



Quarterly Investment Performance Analysis

Wyoming State Treasurer's Office

Period Ended: September 30, 2017





Memorandum

To	Wyoming State Loan and Investment Board
From	RVK, Inc.
Subject	Investment Performance Analysis – Summary of Contents
Date	September 30, 2017

To assist in your review of the Investment Performance Analysis for the quarter ended September 30, 2017, we have provided below an outline and summary of the information contained within each section of this report.

MEMORANDUM – Investment Performance Analysis Commentary

- This two-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 – Performance Summary

- These seven pages provide the market value, asset allocation, and performance information for the State's investments in summary form. They are used as a stand-alone summary report for the regular SLIB meetings.

TAB 3 – 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.

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TAB 4 – 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 actual allocation index is included.

TAB 5 – 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 6 – 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 7 – 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 8 – Cash and Cash Equivalents

- This one-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 9 – 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 10 – 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

THIRD QUARTER 2017

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Memorandum

To	Wyoming State Loan and Investment Board
From	RVK, Inc.
Subject	Investment Performance Analysis Commentary
Date	September 30, 2017

Outlined below please find a summary of significant observations regarding performance of the State's Funds for the period ended September 30, 2017. We hope this summary will facilitate your review of our Investment Performance Analysis Report.

The Total Fund returned 1.9% during the third quarter as global equity markets continued to rally and fixed income assets took in a modest gain. Long-term performance for the Total Fund remains strong, with the State earning returns of 5.3% and 4.8% per annum over the trailing seven- and ten-year periods.

The Total Fund outperformed its custom benchmark by 0.1% over the quarter as relative performance was bolstered by the State's fixed income portfolio structure. Equity markets produced strong gains during the third quarter of 2017, driven largely by continued positive expectations for US fiscal policy, as well as continued improvements in global economic growth. The State has lower strategic exposure to equities relative to the All Master Trust Universe and subsequently underperformed the peer group in the first quarter. Relative to the Universe, the State continues to generate more return for each unit of risk exposure, with risk-adjusted returns ranking in the top 50% and 10% of all Plans over the trailing five- and ten-year time periods, respectively.

Absolute results were positive for the State's nine investment pools, with each outperforming or keeping pace with their respective benchmarks during the quarter. The State's permanent funds with larger strategic allocations to equities and alternative investments generated higher absolute returns than the State's non-permanent funds, but slightly lower returns on a relative basis.

US interest rates reached 2017 lows for key maturities before rising late in the period which was generally attributed to a renewed sense of optimism regarding the economic growth outlook. The Bloomberg US Aggregate Bond Index returned 0.9% over the third quarter, as a slight increase in yields was not enough to keep bonds from posting a positive return. The State's total fixed income portfolio (excluding convertibles) returned 1.0% for the quarter, outperforming the broad market index by 0.1%. Helped by a weakening dollar, the State's emerging markets debt composite was the top contributor

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to relative performance during the first quarter, returning 4.0%. Credit fixed income also contributed to relative performance, returning 1.3%, while core fixed income returned 1.0%, slightly outperforming the broad market index.

US equity markets in the third quarter were driven by expectations for continued global growth as well as US fiscal policy stimulus. All major US equity indices finished the quarter in positive territory, with the Russell 3000 Index returning 4.6% for the quarter. The State's US equity composite returned 4.4% during the first quarter, modestly trailing the broad market index. RBC posted the strongest absolute and relative performance in the US equity portfolio, returning 6.9% and outperforming the Russell 2000 Index by 1.3%. Conversely, the State's all cap US equity manager, Lazard, posted the weakest performance within the asset class, returning 2.5% and underperforming the Russell 3000 Index by 2.1%. The State Street All Cap tracked its custom index and underperformed the broad market index by 0.2%, returning 4.4%. Epoch outperformed the broad market index, returning 4.9% for the quarter.

Developed international stocks performed well on an absolute and relative basis when compared to their domestic counterparts, but trailed relative to emerging markets. The rally was broad based, with only two developed countries within the MSCI EAFE index returning negative performance. The MSCI EAFE Index returned 5.4% and the MSCI Emerging Markets Index returned 7.9%. The State's International Equity portfolio returned 6.2% during the quarter, outperforming the return of the broad market index by 0.1%. Fisher Investments outperformed its custom index by 0.8%, returning 6.9%. Arrowstreet, the State's global equity manager, returned 5.2%, matching the return of the MSCI ACW Index.

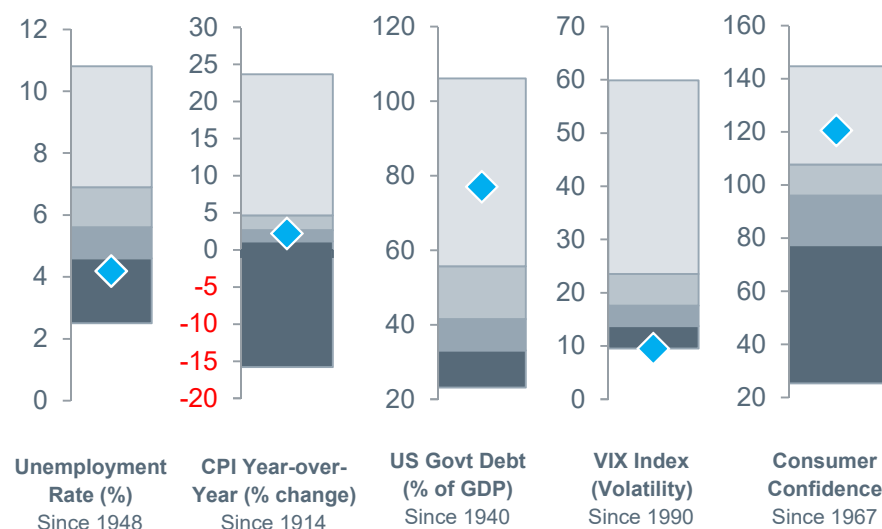
Core real estate continued a trend of delivering modest, positive returns, albeit slightly lower than in recent periods. Market participants characterized this as another quarter of normalizing returns reinforcing investor expectations of lower returns going forward as the market enters the later stages of the recovery. Between the State's two core real estate managers, Clarion and UBS, returns were 2.1% and 1.5% respectively. The PAAMCO - Jackalope Fund (currently the State's single absolute return manager) returned 1.3% during the quarter, underperforming the 2.3% earned by the HFRI FOF Comp Index.

Third Quarter Economic Environment

Key Economic Indicators

Expectations for continued global growth, as well as US fiscal policy stimulus, were again cited as the primary factors driving equity markets to record levels. Oil markets also traded higher during the period, albeit within recent ranges, with WTI crude reaching \$52 per barrel. While no material price action occurred on the announcement, market participants noted Standard & Poor's downgrade of China from AA to A+, suggesting deterioration of economic fundamentals for the world's second largest economy could be a risk to global growth going forward. Global monetary policy was also in focus, with the FOMC announcing its intent to start its balance sheet normalization strategy in October. The announcement elicited limited price action, as market participants suggested the policy change was well telegraphed through speeches by policy makers and FOMC meeting minutes. Finally, US interest rates reached 2017 lows for key maturities before rising late in the period on a renewed sense of optimism regarding the economic growth outlook.

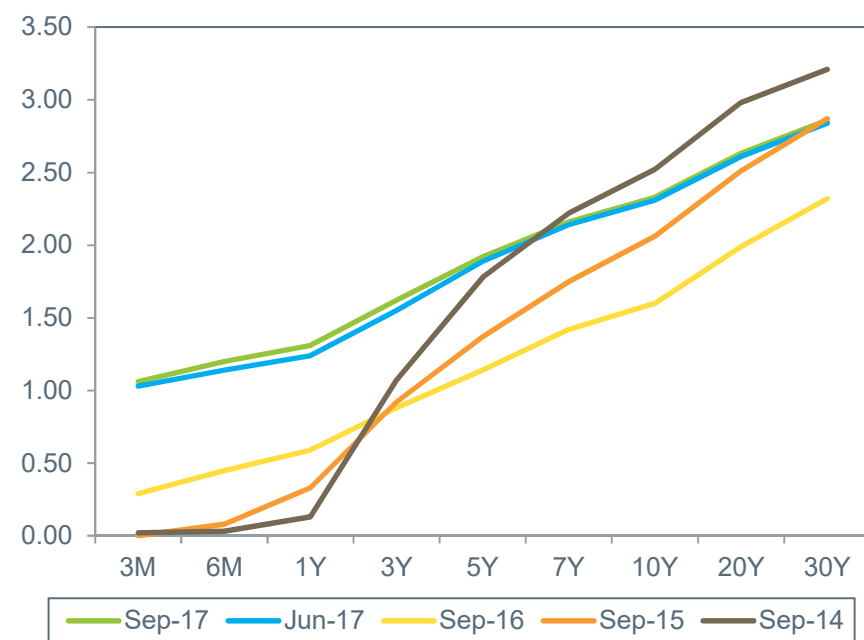
Key Economic Indicators



Economic Indicators	Sep-17		Jun-17	Sep-16	Sep-14	20 Yr
Federal Funds Rate (%)	1.06	—	1.06	0.29	0.07	2.18
Breakeven Infl. - 1 Yr (%)	1.24	▲	0.72	0.95	-0.19	N/A
Breakeven Infl. - 10 Yr (%)	1.85	▲	1.74	1.61	1.97	N/A
CPI YoY (Headline) (%)	2.2	▲	1.6	1.5	1.7	2.1
Unemployment Rate (%)	4.2	▼	4.4	4.9	5.9	5.9
Real GDP YoY (%)	2.3	▲	2.2	1.5	3.2	2.3
PMI - Manufacturing	60.80	▲	57.80	51.70	55.90	52.28
USD Total Wtd Idx	88.11	▼	90.54	90.01	81.08	86.81
WTI Crude Oil per Barrel (\$)	51.7	▲	46.0	48.2	91.2	57.1
Gold Spot per Oz (\$)	1,280.2	▲	1,241.6	1,315.8	1,208.2	818.4

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	4.48	14.24	18.61	14.22	7.44
Russell 2000	5.67	10.94	20.74	13.79	7.85
MSCI EAFE (Net)	5.40	19.96	19.10	8.38	1.34
MSCI EAFE SC (Net)	7.46	25.42	21.84	12.85	4.63
MSCI Emg Mkts (Net)	7.89	27.78	22.46	3.99	1.32
Bloomberg US Agg Bond	0.85	3.14	0.07	2.06	4.27
BofA ML 3 Mo US T-Bill	0.27	0.57	0.65	0.22	0.47
NCREIF ODCE (Gross)	1.87	5.43	7.66	11.59	5.03
Wilshire US REIT	0.61	2.44	0.10	9.51	5.55
HFRI FOF Comp	2.31	5.60	6.51	3.85	1.07
Bloomberg Cmdty (TR)	2.52	-2.87	-0.29	-10.47	-6.83

Treasury Yield Curve (%)



Third Quarter Review

Broad Market

Domestic equity markets were driven to record levels during the quarter. Fiscal stimulus, along with expectations for continued global growth, were cited as primary factors for US equity appreciation.

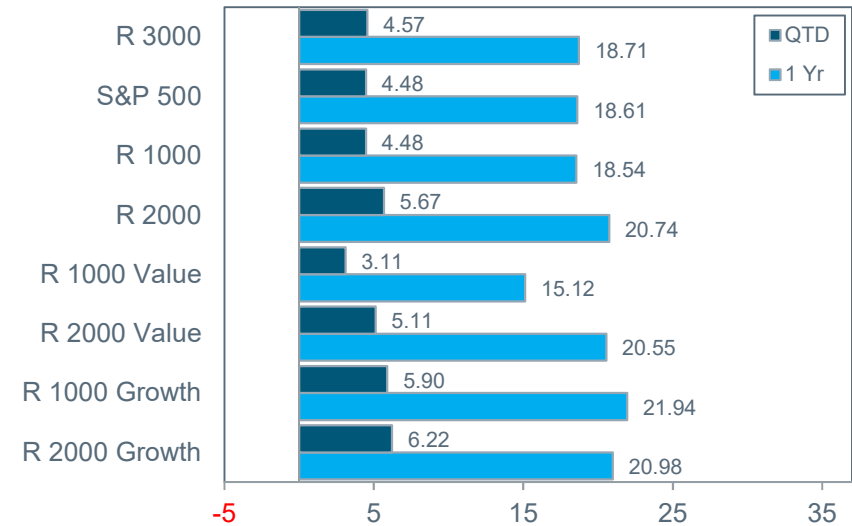
Market Cap

US small cap stocks outperformed large cap stocks, with the Russell 2000 index returning 5.7% versus the Russell 1000 index return of 4.5%.

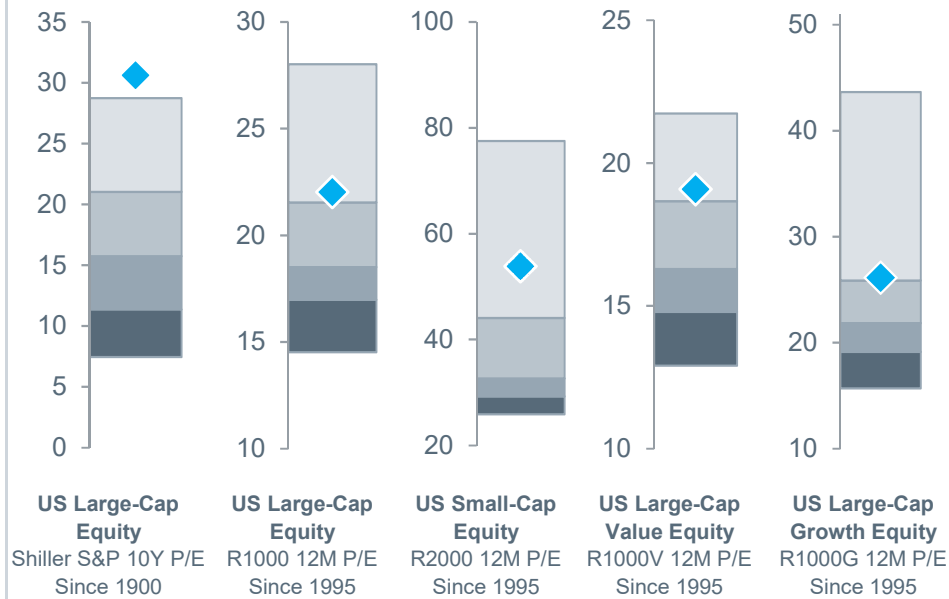
Style and Sector

Growth stocks continued to outperform value across all market caps. Within the large cap growth segment, information technology, health care, and financial stocks outperformed other sectors over the period. Managers targeting these sectors generally benefited from the exposure, but delivered mixed results relative to their respective indices.

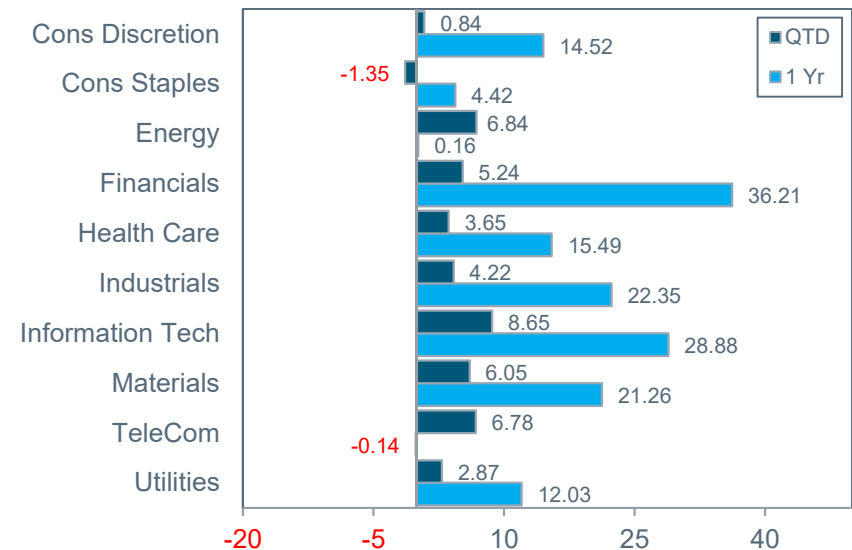
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



Third Quarter Review

Broad Market

Expectations for continued global growth and US fiscal policy stimulus were positive drivers to international equity markets, as the MSCI ACWI Ex US index rose approximately 6.2%.

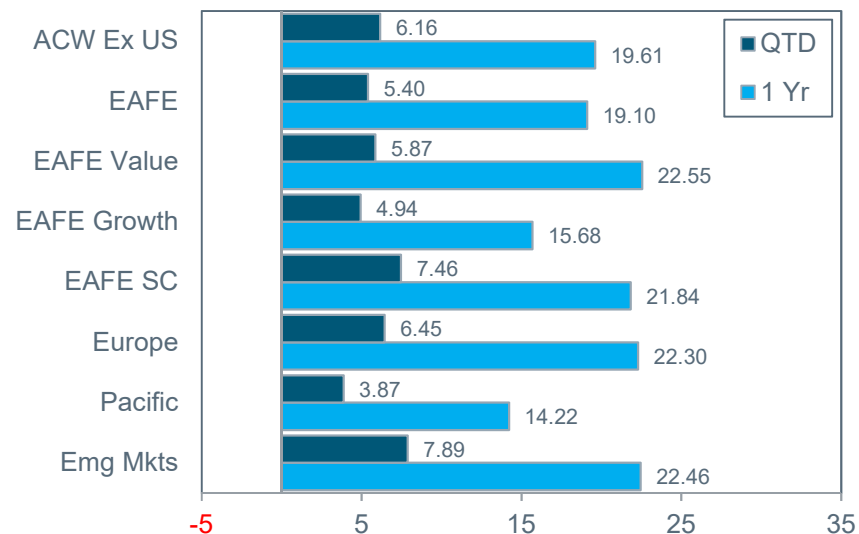
Region

European market returns heavily influenced broad international market exposure, as ECB policy makers scaled back expectations for the removal of accommodative monetary policy.

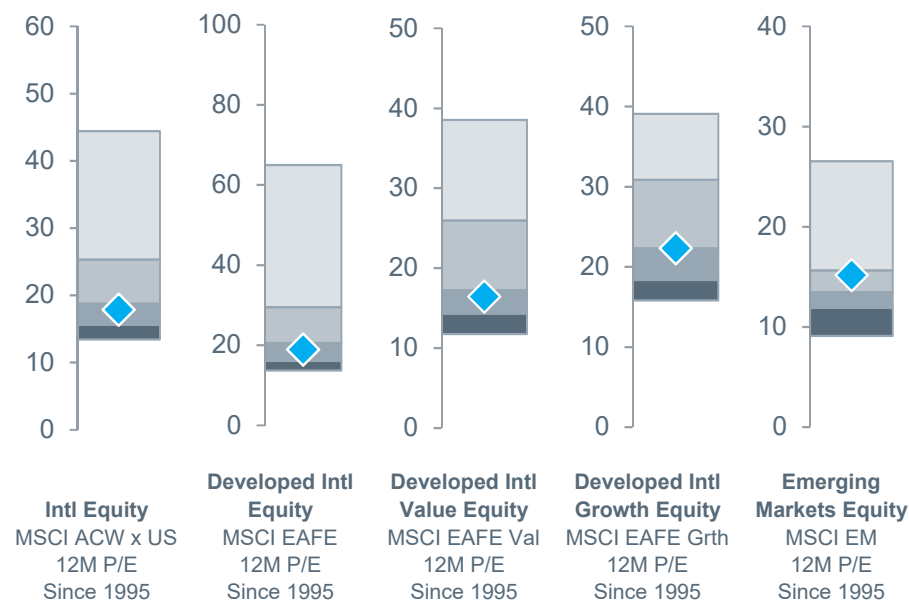
Market Cap & Style

Developed international stocks performed well on an absolute and relative basis when compared to their domestic counterparts, but trailed relative to emerging markets. Value stocks outperformed growth in developed markets while underperforming in emerging markets, however performance varied across market cap. Small cap continued to outperform large cap in developed markets, while large cap outperformed small cap in emerging markets.

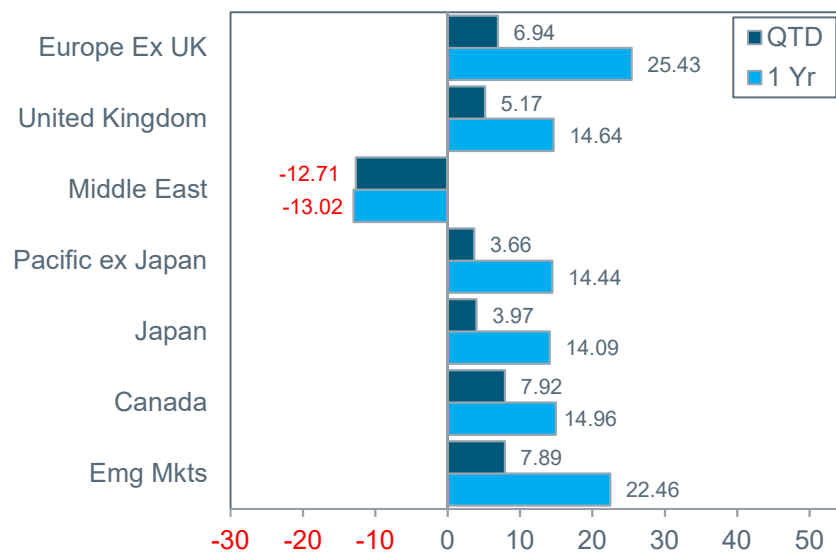
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

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

All returns are shown net of foreign taxes on dividends.

Third Quarter Review

Broad Market

The yield curve flattened materially during the period on the increased likelihood of further rate hikes by the FOMC amidst a general lack of confidence in long-run economic growth prospects. Still, the Bloomberg Barclays US Aggregate Bond index returned 0.8% in Q3, as a slight increase in yields was not enough to keep bonds from posting a positive return.

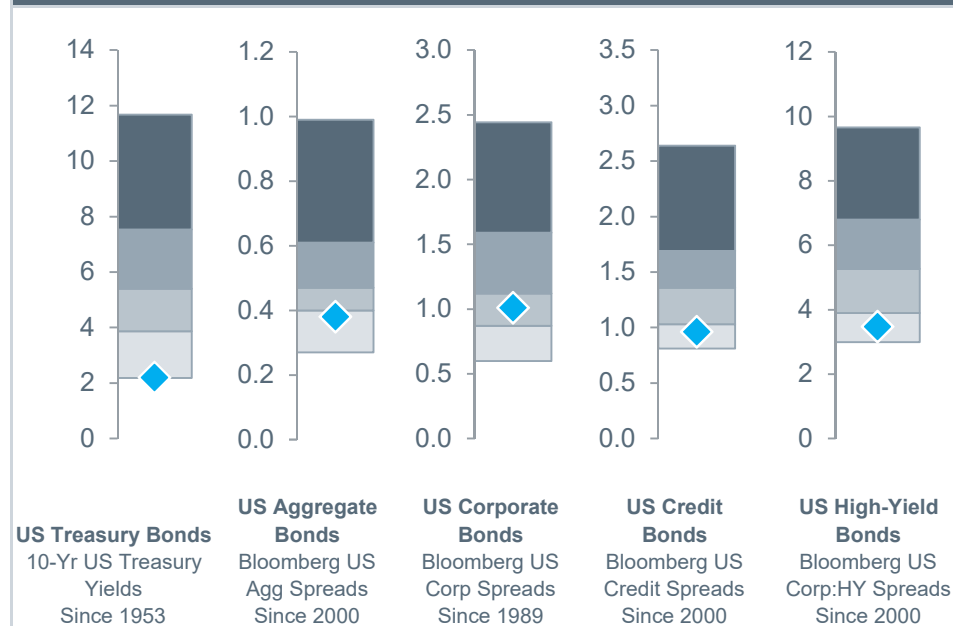
Credit Market

High yield credit spreads reached a three-year low while investment grade credit spreads matched its lowest point since 2007.

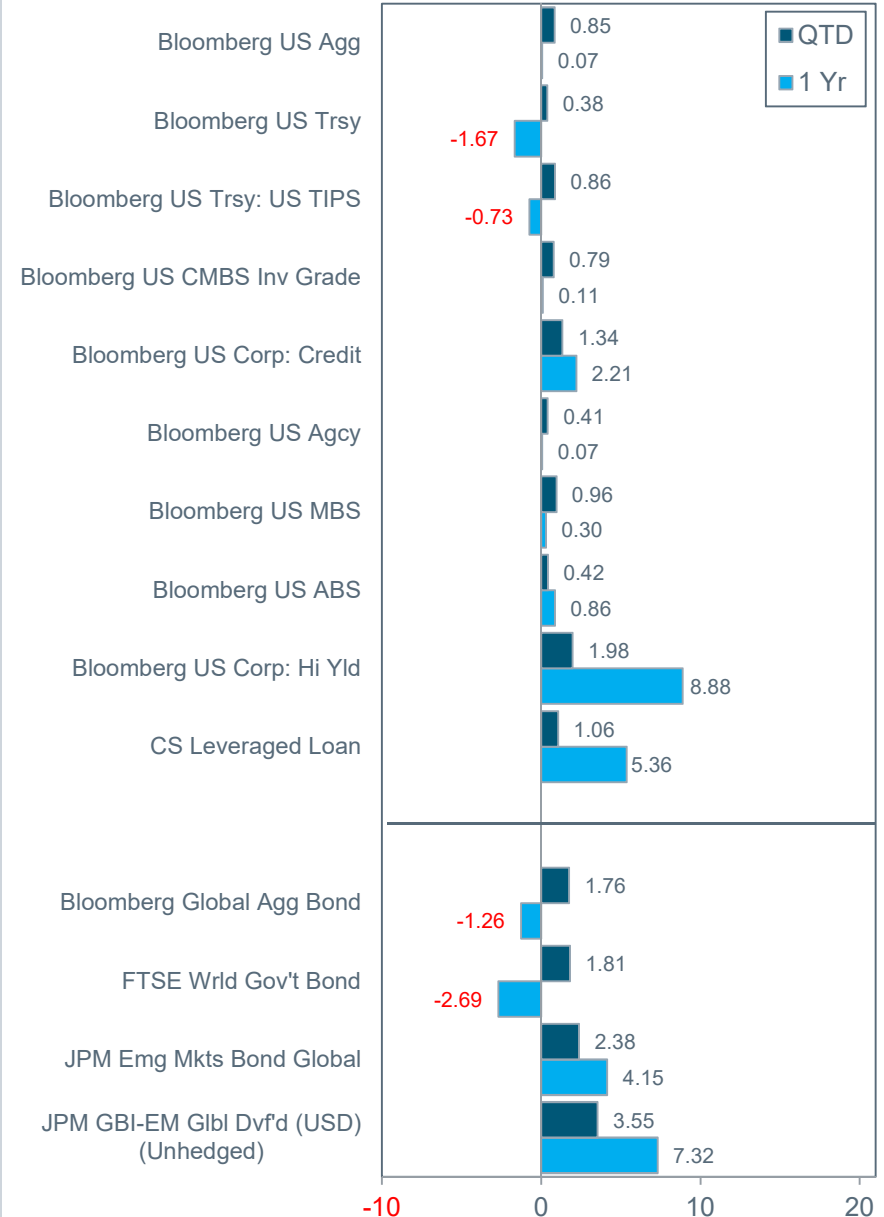
International

Local currency emerging market debt continues to post strong performance as the JPMorgan GBI-EM Global Diversified index returned 3.6% for the quarter. It has been one of the strongest performing asset classes on a year-to-date basis, with a return of 14.3%.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

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

Third Quarter Review - Absolute Return

General Market - Hedge Funds

Hedge funds largely provided positive performance, with fundamental and event-driven strategies leading while macro oriented managers continued to struggle. Multi-Strategy manager returns were generally positive during the quarter, but have experienced wide dispersion year-to-date. The best performing broad hedge fund category for both the quarter and year-to-date has been traditional Equity Long-Short (ELS).

General Market - Global Tactical Asset Allocation (GTAA)

Performance for GTAA Managers continued to build on a strong year for most strategies. Quarterly returns varied widely given a diverse group of managers, but most core GTAA allocation managers outperformed a static US 60/40 portfolio both during the quarter, and also year-to-date. Generally, those that ranked among the top of peers tended to rely on value oriented investment processes that have resulted in significant equity, fixed income and currency exposure within emerging markets.

Third Quarter Review - Real Assets

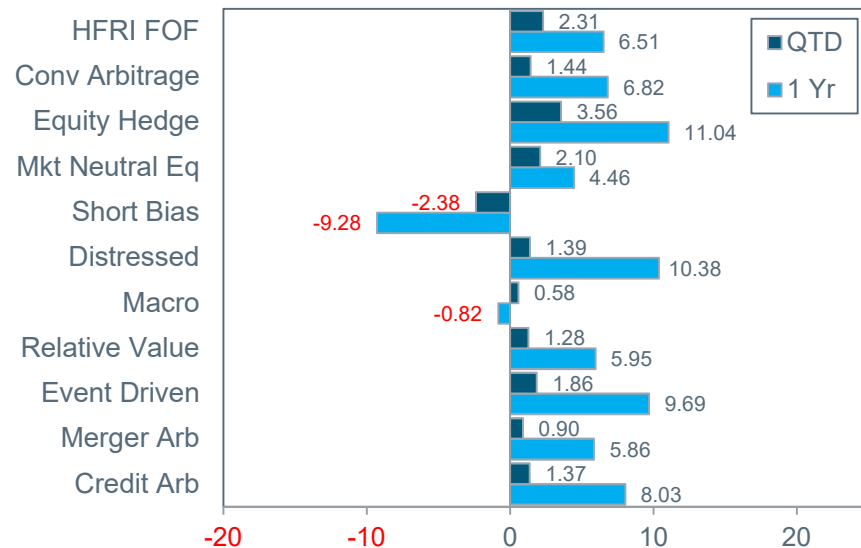
General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategies ("DIS") performed relatively well, with some even outperforming a static US 60/40 portfolio despite a low-inflation environment. This occurred in a quarter where inflation levels remained low, but rose from 1.6% in June, to 2.2% based on the most recently available headline CPI release in September.

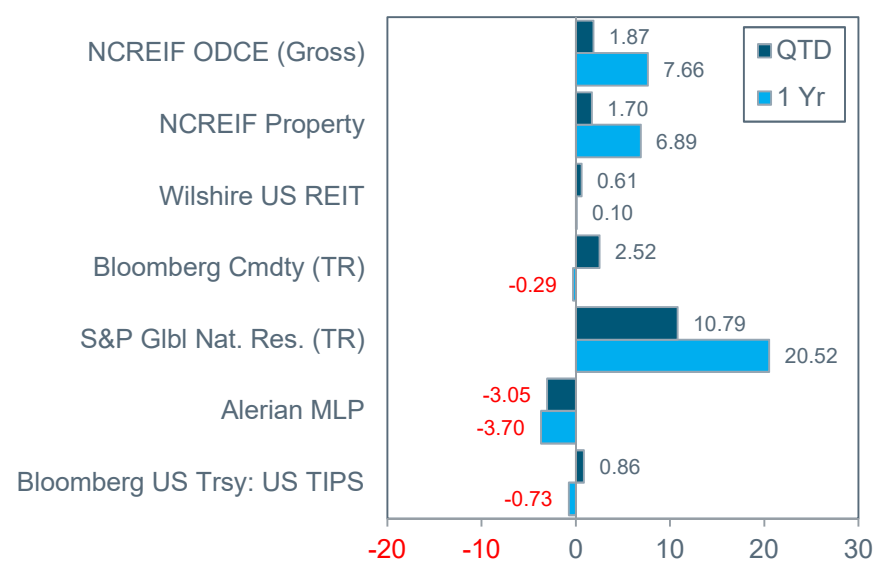
General Market - Real Estate

Real estate valuations remain healthy, supported by continuing strength in the overall economy. The core private real estate index, NCREIF-ODCE returned 1.9%, on a preliminary basis, during Q3, comprised of 1.1% income and 0.8% appreciation. Market participants characterized this as another quarter of normalizing returns reinforcing investor expectations of lower returns going forward as the market enters the later stages of the recovery. Investors in publicly traded real estate trailed their private market counterparts during the quarter as measured by FTSE/NAREIT All REIT's index return of 1.2%.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

As of September 30, 2017

Calendar Year Performance												Annualized Statistics (01/2006 - 09/2017)			
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	CYTD (As of 9/17)		Return	Standard Deviation	Sharpe Ratio
Best ↑ ↓ Worst	18.85	5.24	49.13	26.85	15.99	16.83	38.82	13.88	15.02	21.31	21.13	US Equity Custom Index - US All Cap	8.40	15.15	0.54
	18.11	3.06	45.12	21.74	14.26	16.76	32.39	13.69	13.33	13.00	17.25	S&P 500 Index - US Large Cap	8.43	15.12	0.54
	15.97	-5.22	34.63	16.77	11.16	16.35	32.39	12.50	5.59	12.74	14.28	Russell 2000 Index - US Small Cap	8.47	19.16	0.47
	15.85	-6.46	32.46	16.36	7.84	16.13	24.96	11.82	1.38	11.96	14.24	MSCI ACW Index - Global	6.13	16.89	0.37
	11.66	-10.01	27.17	15.68	3.49	16.00	22.80	11.18	0.55	10.69	13.91	International Equity Custom Index - International	3.84	18.75	0.24
	11.63	-21.37	26.46	15.06	2.11	16.00	21.26	9.42	0.48	10.44	11.96	Cambridge US PE Index - Private Equity	11.40	8.69	1.18
	10.25	-22.48	26.46	15.06	2.11	14.96	15.29	5.97	0.18	9.94	10.94	NCREIF ODCE Index - Core Real Estate	6.77	8.02	0.73
	6.97	-23.62	21.98	13.11	0.66	13.43	13.94	4.89	-0.27	8.77	7.59	NCREIF Property Index - Value-Added Real Estate	7.72	5.53	1.21
	5.49	-33.79	13.22	12.67	-1.75	10.94	10.98	4.16	-1.47	7.97	5.55	HFRI FOF Comp Index	2.44	6.57	0.23
	5.49	-35.73	11.47	10.82	-4.18	10.77	8.96	3.37	-2.36	7.86	5.43	BofA ML All Cnvrts Index (All Qual) - Convertibles	7.56	13.49	0.52
	5.36	-37.00	5.93	9.28	-5.18	10.54	4.22	2.95	-3.24	4.50	5.07	Bloomberg US Agg Bond Index - Fixed Income	4.34	3.29	0.96
	4.53	-37.00	1.17	6.54	-5.72	4.79	0.12	0.18	-4.41	2.65	4.20	Credit Custom Index - Fixed Income	5.56	9.04	0.51
	2.76	-42.19	-16.85	5.70	-7.35	4.21	-2.02	-3.87	-5.66	0.51	3.14	JPM GBI-EM Gbl Dvf'd Index (USD) - EMD	5.69	11.09	0.46
	-1.57	-43.06	-29.76	0.73	-13.71	0.26	-8.98	-5.72	-14.92	0.38	0.60	JP Morgan Cash Custom Index - Cash Equiv	1.48	0.93	1.27

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

ASSET CLASS SUMMARY

US Equity: The **US Equity** structure employs a core-satellite approach, which gains passive, low-cost beta exposure at its core and active management only where the highest conviction strategies can add value – All Cap and Small Cap Equity. The core component of the portfolio utilizes passive management coupled with low beta, minimum volatility strategies that are intended to outperform a market-capitalization weighted index at a similar absolute risk level. Active management in the All Cap space provides investment managers the flexibility to adjust for valuations across market capitalizations. The single active Small Cap investment manager utilizes fundamental stock analysis in a market segment that has historically provided a return premium relative to larger companies.

Global Equity: The **Global Equity** portfolio employs active management, and provides the investment manager the flexibility to overweight the portfolio towards US or International markets based on respective valuations. The portfolio is optimized to balance exposure to style and size factors in order to generate alpha primarily through stock selection.

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, while Non-Core Real Estate investments allow the portfolio to take advantage of real estate market fundamentals. Recent commitments within Non-Core Real Estate have added global diversification through European-focused investments.

Absolute Return: The **Absolute Return** 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. An increase in the use of direct Hedge Funds is anticipated to lower external management expenses and allow for greater control over the program.

Convertible Bonds: The **Convertible Bonds** portfolio consists of a single, specialized investment manager within the fixed income portfolio. The portfolio focuses on convertible issuers that demonstrate the ability to improve fundamental characteristic and attempts to participate in the majority the upside, while limiting the downside of the underlying equity to nearly half.

Fixed Income: The **Fixed Income** 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. The Internally Managed Portfolio also provides liquidity and safety of capital. Treasury Inflation Protected Securities (“TIPS”) provide passive protection against expected changes in inflation. The satellite portfolios serve as dedicated specialists. Credit Fixed Income provides diversification from traditional fixed income investments and the potential for enhanced return. The custom credit portfolios are largely driven by allocations to bank loans, high yield fixed income securities, and investment grade credit. Investments in Emerging Market Debt (Local Currency) diversify US Dollar exposure and provide opportunities to capitalize on global growth trends. Opportunistic Fixed Income is employed to capitalize on severe market dislocations, such as European Debt.

INDEX GLOSSARY

Total Equity Custom Index: The **Total Equity Custom Index** consists of the MSCI World Index through July 2010 and the MSCI All Country World Index thereafter.

MSCI World: The **MSCI World Index** is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. The index consists of the following developed market countries: *Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States.*

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.*

US Equity Custom Index: The **US Equity Custom Index** consists of the S&P 500 Index (Cap Wtd) through September 2014 and the Russell 3000 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.

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 U.S. 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 USA Minimum Volatility Index.

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 the same countries that make up the MSCI ACW Index, excluding the United States.

FTSE All World Ex US: The **FTSE All World Ex US Index** is a free float-adjusted market capitalization weighted index that is comprised of large- and mid-cap stocks providing coverage of Developed and Emerging Markets excluding the US. The index is derived from the FTSE Global Equity Index Series (GEIS), which covers 98% of the world's investable market capitalization.

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

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.

BofA ML All Convertibles: The **BofA Merrill Lynch All Convertibles Index (All Qualities)** is a market capitalization-weighted index of domestic corporate convertible securities that are convertible to common stock.

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.

Credit Custom Index: The **Credit Custom Index** consists of 20% Bloomberg US Credit Index, 20% BofA Merrill Lynch US High Yield Master II Constrained Index, and 60% S&P/LSTA Leveraged Loan Index.

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.

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

Bloomberg US Trsy: US TIPS: The **Bloomberg US Treasury: US TIPS Index** is an unmanaged index that consists of inflation-protected securities issued by the U.S. Treasury.

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

Bloomberg US Gov't/Credit Bond: The **Bloomberg US Gov't/Credit Bond Index** covers the non-securitized component of the US Aggregate Index. It includes investment grade, US dollar denominated, fixed-rate Treasuries, government-related and corporate securities.

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

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

Wyoming State Treasurer's Office

Investment Performance

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Investment Policy:

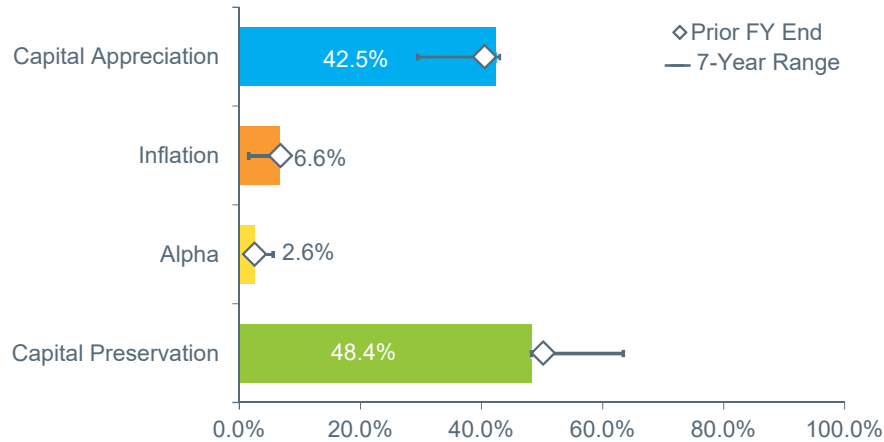
It is the investment policy for the State Loan and Investment Board to invest public funds of the State of Wyoming in a manner that strives for maximum safety, provides adequate liquidity to meet all operating requirements, and achieves the highest possible investment return consistent with the primary objectives of safety and liquidity.

Investment Objectives and Priorities:

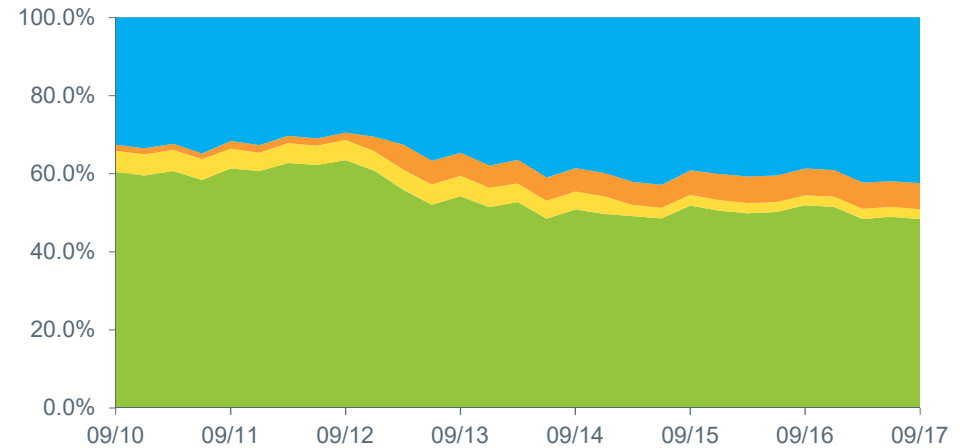
All available funds shall be invested with the following objectives and priorities:

- Safety of principal. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio.
- Liquidity requirements of anticipated and unanticipated expenditures.
- Yield.
- Recognition of differing objectives and needs of various fund portfolios.
- Conformance with State law and other pertinent legal restrictions.
- Maximization of the total rate of return on investment consistent with the foregoing objectives.
- Diversification by asset type, security, and investment manager in order to smooth the volatility of quarterly returns.

Current Asset Allocation:



Historical 7-Year Asset Allocation:



Historical Performance:

	Total Investment Value	Fiscal Year Ending 06/30/17 Market Value	Current Market Value	% of MV	QTD Return	CYTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return
Wyoming State Total Fund	\$19,213.05	\$20,755.87	\$20,317.58	100.0%	1.92%	6.57%	5.78%	4.42%	4.79%	4.75%
<i>Wyoming State Actual Allocation Index</i>					1.82%	6.17%	5.09%	4.23%	4.59%	4.35%
Permanent Funds	\$13,621.48	\$14,431.69	\$14,729.20	72.5%	2.33%	7.80%	7.59%	5.17%	6.01%	5.06%
Non-Permanent Funds	\$5,591.57	\$6,324.18	\$5,588.38	27.5%	0.95%	3.02%	1.04%	2.49%	1.93%	3.95%

Note[1]: Performance shown is gross of fees with the exception of convertible bonds and absolute return, which are shown net of fees.

Note[2]: Pooled investment performance and market values shown reflect State Agency participation and are calculated on a capital-weighted basis using beginning-period allocations.

Note[3]: Thematic allocations shown exclude Public Purpose Investments.

Note[4]: The Wyoming State Actual Allocation Index is calculated using beginning-month asset class weights applied to the appropriate asset class benchmark return.

Note[5]: Market Value and Total Investment Value are shown in (\$) Millions.

Wyoming State Treasurer's Office
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	Total Investment Value	Fiscal Year Ending 06/30/17 Market Value	Current Market Value	% of MV	QTD Return	CYTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return
Allocation by Fund										
Wyoming State Total Fund	\$19,213,048,952	\$20,755,870,537	\$20,317,578,330	100.0%	1.92%	6.57%	5.78%	4.42%	4.79%	4.75%
<i>Wyoming State Actual Allocation Index</i>					1.82%	6.17%	5.09%	4.23%	4.59%	4.35%
Investment Funds:										
Permanent Mineral Trust	\$7,190,995,724	\$7,665,940,594	\$7,828,042,011	38.5%	2.41%	8.06%	8.03%	5.34%	6.30%	4.87%
Common School Perm Land Fund	\$3,644,755,852	\$3,859,838,175	\$3,952,943,368	19.5%	2.37%	8.14%	8.23%	5.47%	6.43%	5.10%
Permanent Land Fund	\$178,558,819	\$189,247,457	\$194,023,596	1.0%	2.30%	7.81%	7.70%	5.23%	6.14%	4.70%
University Permanent Land Fund	\$20,009,286	\$21,764,049	\$23,048,881	0.1%	2.51%	8.55%	8.74%	5.59%	6.48%	4.69%
Hathaway Scholarship	\$554,267,465	\$588,863,703	\$597,194,303	2.9%	2.42%	7.74%	7.12%	4.98%	5.55%	5.65%
Higher Education	\$114,505,928	\$121,412,872	\$123,228,622	0.6%	2.42%	7.73%	7.13%	4.95%	5.54%	5.60%
Workers Compensation Fund	\$1,918,385,875	\$1,984,625,770	\$2,010,717,884	9.9%	1.94%	6.20%	4.96%	4.09%	4.38%	5.46%
Tobacco Settlement Trust*	\$235,991,353	\$84,071,542	\$236,813,063	1.2%	1.15%	3.71%	1.43%	2.91%	2.28%	4.58%
State Agency Pool*	\$5,355,578,651	\$6,240,106,375	\$5,351,566,603	26.3%	0.94%	3.00%	1.03%	2.48%	1.92%	3.94%
Asset Class Performance:										
US Equity	\$1,848,599,860	\$2,254,550,255	\$2,323,949,571	11.4%	4.42%	12.05%	16.66%	10.32%	14.13%	7.89%
US Equity Custom Index					4.57%	13.91%	18.71%	10.69%	14.15%	7.40%
Global Equity	\$379,181,793	\$426,401,778	\$431,678,224	2.1%	5.15%	20.40%	22.50%	N/A	N/A	N/A
MSCI ACW					5.18%	17.25%	18.65%	2.00%	10.20%	3.88%
International Equity	\$1,474,956,927	\$1,672,665,173	\$1,739,703,575	8.6%	6.24%	22.60%	20.23%	5.55%	7.67%	1.85%
International Equity Custom Index					6.16%	21.13%	19.61%	4.70%	6.97%	0.78%
Private Equity	\$421,122,536	\$585,156,569	\$597,940,184	2.9%			See Note[6]			
S&P 500 + 5%					5.76%	18.50%	24.54%	16.35%	19.93%	12.81%
Core Real Estate	\$507,607,260	\$596,442,590	\$601,813,815	3.0%	1.82%	5.45%	6.99%	10.75%	11.01%	4.68%
NCREIF ODCE					1.87%	5.43%	7.66%	10.85%	11.59%	5.03%
Value-Added Real Estate	\$250,583,161	\$268,812,182	\$266,040,753	1.3%			See Note[6]			
NCREIF Property					1.70%	5.07%	6.89%	9.83%	10.35%	6.23%
Absolute Return	\$499,635,960	\$507,134,714	\$513,702,435	2.5%	1.30%	3.59%	4.87%	1.03%	4.02%	N/A
HFRI FOF Comp Index					2.27%	5.56%	6.46%	2.22%	3.84%	1.07%
Convertible Bonds	\$486,668,624	\$517,843,821	\$490,285,383	2.4%	3.82%	12.21%	13.14%	5.97%	9.83%	7.54%
BofA ML All Quality Convertible					3.77%	11.96%	14.32%	6.73%	10.95%	6.80%
Fixed Income	\$11,585,823,660	\$11,576,435,726	\$11,592,767,494	57.1%	1.01%	3.54%	1.16%	2.83%	1.97%	4.55%
Bloomberg US Aggregate					0.85%	3.14%	0.07%	2.71%	2.06%	4.27%
Public Purpose Investments	\$300,104,164	\$811,819,612	\$300,104,164	1.5%	N/A	N/A	N/A	N/A	N/A	N/A
Cash Equivalents	\$1,458,765,008	\$1,538,608,117	\$1,459,592,735	7.2%	0.27%	0.70%	0.70%	0.52%	0.40%	0.92%
JP Morgan Cash Custom Index					0.27%	0.60%	0.56%	0.41%	0.30%	0.86%

* Denotes Non-Permanent Fund.

Note[1]: Performance shown is gross of fees with the exception of convertible bonds and absolute return, which are shown net of fees. Investment performance is calculated on invested assets only.

Note[2]: Pooled investment performance and market values shown reflect State Agency participation and are calculated on a capital-weighted basis using beginning-period allocations.

Note[3]: US Equity Custom Index consists of S&P 500 (Cap Wtd) through September 2014 and the Russell 3000 thereafter.

Note[4]: International Equity Custom Index consists of MSCI EAFE (Gross) through July 2010 and the MSCI ACW Ex US (Net) thereafter.

Note[5]: Market values for non-core real estate and private equity are as of the most recent valuation, adjusted for subsequent cash flows. Investment (Cost) Values are not lagged.

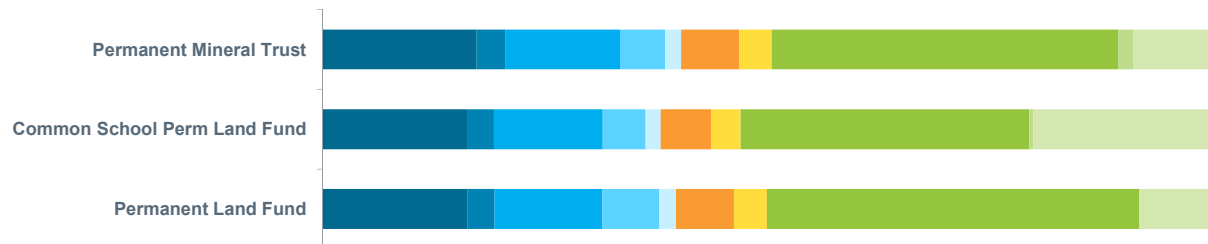
Note[6]: Performance for Private Equity and Value-Added Real Estate investments is calculated on an IRR basis. For further analysis, please refer to the supplementary alternatives performance report.

Note[7]: Cash Equivalents performance includes Extended Cash performance.

Note[8]: Market values shown for Public Purpose Investments reflect cost value of the investments.

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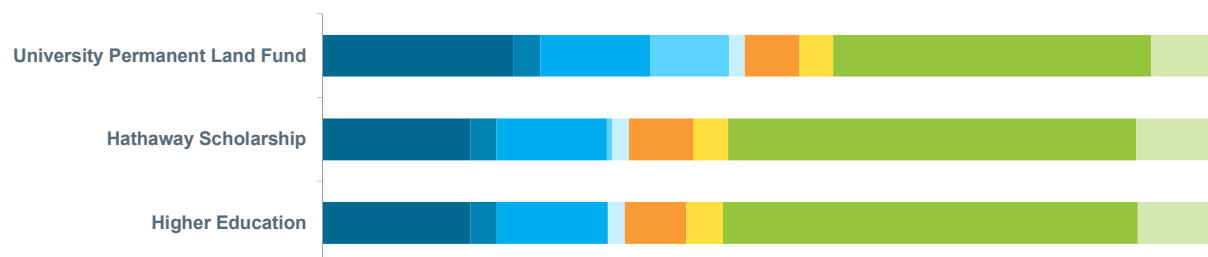
	Total Investment Value	Fiscal Year Ending 06/30/17 Market Value	Current Market Value	% of MV	QTD Return	CYTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return
Wyoming State Total Fund	\$19,213,048,952	\$20,755,870,537	\$20,317,578,330	100.0%	1.92%	6.57%	5.78%	4.42%	4.79%	4.75%
Investment Funds:										
Permanent Mineral Trust	\$7,190,995,724	\$7,665,940,594	\$7,828,042,011	100.0%	2.41%	8.06%	8.03%	5.34%	6.30%	4.87%
US Equity	\$1,065,011,497	\$1,297,262,339	\$1,336,887,905	17.1%						
Global Equity	\$218,517,668	\$245,617,219	\$248,656,573	3.2%						
International Equity	\$848,709,155	\$958,116,815	\$997,315,804	12.7%						
Private Equity	\$276,547,814	\$376,229,716	\$391,314,461	5.0%						
Real Estate	\$447,540,517	\$497,311,710	\$503,123,851	6.4%						
Absolute Return	\$275,796,426	\$279,936,067	\$283,561,420	3.6%						
Convertible Bonds	\$137,484,327	\$146,547,185	\$138,748,286	1.8%						
Fixed Income	\$3,003,854,833	\$3,006,629,507	\$3,011,489,784	38.5%						
Public Purpose Investments	\$130,545,426	\$132,978,738	\$130,545,426	1.7%						
Cash (invested in State Agency Pool)	\$786,988,062	\$725,311,298	\$786,398,502	10.0%						
Actual Allocation Index					2.43%	8.04%	7.74%	5.09%	6.08%	4.34%
Common School Perm Land Fund	\$3,644,755,852	\$3,859,838,175	\$3,952,943,368	100.0%	2.37%	8.14%	8.23%	5.47%	6.43%	5.10%
US Equity	\$502,787,533	\$613,886,992	\$632,884,826	16.0%						
Global Equity	\$104,588,239	\$117,558,429	\$119,013,139	3.0%						
International Equity	\$403,593,915	\$458,520,325	\$476,312,054	12.0%						
Private Equity	\$130,593,947	\$195,110,810	\$188,642,812	4.8%						
Real Estate	\$198,051,558	\$228,592,933	\$224,076,305	5.7%						
Absolute Return	\$124,156,282	\$126,019,153	\$127,651,182	3.2%						
Convertible Bonds	\$65,130,000	\$68,755,007	\$65,096,027	1.6%						
Fixed Income	\$1,261,668,102	\$1,263,723,168	\$1,265,706,895	32.0%						
Public Purpose Investments	\$18,359,738	\$393,359,738	\$18,359,738	0.5%						
Cash (invested in State Agency Pool)	\$835,826,538	\$394,311,619	\$835,200,392	21.1%						
Actual Allocation Index					2.39%	8.09%	7.92%	5.23%	6.21%	4.38%
Permanent Land Fund	\$178,558,819	\$189,247,457	\$194,023,596	100.0%	2.30%	7.81%	7.70%	5.23%	6.14%	4.70%
US Equity	\$24,988,967	\$30,318,918	\$31,235,417	16.1%						
Global Equity	\$5,082,421	\$5,697,577	\$5,768,081	3.0%						
International Equity	\$19,634,590	\$22,337,233	\$23,240,908	12.0%						
Private Equity	\$9,115,452	\$12,250,541	\$12,242,101	6.3%						
Real Estate	\$11,125,420	\$12,325,096	\$12,520,246	6.5%						
Absolute Return	\$6,878,080	\$6,981,304	\$7,071,716	3.6%						
Convertible Bonds	\$3,549,159	\$3,757,476	\$3,557,512	1.8%						
Fixed Income	\$79,856,121	\$79,939,649	\$80,072,736	41.3%						
Cash (invested in State Agency Pool)	\$18,328,610	\$15,639,662	\$18,314,879	9.4%						
Actual Allocation Index					2.31%	7.70%	7.28%	4.96%	5.91%	4.15%



Note[1]: Performance shown is gross of fees with the exception of convertible bonds and absolute return, which are shown net of fees.
Note[2]: Pooled investment performance and market values shown reflect State Agency participation.
Note[3]: Pooled investment and Actual Allocation Index performance is calculated on a capital-weighted basis using beginning-period allocations.
Note[4]: Market values shown for Public Purpose Investments reflect cost value of the investments.

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	Total Investment Value	Fiscal Year Ending 06/30/17 Market Value	Current Market Value	% of MV	QTD Return	CYTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return
Investment Funds:										
University Permanent Land Fund	\$20,009,286	\$21,764,049	\$23,048,881	100.0%	2.51%	8.55%	8.74%	5.59%	6.48%	4.69%
US Equity	\$3,681,088	\$4,717,799	\$4,868,482	21.1%						
Global Equity	\$617,884	\$694,776	\$703,374	3.1%						
International Equity	\$2,337,858	\$2,707,331	\$2,811,649	12.2%						
Private Equity	\$844,797	\$1,147,817	\$2,010,454	8.7%						
Real Estate	\$1,305,230	\$1,378,438	\$1,398,654	6.1%						
Absolute Return	\$834,425	\$846,952	\$857,921	3.7%						
Convertible Bonds	\$396,770	\$425,390	\$402,752	1.7%						
Fixed Income	\$8,131,282	\$8,121,550	\$8,137,038	35.3%						
Cash (invested in State Agency Pool)	\$1,859,951	\$1,723,997	\$1,858,557	8.1%						
<i>Actual Allocation Index</i>					2.55%	8.43%	8.48%	5.38%	6.32%	4.32%
Hathaway Scholarship	\$554,267,465	\$588,863,703	\$597,194,303	100.0%	2.42%	7.74%	7.12%	4.98%	5.55%	5.65%
US Equity	\$77,638,889	\$94,863,475	\$97,830,193	16.4%						
Global Equity	\$15,109,173	\$17,064,655	\$17,275,819	2.9%						
International Equity	\$61,125,994	\$70,453,136	\$73,208,937	12.3%						
Private Equity	\$4,020,525	\$417,685	\$3,730,357	0.6%						
Real Estate	\$34,863,569	\$42,129,753	\$42,780,020	7.2%						
Absolute Return	\$22,366,808	\$22,702,633	\$22,996,647	3.9%						
Convertible Bonds	\$10,710,409	\$11,541,298	\$10,927,097	1.8%						
Fixed Income	\$270,302,543	\$269,758,696	\$270,359,226	45.3%						
Cash (invested in State Agency Pool)	\$58,129,554	\$59,932,372	\$58,086,007	9.7%						
<i>Actual Allocation Index</i>					2.38%	7.68%	6.78%	4.88%	5.45%	5.22%
Higher Education	\$114,505,928	\$121,412,872	\$123,228,622	100.0%	2.42%	7.73%	7.13%	4.95%	5.54%	5.60%
US Equity	\$16,058,794	\$19,597,857	\$20,208,928	16.4%						
Global Equity	\$3,165,925	\$3,576,152	\$3,620,404	2.9%						
International Equity	\$12,649,513	\$14,606,907	\$15,169,800	12.3%						
Real Estate	\$7,012,319	\$8,591,294	\$8,441,281	6.9%						
Absolute Return	\$4,890,998	\$4,964,452	\$5,028,744	4.1%						
Convertible Bonds	\$2,248,679	\$2,429,909	\$2,300,595	1.9%						
Fixed Income	\$56,725,868	\$56,588,284	\$56,713,841	46.0%						
Cash (invested in State Agency Pool)	\$11,753,833	\$11,058,016	\$11,745,028	9.5%						
<i>Actual Allocation Index</i>					2.39%	7.69%	6.80%	4.85%	5.44%	5.20%



Note[1]: Performance shown is gross of fees with the exception of convertible bonds and absolute return, which are shown net of fees.

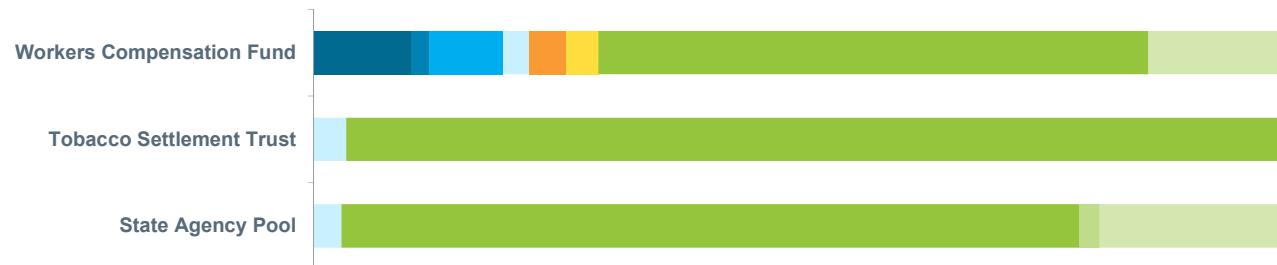
Note[2]: Pooled investment performance and market values shown reflect State Agency participation.

Note[3]: Pooled investment and Actual Allocation Index performance is calculated on a capital-weighted basis using beginning-period allocations.

Note[4]: Market values shown for Public Purpose Investments reflect cost value of the investments.

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	Total Investment Value	Fiscal Year Ending 06/30/17 Market Value	Current Market Value	% of MV	QTD Return	CYTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return
Investment Funds:										
Workers Compensation Fund	\$1,918,385,875	\$1,984,625,770	\$2,010,717,884	100.0%	1.94%	6.20%	4.96%	4.09%	4.38%	5.46%
US Equity	\$158,433,092	\$193,902,874	\$200,033,819	9.9%						
Global Equity	\$32,100,483	\$36,192,970	\$36,640,834	1.8%						
International Equity	\$126,905,903	\$145,923,426	\$151,644,423	7.5%						
Real Estate	\$58,291,808	\$74,925,548	\$75,514,211	3.8%						
Absolute Return	\$64,712,941	\$65,684,153	\$66,534,805	3.3%						
Convertible Bonds	\$53,256,782	\$56,705,540	\$53,687,804	2.7%						
Fixed Income	\$1,126,748,686	\$1,126,384,680	\$1,128,949,003	56.1%						
Cash (invested in State Agency Pool)	\$297,936,179	\$284,906,579	\$297,712,985	14.8%						
Actual Allocation Index					1.84%	6.05%	4.41%	3.99%	4.33%	5.14%
Tobacco Settlement Trust	\$235,991,353	\$84,071,542	\$236,813,063	100.0%	1.15%	3.71%	1.43%	2.91%	2.28%	4.58%
Convertible Bonds	\$8,077,226	\$2,683,232	\$7,786,299	3.3%						
Fixed Income	\$225,841,689	\$76,090,889	\$226,955,879	95.8%						
Cash (invested in State Agency Pool)	\$2,072,438	\$5,297,422	\$2,070,885	0.9%						
Actual Allocation Index					0.94%	3.40%	0.51%	2.81%	2.19%	4.31%
State Agency Pool	\$5,355,578,651	\$6,240,106,375	\$5,351,566,603	100.0%	0.94%	3.00%	1.03%	2.48%	1.92%	3.94%
Convertible Bonds	\$149,591,341	\$181,437,608	\$151,018,632	2.8%						
Fixed Income	\$4,035,827,914	\$4,587,734,635	\$4,029,786,963	75.3%						
Public Purpose Investments	\$109,894,960	\$230,210,197	\$109,894,960	2.1%						
Cash Equivalents	\$1,060,264,436	\$1,240,723,935	\$1,060,866,047	19.8%						
Actual Allocation Index					0.81%	2.94%	0.43%	2.47%	1.90%	3.74%



Note[1]: Performance shown is gross of fees with the exception of convertible bonds and absolute return, which are shown net of fees.
Note[2]: Pooled investment performance and market values shown reflect State Agency participation.
Note[3]: Pooled investment and Actual Allocation Index performance is calculated on a capital-weighted basis using beginning-period allocations.
Note[4]: Market values shown for Public Purpose Investments reflect cost value of the investments.

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Allocation by
Asset Class

	Total Investment Value	Fiscal Year Ending 06/30/17 Market Value	Current Market Value	% of MV	QTD Return	CYTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return
Wyoming State Total Fund	\$19,213,048,952	\$20,755,870,537	\$20,317,578,330	100.0%	1.92%	6.57%	5.78%	4.42%	4.79%	4.75%
<i>Wyoming State Actual Allocation Index</i>					1.82%	6.17%	5.09%	4.23%	4.59%	4.35%
US Equity										
State Street All Cap	\$1,188,501,734	\$1,468,388,420	\$1,520,242,716		4.39%	12.64%	17.89%	N/A	N/A	N/A
State Street All Cap Custom Index					4.44%	12.73%	17.99%	10.59%	14.24%	7.86%
Russell 3000					4.57%	13.91%	18.71%	10.74%	14.23%	7.57%
Epoch	\$219,989,195	\$263,860,478	\$271,082,884		4.92%	16.15%	22.24%	N/A	N/A	N/A
Lazard	\$272,037,073	\$319,270,163	\$318,101,450		2.54%	10.22%	7.25%	N/A	N/A	N/A
Russell 3000					4.57%	13.91%	18.71%	10.74%	14.23%	7.57%
UW Portfolio Management Program	\$1,000,000	\$1,410,522	\$1,462,574		4.16%	14.66%	17.82%	10.33%	12.51%	4.57%
S&P 500					4.48%	14.24%	18.61%	10.81%	14.22%	7.44%
RBC	\$167,071,858	\$201,620,672	\$213,059,945		6.94%	6.51%	17.26%	N/A	N/A	N/A
Russell 2000					5.67%	10.94%	20.74%	12.18%	13.79%	7.85%
Total US Equity	\$1,848,599,860	\$2,254,550,255	\$2,323,949,571	11.4%						
Global Equity										
Arrowstreet	\$379,181,793	\$426,401,778	\$431,678,224		5.15%	20.40%	22.50%	N/A	N/A	N/A
MSCI ACW					5.18%	17.25%	18.65%	7.43%	10.20%	3.88%
Total Global Equity	\$379,181,793	\$426,401,778	\$431,678,224	2.1%						
International Equity										
Internal International Equity Portfolio	\$135,000,000	\$160,143,255	\$167,831,573		5.93%	21.53%	19.44%	N/A	N/A	N/A
FTSE All World Ex US					5.95%	20.73%	19.49%	5.11%	7.35%	1.72%
Northern Trust	\$972,907,939	\$839,582,600	\$1,110,718,540		6.40%	21.49%	19.83%	4.82%	7.13%	N/A
MSCI ACW Ex US					6.16%	21.13%	19.61%	4.70%	6.97%	1.28%
Fisher Investments	\$360,147,528	\$427,481,219	\$453,878,776		6.91%	26.44%	24.31%	8.29%	9.29%	3.32%
MSCI ACW Ex US [4]					6.16%	21.13%	19.61%	4.70%	6.97%	0.78%
Manning & Napier	\$6,901,460	\$245,415,336	\$7,274,686		N/A	N/A	N/A	N/A	N/A	N/A
The Boston Company	\$0	\$42,764	\$0		N/A	N/A	N/A	N/A	N/A	N/A
Total International Equity	\$1,474,956,927	\$1,672,665,173	\$1,739,703,575	8.6%						
Private Equity										
Access Venture Partners II	\$5,177,175	\$14,559,968	\$12,313,721				See Note[6]			
Cheyenne Capital Fund, L.P.	\$175,349,294	\$294,496,615	\$294,496,615				See Note[6]			
Hamilton Lane Nowood Fund, L.P.	\$113,996,066	\$119,855,970	\$127,885,240				See Note[6]			
Neuberger Berman Sauger Fund, L.P.	\$126,600,000	\$156,244,016	\$163,244,607				See Note[6]			
S&P 500 + 5%					5.76%	18.50%	24.54%	16.35%	19.93%	12.81%
Total Private Equity	\$421,122,536	\$585,156,569	\$597,940,184	2.9%						
Real Estate										
Clarion Lion	\$266,303,630	\$324,319,700	\$327,945,234		2.12%	6.78%	8.35%	12.02%	12.07%	3.97%
UBS Trumbull	\$241,303,630	\$272,122,890	\$273,868,581		1.48%	3.88%	5.40%	8.99%	9.58%	5.17%
NCREIF ODCE					1.87%	5.43%	7.66%	10.85%	11.59%	5.03%
Core Real Estate	\$507,607,260	\$596,442,590	\$601,813,815	3.0%						
Cornerstone	\$7,015,723	\$7,305,816	\$7,233,786				See Note[6]			
Heitman	\$1,764,838	\$75,996	\$74,623				See Note[6]			
M&G	\$60,247,829	\$64,640,734	\$48,048,607				See Note[6]			
Northwood	\$115,005,749	\$125,693,992	\$132,731,210				See Note[6]			
SC Capital	\$23,009,909	\$15,520,739	\$23,834,115				See Note[6]			
TA Realty	\$7,909,056	\$7,257,306	\$6,080,474				See Note[6]			
WestRiver	\$35,630,057	\$48,317,599	\$48,037,938				See Note[6]			
NCREIF Property					1.70%	5.07%	6.89%	9.83%	10.35%	6.23%
Value-Added Real Estate	\$250,583,161	\$268,812,182	\$266,040,753	1.3%						
Total Real Estate	\$758,190,421	\$865,254,772	\$867,854,568	4.3%						

Note[1]: Returns are stated in traditional total return terms and do not specify realized income.
Note[2]: State Street All Cap Custom Index consists of 69% R 3000, 24% FTSE RAFI US 1000, 7% MSCI USA Minimum Volatility.
Note[3]: Market value shown for Manning & Napier represents residual assets and subsequent transactions from the liquidation process.
Note[4]: Fisher Index consists of MSCI EAFE (Gross) through July 2010 and the MSCI ACW Ex US (Net) thereafter.
Note[5]: Market values for non-core real estate and private equity are as of the most recent valuation, adjusted for subsequent cash flows. Investment (Cost) Values are not lagged.
Note[6]: Performance for Private Equity and Value-Added Real Estate investments is calculated on an IRR basis. For further analysis, please refer to the supplementary alternatives report.
Note[7]: Market values for M&G are converted from British Pounds using the noon New York City Federal exchange rate. Cost values are converted using the 5pm London WM Benchmark rate.

Wyoming State Treasurer's Office
Investment Performance - Total Performance
September 30, 2017

Allocation by
Asset Class

	Total Investment Value	Fiscal Year Ending 06/30/17 Market Value	Current Market Value	% of MV	QTD Return	CYTD Return	1 Year Return	3 Year Return	5 Year Return	10 Year Return
<u>Absolute Return</u>										
PAAMCO - Jackalope Fund HFRI FOF Comp Index	\$499,635,960	\$507,134,714	\$513,702,435		1.30% 2.27%	3.59% 5.56%	4.87% 6.46%	0.75% 2.22%	4.18% 3.84%	N/A 1.07%
Total Absolute Return	<u>\$499,635,960</u>	<u>\$507,134,714</u>	<u>\$513,702,435</u>	2.5%						
<u>Convertible Bonds</u>										
Allianz Global Investors BofA ML All Quality Convertible	<u>\$486,668,624</u>	<u>\$517,843,821</u>	<u>\$490,285,383</u>	2.4%	3.82% 3.77%	12.21% 11.96%	13.14% 14.32%	5.97% 6.73%	9.83% 10.95%	7.54% 6.80%
<u>Fixed Income</u>										
C.S. McKee	\$1,260,107,187	\$1,265,292,081	\$1,267,363,126		0.90%	3.03%	0.42%	2.90%	N/A	N/A
JP Morgan Core	\$2,137,210,704	\$2,158,626,120	\$2,163,314,621		0.78%	3.23%	0.07%	2.97%	N/A	N/A
PIMCO Core	\$2,180,894,413	\$2,220,137,910	\$2,226,827,307		1.16%	3.65%	0.62%	3.07%	N/A	N/A
Bloomberg US Aggregate					0.85%	3.14%	0.07%	2.71%	2.06%	4.27%
Neuberger Berman Credit	\$934,157,642	\$939,349,147	\$940,865,910		1.23%	3.55%	4.42%	3.98%	N/A	N/A
Seix	\$943,160,037	\$965,016,793	\$964,901,247		1.43% 1.30%	4.42% 4.20%	5.69% 5.37%	4.71% 4.30%	N/A 4.40%	N/A 5.57%
Credit Custom Index										
Grosvenor Silvery Lupine Fund	\$259,661,245	\$323,784,574	\$314,317,294		2.13% 2.31%	6.87% 7.48%	9.75% 10.32%	6.59% 6.81%	N/A 8.04%	N/A 8.41%
CS Western European HY										
Investec	\$297,714,010	\$213,007,182	\$218,902,113		4.04%	15.97%	9.15%	0.19%	N/A	N/A
Stone Harbor	\$297,712,381	\$204,548,478	\$209,368,012		3.88% 3.55%	14.80% 14.28%	7.80% 7.32%	-0.13% 0.26%	N/A -0.91%	N/A 3.80%
JPM GBI-EM Gbl Dvf'd										
State Street TIPS	\$726,621,565	\$713,634,440	\$718,517,225		0.96% 0.90%	1.67% 1.86%	-0.87% -0.83%	1.69% 1.71%	N/A 0.04%	N/A 3.97%
Bloomberg US Trsy: US TIPS (Series B)										
Internal Fixed Income Portfolio	\$2,548,584,475	\$2,573,039,000	\$2,568,390,640		0.38% 0.34%	2.09% 1.55%	0.85% -0.66%	1.94% 1.58%	1.47% 1.01%	2.92% 3.09%
Bloomberg US Gov't: Int. Term Bond Index										
Total Fixed Income	<u>\$11,585,823,660</u>	<u>\$11,576,435,726</u>	<u>\$11,592,767,494</u>	57.1%						
<u>Public Purpose Investments</u>	<u>\$300,104,164</u>	<u>\$811,819,612</u>	<u>\$300,104,164</u>	1.5%	N/A	N/A	N/A	N/A	N/A	N/A
<u>Cash & Cash Equivalents</u>										
JP Morgan Cash Composite	<u>\$1,458,765,008</u>	<u>\$1,538,608,117</u>	<u>\$1,459,592,735</u>	7.2%	0.27% 0.27%	0.70% 0.60%	0.70% 0.56%	0.52% 0.41%	0.40% 0.30%	0.92% 0.86%
JP Morgan Cash Custom Index										

Note[1]: Performance shown is gross of fees with the exception of absolute return and convertible bonds, which are shown net of fees.

Note[2]: Returns are stated in traditional total return terms and do not specify realized income.

Note[3]: The Credit Custom Index consists of 20% Bloomberg US Credit, 20% BofA ML US HY Master II Constrained, 60% S&P/LSTA Leveraged Loan.

Note[4]: Internal Fixed Income Portfolio performance excludes distressed securities taken in from dismissed managers (market value includes distressed securities).

Note[5]: Internal Fixed Income Portfolio Index consists of the Bloomberg US Gov't: Int. Term Bond Index; prior to December 2009 the index consisted of the Bloomberg US Gov't/Credit Bond Index.

Note[6]: Market values shown for Public Purpose Investments reflect cost value of the investments.

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

As of September 30, 2017

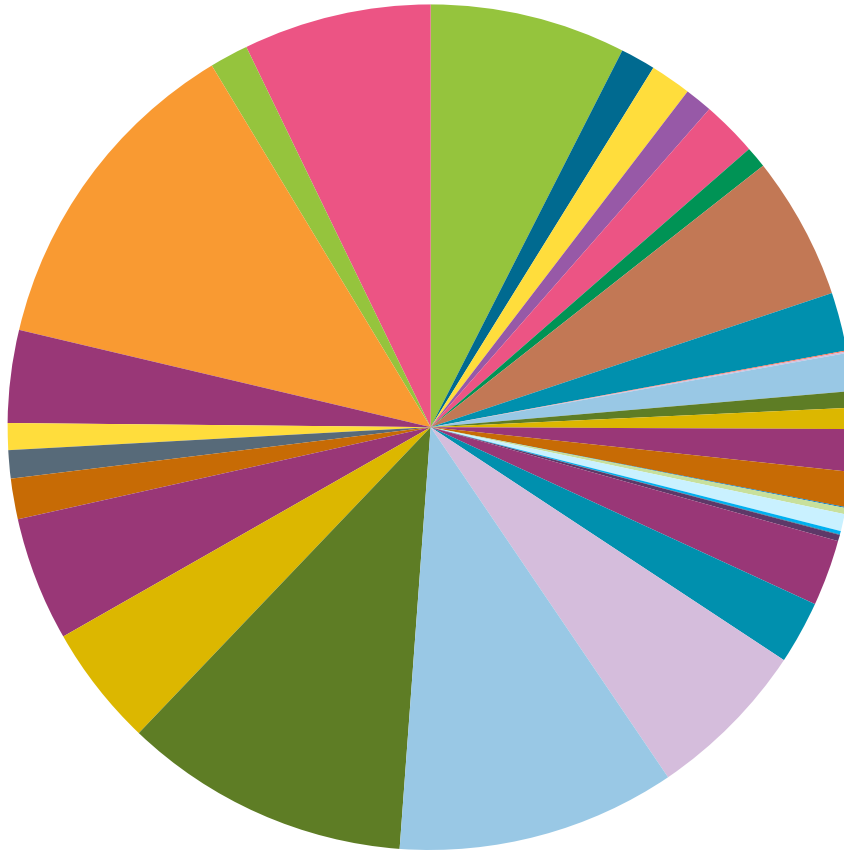
Asset Allocation & Performance			
	Allocation		Performance (%)
	Market Value (\$)	%	FYTD
Total Fund	20,317,578,330	100.00	1.92
US Equity Composite	2,323,949,571	11.44	4.42
State Street All Cap	1,520,242,716	7.48	4.39
Epoch	271,082,884	1.33	4.92
Lazard	318,101,450	1.57	2.54
UW Portfolio Mgmt Program	1,462,574	0.01	4.16
RBC	213,059,945	1.05	6.94
Global Equity Composite	431,678,224	2.12	5.15
Arrowstreet	431,678,224	2.12	5.15
Int'l Equity Composite	1,739,703,575	8.56	6.24
Internal International Equity Portfolio	167,831,573	0.83	5.93
Northern Trust	1,110,718,540	5.47	6.40
Fisher Investments	453,878,776	2.23	6.91
Manning & Napier	7,274,686	0.04	0.27
Private Equity Composite	597,940,184	2.94	N/A
Access Venture Partners II	12,313,721	0.06	N/A
Cheyenne Equity Capital Fund, L.P.	294,496,615	1.45	N/A
Hamilton Lane Nowood Fund, L.P.	127,885,240	0.63	N/A
Neuberger Berman Sauger Fund, L.P.	163,244,607	0.80	N/A
Real Estate Composite	867,854,568	4.27	N/A
Clarion Lion	327,945,234	1.61	2.12
UBS Trumbull	273,868,581	1.35	1.48
Cornerstone	7,233,786	0.04	N/A
Heitman	74,623	0.00	N/A
M&G	48,048,607	0.24	N/A
Northwood	132,731,210	0.65	N/A

Asset Allocation & Performance			
	Allocation		Performance (%)
	Market Value (\$)	%	FYTD
SC Capital	23,834,115	0.12	N/A
TA Associates Realty	6,080,474	0.03	N/A
WestRiver	48,037,938	0.24	N/A
Absolute Return Composite	513,702,435	2.53	1.30
PAAMCO - Jackalope Fund	513,702,435	2.53	1.30
Convertible Bonds Composite	490,285,383	2.41	3.82
Allianz Global Investors	490,285,383	2.41	3.82
Total Fixed Income Composite	11,592,767,494	57.06	1.01
C.S. McKee	1,267,363,126	6.24	0.90
JP Morgan Core	2,163,314,621	10.65	0.78
PIMCO Core	2,226,827,307	10.96	1.16
Neuberger Berman Credit	940,865,910	4.63	1.23
Seix	964,901,247	4.75	1.43
Grosvenor Silvery Lupine Fund	314,317,294	1.55	2.13
Investec	218,902,113	1.08	4.04
Stone Harbor	209,368,012	1.03	3.88
State Street TIPS	718,517,225	3.54	0.96
Internal Fixed Income Portfolio	2,568,390,640	12.64	0.38
Cash Equivalents	1,459,592,735	7.18	0.27
Public Purpose Investments	300,104,164	1.48	N/A

Schedule of Investable Assets - Total Fund Composite Ex Public Purpose Investments						
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return	Unit Value
FYTD	19,944,050,925	-306,829,879	380,253,121	20,017,474,167	1.92	101.92

Allocations may not sum up to 100% exactly due to rounding. Performance is gross of fees, except for the convertible bond portfolio and absolute return, which are net of fees. Performance excludes Public Purpose Investments (PPIs). Wyoming State Treasurer's Office fiscal year ends on June 30th. Market value for Manning & Napier represents residual assets and subsequent transactions from the liquidation process.

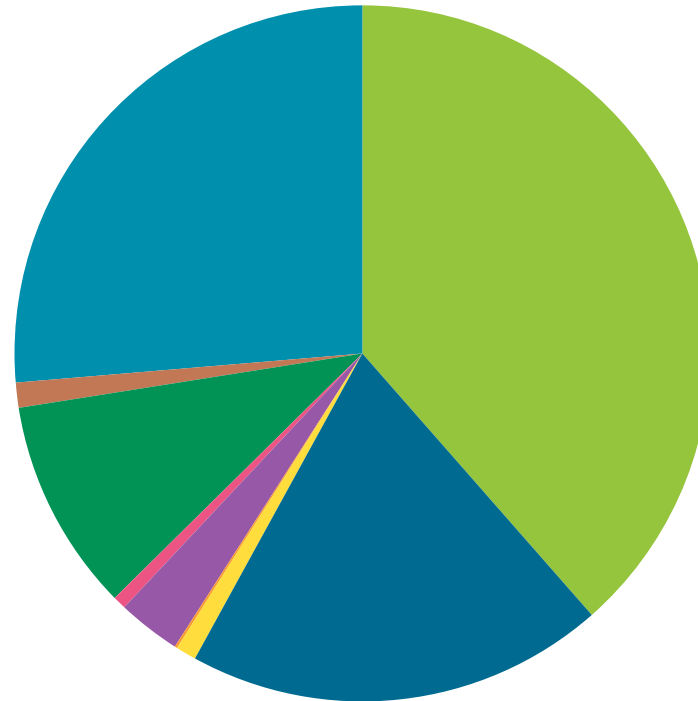
September 30, 2017 : \$20,317,578,330



	Market Value (\$)	Allocation (%)
State Street All Cap	1,520,242,716	7.48
Epoch	271,082,884	1.33
Lazard	318,101,450	1.57
UW Portfolio Mgmt Program	1,462,574	0.01
RBC	213,059,945	1.05
Arrowstreet	431,678,224	2.12
Internal International Equity Portfolio	167,831,573	0.83
Northern Trust	1,110,718,540	5.47
Fisher Investments	453,878,776	2.23
Manning & Napier	7,274,686	0.04
Access Venture Partners II	12,313,721	0.06
Cheyenne Equity Capital Fund, L.P.	294,496,615	1.45
Hamilton Lane Nowood Fund, L.P.	127,885,240	0.63
Neuberger Berman Sauger Fund, L.P.	163,244,607	0.80
Clarion Lion	327,945,234	1.61
UBS Trumbull	273,868,581	1.35
Cornerstone	7,233,786	0.04
Heitman	74,623	0.00
M&G	48,048,607	0.24
Northwood	132,731,210	0.65
SC Capital	23,834,115	0.12
TA Associates Realty	6,080,474	0.03
WestRiver	48,037,938	0.24
PAAMCO - Jackalope Fund	513,702,435	2.53
Allianz Global Investors	490,285,383	2.41
C.S. McKee	1,267,363,126	6.24
JP Morgan Core	2,163,314,621	10.65
PIMCO Core	2,226,827,307	10.96
Neuberger Berman Credit	940,865,910	4.63
Seix	964,901,247	4.75
Grosvenor Silvery Lupine Fund	314,317,294	1.55
Investec	218,902,113	1.08
Stone Harbor	209,368,012	1.03
State Street TIPS	718,517,225	3.54
Internal Fixed Income Portfolio	2,568,390,640	12.64
Public Purpose Investments	300,104,164	1.48
JP Morgan Cash Composite	1,459,592,735	7.18

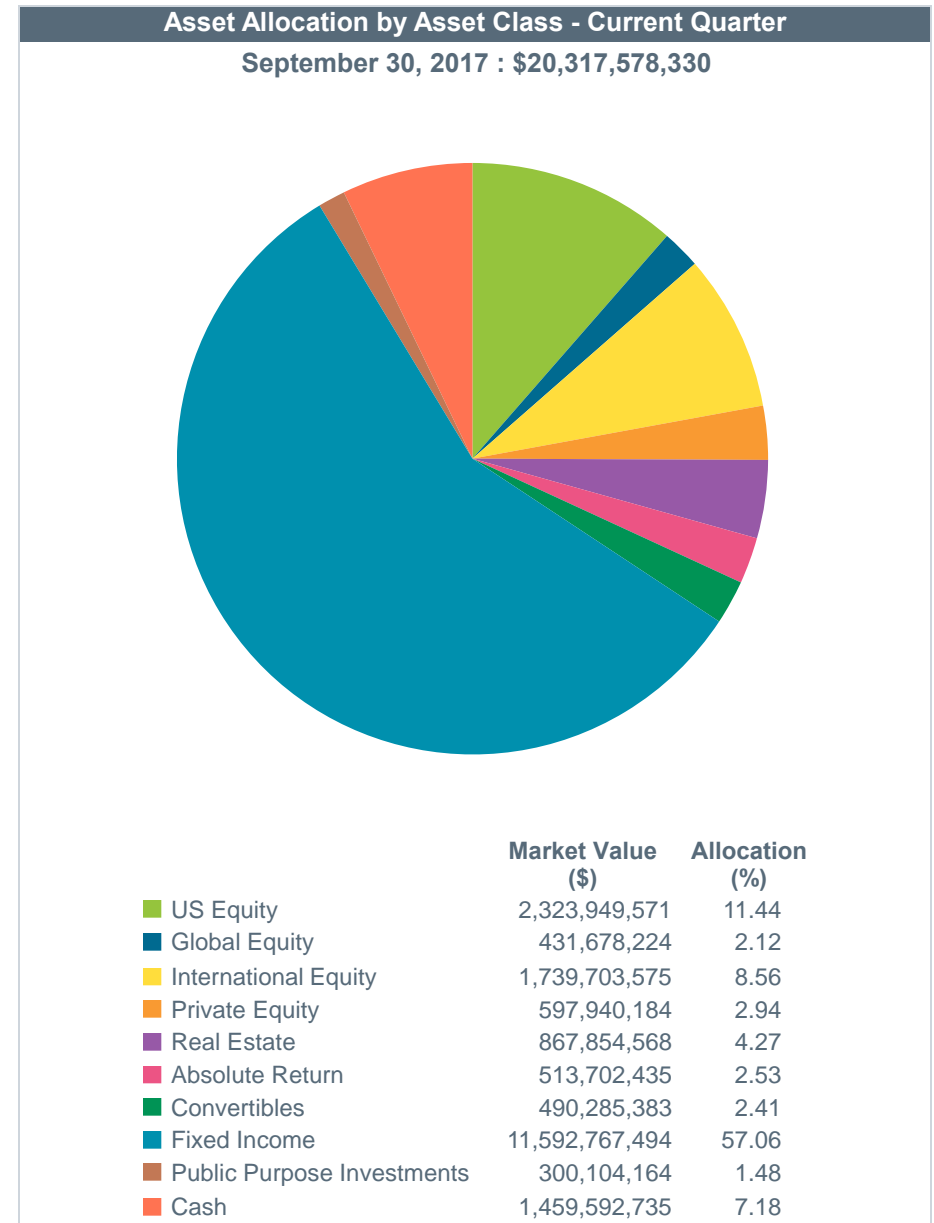
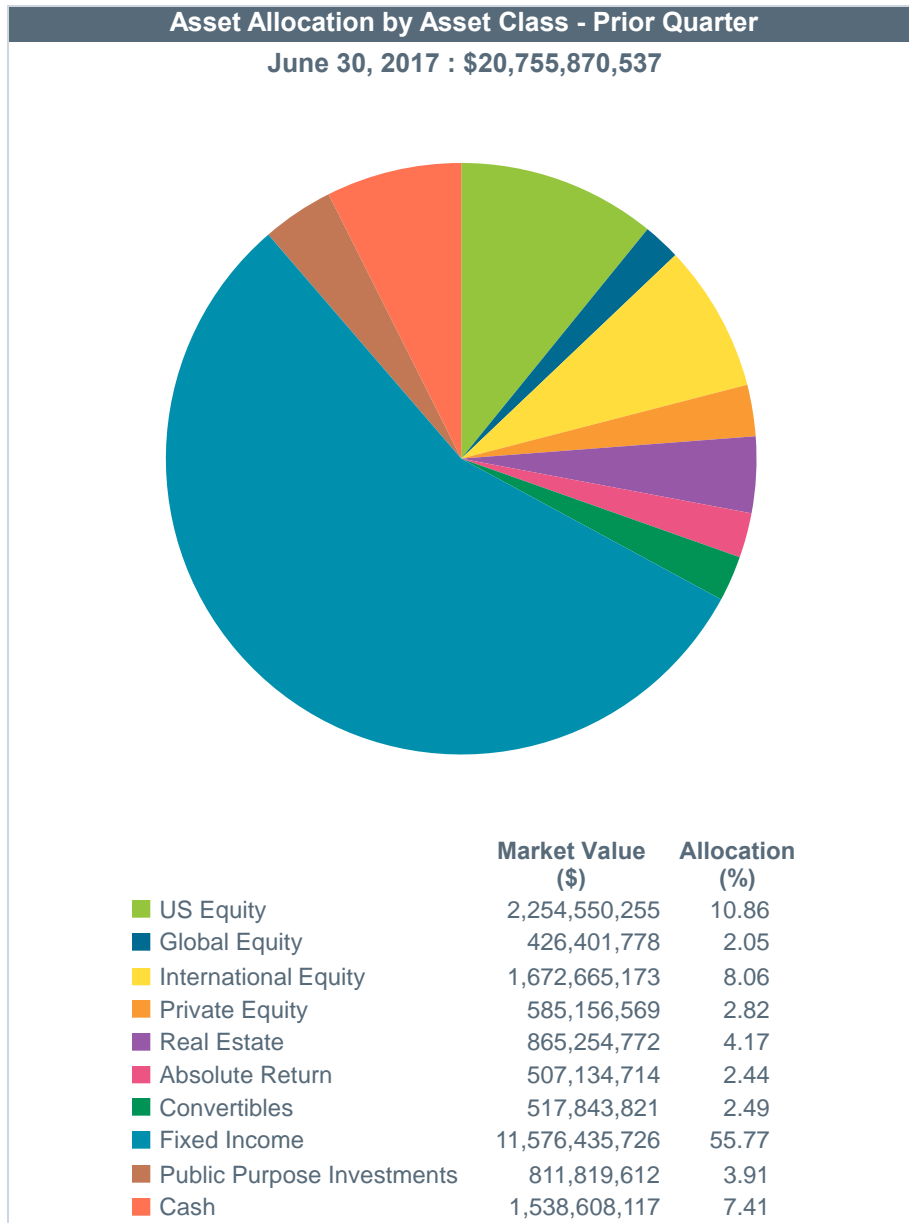
Allocations shown may not sum up to 100% exactly due to rounding.

September 30, 2017 : \$20,317,578,330

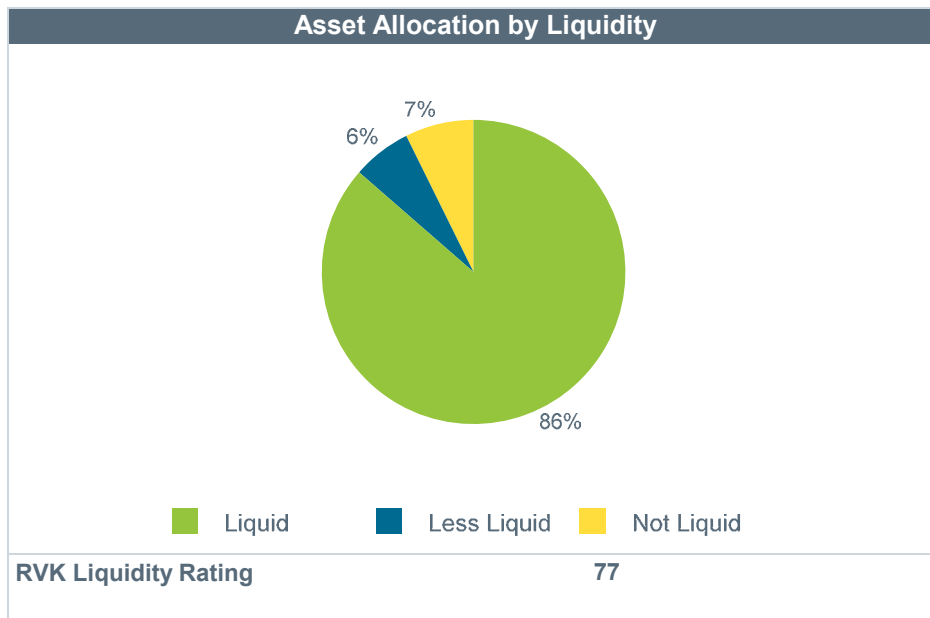
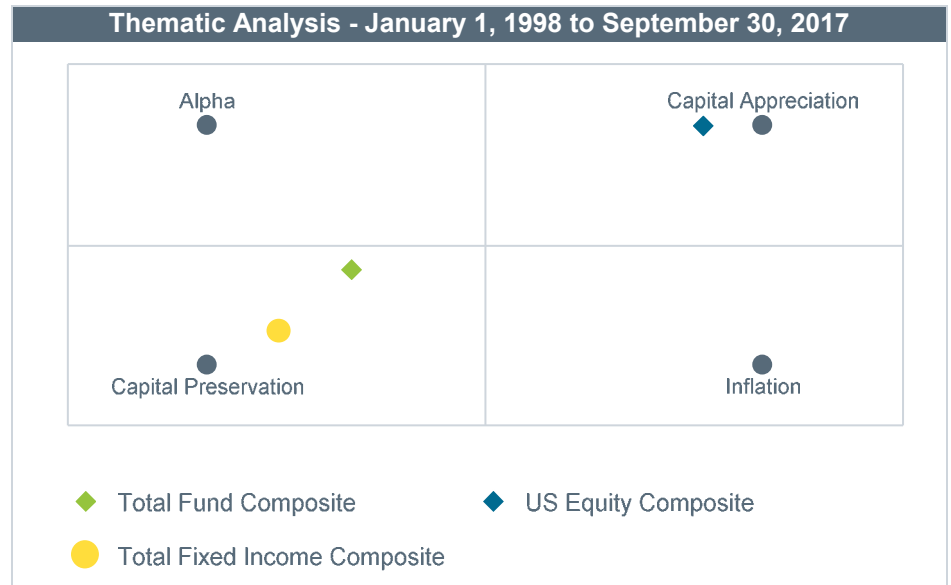
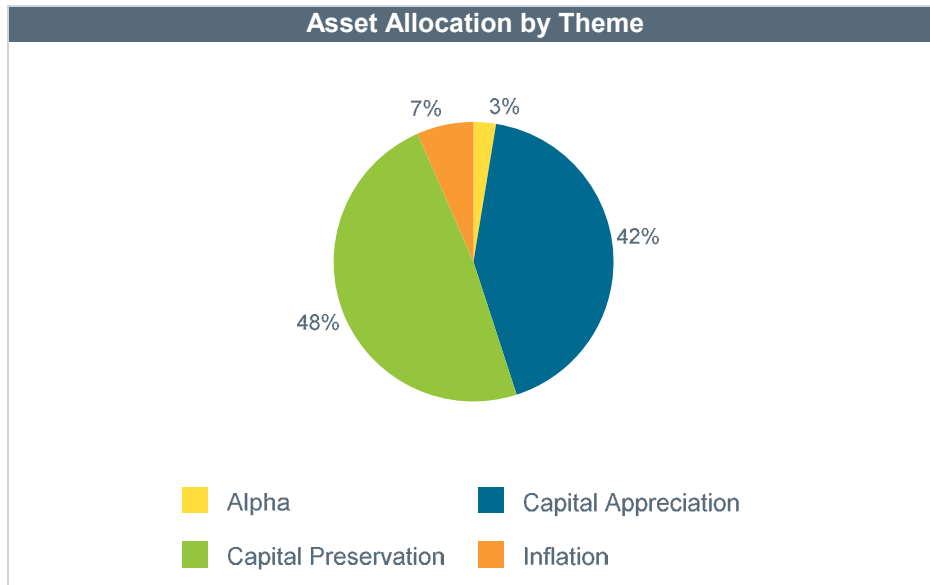


	Market Value (\$)	Allocation (%)
Permanent Mineral Trust	7,828,042,011	38.53
Common School PLF	3,952,943,369	19.46
Permanent Land Fund	194,023,596	0.95
University Permanent Land Fund	23,048,881	0.11
Hathaway Scholarship	597,194,303	2.94
Higher Education	123,228,622	0.61
Workers Compensation Fund	2,010,717,884	9.90
Tobacco Settlement Trust	236,813,063	1.17
State Agency Pool	5,351,566,603	26.34

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



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



Correlation Matrix - 10 Years

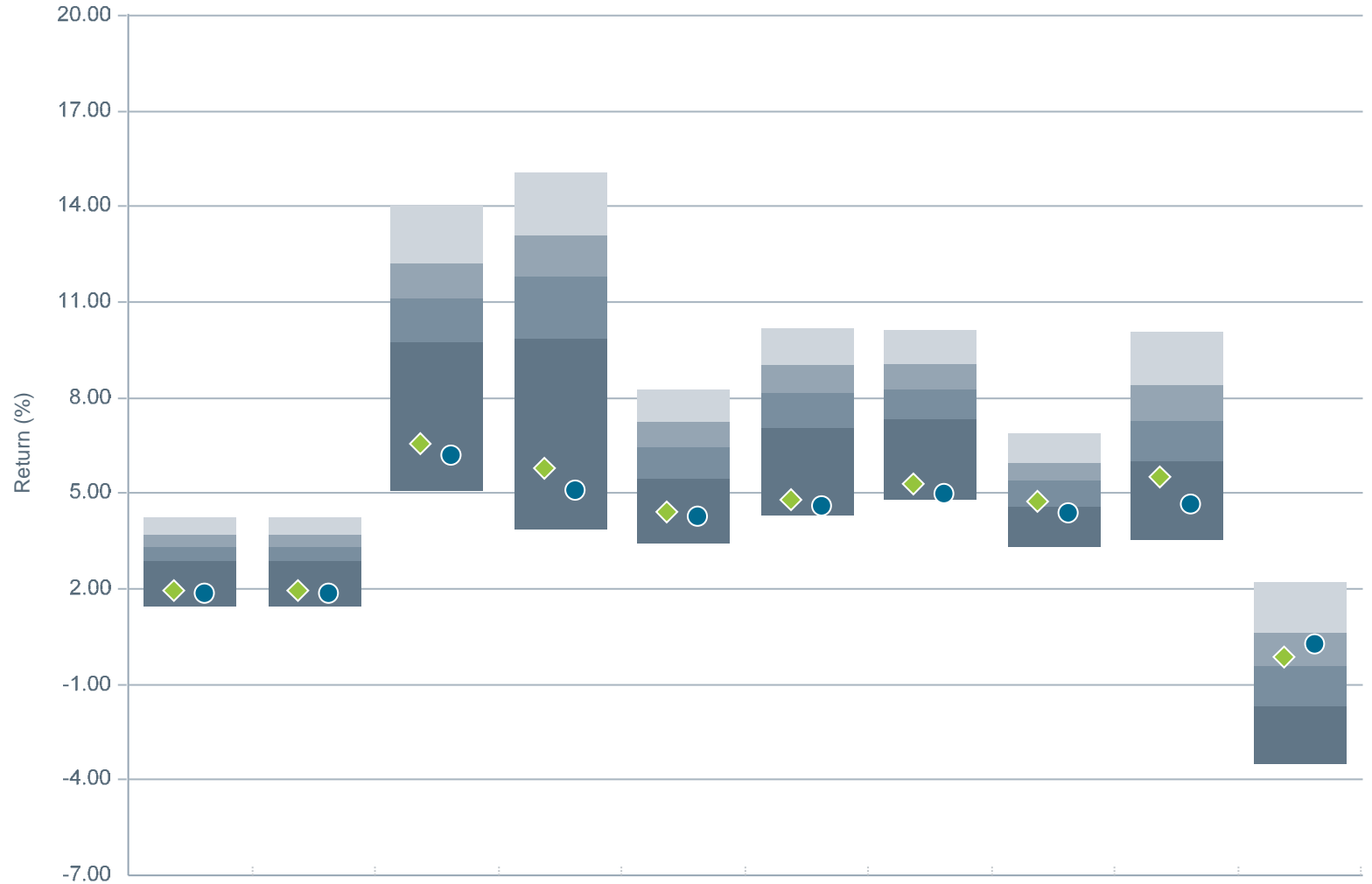
	A	B	C	D
A	1.00			
B	0.56	1.00		
C	-0.37	-0.27	1.00	
D	0.46	0.85	-0.03	1.00

A = HFRI EH: Eq Mkt Neut Index (Alpha)
 B = MSCI ACW Index (USD) (Gross) (Capital Appreciation)
 C = Bloomberg US Gov't Bond Index (Capital Preservation)
 D = Real Return Custom Index (Inflation)

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 Master Trust - Total Fund
Plan Sponsor Peer Group Analysis

As of September 30, 2017

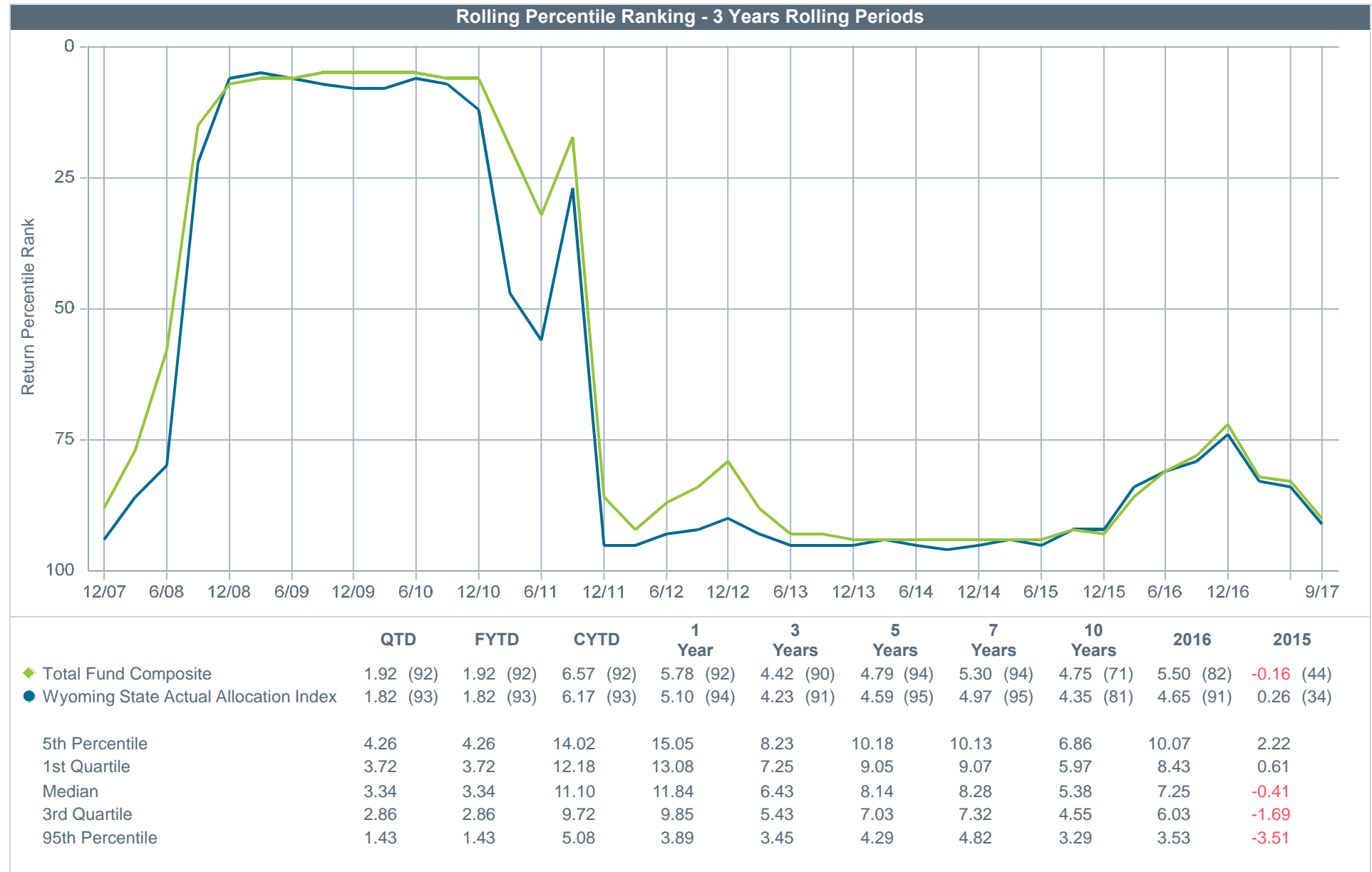


	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015
◆ Total Fund Composite	1.92 (92)	1.92 (92)	6.57 (92)	5.78 (92)	4.42 (90)	4.79 (94)	5.30 (94)	4.75 (71)	5.50 (82)	-0.16 (44)
● Wyoming State Actual Allocation Index	1.82 (93)	1.82 (93)	6.17 (93)	5.10 (94)	4.23 (91)	4.59 (95)	4.97 (95)	4.35 (81)	4.65 (91)	0.26 (34)
Median	3.34	3.34	11.10	11.84	6.43	8.14	8.28	5.38	7.25	-0.41
Population	2,014	2,014	1,941	1,905	1,752	1,618	1,456	1,215	2,428	2,298

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

Wyoming State Treasurer's Office
All Master Trust - Total Fund
Rolling Percentile Ranking and Plan Sponsor Peer Group Analysis

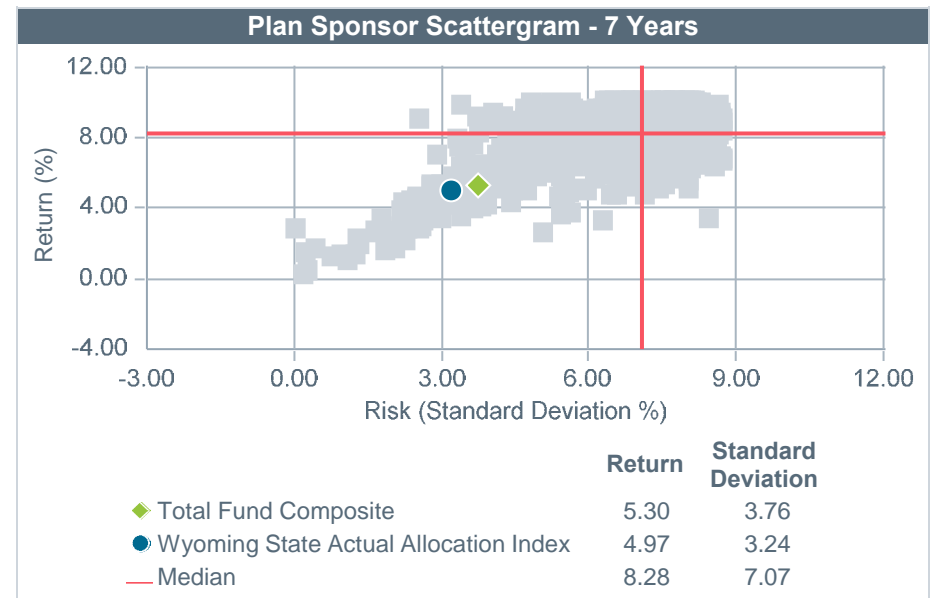
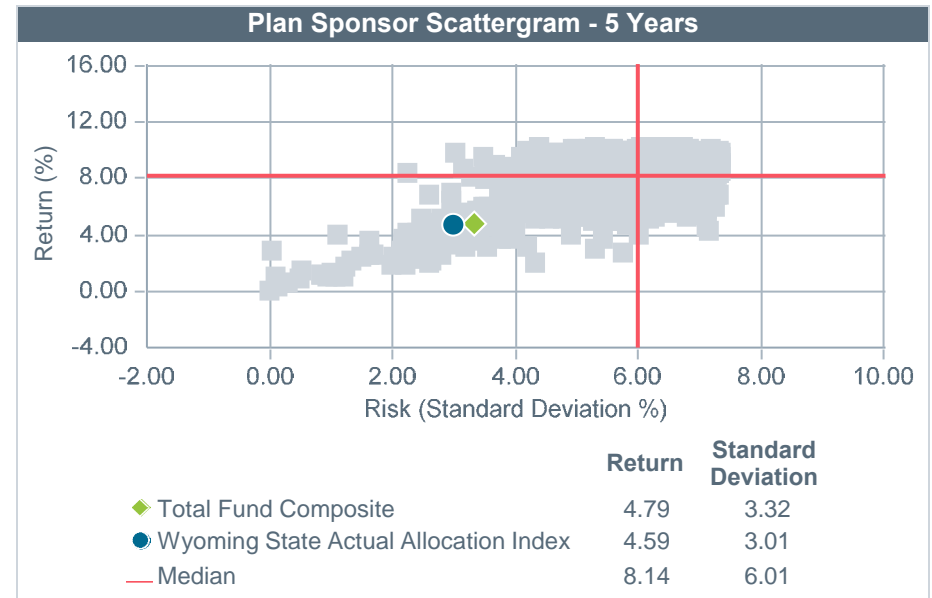
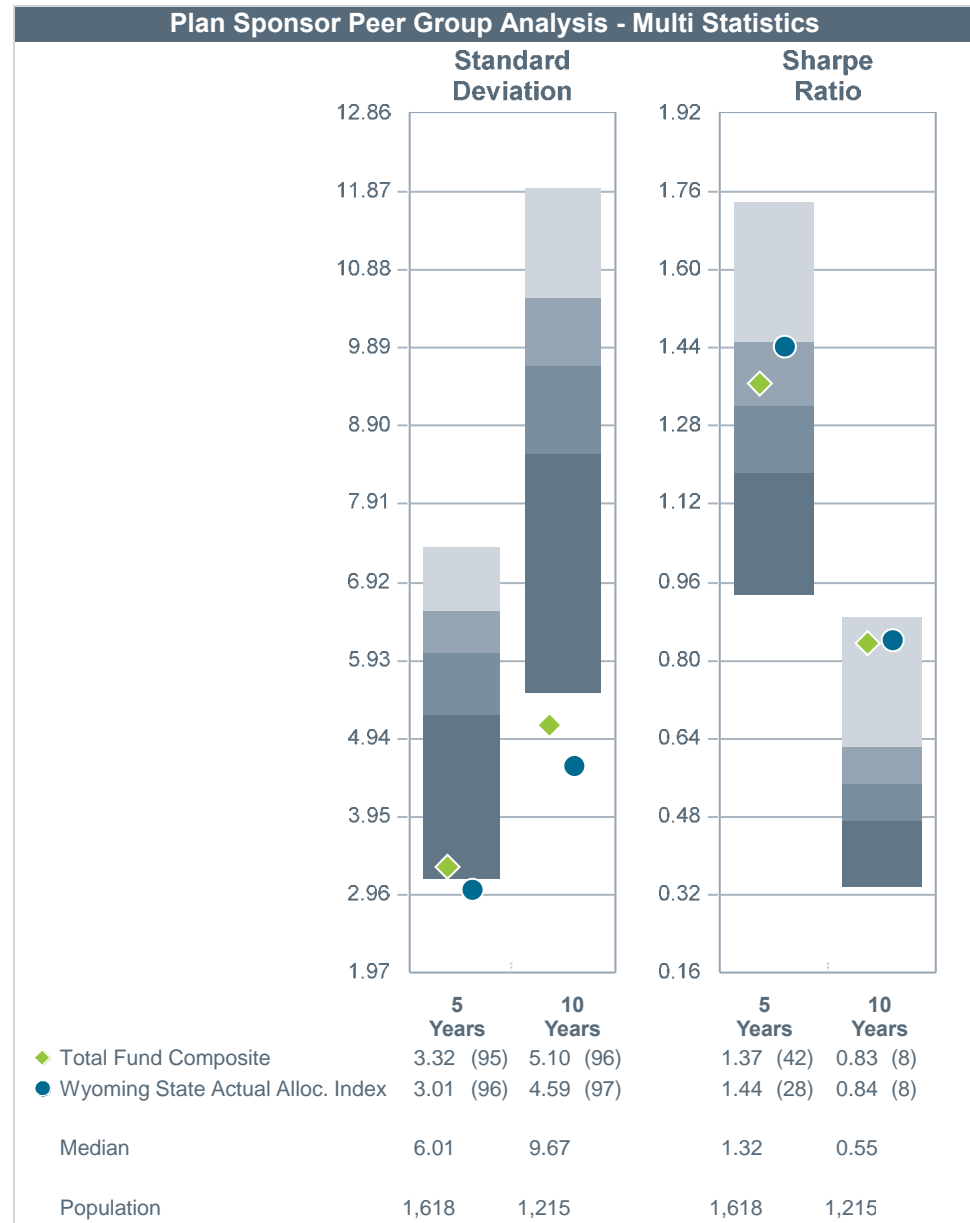
As of September 30, 2017



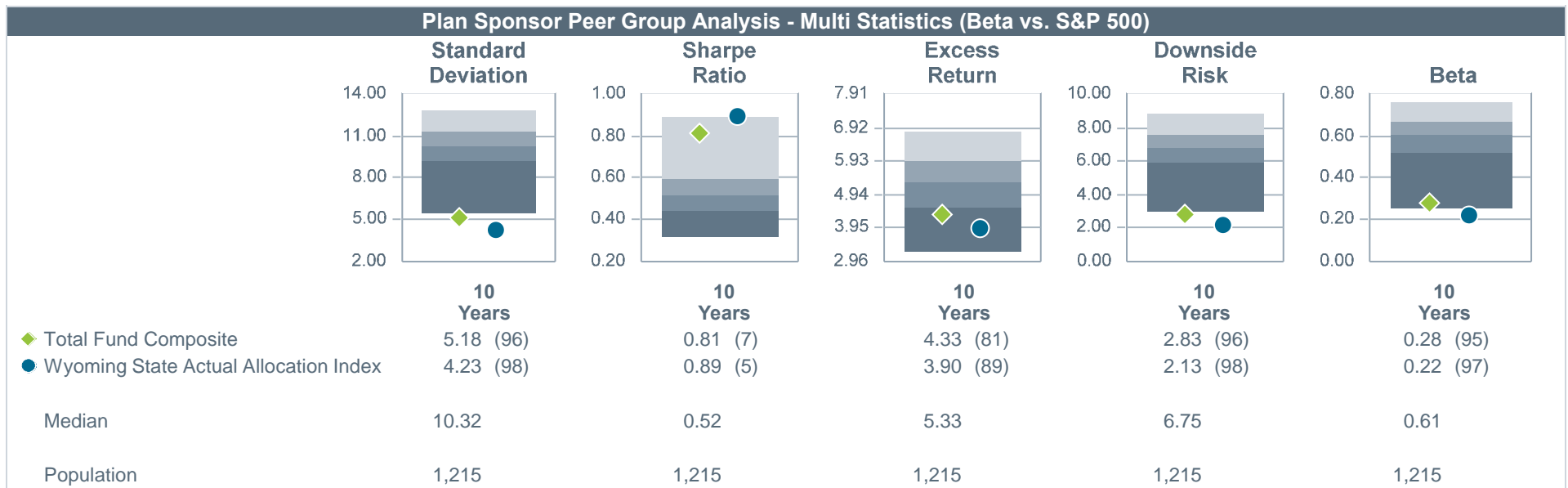
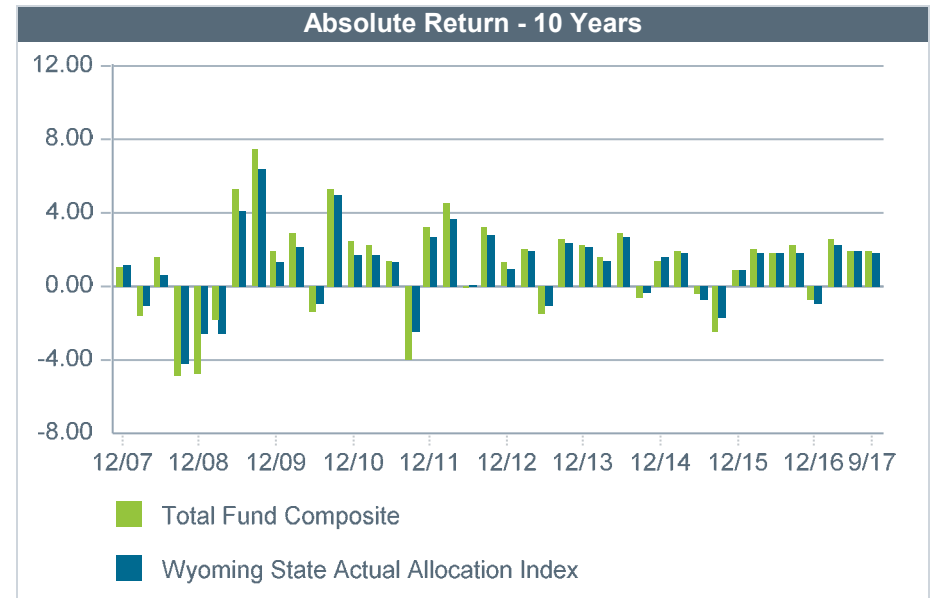
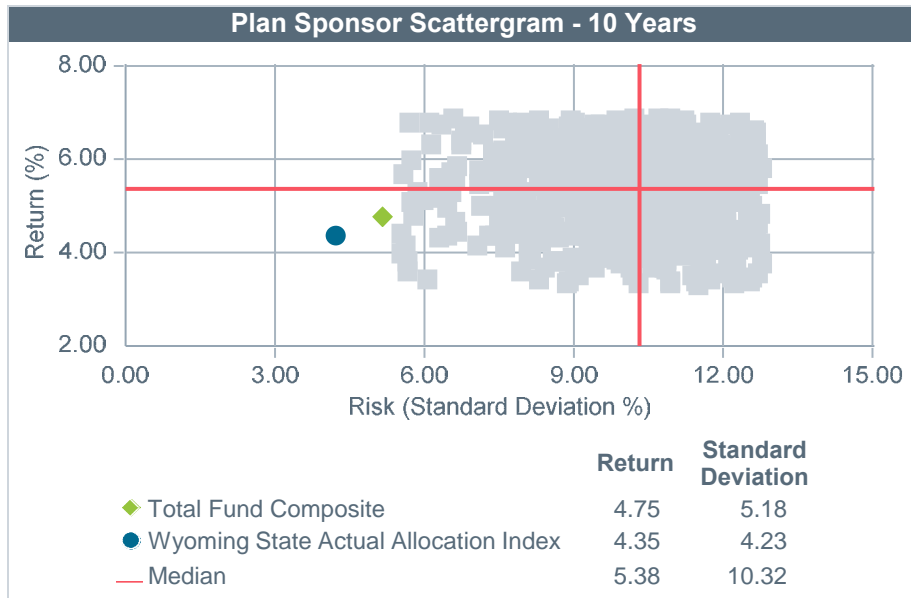
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.
Wyoming State Treasurer's Office fiscal year ends on June 30th.

Wyoming State Treasurer's Office
Total Fund Composite vs. All Master Trust - Total Fund
Plan Sponsor Peer Group Scattergram and Multi Statistics

As of September 30, 2017



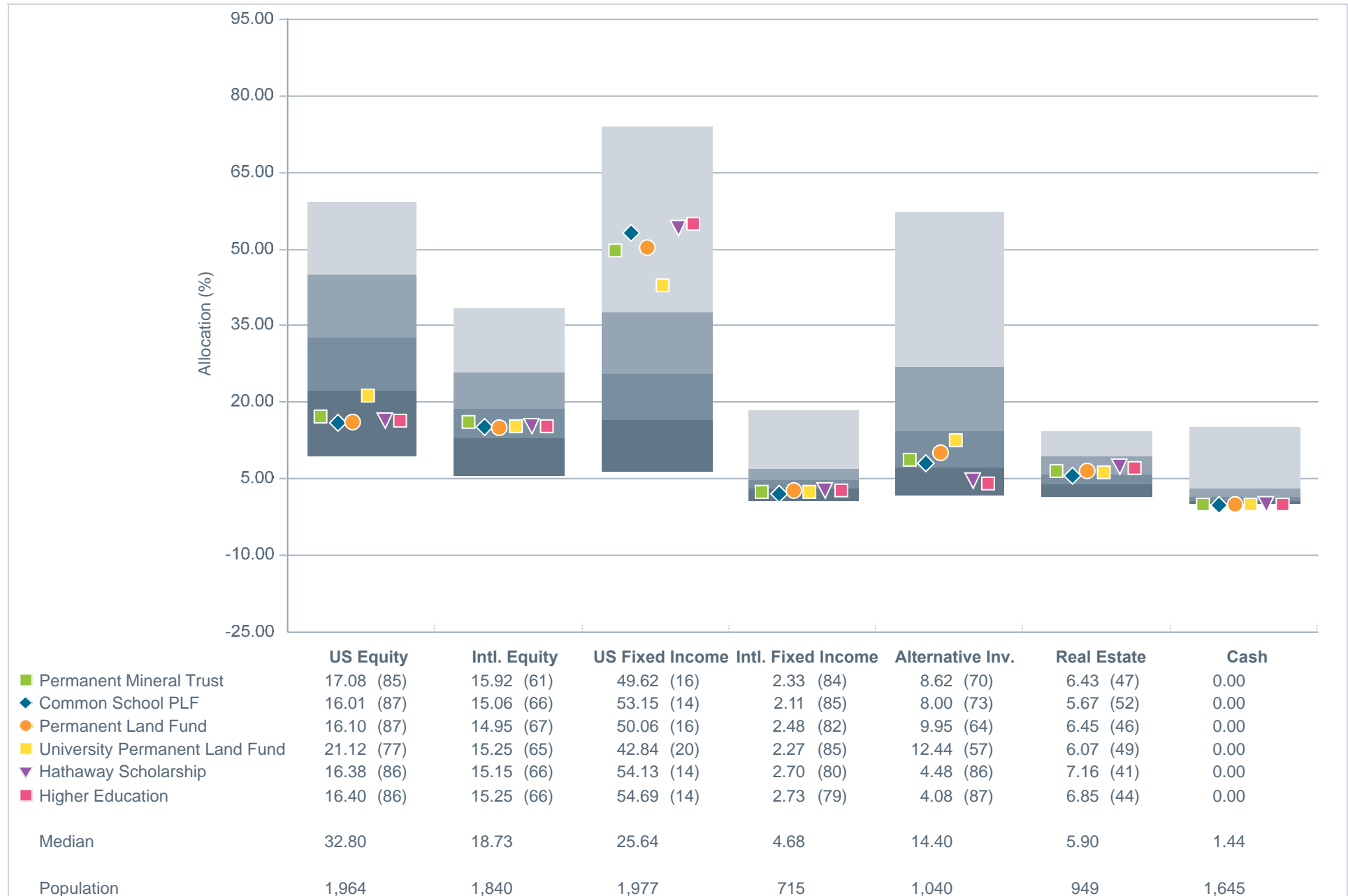
Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



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

Wyoming State Treasurer's Office
All Master Trust - Total Fund
Plan Sponsor TF Asset Allocation

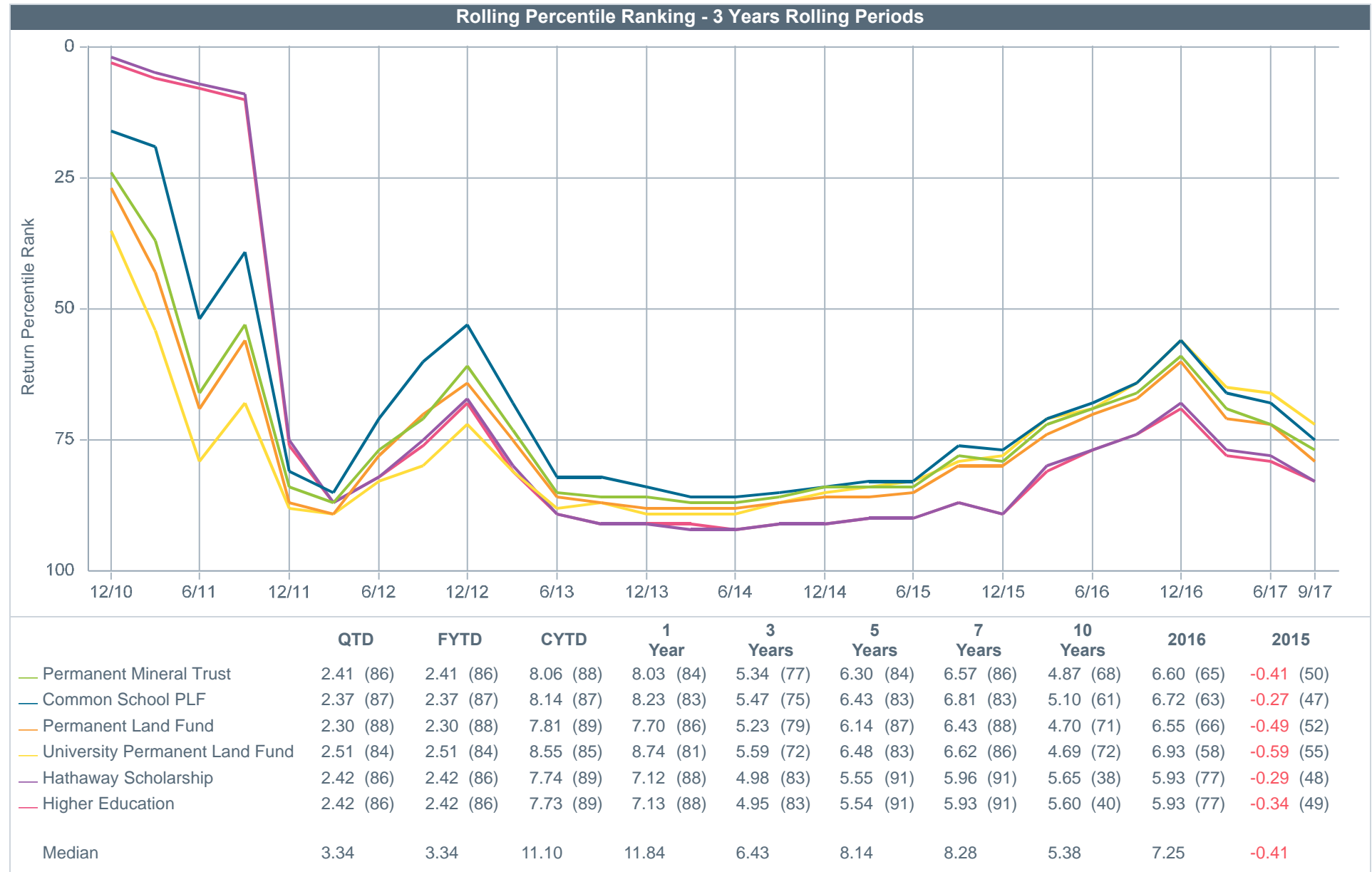
As of September 30, 2017



Parentheses contain percentile ranks. Intl. Equity Allocation shown includes Global Equity. US Fixed Income allocation shown includes Convertibles and Cash (inv. in SAP).

Wyoming State Treasurer's Office
All Master Trust - Total Fund
Rolling Percentile Ranking and Plan Sponsor Peer Group Analysis

As of September 30, 2017



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

Wyoming State Treasurer's Office
Permanent Mineral Trust
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Permanent Fund

Main Objective: Produce maximized long-term investment income and capital gains while providing appropriate liquidity

Primary Investment Goal: Capital appreciation, total return, and protection against inflation

Long-Term Return Expectation: CPI + 3%

Spending Policy: 5% of the five-year rolling average market value, calculated on the first day of the fiscal year

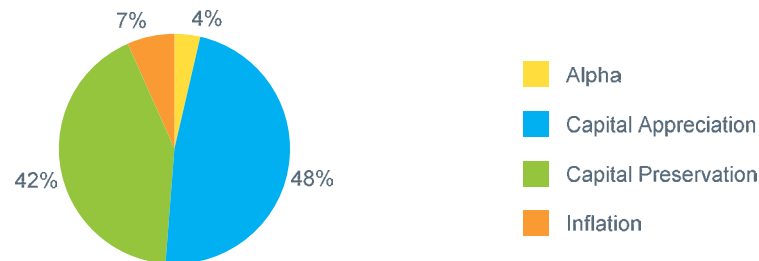
Funding Source: Constitutional and statutory mineral severance tax revenues, and occasional direct legislative appropriations

Liquidity Constraints: The corpus cannot be spent but only invested for income and capital gains

Maximum Equity Allocation: 70%

Current Target Equity Allocation: 50%

Asset Allocation by Theme



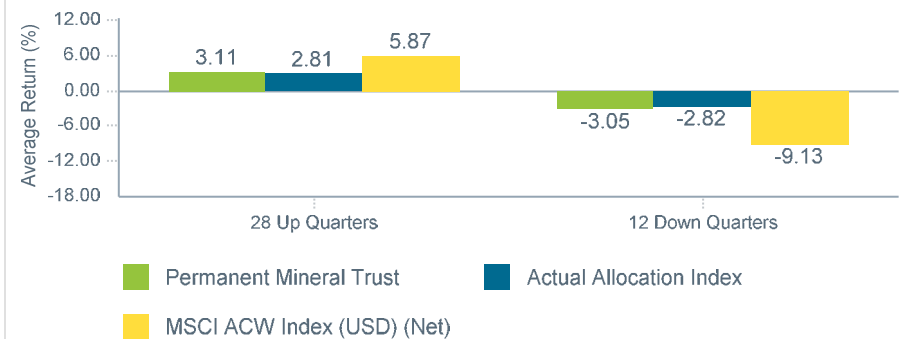
MPT Stats

	5 Years	10 Years
Maximum Return	3.66	8.80
Minimum Return	-4.03	-8.83
Standard Deviation	3.76	7.45
vs. S&P 500 Index (Cap Wtd)		
Beta	0.38	0.42
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	1.61	0.60

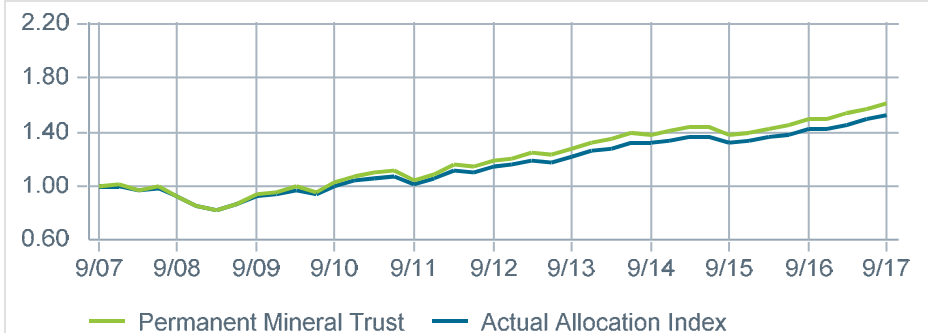
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Permanent Mineral Trust	7,828,042	100.00	-	100.00	-
US Equity	1,336,888	17.08	13.15	16.40	19.65
Global Equity	248,657	3.18	2.35	3.10	3.85
International Equity	997,316	12.74	9.00	11.50	14.00
Private Equity	391,314	5.00	2.00	4.00	6.00
Real Estate	503,124	6.43	4.50	7.50	10.50
Absolute Return	283,561	3.62	4.50	7.50	10.50
Convertibles	138,748	1.77	1.00	2.00	3.00
Fixed Income	3,011,490	38.47	40.00	45.00	50.00
Public Purpose Investments	130,545	1.67	0.00	0.00	0.00
Cash (inv. in SAP)	786,399	10.05	0.00	3.00	6.00

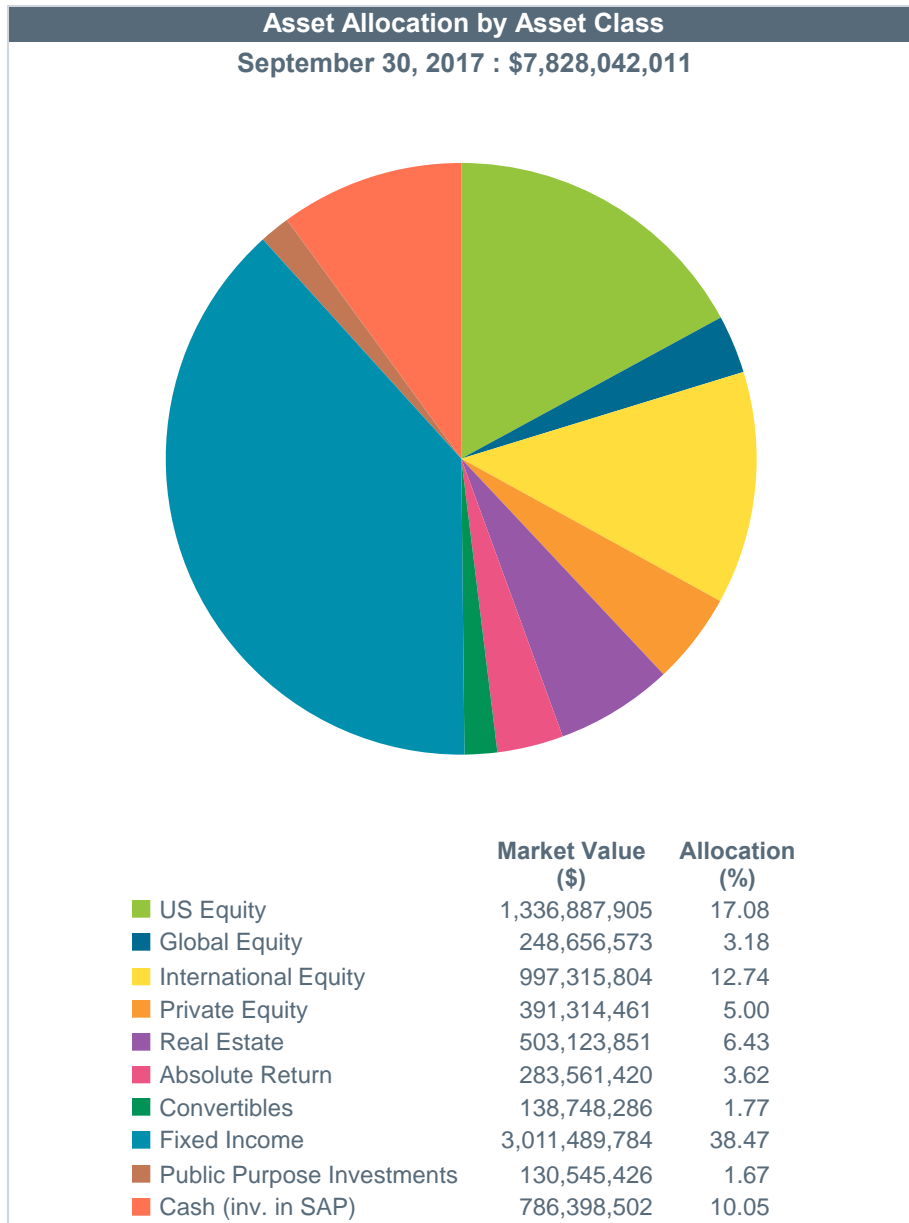
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

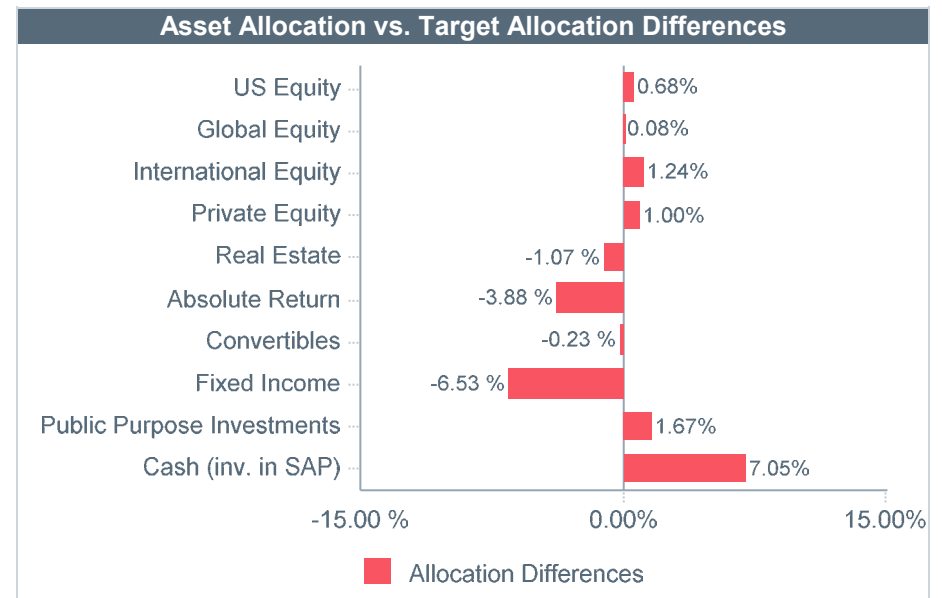


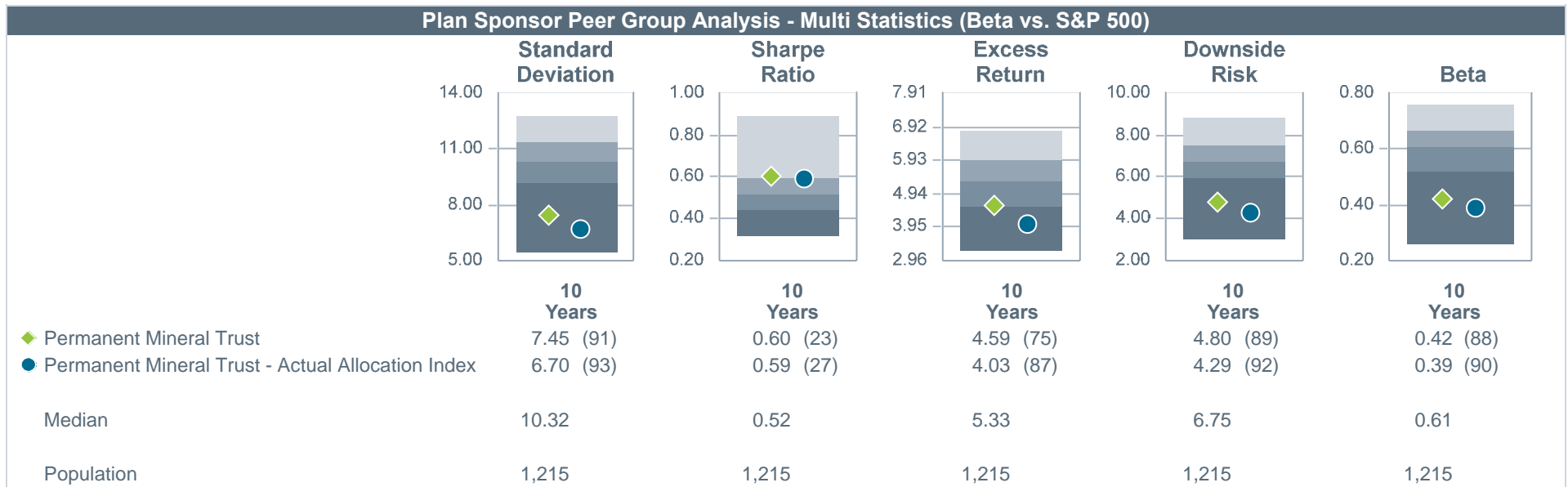
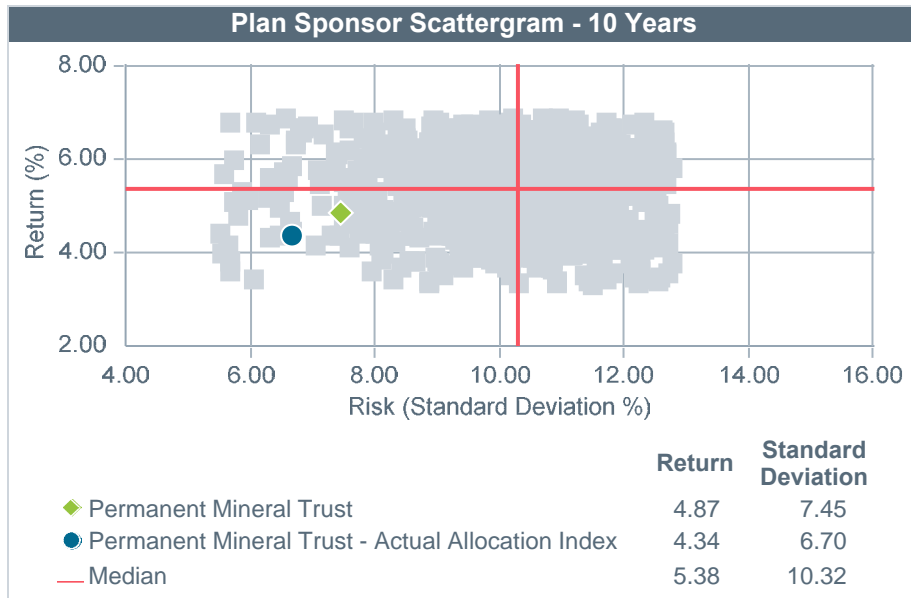
Performance shown is gross of fees. Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding.



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

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
US Equity	1,336,887,905	17.08	16.40
Global Equity	248,656,573	3.18	3.10
International Equity	997,315,804	12.74	11.50
Private Equity	391,314,461	5.00	4.00
Real Estate	503,123,851	6.43	7.50
Absolute Return	283,561,420	3.62	7.50
Convertibles	138,748,286	1.77	2.00
Fixed Income	3,011,489,784	38.47	45.00
Public Purpose Investments	130,545,426	1.67	0.00
Cash (inv. in SAP)	786,398,502	10.05	3.00
Total Fund	7,828,042,011	100.00	100.00





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

Wyoming State Treasurer's Office
Common School Permanent Land Fund
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Permanent Fund

Main Objective: Produce maximized long-term investment income and capital gains while providing appropriate liquidity

Primary Investment Goal: Capital appreciation, total return, and protection against inflation

Long-Term Return Expectation: CPI + 3%

Spending Policy: 5% of the five-year rolling average market value, calculated on the first day of the fiscal year

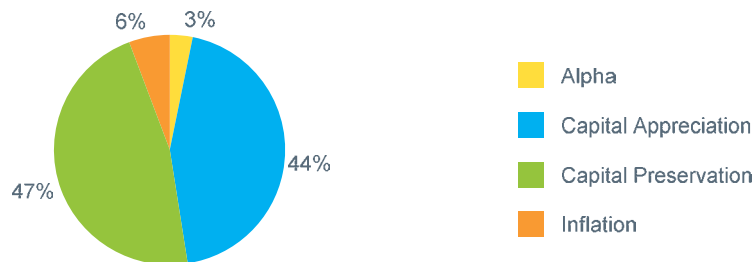
Funding Source: Royalties, leases, fees and permits, and other revenue generated from State lands

Liquidity Constraints: The corpus cannot be spent but only invested for income and capital gains

Maximum Equity Allocation: 70%

Current Target Equity Allocation: 50%

Asset Allocation by Theme



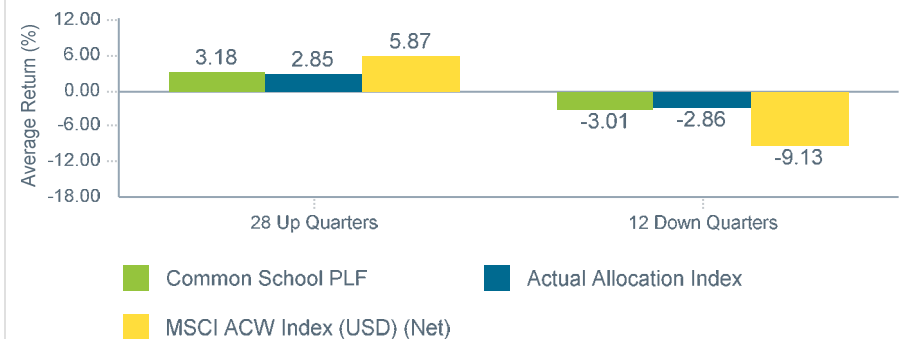
MPT Stats

	5 Years	10 Years
Maximum Return	3.62	8.83
Minimum Return	-3.80	-8.50
Standard Deviation	3.65	7.48
vs. S&P 500 Index (Cap Wtd)		
Beta	0.37	0.43
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	1.69	0.63

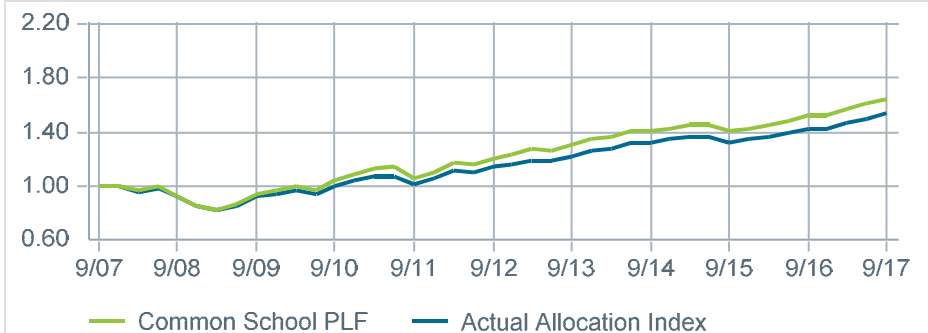
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Common School PLF	3,952,943	100.00	-	100.00	-
US Equity	632,885	16.01	13.15	16.40	19.65
Global Equity	119,013	3.01	2.35	3.10	3.85
International Equity	476,312	12.05	9.00	11.50	14.00
Private Equity	188,643	4.77	2.00	4.00	6.00
Real Estate	224,076	5.67	4.50	7.50	10.50
Absolute Return	127,651	3.23	4.50	7.50	10.50
Convertibles	65,096	1.65	1.00	2.00	3.00
Fixed Income	1,265,707	32.02	40.00	45.00	50.00
Public Purpose Investments	18,360	0.46	0.00	0.00	0.00
Cash (inv. in SAP)	835,200	21.13	0.00	3.00	6.00

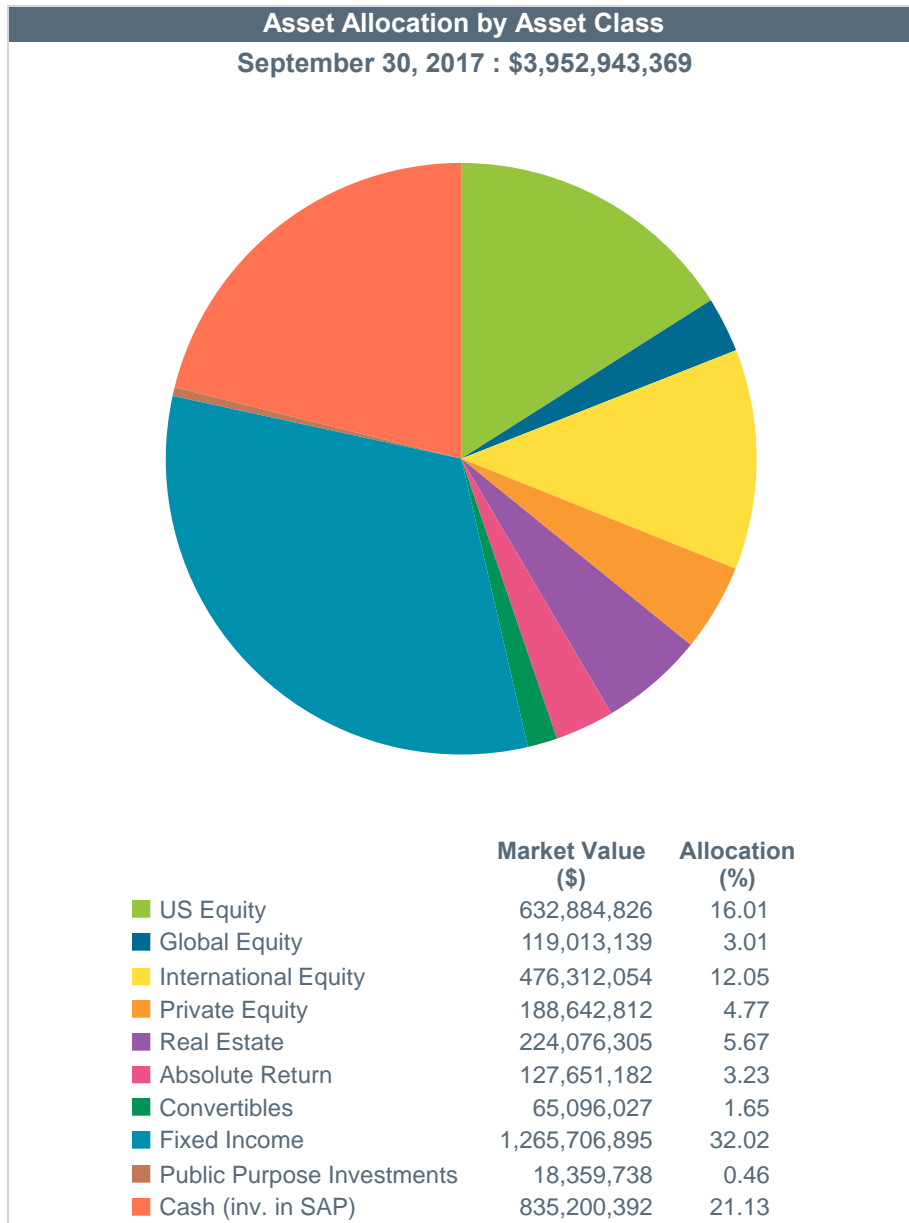
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

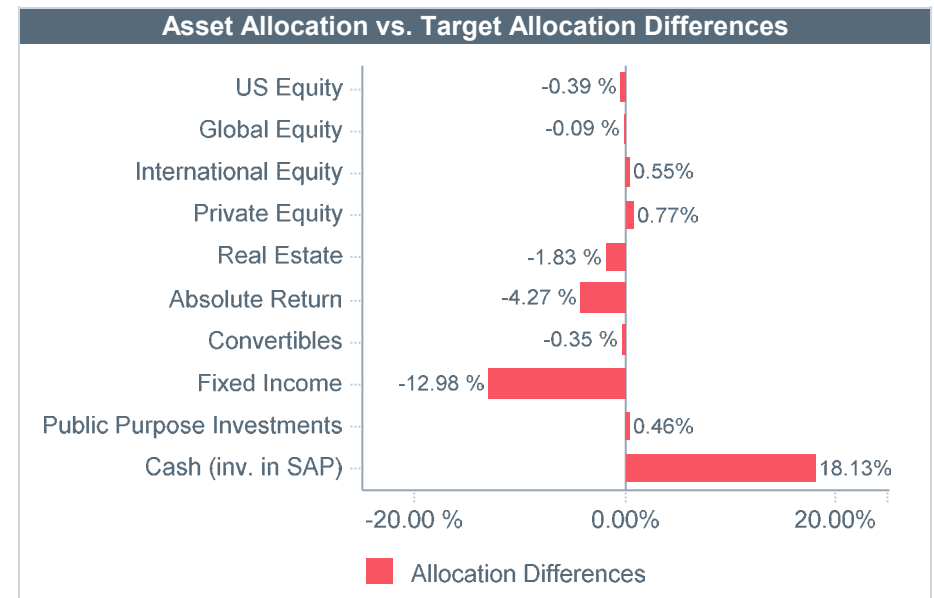


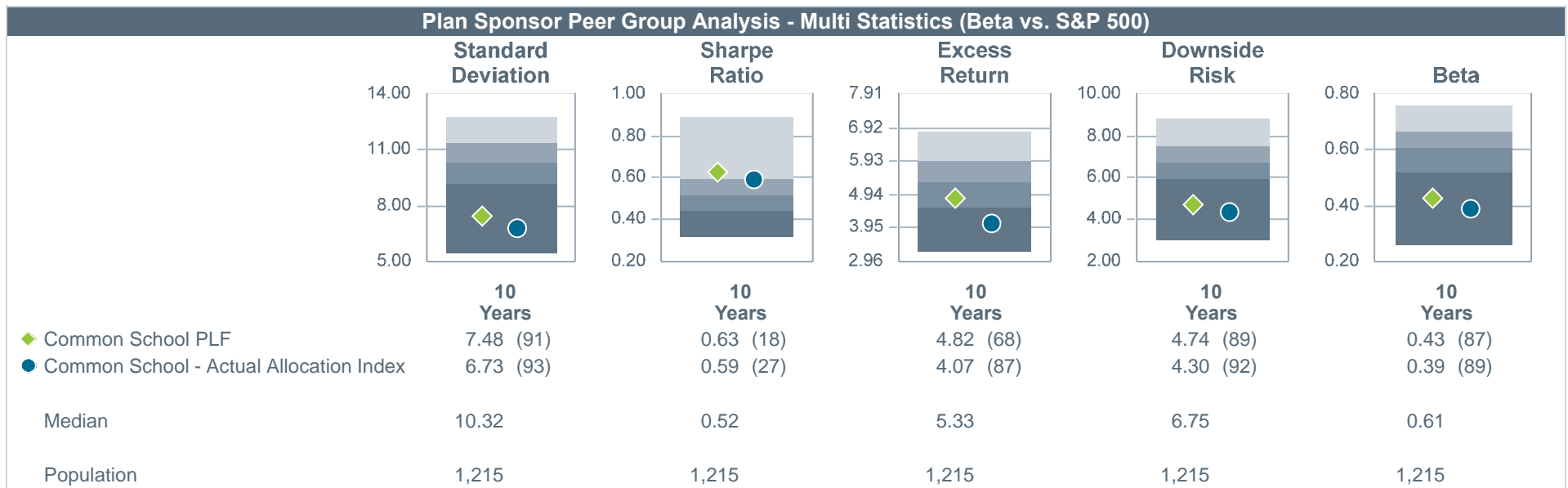
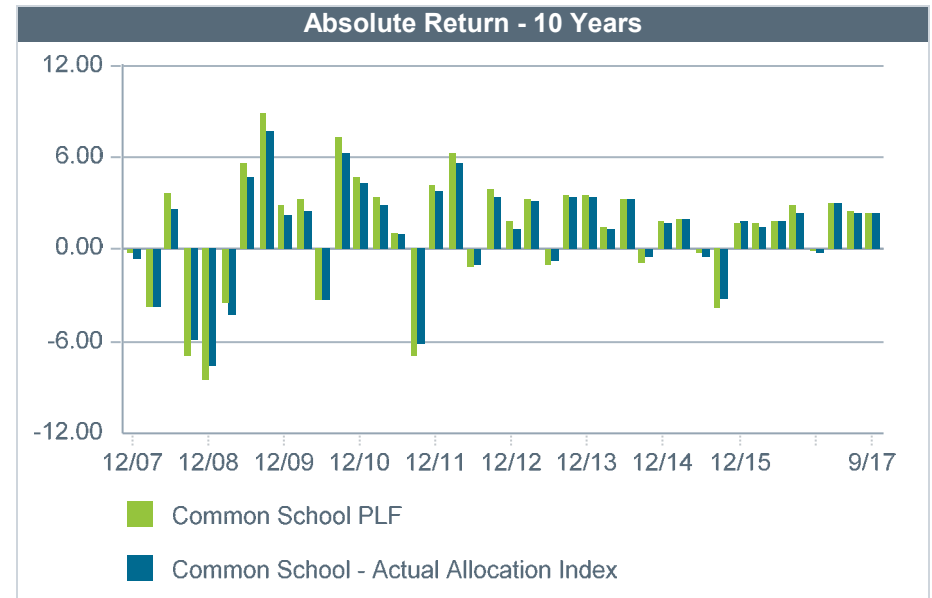
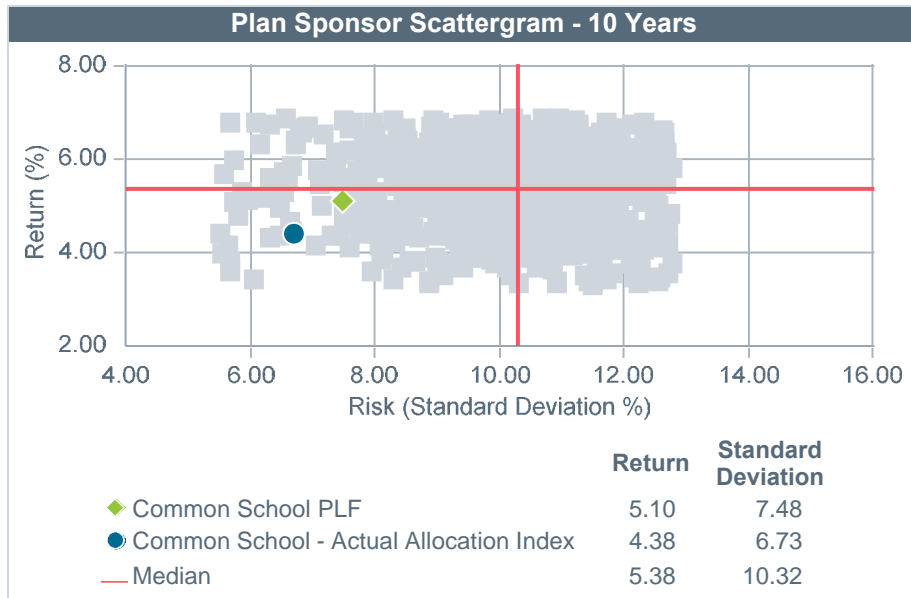
Performance shown is gross of fees. Calculations are based on quarterly periodicity.



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

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
US Equity	632,884,826	16.01	16.40
Global Equity	119,013,139	3.01	3.10
International Equity	476,312,054	12.05	11.50
Private Equity	188,642,812	4.77	4.00
Real Estate	224,076,305	5.67	7.50
Absolute Return	127,651,182	3.23	7.50
Convertibles	65,096,027	1.65	2.00
Fixed Income	1,265,706,895	32.02	45.00
Public Purpose Investments	18,359,738	0.46	0.00
Cash (inv. in SAP)	835,200,392	21.13	3.00
Total Fund	3,952,943,369	100.00	100.00





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

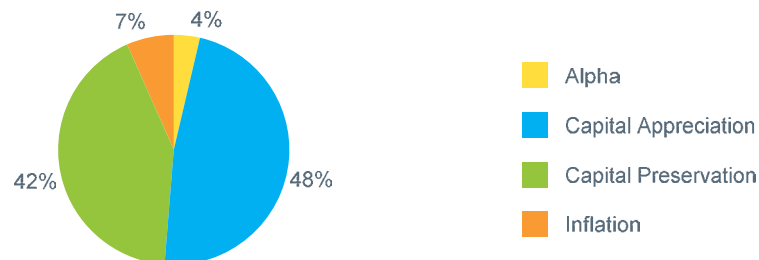
Wyoming State Treasurer's Office
Permanent Land Fund
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Permanent Fund
Main Objective: Produce maximized long-term investment income and capital gains while providing appropriate liquidity
Primary Investment Goal: Capital appreciation, total return, and protection against inflation
Long-Term Return Expectation: CPI + 3%
Funding Source: Royalties, leases, fees and permits, and other revenue generated from State lands
Maximum Equity Allocation: 70%
Current Target Equity Allocation: 50%

Asset Allocation by Theme



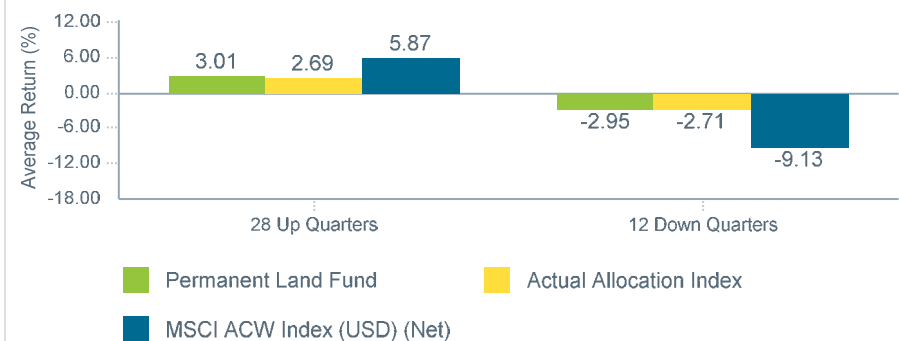
MPT Stats

	5 Years	10 Years
Maximum Return	3.51	8.47
Minimum Return	-3.80	-8.45
Standard Deviation	3.62	7.17
vs. S&P 500 Index (Cap Wtd)		
Beta	0.36	0.41
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	1.63	1.24

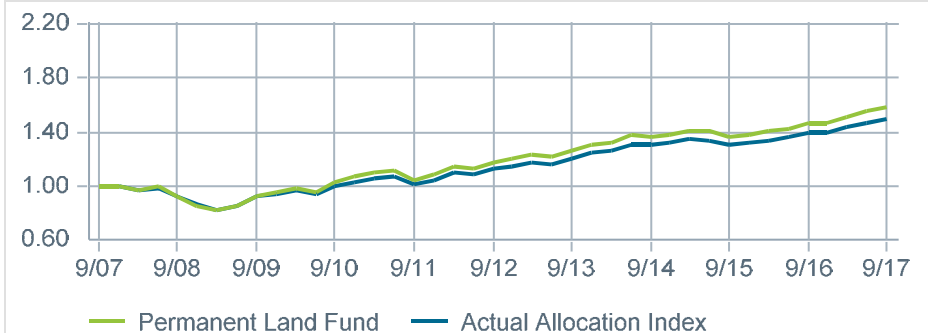
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Permanent Land Fund	194,024	100.00	-	100.00	-
US Equity	31,235	16.10	13.15	16.40	19.65
Global Equity	5,768	2.97	2.35	3.10	3.85
International Equity	23,241	11.98	9.00	11.50	14.00
Private Equity	12,242	6.31	2.00	4.00	6.00
Real Estate	12,520	6.45	4.50	7.50	10.50
Absolute Return	7,072	3.64	4.50	7.50	10.50
Convertibles	3,558	1.83	1.00	2.00	3.00
Fixed Income	80,073	41.27	38.00	43.00	48.00
Cash (inv. in SAP)	18,315	9.44	0.00	5.00	10.00

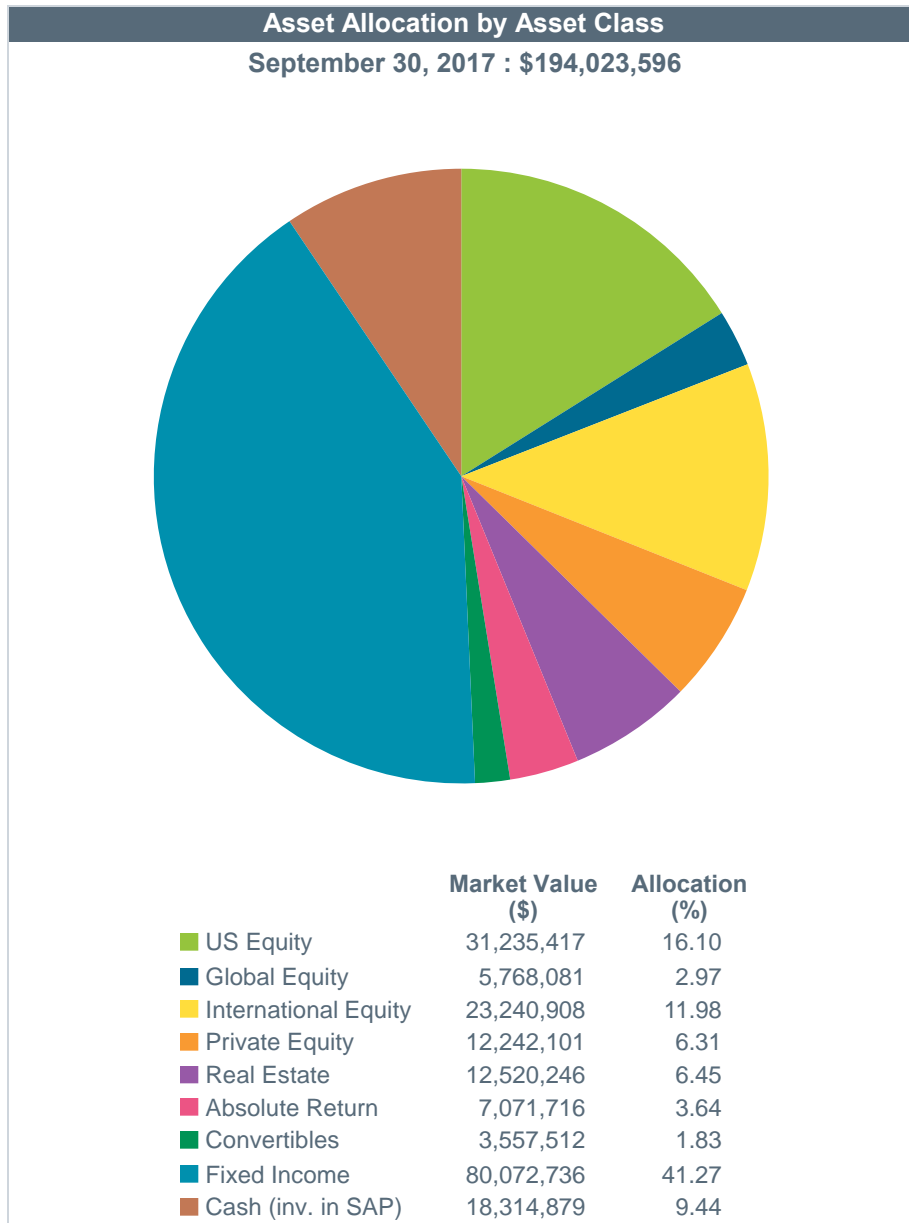
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

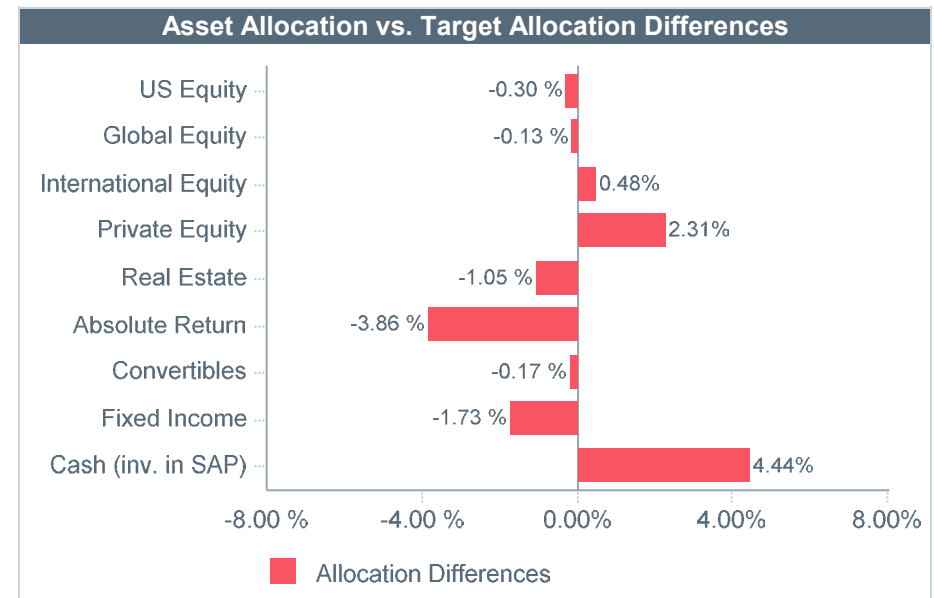


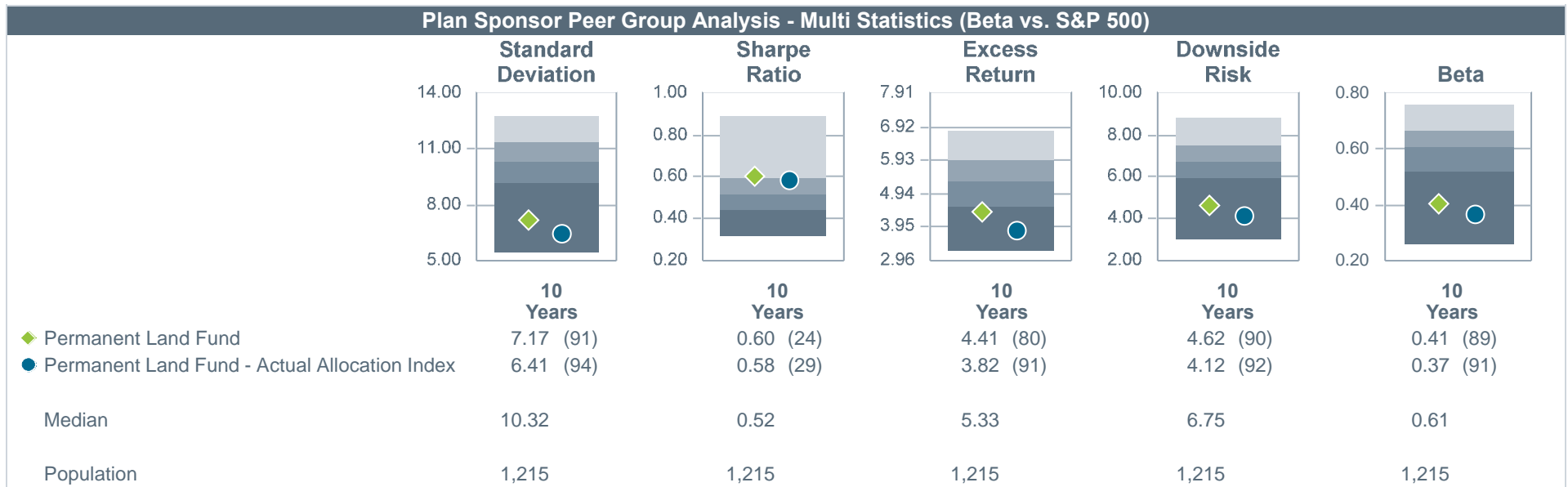
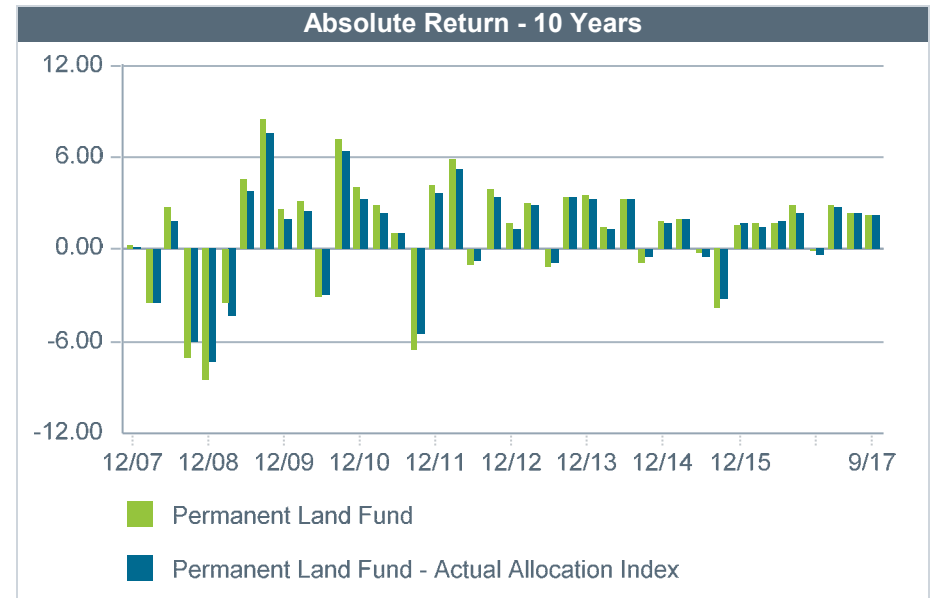
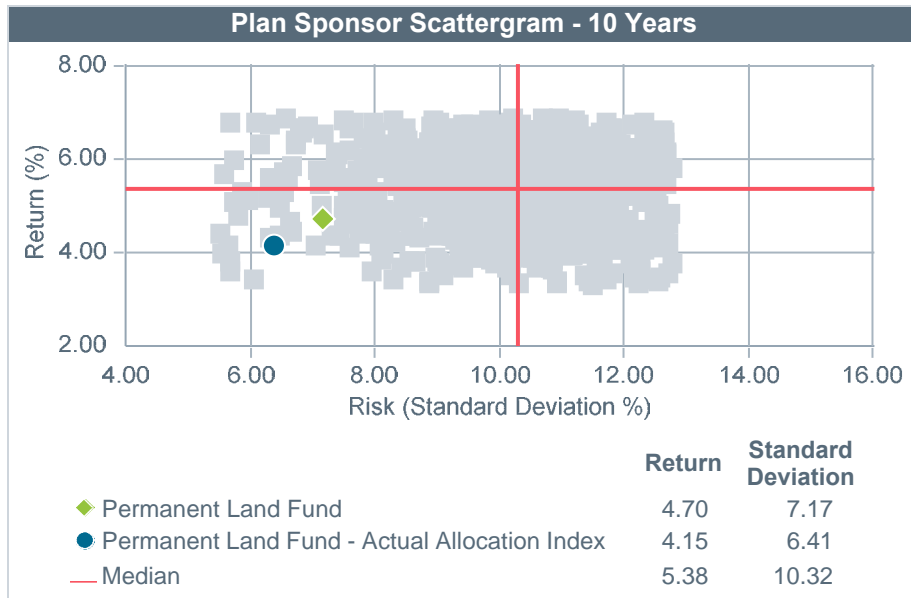
Performance shown is gross of fees. Calculations are based on quarterly periodicity. Allocations shown may not sum up to 100% exactly due to rounding.



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

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
US Equity	31,235,417	16.10	16.40
Global Equity	5,768,081	2.97	3.10
International Equity	23,240,908	11.98	11.50
Private Equity	12,242,101	6.31	4.00
Real Estate	12,520,246	6.45	7.50
Absolute Return	7,071,716	3.64	7.50
Convertibles	3,557,512	1.83	2.00
Fixed Income	80,072,736	41.27	43.00
Cash (inv. in SAP)	18,314,879	9.44	5.00
Total Fund	194,023,596	100.00	100.00





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

Wyoming State Treasurer's Office
University Permanent Land Fund
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Permanent Fund

Main Objective: Produce maximized long-term investment income and capital gains while providing appropriate liquidity

Primary Investment Goal: Capital appreciation, total return, and protection against inflation

Long-Term Return Expectation: CPI + 3%

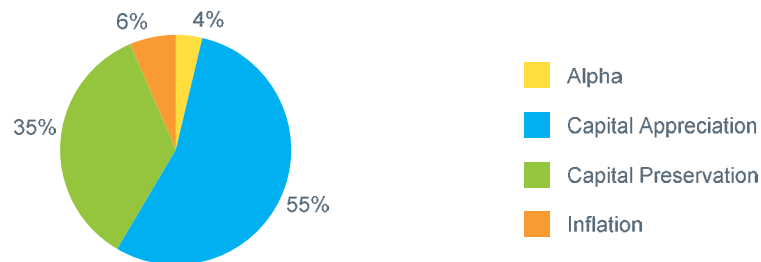
Funding Source: Royalties, leases, fees and permits, and other revenue generated from State lands

Liquidity Constraints: The corpus cannot be spent but only invested for income and capital gains

Maximum Equity Allocation: 70%

Current Target Equity Allocation: 50%

Asset Allocation by Theme



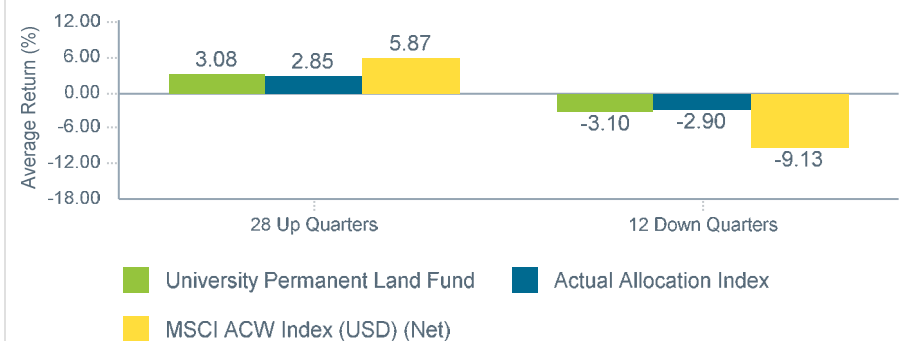
MPT Stats

	5 Years	10 Years
Maximum Return	3.70	8.46
Minimum Return	-4.38	-9.51
Standard Deviation	3.85	7.50
vs. S&P 500 Index (Cap Wtd)		
Beta	0.39	0.43
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	1.62	0.58

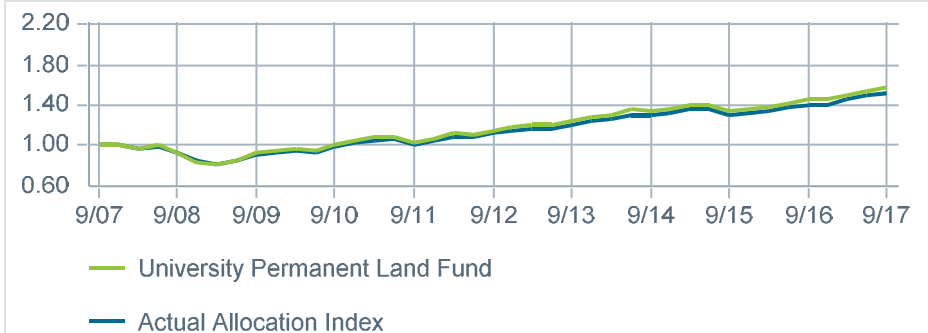
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
University Permanent Land Fund	23,049	100.00	-	100.00	-
US Equity	4,868	21.12	13.15	16.40	19.65
Global Equity	703	3.05	2.35	3.10	3.85
International Equity	2,812	12.20	9.00	11.50	14.00
Private Equity	2,010	8.72	2.00	4.00	6.00
Real Estate	1,399	6.07	4.50	7.50	10.50
Absolute Return	858	3.72	4.50	7.50	10.50
Convertibles	403	1.75	1.00	2.00	3.00
Fixed Income	8,137	35.30	38.00	43.00	48.00
Cash (inv. in SAP)	1,859	8.06	0.00	5.00	10.00

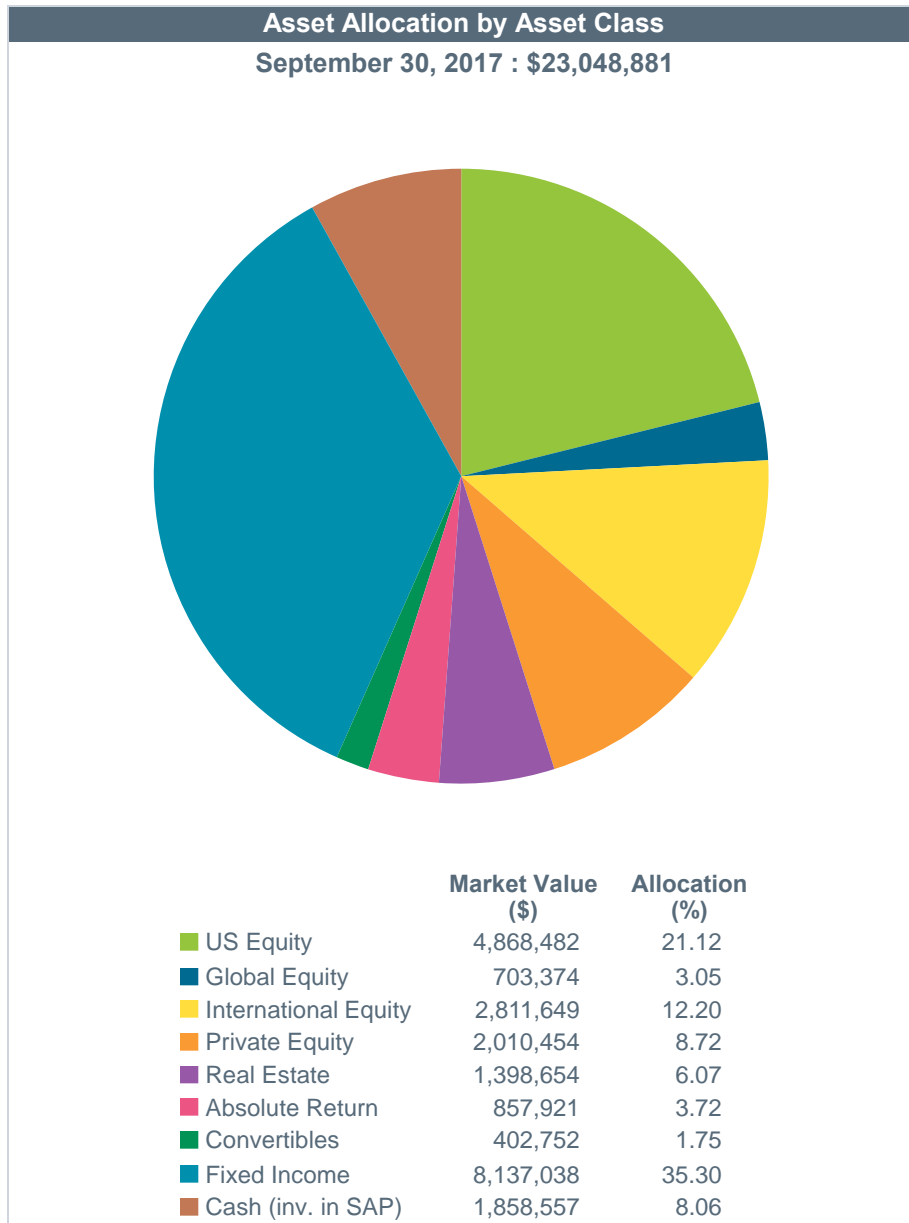
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

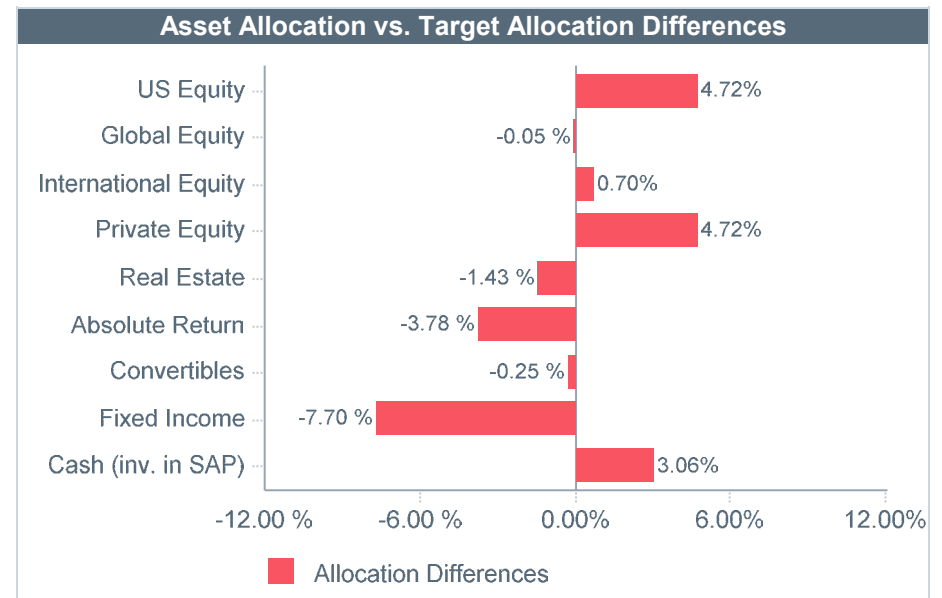


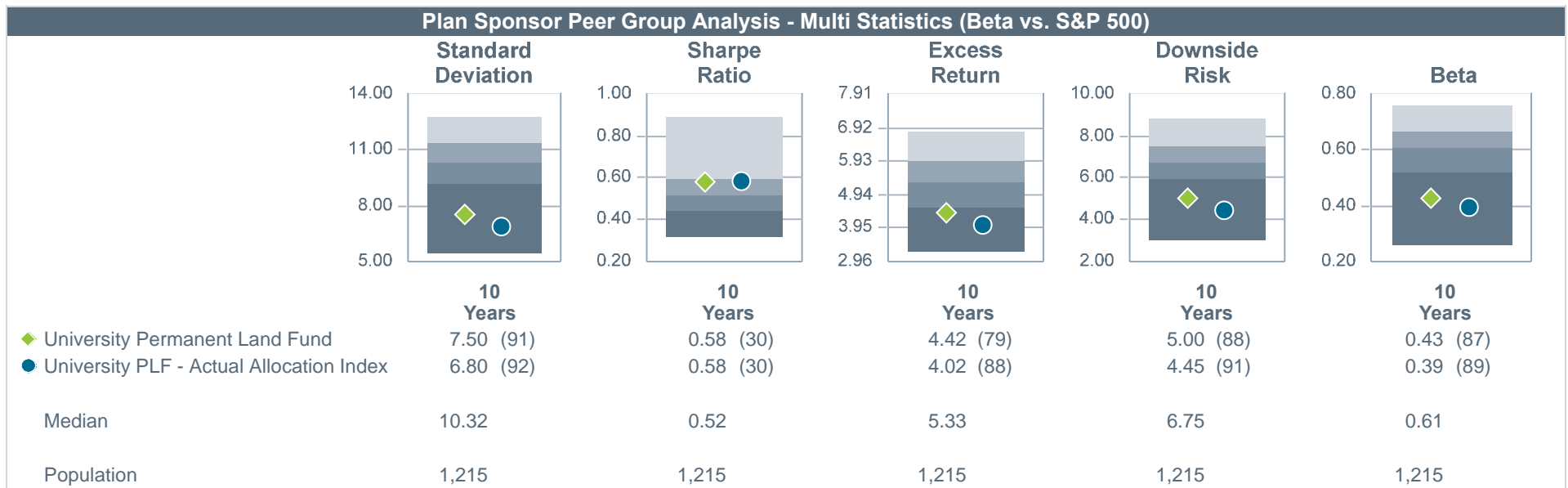
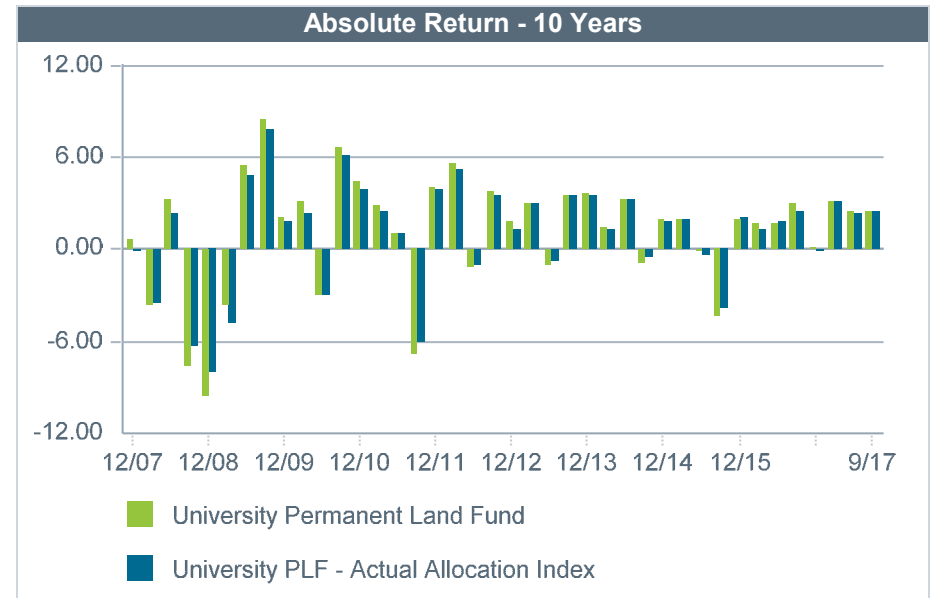
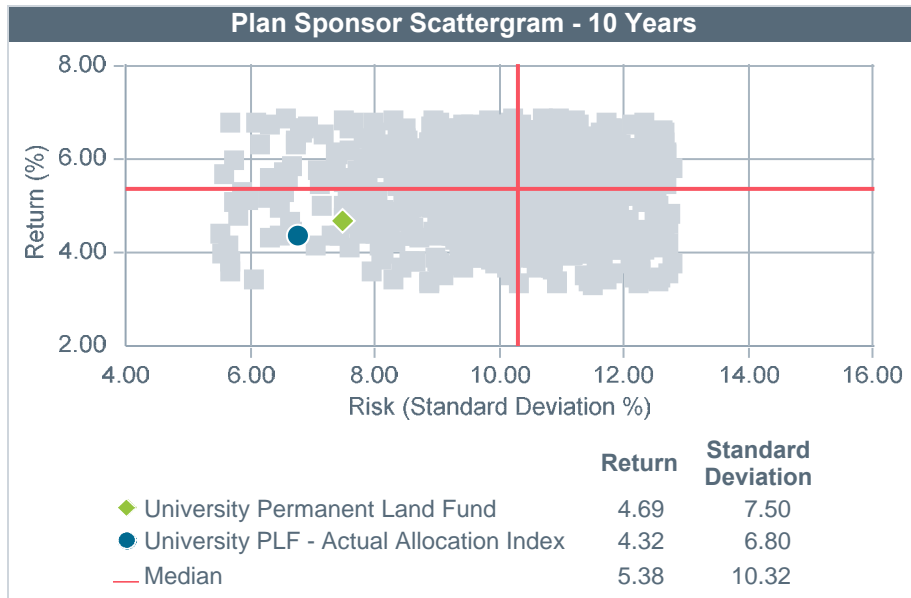
Performance shown is gross of fees. Calculations are based on quarterly periodicity.



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

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
US Equity	4,868,482	21.12	16.40
Global Equity	703,374	3.05	3.10
International Equity	2,811,649	12.20	11.50
Private Equity	2,010,454	8.72	4.00
Real Estate	1,398,654	6.07	7.50
Absolute Return	857,921	3.72	7.50
Convertibles	402,752	1.75	2.00
Fixed Income	8,137,038	35.30	43.00
Cash (inv. in SAP)	1,858,557	8.06	5.00
Total Fund	23,048,881	100.00	100.00





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

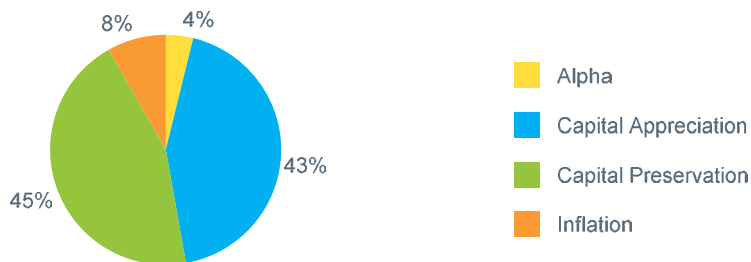
Wyoming State Treasurer's Office
Hathaway Scholarship Endowment Fund
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Permanent Fund
Main Objective: Produce maximized long-term investment income and capital gains while providing appropriate liquidity
Primary Investment Goal: Capital appreciation, total return, and protection against inflation
Long-Term Return Expectation: CPI + 3%
Funding Source: Federal mineral royalties
Liquidity Constraints: The corpus cannot be spent but only invested for income and capital gains
Maximum Equity Allocation: 70%
Current Target Equity Allocation: 45%

Asset Allocation by Theme



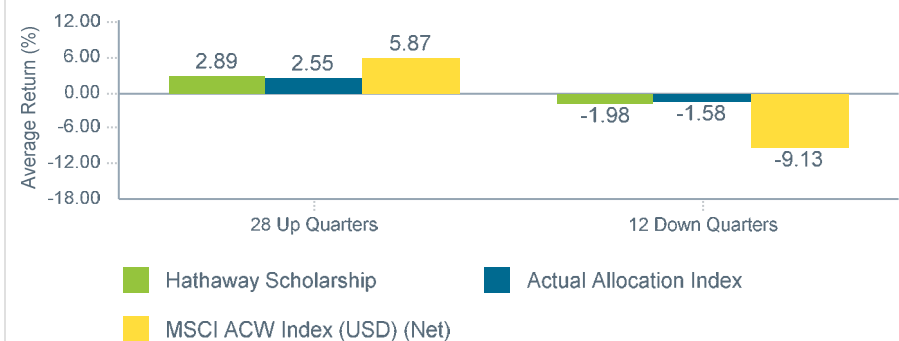
MPT Stats

	5 Years	10 Years
Maximum Return	3.15	7.95
Minimum Return	-3.20	-5.85
Standard Deviation	3.37	5.98
vs. S&P 500 Index (Cap Wtd)		
Beta	0.30	0.33
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	1.58	0.86

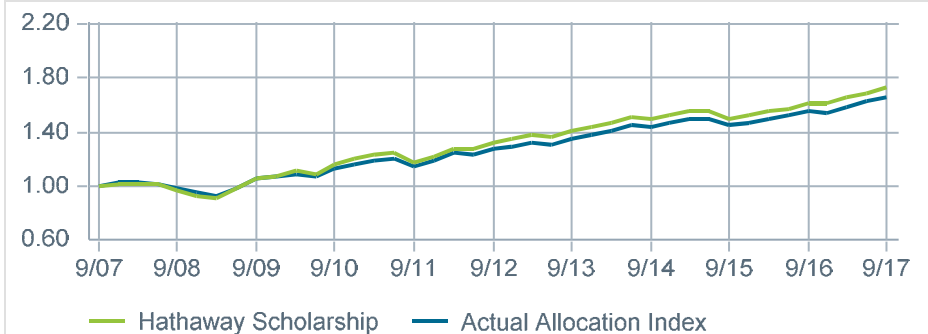
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Hathaway Scholarship	597,194	100.00	-	100.00	-
US Equity	97,830	16.38	12.95	16.20	19.45
Global Equity	17,276	2.89	2.25	3.00	3.75
International Equity	73,209	12.26	8.70	11.20	13.70
Private Equity	3,730	0.62	0.00	0.00	0.00
Real Estate	42,780	7.16	4.30	7.30	10.30
Absolute Return	22,997	3.85	4.30	7.30	10.30
Convertibles	10,927	1.83	1.00	2.00	3.00
Fixed Income	270,359	45.27	43.00	48.00	53.00
Cash (inv. in SAP)	58,086	9.73	0.00	5.00	10.00

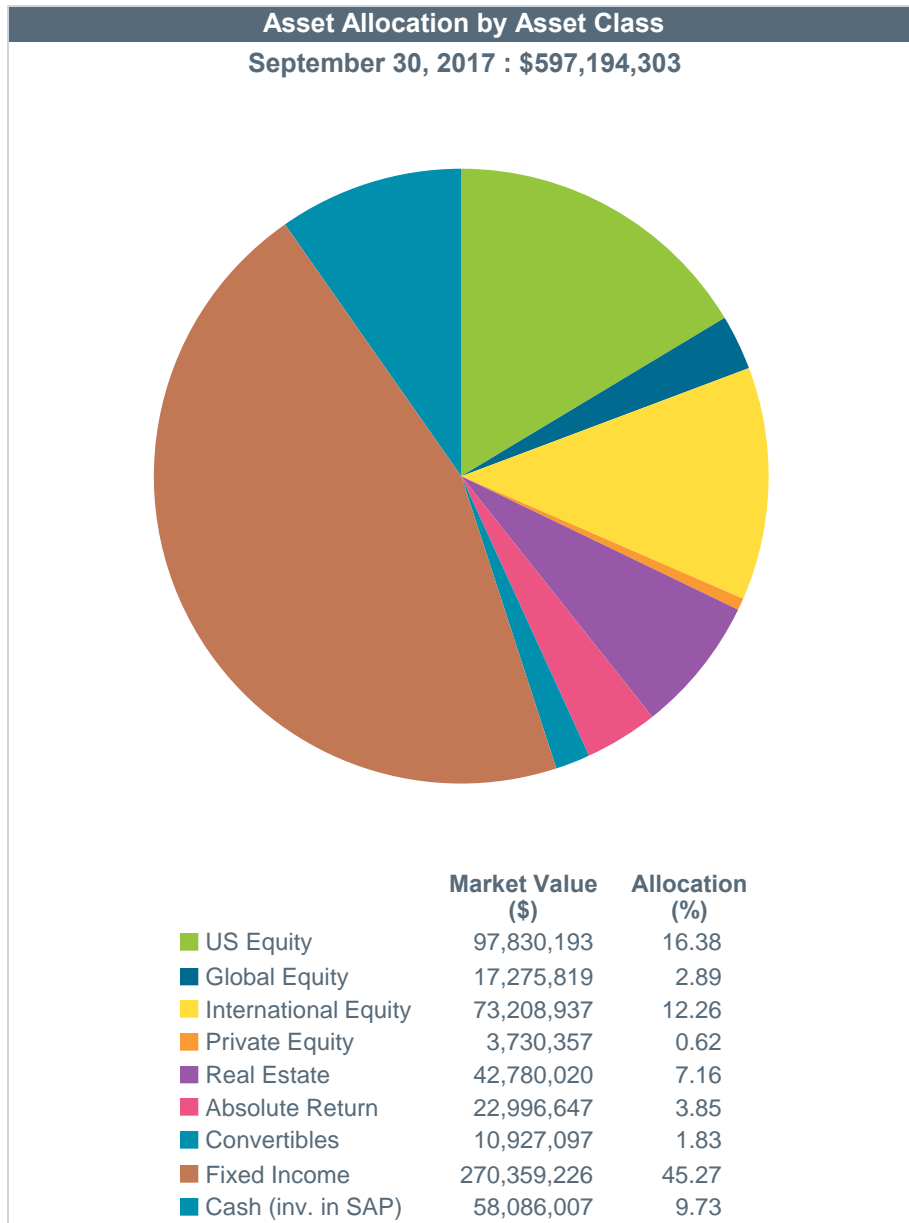
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

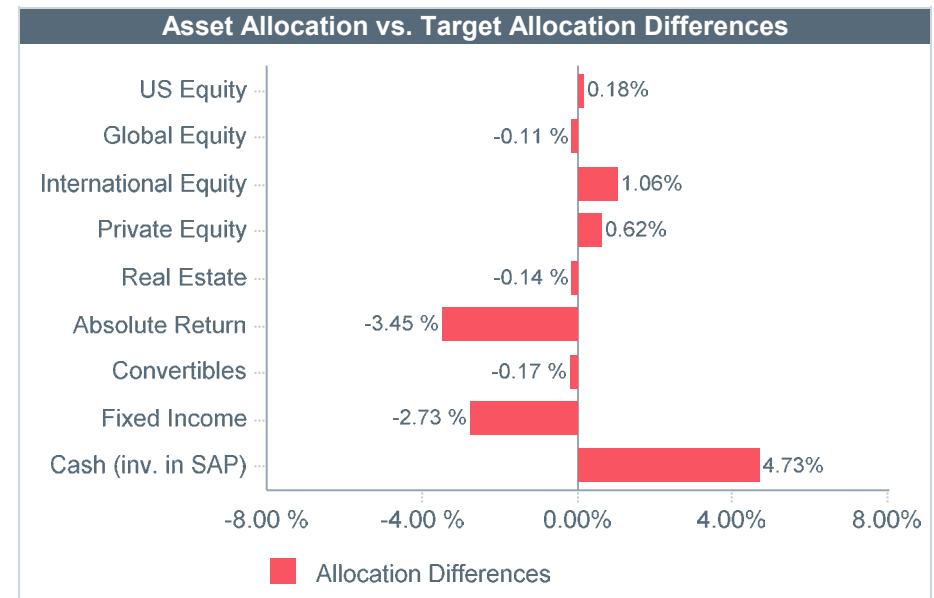


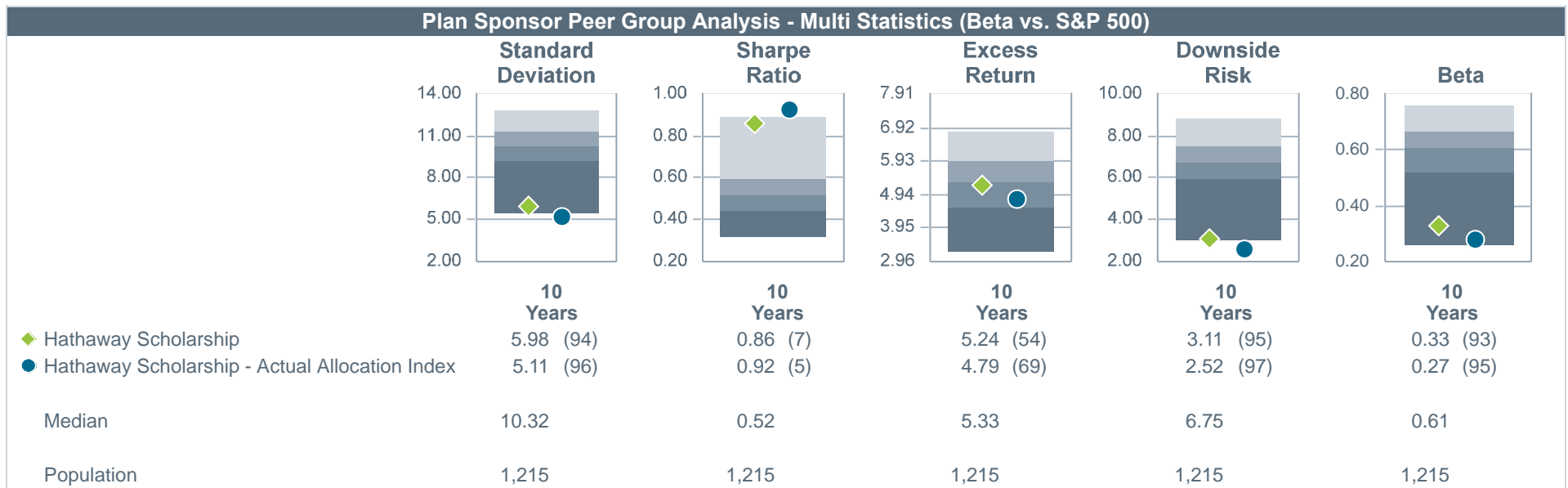
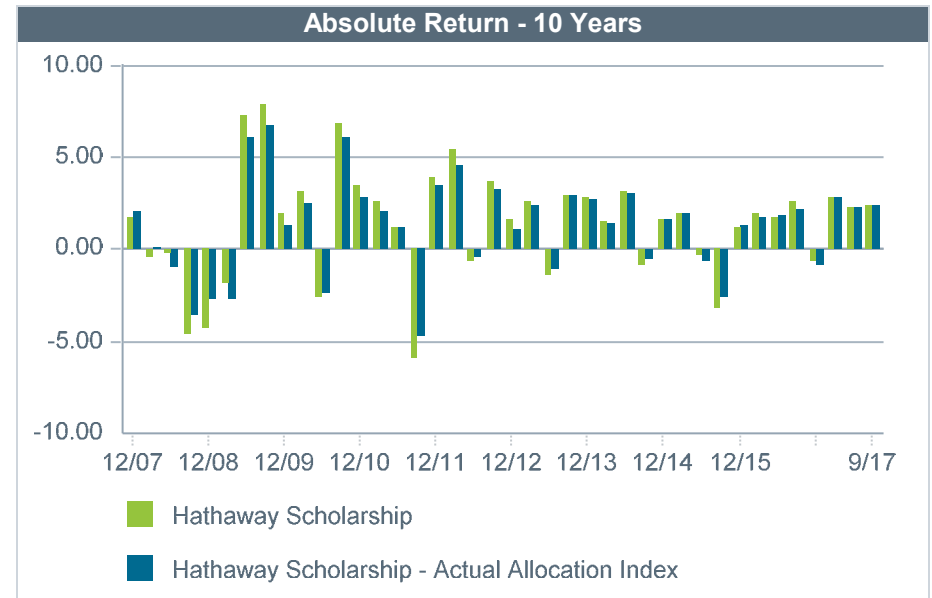
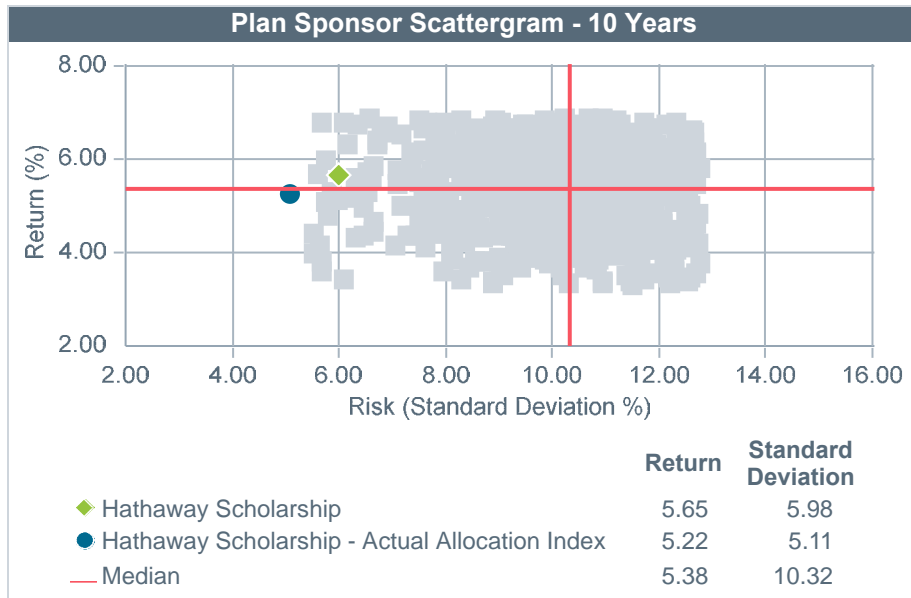
Performance shown is gross of fees. Calculations are based on quarterly periodicity.



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

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
US Equity	97,830,193	16.38	16.20
Global Equity	17,275,819	2.89	3.00
International Equity	73,208,937	12.26	11.20
Private Equity	3,730,357	0.62	0.00
Real Estate	42,780,020	7.16	7.30
Absolute Return	22,996,647	3.85	7.30
Convertibles	10,927,097	1.83	2.00
Fixed Income	270,359,226	45.27	48.00
Cash (inv. in SAP)	58,086,007	9.73	5.00
Total Fund	597,194,303	100.00	100.00





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

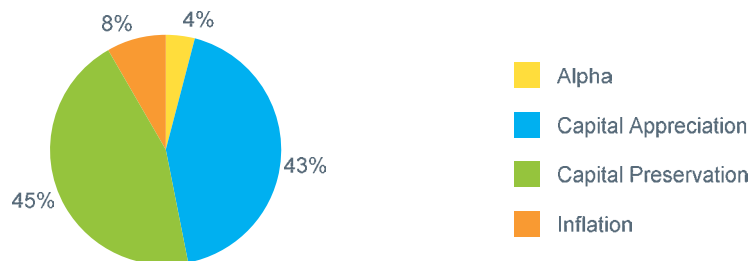
Wyoming State Treasurer's Office
Higher Education Endowment Fund
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Permanent Fund
Main Objective: Produce maximized long-term investment income and capital gains while providing appropriate liquidity
Primary Investment Goal: Capital appreciation, total return, and protection against inflation
Long-Term Return Expectation: CPI + 3%
Spending Policy: 5% of the five-year rolling average market value, calculated on the first day of the fiscal year
Funding Source: Federal mineral royalties
Liquidity Constraints: The corpus cannot be spent but only invested for income and capital gains
Maximum Equity Allocation: 70%
Current Target Equity Allocation: 45%

Asset Allocation by Theme



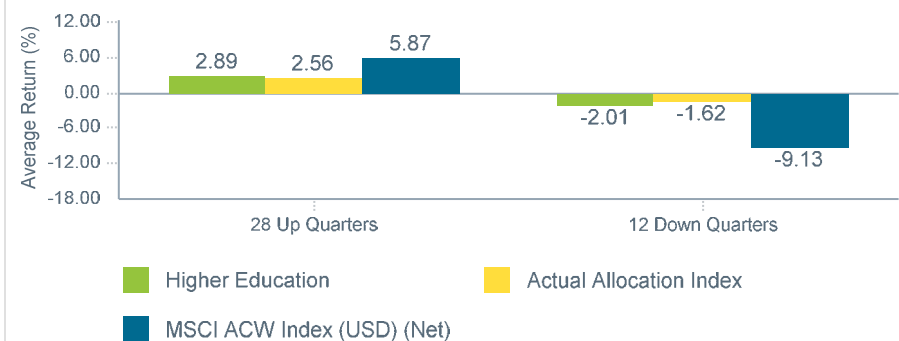
MPT Stats

	5 Years	10 Years
Maximum Return	3.15	8.11
Minimum Return	-3.28	-5.85
Standard Deviation	3.40	6.03
vs. S&P 500 Index (Cap Wtd)		
Beta	0.31	0.33
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	1.57	0.85

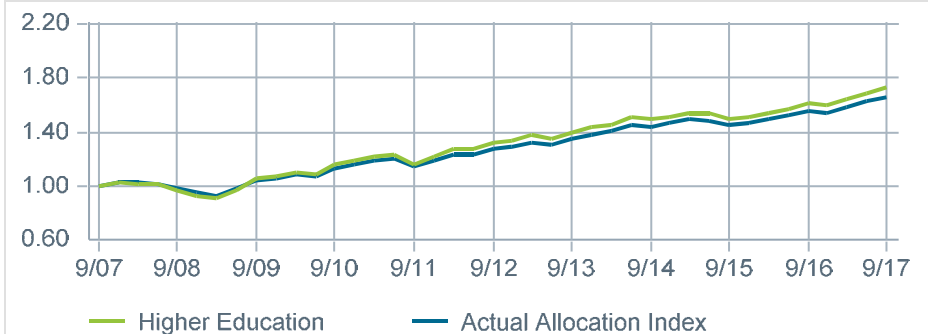
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Higher Education	123,229	100.00	-	100.00	-
US Equity	20,209	16.40	12.95	16.20	19.45
Global Equity	3,620	2.94	2.25	3.00	3.75
International Equity	15,170	12.31	8.70	11.20	13.70
Real Estate	8,441	6.85	4.30	7.30	10.30
Absolute Return	5,029	4.08	4.30	7.30	10.30
Convertibles	2,301	1.87	1.00	2.00	3.00
Fixed Income	56,714	46.02	43.00	48.00	53.00
Cash (inv. in SAP)	11,745	9.53	0.00	5.00	10.00

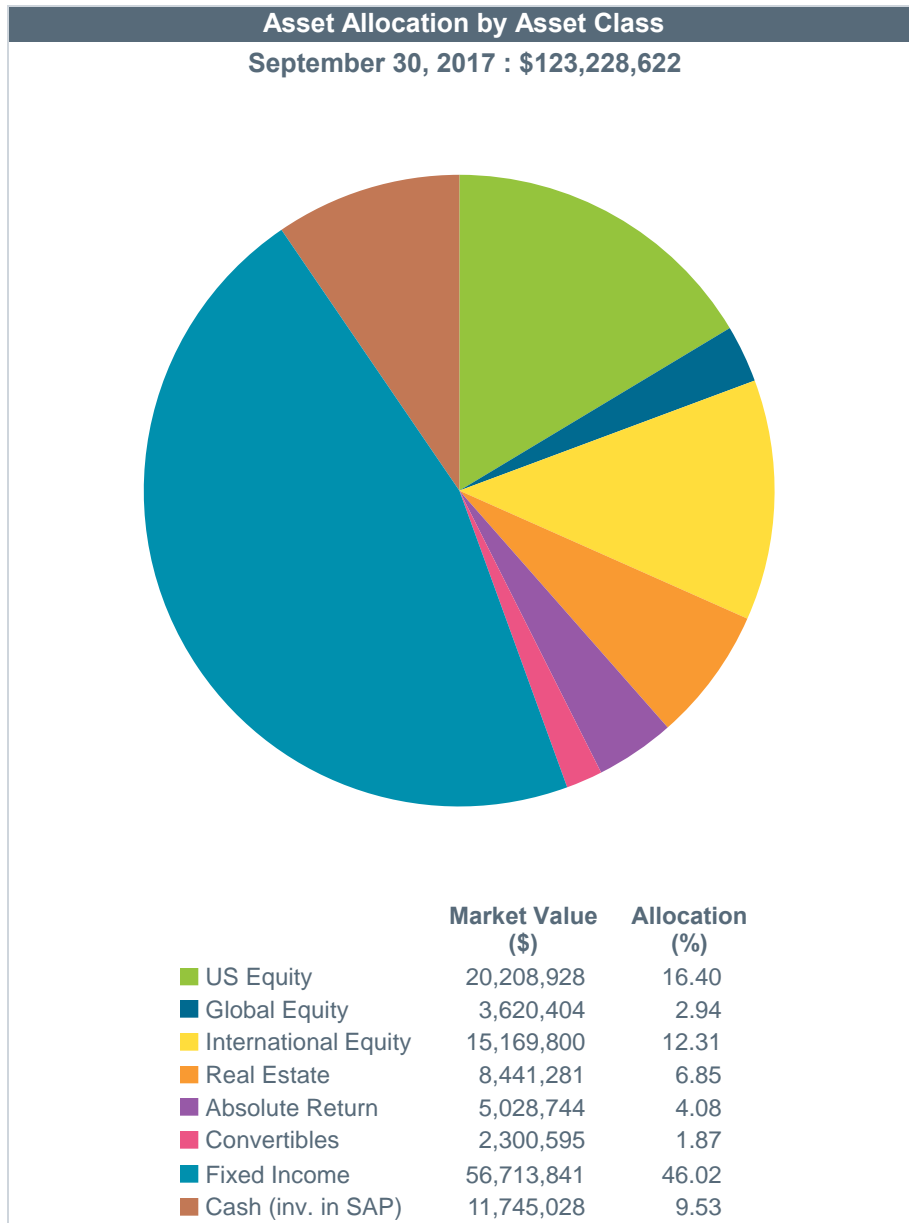
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

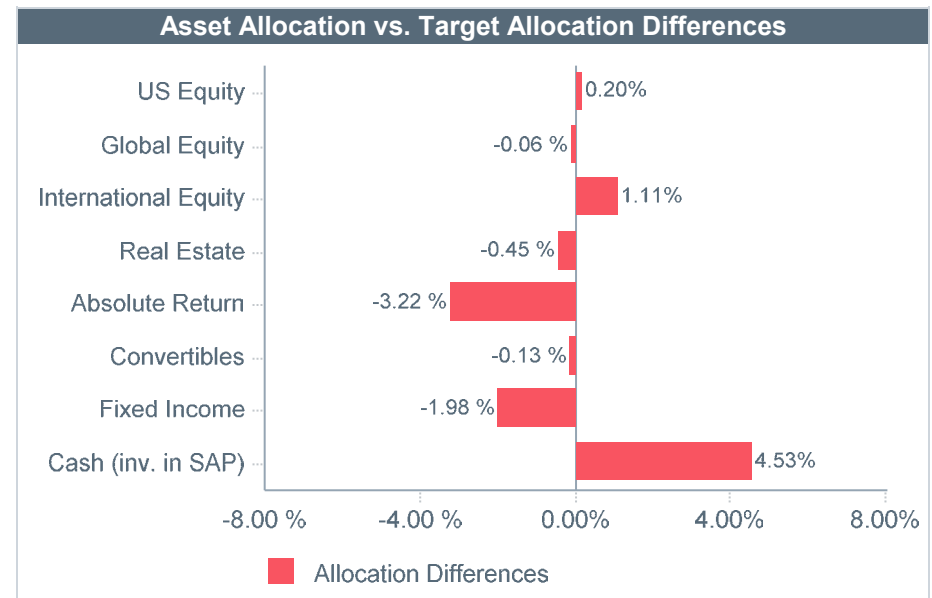


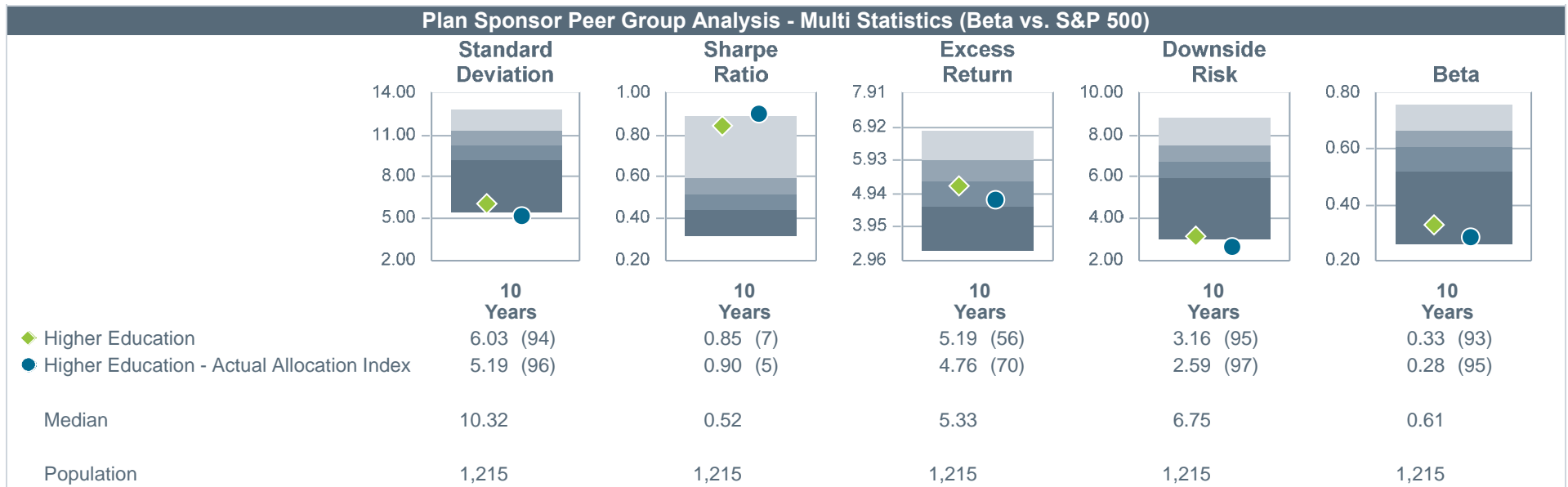
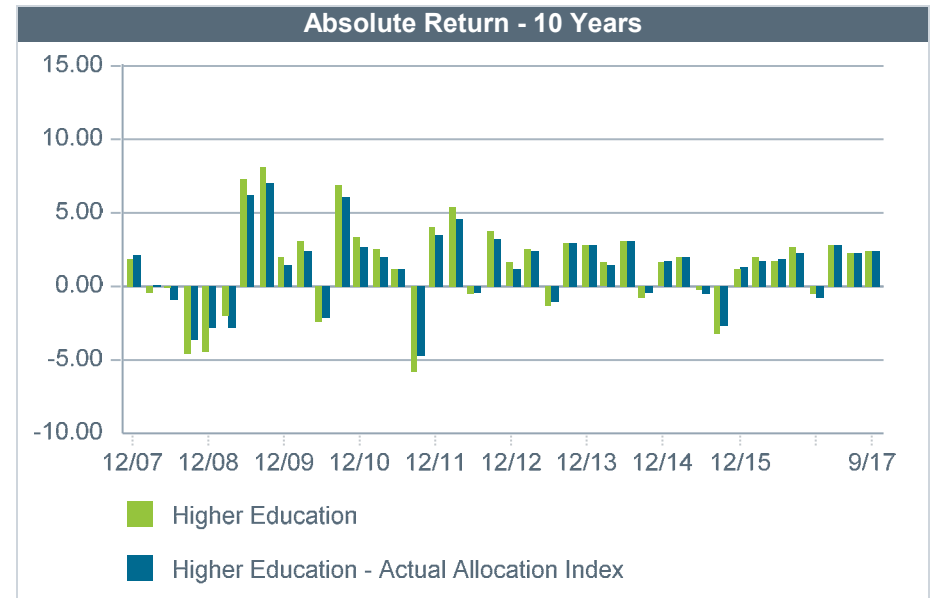
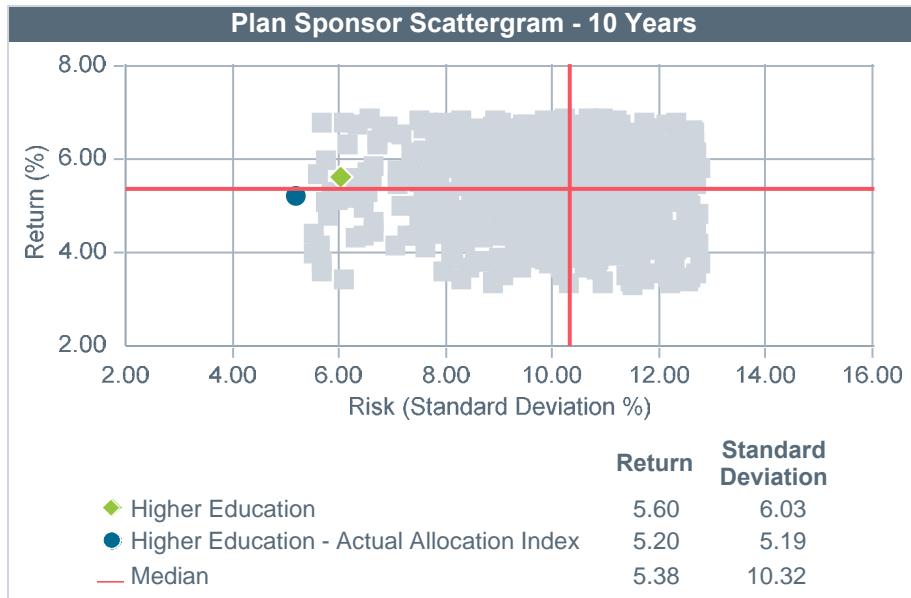
Performance shown is gross of fees. Calculations are based on quarterly periodicity.



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

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
US Equity	20,208,928	16.40	16.20
Global Equity	3,620,404	2.94	3.00
International Equity	15,169,800	12.31	11.20
Real Estate	8,441,281	6.85	7.30
Absolute Return	5,028,744	4.08	7.30
Convertibles	2,300,595	1.87	2.00
Fixed Income	56,713,841	46.02	48.00
Cash (inv. in SAP)	11,745,028	9.53	5.00
Total Fund	123,228,622	100.00	100.00





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

Wyoming State Treasurer's Office
Workers Compensation Fund
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Permanent Fund

Main Objective: To be invested for the very long-term to produce a situation in which the fund is self funding or nearly self-funding in order to substantially reduce or eliminate the need for employer contributions

Primary Investment Goal: Safety of capital, yield, and capital appreciation

Long-Term Return Expectation: CPI + 3%

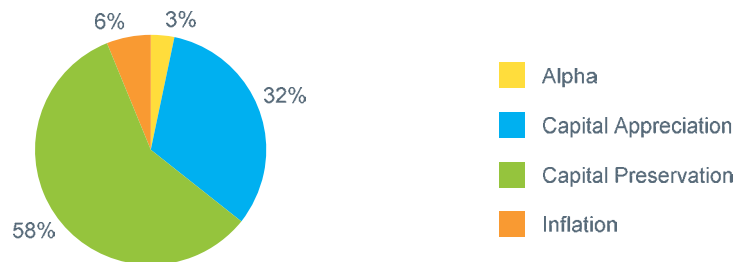
Funding Source: Employer premiums

Liquidity Constraints: The Fund must be managed for long-term return with cash flow necessary only in the case of a disaster

Maximum Equity Allocation: 45%

Current Target Equity Allocation: 30%

Asset Allocation by Theme



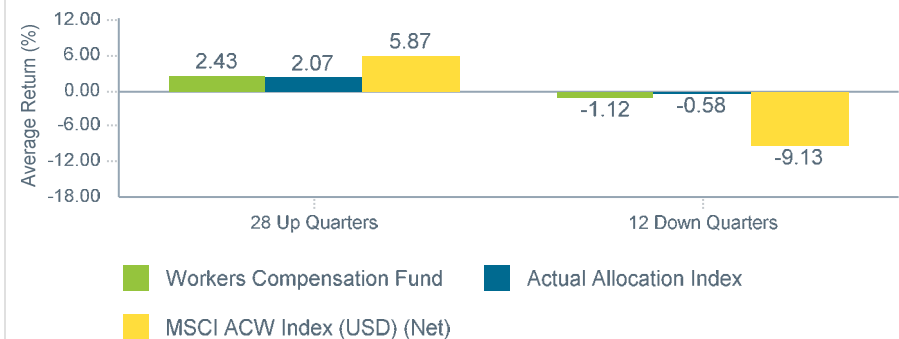
MPT Stats

	5 Years	10 Years
Maximum Return	2.84	7.93
Minimum Return	-2.03	-3.64
Standard Deviation	2.92	4.84
vs. S&P 500 Index (Cap Wtd)		
Beta	0.20	0.24
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	1.43	1.01

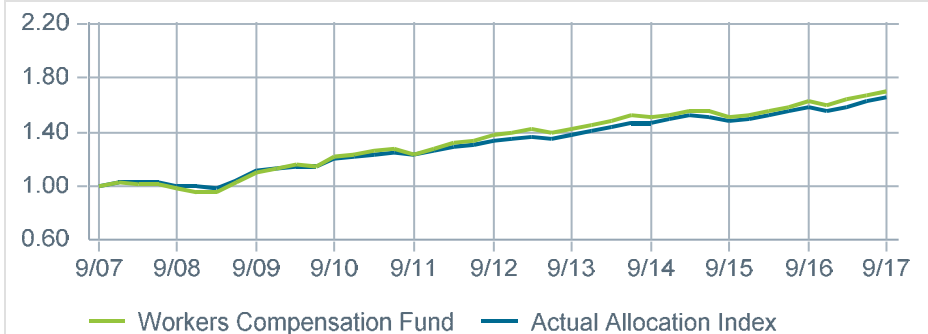
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Workers Compensation Fund	2,010,718	100.00	-	100.00	-
US Equity	200,034	9.95	7.75	10.00	12.25
Global Equity	36,641	1.82	1.40	1.90	2.40
International Equity	151,644	7.54	5.60	7.10	8.60
Real Estate	75,514	3.76	2.25	4.00	5.75
Absolute Return	66,535	3.31	4.00	7.00	10.00
Convertibles	53,688	2.67	1.75	3.00	4.25
Fixed Income	1,128,949	56.15	56.00	62.00	68.00
Cash (inv. in SAP)	297,713	14.81	0.00	5.00	10.00

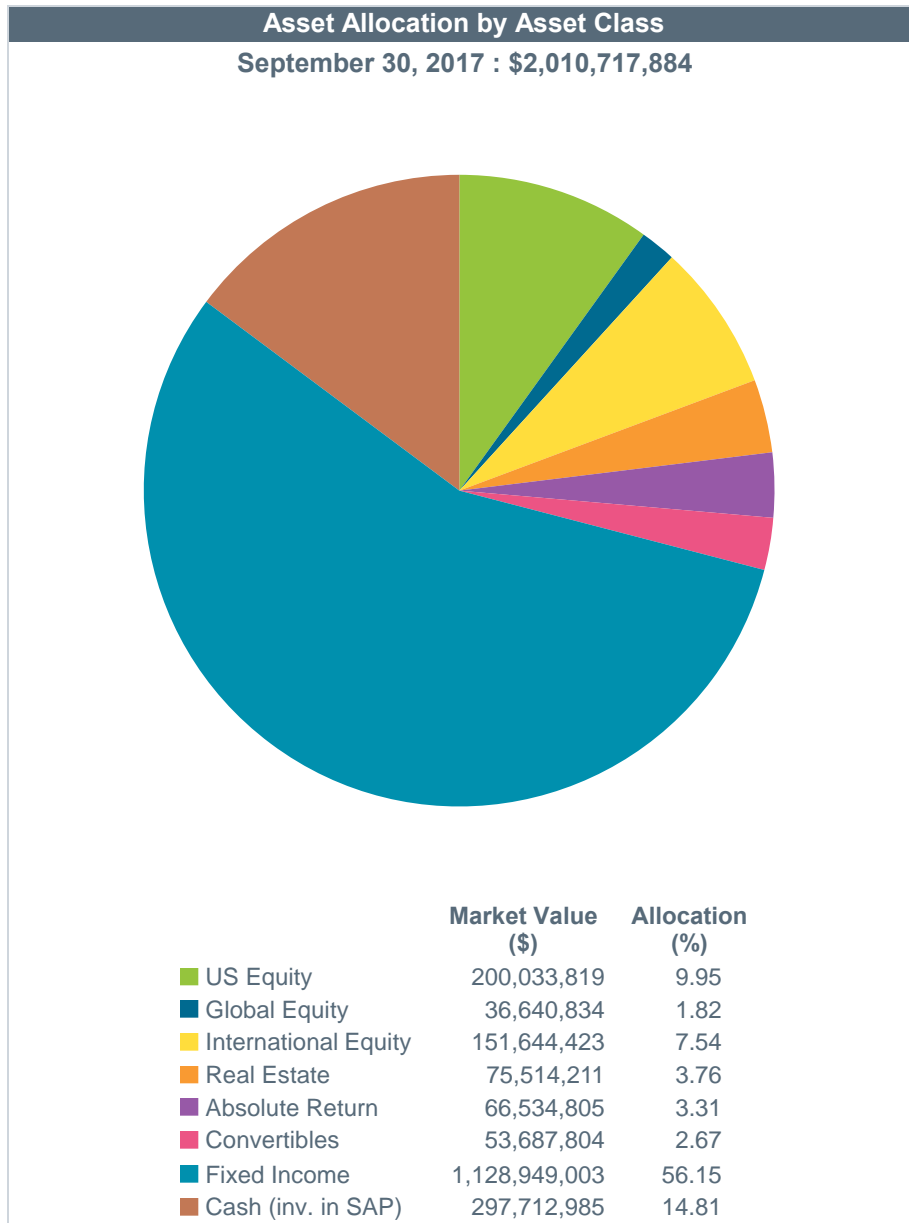
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

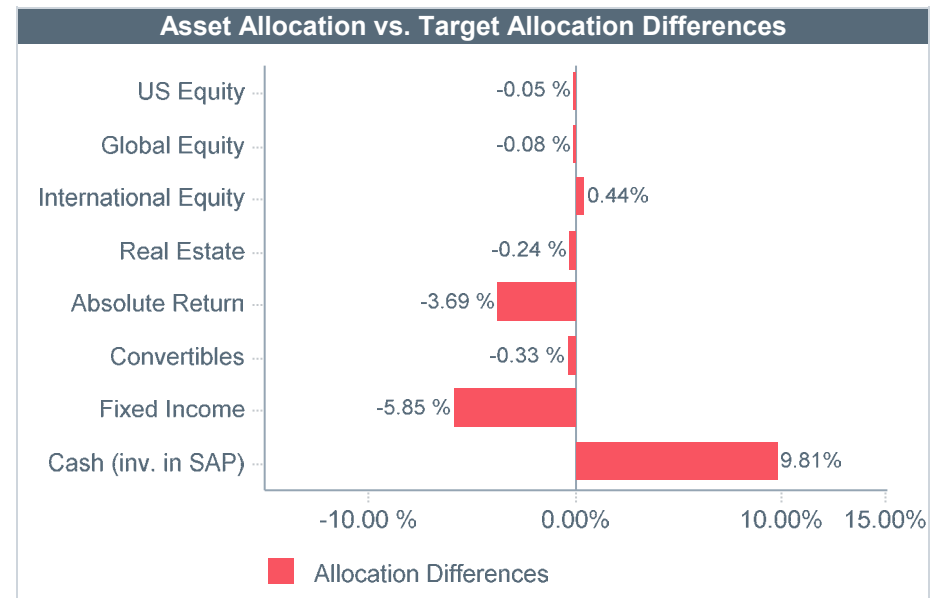


Performance shown is gross of fees. Calculations are based on quarterly periodicity.



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

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
US Equity	200,033,819	9.95	10.00
Global Equity	36,640,834	1.82	1.90
International Equity	151,644,423	7.54	7.10
Real Estate	75,514,211	3.76	4.00
Absolute Return	66,534,805	3.31	7.00
Convertibles	53,687,804	2.67	3.00
Fixed Income	1,128,949,003	56.15	62.00
Cash (inv. in SAP)	297,712,985	14.81	5.00
Total Fund	2,010,717,884	100.00	100.00



Wyoming State Treasurer's Office
Tobacco Settlement Trust
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

Fund Type: Non-Permanent Fund

Main Objective: Managed for investment of payments received pursuant to the Master Settlement Agreement

Primary Investment Goal: Safety of capital, yield, and liquidity

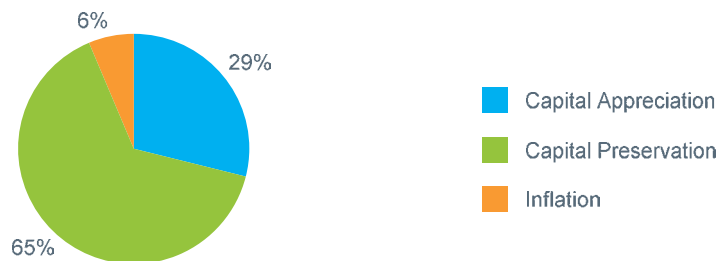
Long-Term Return Expectation: CPI + 2%

Funding Source: Settlement proceeds received under the 1998 Master Settlement Agreement between States and tobacco companies

Maximum Equity Allocation: N/A

Current Target Equity Allocation: 0%

Asset Allocation by Theme



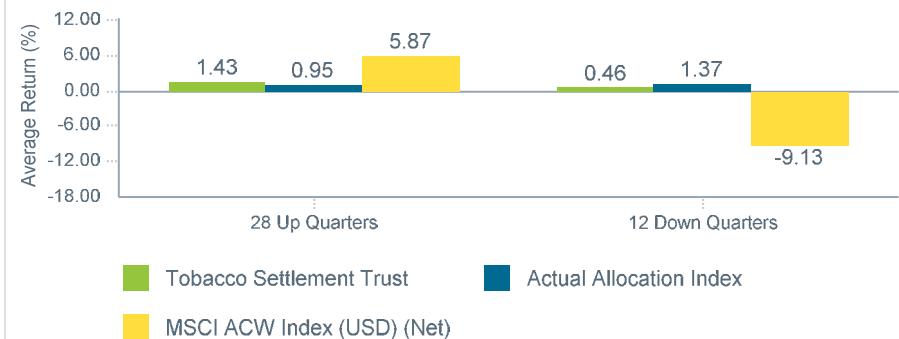
MPT Stats

	5 Years	10 Years
Maximum Return	2.99	5.27
Minimum Return	-3.07	-3.07
Standard Deviation	2.94	3.25
vs. S&P 500 Index (Cap Wtd)		
Beta	-0.01	0.04
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	0.71	1.24

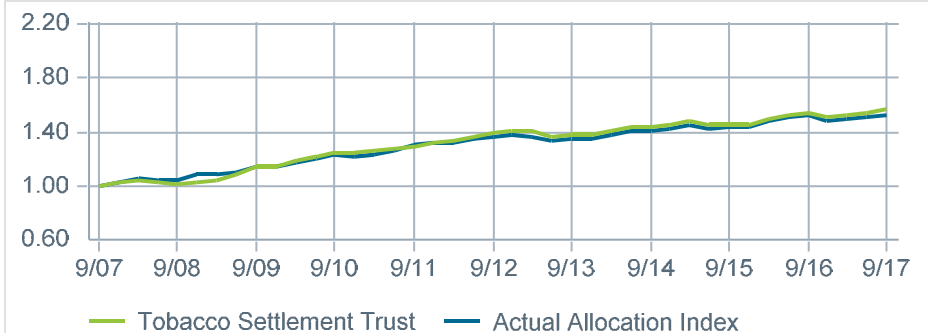
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
Tobacco Settlement Trust	236,813	100.00	-	100.00	-
Convertibles	7,786	3.29	1.75	3.00	4.25
Fixed Income	226,956	95.84	88.00	94.00	100.00
Cash (inv. in SAP)	2,071	0.87	0.00	3.00	6.00

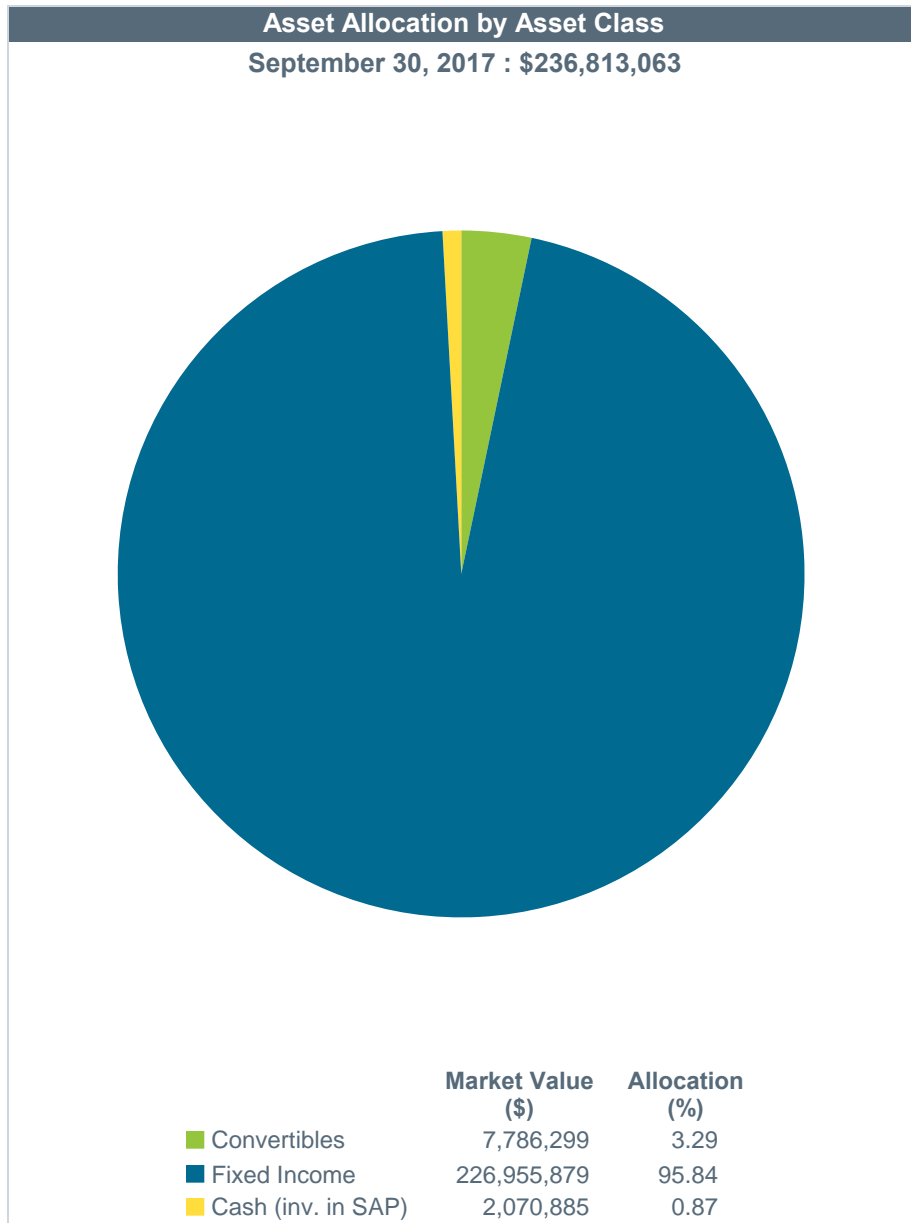
Up/Down Markets - 10 Years



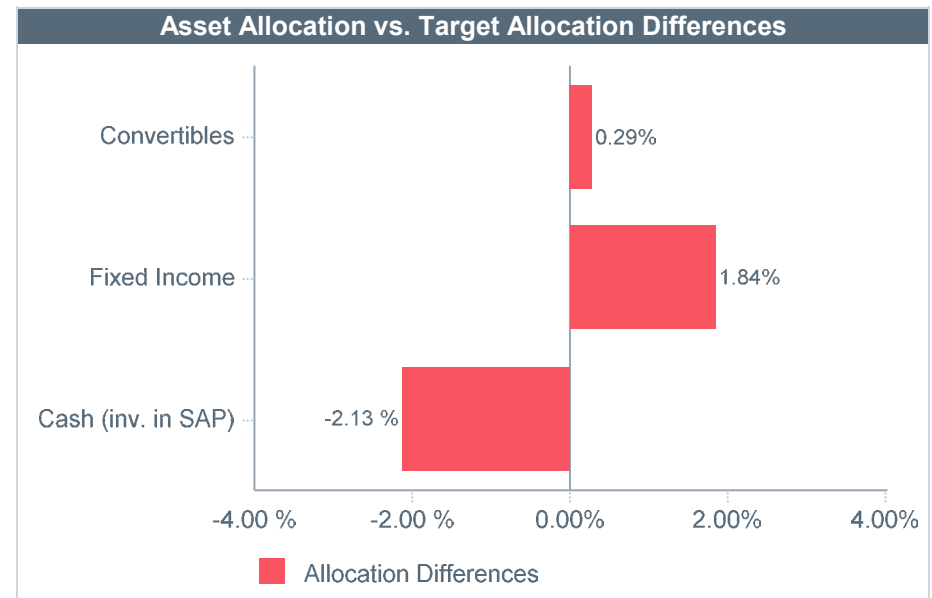
Growth of \$1 - 10 Years



Performance shown is gross of fees. Calculations are based on quarterly periodicity.



Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
Convertibles	7,786,299	3.29	3.00
Fixed Income	226,955,879	95.84	94.00
Cash (inv. in SAP)	2,070,885	0.87	3.00
Total Fund	236,813,063	100.00	100.00



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

Wyoming State Treasurer's Office
State Agency Pool
Total Fund Characteristics

As of September 30, 2017

Investment Pool Profile

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 liquidity

Primary Investment Goal: Safety of capital, yield, and liquidity

Long-Term Return Expectation: CPI + 2%

Funding Source: Monies from all other State funds pooled for investment

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

Maximum Equity Allocation: 0%

Current Target Equity Allocation: 0%

Asset Allocation by Theme



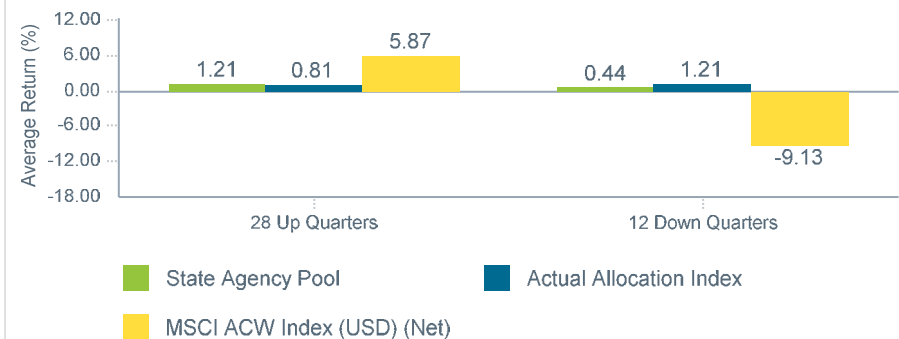
MPT Stats

	5 Years	10 Years
Maximum Return	2.61	4.64
Minimum Return	-2.47	-2.47
Standard Deviation	2.49	2.74
vs. S&P 500 Index (Cap Wtd)		
Beta	-0.01	0.03
vs. BofA ML 3 Mo US T-Bill Index		
Sharpe Ratio	0.70	1.24

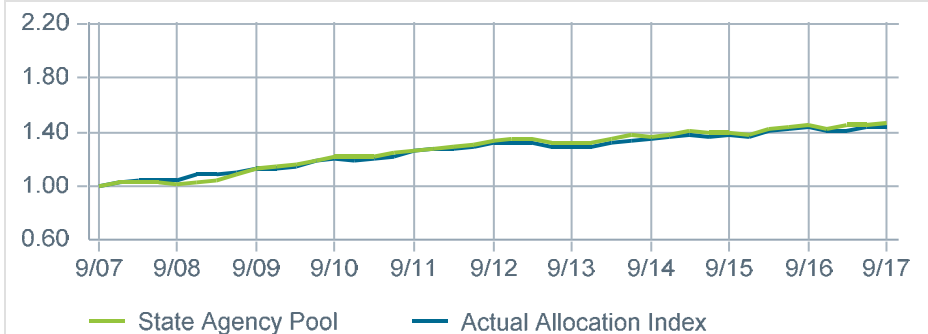
Asset Allocation vs. Target Allocation

	Market Value (\$000)	Allocation (%)	Minimum Range (%)	Target (%)	Maximum Range (%)
State Agency Pool	5,351,567	100.00	-	100.00	-
Convertibles	151,019	2.82	1.75	3.00	4.25
Fixed Income	4,029,787	75.30	82.00	88.00	94.00
Cash Equivalents	1,060,866	19.82	0.00	9.00	18.00
Public Purpose Investments	109,895	2.05	0.00	0.00	0.00

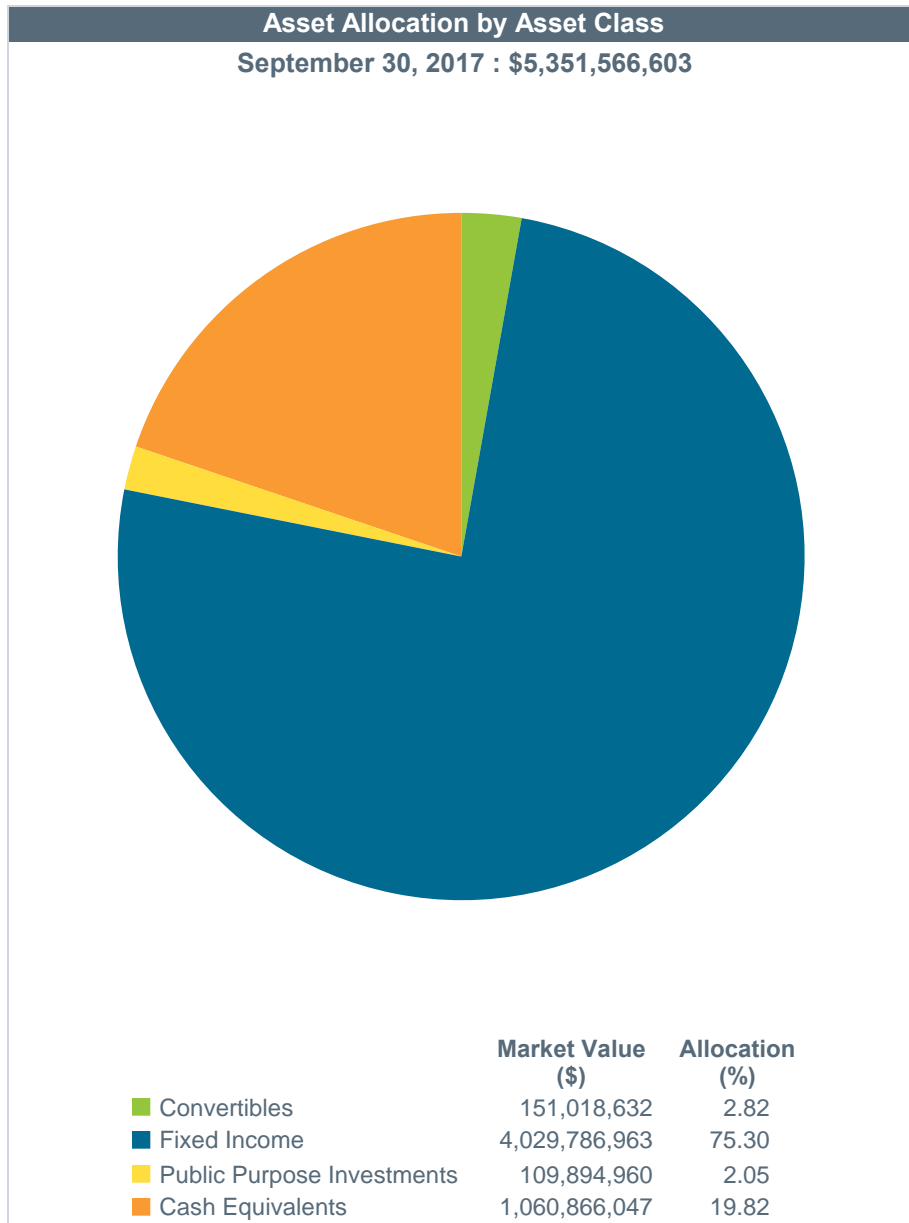
Up/Down Markets - 10 Years



Growth of \$1 - 10 Years

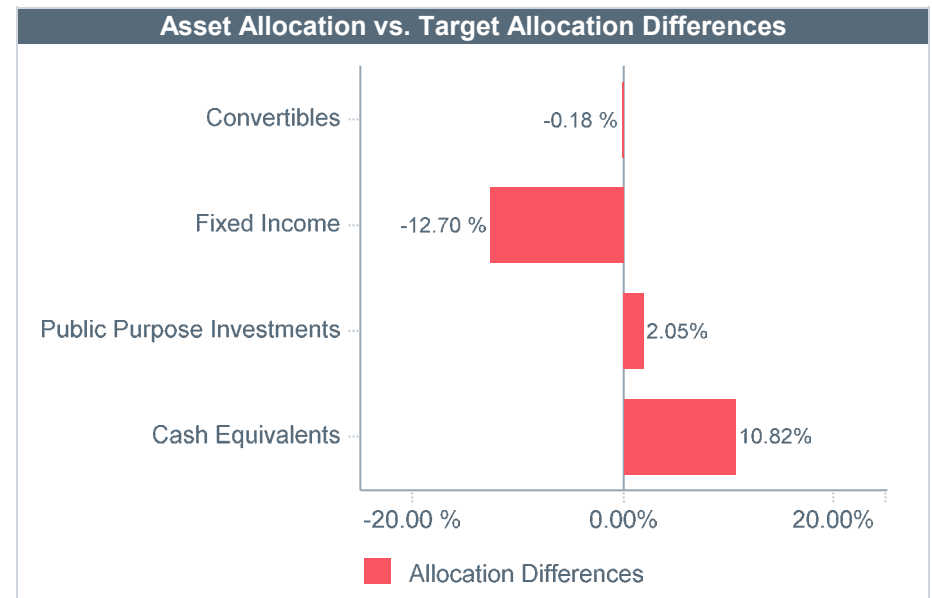


Performance shown is gross of fees. Calculations are based on quarterly periodicity.

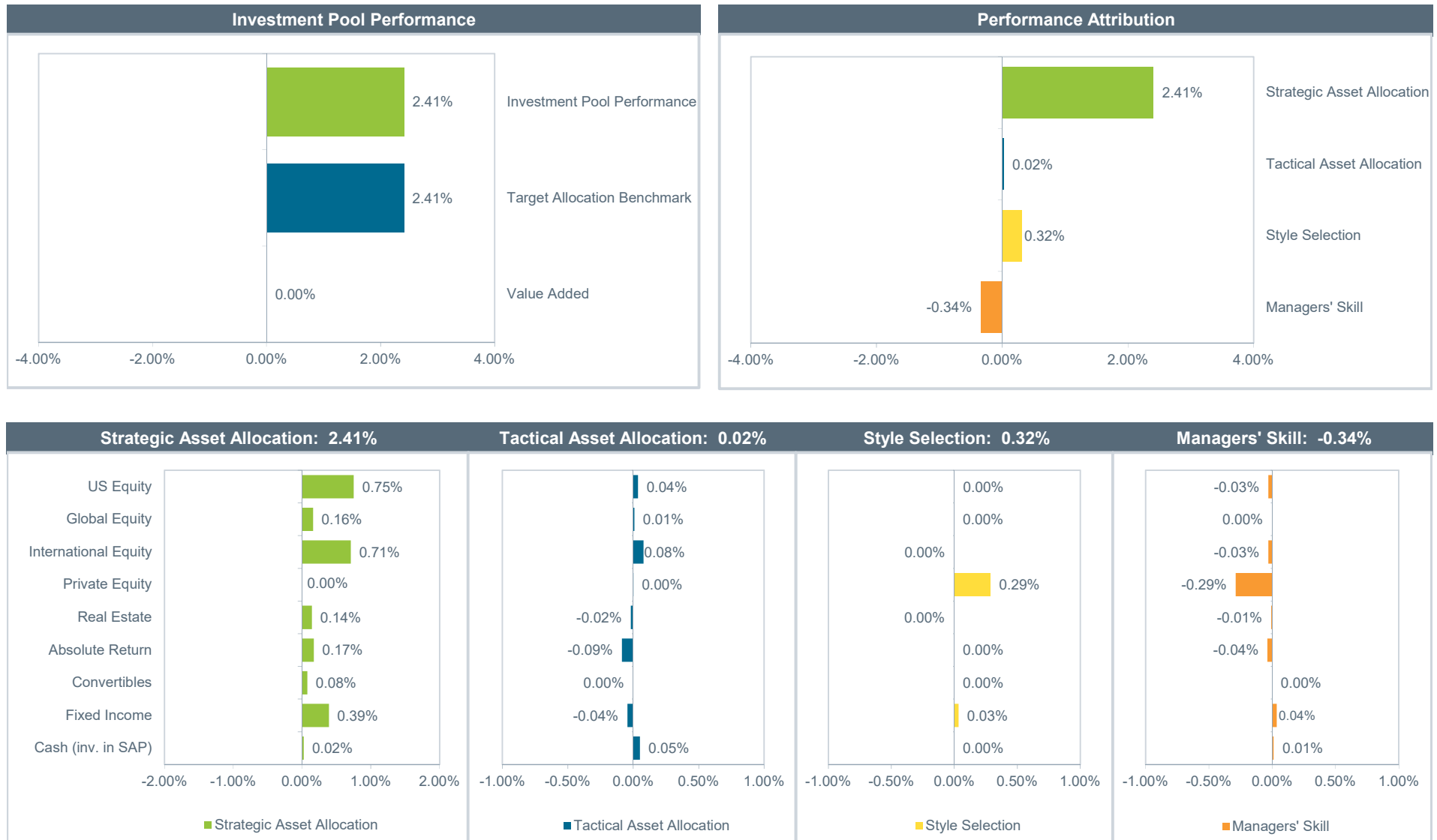


Allocations shown may not sum up to 100% exactly due to rounding.

Asset Allocation vs. Target Allocation			
	Market Value (\$)	Allocation (%)	Target (%)
Convertibles	151,018,632	2.82	3.00
Fixed Income	4,029,786,963	75.30	88.00
Public Purpose Investments	109,894,960	2.05	0.00
Cash Equivalents	1,060,866,047	19.82	9.00
Total Fund	5,351,566,603	100.00	100.00

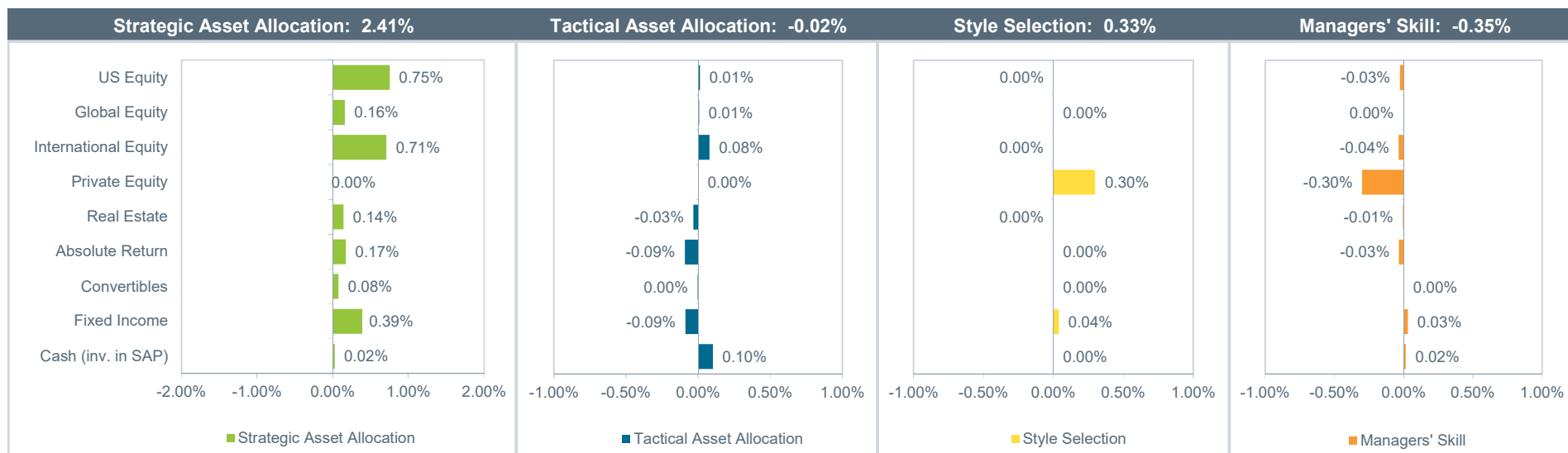
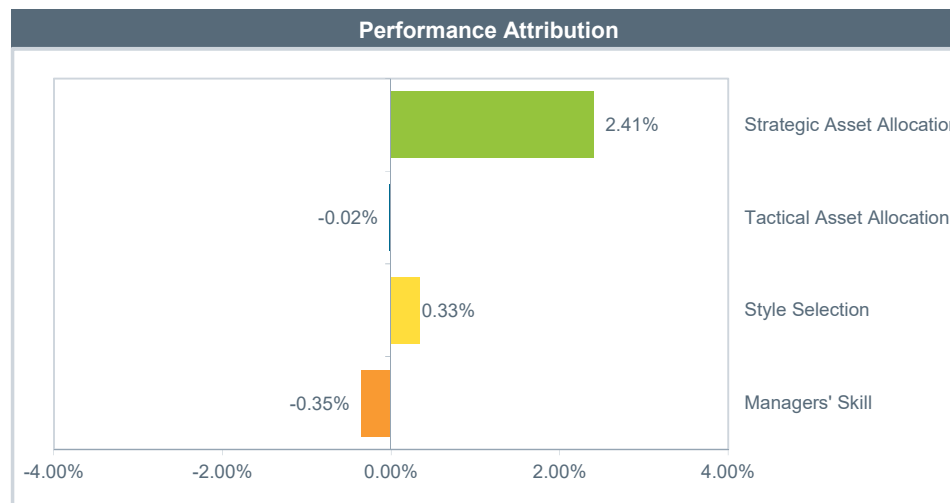
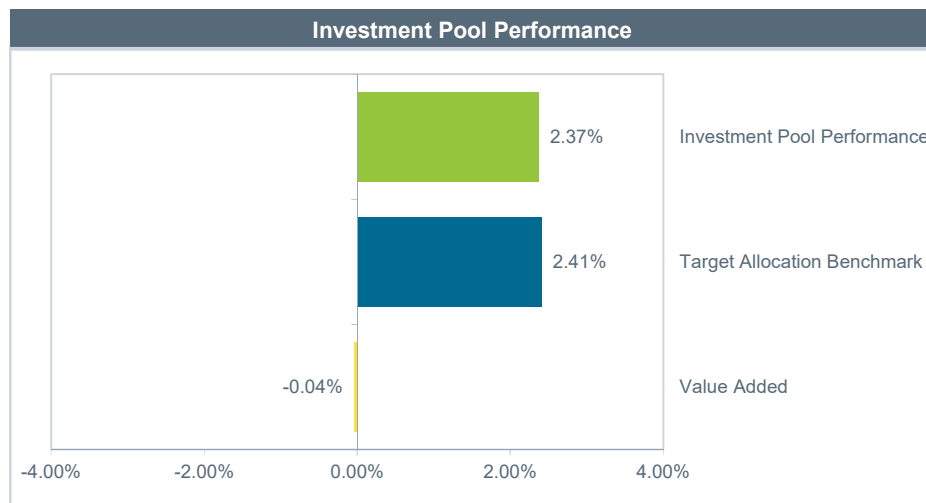


Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Permanent Mineral Trust Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017



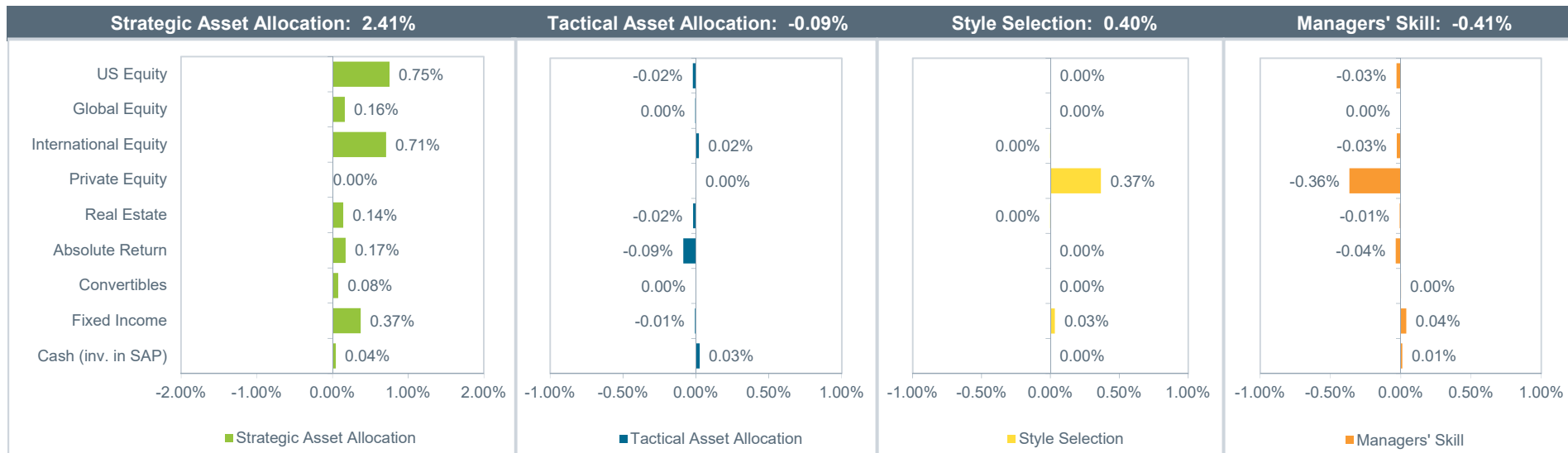
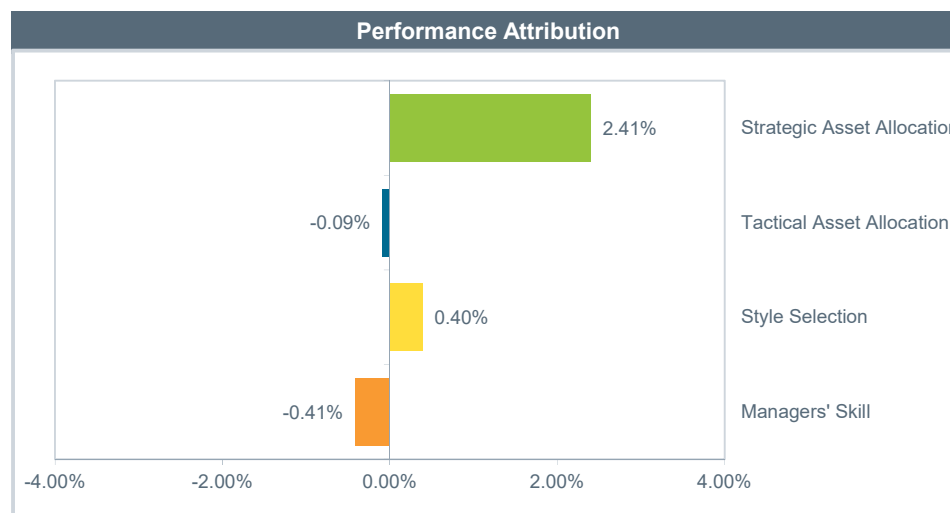
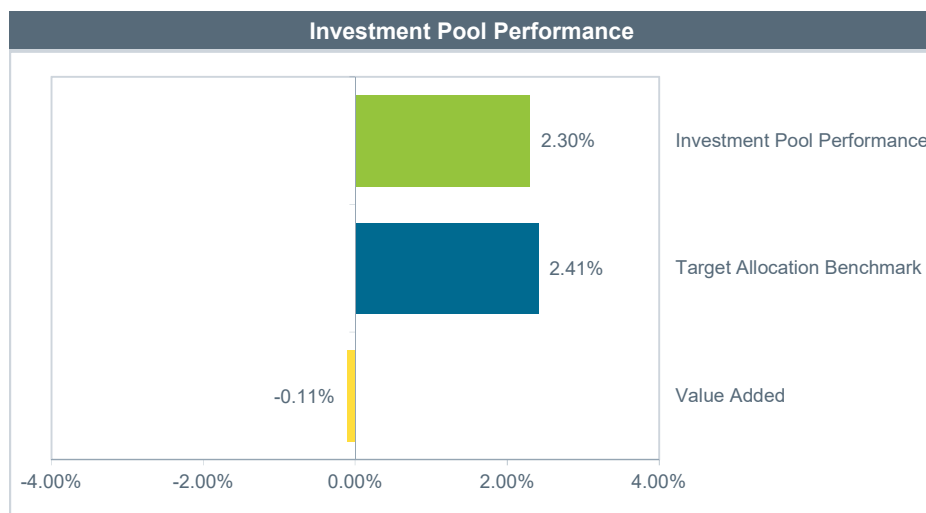
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
 Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Common School Permanent Land Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017



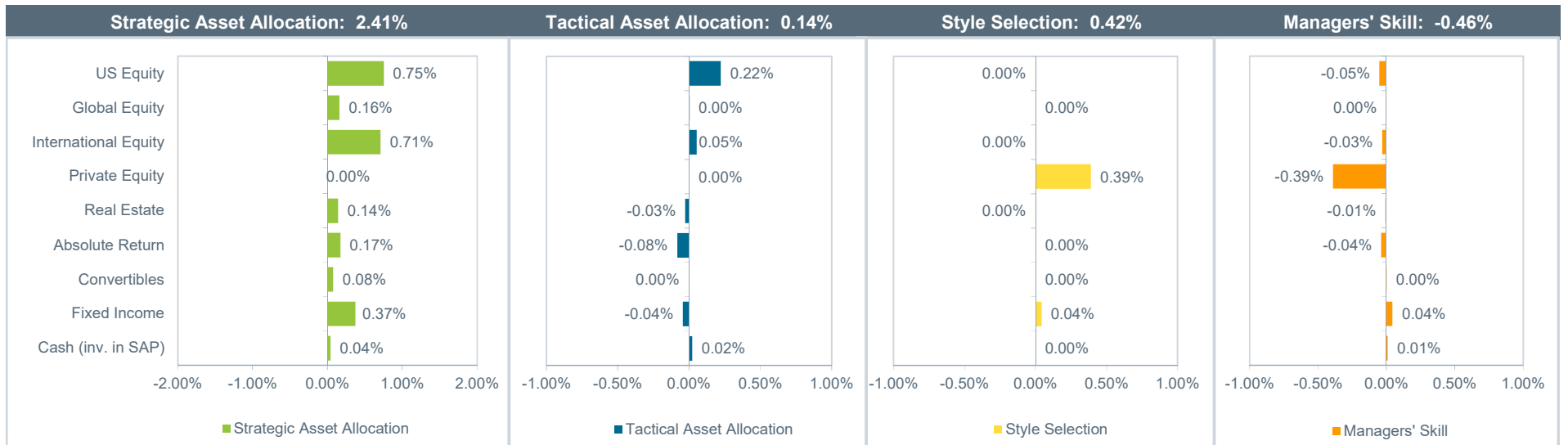
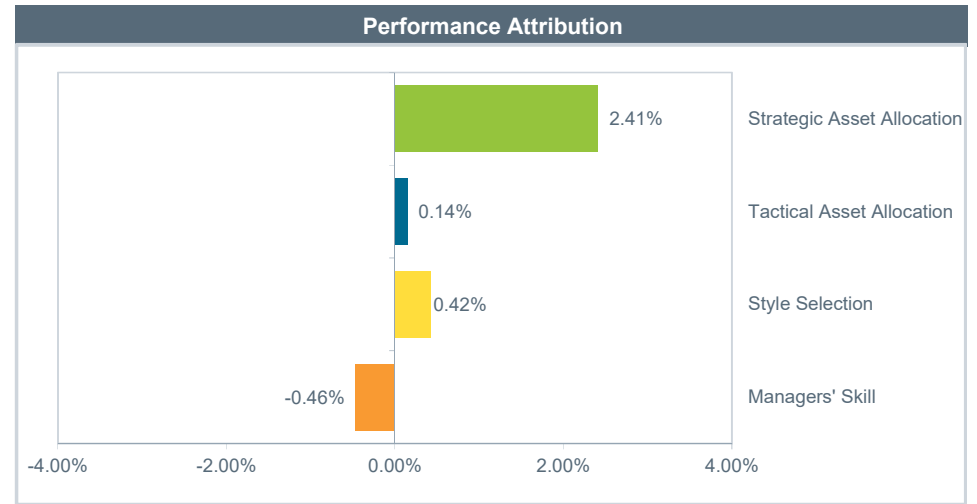
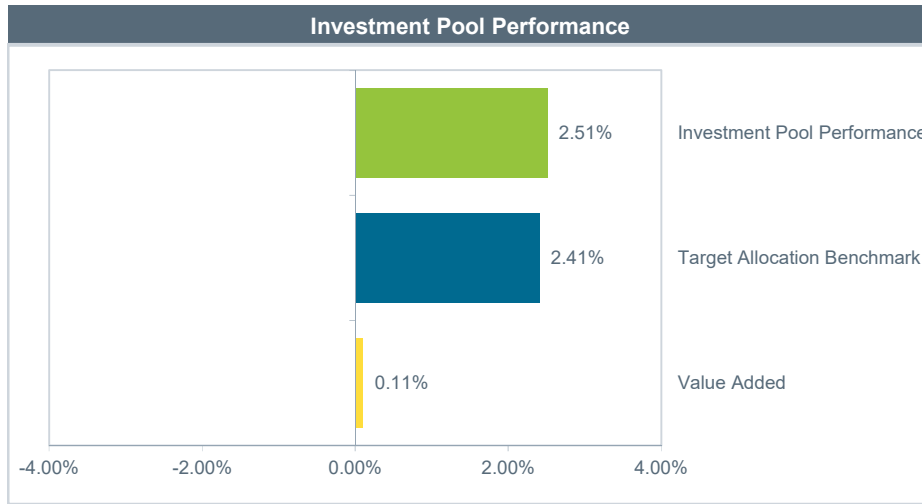
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
 Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Permanent Land Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017



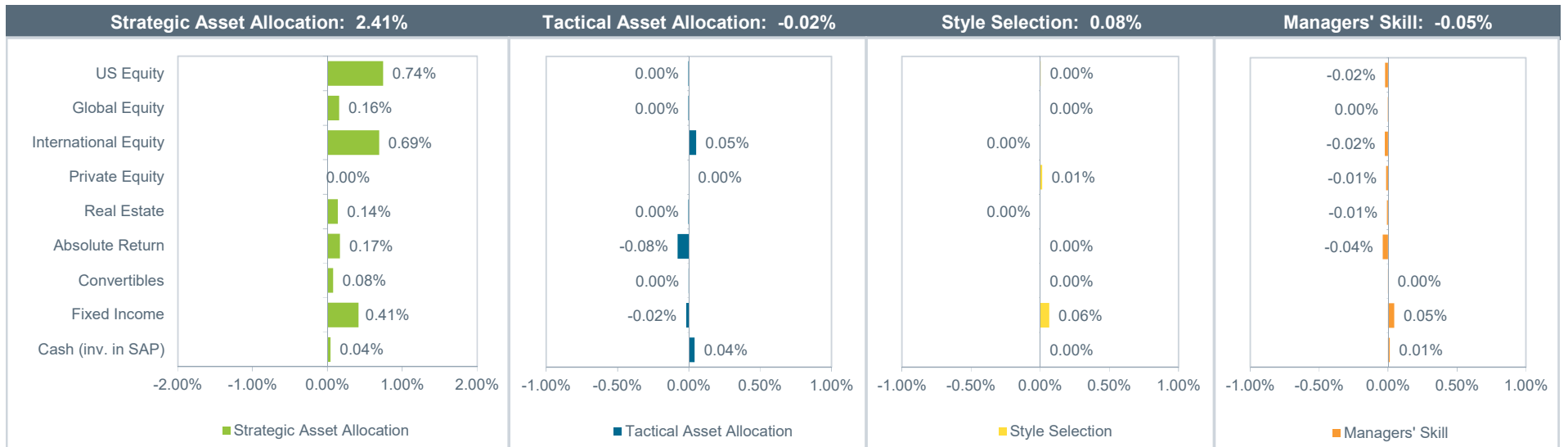
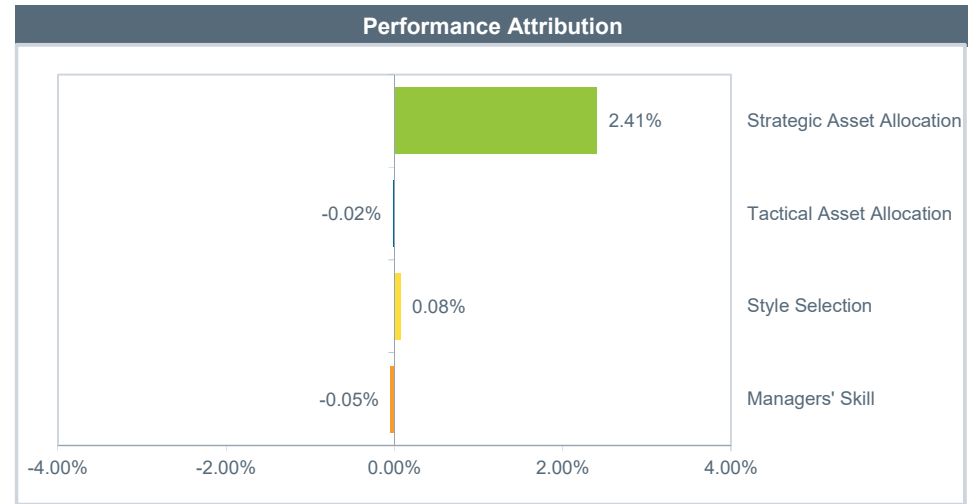
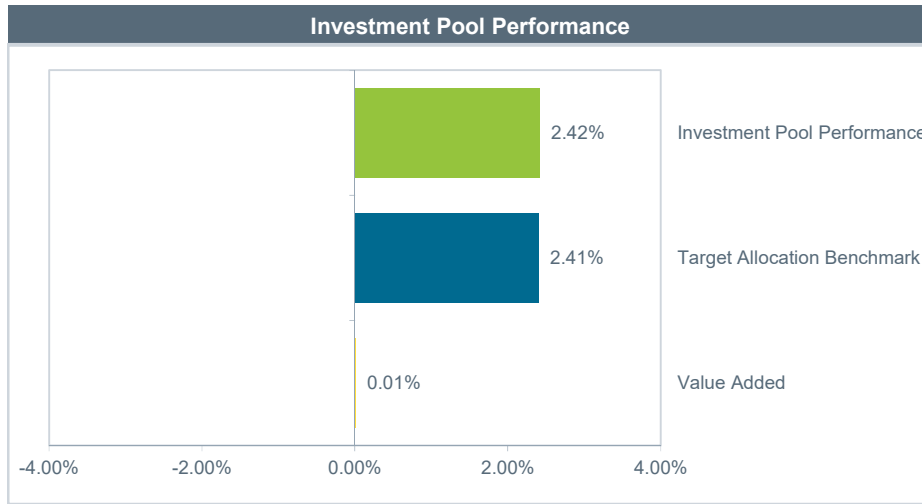
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
 Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
University Permanent Land Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017



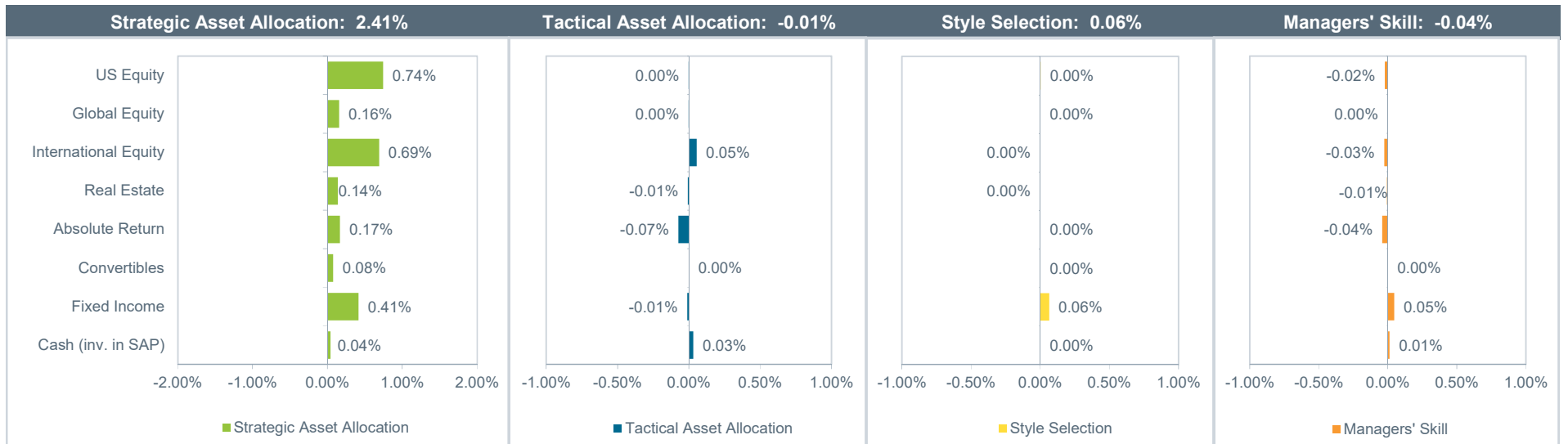
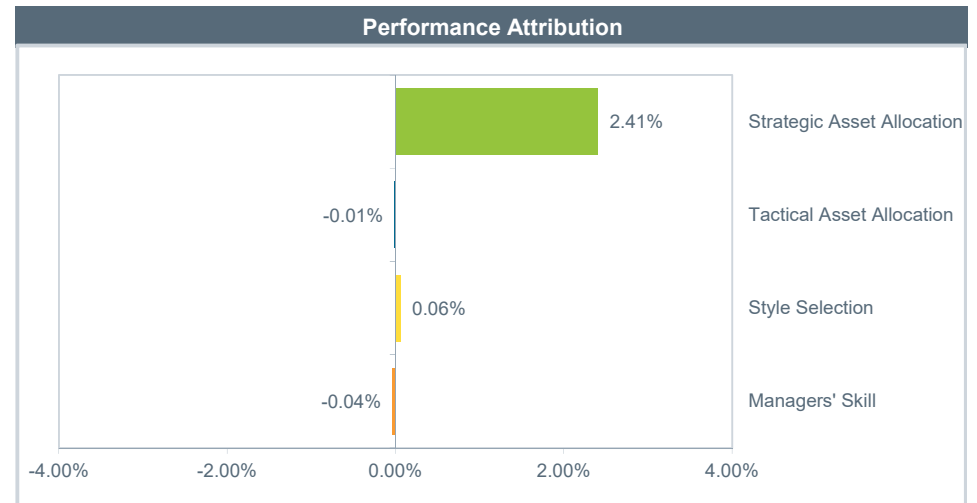
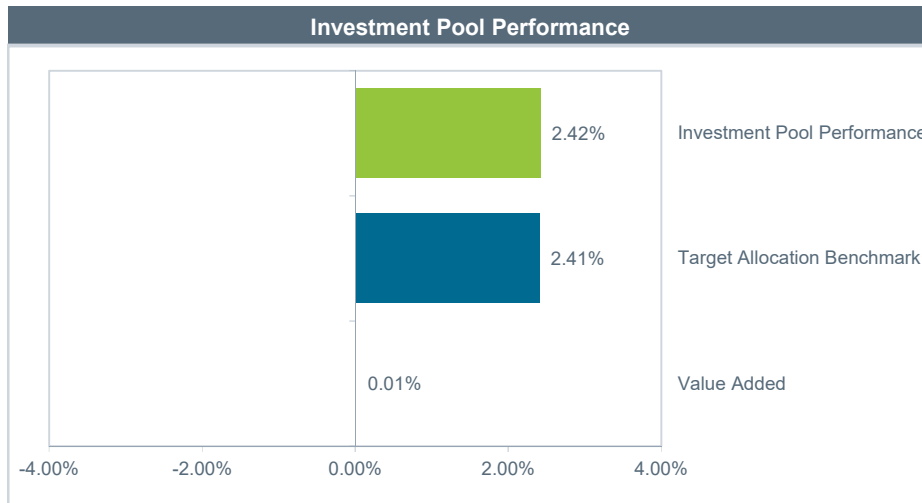
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
 Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Hathaway Scholarship Endowment Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017



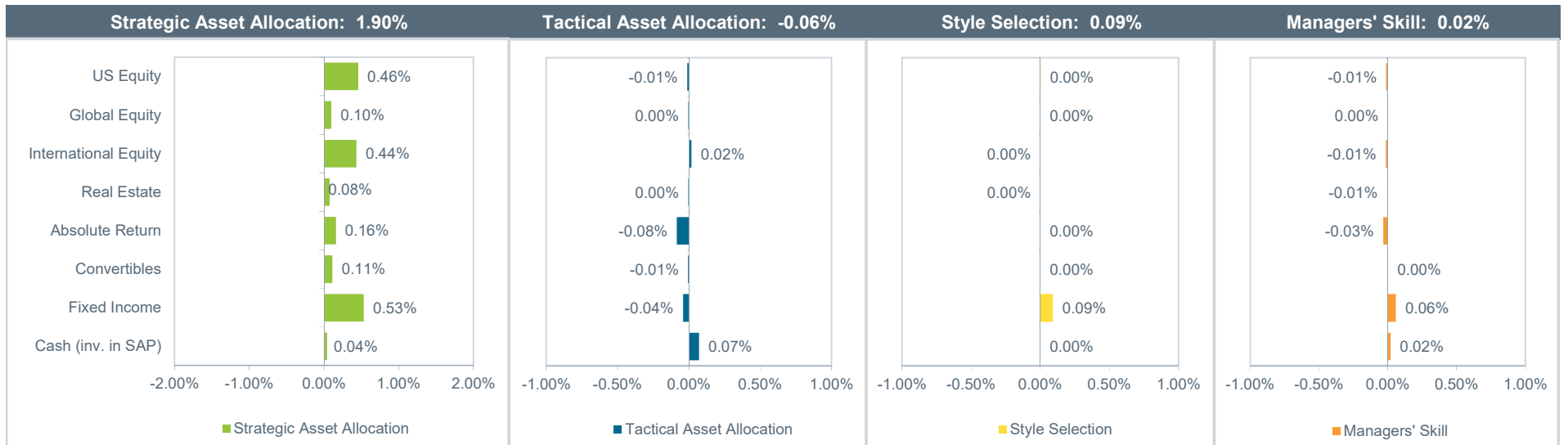
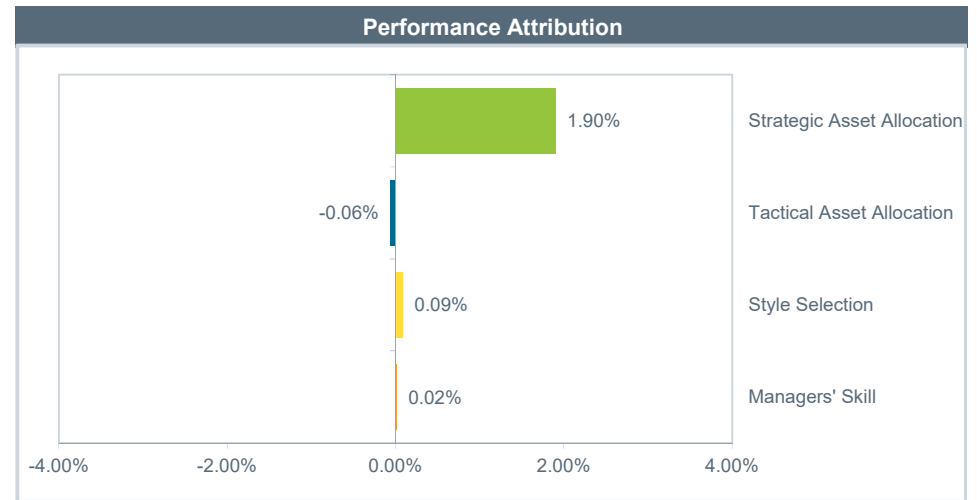
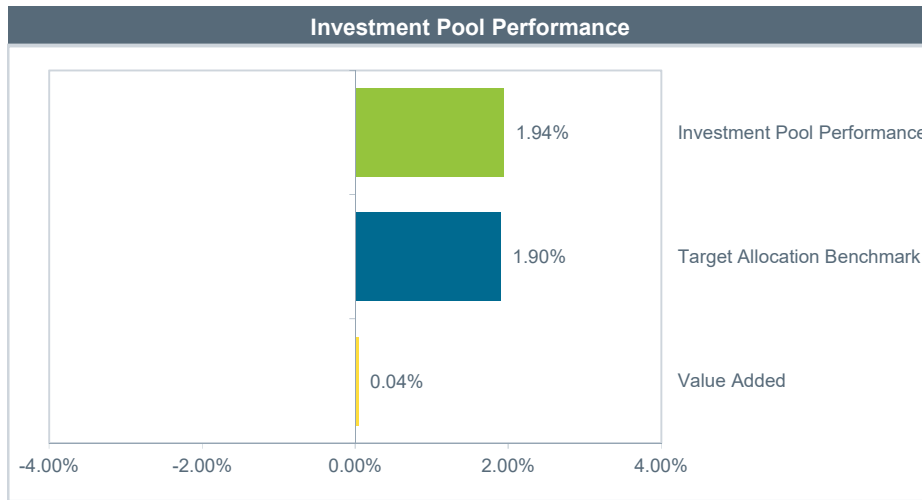
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Higher Education Endowment Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017



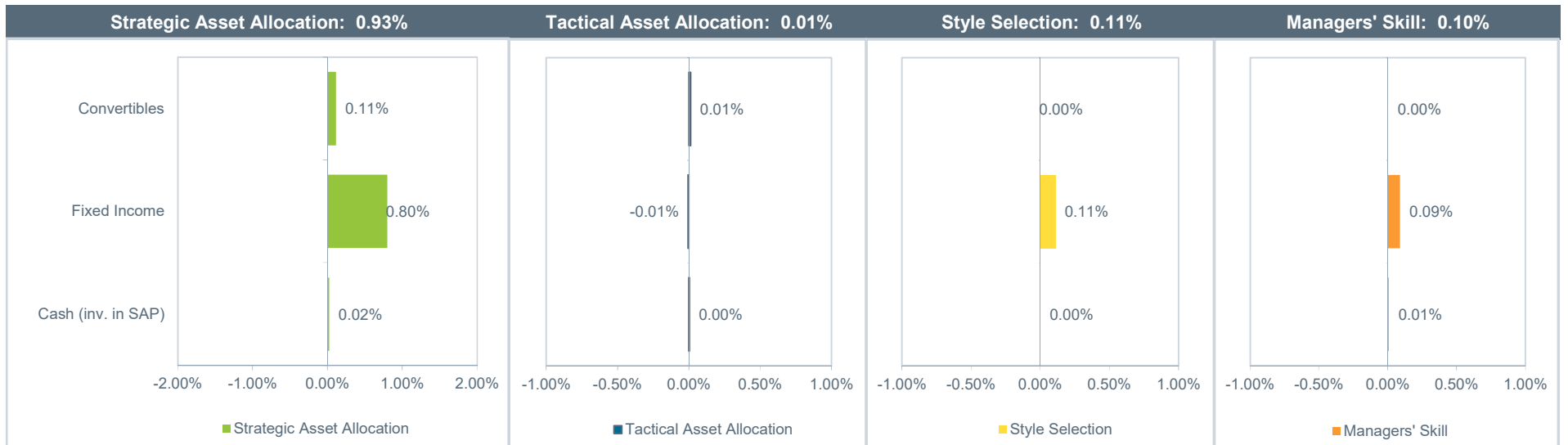
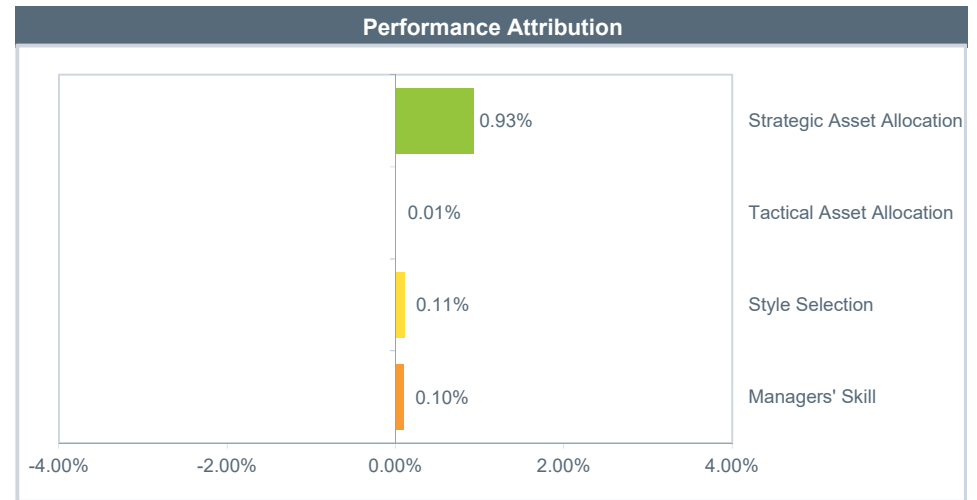
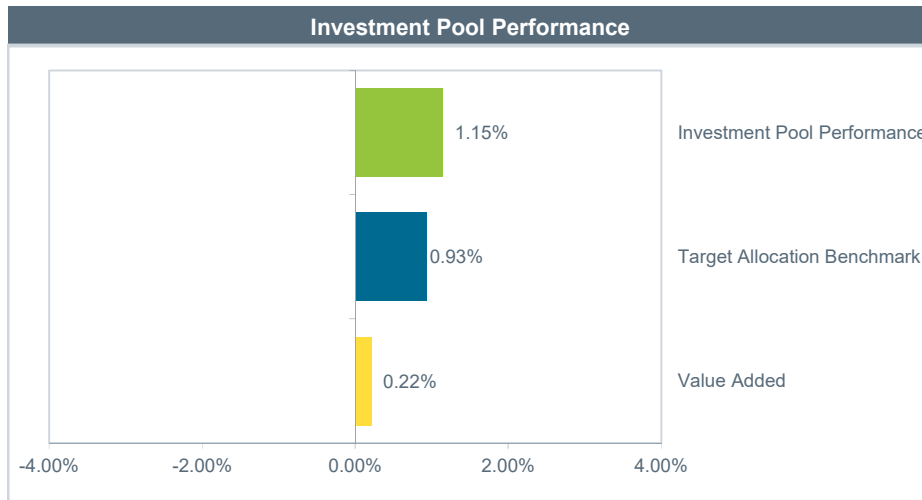
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
 Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Workers Compensation Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017



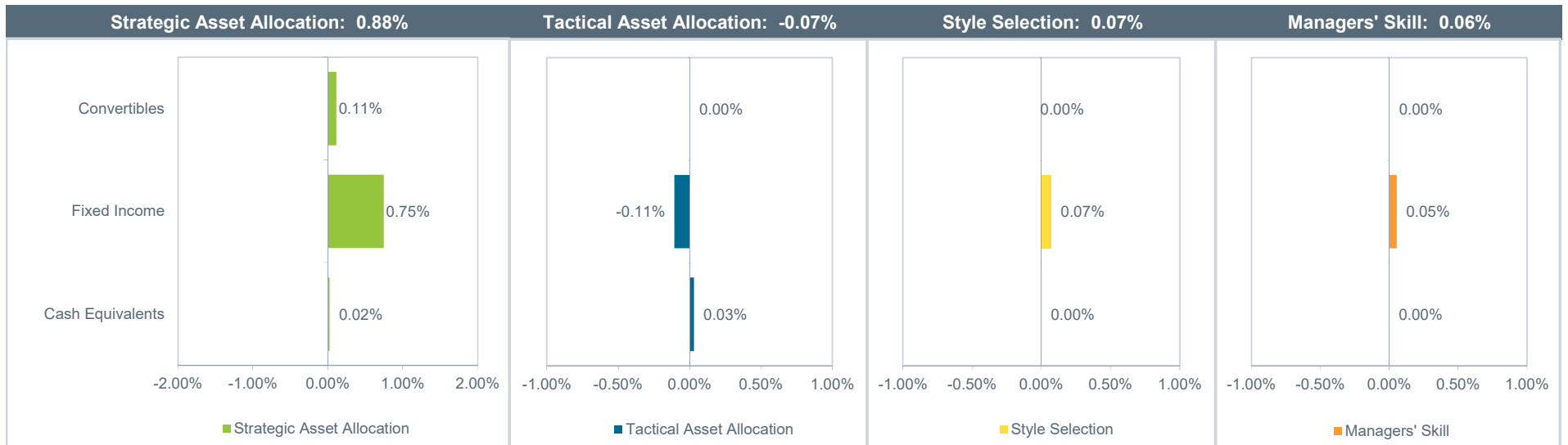
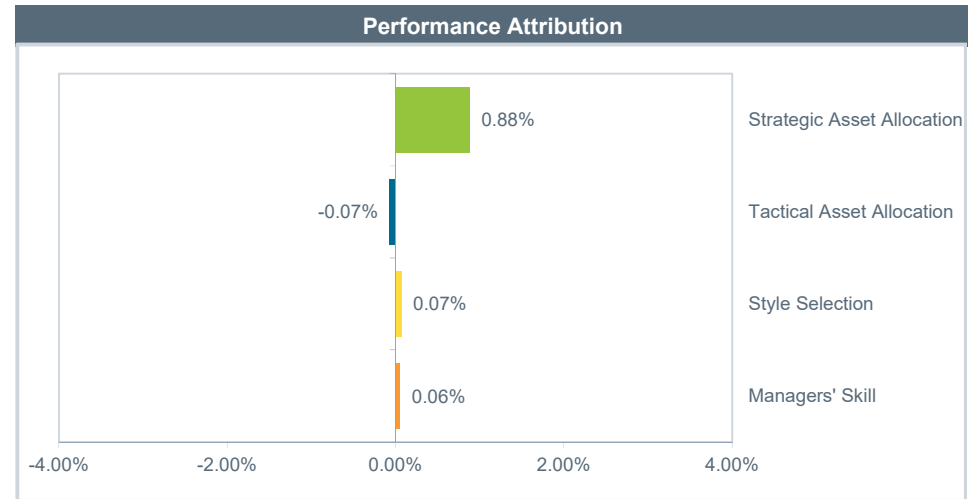
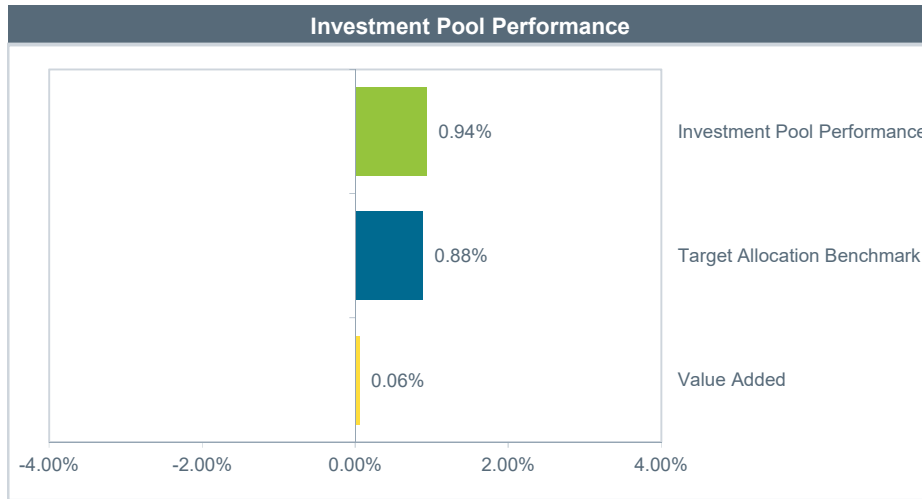
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index.
 Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

**Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
Tobacco Settlement Fund vs. Target Allocation Index
1 Quarter Ending September 30, 2017**



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

**Wyoming State Treasurer's Office
Pool Attribution - IDP Methodology
State Agency Pool vs. Target Allocation Index
1 Quarter Ending September 30, 2017**



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is gross of fees. Calculation is based on monthly periodicity. The benchmark utilized in this analysis is a passive target allocation index rather than an active actual allocation index. Actual Allocation Index = Target Allocation Benchmark + Tactical Asset Allocation. The underlying parts may not exactly sum to the category totals due to rounding.

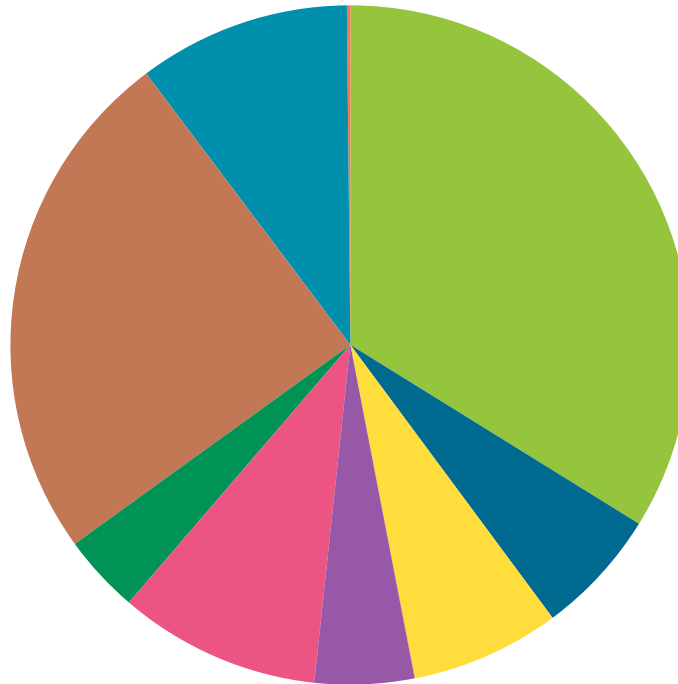
Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2017

	Allocation		Performance (%)									
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015
Permanent Mineral Trust	7,828,042,011	38.53	2.41	2.41	8.06	8.03	5.34	6.30	6.57	4.87	6.60	-0.41
Permanent Mineral Trust - Actual Allocation Index			2.43	2.43	8.04	7.74	5.09	6.08	6.23	4.34	5.59	0.01
Difference			-0.02	-0.02	0.02	0.29	0.25	0.22	0.34	0.53	1.01	-0.42
Common School PLF	3,952,943,369	19.46	2.37	2.37	8.14	8.23	5.47	6.43	6.81	5.10	6.72	-0.27
Common School - Actual Allocation Index			2.39	2.39	8.09	7.92	5.23	6.21	6.41	4.38	5.72	0.17
Difference			-0.02	-0.02	0.05	0.31	0.24	0.22	0.40	0.72	1.00	-0.44
Permanent Land Fund	194,023,596	0.95	2.30	2.30	7.81	7.70	5.23	6.14	6.43	4.70	6.55	-0.49
Permanent Land Fund - Actual Allocation Index			2.31	2.31	7.70	7.28	4.96	5.91	6.08	4.15	5.50	-0.05
Difference			-0.01	-0.01	0.11	0.42	0.27	0.23	0.35	0.55	1.05	-0.44
University Permanent Land Fund	23,048,881	0.11	2.51	2.51	8.55	8.74	5.59	6.48	6.62	4.69	6.93	-0.59
University PLF - Actual Allocation Index			2.55	2.55	8.43	8.48	5.38	6.32	6.38	4.32	6.04	-0.16
Difference			-0.04	-0.04	0.12	0.26	0.21	0.16	0.24	0.37	0.89	-0.43
Hathaway Scholarship	597,194,303	2.94	2.42	2.42	7.74	7.12	4.98	5.55	5.96	5.65	5.93	-0.29
Hathaway Scholarship - Actual Allocation Index			2.38	2.38	7.68	6.78	4.88	5.45	5.68	5.22	5.11	0.21
Difference			0.04	0.04	0.06	0.34	0.10	0.10	0.28	0.43	0.82	-0.50
Higher Education	123,228,622	0.61	2.42	2.42	7.73	7.13	4.95	5.54	5.93	5.60	5.93	-0.34
Higher Education - Actual Allocation Index			2.39	2.39	7.69	6.80	4.85	5.44	5.65	5.20	5.11	0.15
Difference			0.03	0.03	0.04	0.33	0.10	0.10	0.28	0.40	0.82	-0.49
Workers Compensation Fund	2,010,717,884	9.90	1.94	1.94	6.20	4.96	4.09	4.38	4.97	5.46	5.09	-0.26
Workers Compensation - Actual Allocation Index			1.84	1.84	6.05	4.41	3.99	4.33	4.72	5.14	4.18	0.15
Difference			0.10	0.10	0.15	0.55	0.10	0.05	0.25	0.32	0.91	-0.41
Tobacco Settlement Trust	236,813,063	1.17	1.15	1.15	3.71	1.43	2.91	2.28	3.29	4.58	4.08	-0.07
Tobacco Settlement - Actual Allocation Index			0.94	0.94	3.40	0.51	2.81	2.19	3.04	4.31	2.84	0.41
Difference			0.21	0.21	0.31	0.92	0.10	0.09	0.25	0.27	1.24	-0.48
State Agency Pool	5,351,566,603	26.34	0.94	0.94	3.00	1.03	2.48	1.92	2.76	3.94	3.64	-0.09
State Agency Pool - Actual Allocation Index			0.81	0.81	2.94	0.43	2.47	1.90	2.61	3.74	2.54	0.33
Difference			0.13	0.13	0.06	0.60	0.01	0.02	0.15	0.20	1.10	-0.42
Total Fund	20,317,578,330	100.00	1.92	1.92	6.57	5.78	4.42	4.79	5.30	4.75	5.50	-0.16
Wyoming State Actual Allocation Index			1.82	1.82	6.17	5.10	4.23	4.59	4.97	4.35	4.65	0.26
Difference			0.10	0.10	0.40	0.68	0.19	0.20	0.33	0.40	0.85	-0.42

Performance shown is gross of fees. Wyoming State Treasurer's Office fiscal year ends on June 30th.

September 30, 2017 : \$4,495,331,369



	Market Value (\$)	Allocation (%)
State Street All Cap	1,520,242,716	33.82
Epoch	271,082,884	6.03
Lazard	318,101,450	7.08
UW Portfolio Mgmt Program	1,462,574	0.03
RBC	213,059,945	4.74
Arrowstreet	431,678,224	9.60
Internal International Equity Portfolio	167,831,573	3.73
Northern Trust	1,110,718,540	24.71
Fisher Investments	453,878,776	10.10
Manning & Napier	7,274,686	0.16

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

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2017

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	Since Incep.	Inception Date
Total Equity Composite	4,495,331,369	100.00	5.19	5.19	16.68	18.67	8.50	11.53	10.85	5.39	9.66	7.11	01/01/2006
Total Equity Custom Index			5.18	5.18	17.25	18.65	7.43	10.20	9.17	3.66	7.86	5.72	
Difference			0.01	0.01	-0.57	0.02	1.07	1.33	1.68	1.73	1.80	1.39	
US Equity Composite	2,323,949,571	51.70	4.42	4.42	12.05	16.66	10.32	14.13	14.33	7.89	13.83	7.07	06/01/1997
US Equity Custom Index			4.57	4.57	13.91	18.71	10.69	14.15	14.32	7.40	12.74	7.48	
Difference			-0.15	-0.15	-1.86	-2.05	-0.37	-0.02	0.01	0.49	1.09	-0.41	
State Street All Cap	1,520,242,716	33.82	4.39	4.39	12.64	17.89	N/A	N/A	N/A	N/A	13.77	9.43	01/01/2015
State Street All Cap Custom Index			4.44	4.44	12.73	17.99	10.59	14.24	14.28	7.86	13.78	9.52	
Difference			-0.05	-0.05	-0.09	-0.10	N/A	N/A	N/A	N/A	-0.01	-0.09	
Russell 3000 Index			4.57	4.57	13.91	18.71	10.74	14.23	14.28	7.57	12.74	9.71	
Difference			-0.18	-0.18	-1.27	-0.82	N/A	N/A	N/A	N/A	1.03	-0.28	
IM U.S. All Cap Equity (SA+CF) Median			4.31	4.31	12.59	18.64	9.66	13.82	13.78	7.88	12.53	8.89	
State Street All Cap Rank			50	50	50	54	N/A	N/A	N/A	N/A	42	43	
Epoch	271,082,884	6.03	4.92	4.92	16.15	22.24	N/A	N/A	N/A	N/A	10.19	9.83	11/01/2014
Russell 3000 Index			4.57	4.57	13.91	18.71	10.74	14.23	14.28	7.57	12.74	10.03	
Difference			0.35	0.35	2.24	3.53	N/A	N/A	N/A	N/A	-2.55	-0.20	
IM U.S. All Cap Equity (SA+CF) Median			4.31	4.31	12.59	18.64	9.66	13.82	13.78	7.88	12.53	9.28	
Epoch Rank			38	38	29	13	N/A	N/A	N/A	N/A	58	40	
Lazard	318,101,450	7.08	2.54	2.54	10.22	7.25	N/A	N/A	N/A	N/A	9.28	9.38	11/01/2014
Russell 3000 Index			4.57	4.57	13.91	18.71	10.74	14.23	14.28	7.57	12.74	10.03	
Difference			-2.03	-2.03	-3.69	-11.46	N/A	N/A	N/A	N/A	-3.46	-0.65	
IM U.S. All Cap Equity (SA+CF) Median			4.31	4.31	12.59	18.64	9.66	13.82	13.78	7.88	12.53	9.28	
Lazard Rank			87	87	74	100	N/A	N/A	N/A	N/A	63	49	
UW Portfolio Mgmt Program	1,462,574	0.03	4.16	4.16	14.66	17.82	10.33	12.51	10.55	4.57	10.87	4.84	04/01/2006
S&P 500 Index (Cap Wtd)			4.48	4.48	14.24	18.61	10.81	14.22	14.38	7.44	11.96	8.24	
Difference			-0.32	-0.32	0.42	-0.79	-0.48	-1.71	-3.83	-2.87	-1.09	-3.40	
IM U.S. Large Cap Core Equity (SA+CF) Median			4.61	4.61	14.11	18.63	10.59	14.20	14.42	7.83	10.51	8.49	
UW Portfolio Mgmt Program Rank			69	69	40	63	55	83	95	99	47	100	

Performance shown is gross of fees. Total Equity Index consists of the MSCI World Index through July 2010 and the MSCI ACW Index thereafter. US Equity Index consists of the S&P 500 Index through September 2014 and the Russell 3000 Index thereafter. International Equity Custom Index and Fisher Index both consist of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2017

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	Since Incep.	Inception Date
RBC	213,059,945	4.74	6.94	6.94	6.51	17.26	N/A	N/A	N/A	N/A	27.49	9.21	01/01/2015
Russell 2000 Index			5.67	5.67	10.94	20.74	12.18	13.79	13.51	7.85	21.31	9.59	
Difference			1.27	1.27	-4.43	-3.48	N/A	N/A	N/A	N/A	6.18	-0.38	
IM U.S. Small Cap Core Equity (SA+CF) Median			5.58	5.58	10.88	20.94	13.06	15.55	15.13	8.95	20.64	10.89	
RBC Rank			23	23	89	89	N/A	N/A	N/A	N/A	11	78	
Arrowstreet	431,678,224	9.60	5.15	5.15	20.40	22.50	N/A	N/A	N/A	N/A	8.94	8.89	03/01/2015
MSCI ACW Index (USD) (Net)			5.18	5.18	17.25	18.65	7.43	10.20	9.17	3.88	7.86	6.91	
Difference			-0.03	-0.03	3.15	3.85	N/A	N/A	N/A	N/A	1.08	1.98	
IM Global Equity (SA+CF) Median			4.93	4.93	17.17	18.49	8.48	11.78	11.12	5.56	7.09	7.66	
Arrowstreet Rank			47	47	30	21	N/A	N/A	N/A	N/A	35	31	
Int'l Equity Composite	1,739,703,575	38.70	6.24	6.24	22.60	20.23	5.55	7.67	6.03	1.85	3.74	6.34	01/01/2004
International Equity Custom Index			6.16	6.16	21.13	19.61	4.70	6.97	5.25	0.78	4.50	5.70	
Difference			0.08	0.08	1.47	0.62	0.85	0.70	0.78	1.07	-0.76	0.64	
Internal International Equity Portfolio	167,831,573	3.73	5.93	5.93	21.53	19.44	N/A	N/A	N/A	N/A	N/A	19.65	02/01/2016
FTSE All Wrld Ex US Index (US Invstr) (USD) (Net)			5.95	5.95	20.73	19.49	5.11	7.35	5.55	1.72	4.80	20.17	
Difference			-0.02	-0.02	0.80	-0.05	N/A	N/A	N/A	N/A	N/A	-0.52	
Northern Trust	1,110,718,540	24.71	6.40	6.40	21.49	19.83	4.82	7.13	5.40	N/A	4.48	6.25	08/01/2010
MSCI ACW Ex US Index (USD) (Net)			6.16	6.16	21.13	19.61	4.70	6.97	5.25	1.28	4.50	6.11	
Difference			0.24	0.24	0.36	0.22	0.12	0.16	0.15	N/A	-0.02	0.14	
Fisher Investments	453,878,776	10.10	6.91	6.91	26.44	24.31	8.29	9.29	7.76	3.32	1.94	8.07	09/01/2004
MSCI ACW Ex US Index (USD) (Net)			6.16	6.16	21.13	19.61	4.70	6.97	5.25	0.78	4.50	5.84	
Difference			0.75	0.75	5.31	4.70	3.59	2.32	2.51	2.54	-2.56	2.23	
IM All ACWI ex US (SA+CF) Median			6.22	6.22	23.04	20.19	6.93	9.40	7.81	3.00	2.04	8.05	
Fisher Investments Rank			37	37	23	18	29	55	51	44	51	50	

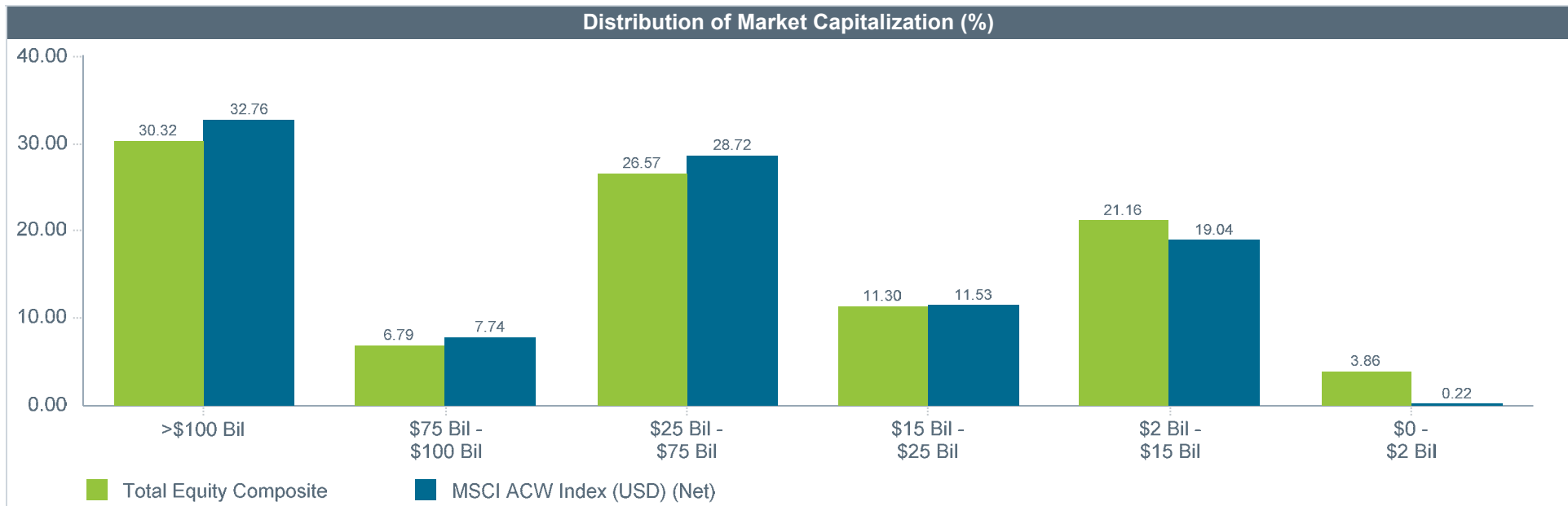
Performance shown is gross of fees. Total Equity Index consists of the MSCI World Index through July 2010 and the MSCI ACW Index thereafter. US Equity Index consists of the S&P 500 Index through September 2014 and the Russell 3000 Index thereafter. International Equity Custom Index and Fisher Index both consist of the MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter. Wyoming State Treasurer's Office fiscal year ends on June 30th. Since Inception date shown represents the first full month following initial funding.

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

As of September 30, 2017

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	1.32	1.85	-0.53	7.45
Microsoft Corp	0.98	1.26	-0.28	8.64
Samsung Electronics Co Ltd	0.92	0.51	0.41	7.96
Alphabet Inc	0.87	0.67	0.20	4.74
Coca-Cola Co (The)	0.86	0.42	0.44	1.16
Medtronic PLC	0.77	0.25	0.52	-11.40
Tencent Holdings LTD	0.75	0.56	0.19	20.34
Cisco Systems Inc	0.73	0.39	0.34	8.45
Alphabet Inc	0.72	0.69	0.03	5.54
Molson Coors Brewing Co	0.64	0.04	0.60	-5.01
% of Portfolio	8.56	6.64	1.92	

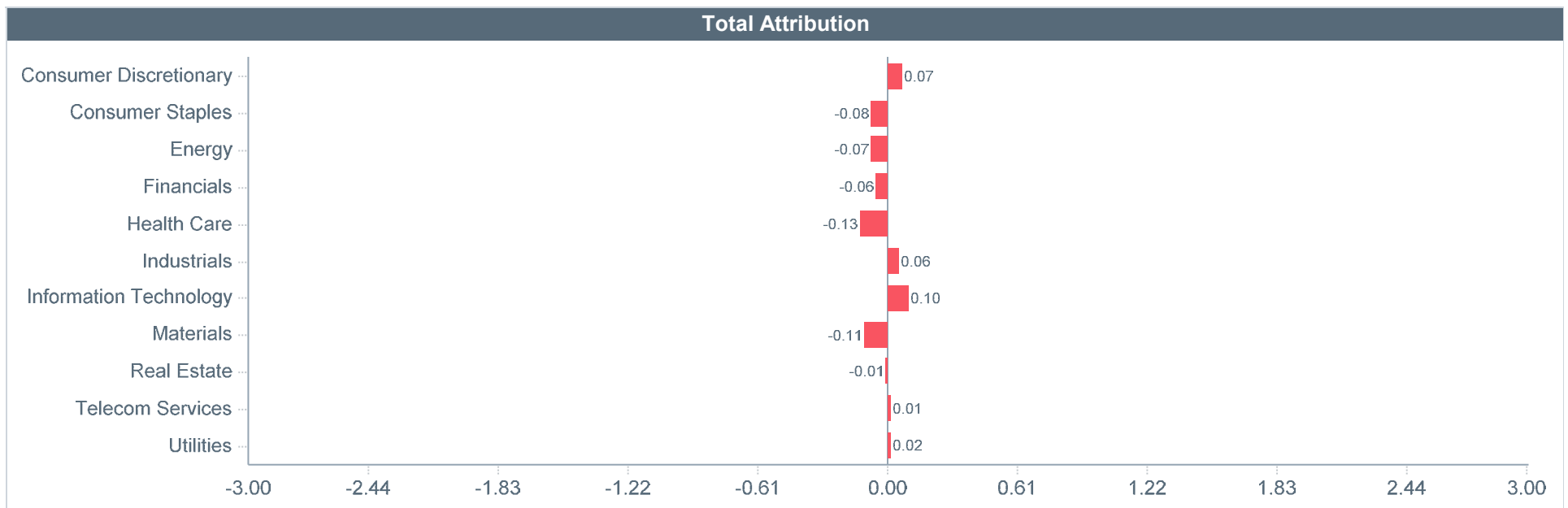
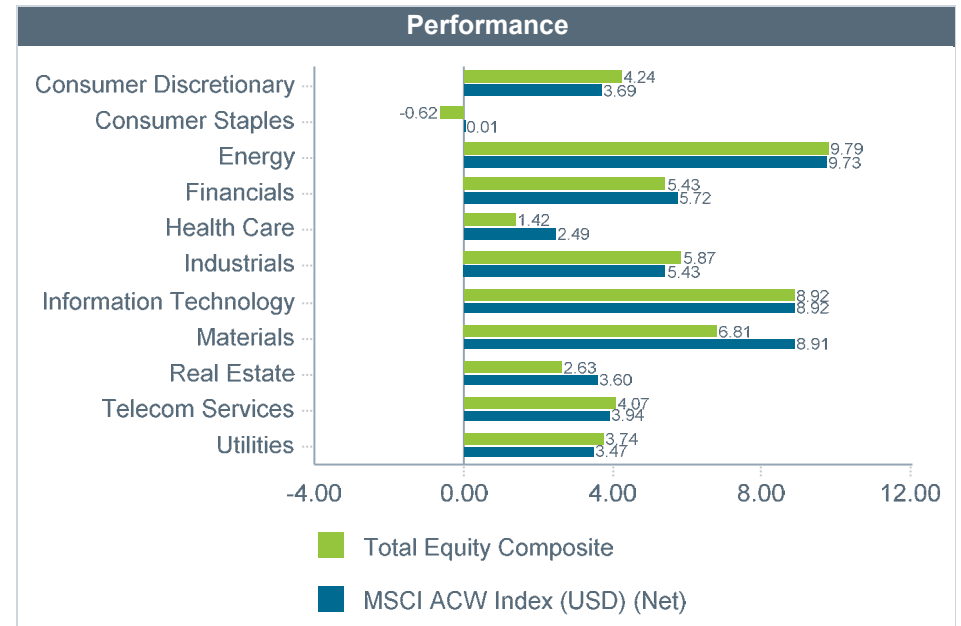
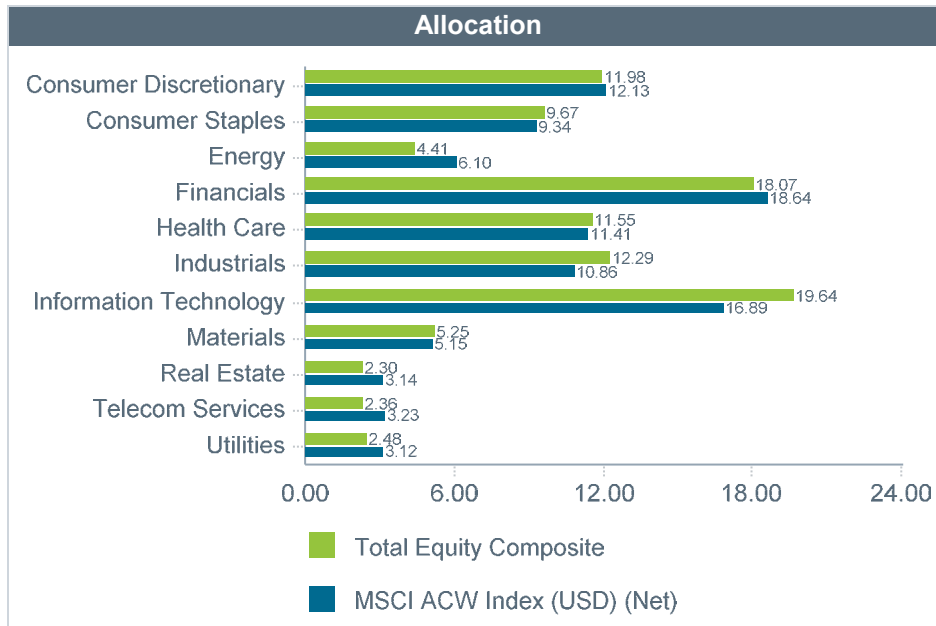
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	105,405	118,288
Median Mkt. Cap (\$M)	4,106	10,318
Price/Earnings Ratio	18.81	19.15
Price/Book Ratio	2.77	2.75
5 Yr. EPS Growth Rate (%)	9.29	8.93
Current Yield (%)	2.24	2.44
Beta (5 Years, Monthly)	0.99	1.00
Number of Securities	5,364	2,491



The Total Equity Custom Index currently consists of the MSCI ACW Index (USD) (Net). Alphabet Inc. is shown twice in the Top Ten Equity Holdings, but represents two different exchanges: GOOG and GOOGL.

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

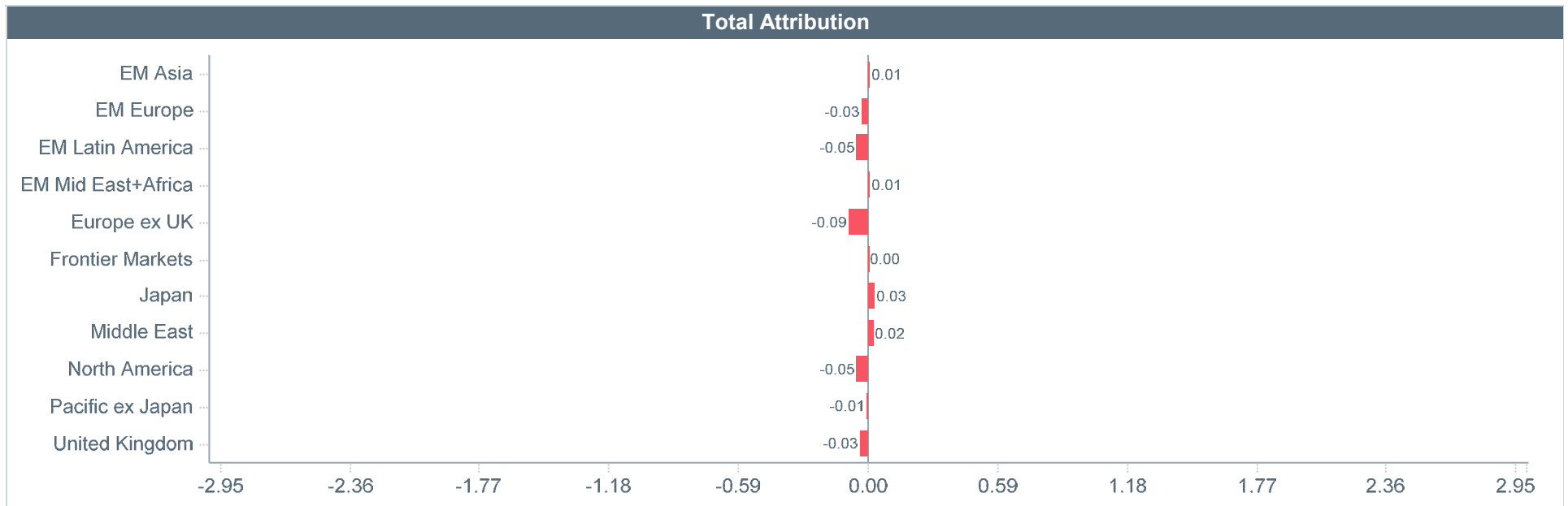
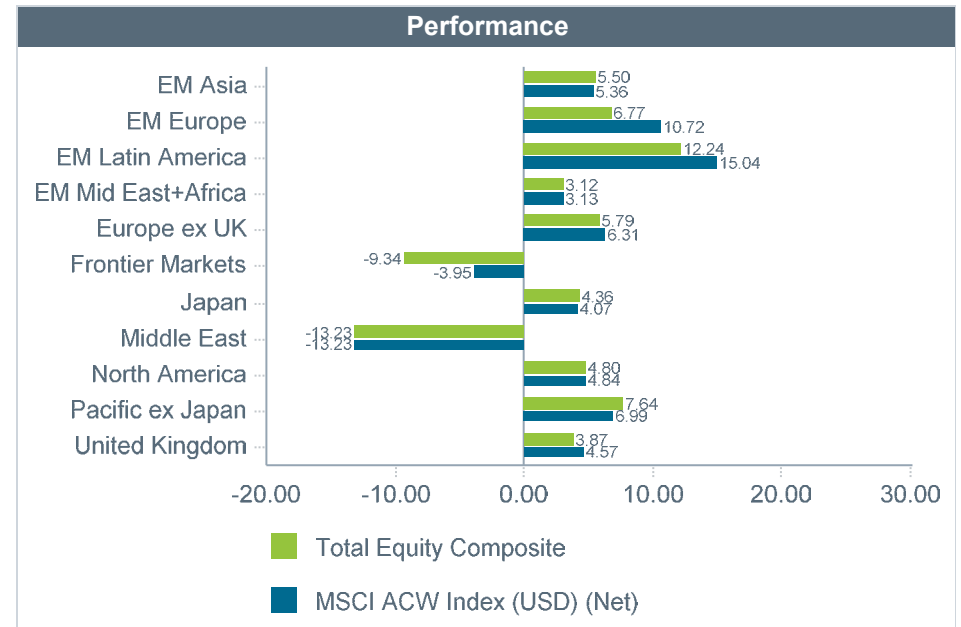
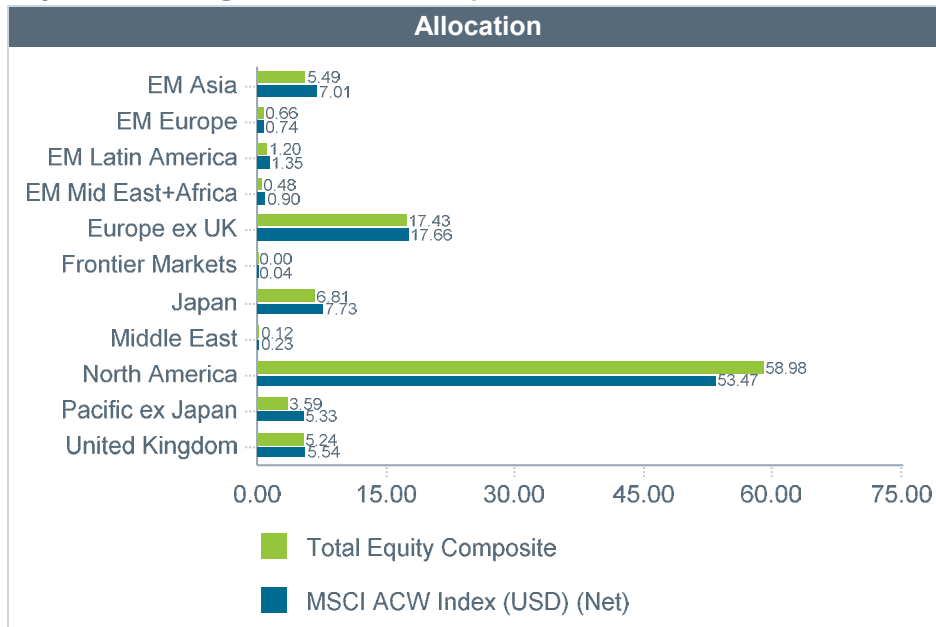
1 Quarter Ending September 30, 2017



The Total Equity Custom Index currently consists of the MSCI ACW Index (USD) (Net).

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

1 Quarter Ending September 30, 2017



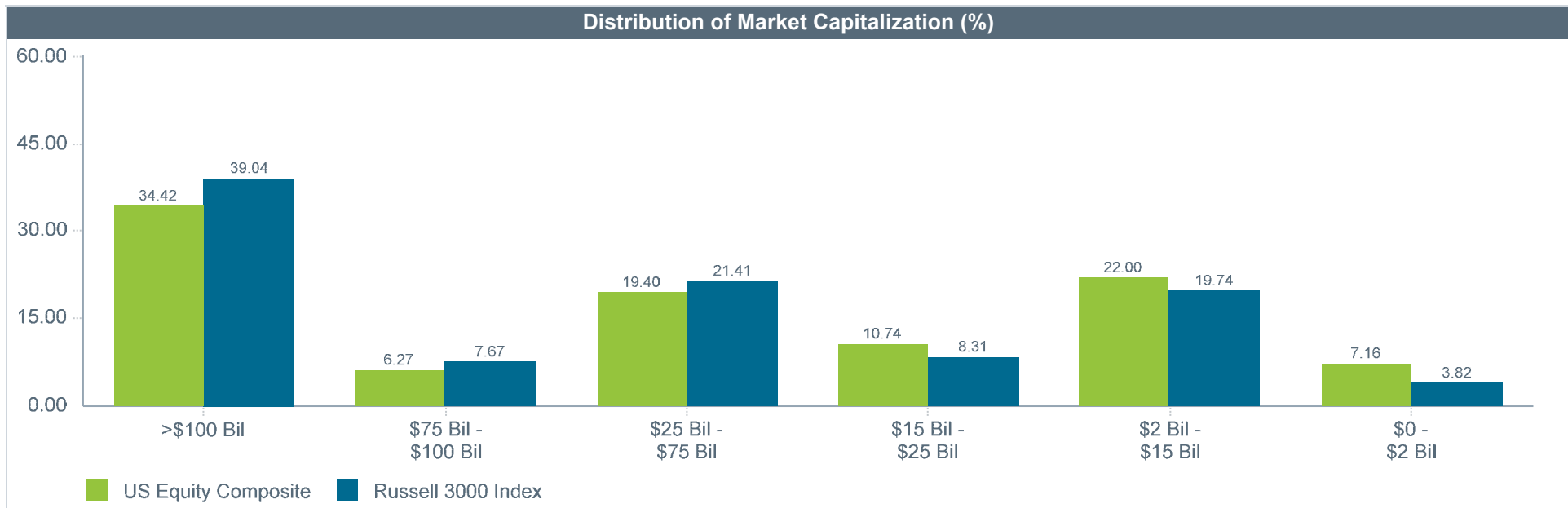
The Total Equity Custom Index currently consists of the MSCI ACW Index (USD) (Net).

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

As of September 30, 2017

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	2.42	3.09	-0.67	7.45
Microsoft Corp	1.89	2.14	-0.25	8.64
Alphabet Inc	1.69	1.11	0.58	4.74
Coca-Cola Co (The)	1.67	0.66	1.01	1.16
Cisco Systems Inc	1.41	0.65	0.76	8.45
Medtronic PLC	1.31	0.41	0.90	-11.40
Molson Coors Brewing Co	1.24	0.05	1.19	-5.01
United Parcel Service Inc	1.15	0.32	0.83	9.40
AT&T Inc	1.12	0.92	0.20	5.18
Exxon Mobil Corp	1.10	1.33	-0.23	2.54
% of Portfolio	15.00	10.68	4.32	

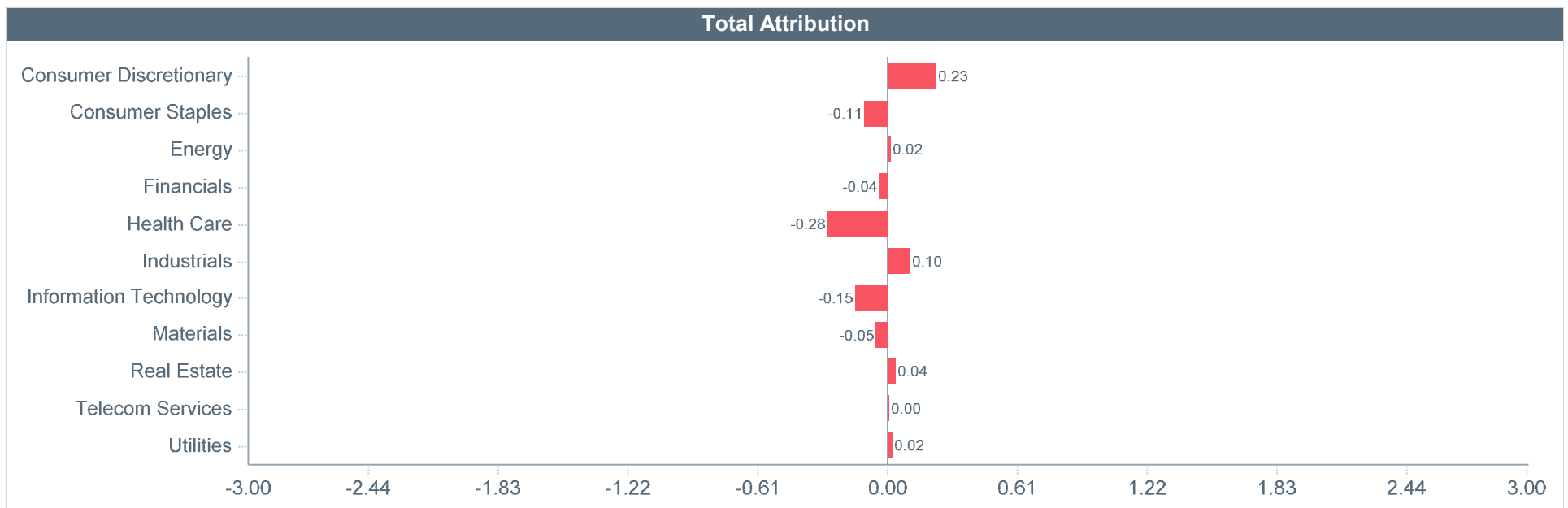
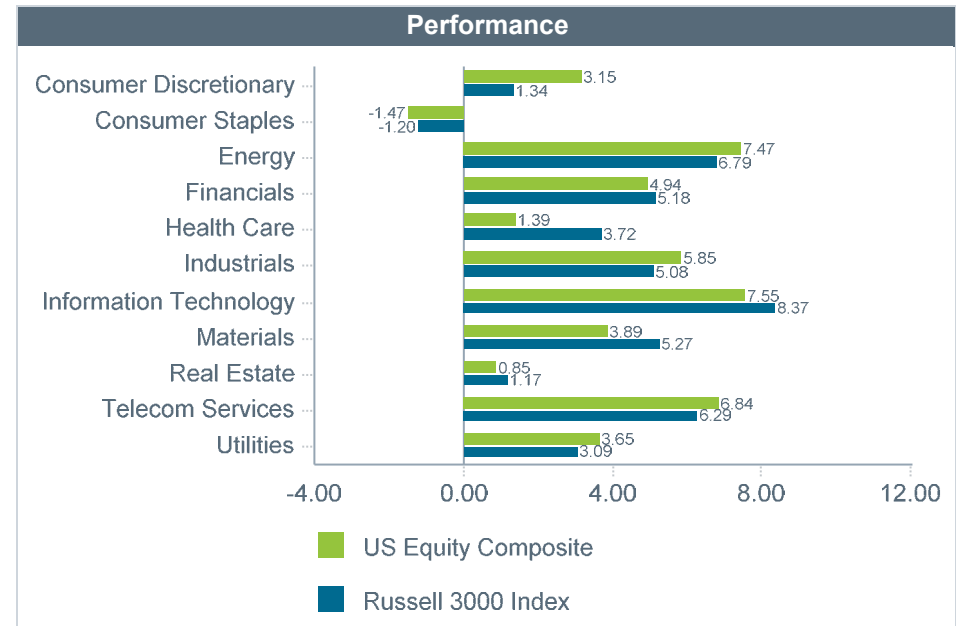
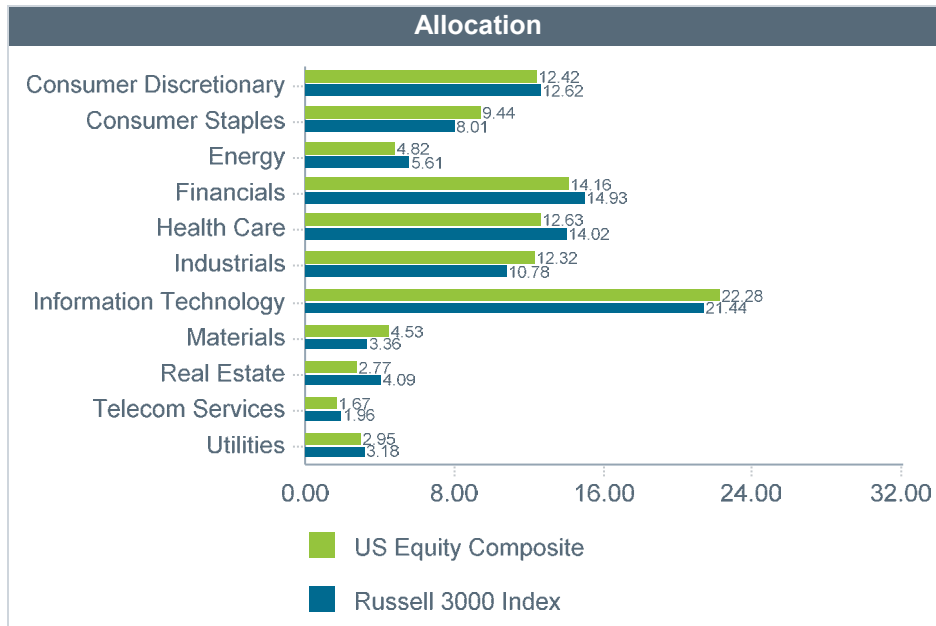
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	126,053	146,514
Median Mkt. Cap (\$M)	2,325	1,673
Price/Earnings Ratio	20.82	22.34
Price/Book Ratio	3.03	3.16
5 Yr. EPS Growth Rate (%)	9.62	10.25
Current Yield (%)	1.86	1.88
Beta (5 Years, Monthly)	1.00	1.00
Number of Securities	2,552	2,981



The US Equity Custom Index currently consists of the Russell 3000 Index.

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

1 Quarter Ending September 30, 2017



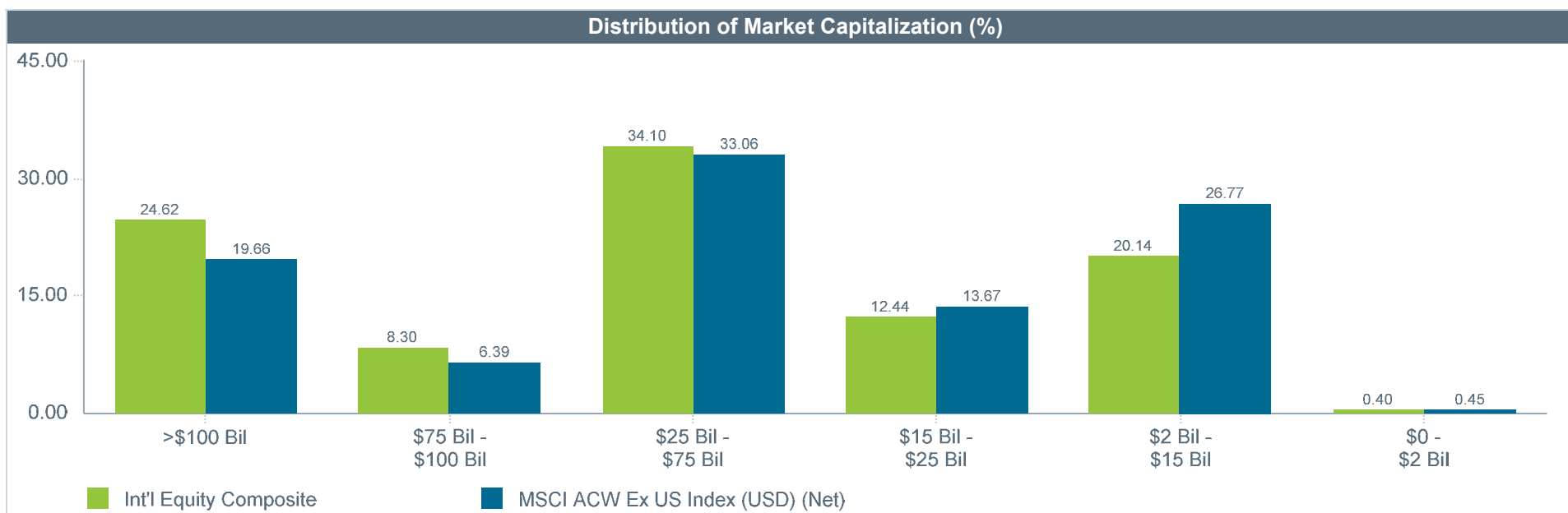
The US Equity Custom Index currently consists of the Russell 3000 Index.

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

As of September 30, 2017

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Tencent Holdings LTD	1.95	1.18	0.77	20.34
Samsung Electronics Co Ltd	1.65	1.06	0.59	7.96
Novartis AG	1.23	0.92	0.31	2.83
ASML Holding NV	1.18	0.31	0.87	30.87
Alibaba Group Holding Ltd	1.12	0.95	0.17	22.58
Roche Holding AG	1.10	0.86	0.24	0.20
HSBC Holdings PLC	1.06	0.95	0.11	8.04
Bayer AG	1.05	0.54	0.51	5.59
SAP AG Systeme Anwendungen	1.01	0.52	0.49	5.07
Novo Nordisk A/S	1.00	0.43	0.57	12.98
% of Portfolio	12.35	7.72	4.63	

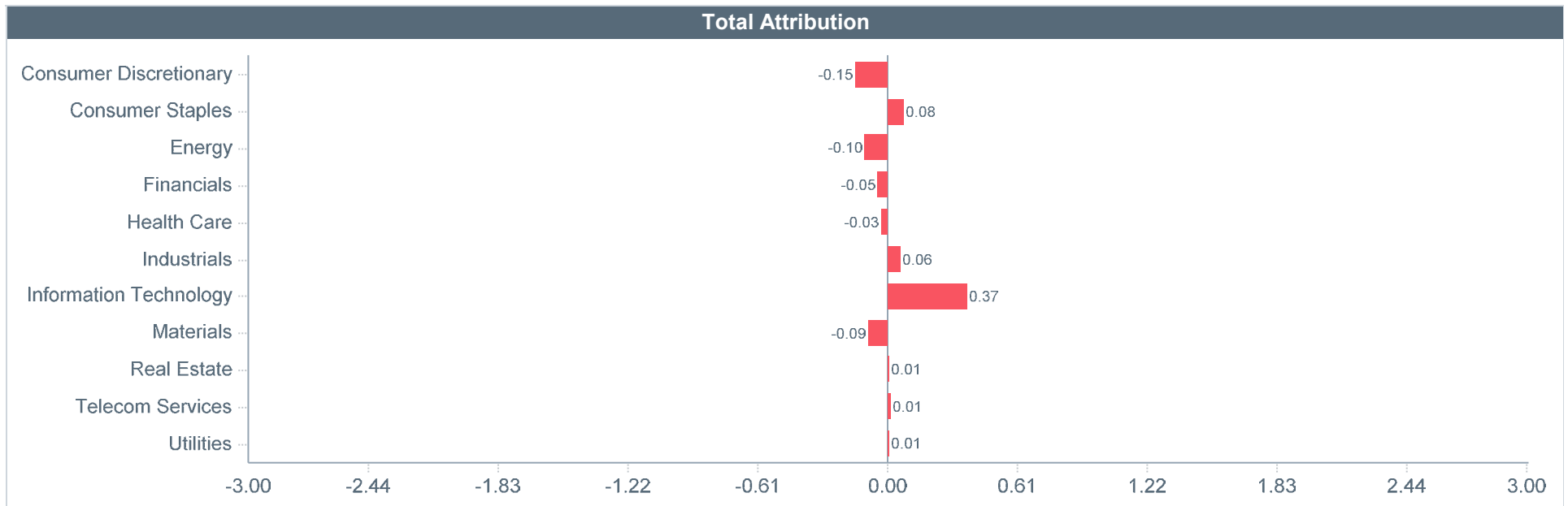
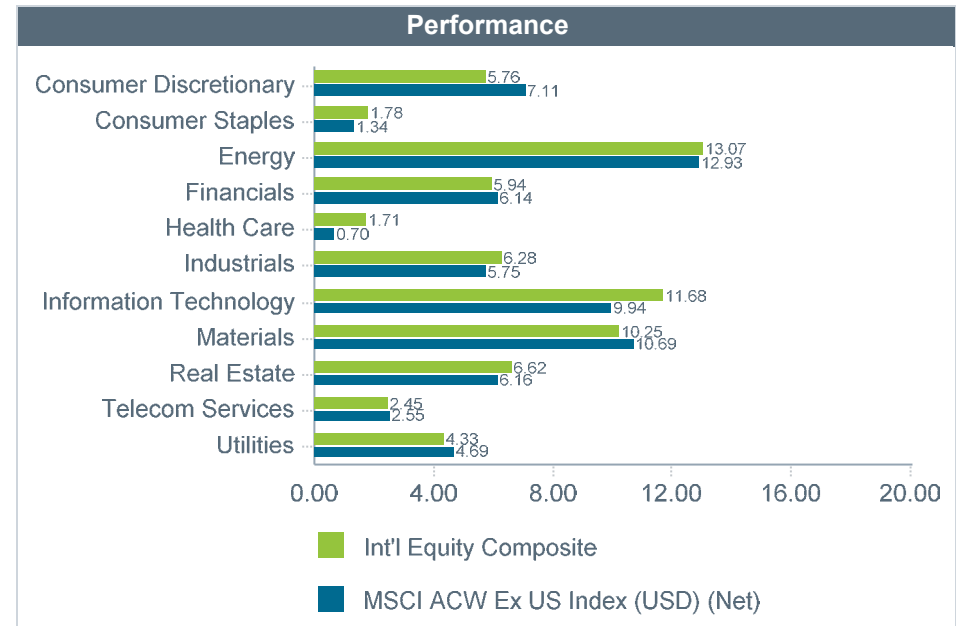
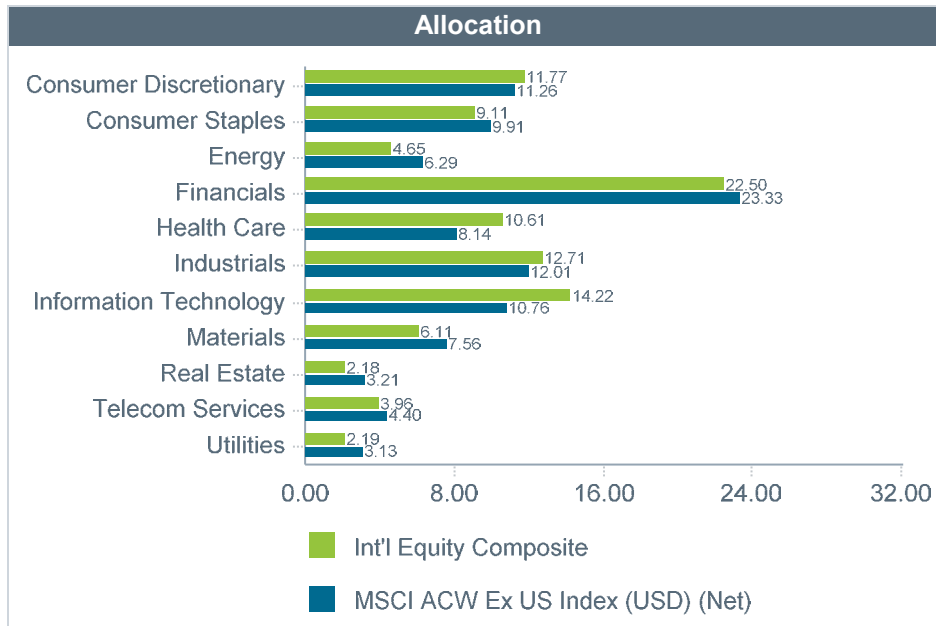
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	77,289	65,456
Median Mkt. Cap (\$M)	5,945	8,265
Price/Earnings Ratio	16.91	16.37
Price/Book Ratio	2.40	2.27
5 Yr. EPS Growth Rate (%)	7.96	7.76
Current Yield (%)	2.81	2.96
Beta (5 Years, Monthly)	1.00	1.00
Number of Securities	2,804	1,859



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

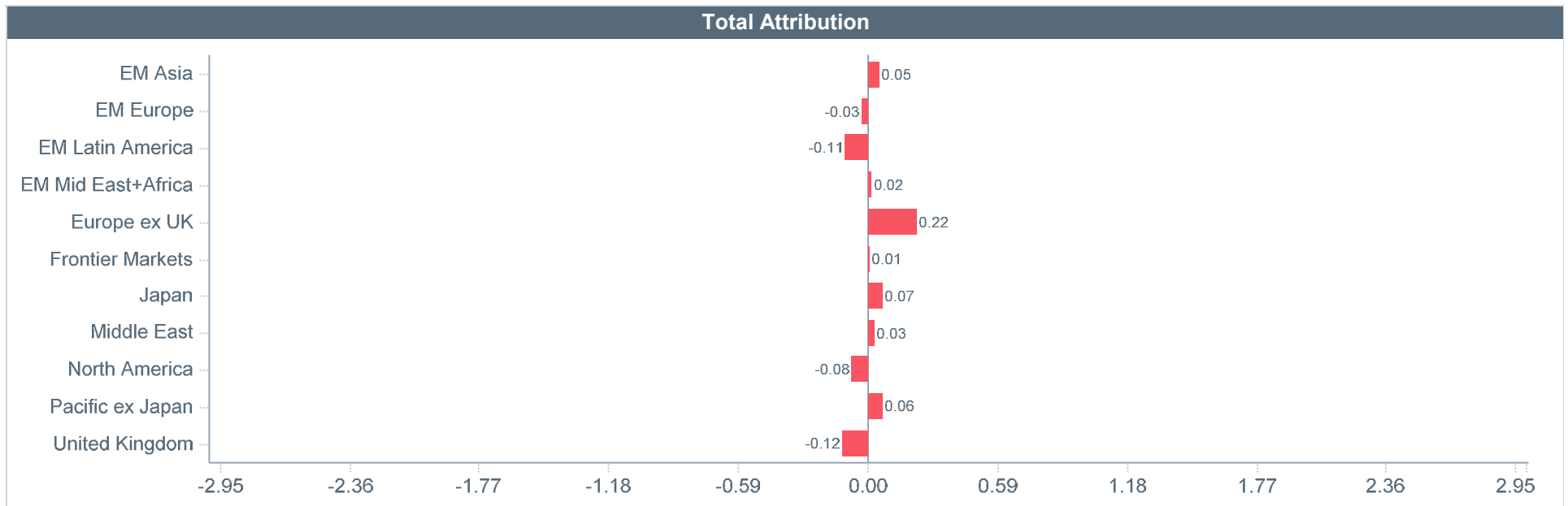
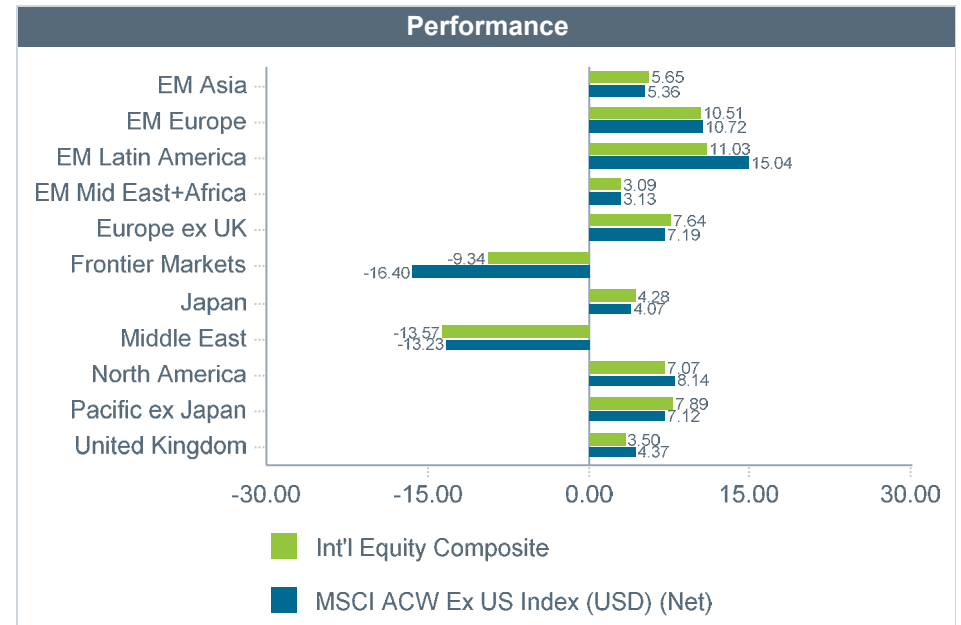
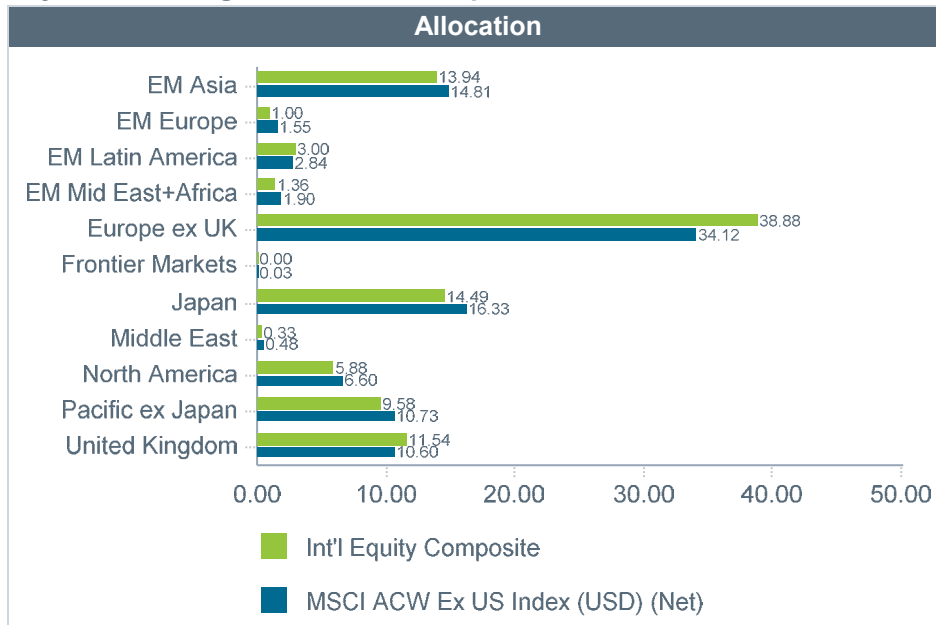
1 Quarter Ending September 30, 2017



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

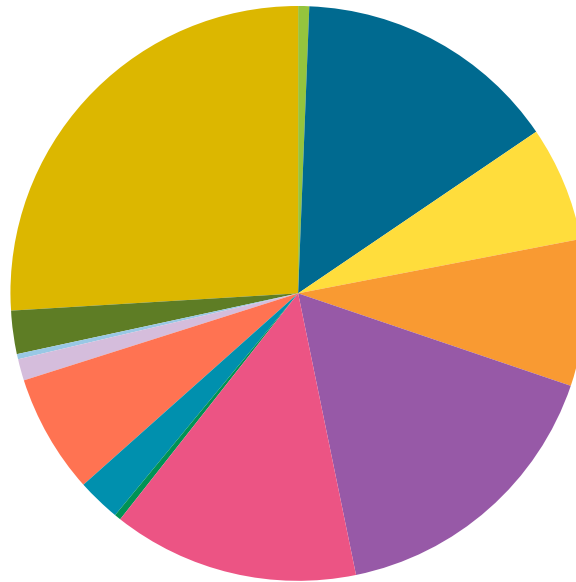
Wyoming State Treasurer's Office
 Int'l Equity Composite vs. MSCI ACW Ex US Index (USD) (Net)
 Buy and Hold Region Attribution Graph

1 Quarter Ending September 30, 2017



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

September 30, 2017 : \$1,979,497,186



	Market Value (\$)	Allocation (%)
Access Venture Partners II	12,313,721	0.62
Cheyenne Equity Capital Fund, L.P.	294,496,615	14.88
Hamilton Lane Nowood Fund, L.P.	127,885,240	6.46
Neuberger Berman Sauger Fund, L.P.	163,244,607	8.25
Clarion Lion	327,945,234	16.57
UBS Trumbull	273,868,581	13.84
Cornerstone	7,233,786	0.37
Heitman	74,623	0.00
M&G	48,048,607	2.43
Northwood	132,731,210	6.71
SC Capital	23,834,115	1.20
TA Associates Realty	6,080,474	0.31
WestRiver	48,037,938	2.43
PAAMCO - Jackalope Fund	513,702,435	25.95

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

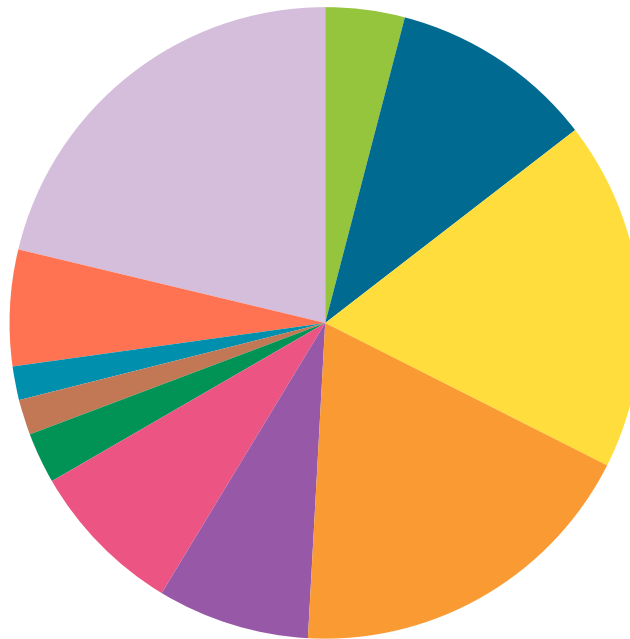
Wyoming State Treasurer's Office
Comparative Performance

As of September 30, 2017

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	Since Incep.	Inception Date
Core Real Estate Composite	1.82	1.82	5.45	6.99	10.75	11.01	11.99	4.68	8.17	6.53	01/01/2006
NCREIF ODCE Index (AWA) (Gross)	1.87	1.87	5.43	7.66	10.85	11.59	12.52	5.03	8.77	6.77	
Difference	-0.05	-0.05	0.02	-0.67	-0.10	-0.58	-0.53	-0.35	-0.60	-0.24	
Clarion Lion	2.12	2.12	6.78	8.35	12.02	12.07	13.45	3.97	9.10	5.95	01/01/2006
NCREIF ODCE Index (AWA) (Gross)	1.87	1.87	5.43	7.66	10.85	11.59	12.52	5.03	8.77	6.77	
Difference	0.25	0.25	1.35	0.69	1.17	0.48	0.93	-1.06	0.33	-0.82	
UBS Trumbull	1.48	1.48	3.88	5.40	8.99	9.58	10.41	5.17	7.11	6.47	07/01/2006
NCREIF ODCE Index (AWA) (Gross)	1.87	1.87	5.43	7.66	10.85	11.59	12.52	5.03	8.77	6.36	
Difference	-0.39	-0.39	-1.55	-2.26	-1.86	-2.01	-2.11	0.14	-1.66	0.11	
Absolute Return Composite	1.30	1.30	3.59	4.87	1.03	4.02	3.80	N/A	0.57	2.42	12/01/2007
HFRI FOF Comp Index	2.28	2.28	5.56	6.48	2.23	3.84	2.88	1.07	0.51	0.93	
Difference	-0.98	-0.98	-1.97	-1.61	-1.20	0.18	0.92	N/A	0.06	1.49	
PAAMCO - Jackalope Fund	1.30	1.30	3.59	4.87	0.75	4.18	3.69	N/A	0.57	2.17	12/01/2007
HFRI FOF Comp Index	2.28	2.28	5.56	6.48	2.23	3.84	2.88	1.07	0.51	0.93	
Difference	-0.98	-0.98	-1.97	-1.61	-1.48	0.34	0.81	N/A	0.06	1.24	

Performance shown is gross of fees with the exception of PAAMCO and the Absolute Return Composite, which are shown net of fees. Wyoming State Treasurer's Office fiscal year ends June 30th. Since Inception date shown represents the first full month following initial funding.

September 30, 2017 : \$12,083,052,877



	Market Value (\$)	Allocation (%)
Allianz Global Investors	490,285,383	4.06
C.S. McKee	1,267,363,126	10.49
JP Morgan Core	2,163,314,621	17.90
PIMCO Core	2,226,827,307	18.43
Neuberger Berman Credit	940,865,910	7.79
Seix	964,901,247	7.99
Grosvenor Silvery Lupine Fund	314,317,294	2.60
Investec	218,902,113	1.81
Stone Harbor	209,368,012	1.73
State Street TIPS	718,517,225	5.95
Internal Fixed Income Portfolio	2,568,390,640	21.26

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

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2017

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	Since Incep.	Inception Date
Total Fixed Income Composite	12,083,052,877	100.00	1.08	1.08	3.86	1.61	2.96	2.34	3.39	4.74	4.13	5.58	10/01/1996
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	5.33	
Difference			0.23	0.23	0.72	1.54	0.25	0.28	0.44	0.47	1.48	0.25	
Total Fixed Income (Ex. Convertibles) Composite	11,592,767,494	95.94	1.01	1.01	3.54	1.16	2.83	1.97	3.07	4.55	4.04	5.56	10/01/1996
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	5.33	
Difference			0.16	0.16	0.40	1.09	0.12	-0.09	0.12	0.28	1.39	0.23	
US Fixed Income (Ex. Convertibles) Composite	10,850,180,076	89.80	0.85	0.85	3.02	0.61	2.85	2.07	3.11	N/A	3.74	3.70	12/01/2009
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	3.43	
Difference			0.00	0.00	-0.12	0.54	0.14	0.01	0.16	N/A	1.09	0.27	
Externally Mgd Fixed Income Composite	9,514,662,237	78.74	1.27	1.27	4.19	1.84	3.08	2.43	3.58	4.87	4.25	5.35	10/01/1996
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	5.33	
Difference			0.42	0.42	1.05	1.77	0.37	0.37	0.63	0.60	1.60	0.02	
Allianz Global Investors (Net)	490,285,383	4.06	3.82	3.82	12.21	13.14	5.97	9.83	9.73	7.54	5.86	5.81	09/01/2000
BofA ML All Cnvrts Index (All Qual)			3.77	3.77	11.96	14.32	6.73	10.95	9.73	6.80	10.44	5.41	
Difference			0.05	0.05	0.25	-1.18	-0.76	-1.12	0.00	0.74	-4.58	0.40	
Core Fixed Income Composite	5,657,505,053	46.82	0.96	0.96	3.18	0.23	2.84	N/A	N/A	N/A	2.95	2.22	01/01/2013
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	2.13	
Difference			0.11	0.11	0.04	0.16	0.13	N/A	N/A	N/A	0.30	0.09	
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			0.92	0.92	3.46	0.60	3.01	2.46	3.47	4.78	3.10	2.51	
Core Fixed Income Composite Rank			41	41	75	71	72	N/A	N/A	N/A	58	77	
C.S. McKee	1,267,363,126	10.49	0.90	0.90	3.03	0.42	2.90	N/A	N/A	N/A	2.65	2.22	01/01/2013
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	2.13	
Difference			0.05	0.05	-0.11	0.35	0.19	N/A	N/A	N/A	0.00	0.09	
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			0.92	0.92	3.46	0.60	3.01	2.46	3.47	4.78	3.10	2.51	
C.S. McKee Rank			53	53	88	64	65	N/A	N/A	N/A	75	77	
JP Morgan Core	2,163,314,621	17.90	0.78	0.78	3.23	0.07	2.97	N/A	N/A	N/A	2.52	2.36	01/01/2013
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	2.13	
Difference			-0.07	-0.07	0.09	0.00	0.26	N/A	N/A	N/A	-0.13	0.23	
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			0.92	0.92	3.46	0.60	3.01	2.46	3.47	4.78	3.10	2.51	
JP Morgan Core Rank			88	88	71	86	56	N/A	N/A	N/A	86	59	

Performance shown is gross of fees with the exception of the convertible bond portfolio and Grosvenor Silvery Lupine Fund, 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. The Credit Custom Index consists of 20% Bloomberg US Credit Index, 20% BofA ML US HY Master II Const. Index, and 60% S&P/LSTA Leveraged Loan Index. The Internal Fixed Income Portfolio Index consists of the Bloomberg US Gov't: Int. Term Bond Index; prior to December 2009 the index consisted of the Bloomberg US Gov't/Credit Bond Index.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2017

	Allocation		Performance (%)										
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	Since Incep.	Inception Date
PIMCO Core	2,226,827,307	18.43	1.16	1.16	3.65	0.62	3.07	N/A	N/A	N/A	3.35	2.25	01/01/2013
Bloomberg US Agg Bond Index			0.85	0.85	3.14	0.07	2.71	2.06	2.95	4.27	2.65	2.13	
Difference			0.31	0.31	0.51	0.55	0.36	N/A	N/A	N/A	0.70	0.12	
IM U.S. Broad Mkt Core Fixed Income (SA+CF) Median			0.92	0.92	3.46	0.60	3.01	2.46	3.47	4.78	3.10	2.51	
PIMCO Core Rank			11	11	33	49	48	N/A	N/A	N/A	42	73	
Credit Fixed Income Composite	1,905,767,157	15.77	1.33	1.33	4.10	5.18	4.40	N/A	N/A	N/A	9.91	3.91	04/01/2013
Credit Custom Index			1.30	1.30	4.20	5.37	4.30	4.40	5.22	5.57	10.69	4.09	
Difference			0.03	0.03	-0.10	-0.19	0.10	N/A	N/A	N/A	-0.78	-0.18	
IM U.S. Fixed Income (SA+CF) Median			0.98	0.98	3.55	1.40	3.17	2.78	3.67	4.77	3.72	2.82	
Credit Fixed Income Composite Rank			31	31	39	19	29	N/A	N/A	N/A	19	33	
Neuberger Berman Credit	940,865,910	7.79	1.23	1.23	3.55	4.42	3.98	N/A	N/A	N/A	8.42	4.02	04/01/2013
Credit Custom Index			1.30	1.30	4.20	5.37	4.30	4.40	5.22	5.57	10.69	4.09	
Difference			-0.07	-0.07	-0.65	-0.95	-0.32	N/A	N/A	N/A	-2.27	-0.07	
IM U.S. Fixed Income (SA+CF) Median			0.98	0.98	3.55	1.40	3.17	2.78	3.67	4.77	3.72	2.82	
Neuberger Berman Credit Rank			35	35	51	23	35	N/A	N/A	N/A	23	31	
Seix	964,901,247	7.99	1.43	1.43	4.42	5.69	4.71	N/A	N/A	N/A	11.46	4.11	05/01/2013
Credit Custom Index			1.30	1.30	4.20	5.37	4.30	4.40	5.22	5.57	10.69	3.91	
Difference			0.13	0.13	0.22	0.32	0.41	N/A	N/A	N/A	0.77	0.20	
IM U.S. Fixed Income (SA+CF) Median			0.98	0.98	3.55	1.40	3.17	2.78	3.67	4.77	3.72	2.65	
Seix Rank			28	28	36	17	26	N/A	N/A	N/A	13	27	
Grosvenor Silvery Lupine Fund	314,317,294	2.60	2.13	2.13	6.87	9.75	6.59	N/A	N/A	N/A	8.58	6.27	07/01/2014
CS Western Euro Hi Yld Index			2.31	2.31	7.48	10.32	6.81	8.04	8.27	8.41	11.29	6.00	
Difference			-0.18	-0.18	-0.61	-0.57	-0.22	N/A	N/A	N/A	-2.71	0.27	

Performance shown is gross of fees with the exception of the convertible bond portfolio and Grosvenor Silvery Lupine Fund, 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. The Credit Custom Index consists of 20% Bloomberg US Credit Index, 20% BofA ML US HY Master II Const. Index, and 60% S&P/LSTA Leveraged Loan Index. The Internal Fixed Income Portfolio Index consists of the Bloomberg US Gov't: Int. Term Bond Index; prior to December 2009 the index consisted of the Bloomberg US Gov't/Credit Bond Index.

Wyoming State Treasurer's Office
Asset Allocation & Performance

As of September 30, 2017

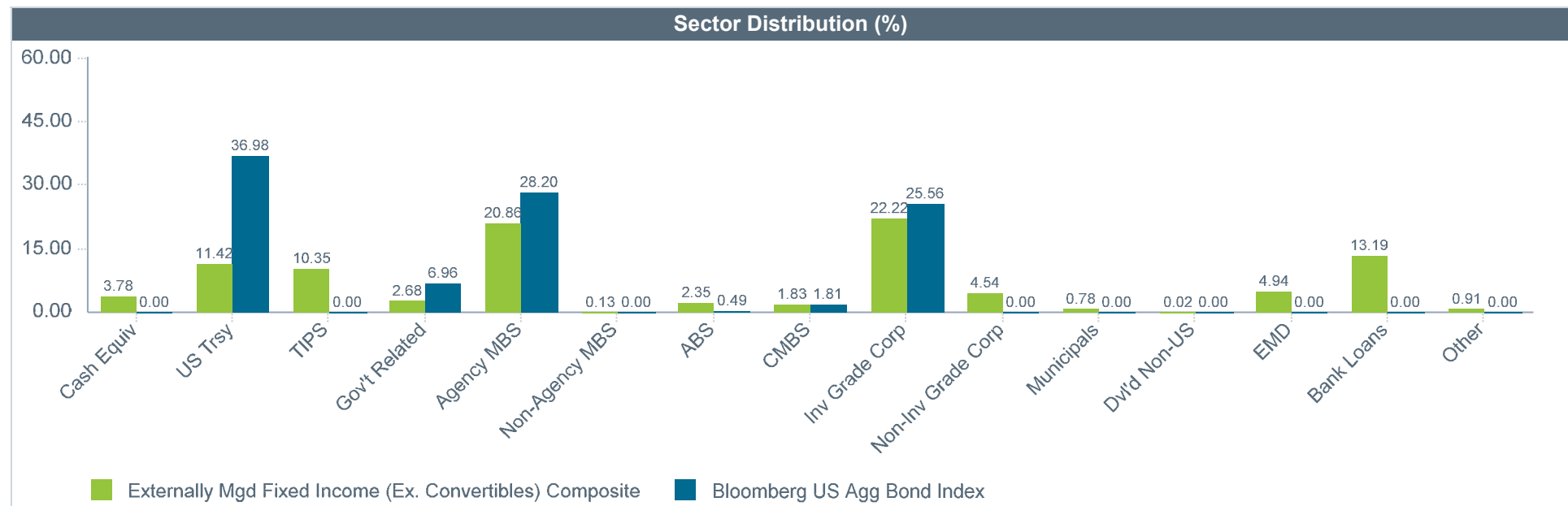
	Allocation		Performance (%)											Inception Date
	Market Value (\$)	%	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	Since Incep.		
Emerging Market Debt Fixed Income Composite	428,270,124	3.54	3.96	3.96	15.39	8.48	0.04	N/A	N/A	N/A	8.42	-2.23	04/01/2013	
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			3.55	3.55	14.28	7.32	0.26	-0.91	0.68	3.80	9.94	-1.87		
Difference			0.41	0.41	1.11	1.16	-0.22	N/A	N/A	N/A	-1.52	-0.36		
IM Emerging Markets Debt (SA+CF) Median			3.33	3.33	11.43	7.82	5.11	3.54	5.68	7.16	11.09	3.76		
Emerging Market Debt Fixed Income Composite Rank			17	17	14	40	99	N/A	N/A	N/A	84	97		
Investec	218,902,113	1.81	4.04	4.04	15.97	9.15	0.19	N/A	N/A	N/A	7.00	-1.77	04/01/2013	
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			3.55	3.55	14.28	7.32	0.26	-0.91	0.68	3.80	9.94	-1.87		
Difference			0.49	0.49	1.69	1.83	-0.07	N/A	N/A	N/A	-2.94	0.10		
IM Emerging Markets Debt (SA+CF) Median			3.33	3.33	11.43	7.82	5.11	3.54	5.68	7.16	11.09	3.76		
Investec Rank			14	14	12	26	97	N/A	N/A	N/A	91	92		
Stone Harbor	209,368,012	1.73	3.88	3.88	14.80	7.80	-0.13	N/A	N/A	N/A	9.94	-2.75	04/01/2013	
JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)			3.55	3.55	14.28	7.32	0.26	-0.91	0.68	3.80	9.94	-1.87		
Difference			0.33	0.33	0.52	0.48	-0.39	N/A	N/A	N/A	0.00	-0.88		
IM Emerging Markets Debt (SA+CF) Median			3.33	3.33	11.43	7.82	5.11	3.54	5.68	7.16	11.09	3.76		
Stone Harbor Rank			18	18	21	51	100	N/A	N/A	N/A	69	99		
State Street TIPS	718,517,225	5.95	0.96	0.96	1.67	-0.87	1.69	N/A	N/A	N/A	5.04	-0.11	01/01/2013	
Bloomberg US Trsy: US TIPS Index (Series B)			0.90	0.90	1.86	-0.83	1.71	0.04	2.74	3.97	4.85	-0.11		
Difference			0.06	0.06	-0.19	-0.04	-0.02	N/A	N/A	N/A	0.19	0.00		
Internal Fixed Income Portfolio	2,568,390,640	21.26	0.38	0.38	2.09	0.85	1.94	1.47	1.88	2.92	0.95	4.77	10/01/1996	
Bloomberg US Gov't: Int. Term Bond Index			0.34	0.34	1.55	-0.66	1.58	1.01	1.59	3.09	1.05	4.78		
Difference			0.04	0.04	0.54	1.51	0.36	0.46	0.29	-0.17	-0.10	-0.01		
IM U.S. Government Bonds (SA+CF) Median			0.40	0.40	1.79	-0.60	1.94	1.29	1.79	3.29	1.37	4.68		
Internal Fixed Income Portfolio Rank			56	56	46	3	51	42	49	68	84	49		

Performance shown is gross of fees with the exception of the convertible bond portfolio and Grosvenor Silvery Lupine Fund, 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. The Credit Custom Index consists of 20% Bloomberg US Credit Index, 20% BofA ML US HY Master II Const. Index, and 60% S&P/LSTA Leveraged Loan Index. The Internal Fixed Income Portfolio Index consists of the Bloomberg US Gov't: Int. Term Bond Index; prior to December 2009 the index consisted of the Bloomberg US Gov't/Credit Bond Index.

Externally Mgd Fixed Income (Ex. Convertibles) Composite vs. Bloomberg US Agg Bond Index

Portfolio Characteristics

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	4.96	5.96
Avg. Maturity	7.00	8.25
Avg. Quality	A2	Aa1/Aa2
Yield To Maturity (%)	3.34	2.55
Coupon Rate (%)	3.40	3.06
Current Yield (%)	2.92	N/A

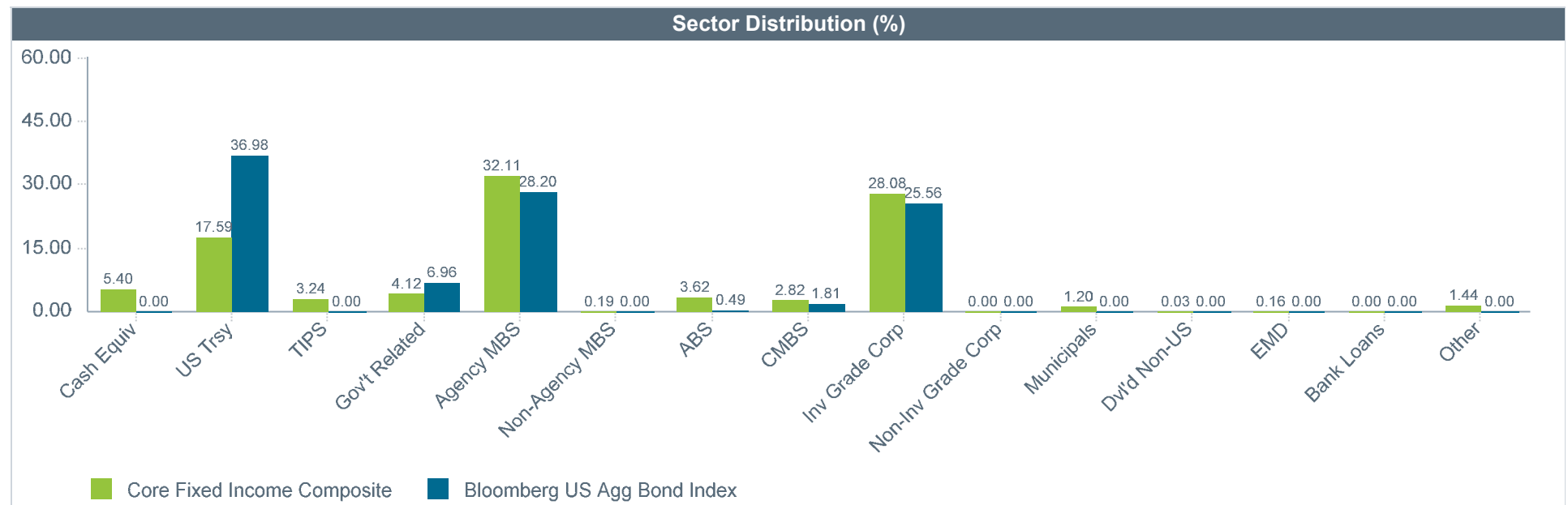


The statistics are calculated based on a weighted average of the underlying managers. Statistics shown exclude Grosvenor Silvery Lupine Fund and managers in the liquidation process as of September 30, 2017. Allocation to "Other" consists of collateralized mortgage obligations, Euro/Yankee securities, sovereign debt, supranational debt, foreign exchange, and interest rate swaps.

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

As of September 30, 2017

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.54	5.96
Convexity	0.03	0.13
Avg. Maturity	6.89	8.25
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	2.63	2.55
Coupon Rate (%)	3.11	3.06
Current Yield (%)	2.79	N/A

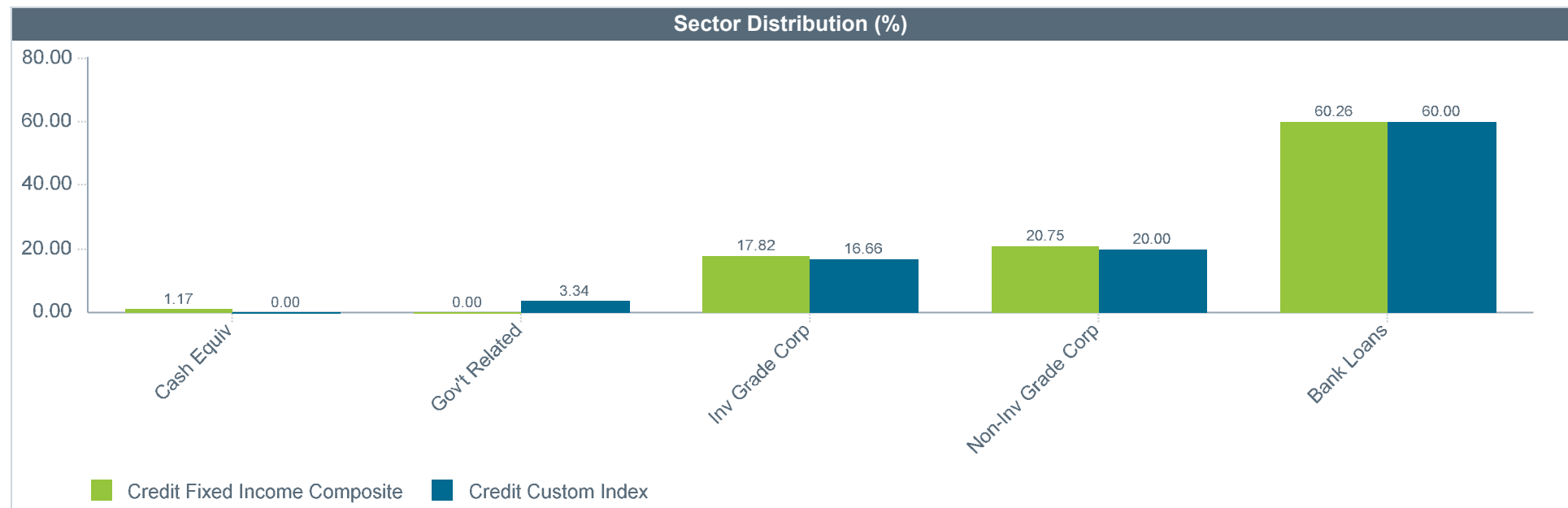


The statistics are calculated based on a weighted average of the underlying managers. Allocation to "Other" consists of collateralized mortgage obligations, sovereign debt, supranational debt, and Euro/Yankee securities.

Wyoming State Treasurer's Office
Credit Fixed Income Composite vs. Credit Custom Index
Portfolio Characteristics

As of September 30, 2017

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	2.65	N/A
Avg. Maturity	6.39	6.42
Avg. Quality	Ba3	Ba2
Yield To Maturity (%)	4.85	5.59
Coupon Rate (%)	4.62	5.05
Current Yield (%)	3.40	N/A

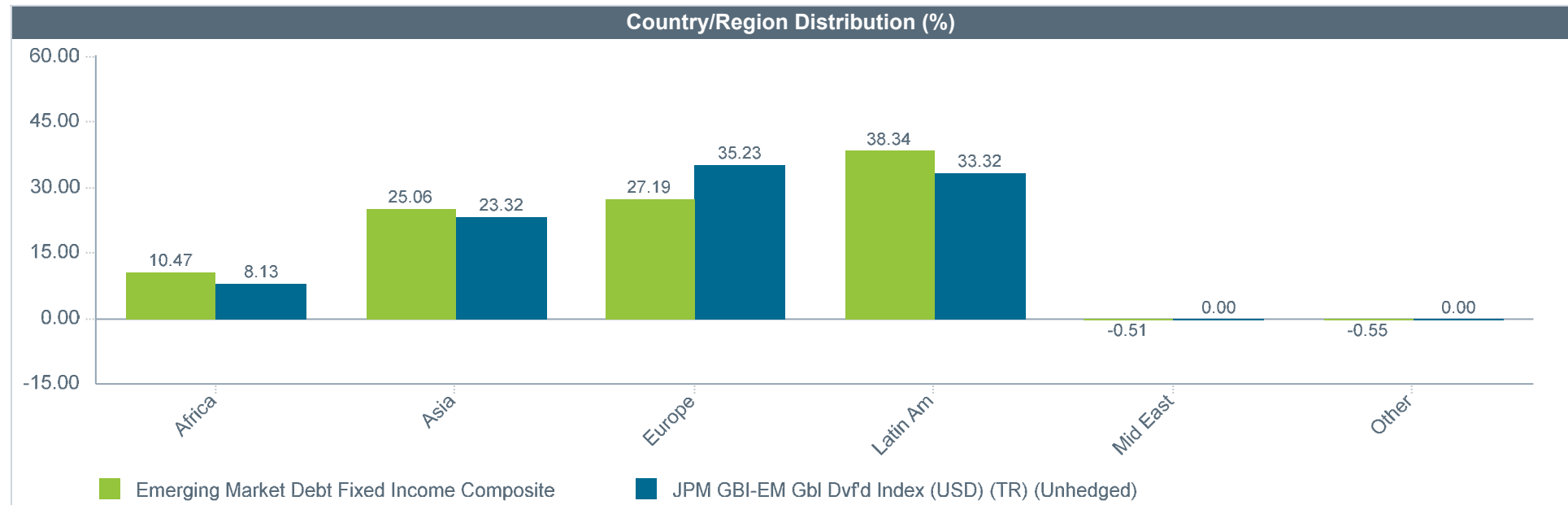


The statistics are calculated based on a weighted average of the underlying members.
Statistics for the S&P/LSTA Leveraged Loan Index are unavailable.
The Credit Suisse Leveraged Loan Index is used as a proxy within the Credit Custom Index.

Emerging Market Debt Fixed Income Composite vs. JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)

Portfolio Characteristics

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.05	5.12
Spread Duration	4.75	N/A
Convexity	0.49	0.49
Avg. Maturity	7.76	7.33
Avg. Quality	Baa2	Baa3
Yield To Maturity (%)	7.53	5.93
Coupon Rate (%)	5.95	6.65
Yield To Worst (%)	7.53	5.93
Current Yield (%)	6.09	6.44



The statistics are calculated based on a weighted average of the underlying managers. Region allocation to "Other" consists of developed market securities, the Commonwealth of Independent States, and cash. Negative region allocation reflects manager's use of derivatives, short selling, or interest rate swaps.

**Wyoming State Treasurer's Office
Comparative Performance**

As of September 30, 2017

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	Since Incep.	Inception Date
JP Morgan Cash Composite	0.27	0.27	0.70	0.70	0.52	0.40	0.41	0.92	0.56	1.56	01/01/2006
JP Morgan Cash Custom Index	0.27	0.27	0.60	0.56	0.41	0.30	0.35	0.86	0.38	1.48	
Difference	0.00	0.00	0.10	0.14	0.11	0.10	0.06	0.06	0.18	0.08	
Wyo-Star Cash Composite	0.27	0.27	0.66	0.60	0.50	0.40	0.44	1.03	0.53	3.40	10/01/1996
Wyo-Star Cash Custom Index	0.27	0.27	0.64	0.51	0.45	0.35	0.42	0.96	0.38	2.71	
Difference	0.00	0.00	0.02	0.09	0.05	0.05	0.02	0.07	0.15	0.69	

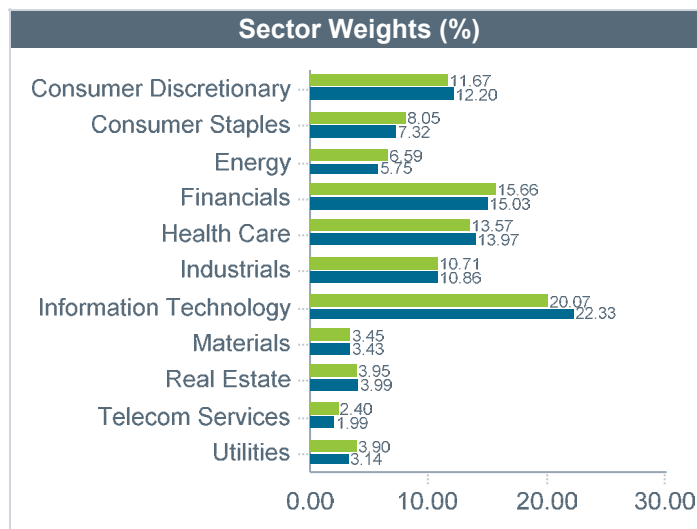
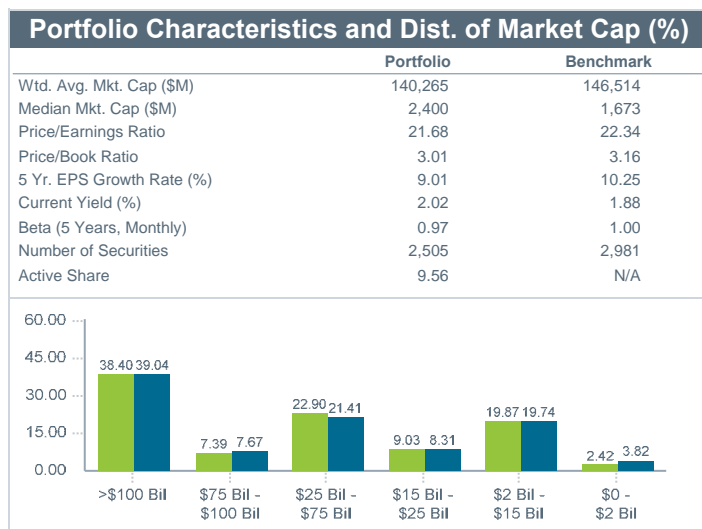
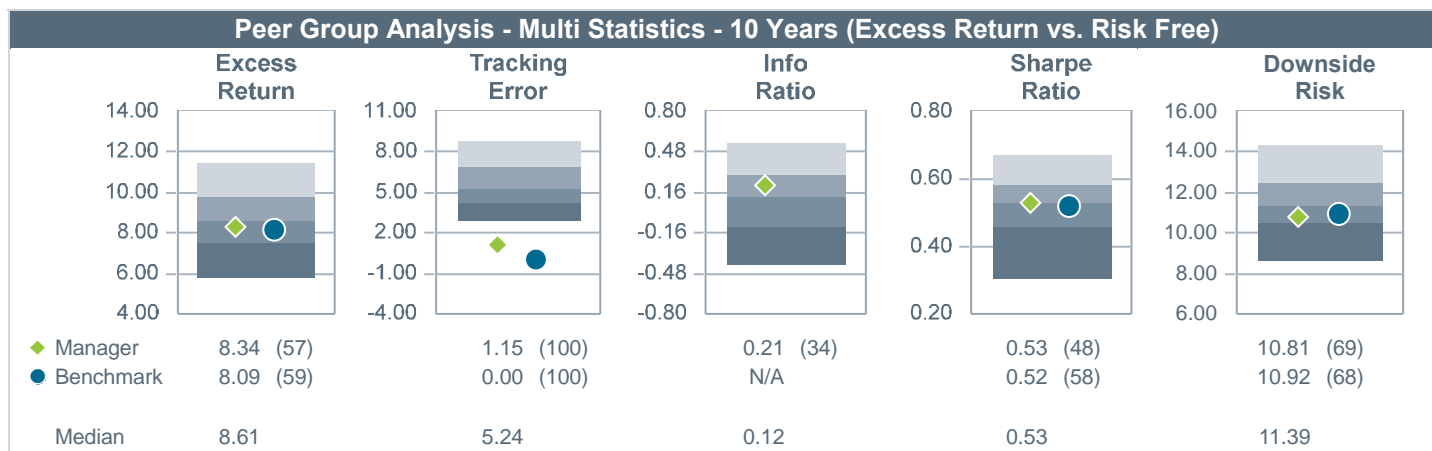
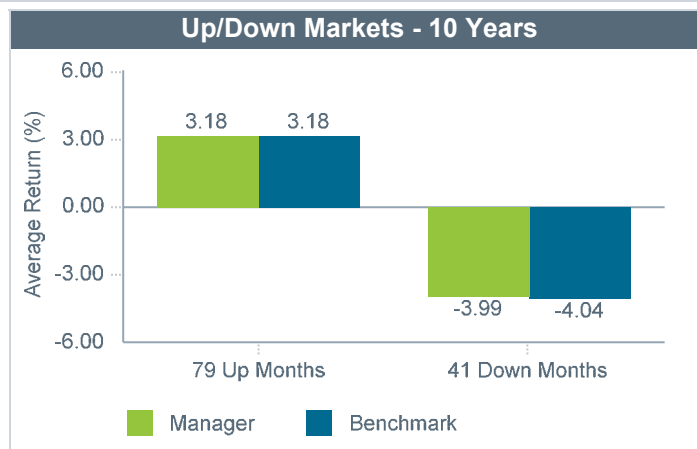
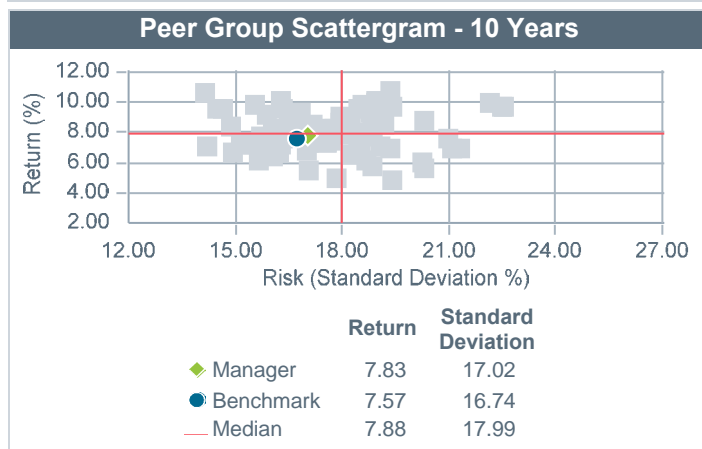
Performance shown for the JP Morgan Cash Composite and the Wyo-Star Cash Composite consists of the respective operating and extended cash accounts.

The JP Morgan Cash Custom Index is calculated monthly using beginning of the month investment weights applied to each corresponding primary benchmark return. Currently, the primary benchmark for JP Morgan Cash is the BofA ML 3 Mo US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index.

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 BofA ML 3 Mo US T-Bill Index and for Wyo-Star Extd is the JP Morgan Blended Index.

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.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	4.39	17.89	10.50	14.19	14.24	7.83	13.77	-0.02	12.86	33.48	16.26
Benchmark	4.57	18.71	10.74	14.23	14.28	7.57	12.74	0.48	12.56	33.55	16.42
Difference	-0.18	-0.82	-0.24	-0.04	-0.04	0.26	1.03	-0.50	0.30	-0.07	-0.16
Peer Group Median	4.31	18.64	9.66	13.82	13.78	7.88	12.53	-0.48	10.01	35.00	15.88
Rank	50	54	39	48	42	53	42	47	23	66	46
Population	152	152	146	139	126	105	171	179	190	202	211



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: Epoch

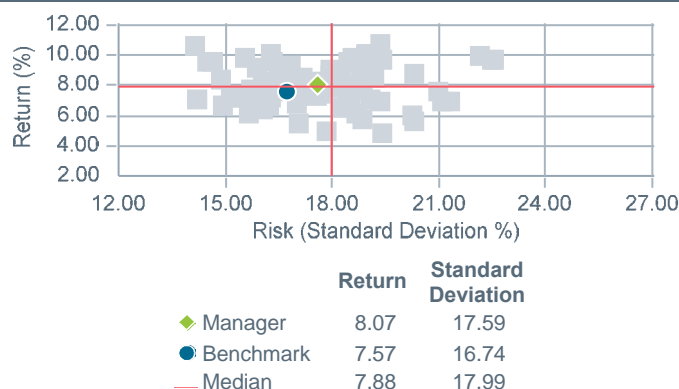
As of September 30, 2017

Benchmark: Russell 3000 Index

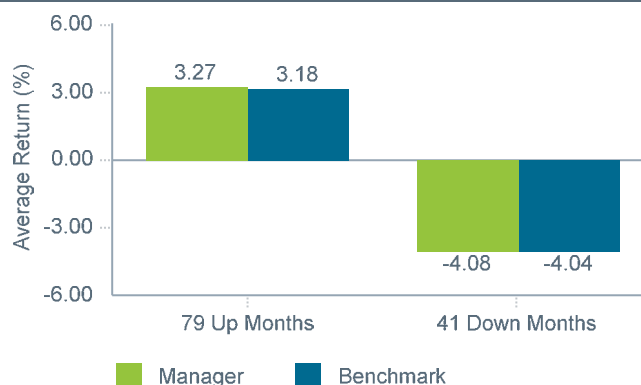
Peer Group: IM U.S. All Cap Equity (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	4.92	22.24	10.53	14.83	13.94	8.07	10.19	-1.61	14.56	37.28	12.01
Benchmark	4.57	18.71	10.74	14.23	14.28	7.57	12.74	0.48	12.56	33.55	16.42
Difference	0.35	3.53	-0.21	0.60	-0.34	0.50	-2.55	-2.09	2.00	3.73	-4.41
Peer Group Median	4.31	18.64	9.66	13.82	13.78	7.88	12.53	-0.48	10.01	35.00	15.88
Rank	38	13	39	34	48	46	58	57	12	36	77
Population	152	152	146	139	126	105	171	179	190	202	211

Peer Group Scattergram - 10 Years



Up/Down Markets - 10 Years

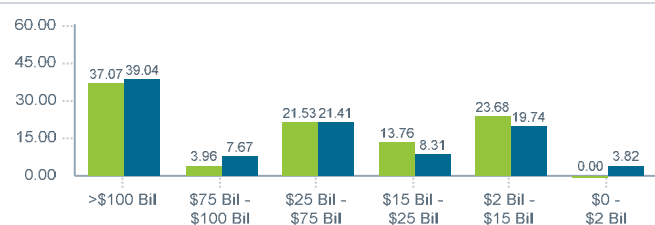


Peer Group Analysis - Multi Statistics - 10 Years (Excess Return vs. Risk Free)

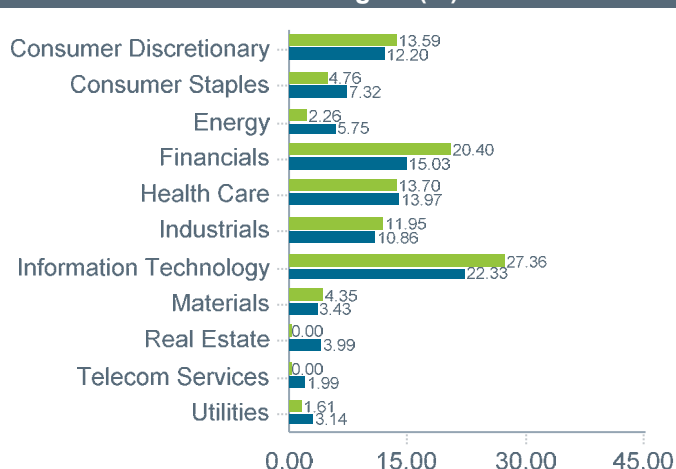


Portfolio Characteristics and Dist. of Market Cap (%)

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	150,469	146,514
Median Mkt. Cap (\$M)	27,690	1,673
Price/Earnings Ratio	20.77	22.34
Price/Book Ratio	3.22	3.16
5 Yr. EPS Growth Rate (%)	10.86	10.25
Current Yield (%)	1.73	1.88
Beta (5 Years, Monthly)	1.08	1.00
Number of Securities	59	2,981
Active Share	80.84	N/A



Sector Weights (%)



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

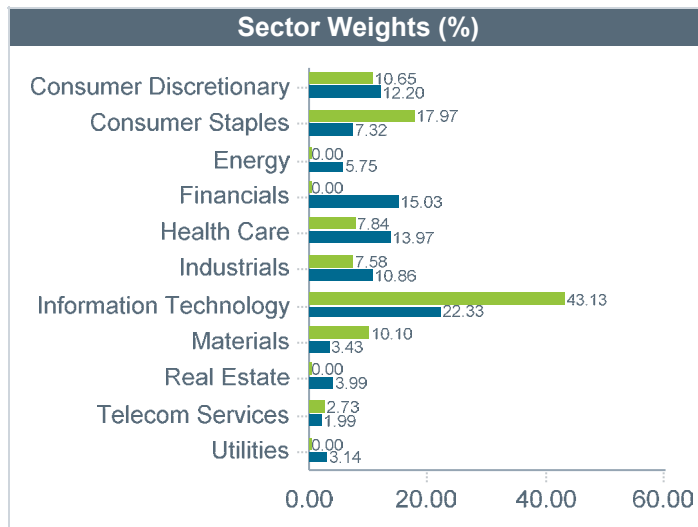
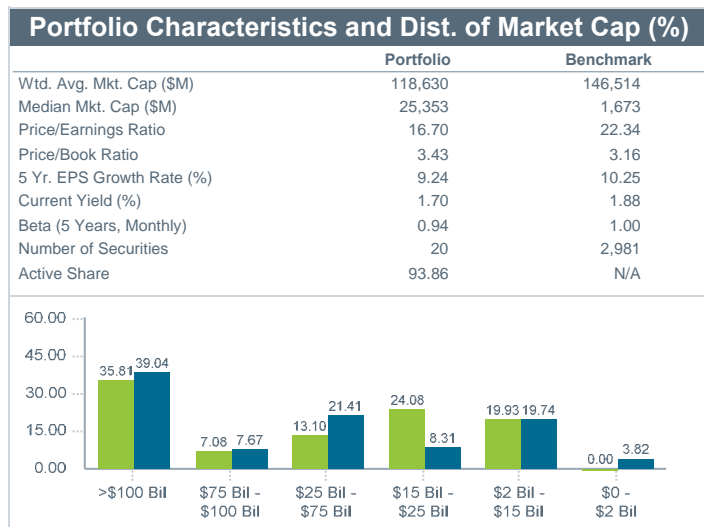
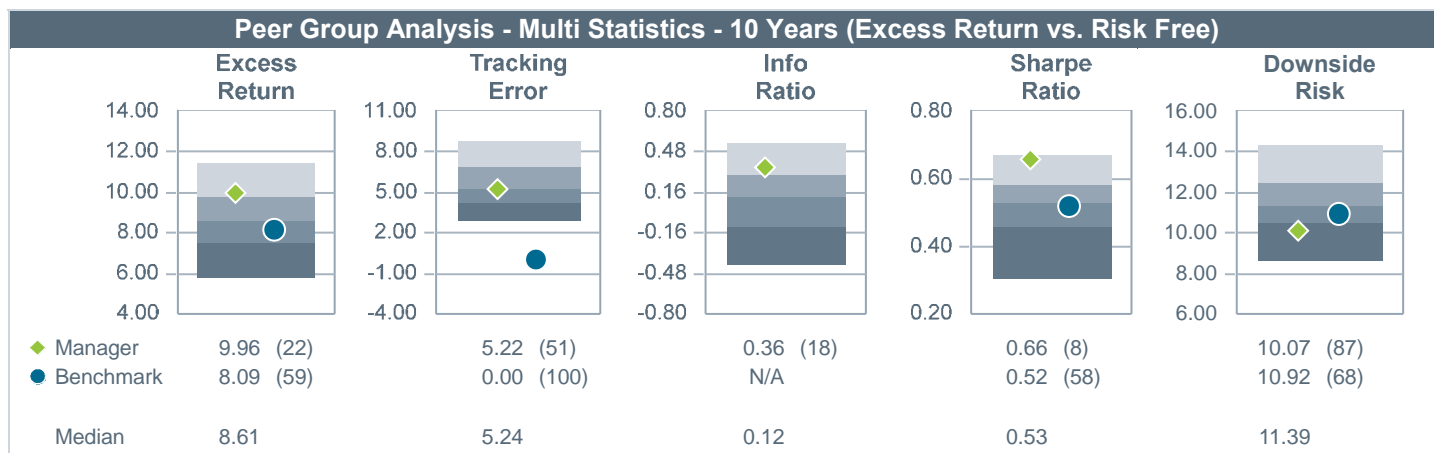
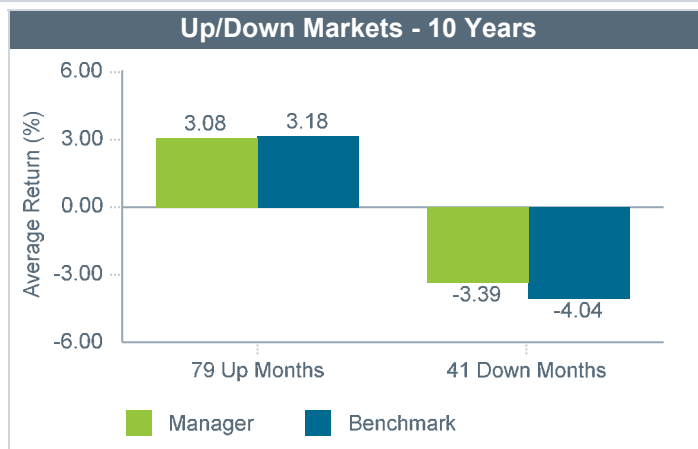
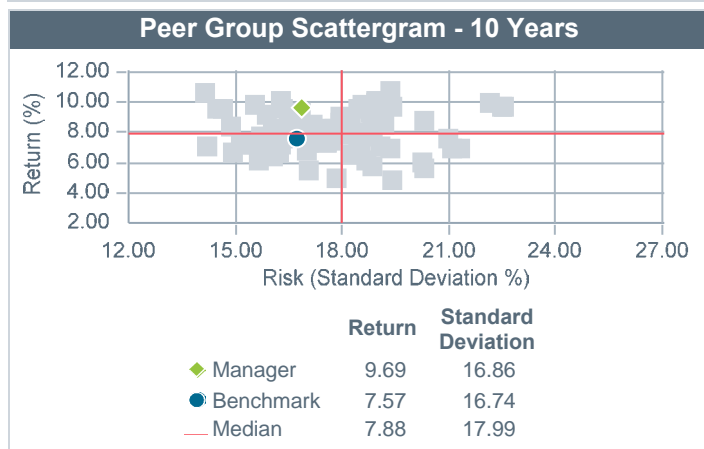
Manager: Lazard

As of September 30, 2017

Benchmark: Russell 3000 Index

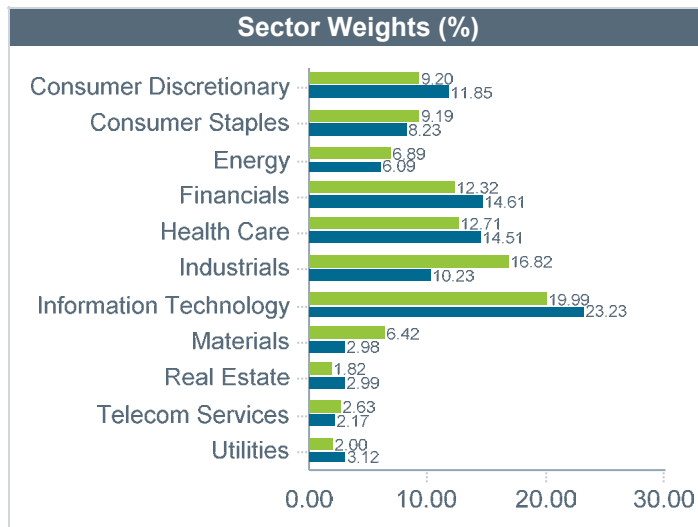
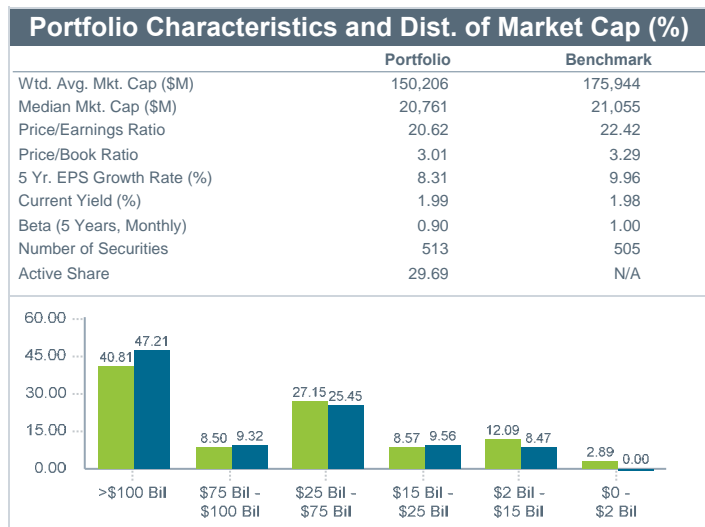
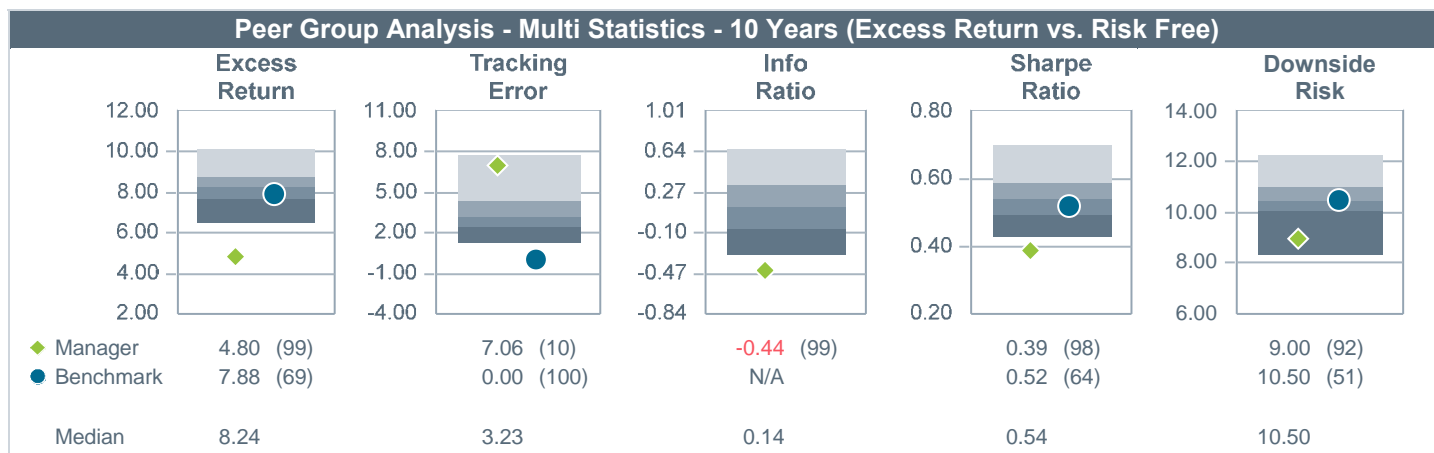
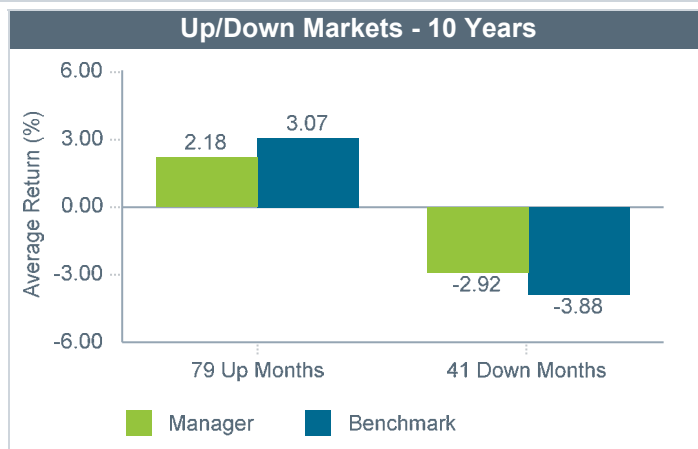
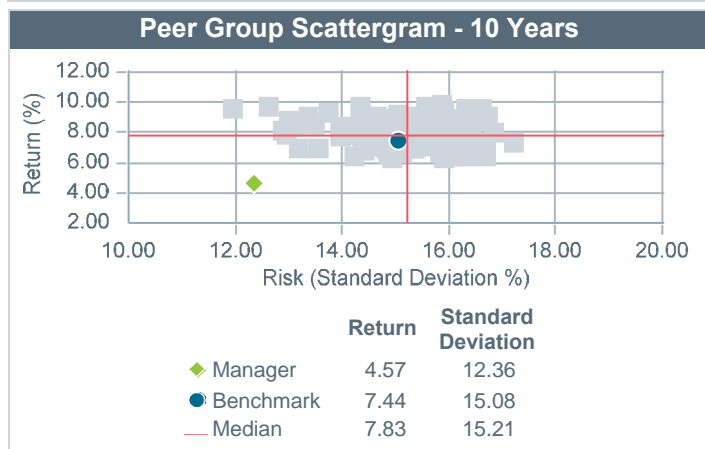
Peer Group: IM U.S. All Cap Equity (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	2.54	7.25	10.39	14.49	14.83	9.69	9.28	4.26	17.84	30.58	19.32
Benchmark	4.57	18.71	10.74	14.23	14.28	7.57	12.74	0.48	12.56	33.55	16.42
Difference	-2.03	-11.46	-0.35	0.26	0.55	2.12	-3.46	3.78	5.28	-2.97	2.90
Peer Group Median	4.31	18.64	9.66	13.82	13.78	7.88	12.53	-0.48	10.01	35.00	15.88
Rank	87	100	40	39	31	16	63	19	1	80	20
Population	152	152	146	139	126	105	171	179	190	202	211



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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	4.16	17.82	10.33	12.51	10.55	4.57	10.87	1.03	13.30	23.52	6.25
Benchmark	4.48	18.61	10.81	14.22	14.38	7.44	11.96	1.38	13.69	32.39	16.00
Difference	-0.32	-0.79	-0.48	-1.71	-3.83	-2.87	-1.09	-0.35	-0.39	-8.87	-9.75
Peer Group Median	4.61	18.63	10.59	14.20	14.42	7.83	10.51	1.32	13.42	32.96	15.70
Rank	69	63	55	83	95	99	47	54	52	95	98
Population	266	265	260	245	227	204	295	313	335	354	361



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

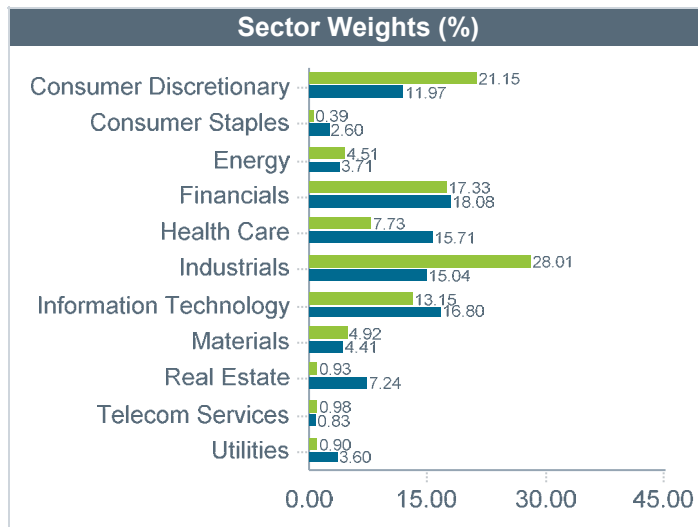
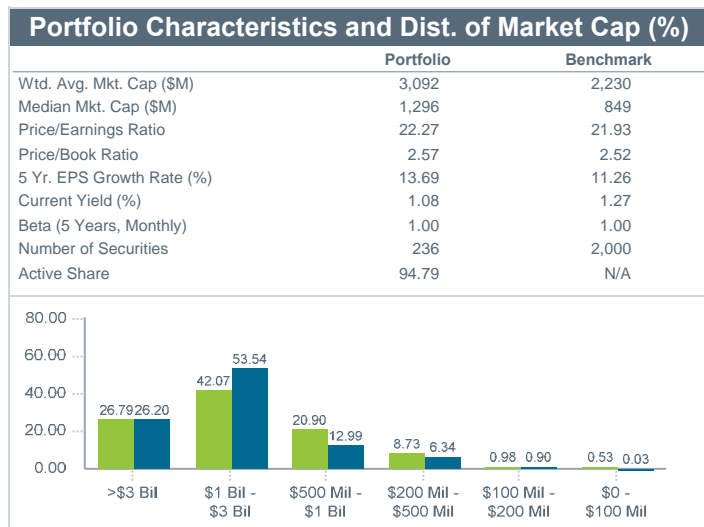
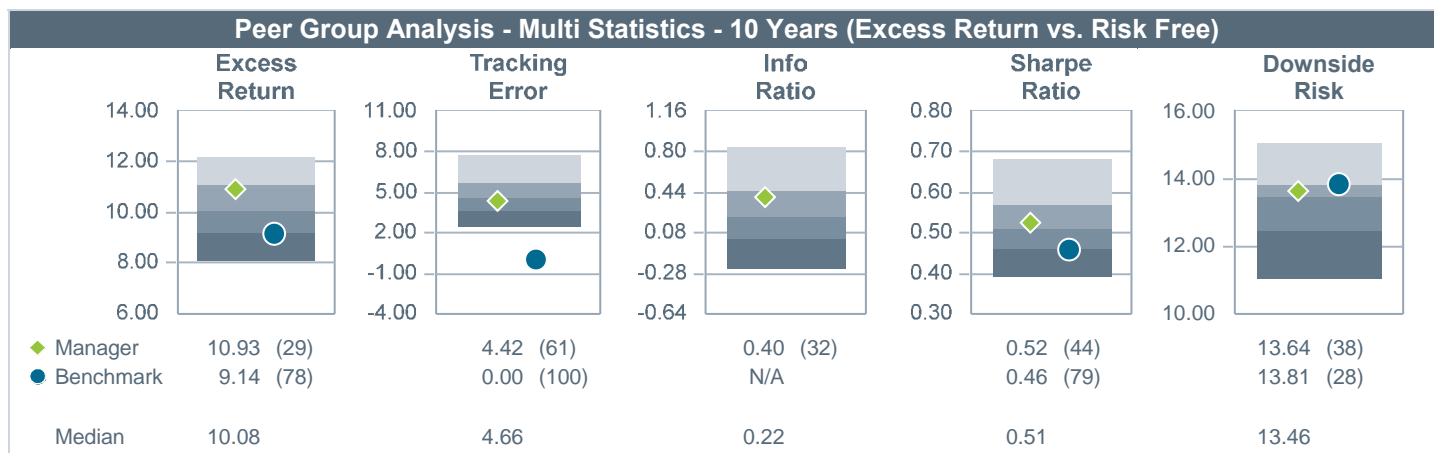
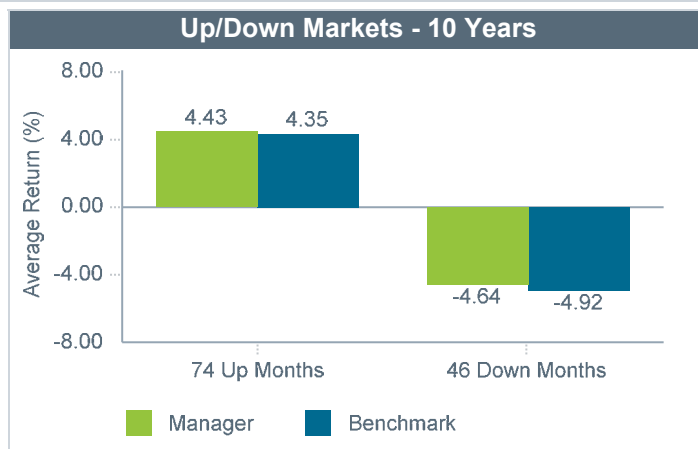
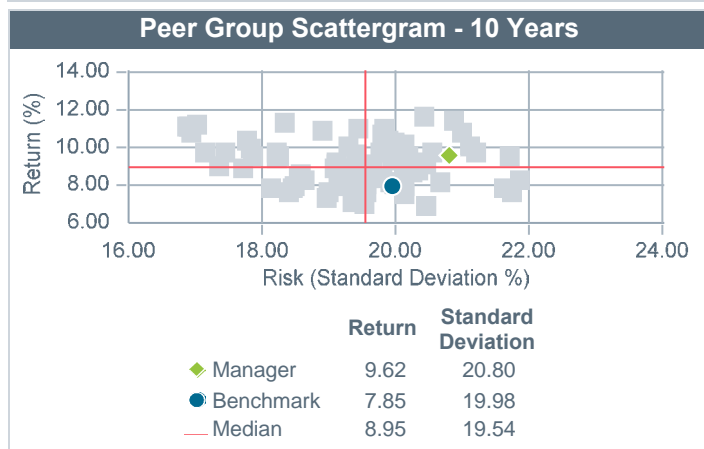
Manager: RBC

As of September 30, 2017

Benchmark: Russell 2000 Index

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	6.94	17.26	11.41	14.41	14.58	9.62	27.49	-6.18	5.31	39.56	17.26
Benchmark	5.67	20.74	12.18	13.79	13.51	7.85	21.31	-4.41	4.89	38.82	16.35
Difference	1.27	-3.48	-0.77	0.62	1.07	1.77	6.18	-1.77	0.42	0.74	0.91
Peer Group Median	5.58	20.94	13.06	15.55	15.13	8.95	20.64	-1.36	6.56	41.26	16.84
Rank	23	89	76	73	63	34	11	91	61	67	47
Population	135	134	133	129	118	100	144	152	152	151	153

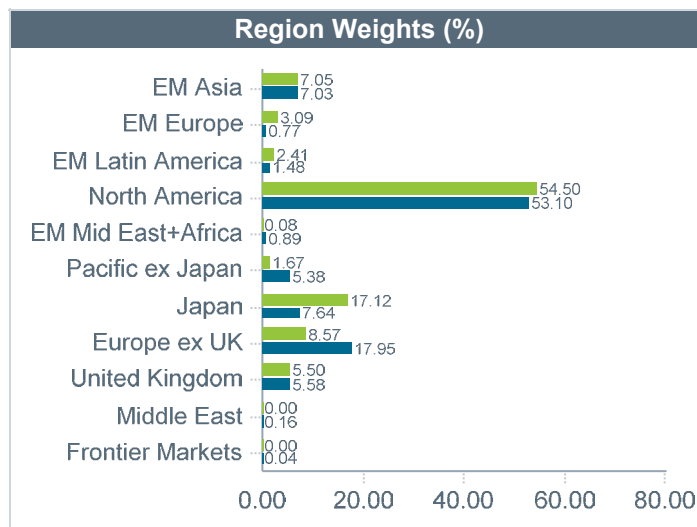
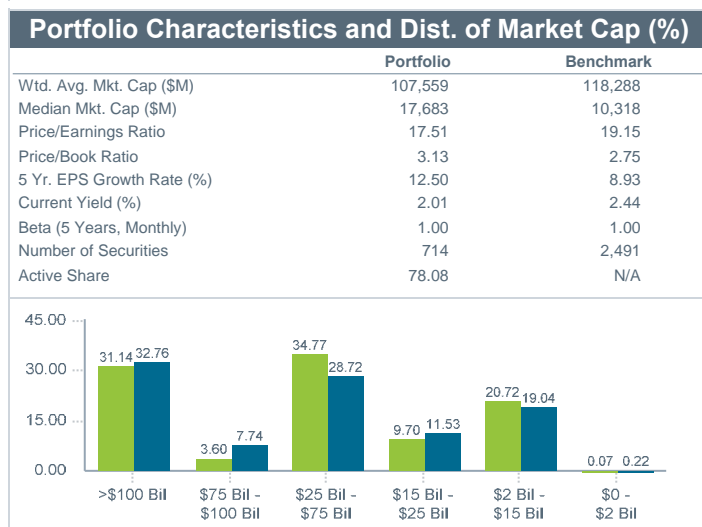
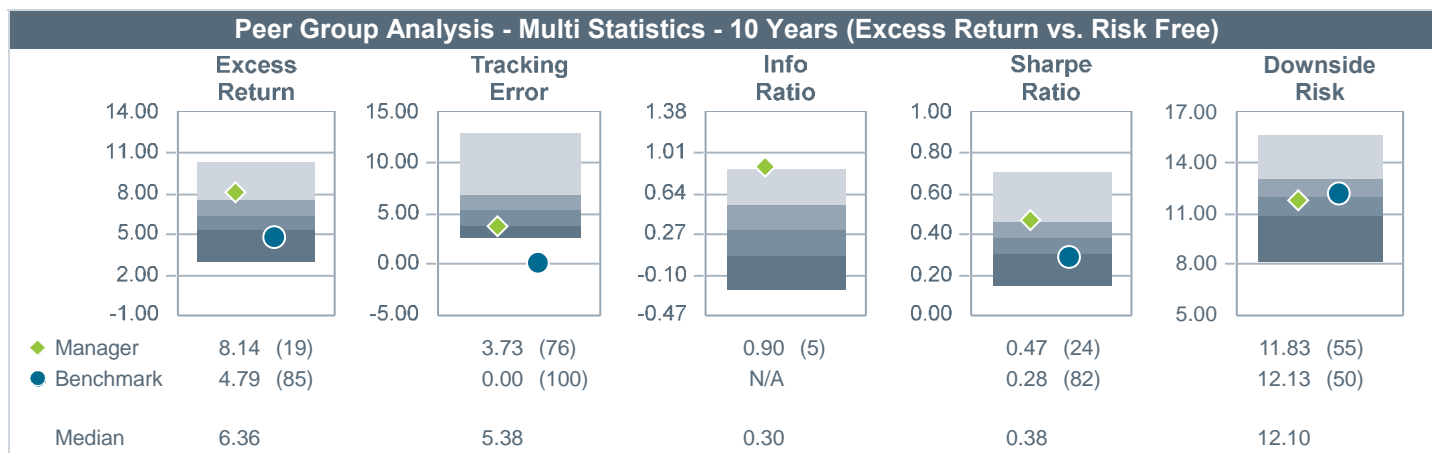
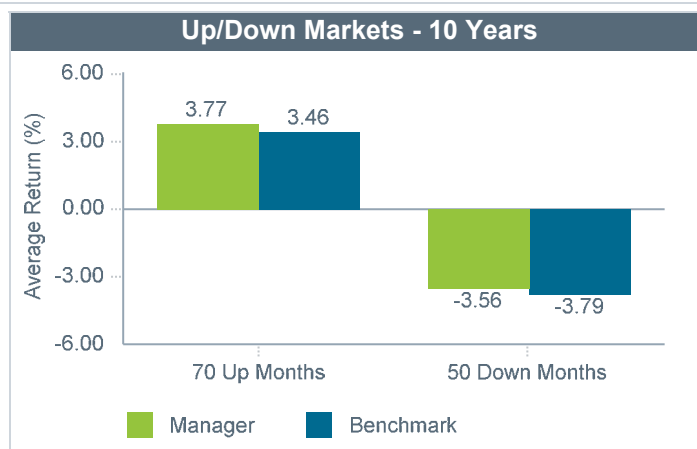
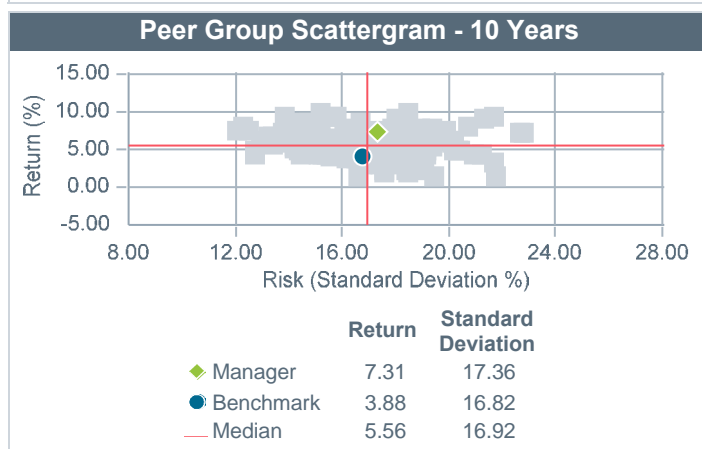


Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Manager: Arrowstreet
Benchmark: MSCI ACW Index (USD) (Net)
Peer Group: IM Global Equity (SA+CF)

As of September 30, 2017

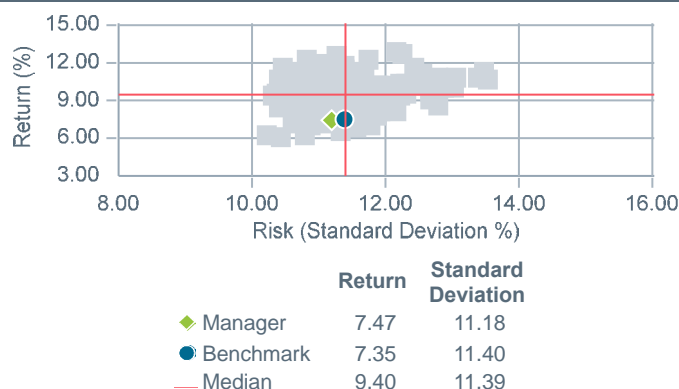
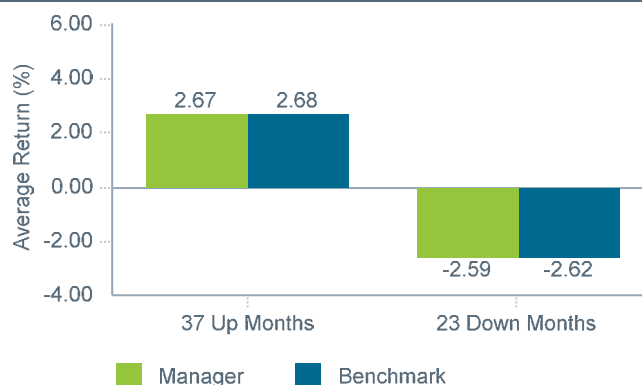
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	5.15	22.50	10.37	14.68	12.33	7.31	8.94	-0.05	8.57	34.46	17.69
Benchmark	5.18	18.65	7.43	10.20	9.17	3.88	7.86	-2.36	4.16	22.80	16.13
Difference	-0.03	3.85	2.94	4.48	3.16	3.43	1.08	2.31	4.41	11.66	1.56
Peer Group Median	4.93	18.49	8.48	11.78	11.12	5.56	7.09	0.10	4.37	27.27	16.77
Rank	47	21	27	14	25	21	35	52	18	17	42
Population	464	458	428	384	312	211	510	543	546	555	548



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

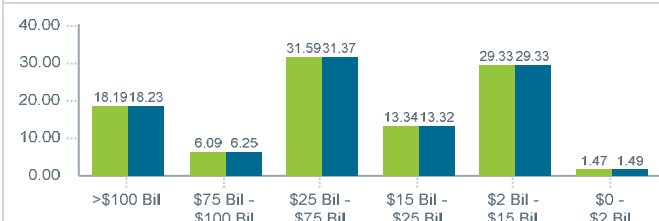
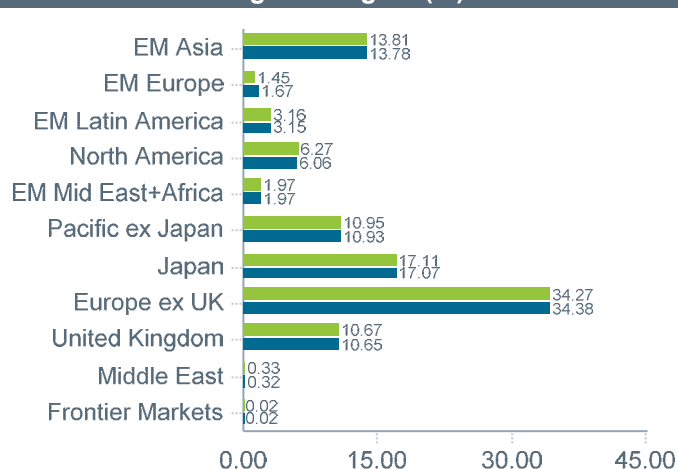
Manager: Internal International Equity Portfolio
As of September 30, 2017
Benchmark: FTSE All Wrld Ex US Index (US Invstr) (USD) (Net)
Peer Group: IM All ACWI ex US (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	5.93	19.44	5.28	7.47	N/A	N/A	4.81	-4.54	-3.92	14.65	18.69
Benchmark	5.95	19.49	5.11	7.35	5.55	1.72	4.80	-4.72	-3.31	15.31	17.48
Difference	-0.02	-0.05	0.17	0.12	N/A	N/A	0.01	0.18	-0.61	-0.66	1.21
Peer Group Median	6.22	20.19	6.93	9.40	7.81	3.00	2.04	-0.53	-3.38	20.39	18.70
Rank	56	57	76	84	N/A	N/A	26	80	60	88	51
Population	189	189	185	170	153	125	204	217	214	204	194

Peer Group Scattergram - 5 Years

Up/Down Markets - 5 Years

Peer Group Analysis - Multi Statistics - 5 Years (Excess Return vs. Risk Free)

Portfolio Characteristics and Dist. of Market Cap (%)

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	57,344	59,970
Median Mkt. Cap (\$M)	6,038	5,981
Price/Earnings Ratio	16.33	16.10
Price/Book Ratio	2.25	2.24
5 Yr. EPS Growth Rate (%)	7.75	8.05
Current Yield (%)	2.97	2.98
Beta (5 Years, Monthly)	0.97	1.00
Number of Securities	2,655	2,537
Active Share	4.48	N/A


Region Weights (%)


Performance shown is gross of fees and product specific prior to client inception. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks. The Internal International Equity Portfolio currently consists of Vanguard FTSE xUS:InsP (VFWPX).

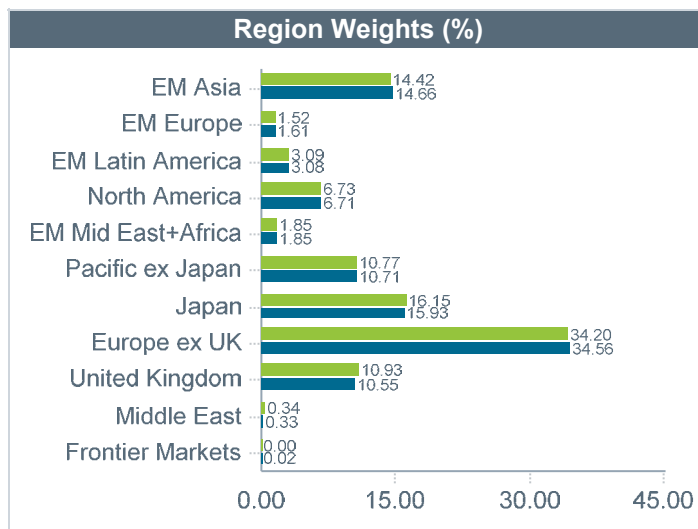
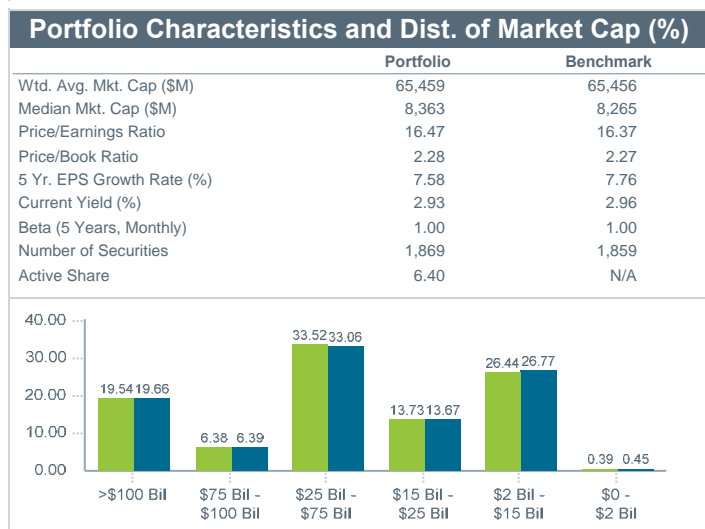
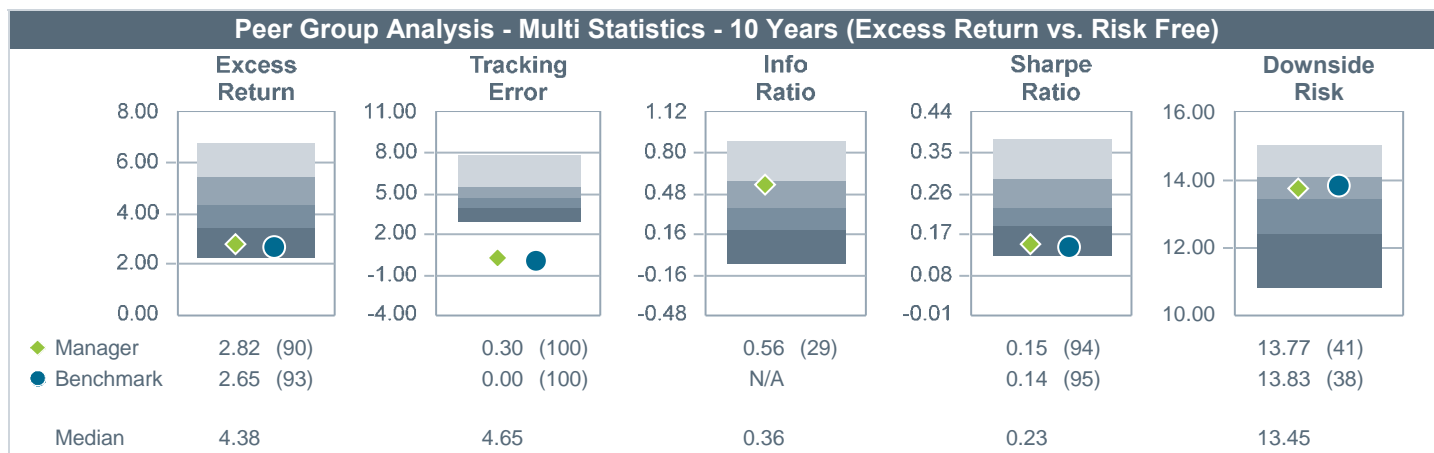
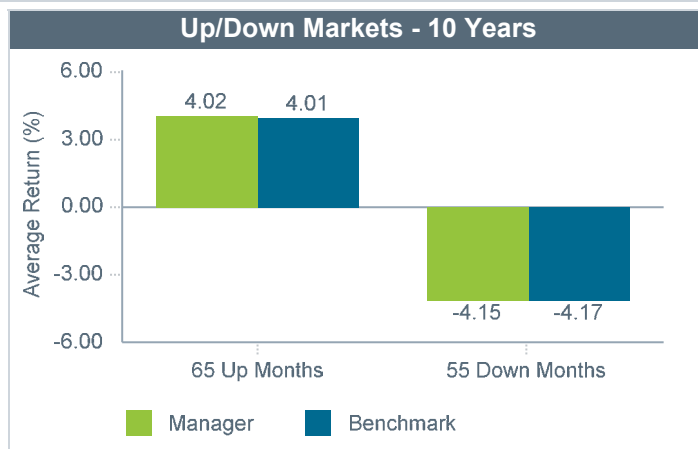
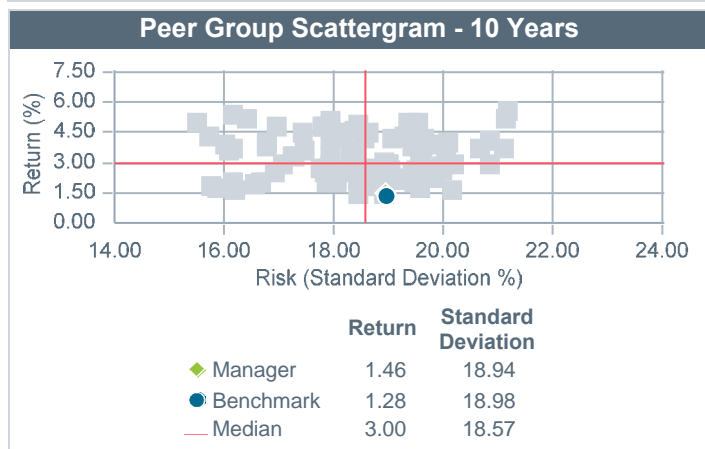
Manager: Northern Trust

As of September 30, 2017

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	2016	2015	2014	2013	2012
Manager	6.40	19.83	4.82	7.13	5.40	1.46	4.48	-5.70	-3.63	15.42	17.13
Benchmark	6.16	19.61	4.70	6.97	5.25	1.28	4.50	-5.66	-3.87	15.29	16.83
Difference	0.24	0.22	0.12	0.16	0.15	0.18	-0.02	-0.04	0.24	0.13	0.30
Peer Group Median	6.22	20.19	6.93	9.40	7.81	3.00	2.04	-0.53	-3.38	20.39	18.70
Rank	45	53	82	91	90	94	29	87	54	85	62
Population	189	189	185	170	153	125	204	217	214	204	194



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

Manager: Fisher Investments

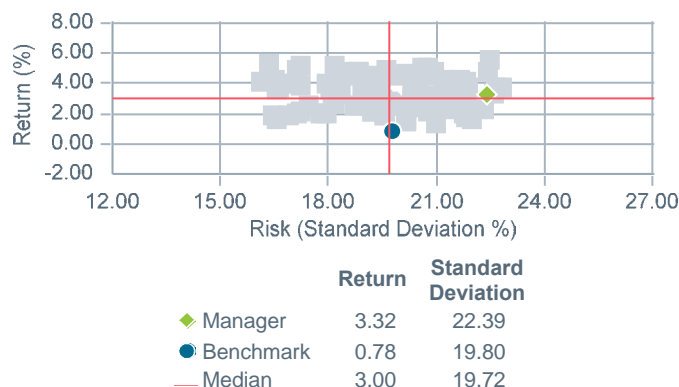
As of September 30, 2017

Benchmark: MSCI ACW Ex US Index (Net)*

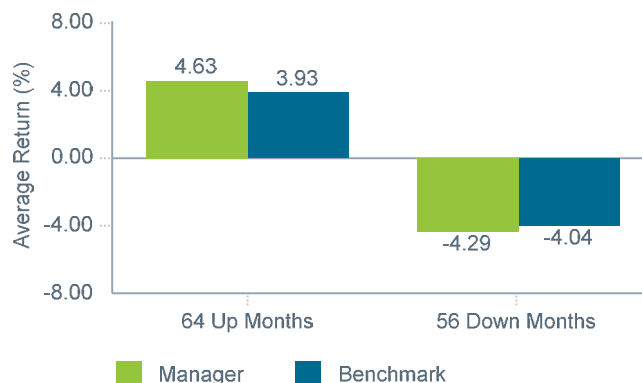
Peer Group: IM All ACWI ex US (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	6.91	24.31	8.29	9.29	7.76	3.32	1.94	-1.84	-1.91	17.68	16.88
Benchmark	6.16	19.61	4.70	6.97	5.25	0.78	4.50	-5.66	-3.87	15.29	16.83
Difference	0.75	4.70	3.59	2.32	2.51	2.54	-2.56	3.82	1.96	2.39	0.05
Peer Group Median	6.22	20.19	6.93	9.40	7.81	3.00	2.04	-0.53	-3.38	20.39	18.70
Rank	37	18	29	55	51	44	51	59	37	68	64
Population	189	189	185	170	153	125	204	217	214	204	194

Peer Group Scattergram - 10 Years



Up/Down Markets - 10 Years

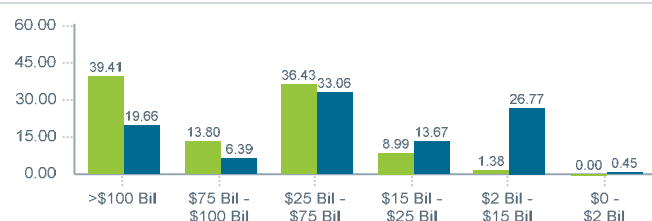


Peer Group Analysis - Multi Statistics - 10 Years (Excess Return vs. Risk Free)



Portfolio Characteristics and Dist. of Market Cap (%)

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	113,557	65,456
Median Mkt. Cap (\$M)	65,950	8,265
Price/Earnings Ratio	18.24	16.37
Price/Book Ratio	2.79	2.27
5 Yr. EPS Growth Rate (%)	8.91	7.76
Current Yield (%)	2.46	2.96
Beta (5 Years, Monthly)	1.03	1.00
Number of Securities	67	1,859
Active Share	79.44	N/A



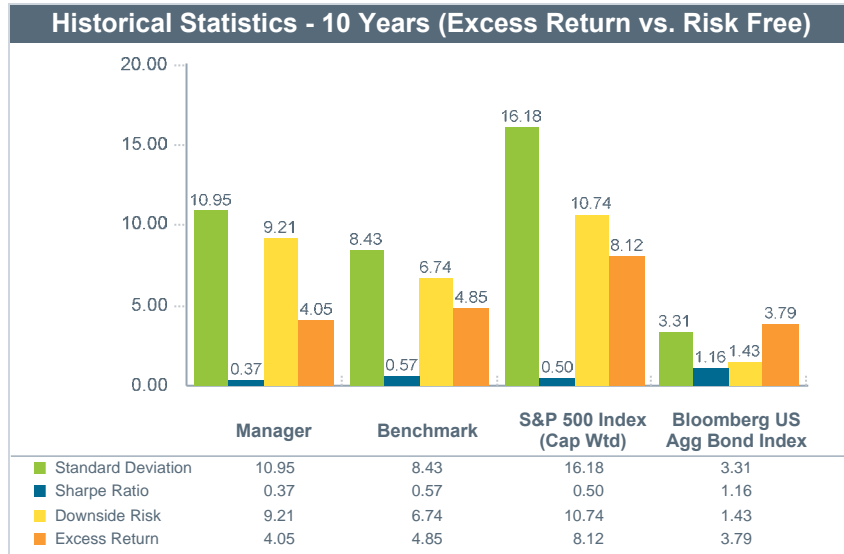
Region Weights (%)



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

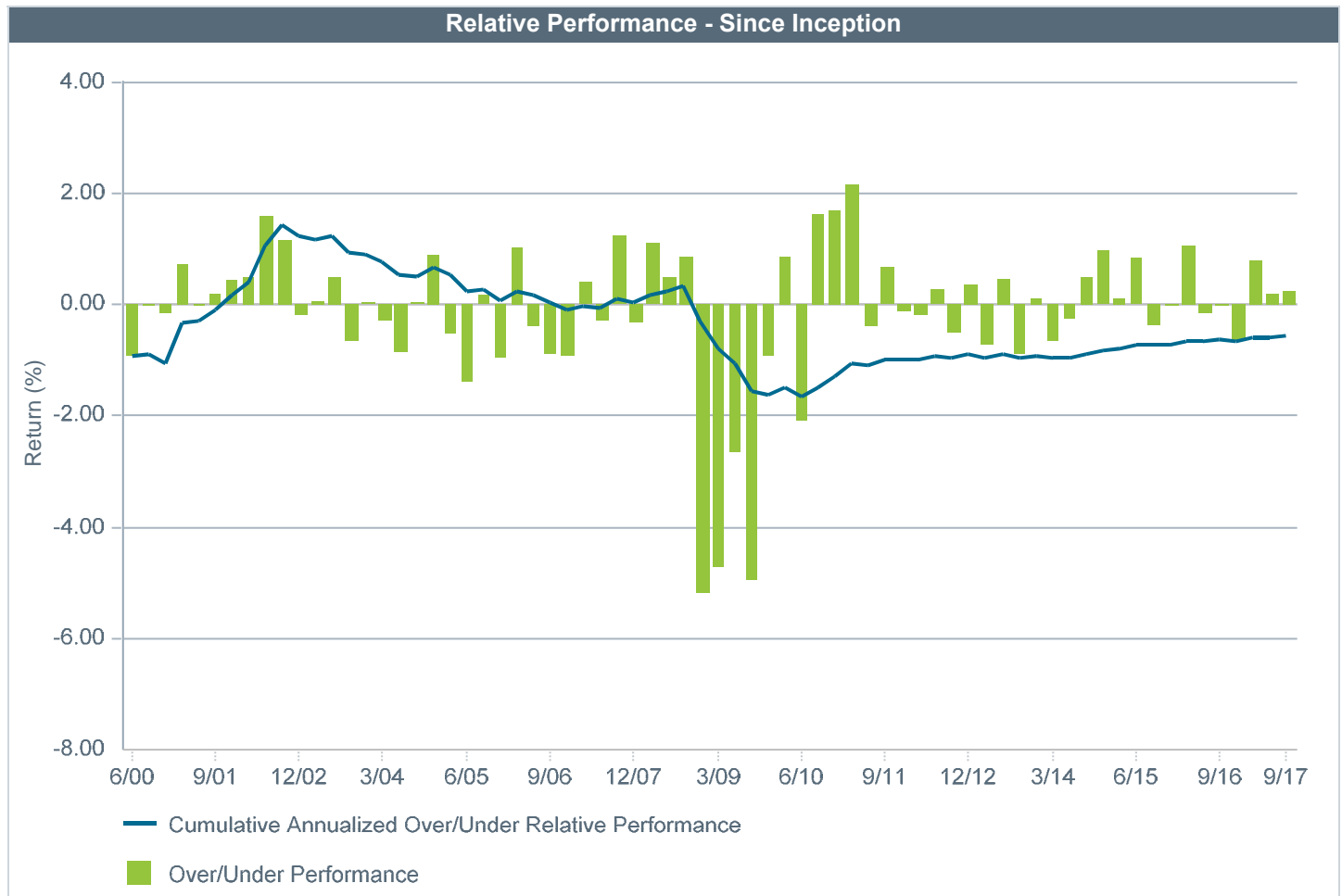
*Consists of the MSCI EAFE (Gross) through July 2010 and the MSCI ACW Ex US (Net) thereafter.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	2.11	8.34	12.01	12.06	13.44	3.93	9.09	15.71	13.17	12.77	10.91
Benchmark	1.87	7.66	10.85	11.59	12.52	5.03	8.77	15.02	12.50	13.94	10.94
Difference	0.24	0.68	1.16	0.47	0.92	-1.10	0.32	0.69	0.67	-1.17	-0.03



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.99
S&P 500 Index (Cap Wtd)	0.22
Russell 2000 Index	0.19
MSCI EAFE Index (USD) (Net)	0.08
MSCI Emg Mkts Index (USD) (Net)	-0.08
Bloomberg US Agg Bond Index	-0.25
Bloomberg US Trsy: US TIPS Index	-0.07
Wilshire US REIT Index	0.22
HFRI FOF Comp Index	0.12
Bloomberg Cmnty Index (TR)	0.17
BofA ML 3 Mo US T-Bill Index	-0.06
Cons Price Index (Unadjusted)	0.23



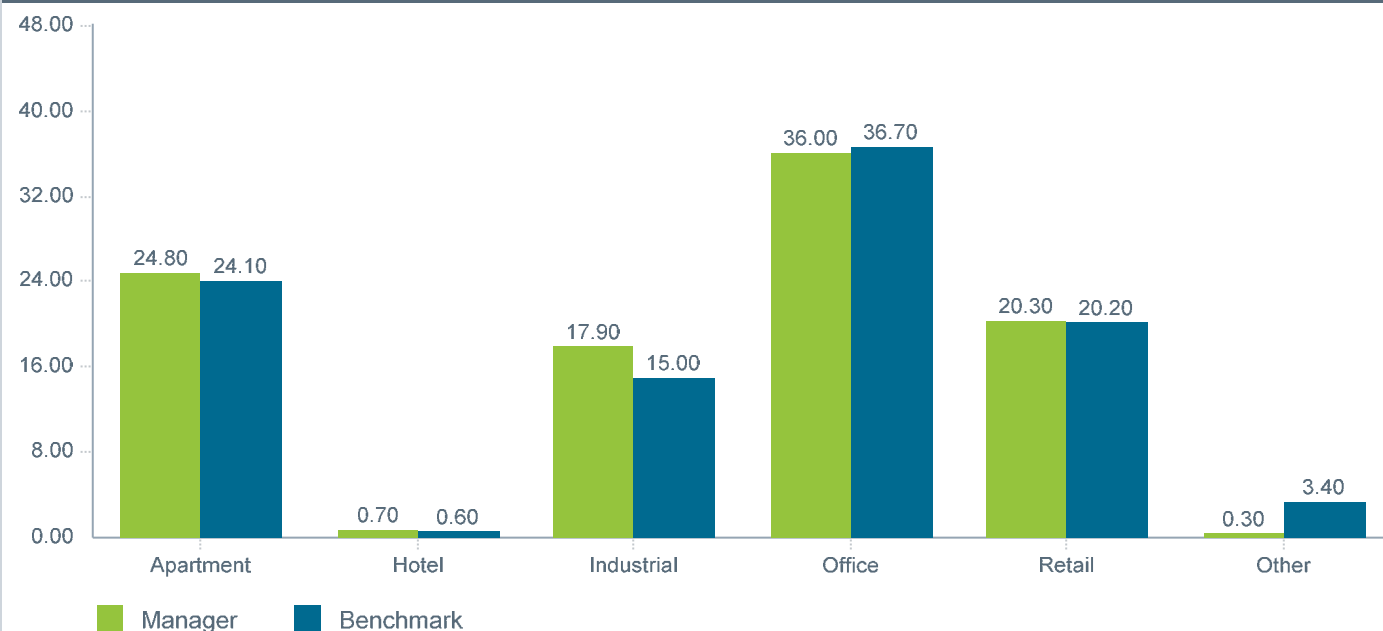
Investment Strategy

The Clarion Lion Properties Fund is a core real estate investment vehicle that seeks to combine an attractive income yield with long-term capital growth. The Fund's investment strategy is to manage a diversified portfolio of primarily institutional quality real estate assets and related investments across the four main property types in major markets located throughout the US. The portfolio is actively managed with inputs from the firm's Research and Investment Strategy Group and the firm's Acquisitions Group through a continuous evaluation of real estate cycles, national and regional market fundamentals, and property characteristics to emphasize sectors of relative value. The Fund may invest up to 15% of its gross assets in non-core type real estate investment opportunities.

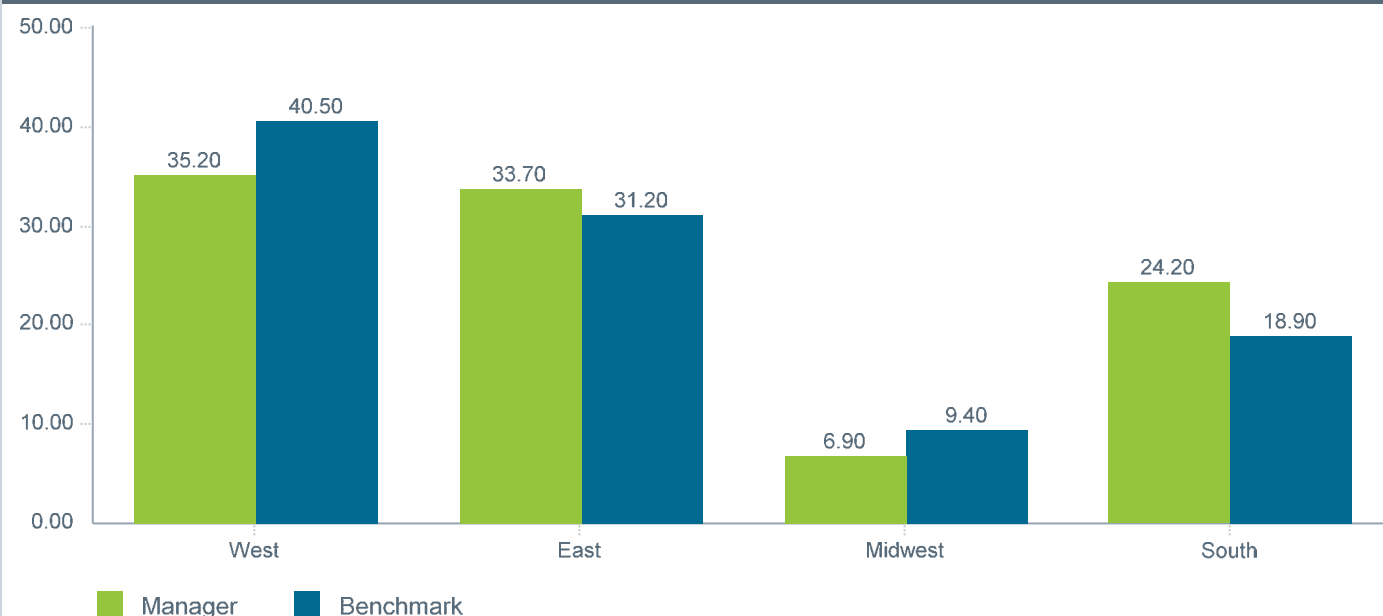
Investment Profile

Fund Inception	2000
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	10,375
Fund Leverage %	24.30
Portfolio Occupancy %	94.60
Cash Reserve %	6.90
Number of Investments	134
Number of Limited Partners	284

Property Type Allocation (%)

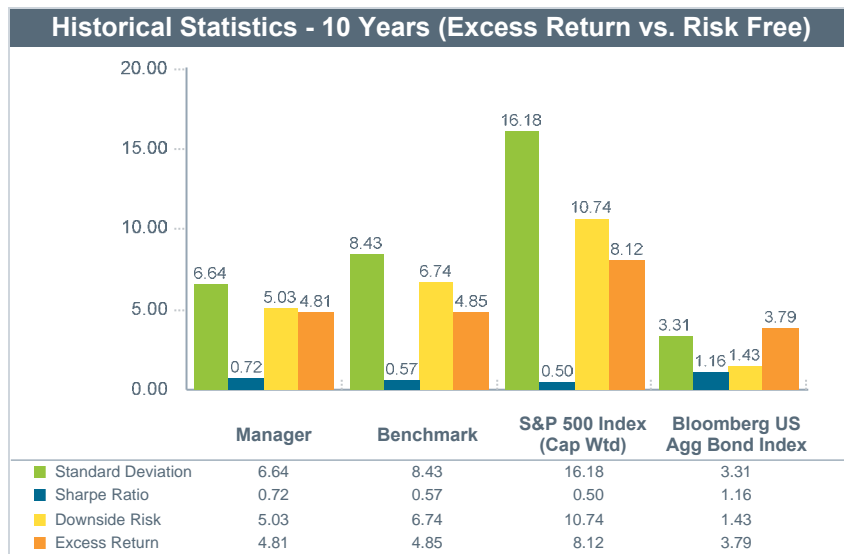


Geographic Allocation (%)



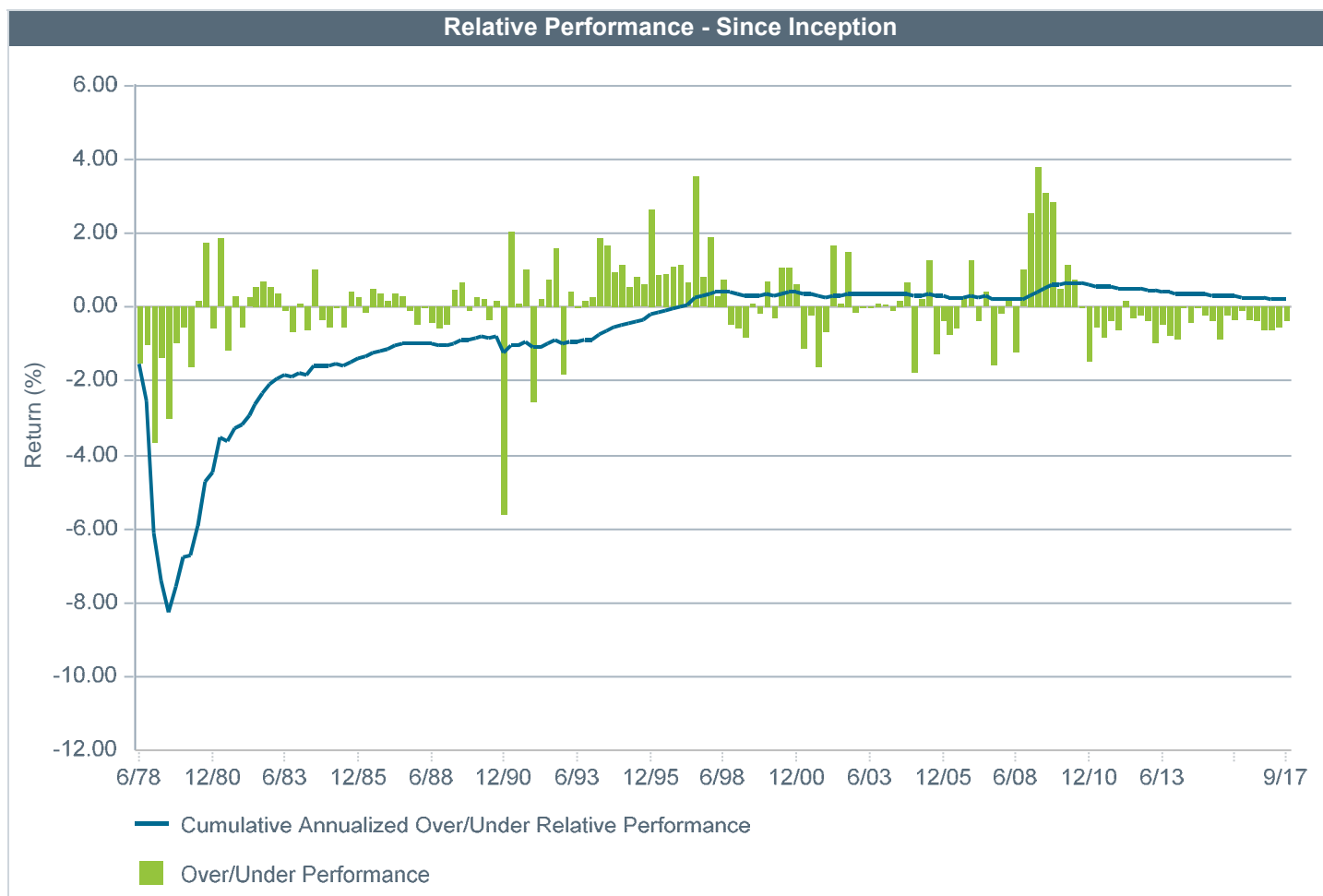
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of land. 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.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	1.48	5.37	9.01	9.60	10.42	5.15	7.21	12.94	11.69	10.44	10.15
Benchmark	1.87	7.66	10.85	11.59	12.52	5.03	8.77	15.02	12.50	13.94	10.94
Difference	-0.39	-2.29	-1.84	-1.99	-2.10	0.12	-1.56	-2.08	-0.81	-3.50	-0.79



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.99
S&P 500 Index (Cap Wtd)	0.21
Russell 2000 Index	0.18
MSCI EAFE Index (USD) (Net)	0.08
MSCI Emg Mkts Index (USD) (Net)	-0.08
Bloomberg US Agg Bond Index	-0.13
Bloomberg US Trsy: US TIPS Index	-0.02
Wilshire US REIT Index	0.26
HFRI FOF Comp Index	0.11
Bloomberg Cmnty Index (TR)	0.12
BofA ML 3 Mo US T-Bill Index	-0.10
Cons Price Index (Unadjusted)	0.18



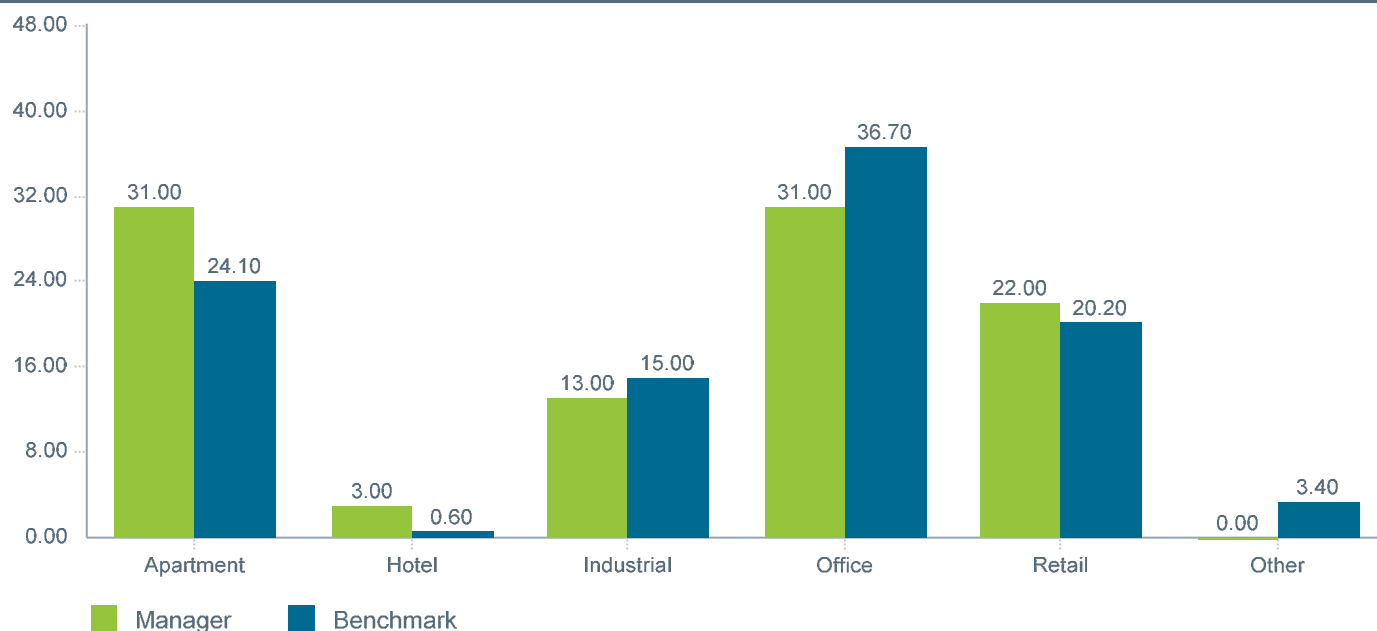
Investment Strategy

The UBS Trumbull Property Fund is an actively managed core equity real estate investment vehicle 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 its income component. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in the "value-added" type real estate investment opportunities.

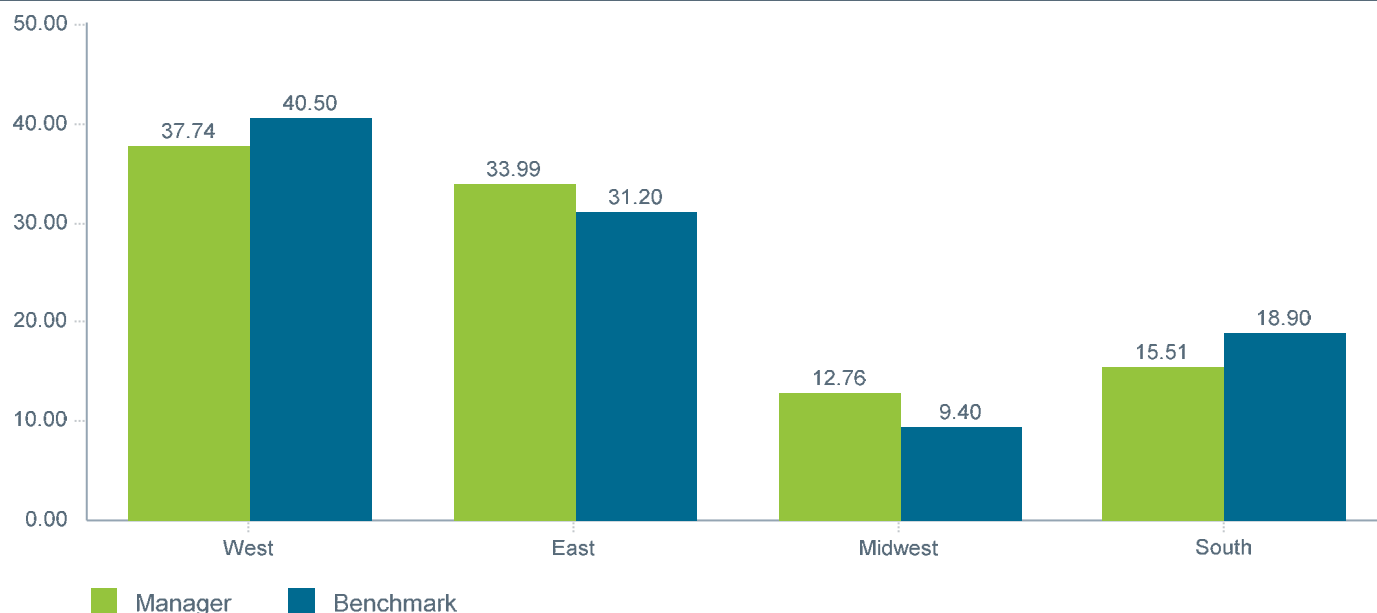
Investment Profile

Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	23,499
Fund Leverage %	15.10
Portfolio Occupancy %	92.30
Cash Reserve %	3.40
Number of Investments	222
Number of Limited Partners	461

Property Type Allocation (%)

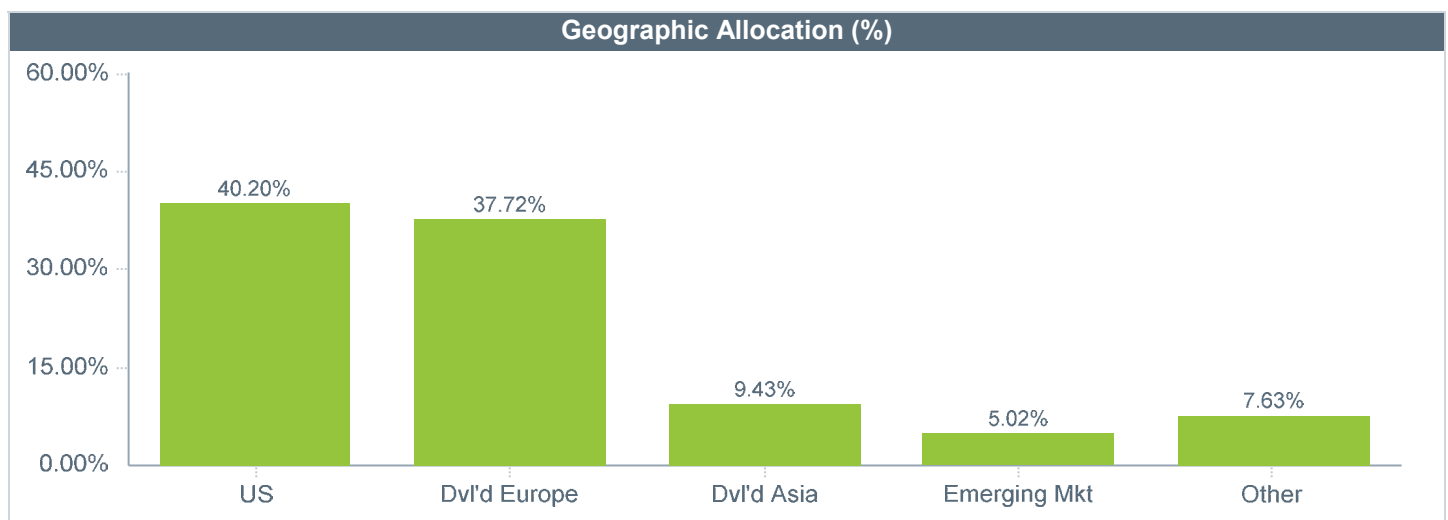
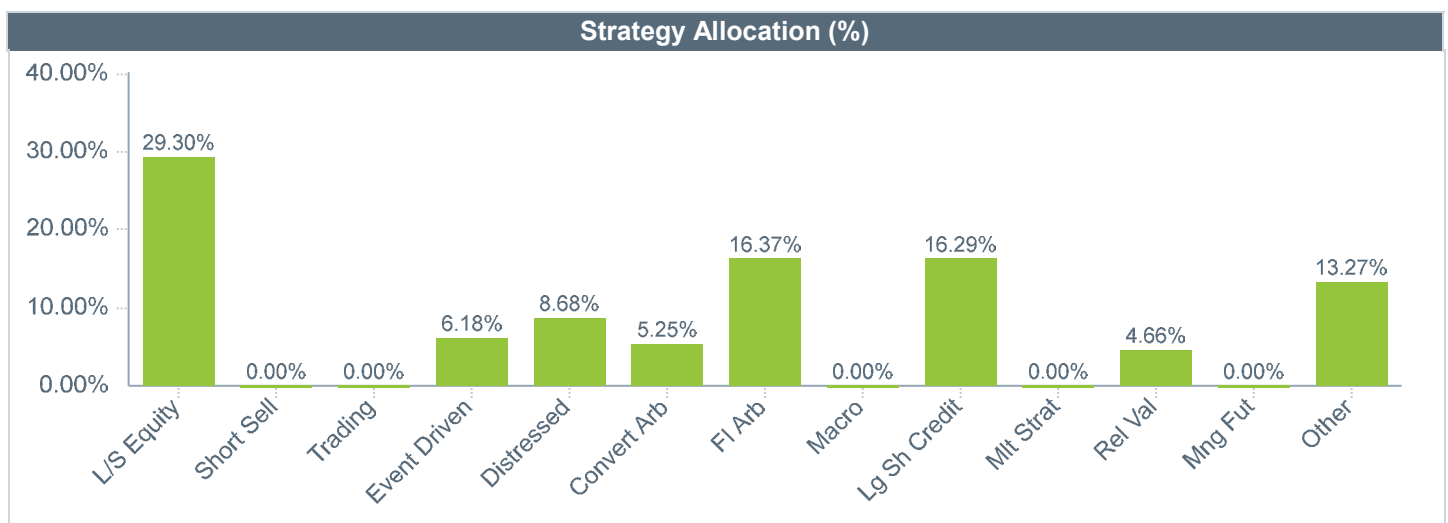


Geographic Allocation (%)



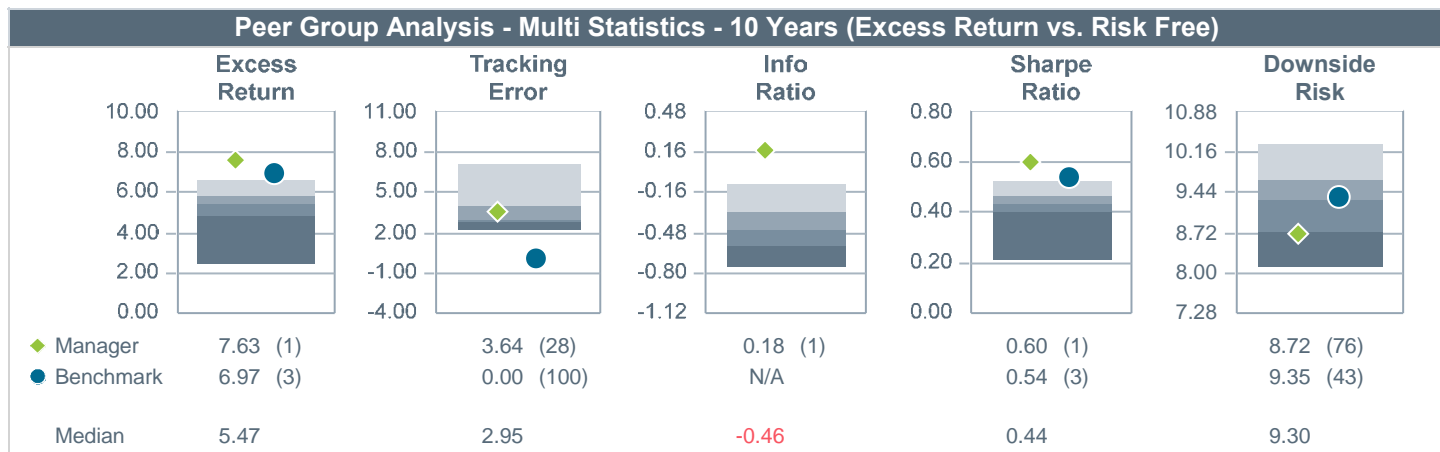
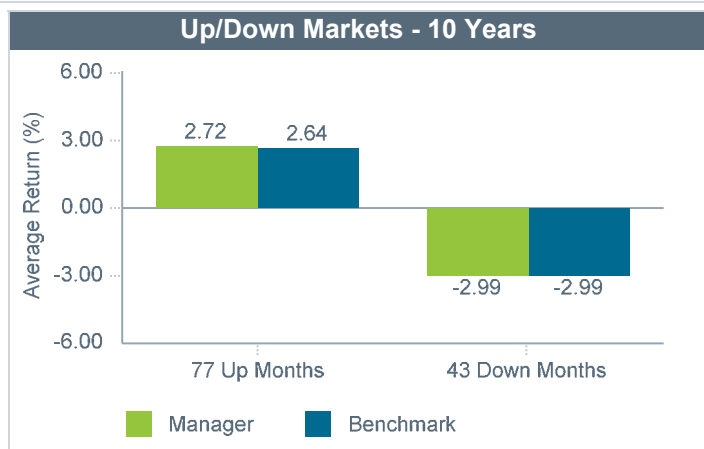
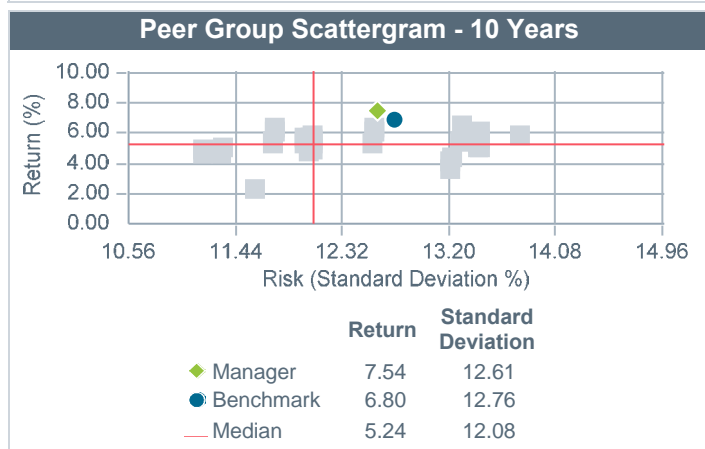
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists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

Investment Strategy	Firm Statistics	
PAAMCO focuses on returns which are targeted to be independent of traditional markets and builds portfolios which aim to diversify sources of idiosyncratic returns. PAAMCO believes in being open to new investment ideas and that investment decisions should be based on independent, fundamental assessments. PAAMCO attempts to avoid conflicts and maintain the highest ethical standards in evaluating investment opportunities.	Year Firm Established	2000
	Firm AUM (\$M)	9,782
	Percentage Employee Owned %	60.10
	Fund Statistics	
	Fund Inception	2007
	Fund Size(\$M)	507
	Number of Underlying Managers	40
	Maximum Weighting of an Underlying Manager %	6.26
	Current Leverage (Assets/Equity)	2.87
	Annual Manager Turnover %	14.98
Annual Management Fee %	0.94	
Performance Fee %	No	
Hurdle %	No	
Initial Lock-Up Periods	No	
Redemption Frequency	Monthly	
Notification Period	30 Days	

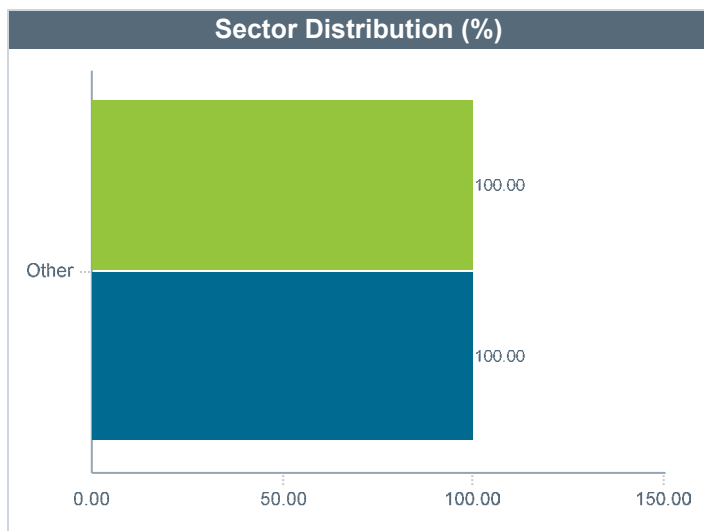


Strategy Allocation to "Other" consists of opportunistic investments, lower liquidity investments, and cash. Geographic Allocation to "Other" consists of Asia ex-Japan, Canada, and unclassified geographies. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	3.82	13.14	5.97	9.83	9.73	7.54	5.86	-1.49	6.64	25.60	11.93
Benchmark	3.77	14.32	6.73	10.95	9.73	6.80	10.44	-3.24	9.42	24.96	14.96
Difference	0.05	-1.18	-0.76	-1.12	0.00	0.74	-4.58	1.75	-2.78	0.64	-3.03
Peer Group Median	3.69	13.11	5.33	8.83	8.01	5.24	6.62	-3.62	6.37	22.72	11.59
Rank	49	50	35	25	4	1	64	32	44	11	43
Population	92	88	70	66	59	41	91	83	80	80	79



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	N/A	2.34
Spread Duration	N/A	N/A
Avg. Maturity	13.84	20.14
Avg. Quality	Ba1	Ba2
Yield To Maturity (%)	N/A	1.93
Coupon Rate (%)	N/A	3.41
Current Yield (%)	2.04	2.76
Holdings Count	105	423



Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to other consists of convertibles.

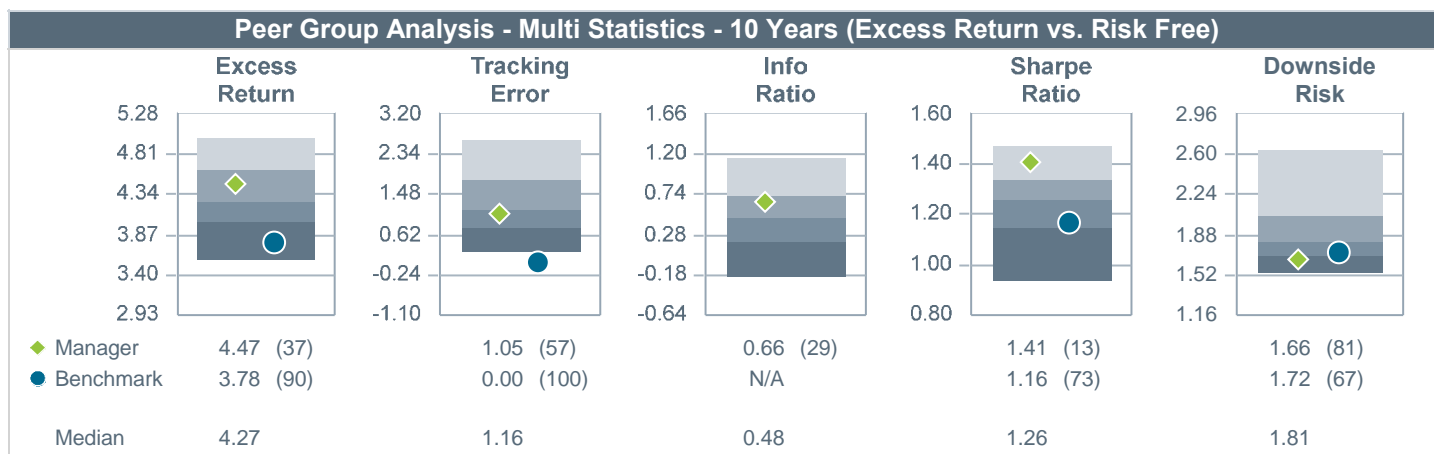
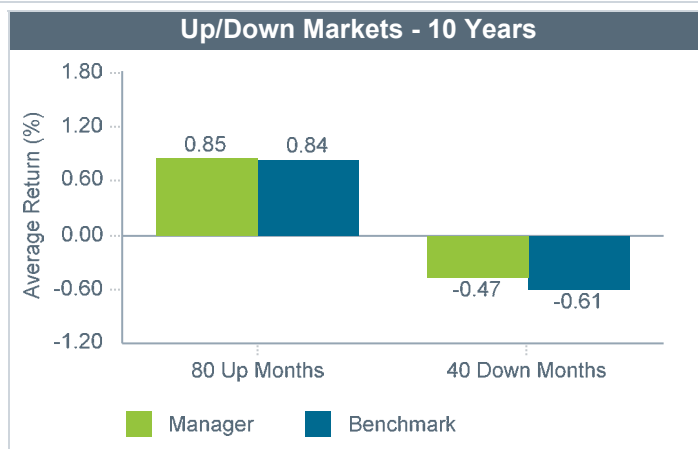
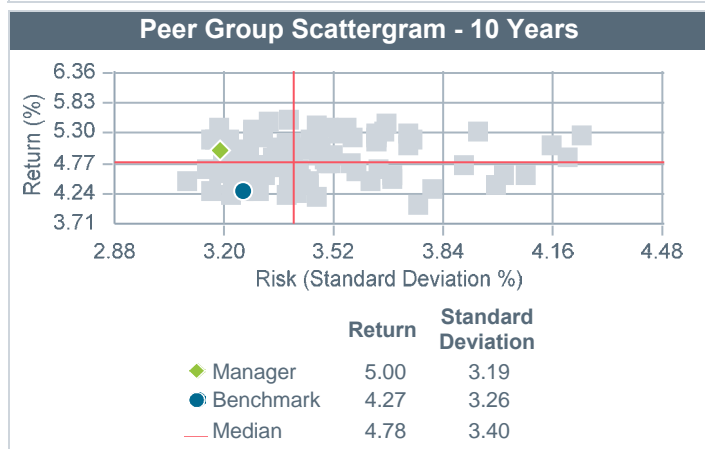
Manager: C.S. McKee

As of September 30, 2017

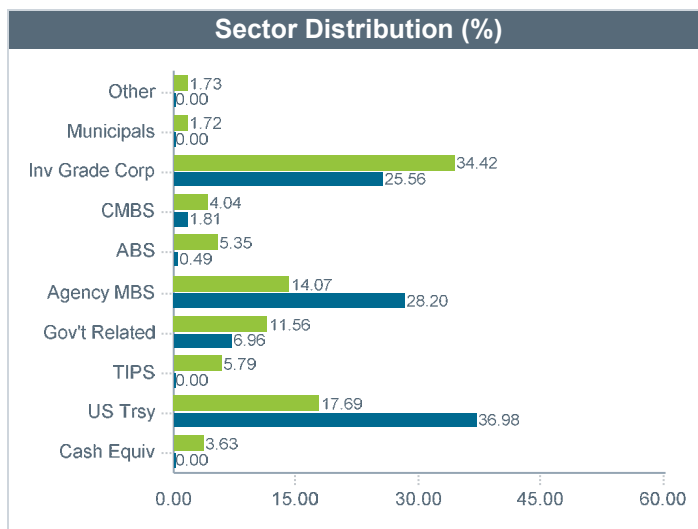
Benchmark: Bloomberg US Agg Bond Index

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	0.90	0.42	2.90	2.20	3.32	5.00	2.65	1.49	5.75	-2.23	5.07
Benchmark	0.85	0.07	2.71	2.06	2.95	4.27	2.65	0.55	5.97	-2.02	4.21
Difference	0.05	0.35	0.19	0.14	0.37	0.73	0.00	0.94	-0.22	-0.21	0.86
Peer Group Median	0.92	0.60	3.01	2.46	3.47	4.78	3.10	0.82	6.15	-1.56	5.85
Rank	53	64	65	73	64	36	75	10	78	88	76
Population	140	140	134	131	128	124	155	158	172	184	193



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.93	5.96
Spread Duration	3.72	6.14
Avg. Maturity	7.57	8.25
Avg. Quality	Aa2	Aa1/Aa2
Yield To Maturity (%)	2.53	2.55
Coupon Rate (%)	2.75	3.06
Current Yield (%)	2.71	N/A
Holdings Count	261	9,547



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 sovereign debt, supranational debt, and collateralized mortgage obligations.

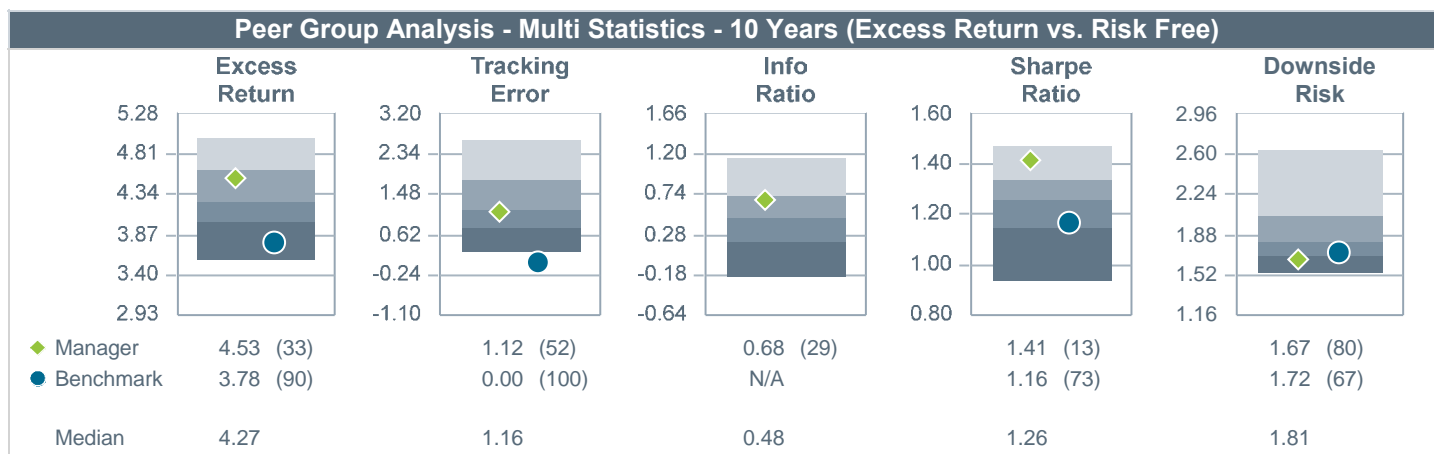
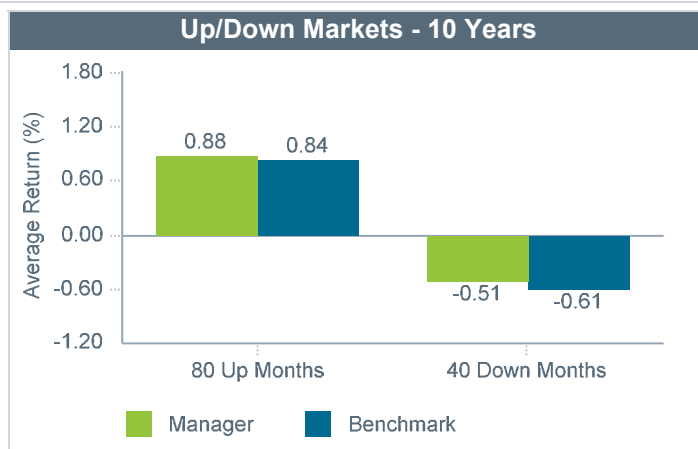
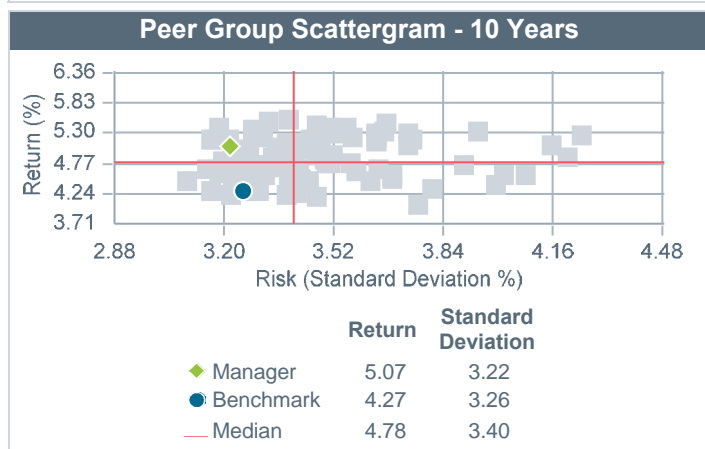
Manager: JP Morgan Core

As of September 30, 2017

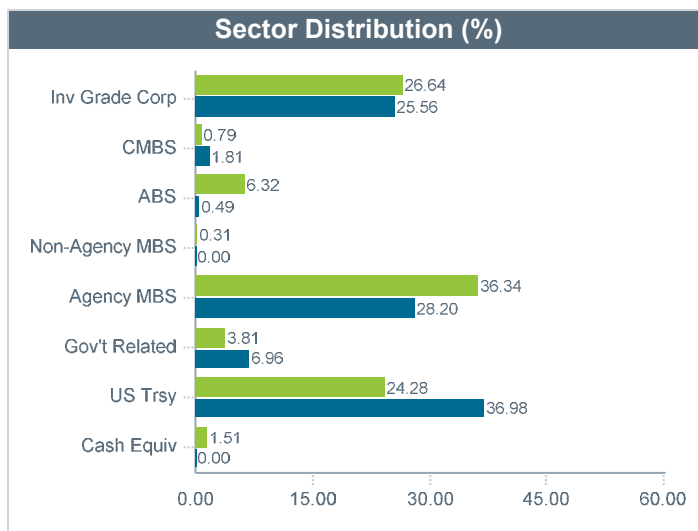
Benchmark: Bloomberg US Agg Bond Index

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	0.78	0.07	2.97	2.33	3.42	5.07	2.52	1.25	6.19	-1.83	5.74
Benchmark	0.85	0.07	2.71	2.06	2.95	4.27	2.65	0.55	5.97	-2.02	4.21
Difference	-0.07	0.00	0.26	0.27	0.47	0.80	-0.13	0.70	0.22	0.19	1.53
Peer Group Median	0.92	0.60	3.01	2.46	3.47	4.78	3.10	0.82	6.15	-1.56	5.85
Rank	88	86	56	61	55	33	86	15	46	65	52
Population	140	140	134	131	128	124	155	158	172	184	193



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.57	5.96
Spread Duration	3.80	6.14
Avg. Maturity	6.66	8.25
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	2.54	2.55
Coupon Rate (%)	3.35	3.06
Current Yield (%)	2.61	N/A
Holdings Count	1,029	9,547



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

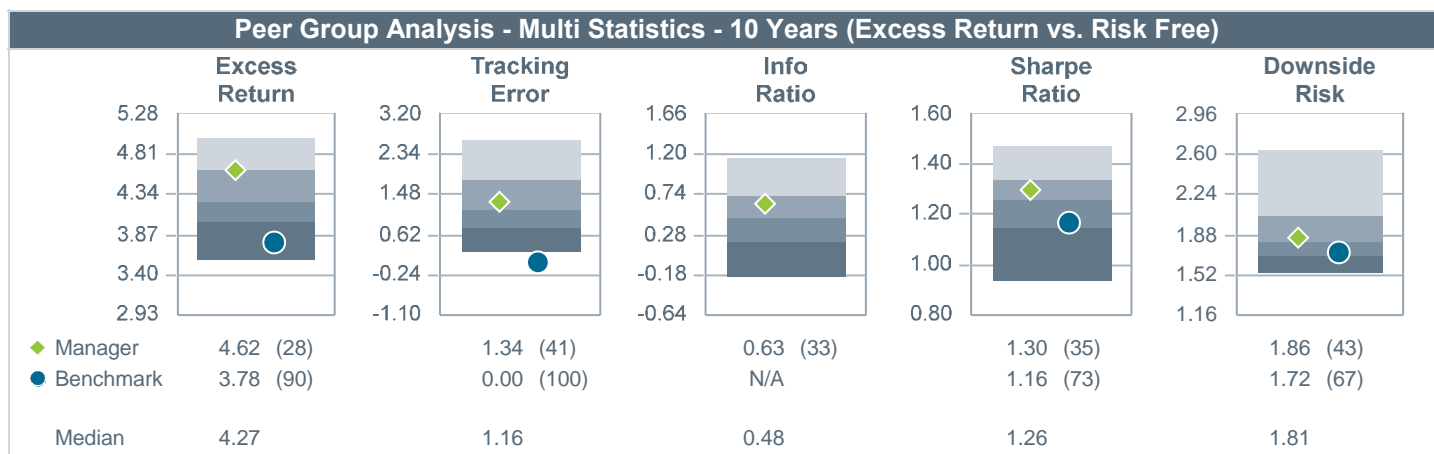
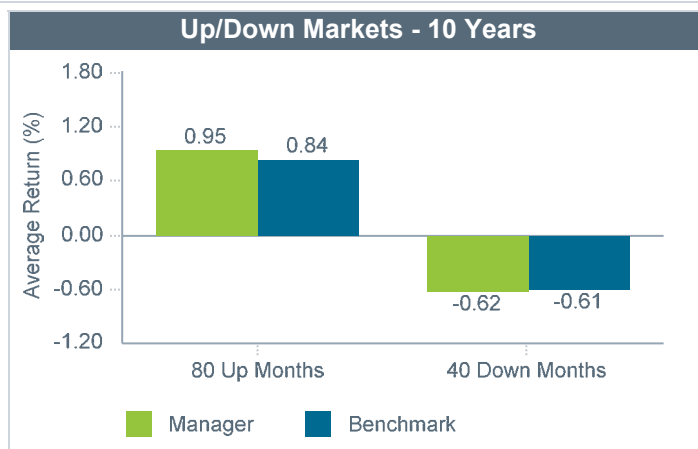
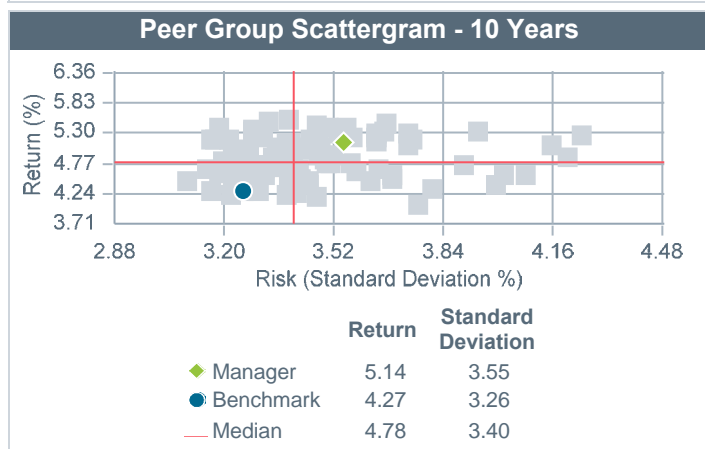
Manager: PIMCO Core

As of September 30, 2017

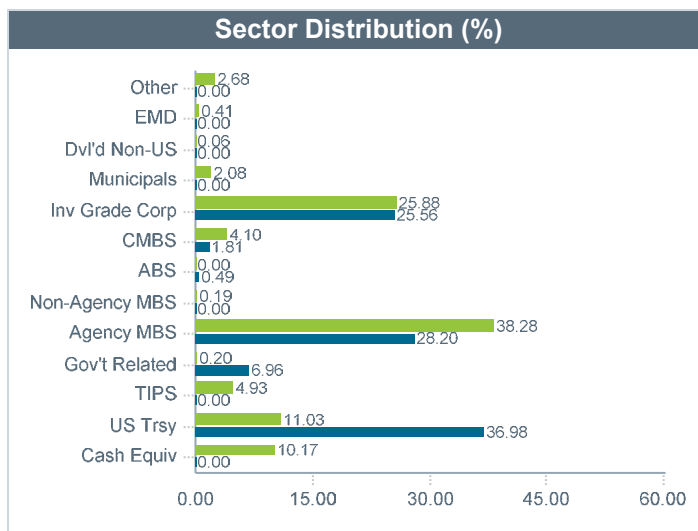
Benchmark: Bloomberg US Agg Bond Index

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	1.16	0.62	3.07	2.31	3.37	5.14	3.35	0.50	5.85	-2.48	7.88
Benchmark	0.85	0.07	2.71	2.06	2.95	4.27	2.65	0.55	5.97	-2.02	4.21
Difference	0.31	0.55	0.36	0.25	0.42	0.87	0.70	-0.05	-0.12	-0.46	3.67
Peer Group Median	0.92	0.60	3.01	2.46	3.47	4.78	3.10	0.82	6.15	-1.56	5.85
Rank	11	49	48	61	58	28	42	79	72	95	10
Population	140	140	134	131	128	124	155	158	172	184	193



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.29	5.96
Spread Duration	3.77	6.14
Avg. Maturity	6.72	8.25
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	2.77	2.55
Coupon Rate (%)	3.07	3.06
Current Yield (%)	3.02	N/A
Holdings Count	350	9,547

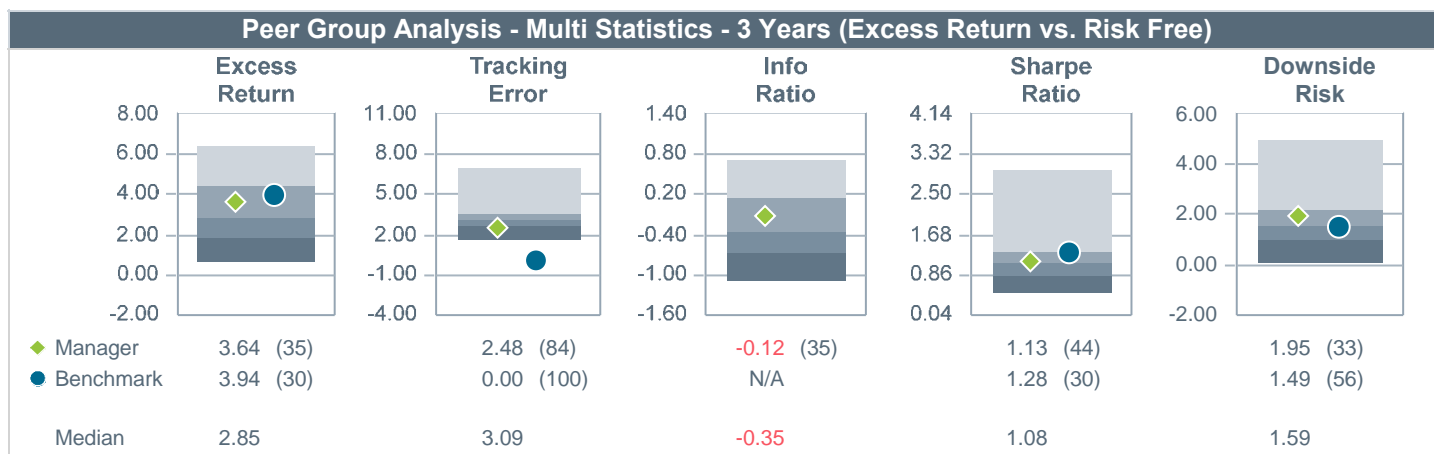
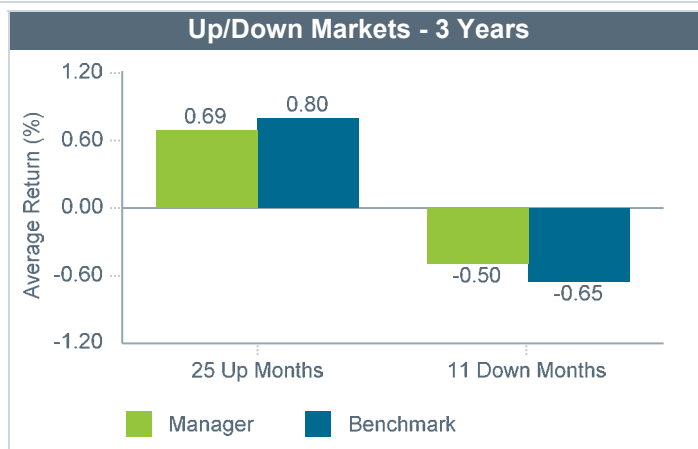
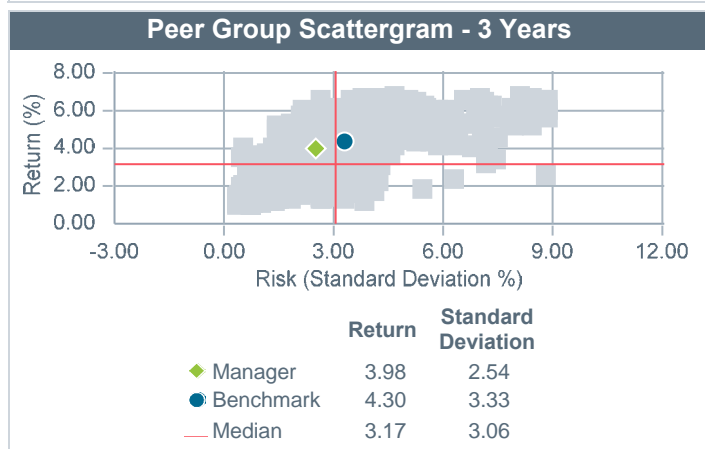


Performance shown is gross of fees and product specific prior to client inception. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Sector allocation to "Other" consists of Euro/Yankee securities.

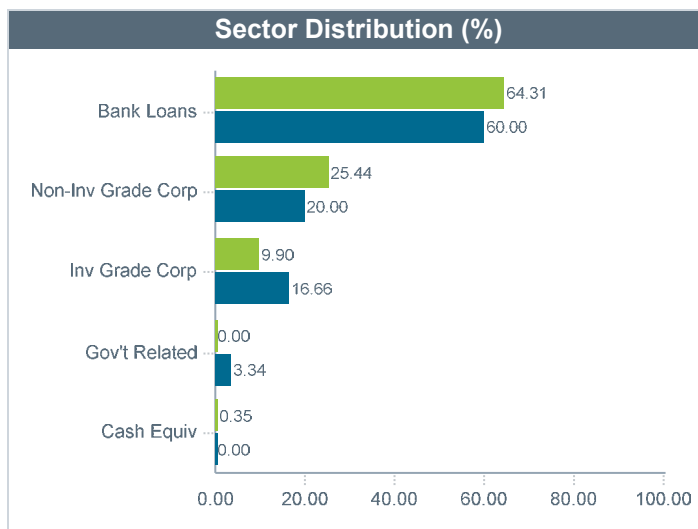
Manager: Neuberger Berman Credit
Benchmark: Credit Custom Index
Peer Group: IM U.S. Fixed Income (SA+CF)

As of September 30, 2017

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	1.23	4.42	3.98	N/A	N/A	N/A	8.42	0.08	3.40	N/A	N/A
Benchmark	1.30	5.37	4.30	4.40	5.22	5.57	10.69	-1.47	2.95	4.22	10.77
Difference	-0.07	-0.95	-0.32	N/A	N/A	N/A	-2.27	1.55	0.45	N/A	N/A
Peer Group Median	0.98	1.40	3.17	2.78	3.67	4.77	3.72	0.72	4.44	-0.17	6.86
Rank	35	23	35	N/A	N/A	N/A	23	67	62	N/A	N/A
Population	1,313	1,309	1,274	1,223	1,138	954	1,453	1,493	1,551	1,588	1,622



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	2.36	N/A
Spread Duration	4.46	N/A
Avg. Maturity	5.39	6.42
Avg. Quality	Ba3	Ba2
Yield To Maturity (%)	4.65	5.59
Coupon Rate (%)	4.63	5.05
Current Yield (%)	2.22	N/A
Holdings Count	137	2,629



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

Manager: Seix

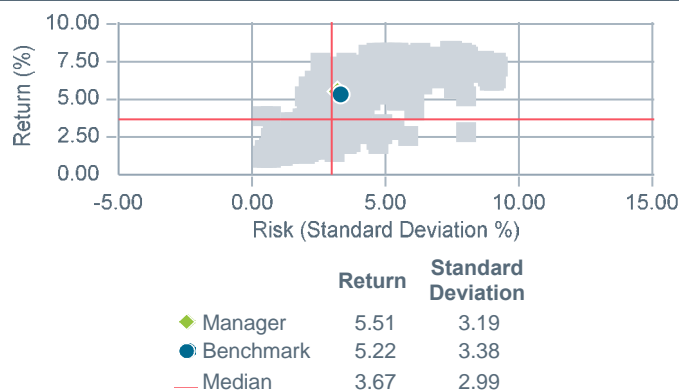
As of September 30, 2017

Benchmark: Credit Custom Index

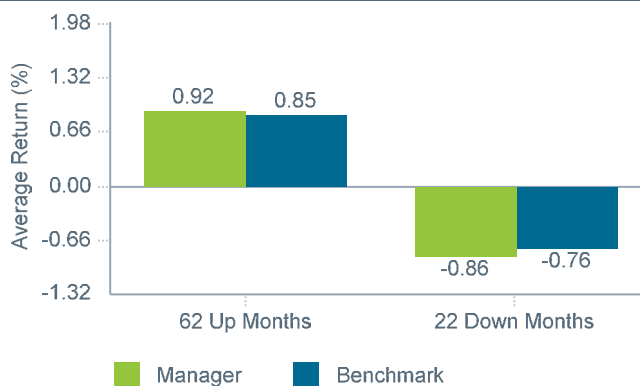
Peer Group: IM U.S. Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	1.43	5.69	4.71	4.42	5.51	N/A	11.46	-0.91	2.68	3.27	11.09
Benchmark	1.30	5.37	4.30	4.40	5.22	5.57	10.69	-1.47	2.95	4.22	10.77
Difference	0.13	0.32	0.41	0.02	0.29	N/A	0.77	0.56	-0.27	-0.95	0.32
Peer Group Median	0.98	1.40	3.17	2.78	3.67	4.77	3.72	0.72	4.44	-0.17	6.86
Rank	28	17	26	26	28	N/A	13	76	70	22	25
Population	1,313	1,309	1,274	1,223	1,138	954	1,453	1,493	1,551	1,588	1,622

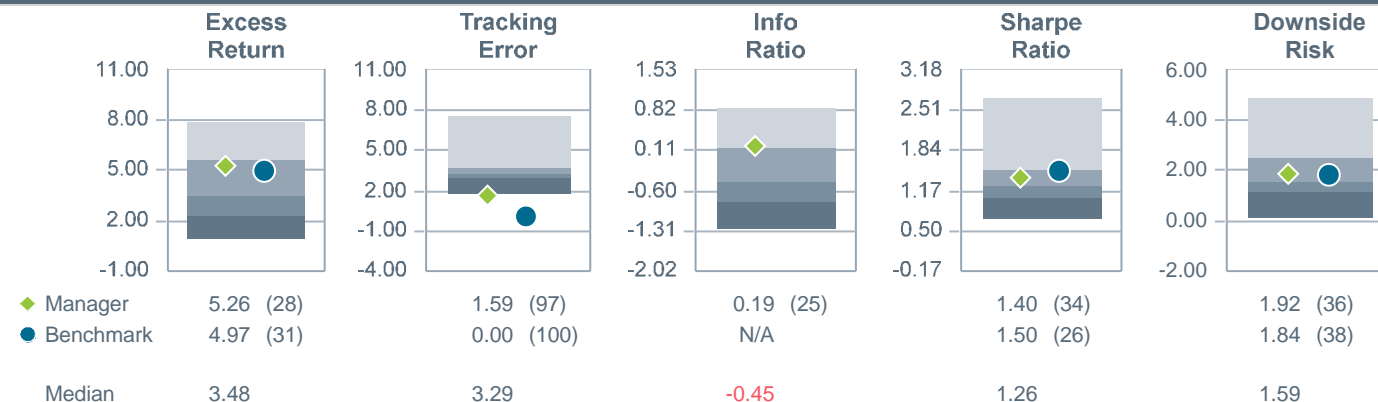
Peer Group Scattergram - 7 Years



Up/Down Markets - 7 Years



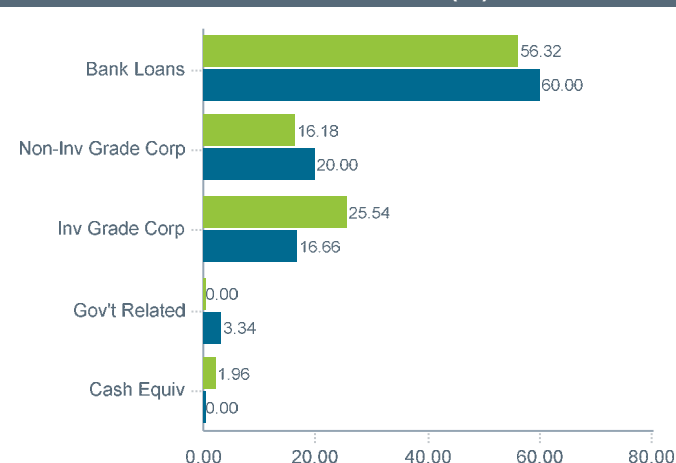
Peer Group Analysis - Multi Statistics - 7 Years (Excess Return vs. Risk Free)



Portfolio Characteristics

	Portfolio	Benchmark
Effective Duration	2.94	N/A
Spread Duration	N/A	N/A
Avg. Maturity	7.36	6.42
Avg. Quality	Ba2	Ba2
Yield To Maturity (%)	5.05	5.59
Coupon Rate (%)	4.60	5.05
Current Yield (%)	4.54	N/A
Holdings Count	535	2,629

Sector Distribution (%)



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

Manager: Investec

As of September 30, 2017

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

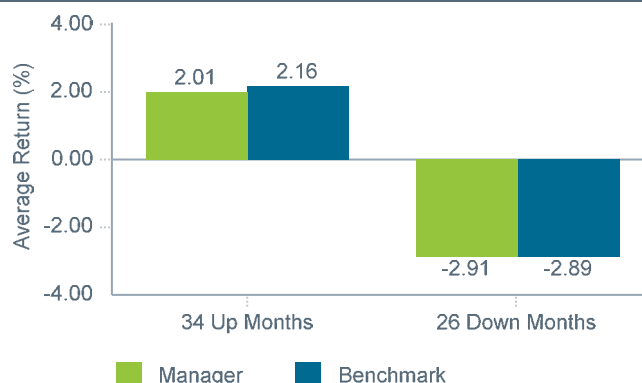
Peer Group: IM Emerging Markets Debt (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	4.04	9.15	0.19	-2.01	N/A	N/A	7.00	-14.68	-4.67	-8.93	-1.35
Benchmark	3.55	7.32	0.26	-0.91	0.68	3.80	9.94	-14.92	-5.72	-8.98	16.76
Difference	0.49	1.83	-0.07	-1.10	N/A	N/A	-2.94	0.24	1.05	0.05	-18.11
Peer Group Median	3.33	7.82	5.11	3.54	5.68	7.16	11.09	-2.90	1.39	-5.94	18.91
Rank	14	26	97	100	N/A	N/A	91	83	81	81	100
Population	135	134	128	113	84	71	157	168	169	155	146

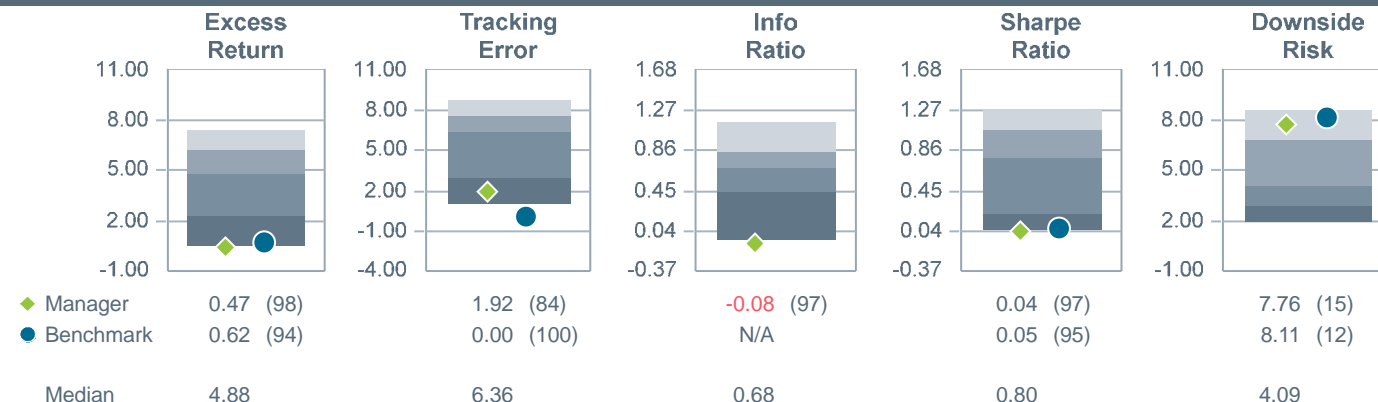
Peer Group Scattergram - 5 Years



Up/Down Markets - 5 Years



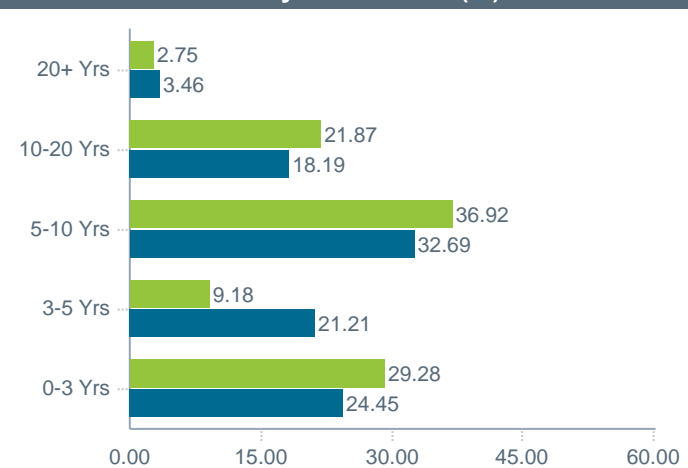
Peer Group Analysis - Multi Statistics - 5 Years (Excess Return vs. Risk Free)



Portfolio Characteristics (%)

	Portfolio	Benchmark
Effective Duration	5.20	5.12
Spread Duration	4.74	N/A
Avg. Maturity	8.18	7.33
Avg. Quality	Baa2	Baa3
Yield To Maturity (%)	8.28	5.93
Coupon Rate (%)	5.43	6.65
Current Yield (%)	5.78	6.44
Holdings Count	164	217

Maturity Distribution (%)

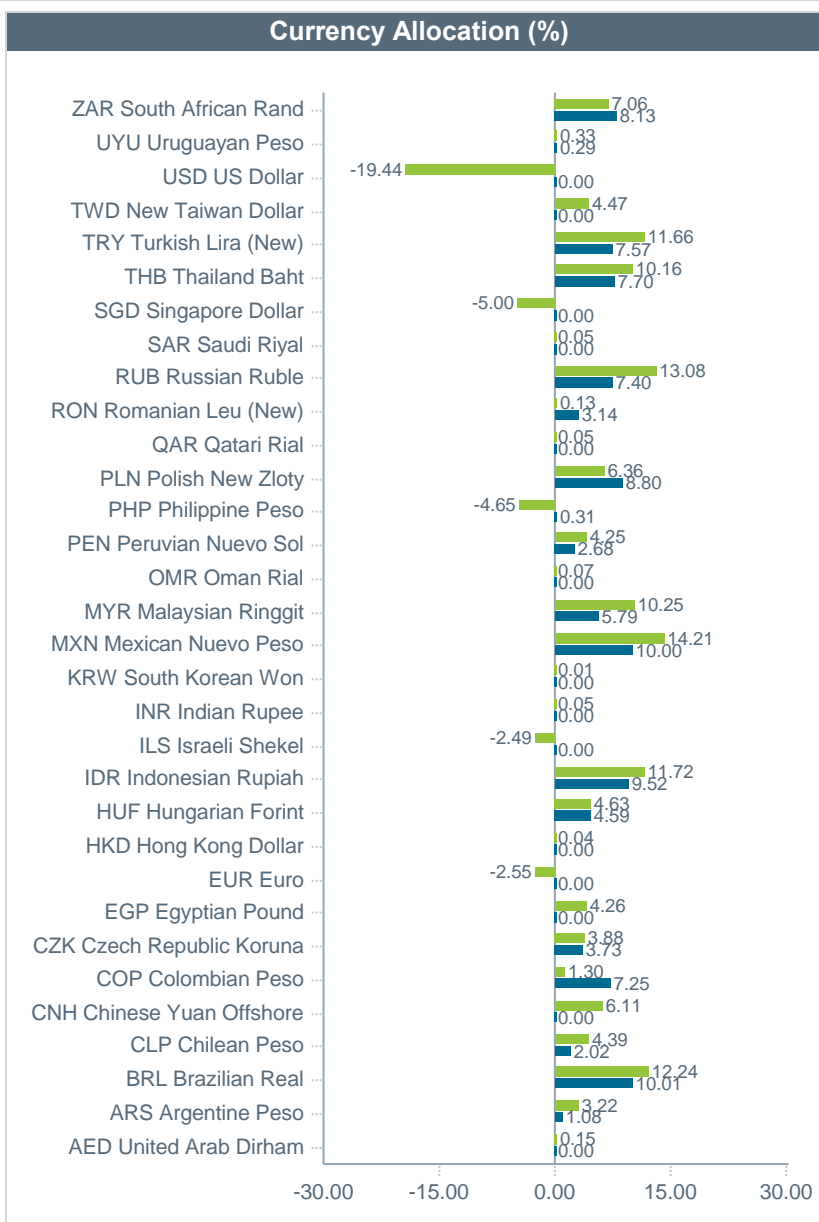
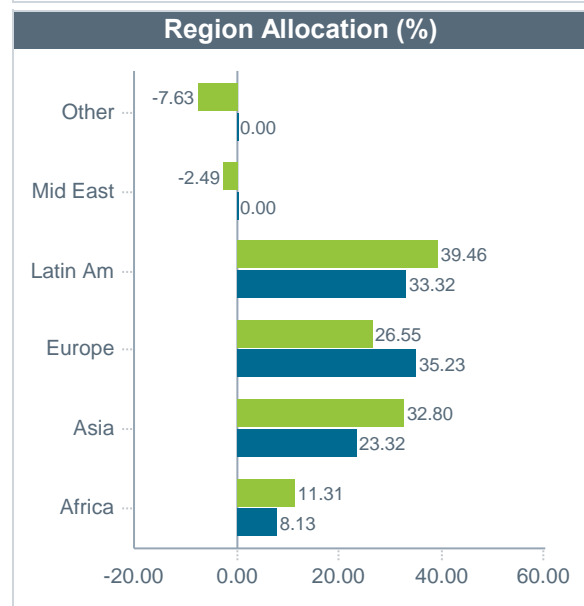
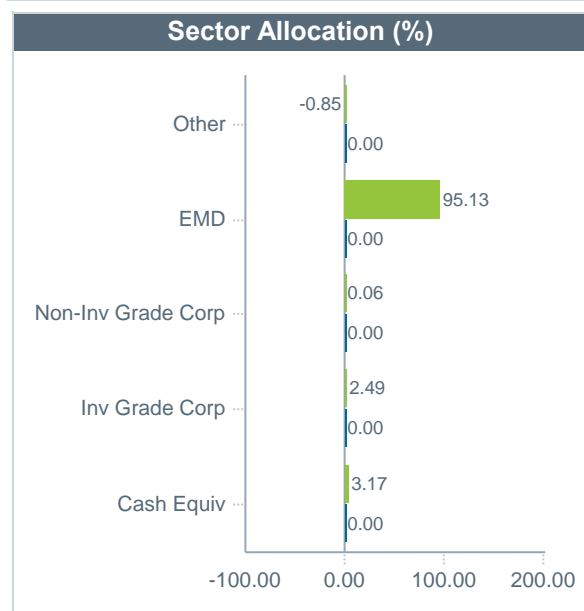
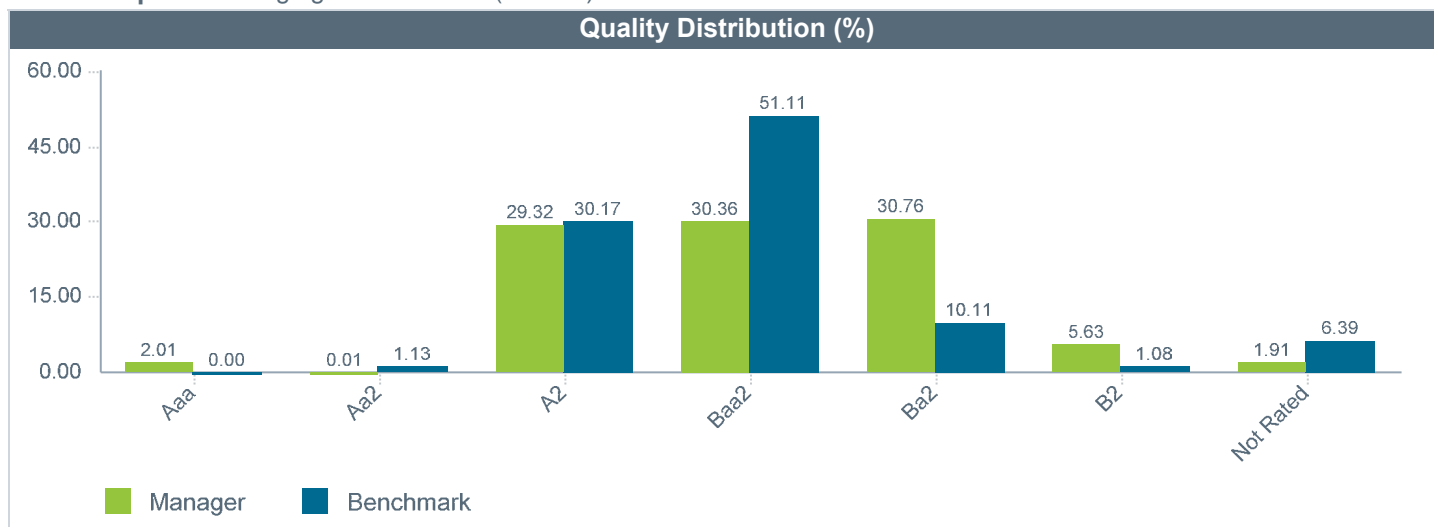


Manager: Investec

As of September 30, 2017

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. Negative sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps. Sector allocation to "Other" consists of foreign exchange and interest rate swaps. Region allocation to "Other" consists of developed market securities and securities from the Commonwealth of Independent States region.

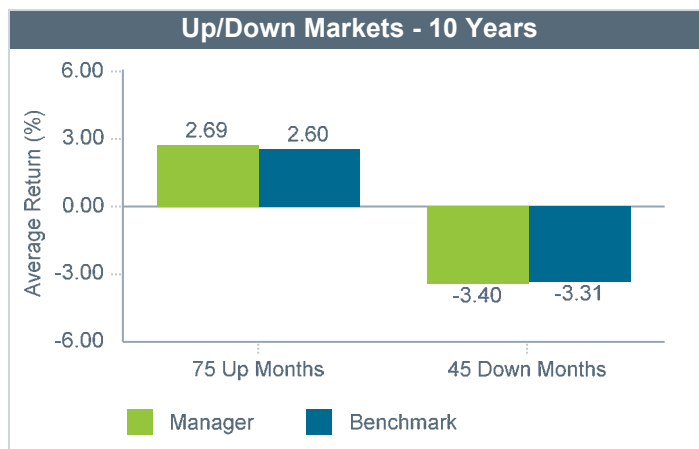
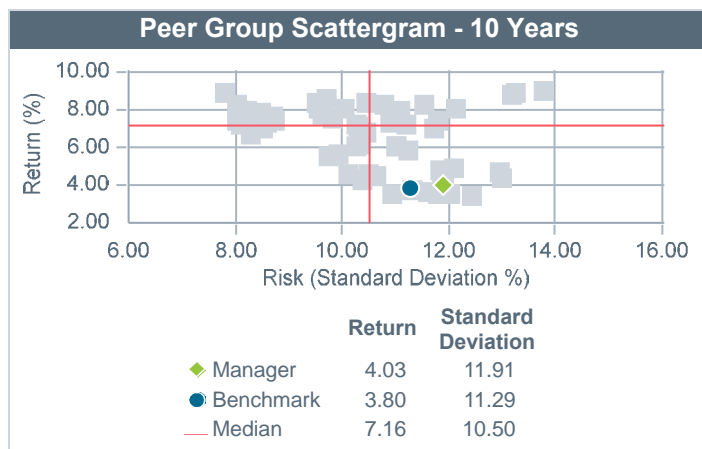
Manager: Stone Harbor

As of September 30, 2017

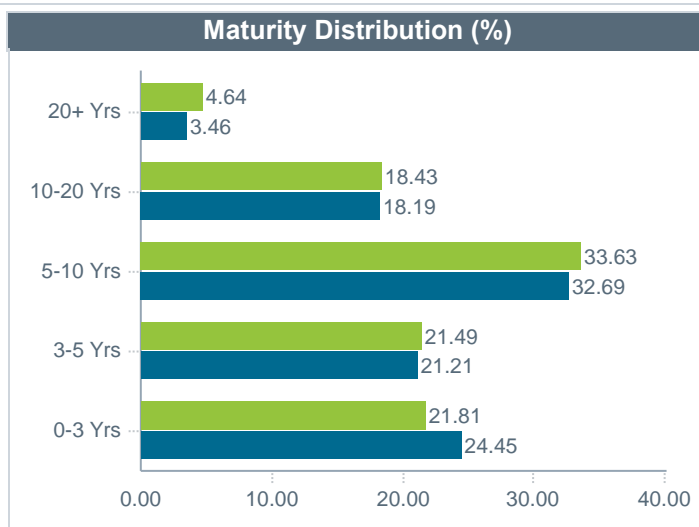
Benchmark: JPM GBI-EM Gbl Dvf'd Index (USD) (TR) (Unhedged)

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	3.88	7.80	-0.13	-1.88	0.33	4.03	9.94	-14.61	-7.63	-11.48	15.60
Benchmark	3.55	7.32	0.26	-0.91	0.68	3.80	9.94	-14.92	-5.72	-8.98	16.76
Difference	0.33	0.48	-0.39	-0.97	-0.35	0.23	0.00	0.31	-1.91	-2.50	-1.16
Peer Group Median	3.33	7.82	5.11	3.54	5.68	7.16	11.09	-2.90	1.39	-5.94	18.91
Rank	18	51	100	100	99	85	69	82	98	99	87
Population	135	134	128	113	84	71	157	168	169	155	146



Portfolio Characteristics (%)		
	Portfolio	Benchmark
Effective Duration	4.89	5.12
Spread Duration	4.76	N/A
Avg. Maturity	7.33	7.33
Avg. Quality	Baa2	Baa3
Yield To Maturity (%)	6.75	5.93
Coupon Rate (%)	6.49	6.65
Current Yield (%)	6.42	6.44
Holdings Count	178	217

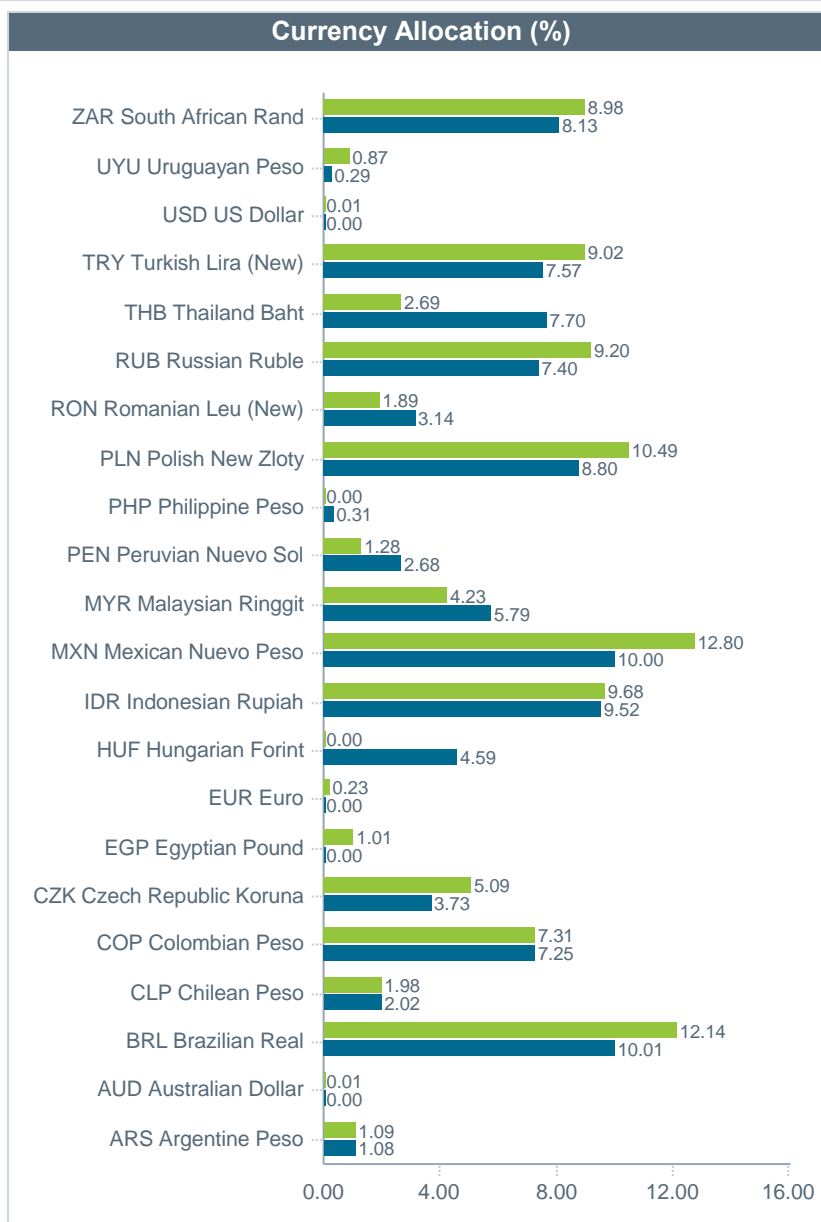
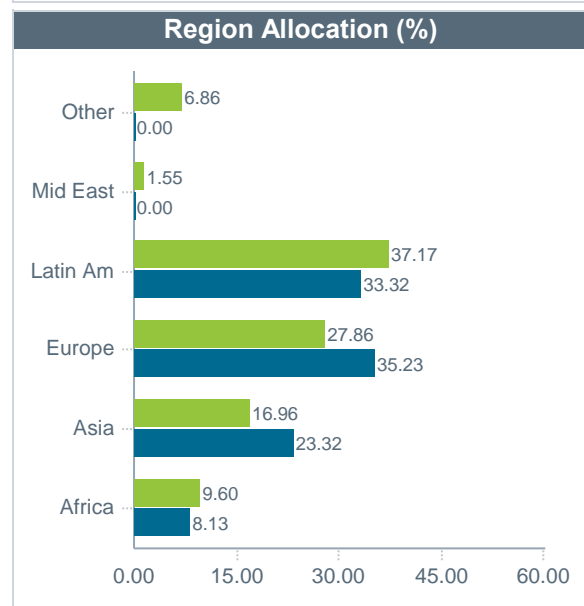
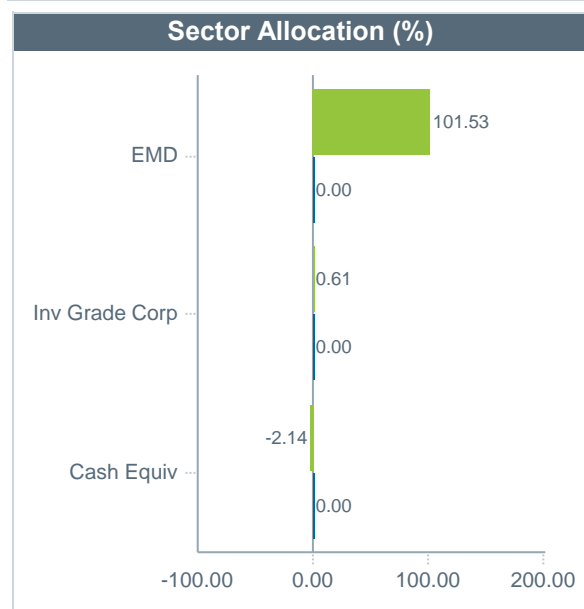
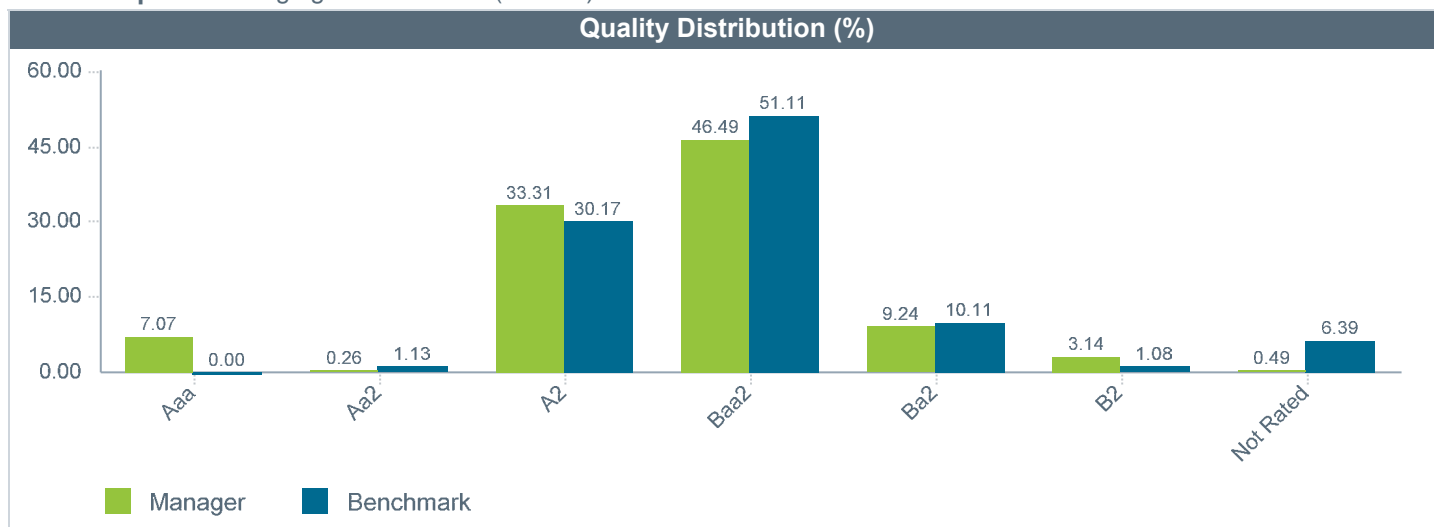


Manager: Stone Harbor

As of September 30, 2017

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. Negative sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps. Region allocation to "Other" consists of USD and cash.

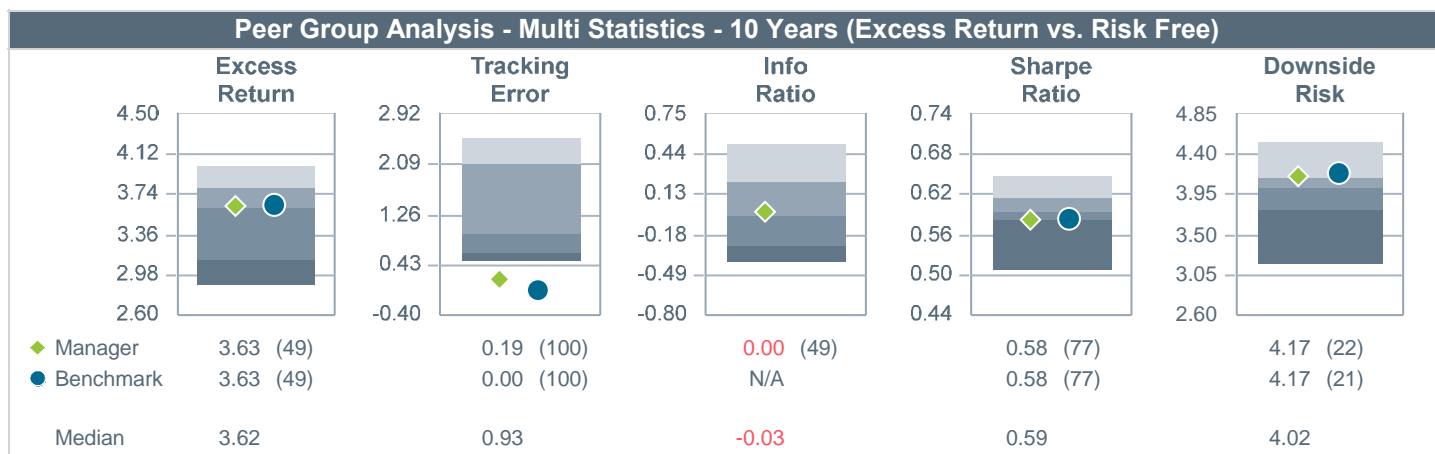
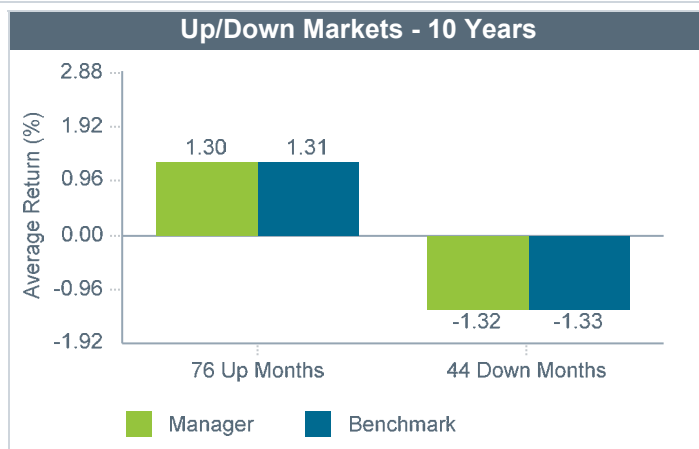
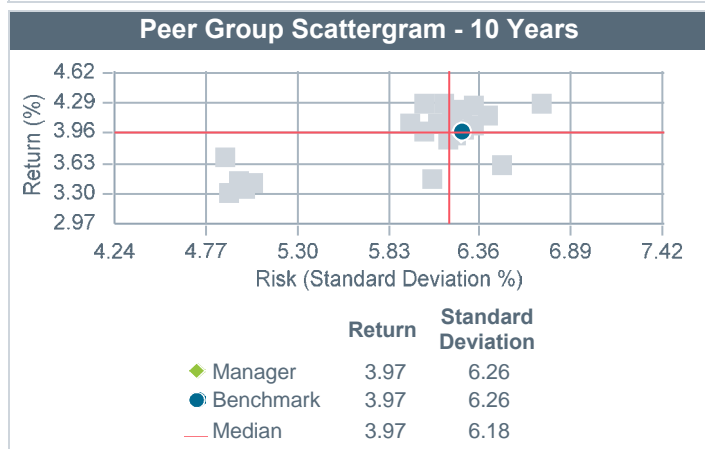
Manager: State Street TIPS

As of September 30, 2017

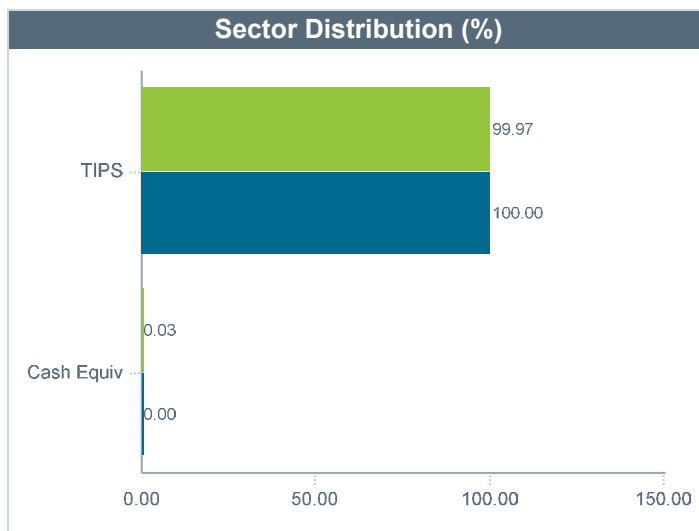
Benchmark: Bloomberg US Trsy: US TIPS Index (Series B)

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	0.96	-0.87	1.69	0.03	2.74	3.97	5.04	-1.75	4.47	-9.26	7.26
Benchmark	0.90	-0.83	1.71	0.04	2.74	3.97	4.85	-1.72	4.43	-9.26	7.26
Difference	0.06	-0.04	-0.02	-0.01	0.00	0.00	0.19	-0.03	0.04	0.00	0.00
Peer Group Median	0.89	-0.52	1.63	0.13	2.63	3.97	4.65	-1.41	3.57	-8.41	6.96
Rank	22	87	37	79	32	50	23	89	7	93	37
Population	32	32	31	30	29	29	37	37	42	45	43



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.41	8.29
Spread Duration	N/A	N/A
Avg. Maturity	9.03	8.88
Avg. Quality	Aaa	Aaa
Yield To Maturity (%)	2.42	N/A
Coupon Rate (%)	0.98	N/A
Current Yield (%)	0.73	N/A
Holdings Count	39	38



Performance shown is gross of fees. Performance prior to client inception consists of the Bloomberg US Trsy: US TIPS Index (Series B). Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Manager: Internally Managed Fixed Income Comp
Benchmark: Bloomberg US Gov't: Int. Term Bond Index*
Peer Group: IM U.S. Government Bonds (SA+CF)

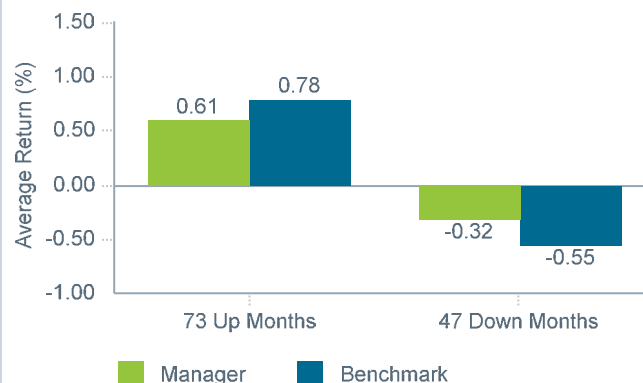
As of September 30, 2017

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2016	2015	2014	2013	2012
Manager	0.38	0.85	1.94	1.47	1.88	2.92	0.95	1.83	5.30	-3.11	2.66
Benchmark	0.34	-0.66	1.58	1.01	1.59	3.09	1.05	1.18	2.52	-1.25	1.73
Difference	0.04	1.51	0.36	0.46	0.29	-0.17	-0.10	0.65	2.78	-1.86	0.93
Peer Group Median	0.40	-0.60	1.94	1.29	1.79	3.29	1.37	0.72	2.89	-1.26	2.09
Rank	56	3	51	42	49	68	84	7	35	67	44
Population	46	44	44	42	42	36	46	46	47	47	50

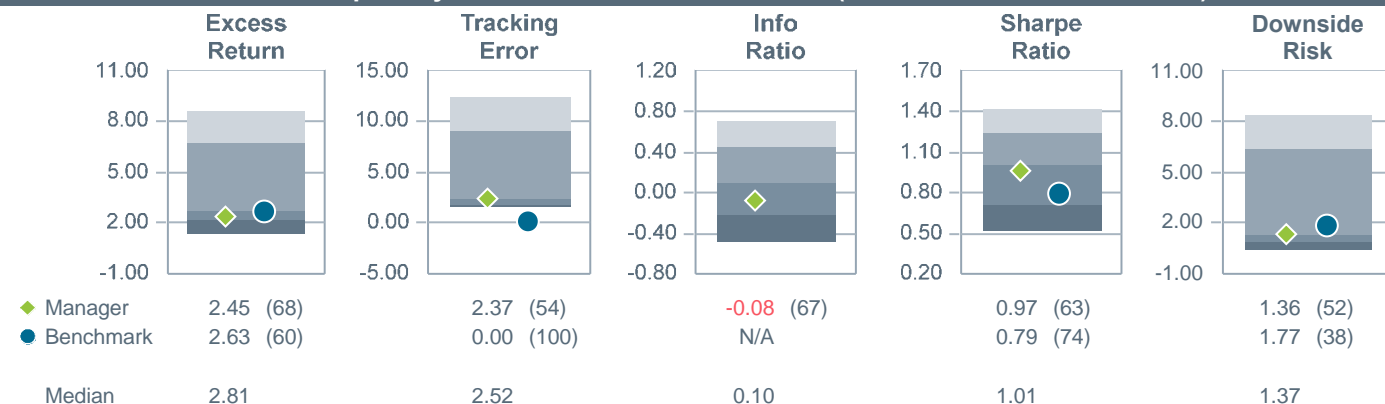
Peer Group Scattergram - 10 Years



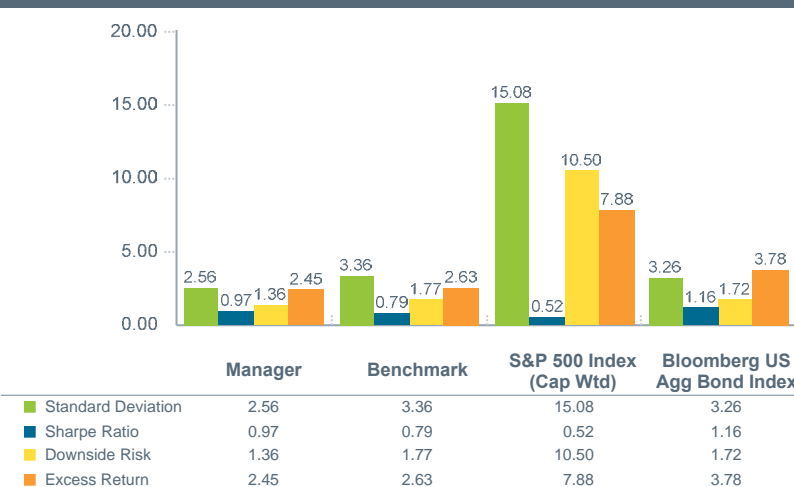
Up/Down Markets - 10 Years



Peer Group Analysis - Multi Statistics - 10 Years (Excess Return vs. Risk Free)



Historical Statistics - 10 Years



Actual Correlation - 10 Years

	Actual Correl.
Bloomberg US Gov't: Int. Term Bond Index*	0.71
S&P 500 Index (Cap Wtd)	-0.12
Russell 2000 Index	-0.21
MSCI EAFE Index (USD) (Net)	-0.07
MSCI Emg Mkts Index (USD) (Net)	-0.03
Bloomberg US Agg Bond Index	0.75
Bloomberg US Trsy: US TIPS Index	0.57
NCREIF ODCE Index (AWA) (Gross)	-0.21
Wilshire US REIT Index	0.03
HFN FOF Multi-Strat Index (Net)	-0.12
Bloomberg Cmdty Index (TR)	-0.07
BofA ML 3 Mo US T-Bill Index	0.20
Cons Price Index (Unadjusted)	-0.13

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

*Consists of the Bloomberg US Gov't: Int. Term Bond Index; prior to December 2009 the index consisted of the Bloomberg US Gov't/Credit Bond Index.

State of Wyoming
State Loan and Investment Board
Investment Policy Objective Review

September 30, 2017

Investment Policy Guidelines	Meeting Objective			Explanation
	Yes	No	N/A	
1. Total Fund				
Exceed the rate of inflation (C.P.I.) over a market cycle of 5-years.	✓			Wyoming returned 4.8% vs. 1.3% 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 4.8% vs. 4.6% for the Actual Allocation 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 6.3% vs. 6.1% for the Actual Allocation 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 6.4% vs. 6.2% for the Actual Allocation 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 6.1% vs. 5.9% for the Actual Allocation 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 6.5% vs. 6.3% for the Actual Allocation 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 5.6% vs. 5.4% for the Actual Allocation 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 5.5% vs. 5.4% for the Actual Allocation 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 4.4% vs. 4.3% for the Actual Allocation Index
h) Tobacco Settlement Trust Fund				
At least 5% to 10% of the fund balance should be invested in securities with maturities of less than one year.	✓			
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: Tobacco Settlement Trust Fund return was 2.3% vs. 2.2% for the Actual Allocation Index
i) State Agency Pool				
At least 10% to 15% of the fund balance should be invested in securities with maturities of less than one year.	✓			
No public and/or private equities are permitted.	✓			
Exceed a weighted index of the Fund's asset allocation and component benchmarks over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: State Agency Pool return was 1.9% vs. 1.9% 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 the greater of five percent (5%), or the benchmark weighting plus two percent (2%), of the total stock portfolio of a manager may be invested in any one security.	✓			Largest Holding: Apple Inc = 2.67%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (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.			N/A	Inception date: 01/2015
b) Epoch – All Cap				
A maximum of the greater of five percent (5%), or the benchmark weighting plus two percent (2%), of the total stock portfolio of a manager may be invested in any one security.	✓			Largest Holding: Apple Inc = 5.60%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (20) securities shall be held.	✓			
Outperform the Russell 3000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 11/2014
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: 11/2014

	Yes	No	N/A	Explanation
c) Lazard – All Cap				
A maximum of 7.5% of the total stock portfolio may be invested in any one security.	✓			Largest Holding: Coca-Cola Co. = 8.33%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (20) securities shall be held.	✓			
Outperform the Russell 3000 Index, net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 11/2014
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: 11/2014
d) RBC – Small Cap				
A maximum of the greater of five percent (5%), or the benchmark weighting plus two percent (2%), of the total stock portfolio of a manager may be invested in any one security.	✓			Largest Holding: Patrick Industries Inc = 4.99%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (20) securities shall be held.	✓			
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: 11/2014
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: 11/2014

	Yes	No	N/A	Explanation
4. Global Equity Portfolios				
a) Arrowstreet – Global Equity				
A maximum of the greater of five percent (5%), or the benchmark weighting plus two percent (2%), of the total stock portfolio of a manager may be invested in any one security.	✓			Largest Holding: Alphabet Inc = 2.92%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (20) securities shall be held.	✓			
Outperform the MSCI ACW Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception date: 03/2015
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: 03/2015

	Yes	No	N/A	Explanation
5. International Equity Portfolios				
a) Internal International Equity Portfolio – Int’l – Passive				
A maximum of the greater of five percent (5%), or the benchmark weighting plus two percent (2%), of the total stock portfolio of a manager may be invested in any one security.	✓			Largest Holding: Nestle SA = 1.23%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (20) securities shall be held.	✓			
Meet performance of the FTSE All World Ex US Index (Net), net of fees, over a full market cycle, approximated by the most recent five-year period.			N/A	Inception Date: 02/2016
b) Northern Trust – Int’l – Passive				
A maximum of the greater of five percent (5%), or the benchmark weighting plus two percent (2%), of the total stock portfolio of a manager may be invested in any one security.	✓			Largest Holding: Nestle SA = 1.26%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (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 7.1% vs. 7.0% for the MSCI ACW Ex US Index (Net)

	Yes	No	N/A	Explanation
c) Fisher – Int'l Active				
A maximum of the greater of five percent (5%), or the benchmark weighting plus two percent (2%), of the total stock portfolio of a manager may be invested in any one security.	✓			Largest Holding: Tencent Holdings Ltd = 4.11%
A maximum of one percent (1%) of the outstanding float of shares of one company may be held in companies with market capitalizations of \$5 Billion or greater at the time of purchase. A maximum of five percent (5%) of the outstanding float of shares of one company may be held in companies with market capitalizations of less than \$5 Billion at the time of purchase.	✓			
The maximum allowable in any sector, as defined as Global Industry Classification System Level 1, is two and one-half (2.5) times the respective benchmark weighting, unless the contract with the investment manager specifically provides otherwise.	✓			
A minimum number of twenty (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.	✓			5-year: Fisher net of fees return was 8.8% vs. 7.0% for the MSCI ACW Ex US Index (Net)
Performance should rank in the top 40th percentile of peer manager universe as measured by the State's Consultant, gross of fees, over a full market cycle, approximated by the most recent five-year period.		✗		5-year: Fisher ranked in the 55th percentile for International Equity

*Fisher Index consists of MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter.

	Yes	No	N/A	Explanation
6. 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 11.2% vs. 10.6% for the NCREIF ODCE Index (Net) (AWA)
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 8.5% vs. 10.6% for the NCREIF ODCE Index (Net) (AWA)
Absolute Return				
c) PAAMCO				
Outperform the 90-Day T-Bills by 500 basis points, net of all fees (including underlying fund manager fees), over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: PAAMCO net of fees return was 4.2% vs. 0.2% for the BofA ML 3 Mo US T-Bill Index
Outperform the HFRI FOF Comp Index, net of all fees (including underlying fund manager fees), over a full market cycle, approximated by the most recent 5-year period.	✓			5-year: PAAMCO net of fees return was 4.2% vs. 3.8% for the HFRI FOF Comp Index

	Yes	No	N/A	Explanation
7. Convertible Bond Portfolios				
a) Allianz Global Investors				
Outperform the BofA ML All Quality Convertible Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.		✗		5-year: Allianz Global Investors net of fees return was 9.8% vs. 11.0% for the BofA ML All Quality Convertible Bond Index

	Yes	No	N/A	Explanation
8. Fixed Income Portfolios				
a) C.S. McKee – Core				
Obligations not issued or guaranteed by the US government, US agencies, or US government-sponsored corporations and agencies are subject to a five percent (5%) per issuer limit excluding investments in commingled vehicles.	✓			
Non-US dollar denominated securities are permitted, but shall comprise no more than ten percent (10%) of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to ten percent (10%) of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than ten percent (10%) of the portfolio market value.	✓			
Commercial paper of all issuers shall not exceed \$500 million.	✓			
Duration must fall in the range of plus or minus twenty percent (20%) of the Bloomberg Barclays US Aggregate Bond Index.	✓			
Minimum Issue Credit Rating at the time of purchase will be: A1 or equivalent for commercial paper BBB- for Corporate Bonds BBB- for Mortgage-Backed Securities BBB- for Commercial Mortgage-Backed Securities BBB- for Asset-Backed Securities BBB- for Non-US Dollar Denominated Securities BBB- for Dollar Denominated Emerging Market Securities	✓			
Average portfolio credit quality must be A- or better.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than ten percent (10%) of the portfolio market value.	✓			
A minimum number of 25 securities shall be held.	✓			
Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than five percent (5%) of the portfolio market value.	✓			
Private placements, including 144A securities are not permitted.	✓			
Outperform the Bloomberg US Aggregate Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 01/2013
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: 01/2013

	Yes	No	N/A	Explanation
b) JP Morgan – Core				
Obligations not issued or guaranteed by the US government, US agencies, or US government-sponsored corporations and agencies are subject to a five percent (5%) per issuer limit excluding investments in commingled vehicles.	✓			
Non-US dollar denominated securities are permitted, but shall comprise no more than ten percent (10%) of the portfolio market value.			N/A	
Private mortgage-backed and asset-backed securities are limited to ten percent (10%) of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than ten percent (10%) of the portfolio market value.	✓			
Commercial paper of all issuers shall not exceed \$500 million.			N/A	
Duration must fall in the range of plus or minus twenty percent (20%) of the Bloomberg US Aggregate Bond Index.	✓			
Minimum Issue Credit Rating at the time of purchase will be: A1 or equivalent for commercial paper BBB- for Corporate Bonds BBB- for Mortgage-Backed Securities BBB- for Commercial Mortgage-Backed Securities BBB- for Asset-Backed Securities BBB- for Non-US Dollar Denominated Securities BBB- for Dollar Denominated Emerging Market Securities	✓			
Average portfolio credit quality must be A- or better.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than ten percent (10%) of the portfolio market value.			N/A	
A minimum number of 25 securities shall be held.	✓			
Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than five percent (5%) of the portfolio market value.	✓			
Private placements, including 144A securities are not permitted.	✓			
Outperform the Bloomberg US Aggregate Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 01/2013
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: 01/2013

	Yes	No	N/A	Explanation
c) PIMCO – Core				
Obligations not issued or guaranteed by the US government, US agencies, or US government-sponsored corporations and agencies are subject to a five percent (5%) per issuer limit excluding investments in commingled vehicles.	✓			
Non-US dollar denominated securities are permitted, but shall comprise no more than ten percent (10%) of the portfolio market value.	✓			
Private mortgage-backed and asset-backed securities are limited to ten percent (10%) of the portfolio market value.	✓			
Commercial mortgage-backed securities are permitted but shall comprise no more than ten percent (10%) of the portfolio market value.	✓			
Commercial paper of all issuers shall not exceed \$500 million.	✓			
Duration must fall in the range of plus or minus twenty percent (20%) of the Bloomberg US Aggregate Bond Index.	✓			
Minimum Issue Credit Rating at the time of purchase will be: A1 or equivalent for commercial paper BBB- for Corporate Bonds BBB- for Mortgage-Backed Securities BBB- for Commercial Mortgage-Backed Securities BBB- for Asset-Backed Securities BBB- for Non-US Dollar Denominated Securities BBB- for Dollar Denominated Emerging Market Securities	✓			
Average portfolio credit quality must be A- or better.	✓			
Dollar denominated emerging market securities are permitted, but shall comprise no more than ten percent (10%) of the portfolio market value.	✓			
A minimum number of 25 securities shall be held.	✓			
Investments in mortgage interest only and principal only securities or their derivations are permitted, but shall comprise no more than five percent (5%) of the portfolio market value.	✓			
Private placements, including 144A securities are not permitted.	✓			
Outperform the Bloomberg US Aggregate Bond Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 01/2013
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: 01/2013

	Yes	No	N/A	Explanation
d) Neuberger Berman – Credit				
Duration must not exceed plus two (2) years of the custom index.	✓			
Minimum Issue Credit Rating for commercial paper will be A1.	✓			
Average portfolio credit quality must be B or better.	✓			
Obligations of specific issuers are subject to five percent (5%) per issuer limit, excluding investments in commingled vehicles.	✓			
Standalone purchases of private placements, including 144A securities, are not allowed.	✓			
Outperform the State's custom benchmark as measured by twenty percent (20%) Bloomberg US Credit Index, twenty percent (20%) BofA Merrill Lynch US High Yield Master II Constrained Index and sixty percent (60%) 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: 04/2013
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: 04/2013
Investment Grade Credit Sleeve:				
Minimum Issue Credit Rating at the time of purchase will be: BBB- for individual securities.	✓			
Minimum of ten percent (10%) of the total portfolio must be invested in investment grade rated securities and a maximum of sixty percent (60%) of the total portfolio can be invested in investment grade rated securities.	✓			
High Yield Sleeve:				
Minimum Issue Credit Rating at the time of purchase will be: CCC- for individual securities. Securities that are not rated shall be, in the judgement of the investment manager, of credit quality equal or superior to the standards described above.	✓			
Maximum of forty percent (40%) of the total portfolio can be invested in high yield bonds.	✓			
Bank Loan Sleeve:				
Minimum Issue Credit Rating at the time of purchase will be: CCC for individual securities. Securities that are not rated shall be, in the judgement of the investment manager, of credit quality equal or superior to the standards described above.	✓			
Minimum of forty percent (40%) of the total portfolio must be invested in bank loans and a maximum of eighty percent (80%) of the total portfolio can be invested in bank loans.	✓			

	Yes	No	N/A	Explanation
e) Seix – Credit				
Duration must not exceed plus two (2) years of the custom index.	✓			
Minimum Issue Credit Rating for commercial paper will be A1.	✓			
Average portfolio credit quality must be B or better.	✓			
Obligations of specific issuers are subject to five percent (5%) per issuer limit, excluding investments in commingled vehicles.	✓			
Standalone purchases of private placements, including 144A securities, are not allowed.	✓			
Outperform the State's custom benchmark as measured by twenty percent (20%) Bloomberg US Credit Index, twenty percent (20%) BofA Merrill Lynch US High Yield Master II Constrained Index and sixty percent (60%) 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: 05/2013
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: 05/2013
Investment Grade Credit Sleeve:				
Minimum Issue Credit Rating at the time of purchase will be: BBB- for individual securities.	✓			
Minimum of ten percent (10%) of the total portfolio must be invested in investment grade rated securities and a maximum of sixty percent (60%) of the total portfolio can be invested in investment grade rated securities.	✓			
High Yield Sleeve:				
Minimum Issue Credit Rating at the time of purchase will be: CCC- for individual securities. Securities that are not rated shall be, in the judgement of the investment manager, of credit quality equal or superior to the standards described above.	✓			
Maximum of forty percent (40%) of the total portfolio can be invested in high yield bonds.	✓			
Bank Loan Sleeve:				
Minimum Issue Credit Rating at the time of purchase will be: CCC for individual securities. Securities that are not rated shall be, in the judgement of the investment manager, of credit quality equal or superior to the standards described above.	✓			
Minimum of forty percent (40%) of the total portfolio must be invested in bank loans and a maximum of eighty percent (80%) of the total portfolio can be invested in bank loans.	✓			

	Yes	No	N/A	Explanation
f) 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.			N/A	Inception date: 07/2014
g) Investec – Emerging Market Debt (Local Currency)				
Duration must fall in the range of plus or minus twenty percent (20%) of the index.	✓			
Minimum Issue Credit Rating at the time of purchase will be: A1 for commercial paper B- for individual securities Where a security is not rated at the issue level, the issuer rating will be relied upon.	✓			
Average portfolio credit quality must be BB+ or better.	✓			
Obligations of individual sovereign/quasi-sovereign issuer are subject to a twenty-five percent (25%) per issuer limit.	✓			
Private placements, including 144A securities are not allowed.	✓			There are three 144A securities held by this portfolio. Retention of these securities in the portfolio is permitted pursuant to Section 7.2 of the Investment Policy.
The investment manager, as part of managing the account, can take net investment positions of up to twenty percent (20%) of the portfolio in currency and currency forwards.	✓			
Outperform the JP Morgan GBI-EM Global Diversified Unhedged Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 04/2013
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: 04/2013

	Yes	No	N/A	Explanation
h) Stone Harbor – Emerging Market Debt (Local Currency)				
Duration must fall in the range of plus or minus twenty percent (20%) of the index.	✓			
Minimum Issue Credit Rating at the time of purchase will be: A1 for commercial paper B- for individual securities Where a security is not rated at the issue level, the issuer rating will be relied upon.	✓			The portfolio currently holds securities which are rated below B-. Retention of these securities in the portfolio is permitted pursuant to Section 7.2 of the Investment Policy.
Average portfolio credit quality must be BB+ or better.	✓			
Obligations of individual sovereign/quasi-sovereign issuer are subject to a twenty-five percent (25%) per issuer limit.	✓			
Private placements, including 144A securities are not allowed.	✓			The portfolio holds private placement and 144A securities. Retention of these securities in the portfolio is permitted pursuant to Section 7.2 of the Investment Policy.
The investment manager, as part of managing the account, can take net investment positions of up to twenty percent (20%) of the portfolio in currency and currency forwards.	✓			
Outperform the JP Morgan GBI-EM Global Diversified Unhedged Index, net of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 04/2013
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: 04/2013
i) State Street – US TIPS – Passive				
Meet the performance of the Bloomberg US TIPS Index with minimal tracking error, gross of fees, over a full market cycle, approximated by the most recent 5-year period.			N/A	Inception date: 01/2013

	Yes	No	N/A	Explanation
8. Cash and Cash Equivalents Portfolios				
JP Morgan Cash Composite*				
a) JP Morgan Treasury Cash				
Portfolio's weighted average maturity is not to exceed 90 days.	✓			
Portfolio's maximum average cash flow weighted duration of the portfolio must not exceed 90 days.	✓			
The market value of the portfolio must remain within plus or minus one-half percent (0.5%) of one percent (1%) of amortized cost.	✓			
A maximum of 5% of total assets shall be placed in the securities of one issuer except for government securities.	✓			
Investment in any single issuer must not exceed 5% of the outstanding issues of that 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 Treasury Cash net of fees return was 0.2% vs. 0.2% for the BofA ML 3 Mo US T-Bill Index
b) JP Morgan Treasury Extended Cash				
Portfolio's average cash flow weighted duration is not to exceed 3 years.	✓			
Average cash flow weighted duration is not to exceed 3 years.	✓			
Individual securities must not exceed cash flow weighted duration of greater than 5-years.	✓			
A maximum of 5% of total assets shall be placed in the 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 Treasury Extended Cash net of fees return was 0.8% vs. 0.7% for the Blended Index
The extended portfolio must not exceed 35% of the total JP Morgan managed portfolio.	✓			

*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*				
c) JP Morgan Wyo-Star Cash				
Portfolio's weighted average maturity is not to exceed 90 days.	✓			
Portfolio's maximum average cash flow weighted duration of the portfolio must not exceed 90 days.	✓			
The market value of the portfolio must remain within plus or minus one-half percent (0.5%) of one percent (1%) of amortized cost.	✓			
A maximum of 5% of total assets shall be placed in the 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 Wyo-Star Cash net of fees return was 0.1% vs. 0.2% for the BofA ML 3 Mo US T-Bill Index
d) JP Morgan Wyo-Star Extended Cash				
Portfolio's average cash flow weighted duration is not to exceed 3 years.	✓			
Average cash flow weighted duration is not to exceed 3 years.	✓			
Individual securities must not exceed cash flow weighted duration of greater than 5-years.	✓			
A maximum of 5% of total assets shall be placed in the 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 0.6% vs. 0.7% for the Blended Index
The extended portfolio must not exceed 35% of the total JP Morgan managed portfolio.	✓			

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

Custom Benchmark Comments

The Wyoming State Actual Allocation Index is calculated using beginning month asset class weights applied to the appropriate asset class benchmark return, using the US Equity Custom Index for US equities, MSCI ACW Index (Net) for global equities, MSCI ACW Ex US Index (Net) for international equities, Bloomberg US Aggregate Bond Index for fixed income, BofA Merrill Lynch All Convertibles Index (All Qualities) for convertible bonds, NCREIF Open-End Diversified Core Equity Index (Gross) (AWA) for core real estate, NCREIF Property Index for value-added real estate, the State's actual private equity investment returns for private equity, HFRI FOF Comp Index for absolute return, and BofA Merrill Lynch 90 day US T-Bill rate for cash equivalents.

Pooled Fund actual allocation indices are calculated using beginning month asset class weights applied to the appropriate asset class benchmark return, using the US Equity Custom Index for US equities, MSCI ACW Index (Net) for global equities, MSCI ACW Ex US Index (Net) for international equities, Bloomberg US Aggregate Bond Index for fixed income, BofA Merrill Lynch All Convertibles Index (All Qualities) for convertible bonds, NCREIF Open-End Diversified Core Equity Index for core real estate, NCREIF Property Index for value-added real estate, the State's actual private equity investment returns for private equity, HFRI FOF Comp Index for absolute return, and the State Agency Pool Custom Index for the State Agency Pool allocation.

The Total Equity Custom Index consists of the MSCI World Index (USD) (Net) through July 2010 and the MSCI All Country World Index (USD) (Net) thereafter.

The US Equity Custom Index consists of the S&P 500 Index (Cap Wtd) through September 2014 and the Russell 3000 Index thereafter.

The State Street All Cap Custom Index consists of 69% Russell 3000 Index, 24% FTSE RAFI US 1000 Index and 7% MSCI USA Minimum Volatility Index (Net).

The International Equity Custom Index and the Fisher Custom Benchmark both consist of MSCI EAFE Index (Gross) through July 2010 and the MSCI ACW Ex US Index (Net) thereafter.

The Credit Custom Index consists of 20% Bloomberg US Credit Index, 20% BofA Merrill Lynch US High Yield Master II Constrained Index, and 60% S&P/LSTA Leveraged Loan Index.

The Internal Fixed Income Portfolio Custom Index consists of the Bloomberg US Gov't: Int. Term Bond Index; prior to December 2009 the index consists of the Bloomberg US Gov't/Credit Bond Index.

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

The JP Morgan 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 JP Morgan Cash is the BofA ML 3 ML US T-Bill Index and for JP Morgan Extd is the JP Morgan Blended Index.

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 BofA ML 3 ML 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 Global Equity, 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 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.

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

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

Miscellaneous Comments

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

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

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

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

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

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

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

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

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

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 Global Equity (SA+CF): The **Global Equity** universe includes funds where the investment strategy focuses on investments in securities in the U.S. and international markets, and includes a blend of both value and growth securities across a variety of market cap ranges.

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 U.S. Fixed Income (SA+CF): The **U.S. Fixed Income** universe includes all U.S. fixed income products.

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.

Glossary

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

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

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

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

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment 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	B	B2	
A	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			C	Ca	
			D	C	In default

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, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd 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.

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, names that make up the subsequent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category.

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.

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.

Glossary

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

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."

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, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative monthly returns. 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., BofA ML 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.

Glossary

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 returns compiled from consultant and custodial 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. Plan Sponsor Peer Groups are gross of fees.

Institutional Peer Groups (Separate Account and Commingled Fund) - RVK utilizes the Investment Metrics Separate Account and Commingled Fund Manager Peer Groups for peer comparison and rankings. The Separate Account and Commingled Fund Peer Group database includes performance and other quantitative data for over 1,000 investment management firms, 6,400 investment products, across 100 standard peer groups. Separate Account and Commingled Fund Peer Groups are gross of fees.

Mutual Fund (MF) Peer Groups - RVK utilizes the Lipper Mutual Fund Manager Peer Groups for peer comparison and rankings. The Lipper Manager Peer Group database includes performance and other quantitative data for over 700 investment management firms and 24,500 investment products, across more than 140 standard peer groups. Mutual Fund Peer Groups are net of fees.

For more information on Peer Groups, visit <https://www.invmetrics.com/style-peer-groups>.

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 $\geq 10\%$ of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

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

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

Portfolio Characteristics - 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 of a company's share price to its per-share earnings

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.

Return - Compounded rate of return for the period.

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

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.

Risk Free Benchmark - BofA ML 3 Mo US T-Bill Index unless specified otherwise.

Glossary

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

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Bank Loans	50
TIPS	95	Stable Value (Plan Sponsor Directed)	50
US Large Cap Equity	95	Absolute Return Strategies	35
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Non-US Large Cap Equity	90	<u>Not Liquid Investments</u>	
Global Tactical Asset Allocation	88	Core Real Estate	25
US Small Cap Equity	85	Core Plus Real Estate	15
REITS	85	Non-Core Real Estate	5
Non-US Small Cap Equity	85	Private Equity Funds of Funds	5
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., BofA ML 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.

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

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

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

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.

Glossary

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., BofA ML 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 portfolios 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.

PORTLAND

CHICAGO

NEW YORK

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