg Bond Index	-0.08
Bloomberg US Trsy US TIPS Index	0.47
NCREIF ODCE Index (AWA) (Gross)	-0.26
Wilshire US REIT Index	0.78
Bloomberg Cmdty Index (TR)	0.87
ICE BofAML 3 Mo US T-Bill Index	-0.62
Cons Price Index (Unadjusted)	0.08





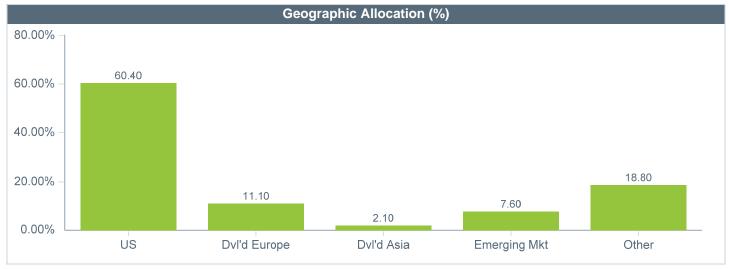


Investment Strategy
ne Fund Class C is a direct hedge funds portfolio managed ning State Treasurer's Office.

Firm Statistics	
Year Firm Established	1971
Firm AUM (\$M)	26,626
Percentage Employee Owned %	78.00

Fund Statistics	
Fund Inception	2018
Fund Size(\$M)	574
Number of Underlying Managers	16
Maximum Weighting of an Underlying Manager %	N/A
Current Leverage (Assets/Equity)	4.30
Annual Manager Turnover %	0.00
Annual Management Fee %	0
Performance Fee %	N/A
Hurdle %	N/A
Initial Lock-Up Periods	N/A
Redemption Frequency	N/A
Notification Period	N/A





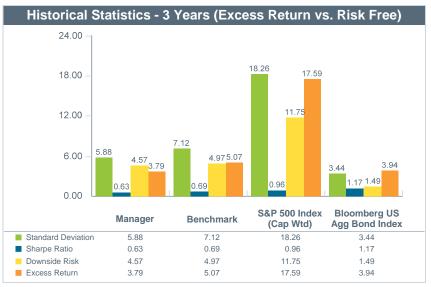
Strategy allocation to other consists of cash, expenses, and net receivable. Geographic allocation to other consists of cash or funds where geographic data are unavailable. Fund statistics shown are provided by GCM and are as of the most recently available quarter end.



Manager: Internal Diversified Hedge Funds

Benchmark: HFRI FOF Comp Index

				Pe	erforman	се					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	3.27	12.93	5.05	N/A	N/A	N/A	5.83	6.08	N/A	N/A	N/A
Benchmark	2.86	18.28	6.32	6.12	4.09	3.85	10.88	8.39	-4.02	7.77	0.51
Difference	0.41	-5.35	-1.27	N/A	N/A	N/A	-5.05	-2.31	N/A	N/A	N/A



	Actual Correlation
HFRI FOF Comp Index	0.88
S&P 500 Index (Cap Wtd)	0.79
Russell 2000 Index	0.82
MSCI EAFE Index (USD) (Net)	0.88
MSCI Emg Mkts Index (USD) (Net)	0.90
Bloomberg US Agg Bond Index	-0.06
Bloomberg US Trsy US TIPS Index	0.35
NCREIF ODCE Index (AWA) (Gross)	-0.07
Wilshire US REIT Index	0.78
Bloomberg Cmdty Index (TR)	0.84
ICE BofAML 3 Mo US T-Bill Index	-0.50
Cons Price Index (Unadjusted)	0.03



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity.

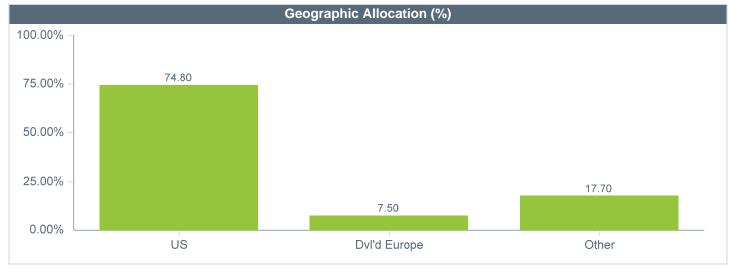


Investment Strategy
enor Silvery Lupine Fund Class D is the opportunistic investme lio of the State Treasurer's Office.

Firm Statistics	
Year Firm Established	1971
Firm AUM (\$M)	26,626
Percentage Employee Owned %	78.00

Fund Statistics	
Fund Inception	2020
Fund Size(\$M)	105
Number of Underlying Managers	N/A
Maximum Weighting of an Underlying Manager %	N/A
Current Leverage (Assets/Equity)	1.20
Annual Manager Turnover %	N/A
Annual Management Fee %	0.30
Performance Fee %	10
Hurdle %	Custom
Initial Lock-Up Periods	N/A
Redemption Frequency	N/A
Notification Period	N/A



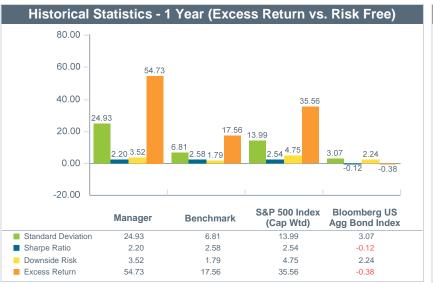


Strategy allocation to other consists of cash, expenses, fees, SPV, and net receivable. Geographic allocation to other consists of cash or funds where geographic data are unavailable. Fund statistics shown are provided by GCM and are as of the most recently available quarter end.



Manager: Grosvenor Opportunistic Class D
Benchmark: Grosvenor Class D Custom Benchmark

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.30	66.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	4.69	18.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Difference	-3.39	47.53	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



Actual Correlation - 1	/ear
	Actual Correlation
Grosvenor Class D Custom Benchmark	0.12
S&P 500 Index (Cap Wtd)	0.07
Russell 2000 Index	0.46
MSCI EAFE Index (USD) (Net)	0.15
MSCI Emg Mkts Index (USD) (Net)	0.02
Bloomberg US Agg Bond Index	-0.44
Bloomberg US Trsy US TIPS Index	-0.62
Wilshire US REIT Index	0.06
Bloomberg Cmdty Index (TR)	0.34
ICE BofAML 3 Mo US T-Bill Index	0.03
Cons Price Index (Unadjusted)	-0.31



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity.



Manager: PIMCO Core

Benchmark: PIMCO Custom Index

Peer Group: IM U.S. Broad Market Core Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	2.32	0.43	5.56	3.48	3.63	3.79	8.93	7.71	0.58	4.27	3.35
Benchmark	1.83	-0.34	5.18	2.94	3.22	3.35	8.14	7.30	0.32	3.54	2.65
Difference	0.49	0.77	0.38	0.54	0.41	0.44	0.79	0.41	0.26	0.73	0.70
Peer Group Median	1.98	0.98	6.04	3.66	3.78	3.95	8.51	9.19	0.07	4.03	3.11
Rank	18	64	78	63	62	66	33	95	15	33	44
Population	140	140	136	134	132	125	149	152	158	163	170







Portfol	Portfolio Characteristics									
	Portfolio	Benchmark								
Effective Duration	6.16	N/A								
Spread Duration	3.61	4.34								
Avg. Maturity	7.58	4.86								
Avg. Quality	Aa2	Aa1/Aa2								
Yield To Maturity (%)	1.59	1.24								
Coupon Rate (%)	1.93	2.31								
Current Yield (%)	1.87	N/A								
Holdings Count	429	9,252								



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Sector allocation to "Other" consists of Euro/Yankee securities.

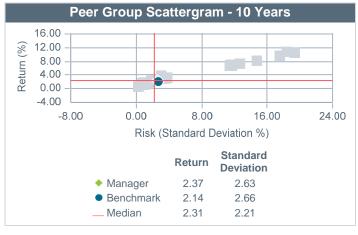


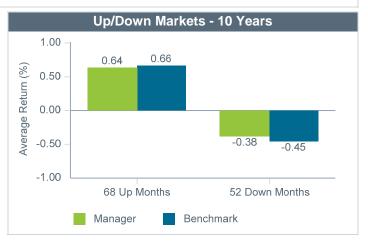
Manager: Internal Intermediate Gov't Fixed Income Portfolio

Benchmark: Internal Int Govt Fixed Income Portfolio Index

Peer Group: IM U.S. Government Bonds (SA+CF)

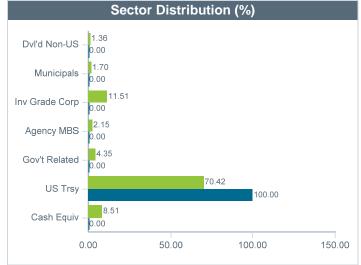
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	1.79	-3.14	3.85	2.42	2.48	2.37	7.85	4.53	1.85	1.84	0.95
Benchmark	1.75	-3.22	4.00	1.98	2.22	2.14	8.00	4.70	1.43	1.14	1.05
Difference	0.04	0.08	-0.15	0.44	0.26	0.23	-0.15	-0.17	0.42	0.70	-0.10
Peer Group Median	0.72	-1.52	4.19	2.20	2.41	2.31	6.39	5.84	1.27	1.77	1.32
Rank	44	58	71	44	49	46	47	73	8	50	79
Population	41	41	41	40	39	36	45	46	52	51	51







Portfolio Characteristics									
	Portfolio	Benchmark							
Effective Duration	6.66	7.01							
Spread Duration	N/A	6.82							
Avg. Maturity	8.56	8.24							
Avg. Quality	Aa1	Aaa							
Yield To Maturity (%)	0.97	0.95							
Coupon Rate (%)	1.90	1.65							
Current Yield (%)	1.82	N/A							
Holdings Count	52	266							



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. The Internal Intermediate Govt Fixed Income Portfolio Index consists of the Bloomberg US Treasury Index as of 12/1/2019. 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.



Manager: Payden & Rygel

Benchmark: Payden & Rygel Custom Index **Peer Group:** IM U.S. Corporate Bonds (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	3.62	3.44	7.92	6.03	5.85	6.46	10.37	14.96	-2.41	9.23	7.51
Benchmark	3.55	3.30	7.48	4.72	4.60	5.08	8.94	14.54	-2.51	6.42	6.11
Difference	0.07	0.14	0.44	1.31	1.25	1.38	1.43	0.42	0.10	2.81	1.40
Peer Group Median	3.65	4.44	8.62	5.76	5.43	6.02	11.35	15.08	-2.33	7.22	7.30
Rank	52	71	69	43	39	43	66	53	53	32	46
Population	118	118	114	107	103	98	125	128	133	130	132







Portfol	Portfolio Characteristics									
	Portfolio	Benchmark								
Effective Duration	8.14	8.72								
Spread Duration	8.23	N/A								
Avg. Maturity	11.50	12.25								
Avg. Quality	A3	A3/Baa1								
Yield To Maturity (%)	2.14	2.09								
Coupon Rate (%)	3.87	3.64								
Current Yield (%)	3.26	N/A								
Holdings Count	235	6,835								



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Manager: JPM MBS As of June 30, 2021

Benchmark: Bloomberg US MBS Index (Unhgd) **Peer Group:** IM U.S. Mortgage Backed Bonds (SA+CF)

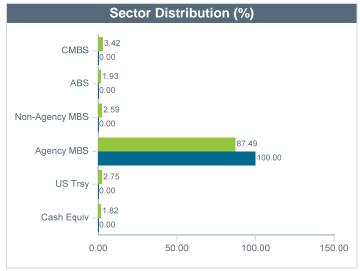
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.07	1.26	4.67	2.85	3.10	3.07	5.73	6.47	1.01	2.64	2.24
Benchmark	0.33	-0.42	3.78	2.27	2.56	2.64	3.87	6.35	0.99	2.47	1.67
Difference	-0.40	1.68	0.89	0.58	0.54	0.43	1.86	0.12	0.02	0.17	0.57
Peer Group Median	0.51	1.08	4.21	3.03	2.99	3.54	4.24	6.56	1.44	3.59	2.38
Rank	87	48	26	54	48	63	13	59	73	71	55
Population	47	47	46	45	45	42	50	51	52	55	58







Effective Duration Spread Duration	2.69	4.16
Sproad Duration		
Spread Duration	3.88	4.66
Avg. Maturity	4.81	5.54
Avg. Quality	Aa1	Aaa
Yield To Maturity (%)	1.69	1.77
Coupon Rate (%)	3.06	2.80
Current Yield (%)	4.11	N/A
Holdings Count	383	446



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



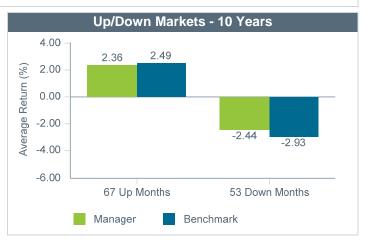
Manager: Global Evolution

Benchmark: JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)

Peer Group: IM Emerging Markets Debt (SA+CF)

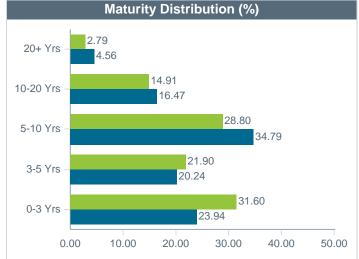
	Performance Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016		
Manager	3.82	7.69	3.75	3.26	1.97	2.33	2.77	12.61	-7.84	15.68	11.89		
Benchmark	3.54	6.57	4.12	3.25	0.18	0.47	2.69	13.47	-6.21	15.21	9.94		
Difference	0.28	1.12	-0.37	0.01	1.79	1.86	0.08	-0.86	-1.63	0.47	1.95		
Peer Group Median	3.89	9.91	6.73	5.30	4.27	5.03	6.72	14.25	-5.33	12.44	10.93		
Rank	53	84	92	92	74	70	94	77	85	20	36		
Population	124	124	119	112	106	77	136	150	160	165	174		







Portfolio Characteristics (%)											
	Portfolio	Benchmark									
Effective Duration	5.23	5.34									
Spread Duration	N/A	0.03									
Avg. Maturity	7.10	7.27									
Avg. Quality	Baa1	Ba3									
Yield To Maturity (%)	6.16	4.90									
Coupon Rate (%)	6.45	5.48									
Current Yield (%)	5.66	5.16									
Holdings Count	75	283									





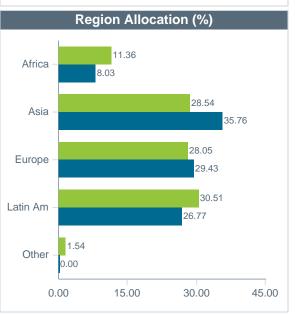
Manager: Global Evolution

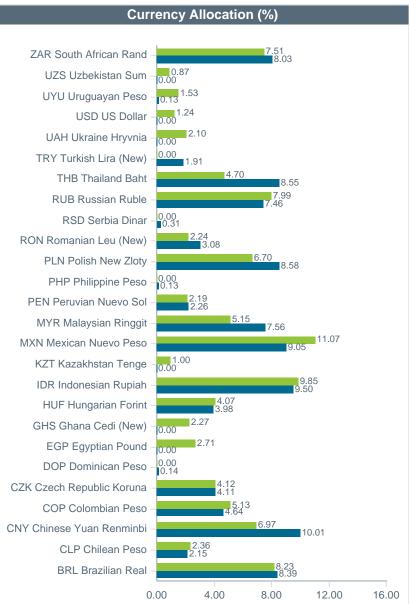
Benchmark: JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)

Peer Group: IM Emerging Markets Debt (SA+CF)









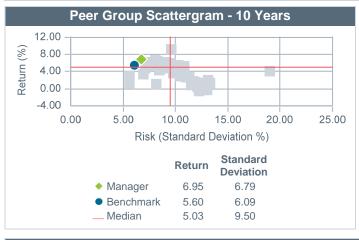
Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to "Other" consists of cash.

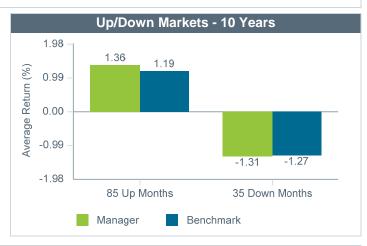


Manager: Goldman Sachs

Benchmark: Goldman Sachs Custom Index **Peer Group:** IM Emerging Markets Debt (SA+CF)

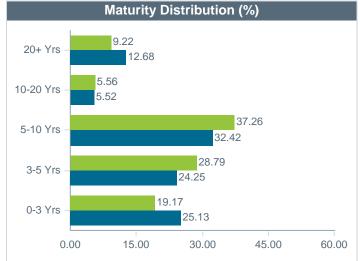
	Performance Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016	
Manager	1.96	9.51	8.30	6.76	6.12	6.95	8.70	14.69	-1.62	9.57	11.71	
Benchmark	2.10	8.85	7.56	5.83	5.25	5.60	7.31	13.09	-1.65	7.96	9.65	
Difference	-0.14	0.66	0.74	0.93	0.87	1.35	1.39	1.60	0.03	1.61	2.06	
Peer Group Median	3.89	9.91	6.73	5.30	4.27	5.03	6.72	14.25	-5.33	12.44	10.93	
Rank	95	63	17	16	6	2	22	40	12	86	40	
Population	124	124	119	112	106	77	136	150	160	165	174	







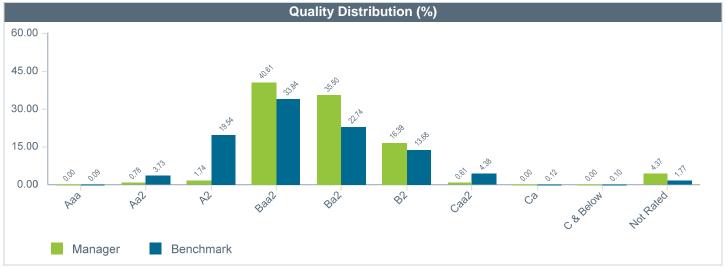
Portfolio Characteristics (%)											
	Portfolio	Benchmark									
Effective Duration	4.81	4.63									
Spread Duration	4.80	4.59									
Avg. Maturity	15.02	10.39									
Avg. Quality	Ba1	Ba1									
Yield To Maturity (%)	4.02	3.72									
Coupon Rate (%)	4.80	4.76									
Current Yield (%)	4.63	4.54									
Holdings Count	203	2,055									

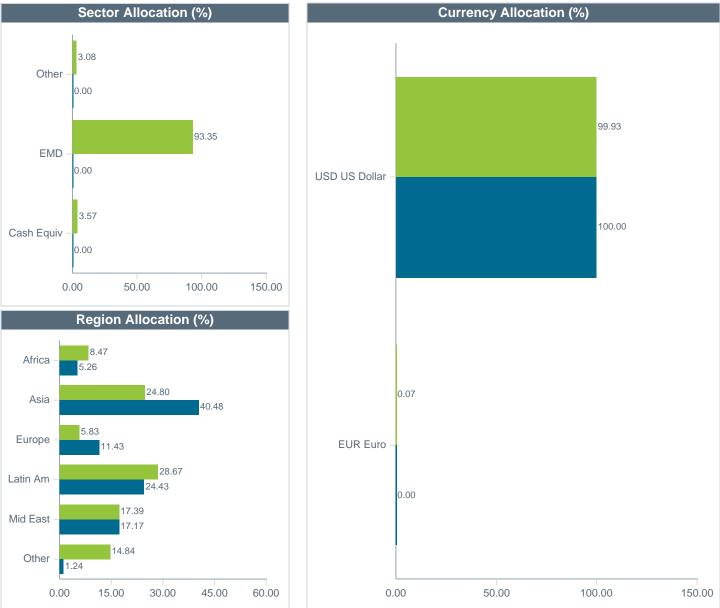




Manager: Goldman Sachs

Benchmark: Goldman Sachs Custom Index **Peer Group:** IM Emerging Markets Debt (SA+CF)





Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Sector allocation to "Other" consists of foreign exchange, supranational and interest rate swaps. Region allocation to "Other" consists of CIS, cash, supranational and developed.



Manager: Eaton Vance

Benchmark: JP Morgan EMB (JEMB) Hard/Local 50/50 **Peer Group:** IM Emerging Markets Debt (SA+CF)

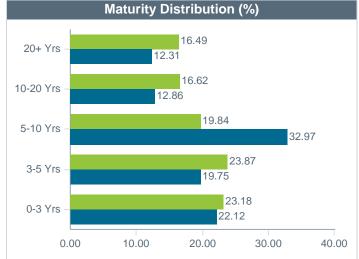
	Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016	
Manager	3.68	13.90	9.55	8.58	6.35	N/A	8.35	19.33	-3.44	14.00	11.85	
Benchmark	3.32	7.37	5.67	4.35	2.67	3.09	4.49	13.84	-4.50	12.15	10.06	
Difference	0.36	6.53	3.88	4.23	3.68	N/A	3.86	5.49	1.06	1.85	1.79	
Peer Group Median	3.89	9.91	6.73	5.30	4.27	5.03	6.72	14.25	-5.33	12.44	10.93	
Rank	58	10	8	5	3	N/A	25	1	23	35	37	
Population	124	124	119	112	106	77	136	150	160	165	174	







Portfolio Characteristics (%)											
	Portfolio	Benchmark									
Effective Duration	2.13	5.80									
Spread Duration	3.97	3.08									
Avg. Maturity	9.08	9.45									
Avg. Quality	Ba3	Ba2									
Yield To Maturity (%)	7.66	4.45									
Coupon Rate (%)	7.50	5.18									
Current Yield (%)	7.10	4.92									
Holdings Count	141	889									

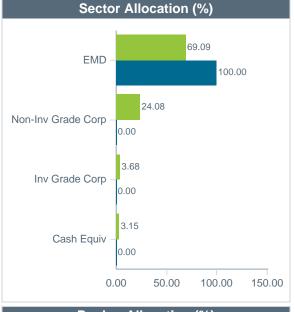


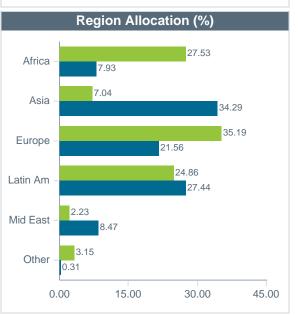


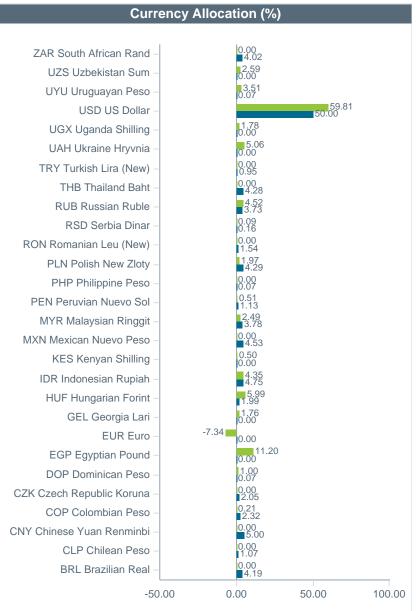
Manager: Eaton Vance As of June 30, 2021

Benchmark: JP Morgan EMB (JEMB) Hard/Local 50/50 **Peer Group:** IM Emerging Markets Debt (SA+CF)









Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Region allocation to "Other" consists of cash.

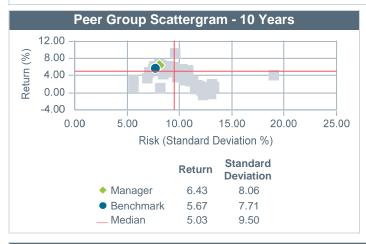


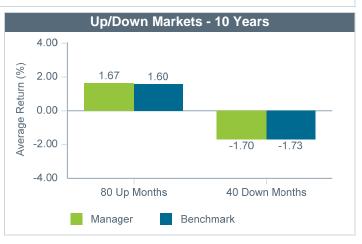
Manager: Global Evolution Hard

Benchmark: JP Morgan EMBIG Div Ex CCC (USD) (TR) Index

Peer Group: IM Emerging Markets Debt (SA+CF)

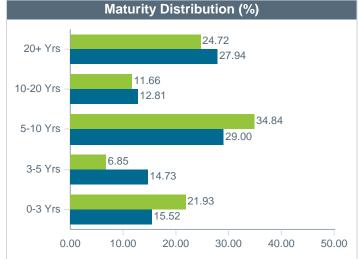
	Performance Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016		
Manager	3.87	7.50	6.30	5.57	5.64	6.43	6.04	14.13	-4.01	13.35	12.20		
Benchmark	3.90	7.21	7.14	5.10	5.09	5.67	6.09	15.72	-4.14	10.79	9.22		
Difference	-0.03	0.29	-0.84	0.47	0.55	0.76	-0.05	-1.59	0.13	2.56	2.98		
Peer Group Median	3.89	9.91	6.73	5.30	4.27	5.03	6.72	14.25	-5.33	12.44	10.93		
Rank	51	86	55	42	14	4	59	53	32	40	31		
Population	124	124	119	112	106	77	136	150	160	165	174		







Portfolio Characteristics (%)										
	Portfolio	Benchmark								
Effective Duration	7.86	8.12								
Spread Duration	N/A	7.92								
Avg. Maturity	12.70	12.60								
Avg. Quality	Baa3	Baa3								
Yield To Maturity (%)	3.71	4.25								
Coupon Rate (%)	5.03	5.20								
Current Yield (%)	3.70	N/A								
Holdings Count	109	854								

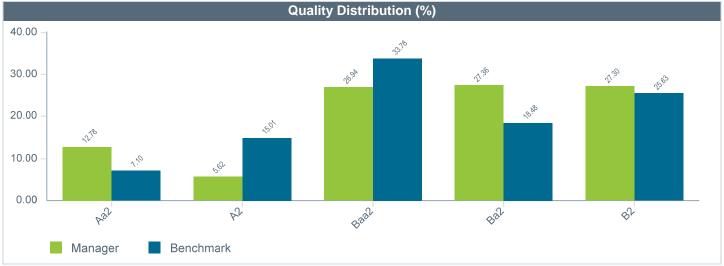


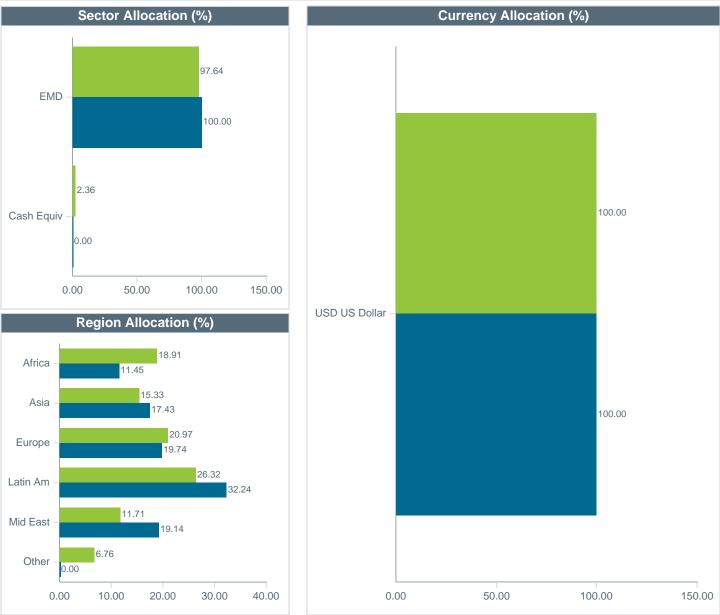


Manager: Global Evolution Hard

Benchmark: JP Morgan EMBIG Div Ex CCC (USD) (TR) Index

Peer Group: IM Emerging Markets Debt (SA+CF)





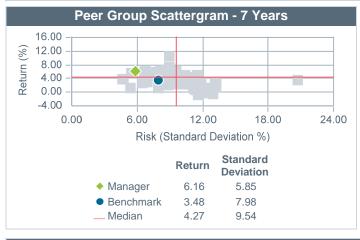




Manager: Finisterre

Benchmark: Custom EMD Benchmark (1/3) **Peer Group:** IM Emerging Markets Debt (SA+CF)

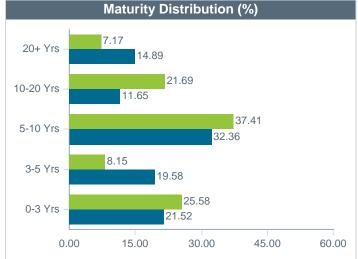
	Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016		
Manager	2.19	8.49	8.01	7.81	6.16	N/A	8.14	16.04	-0.20	12.46	11.21		
Benchmark	3.24	7.63	6.17	4.69	3.48	3.95	5.07	13.93	-3.96	11.13	10.04		
Difference	-1.05	0.86	1.84	3.12	2.68	N/A	3.07	2.11	3.76	1.33	1.17		
Peer Group Median	3.89	9.91	6.73	5.30	4.27	5.03	6.72	14.25	-5.33	12.44	10.93		
Rank	91	77	24	6	6	N/A	29	14	5	50	47		
Population	124	124	119	112	106	77	136	150	160	165	174		







	Portfolio	Benchmark
Effective Duration	3.02	5.96
Spread Duration	2.45	4.10
Avg. Maturity	5.18	10.18
Avg. Quality	Ba2	Ba2
Yield To Maturity (%)	4.32	4.30
Coupon Rate (%)	4.61	5.09
Current Yield (%)	4.62	4.84
Holdings Count	91	1,090



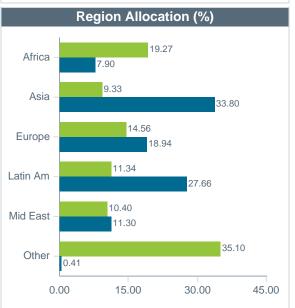


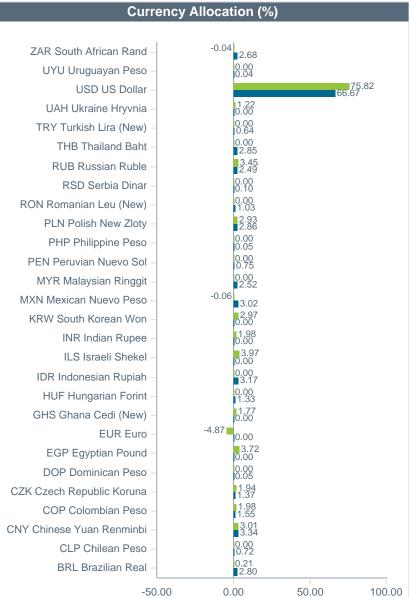
Manager: Finisterre As of June 30, 2021

Benchmark: Custom EMD Benchmark (1/3) **Peer Group:** IM Emerging Markets Debt (SA+CF)









Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Sector and region allocation to "Other" consists of foreign exchange, futures, margin for derivatives and interest rate swaps.



Manager: Credit Suisse

Benchmark: S&P/LSTA Lvg'd Loan Index **Peer Group:** IM U.S. Bank Loans (SA+CF)

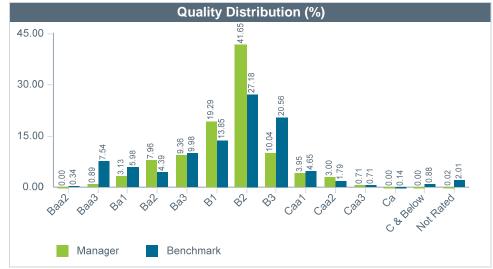
	Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016		
Manager	1.55	10.91	4.51	5.21	4.74	5.22	3.11	7.97	1.51	5.07	9.46		
Benchmark	1.47	11.65	4.39	4.99	3.94	4.39	3.12	8.64	0.44	4.12	10.16		
Difference	0.08	-0.74	0.12	0.22	0.80	0.83	-0.01	-0.67	1.07	0.95	-0.70		
Peer Group Median	1.58	10.89	4.28	4.91	4.00	4.63	2.45	8.71	0.79	4.46	9.51		
Rank	58	49	42	29	10	18	29	81	10	16	53		
Population	53	53	53	50	50	44	55	58	66	67	68		







Portfolio Ch	aracteri	stics
	Portfolio	Benchmark
Effective Duration	0.25	N/A
Spread Duration	4.39	N/A
Avg. Maturity	4.96	4.79
Avg. Quality	B2	B1
Yield To Maturity (%)	4.78	4.39
Coupon Rate (%)	4.07	3.92
Current Yield (%)	4.10	4.39
Holdings Count	313	1,160



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

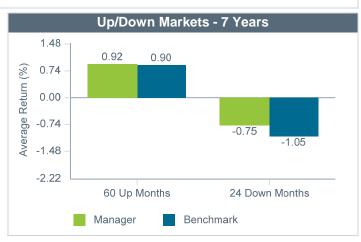


Manager: Octagon

Benchmark: S&P/LSTA Lvg'd Loan Index **Peer Group:** IM U.S. Bank Loans (SA+CF)

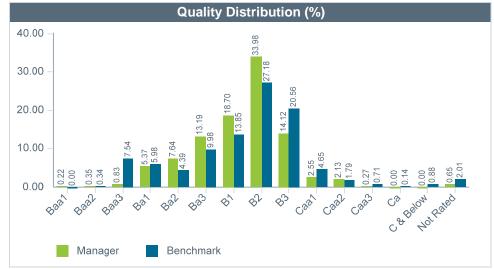
Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016	
Manager	1.38	11.10	4.91	6.12	5.28	N/A	3.72	8.92	2.17	6.65	10.49	
Benchmark	1.47	11.65	4.39	4.99	3.94	4.39	3.12	8.64	0.44	4.12	10.16	
Difference	-0.09	-0.55	0.52	1.13	1.34	N/A	0.60	0.28	1.73	2.53	0.33	
Peer Group Median	1.58	10.89	4.28	4.91	4.00	4.63	2.45	8.71	0.79	4.46	9.51	
Rank	81	43	23	8	4	N/A	16	44	6	5	22	
Population	53	53	53	50	50	44	55	58	66	67	68	







Portfolio Ch	aracteri	stics
	Portfolio	Benchmark
Effective Duration	0.25	N/A
Spread Duration	N/A	N/A
Avg. Maturity	5.26	4.79
Avg. Quality	B2	B1
Yield To Maturity (%)	4.32	4.39
Coupon Rate (%)	4.10	3.92
Current Yield (%)	4.13	4.39
Holdings Count	367	1,160



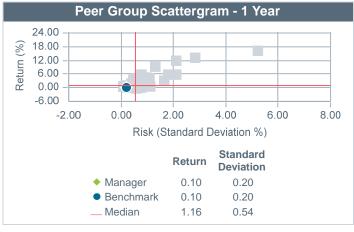
Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

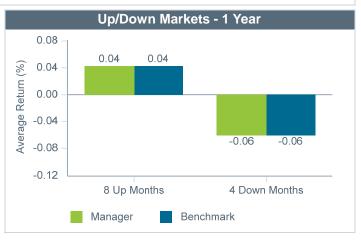


Manager: Wyoming Internal Ladder Portfolio Benchmark: Wyoming Internal Ladder Portfolio

Peer Group: IM U.S. Short Duration Fixed Income (SA+CF)

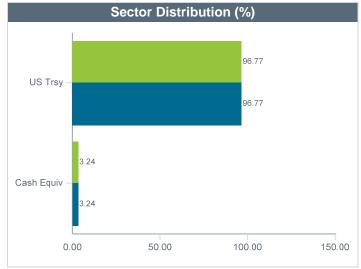
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.01	0.10	N/A	N/A	N/A	N/A	3.20	N/A	N/A	N/A	N/A
Benchmark	-0.01	0.10	N/A	N/A	N/A	N/A	3.20	N/A	N/A	N/A	N/A
Difference	0.00	0.00	N/A	N/A	N/A	N/A	0.00	N/A	N/A	N/A	N/A
Peer Group Median	0.27	1.16	3.32	2.30	2.08	1.98	3.85	4.52	1.66	1.53	1.67
Rank	100	99	N/A	N/A	N/A	N/A	83	N/A	N/A	N/A	N/A
Population	109	109	106	102	99	90	113	118	127	129	130







	Portfolio	Benchmark
Effective Duration	1.45	1.45
Spread Duration	N/A	N/A
Avg. Maturity	1.53	1.53
Avg. Quality	Aaa	Aaa
Yield To Maturity (%)	0.19	0.19
Coupon Rate (%)	0.93	0.93
Current Yield (%)	0.92	0.92
Holdings Count	16	16



Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



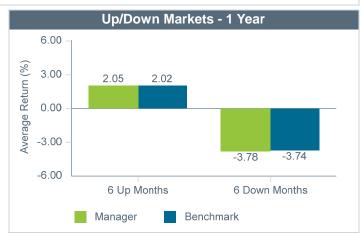
Manager: Internal Long Duration Fixed Income Portfolio

Benchmark: Bloomberg US Gov't Lng Trm Bond Index

Peer Group: IM U.S. Long Duration (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	6.59	-10.50	N/A	N/A	N/A	N/A	17.06	14.61	N/A	N/A	N/A
Benchmark	6.43	-10.42	7.97	3.18	5.74	6.62	17.55	14.75	-1.79	8.53	1.43
Difference	0.16	-0.08	N/A	N/A	N/A	N/A	-0.49	-0.14	N/A	N/A	N/A
Peer Group Median	6.63	1.04	10.88	6.35	6.99	7.91	16.98	20.14	-4.74	11.21	7.39
Rank	58	100	N/A	N/A	N/A	N/A	50	91	N/A	N/A	N/A
Population	56	56	54	49	48	45	59	62	73	75	77







	Portfolio	Benchmark
Effective Duration	18.07	18.67
Spread Duration	N/A	17.87
Avg. Maturity	23.18	24.16
Avg. Quality	Aaa	Aaa/Aa1
Yield To Maturity (%)	2.02	2.03
Coupon Rate (%)	2.35	2.61
Current Yield (%)	2.22	N/A
Holdings Count	17	89



Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

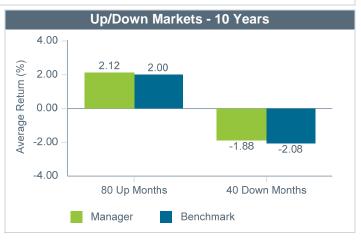


As of June 30, 2021 Manager: Metlife

Benchmark: Bloomberg US Lng Crdt Index Peer Group: IM U.S. Long Duration (SA+CF)

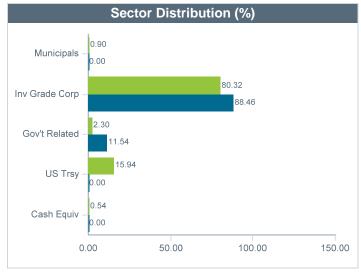
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	6.76	3.32	11.86	8.16	7.85	9.42	16.37	23.73	-5.68	13.59	13.40
Benchmark	6.45	4.32	10.73	6.65	6.60	7.55	13.32	23.36	-6.76	12.21	10.22
Difference	0.31	-1.00	1.13	1.51	1.25	1.87	3.05	0.37	1.08	1.38	3.18
Peer Group Median	6.63	1.04	10.88	6.35	6.99	7.91	16.98	20.14	-4.74	11.21	7.39
Rank	34	26	10	1	3	2	57	10	78	3	2
Population	56	56	54	49	48	45	59	62	73	75	77







Portfol	io Characteristic	s
	Portfolio	Benchmark
Effective Duration	14.76	15.18
Spread Duration	11.30	14.63
Avg. Maturity	21.67	23.74
Avg. Quality	A3	A3/Baa1
Yield To Maturity (%)	3.10	3.10
Coupon Rate (%)	4.26	4.48
Current Yield (%)	3.64	N/A
Holdings Count	N/A	2,866



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



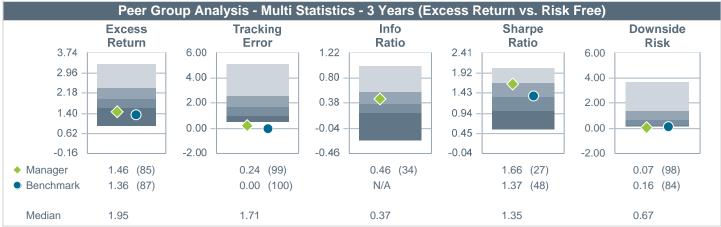
Manager: Internal Low Duration Fixed Income Portfolio

Benchmark: Bloomberg US Gov't 1-3 Yr Bond Index **Peer Group:** IM U.S. Short Duration Fixed Income (SA+CF)

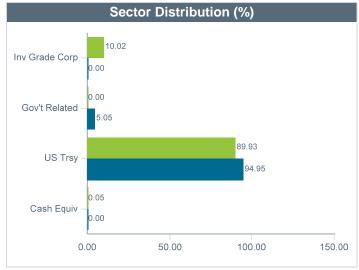
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.06	0.25	2.83	N/A	N/A	N/A	3.14	3.80	N/A	N/A	N/A
Benchmark	-0.04	0.06	2.72	1.61	1.47	1.23	3.14	3.59	1.58	0.45	0.87
Difference	0.10	0.19	0.11	N/A	N/A	N/A	0.00	0.21	N/A	N/A	N/A
Peer Group Median	0.27	1.16	3.32	2.30	2.08	1.98	3.85	4.52	1.66	1.53	1.67
Rank	90	94	85	N/A	N/A	N/A	83	84	N/A	N/A	N/A
Population	109	109	106	102	99	90	113	118	127	129	130







Effective Duration 1.29 Spread Duration N/A Avg. Maturity 1.32 Avg. Quality Aaa	1.96 1.96 2.00
Avg. Maturity 1.32 Avg. Quality Aaa	2.00
Avg. Quality Aaa	
	A /A 4
	Aaa/Aa1
Yield To Maturity (%) 0.11	0.26
Coupon Rate (%) 1.43	1.25
Current Yield (%) 1.43	N/A
Holdings Count 16	290

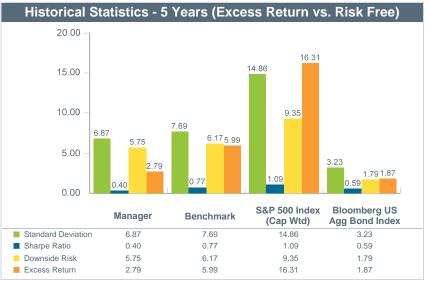


Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Manager: Grosvenor Silvery Lupine Fund Benchmark: CS Western Euro Hi Yld Index

	Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016	
Manager	0.35	4.95	0.05	3.77	3.72	N/A	-7.50	6.59	4.12	9.66	8.58	
Benchmark	1.80	12.89	6.73	7.07	5.77	7.29	3.59	14.41	-1.08	8.41	11.29	
Difference	-1.45	-7.94	-6.68	-3.30	-2.05	N/A	-11.09	-7.82	5.20	1.25	-2.71	



Actual Correlation - 5 Years	
	Actual Correlation
CS Western Euro Hi Yld Index	0.79
S&P 500 Index (Cap Wtd)	0.67
Russell 2000 Index	0.71
MSCI EAFE Index (USD) (Net)	0.76
MSCI Emg Mkts Index (USD) (Net)	0.69
Bloomberg US Agg Bond Index	-0.34
Bloomberg US Trsy US TIPS Index	-0.14
NCREIF ODCE Index (AWA) (Gross)	0.21
Wilshire US REIT Index	0.66
HFRI FOF Comp Index	0.69
Bloomberg Cmdty Index (TR)	0.67
ICE BofAML 3 Mo US T-Bill Index	-0.31
Cons Price Index (Unadjusted)	-0.02
CS Western Euro Hi Yld Index	0.79



Performance shown is net of fees and client specific. Calculation is based on quarterly periodicity.



June 30, 2021

Investment Policy Guidelines Meeting Objective Explanation

	Yes	No	N/A	Explanation
1. Total Fund				
Exceed the rate of inflation (C.P.I.) over a market cycle of 5-years.	✓			Wyoming returned 6.5% vs. 2.4% 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 6.5% vs. 6.3% 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
2. Investment Funds				
a) Permanent Mineral Trust Fund				
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 8.6% vs. 8.3% for the Total Fund Index
b) Common School Permanent Land Fund				
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 7.4% vs. 6.9% for the Total Fund Index
c) Permanent Land Fund				
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 8.4% vs. 8.2% for the Total Fund Index
d) University Permanent Land Fund				
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 8.9% vs. 8.7% for the Total Fund Index
e) Hathaway Scholarship Endowment Fund				
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 8.0% vs. 7.9% for the Total Fund Index
f) Higher Education Endowment Fund				
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 6.7% vs. 6.5% for the Total Fund Index
g) Workers Compensation Fund				
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 7.4% vs. 6.9% for the Total Fund Index
h) Pool A				
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 4.9% vs. 4.1% for the Total Fund Index
i) LSRA				
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.
j) State Agency Pool				
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 2.1% vs. 1.8% for the Actual Allocation Index



	Yes	No	N/A	Explanation
3. US Equity Portfolios				
a) State Street Global Advisors – All Cap – Passive				
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 = 5.9%
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 16.8% vs. 16.8% for the index



	Yes	No	N/A	Explanation
b) Internal Domestic Equity Quantamental – Broad US Equity				
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 = 5.8%
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.	1			
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
c) Internal Domestic Equity Quantatative – Broad US Equity				
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 = 8.7% vs 5.9% for the index
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.	1			
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
d) Van Berkom – Small Cap - Active				
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
e) BlackRock Small Cap - Small Cap - Active				
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: Southwest Gas Holdings = 1.4%
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 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: 08/2020
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: 08/2020



	Yes	No	N/A	Explanation
f) Internal Small Cap Quantamental – Small Cap				
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: Clear Channel = 1.9%
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
g) Internal Small Cap Quantatative – Small Cap				
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.			N/A	This account is in development as of 6/30.
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.			N/A	This account is in development as of 6/30.
The maximum allowable in any sector, as defined by Global Industry Classification System Level 1, is 2.5 times the respective benchmark weighting.			N/A	This account is in development as of 6/30.
A minimum number of 20 securities shall be held.			N/A	This account is in development as of 6/30.
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	This account is in development as of 6/30.
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	This account is in development as of 6/30.



	Yes	No	N/A	Explanation
4. International Equity Portfolios				
a) Northern Trust – Int'l – Passive				
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: Alibaba Ltd = 1.6%
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 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 11.2% vs. 11.1% for the MSCI ACW Ex US Index (Net)
	Yes	No	N/A	Explanation
b) Arrowstreet - Int'l Active				
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 = 2.9%
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.			N/A	Inception date: 03/2018
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: 03/2018



	Yes	No	N/A	Explanation
c) Harding Loevner – Int'l Active				
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: Ping An = 4.3%
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
5. Preferred Stock				
a) Cohen & Steers				
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 S&P U.S. Preferred Stock Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 07/2018
	Yes	No	N/A	Explanation
6. MLPs				
a) Harvest				
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.			N/A	Inception date: 08/2018
b) Harvest Passive				
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
7. Alternative Strategies				
Core Real Estate				
a) Clarion Lion				
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 7.3% vs. 5.6% 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) UBS Trumbull				
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 2.0% vs. 5.6% 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.	✓			
c) MS Prime				
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.	✓			
Diversified Hedge Funds				
d) Grosvenor Diversified Hedge Funds				
Outperform the HFRI FOF Comp Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 07/2018
The portfolio shall be diversified across underlying hedge fund strategies and hedge fund managers.	√			
e) Internal Diversified Hedge Funds				
Outperform the HFRI FOF Comp Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 07/2018
The portfolio shall be diversified across underlying hedge fund strategies and hedge fund managers.	✓			



	Yes	No	N/A	Explanation
8. Fixed Income Portfolios				
a) PIMCO – Core				
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 must fall in the range of +/- 20% of the manager's primary benchmark, but not to exceed the duration of the Bloomberg Barclays U.S. Aggregate Bond Index or the Bloomberg Barclays Intermediate U.S. Aggregate Bond Index by more than 20%.	✓			
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 3.4% vs. 2.9% 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 63rd percentile for Core Fixed Income



	Yes	No	N/A	Explanation
b) Internal Int. Govt Fixed Income Portfolio – Core				
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 must fall in the range of +/- 20% of the manager's primary benchmark, but not to exceed the duration of the Bloomberg Barclays U.S. Aggregate Bond Index or the Bloomberg Barclays Intermediate U.S. Aggregate Bond Index by more than 20%.	√			
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 2.4% vs. return of 2.0% 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 44th percentile for Government Fixed Income



	Yes	No	N/A	Explanation
c) Payden & Rygel – Core				
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 must fall in the range of +/- 20% of the manager's primary benchmark, but not to exceed the duration of the Bloomberg Barclays U.S. Aggregate Bond Index or the Bloomberg Barclays Intermediate U.S. Aggregate Bond Index by more than 20%.	✓			
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
d) JPM MBS – Core				
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 must fall in the range of +/- 20% of the manager's primary benchmark, but not to exceed the duration of the Bloomberg Barclays U.S. Aggregate Bond Index or the Bloomberg Barclays Intermediate U.S. Aggregate Bond Index by more than 20%.	✓			
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
e) Credit Suisse – Bank Loans				
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 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.	1			
Outperform the S&P/LSTA Leveraged Loan 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
f) Octagon – Bank Loans				
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 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 S&P/LSTA Leveraged Loan Index., net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 09/2019



	Yes	No	N/A	Explanation
g) Grosvenor Silvery Lupine Fund – Opportunistic Fixed Income				
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 3.8% vs 7.1% for the index
	Yes	No	N/A	Explanation
h) Global Evolution – Emerging Market Debt (Local Currency)				
Obligations of individual sovereign/quasi-sovereign issuers are subject to a 20% per issuer limit.	1			
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.		Х		
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 GbI Dvf'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
i) Global Evolution – Emerging Market Debt (Hard Currency)				
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.		Х		
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



	Yes	No	N/A	Explanation
j) Eaton Vance – Emerging Market Debt				
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
k) Goldman Sachs – Emerging Market Debt (Corporate)				
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.	1			
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



	Yes	No	N/A	Explanation
I) Finisterre – Emerging Market Debt				
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.	1			
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
m) Metlife – Long Duration Credit				
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.			N/A	Inception date: 11/2018
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: 11/2018
	Yes	No	N/A	Explanation
n) Internal Long Duration – Long Duration Government				
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.	√			
	✓			
securities. A maximum of the appropriate benchmark plus 5% of the portfolio may be invested in convertible				
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	✓		N/A	Inception date: 01/2019



	Yes	No	N/A	Explanation
o) Internal Low Duration – Low Duration Government				
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.			N/A	Inception date: 03/2018
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: 03/2018



	Yes	No	N/A	Explanation
9. Cash and Cash Equivalents Portfolios				
JP Morgan Cash Composite*				
a) JP Morgan Treasury Cash				
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 1.1% vs. 1.2% for the ICE BofAML 3 Mo US T-Bill Index

^{*}During the fourth quarter of 2011, JP Morgan Treasury Cash and JP Morgan Treasury 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.

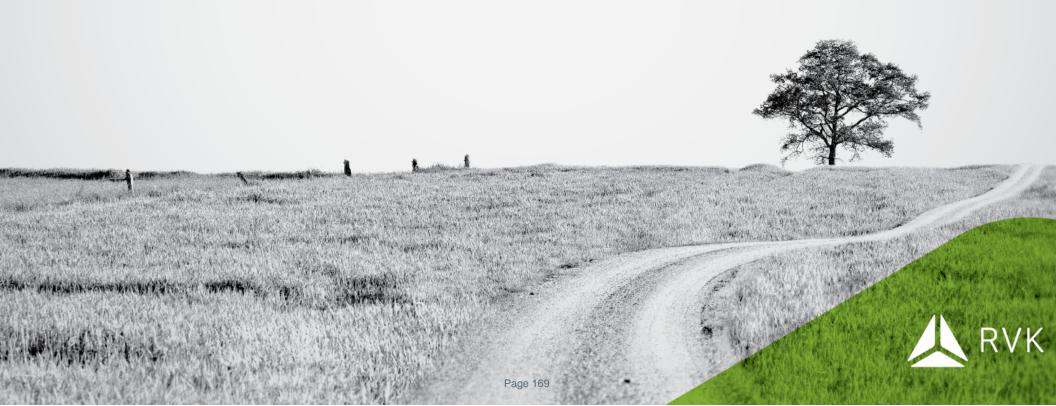


	Yes	No	N/A	Explanation
JP Morgan Wyo-Star Cash Composite*				
b) JP Morgan Wyo-Star Cash				
The portfolio's weighted average maturity is not to exceed 90 days.	✓			
All securities must have a maximum maturity of 365 days.	✓			
The maximum average cash flow weighted duration of the portfolio must not 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 1.0% vs. 1.2% for the ICE BofAML 3 Mo US T-Bill Index
c) JP Morgan Wyo-Star Extended Cash				
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 1.7% vs. 1.7% 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.



Addendum & Glossary



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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 Index for bank loans, EMD Blended Benchmark for EMD, NCREIF Open-End Diversified Core Equity Index for real estate, the State's actual private equity investment returns 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.
- 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 and the MSCI ACW Ex US Index (USD) (Net) thereafter.
- The Internal Intermediate Govt Fixed Income Portfolio Index currently consists of the Bloomberg US Treasury Index. November 2019 performance consists of the Internal Intermediate Govt Fixed Income Portfolio. Prior to November 2019, the index consists of Bloomberg US Gov't Int Term Bond Index. Prior to December 2009, the index consisted of the Bloomberg US Gov't Crdt Bond Index.
- The PIMCO Custom Index consists of the Bloomberg US Agg Bond Index through February 2018, the Bloomberg US Agg Int Index through June 2019, the Bloomberg US Agg Bond Index through 03/26/2020, account performance from 03/27/2020 through 04/03/2020, and the Bloomberg US Agg Bond Index thereafter.
- The Low Duration Fixed Income Custom Index consists of the Bloomberg US Gov't Crdt 1-3 Yr Bond Index through 06/30/2019 and the Bloomberg US Gov't 1-3 Yr Bond Index thereafter.
- The State Street All Cap Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index, and 7% MSCI US Min Vol Index (USD) (Gross) through 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 GbI Dvf'd Index through 02/29/2020, 70% JPM GBI-EM GbI Dvf'd Index / 30% JPM CEMBI Brd Dvf'd Index thereafter through 11/30/2020, and 1/3 JPM GBI-EM GbI Dvf'd Index, 1/3 JPM CEMBI Brd Dvf'd Index, and 1/3 JPM EMBI GbI Dvf'd Index thereafter.
- The JP Morgan EMB (JEMB) Hard Currency/Local Currency 50/50 consists of 50% JPM GBI-EM GbI Dvf'd Index, 25% JPM CEMBI Brd Dvf'd Index, and 25% JPM EMBI GbI 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 threeafter.
- 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.
- Opportunistic Investments Index: The Opportunistic Investments Index is the weighted average of the permanent funds' target allocation indices, excluding the opportunistic allocation.
- 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.



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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 guarter 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 guarter 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.



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Miscellaneous Comments (Continued)

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 guarter 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 Berkom 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.



INVESTMENT MANAGER PEER GROUP GLOSSARY

- **IM U.S. All Cap Equity (SA+CF):** The **U.S. All Cap Equity** universe includes products with a higher growth bias, products with a higher value bias, and products where the investment strategy permits investments in both value and growth equity securities across the complete Russell 3000 market cap spectrum.
- IM U.S. Large Cap Core Equity (SA+CF): The U.S. Large Cap Core Equity universe includes products where the investment strategy can best be described as benchmark driven rather than style driven and can include a blend of both value and growth considerations. The weighted average market cap is in excess of \$10 billion.
- **IM U.S. Small Cap Core Equity (SA+CF):** The **U.S. Small Cap Core Equity** universe includes products where the investment strategy can best be described as benchmark driven rather than style driven and can include a blend of both value and growth considerations. The weighted average market is between \$300 million and \$2 billion.
- **IM All ACWI ex US (SA+CF):** The **All ACWI ex US** universe includes products where the investment strategy can be best described as benchmark driven and includes products investing in growth and value securities across the MSCI ACW Ex US Index.
- **IM U.S. Broad Mkt Core Fixed Income (SA+CF):** The **U.S. Broad Mkt Core Fixed Income** universe includes products where the portfolio weighted average duration is greater than or equal to 4 years and less than 6 years. The average maturity can be between 3 and 8 years. The allocation to high yield bonds or emerging market debt is less than or equal to 5%.
- **IM Emerging Markets Debt (SA+CF):** The **Emerging Markets Debt** universe includes products where the combined market allocation to emerging market debt in Asia, Africa/Europe and Latin America is approximately 75% or more. The JP Morgan Emerging Markets Bond and EMBI+ are commonly used benchmarks.
- **IM U.S. Government Bonds (SA+CF):** The **U.S. Government Bonds** universe includes products where the investment style focuses on government bonds and the sector allocation to them is greater than or equal to 75%. The Barclays Capital U.S. Government or Government: Intermediate are commonly used benchmarks.
- **IM U.S. Short Duration Fixed Income (SA+CF):** The **U.S. Short Duration Fixed Income** universe includes products where the portfolio weighted average duration is greater than or equal to 1 year and less than 2.5 years. The average maturity is between 1 and 3 years.
- **IM U.S. Long Duration Fixed Income (SA+CF):** The **U.S. Long Duration Fixed Income** universe includes products where the portfolio weighted average duration is greater than or equal to 6 years. The average maturity can be greater than 6 years.
- **IM U.S. Bank Loans (SA+CF):** The **U.S. Bank Loans** universe includes products where the sector allocation to bank loans is greater than or equal to 75%. The S&P/LSTA Leverage Loan Index or Credit Suisse Leveraged Loan Index are commonly used benchmarks.



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:

S&P	Moody's	Explanation	S&P	Moody's	Explanation
Higher Cr	edit Quality – I	nvestment Grade	Lower Credit Quality – Below Investment Grade		
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	В	B2	
Α	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
			С	Ca	
			D	С	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., 1st quartile, 2nd quartile, 3nd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3nd 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.

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.

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 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.

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.

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 4th 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 ≥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 - Due to disclosure guidelines set by each investment manager, portfolio characteristics 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.



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.

Asset Class	RVK Liquidity Rating	Asset Class	RVK Liquidity Rating
Liquid Investments		Less Liquid Investments	
T-Bills and Treasurys	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	Not Liquid Investments	
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 Funds of Funds	5
US SMid Cap Equity	85		
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>	Capital Appreciation	Capital Preservation	<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.

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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