



# Investment Performance Analysis

North Dakota Board of University and School Lands

Period Ended: September 30, 2021



# Table Of Contents

1	Capital Markets Review	Page 3
2	Total Fund	Page 10
3	Composite Profiles	Page 20
4	Investment Manager Profiles	Page 34
5	Addendum & Glossary	Page 54

# Capital Markets Review

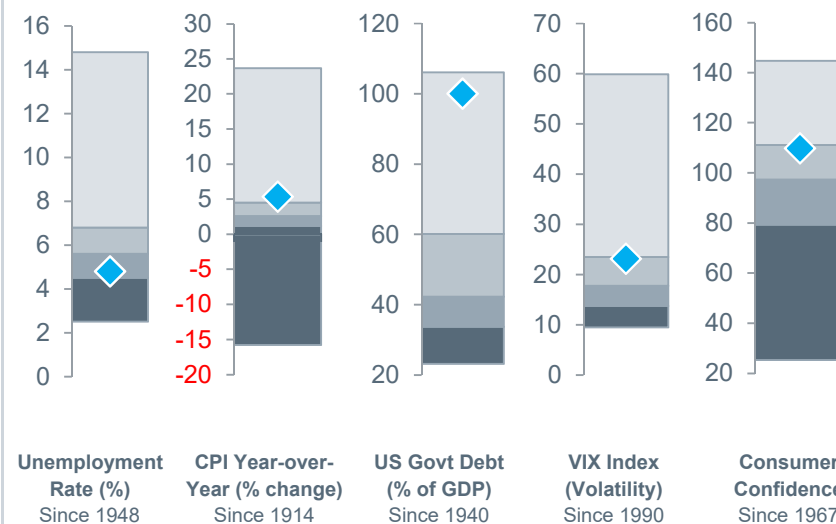




## Third Quarter Economic Environment

Persistent inflationary pressures, disrupted supply chains, stalled fiscal negotiations, and the continued spread of the delta variant, all contributed to a quarter of mixed results for risk assets. In addition, heightened concerns over an increasingly stringent regulatory regime in China, combined with the debt restructuring of its second-largest property developer, led to a down quarter for emerging markets with volatility spreading to other regions as well. US markets outperformed on average, though were roughly flat. Investor sentiment was aided by a strong corporate earnings environment amid continued support from the Federal Reserve, along with improvement in some economic fundamentals. Globally, an uneven economic recovery continued, evidenced by labor market conditions and inflation readings showing mixed indications of progress. The September US non-farm payrolls report indicated a weaker than anticipated 194,000 added jobs, although past months were revised higher. The unemployment rate dropped to 4.8%, compared to 5.9% at the start of the quarter, but this decrease was largely driven by a declining labor force participation rate. The core PCE price index, the Federal Reserve's preferred measure for inflation, ran at a 30 year high based on the reading in August. Wage growth similarly rose higher in September with average hourly pay increasing 4.6% year-over-year. Overall, global growth forecasts remained relatively consistent with recent quarters.

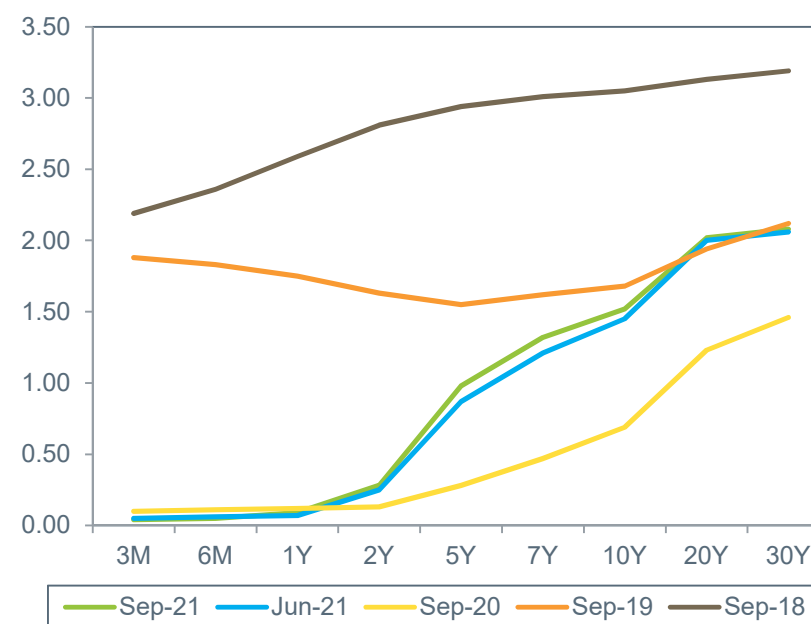
## Key Economic Indicators



Economic Indicators	Sep-21	Jun-21	Sep-20	Sep-18	20 Yr
Federal Funds Rate (%)	0.06 ▼	0.08	0.09	2.18	1.33
Breakeven Infl. - 5 Yr (%)	2.53 ▲	2.50	1.49	2.03	1.84
Breakeven Infl. - 10 Yr (%)	2.38 ▲	2.34	1.63	2.14	2.03
CPI YoY (Headline) (%)	5.4 =	5.4	1.4	2.3	2.1
Unemployment Rate (%)	4.8 ▼	5.9	7.8	3.7	6.1
Real GDP YoY (%)	4.9 ▼	12.2	-2.9	3.1	1.9
PMI - Manufacturing	61.1 ▲	60.6	55.7	59.5	53.3
USD Total Wtd Idx	114.99 ▲	112.85	117.26	113.81	103.15
WTI Crude Oil per Barrel (\$)	75.0 ▲	73.5	40.2	73.3	63.7
Gold Spot per Oz (\$)	1,757 ▼	1,770	1,886	1,191	1,067

Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	0.58	15.92	30.00	16.90	16.63
Russell 2000	-4.36	12.41	47.68	13.45	14.63
MSCI EAFE (Net)	-0.45	8.35	25.73	8.81	8.10
MSCI EAFE SC (Net)	0.90	10.02	29.02	10.38	10.73
MSCI Emg Mkts (Net)	-8.09	-1.25	18.20	9.23	6.09
Bloomberg US Agg Bond	0.05	-1.56	-0.90	2.94	3.01
ICE BofAML 3 Mo US T-Bill	0.02	0.04	0.07	1.16	0.63
NCREIF ODCE (Gross)	6.63	13.15	14.63	7.51	9.92
FTSE NAREIT Eq REIT (TR)	0.98	23.15	37.39	6.83	11.27
HFRI FOF Comp	0.74	5.73	14.30	5.80	4.46
Bloomberg Cmdty (TR)	6.59	29.13	42.29	4.54	-2.66

## Treasury Yield Curve (%)





## Third Quarter Review

## Broad Market

US equity markets cooled off in Q3, compared to recent quarters, as the S&P 500 finished relatively flat. The spread of the Delta variant throughout the country slowed consumer spending, although the overall recovery remained on course. Concerns over inflation, due to continued stimulus from the Fed and supply chain disruptions, continue to be a major theme in the US contributing to moderated investor sentiment.

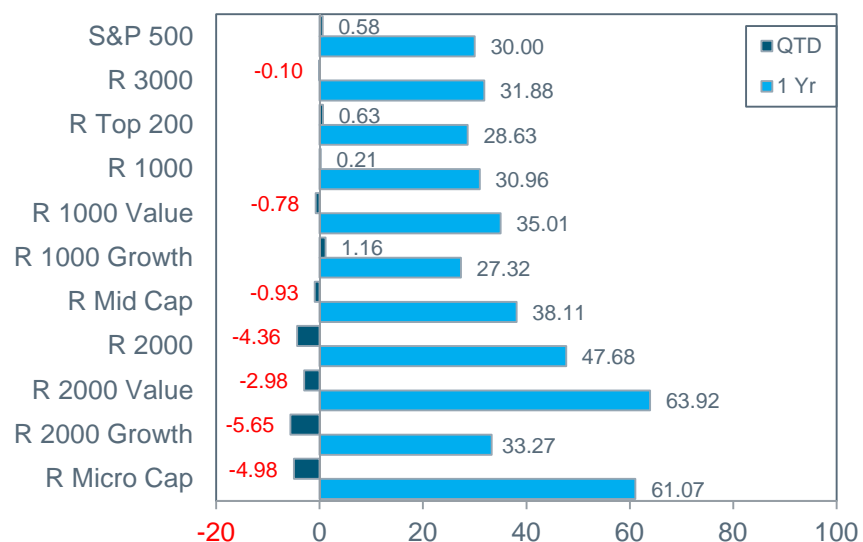
## Market Cap

Large-cap stocks significantly outperformed their smaller-cap counterparts. The Russell 2000 Index returned -4.4% compared to 0.6% for the S&P 500.

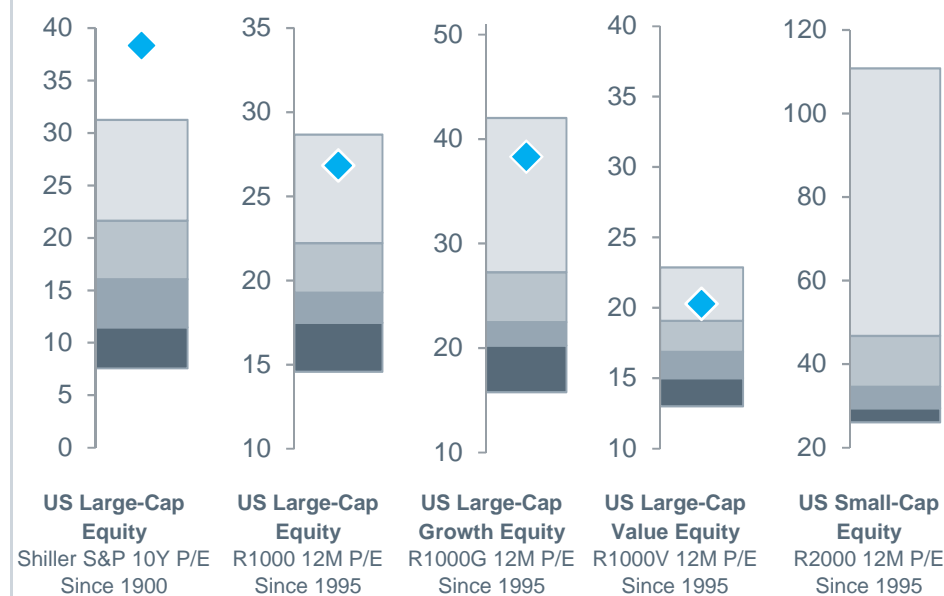
## Style and Sector

Large-cap growth turned in modestly positive returns in Q3 while small-cap and value stocks generally struggled. The Russell 1000 Growth Index returned 1.2% vs. -0.8% for the Russell 1000 Value Index. The Russell 2000 Value Index returned -3.0% vs. -5.7% for the Russell 2000 Growth Index.

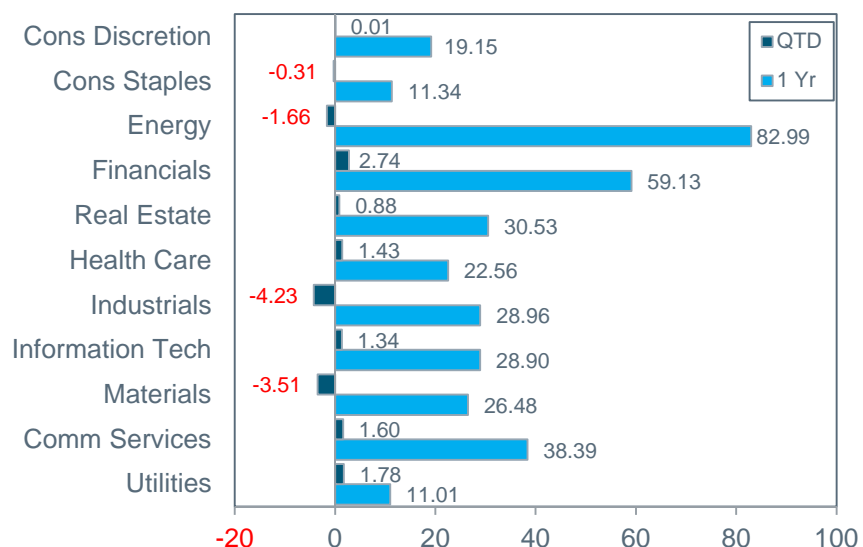
## Style and Capitalization Market Performance (%)



## Valuations



## S&amp;P 500 Index Sector Performance (%)



Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition.

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

Current R2000 P/E is unavailable due to negative earnings per share as of 9/30/2021.

## Third Quarter Review

## Developed Markets

In similar fashion to the US equity market, developed international market returns were muted. The MSCI EAFE Index was slightly negative for Q3 with growth stocks outperforming value, although value stocks are still ahead year-to-date. Small cap stocks outperformed their larger counterparts.

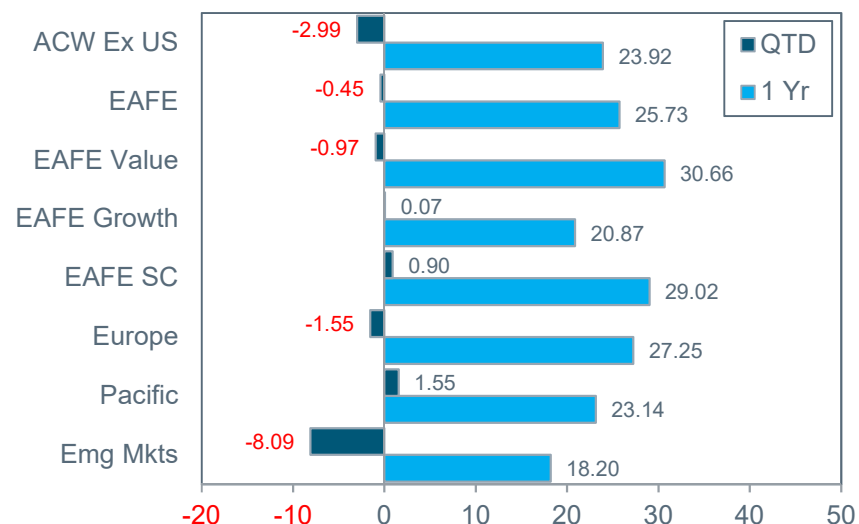
## Emerging Markets

Unlike developed markets, emerging markets experienced significant negative absolute returns in Q3 driven by market volatility in China. Subsequently, value stocks outperformed growth and small cap stocks outperformed large.

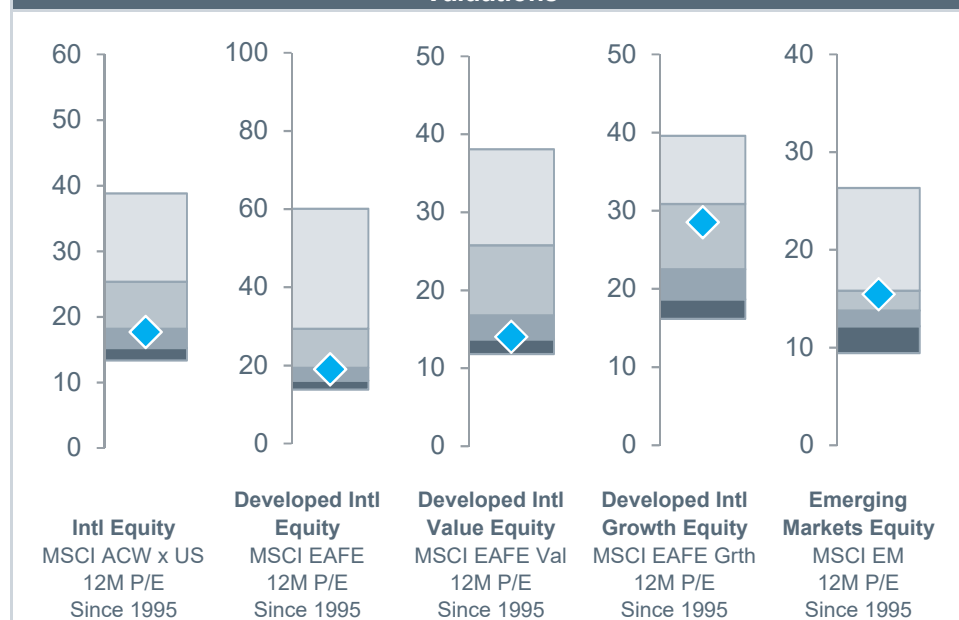
## Market Cap &amp; Style

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

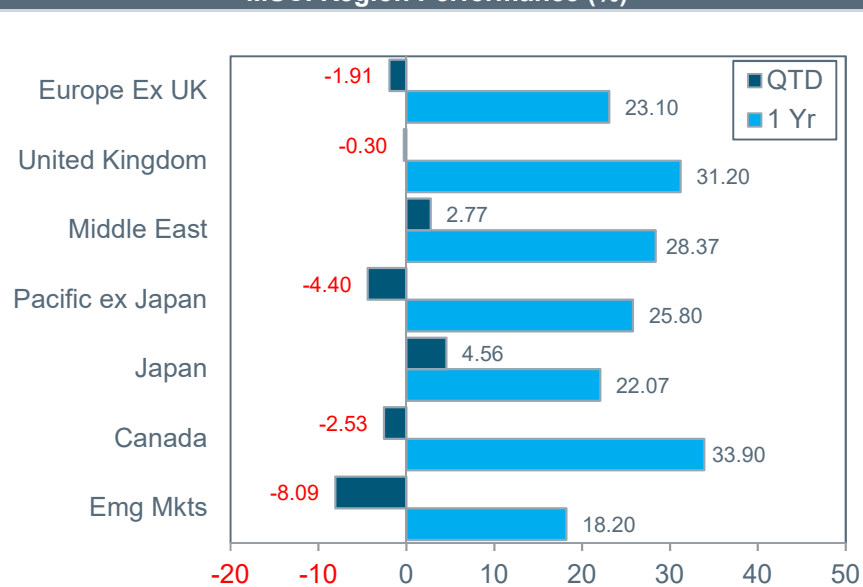
## MSCI Style and Capitalization Market Performance (%)



## 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 Bloomberg US Aggregate Index was flat, finishing with returns of 0.1% in Q3, while remaining down -1.6% year-to-date. Treasury yields rose in Q3 in light of inflation concerns sparked by supply chain constraints and sustained economic growth. Speculation over the timing of Federal Reserve tapering was also a contributing factor to the slight move in rates.

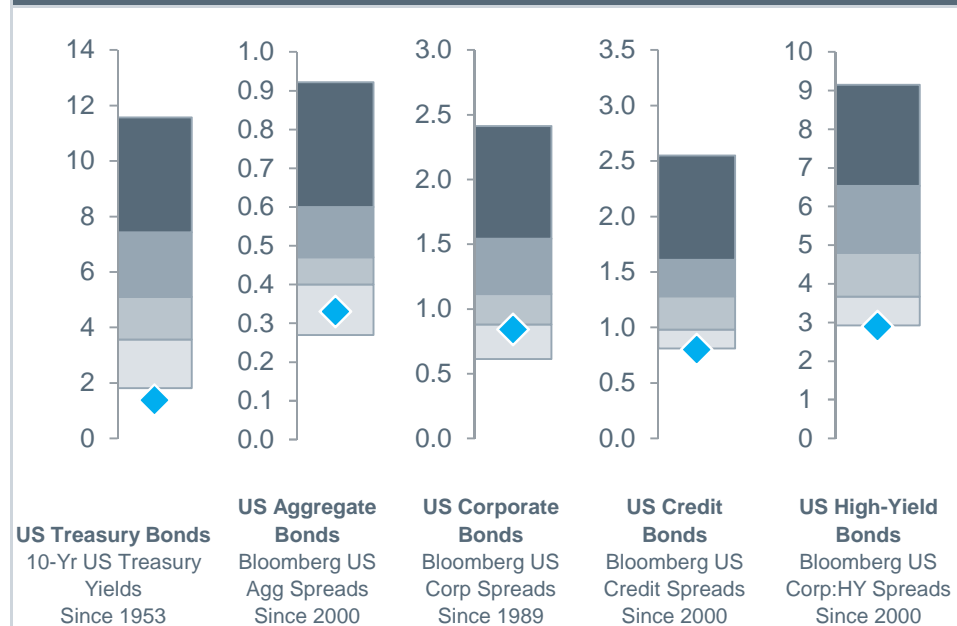
## Credit Market

Low-rated debt remained a source of outperformance in a market starved for yield. The Bloomberg US Credit Index was flat, returning 0.0% QTD with BBB-rated debt marginally outperforming higher-rated debt. In contrast, the Bloomberg US High Yield Index returned 0.9% in Q3 with the Credit Suisse Leveraged Loan Index returned 1.1%.

## Emerging Market Debt

Emerging markets corporate debt continued to outpace local currency and hard currency sovereign debt, with local currency being a laggard in part due to a strengthening US dollar.

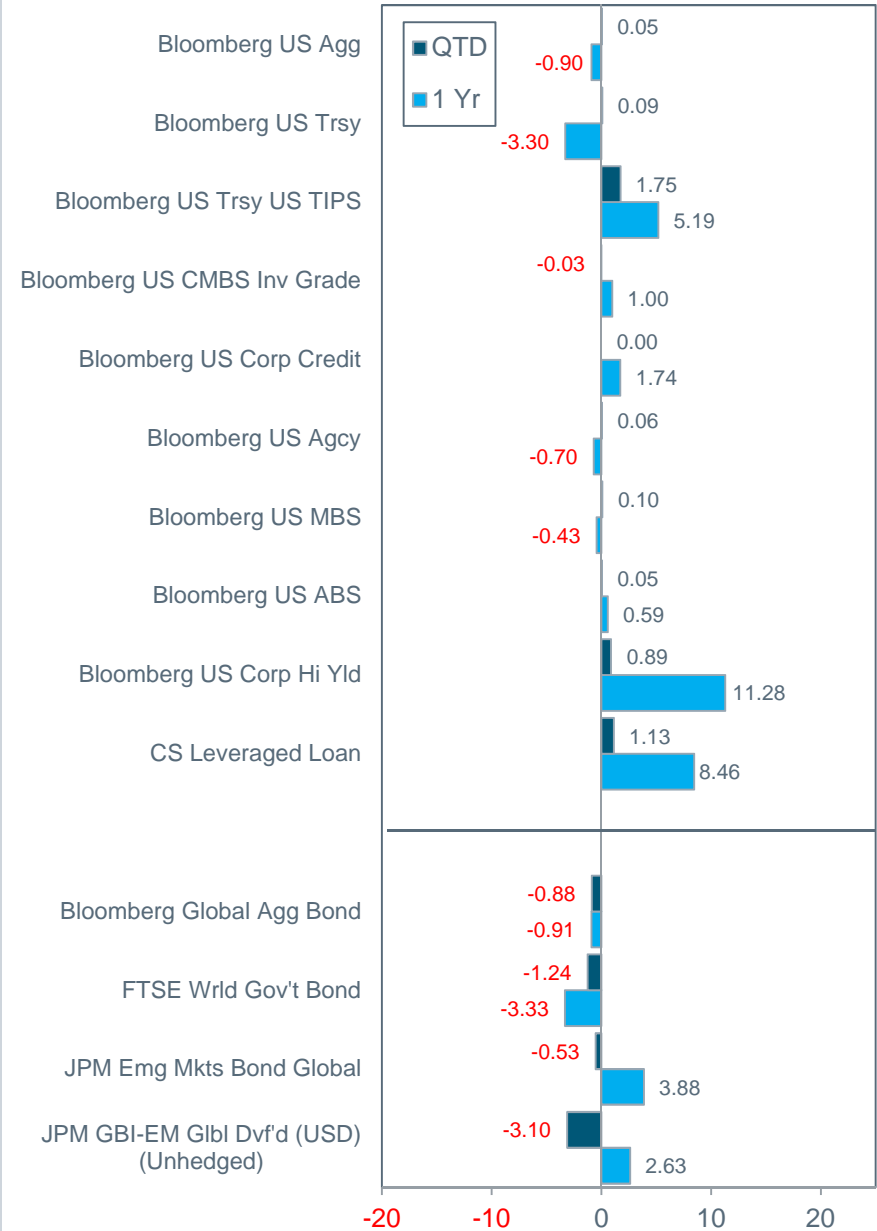
## Valuations



Valuation data courtesy of Bloomberg Professional Service.

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

## Fixed Income Performance (%)





### Third Quarter Review - Absolute Return

#### General Market - Hedge Funds

After a strong first half of the year, hedge fund returns moderated during Q3, with the HFRI Fund Weighted Composite Index finishing the quarter roughly flat. The Asset Weighted composite, which relies far less heavily on directional long/short equity strategies, produced a modest gain of 0.03% in Q3. Hedged equity strategies, which had led the way in the first half of 2021, captured some of the downside, finishing the quarter with a -0.9% return according to the HFRI Equity Hedge Index.

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

Global Tactical Asset Allocation strategies that RVK follows closely generated disparate results in Q3. The top performing long-biased GTAA strategies incorporated inflation protection subcomponents, particularly in energy commodities, which continued to reward investors. These long-biased strategies also produced differentiated results compared to the modest performance of a less diversified blended benchmark of 60% US equity and 40% US fixed income.

### Third Quarter Review - Real Assets

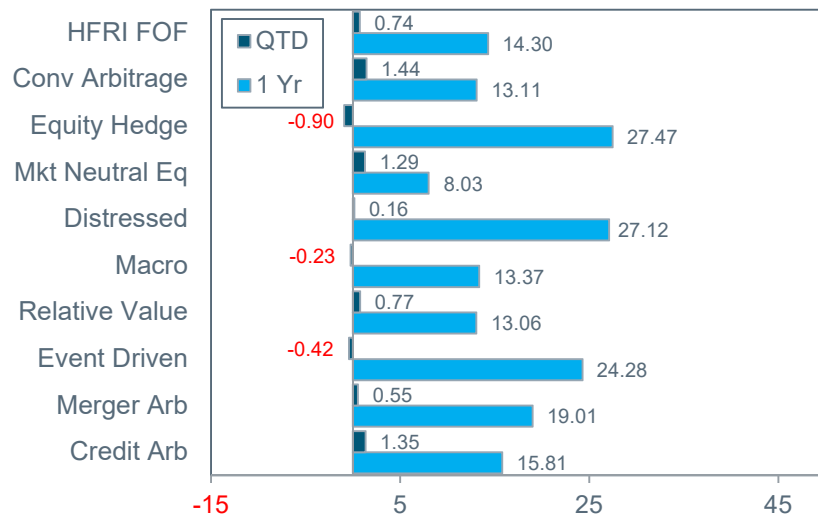
#### General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategies that RVK follows closely continued to generate strong positive absolute performance. Managers with higher commodities and TIPS exposures posted the strongest positive absolute returns. Commodities led the way, with the Bloomberg Commodity Index posting a 6.6% return, largely driven by gains in energy. Inflation, as measured by the year-over-year change in Headline CPI, was reported as 5.4% for September, a significant increase from 2.6% at the end of Q1.

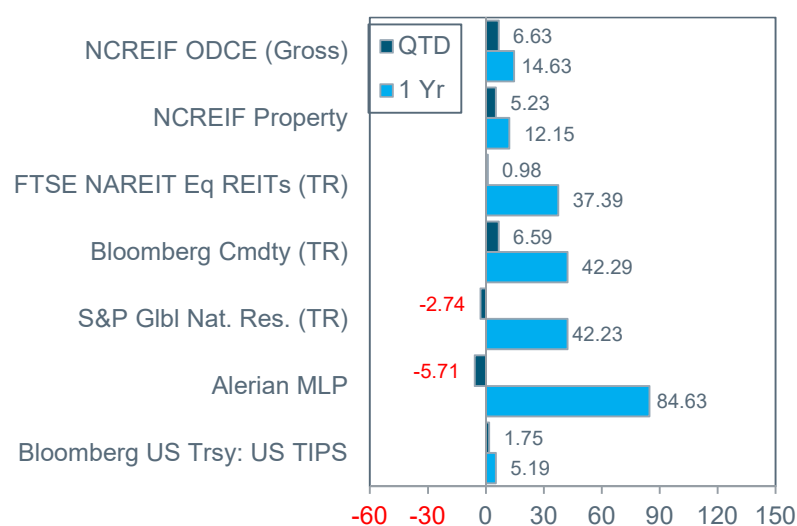
#### General Market - Real Estate

Core private real estate generated a positive 6.6% return in Q3, as reported by the NFI-ODCE Index, with the total return comprising of 1.0% income and 5.6% price appreciation. While the income return continues to trend in line with historical levels, price appreciation exceeded expectations and previous levels, such as the 2.6% return recorded in Q2. Investors in publicly traded real estate underperformed their private market counterparts.

### HFRI Hedge Fund Performance (%)



### Real Asset Performance (%)



## Annual Asset Class Performance

As of September 30, 2021

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	YTD
<div>Best</div> <div>↑</div> <div>↓</div> <div>Worst</div>	39.38	8.44	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	19.96	29.13
	16.23	5.24	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	18.40	23.15
	15.97	2.06	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	18.31	15.92
	11.63	-2.35	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	16.12	13.15
	11.17	-10.01	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	12.34	12.41
	10.25	-21.37	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	10.99	10.02
	6.97	-26.16	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.44	10.88	8.35
	6.60	-33.79	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	7.82	5.73
	5.49	-35.65	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	7.51	4.53
	5.00	-37.00	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	7.11	3.51
	1.87	-37.74	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	1.19	0.04
	1.45	-43.38	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.79	7.69	0.67	-1.25
	-1.57	-47.01	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.58	5.34	-3.12	-1.56
	-15.70	-53.33	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-8.00	-4.57
	S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Net) - Int'l Dev.	MSCI EAFE SC (Net) - Int'l SC	MSCI EM (Net) - Int'l Emg Mkts	Bloombrg US Agg Bond - FI	Bloombrg US Corp Hi Yield - FI	Bloombrg US Trsry US TIPS - FI	Bloombrg US Gov Credit Lng - FI	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombrg Cmdty (TR) - Commod.	ICE BofAML 3 Mo T-Bill - Cash Equiv	

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.

# Total Fund





**North Dakota Board of University and School Lands**  
**AA by Manager, AA vs. Target, and Schedule of Investable Assets**

**As of September 30, 2021**

Asset Allocation by Manager			Asset Allocation vs. Target Allocation					
	Market Value (\$)	Allocation (%)	Asset Allocation (\$000)	Asset Allocation (%)	Target Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	
<b>Broad US Equity</b>			<b>6,063,406</b>	<b>100.00</b>	<b>100.00</b>	-	-	
State Street Russell 1000 Index SL (US Large Cap)	830,500,678	13.70	1,155,008	19.05	19.00	14.00	24.00	
State Street Russell Mid Cap Index (US Mid Cap)	110,944,513	1.83	1,113,688	18.37	19.00	14.00	24.00	
NT Small Cap Core (US Small Cap)	213,562,401	3.52						
<b>Broad International Equity</b>								
State Street World Ex US Index (International Equity)	659,284,490	10.87						
QMA Int'l Sm Cap Equity (International Equity)	215,233,275	3.55						
DFA Emg Mkts Core Eq:I (Emerging Markets Equity)	121,917,782	2.01						
Harding Loevner:IEM;IZ (Emerging Markets Equity)	117,252,344	1.93						
<b>Fixed Income</b>								
Payden & Rygel Long Term (Investment Grade US FI)	370,480,230	6.11						
JP Morgan Core Bond (Investment Grade US FI)	362,825,412	5.98						
Brandywine Gbl Opp Fixed Income (Global FI)	97,348,710	1.61						
Loomis Sayles Credit Asset (Multi-Sector)	103,174,580	1.70						
FLP (Loans)	6,829,506	0.11						
AG Direct Lending III LP (Direct Lending)	151,211,661	2.49						
AG Direct Lending IV LP (Direct Lending)	45,764,008	0.75						
Ares Pathfinder Fund LP (Private Credit)	31,854,111	0.53						
Schroders Securitized Credit (Structured Credit)	4,532							
Schroders Flexible Secured Income (Secured Income)	200,478,121	3.31						
ND Land - PTF Cash (Cash)	40,153,060	0.66						
<b>Absolute Return</b>								
GMO:Bchmk-Fr All;IV (GTAA)	397,736,372	6.56						
PIMCO:All Ast Ath;Inst (GTAA)	468,909,294	7.73						
<b>Real Estate</b>								
Morgan Stanley Prime Property (Core Real Estate)	242,658,583	4.00						
UBS Trumbull Property LP (Core Real Estate)	188,243,770	3.10						
Jamestown Premier Property (Core Plus Real Estate)	63,767,278	1.05						
Prologis Targeted US Logistics LP (Core Plus Real Estate)	196,943,796	3.25						
JP Morgan US RE Inc & Grth LP (Core Plus Real Estate)	148,228,568	2.44						
<b>Private Equity</b>								
GCM Grosvenor BUSL LP	15,993,977	0.26						
<b>Opportunistic Investments</b>								
Varde Dislocation Fund LP	57,914,165	0.96						
Apollo Accord Fund IV LP	17,869,578	0.29						
<b>Transition Account</b>								
NT STIF (Transition Account)	586,320,785	9.67						

Asset Allocation vs. Target Allocation Differences					
Broad US Equity			0.05%		
Broad International Equity	-0.63 %				
Fixed Income			1.25%		
Absolute Return	-0.71 %				
Real Estate	-1.15 %				
Private Equity	-4.74 %				
Private Infrastructure	-5.00 %				
Opportunistic Investments			1.25%		
Transition Account			9.67%		

Schedule of Investable Assets					
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
QTD	5,914,927,874	99,843,509	48,634,195	6,063,405,578	0.82

Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is net of fees. Net cash flow includes securities lending income and client directed flows. Gain/loss includes dividend and interest income and capital appreciation. Real Estate market values are as of the most recent quarter-end. In Q3, Harding Loevner:IEM;IZ, QMA Int'l Sm Cap Equity, DFA Emg Mkts Core Eq:I and Brandywine Gbl Opp Fixed Income were liquidated. Market value shown consist of uninvested cash. Schroders Securitized Credit (Structured Credit) transitioned into Schroders Flexible Secured Income (Secured Income).

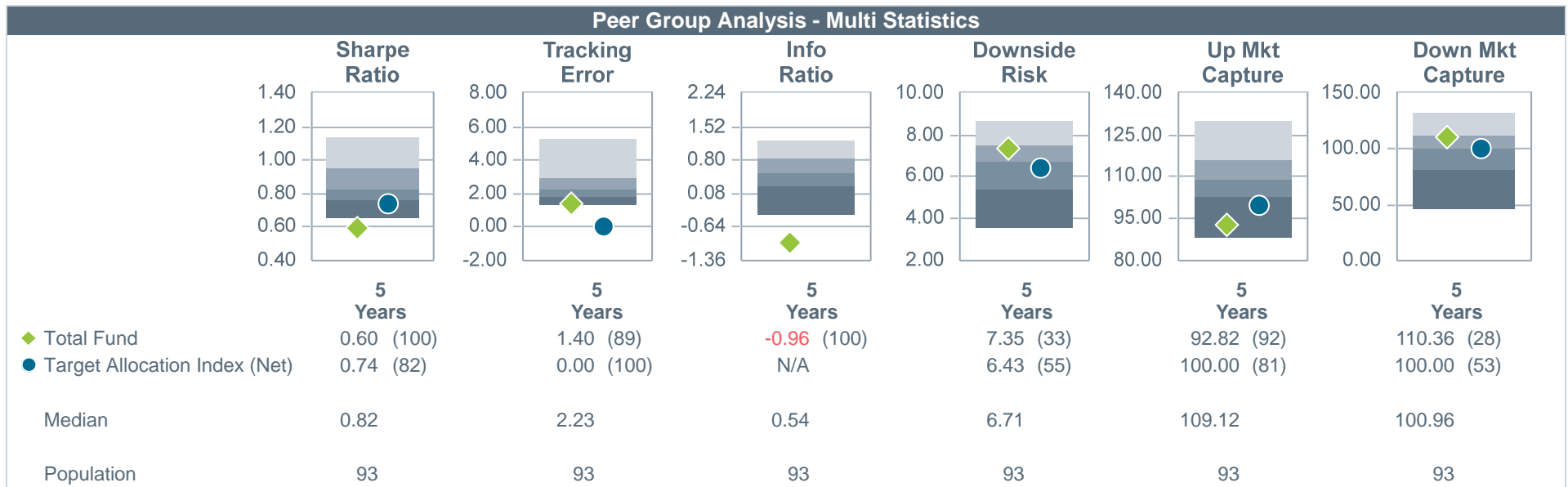
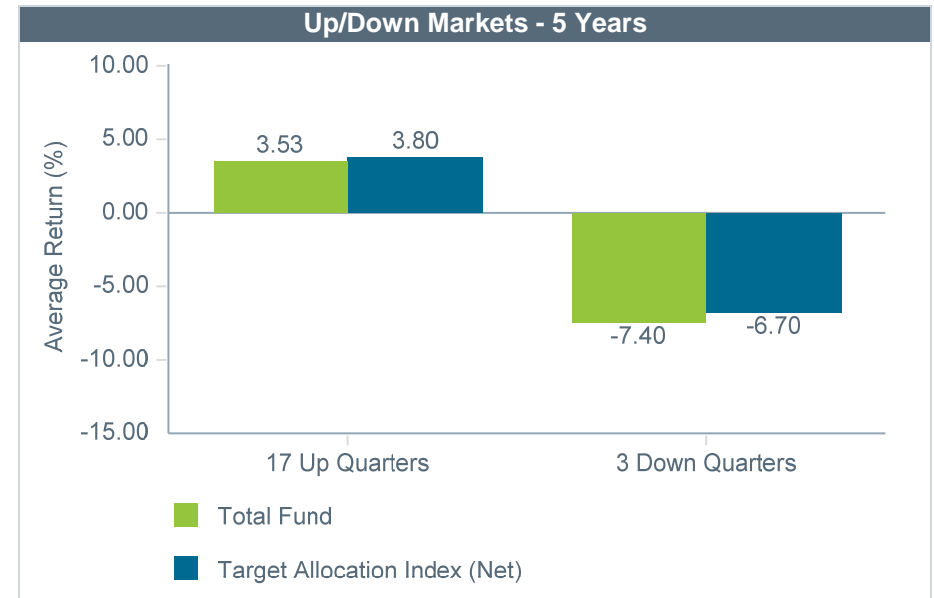
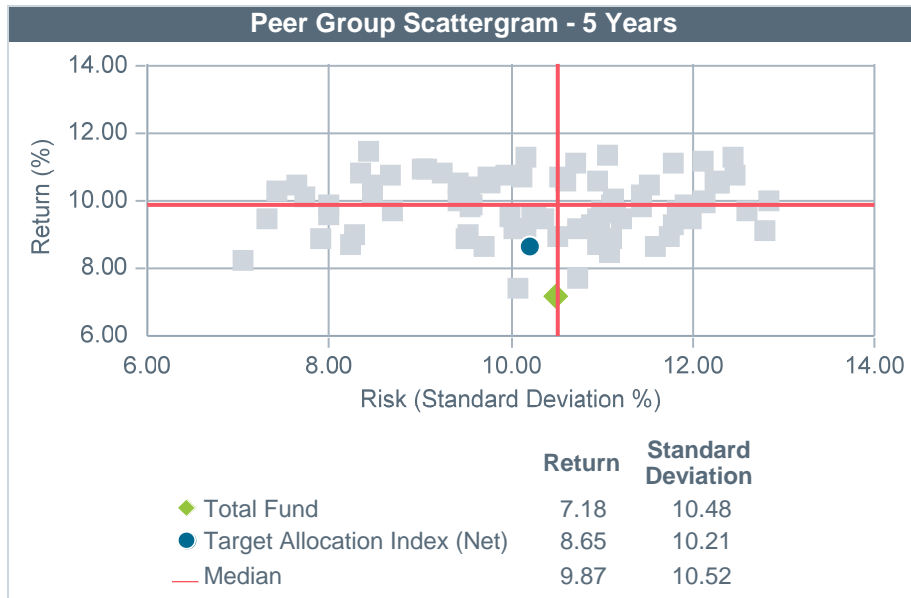


North Dakota Board of University and School Lands  
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Total Fund</b>	<b>0.82</b>	<b>0.82</b>	<b>8.67</b>	<b>18.35</b>	<b>7.13</b>	<b>7.18</b>	<b>5.78</b>	<b>7.37</b>	<b>5.95</b>	<b>14.40</b>	<b>-5.11</b>	<b>6.78</b>	<b>08/01/1995</b>
Target Allocation Index (Net)	0.47	0.47	8.02	17.97	9.46	8.65	7.15	8.61	11.52	16.30	-4.51	N/A	
Difference	0.35	0.35	0.65	0.38	-2.33	-1.47	-1.37	-1.24	-5.57	-1.90	-0.60	N/A	
All Public Plans > \$1B-Total Fund Median	0.32	0.32	9.67	21.16	10.08	9.87	8.02	9.47	11.35	17.09	-3.38	7.70	
Rank	36	36	76	90	95	96	95	93	94	90	79	95	
<b>Broad US Equity</b>	<b>0.23</b>	<b>0.23</b>	<b>15.49</b>	<b>34.07</b>	<b>15.82</b>	<b>16.89</b>	<b>14.00</b>	<b>15.76</b>	<b>20.97</b>	<b>30.30</b>	<b>-5.49</b>	<b>15.40</b>	<b>07/01/2009</b>
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	20.89	31.02	-5.24	15.80	
Difference	0.33	0.33	0.50	2.19	-0.18	0.04	0.07	-0.84	0.08	-0.72	-0.25	-0.40	
<b>Broad International Equity</b>	<b>-0.49</b>	<b>-0.49</b>	<b>9.94</b>	<b>28.36</b>	<b>8.39</b>	<b>8.69</b>	<b>5.64</b>	<b>8.20</b>	<b>8.42</b>	<b>22.05</b>	<b>-16.49</b>	<b>7.20</b>	<b>07/01/2009</b>
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	10.65	21.51	-14.20	7.27	
Difference	2.50	2.50	4.04	4.44	0.36	-0.25	-0.04	0.72	-2.23	0.54	-2.29	-0.07	
<b>Fixed Income</b>	<b>0.51</b>	<b>0.51</b>	<b>1.42</b>	<b>4.48</b>	<b>5.67</b>	<b>3.66</b>	<b>3.65</b>	<b>3.78</b>	<b>7.31</b>	<b>7.70</b>	<b>-0.24</b>	<b>5.54</b>	<b>08/01/1995</b>
Global Fixed Income Custom Index	0.07	0.07	-1.07	0.20	5.53	3.18	3.37	3.20	7.58	9.21	-0.52	N/A	
Difference	0.44	0.44	2.49	4.28	0.14	0.48	0.28	0.58	-0.27	-1.51	0.28	N/A	
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	5.11	
Difference	0.46	0.46	2.98	5.38	0.32	0.72	0.39	0.77	-0.20	-1.02	-0.25	0.43	
<b>Absolute Return</b>	<b>-1.40</b>	<b>-1.40</b>	<b>7.90</b>	<b>17.87</b>	<b>5.15</b>	<b>5.09</b>	<b>3.63</b>	<b>N/A</b>	<b>0.99</b>	<b>11.09</b>	<b>-5.16</b>	<b>3.19</b>	<b>07/01/2014</b>
Absolute Return Custom Index	-0.63	-0.63	6.12	16.33	9.98	9.21	7.51	8.55	13.56	19.28	-5.93	7.00	
Difference	-0.77	-0.77	1.78	1.54	-4.83	-4.12	-3.88	N/A	-12.57	-8.19	0.77	-3.81	
Consumer Price Index+5%	2.20	2.20	9.24	10.66	7.95	7.72	7.15	7.01	6.43	7.40	7.01	7.06	
Difference	-3.60	-3.60	-1.34	7.21	-2.80	-2.63	-3.52	N/A	-5.44	3.69	-12.17	-3.87	
<b>Real Estate</b>	<b>7.09</b>	<b>7.09</b>	<b>13.94</b>	<b>14.78</b>	<b>6.51</b>	<b>7.60</b>	<b>N/A</b>	<b>N/A</b>	<b>-0.21</b>	<b>4.48</b>	<b>8.34</b>	<b>8.13</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	7.93	8.92	0.34	4.39	7.36	7.26	
Difference	0.68	0.68	1.53	1.14	0.38	1.04	N/A	N/A	-0.55	0.09	0.98	0.87	
<b>Private Equity</b>	<b>6.10</b>	<b>6.10</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>8.03</b>	<b>04/01/2021</b>
Cambridge US Prvt Eq Index	4.00	4.00	27.72	47.75	22.15	20.35	16.59	15.96	25.69	14.50	9.41	17.70	
Difference	2.10	2.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-9.67	
<b>Opportunistic Investments</b>	<b>1.15</b>	<b>1.15</b>	<b>9.38</b>	<b>29.46</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>34.43</b>	<b>07/01/2020</b>

Performance shown is net of fees, and annualized for periods greater than one year. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.



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



North Dakota Board of University and School Lands  
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Total Fund</b>	<b>0.82</b>	<b>0.82</b>	<b>8.67</b>	<b>18.35</b>	<b>7.13</b>	<b>7.18</b>	<b>7.37</b>	<b>5.95</b>	<b>14.40</b>	<b>-5.11</b>	<b>6.78</b>	<b>08/01/1995</b>
Target Allocation Index (Net)	0.47	0.47	8.02	17.97	9.46	8.65	8.61	11.52	16.30	-4.51	N/A	
Difference	0.35	0.35	0.65	0.38	-2.33	-1.47	-1.24	-5.57	-1.90	-0.60	N/A	
<b>Broad US Equity</b>	<b>0.23</b>	<b>0.23</b>	<b>15.49</b>	<b>34.07</b>	<b>15.82</b>	<b>16.89</b>	<b>15.76</b>	<b>20.97</b>	<b>30.30</b>	<b>-5.49</b>	<b>15.40</b>	<b>07/01/2009</b>
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	16.60	20.89	31.02	-5.24	15.80	
Difference	0.33	0.33	0.50	2.19	-0.18	0.04	-0.84	0.08	-0.72	-0.25	-0.40	
<b>State Street Russell 1000 Index SL (CF)</b>	<b>0.20</b>	<b>0.20</b>	<b>15.17</b>	<b>30.94</b>	<b>16.40</b>	<b>N/A</b>	<b>N/A</b>	<b>20.90</b>	<b>31.39</b>	<b>-4.78</b>	<b>16.71</b>	<b>06/01/2017</b>
Russell 1000 Index	0.21	0.21	15.19	30.96	16.43	17.11	16.76	20.96	31.43	-4.78	16.74	
Difference	-0.01	-0.01	-0.02	-0.02	-0.03	N/A	N/A	-0.06	-0.04	0.00	-0.03	
<b>State Street Russell Mid Cap Index (SA)</b>	<b>-0.92</b>	<b>-0.92</b>	<b>15.17</b>	<b>38.05</b>	<b>14.21</b>	<b>N/A</b>	<b>N/A</b>	<b>17.05</b>	<b>30.38</b>	<b>-8.97</b>	<b>14.14</b>	<b>06/01/2017</b>
Russell Mid Cap Index	-0.93	-0.93	15.17	38.11	14.22	14.39	15.52	17.10	30.54	-9.06	14.15	
Difference	0.01	0.01	0.00	-0.06	-0.01	N/A	N/A	-0.05	-0.16	0.09	-0.01	
<b>NT Small Cap Core (SA)</b>	<b>0.33</b>	<b>0.33</b>	<b>17.31</b>	<b>52.21</b>	<b>12.90</b>	<b>16.58</b>	<b>15.26</b>	<b>23.90</b>	<b>23.13</b>	<b>-7.63</b>	<b>11.60</b>	<b>07/01/2014</b>
Russell 2000 Index	-4.36	-4.36	12.41	47.68	10.54	13.45	14.63	19.96	25.53	-11.01	10.30	
Difference	4.69	4.69	4.90	4.53	2.36	3.13	0.63	3.94	-2.40	3.38	1.30	
<b>Broad International Equity</b>	<b>-0.49</b>	<b>-0.49</b>	<b>9.94</b>	<b>28.36</b>	<b>8.39</b>	<b>8.69</b>	<b>8.20</b>	<b>8.42</b>	<b>22.05</b>	<b>-16.49</b>	<b>7.20</b>	<b>07/01/2009</b>
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	7.48	10.65	21.51	-14.20	7.27	
Difference	2.50	2.50	4.04	4.44	0.36	-0.25	0.72	-2.23	0.54	-2.29	-0.07	
<b>State Street World Ex US Index (CF)</b>	<b>-0.65</b>	<b>-0.65</b>	<b>9.21</b>	<b>26.50</b>	<b>7.81</b>	<b>8.82</b>	<b>N/A</b>	<b>7.52</b>	<b>22.38</b>	<b>-14.16</b>	<b>4.57</b>	<b>07/01/2014</b>
MSCI Wrld Ex US Index (USD) (Net)	-0.66	-0.66	9.19	26.50	7.87	8.88	7.88	7.59	22.49	-14.09	4.63	
Difference	0.01	0.01	0.02	0.00	-0.06	-0.06	N/A	-0.07	-0.11	-0.07	-0.06	

Performance shown is net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.



**North Dakota Board of University and School Lands  
Comparative Performance**

**As of September 30, 2021**

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Fixed Income</b>	<b>0.51</b>	<b>0.51</b>	<b>1.42</b>	<b>4.48</b>	<b>5.67</b>	<b>3.66</b>	<b>3.78</b>	<b>7.31</b>	<b>7.70</b>	<b>-0.24</b>	<b>5.54</b>	<b>08/01/1995</b>
Global Fixed Income Custom Index	0.07	0.07	-1.07	0.20	5.53	3.18	3.20	7.58	9.21	-0.52	N/A	
Difference	0.44	0.44	2.49	4.28	0.14	0.48	0.58	-0.27	-1.51	0.28	N/A	
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.01	7.51	8.72	0.01	5.11	
Difference	0.46	0.46	2.98	5.38	0.32	0.72	0.77	-0.20	-1.02	-0.25	0.43	
<b>Payden &amp; Rygel Long Term (SA)</b>	<b>0.15</b>	<b>0.15</b>	<b>-0.84</b>	<b>0.70</b>	<b>5.66</b>	<b>3.68</b>	<b>3.92</b>	<b>7.58</b>	<b>9.42</b>	<b>0.16</b>	<b>5.73</b>	<b>08/01/1995</b>
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.01	7.51	8.72	0.01	5.11	
Difference	0.10	0.10	0.72	1.60	0.31	0.74	0.91	0.07	0.70	0.15	0.62	
<b>JP Morgan Core Bond (SA)</b>	<b>0.07</b>	<b>0.07</b>	<b>-0.28</b>	<b>0.24</b>	<b>4.70</b>	<b>2.82</b>	<b>N/A</b>	<b>6.31</b>	<b>6.70</b>	<b>1.01</b>	<b>2.55</b>	<b>08/01/2012</b>
JP Morgan FI Custom Index	0.05	0.05	-0.49	-0.01	4.77	2.68	2.56	6.43	6.80	0.88	2.37	
Difference	0.02	0.02	0.21	0.25	-0.07	0.14	N/A	-0.12	-0.10	0.13	0.18	
<b>Loomis Sayles Credit Asset (SA)</b>	<b>0.65</b>	<b>0.65</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>3.23</b>	<b>04/01/2021</b>
Loomis Sayles CA Custom Index	0.50	0.50	1.59	5.74	6.53	5.11	5.55	7.54	13.03	-1.64	3.34	
Difference	0.15	0.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.11	
<b>AG Direct Lending III LP</b>	<b>2.92</b>	<b>2.92</b>	<b>10.41</b>	<b>15.00</b>	<b>10.34</b>	<b>N/A</b>	<b>N/A</b>	<b>8.13</b>	<b>10.02</b>	<b>N/A</b>	<b>10.07</b>	<b>09/01/2018</b>
CS Lvg'd Loan Index	1.13	1.13	4.65	8.46	4.09	4.64	5.04	2.78	8.17	1.14	4.20	
Difference	1.79	1.79	5.76	6.54	6.25	N/A	N/A	5.35	1.85	N/A	5.87	
<b>AG Direct Lending IV LP</b>	<b>1.83</b>	<b>1.83</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.71</b>	<b>06/01/2021</b>
CS Lvg'd Loan Index	1.13	1.13	4.65	8.46	4.09	4.64	5.04	2.78	8.17	1.14	1.55	
Difference	0.70	0.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.16	
<b>Ares Pathfinder Fund LP</b>	<b>7.18</b>	<b>7.18</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>86.74</b>	<b>03/01/2021</b>
<b>Schroders Flexible Secured Income (SA)</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.19</b>	<b>09/01/2021</b>
3 Month LIBOR Index (USD)+1.75%	0.47	0.47	1.46	1.96	3.24	3.22	2.66	2.85	4.39	3.86	0.15	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.04	
<b>ND Land - PTF Cash (SA)</b>	<b>0.03</b>	<b>0.03</b>	<b>0.04</b>	<b>0.05</b>	<b>1.16</b>	<b>N/A</b>	<b>N/A</b>	<b>0.39</b>	<b>2.49</b>	<b>1.71</b>	<b>1.24</b>	<b>07/01/2017</b>
ICE BofAML 3 Mo US T-Bill Index	0.02	0.02	0.04	0.07	1.18	1.16	0.63	0.67	2.28	1.87	1.27	
Difference	0.01	0.01	0.00	-0.02	-0.02	N/A	N/A	-0.28	0.21	-0.16	-0.03	
<b>FLP (Loans)</b>	<b>1.17</b>	<b>1.17</b>	<b>3.01</b>	<b>4.12</b>	<b>4.50</b>	<b>5.19</b>	<b>5.55</b>	<b>4.19</b>	<b>4.86</b>	<b>6.15</b>	<b>6.94</b>	<b>08/01/1995</b>

Performance shown is net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

North Dakota Board of University and School Lands  
Comparative Performance

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Absolute Return</b>	<b>-1.40</b>	<b>-1.40</b>	<b>7.90</b>	<b>17.87</b>	<b>5.15</b>	<b>5.09</b>	<b>N/A</b>	<b>0.99</b>	<b>11.09</b>	<b>-5.16</b>	<b>3.19</b>	<b>07/01/2014</b>
Absolute Return Custom Index	-0.63	-0.63	6.12	16.33	9.98	9.21	8.55	13.56	19.28	-5.93	7.00	
Difference	-0.77	-0.77	1.78	1.54	-4.83	-4.12	N/A	-12.57	-8.19	0.77	-3.81	
<b>GMO:Bchmk-Fr All;IV (GBMBX)</b>	<b>-2.01</b>	<b>-2.01</b>	<b>3.46</b>	<b>8.99</b>	<b>2.57</b>	<b>3.61</b>	<b>N/A</b>	<b>-2.40</b>	<b>11.64</b>	<b>-5.27</b>	<b>2.03</b>	<b>07/01/2014</b>
60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	-0.97	-0.97	4.86	15.48	9.55	8.83	7.99	14.05	18.55	-6.00	6.36	
Difference	-1.04	-1.04	-1.40	-6.49	-6.98	-5.22	N/A	-16.45	-6.91	0.73	-4.33	
Consumer Price Index+5%	2.20	2.20	9.24	10.66	7.95	7.72	7.01	6.43	7.40	7.01	7.06	
Difference	-4.21	-4.21	-5.78	-1.67	-5.38	-4.11	N/A	-8.83	4.24	-12.28	-5.03	
<b>PIMCO:All Ast Ath;Inst (PAUIX)</b>	<b>-0.87</b>	<b>-0.87</b>	<b>11.96</b>	<b>26.61</b>	<b>7.34</b>	<b>5.61</b>	<b>N/A</b>	<b>4.59</b>	<b>7.62</b>	<b>-6.14</b>	<b>2.81</b>	<b>07/01/2014</b>
All Asset Custom Index (EqI Wtd)	0.21	0.21	3.94	9.50	7.57	6.61	6.13	9.89	12.97	-1.62	5.23	
Difference	-1.08	-1.08	8.02	17.11	-0.23	-1.00	N/A	-5.30	-5.35	-4.52	-2.42	
Consumer Price Index+5%	2.20	2.20	9.24	10.66	7.95	7.72	7.01	6.43	7.40	7.01	7.06	
Difference	-3.07	-3.07	2.72	15.95	-0.61	-2.11	N/A	-1.84	0.22	-13.15	-4.25	

Performance shown is net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.





North Dakota Board of University and School Lands  
Comparative Performance

As of September 30, 2021

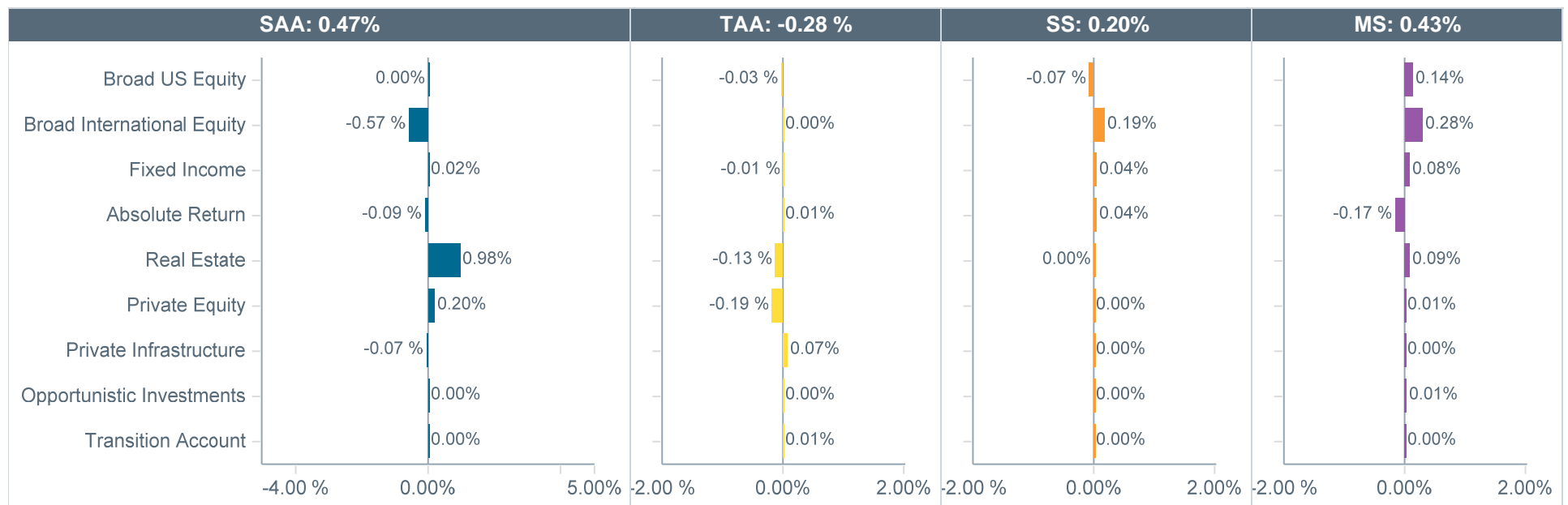
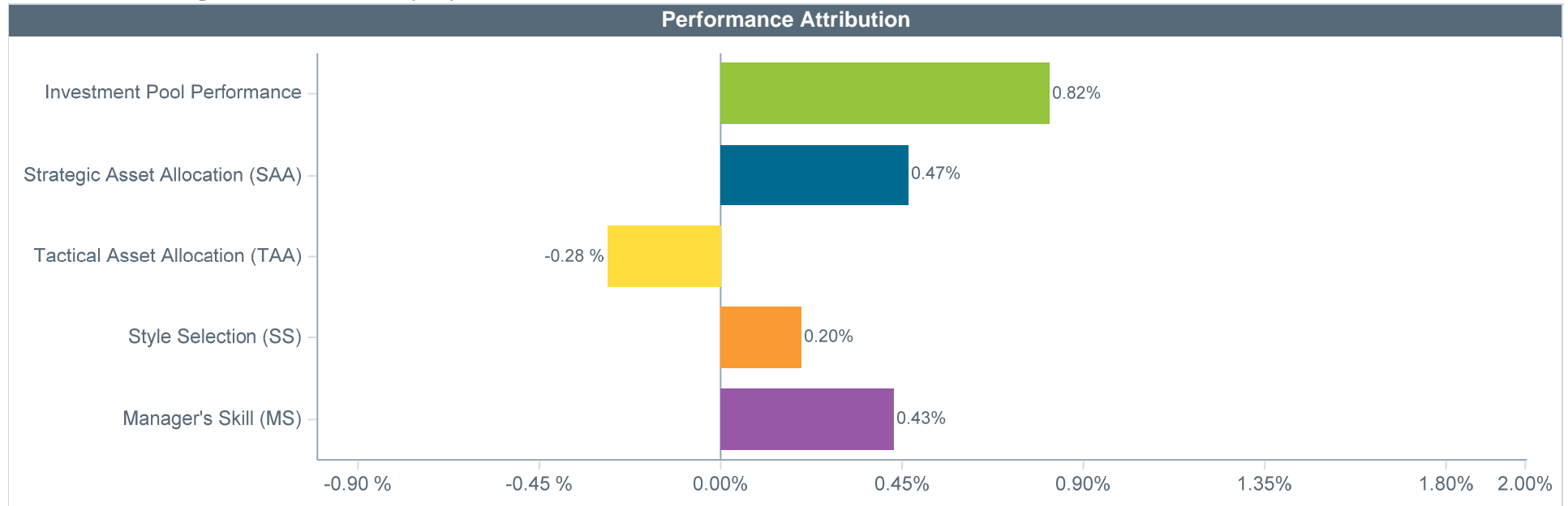
	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Real Estate</b>	<b>7.09</b>	<b>7.09</b>	<b>13.94</b>	<b>14.78</b>	<b>6.51</b>	<b>7.60</b>	<b>N/A</b>	<b>-0.21</b>	<b>4.48</b>	<b>8.34</b>	<b>8.13</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	8.92	0.34	4.39	7.36	7.26	
Difference	0.68	0.68	1.53	1.14	0.38	1.04	N/A	-0.55	0.09	0.98	0.87	
<b>Morgan Stanley Prime Property (CF)</b>	<b>5.83</b>	<b>5.83</b>	<b>10.84</b>	<b>12.48</b>	<b>6.71</b>	<b>7.46</b>	<b>N/A</b>	<b>1.26</b>	<b>6.17</b>	<b>7.96</b>	<b>8.15</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	8.92	0.34	4.39	7.36	7.26	
Difference	-0.58	-0.58	-1.57	-1.16	0.58	0.90	N/A	0.92	1.78	0.60	0.89	
<b>UBS Trumbull Property LP (CF)</b>	<b>6.09</b>	<b>6.09</b>	<b>10.21</b>	<b>7.97</b>	<b>1.20</b>	<b>2.95</b>	<b>N/A</b>	<b>-4.67</b>	<b>-2.84</b>	<b>6.17</b>	<b>4.10</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	8.92	0.34	4.39	7.36	7.26	
Difference	-0.32	-0.32	-2.20	-5.67	-4.93	-3.61	N/A	-5.01	-7.23	-1.19	-3.16	
<b>Jamestown Premier Property (CF)</b>	<b>1.99</b>	<b>1.99</b>	<b>-2.81</b>	<b>-4.48</b>	<b>-3.15</b>	<b>1.96</b>	<b>N/A</b>	<b>-9.83</b>	<b>2.40</b>	<b>7.75</b>	<b>3.54</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	8.92	0.34	4.39	7.36	7.26	
Difference	-4.42	-4.42	-15.22	-18.12	-9.28	-4.60	N/A	-10.17	-1.99	0.39	-3.72	
<b>Prologis Targeted US Logistics LP (CF)</b>	<b>11.30</b>	<b>11.30</b>	<b>30.88</b>	<b>38.55</b>	<b>20.21</b>	<b>19.87</b>	<b>N/A</b>	<b>9.86</b>	<b>16.84</b>	<b>16.18</b>	<b>19.19</b>	<b>04/01/2016</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	8.92	0.34	4.39	7.36	6.66	
Difference	4.89	4.89	18.47	24.91	14.08	13.31	N/A	9.52	12.45	8.82	12.53	
<b>JP Morgan US RE Inc &amp; Grth LP (CF)</b>	<b>7.39</b>	<b>7.39</b>	<b>12.90</b>	<b>11.67</b>	<b>4.39</b>	<b>5.56</b>	<b>N/A</b>	<b>-1.76</b>	<b>2.24</b>	<b>5.73</b>	<b>5.66</b>	<b>07/01/2016</b>
NCREIF ODCE Index (AWA) (Net)	6.41	6.41	12.41	13.64	6.13	6.56	8.92	0.34	4.39	7.36	6.60	
Difference	0.98	0.98	0.49	-1.97	-1.74	-1.00	N/A	-2.10	-2.15	-1.63	-0.94	
<b>Private Equity</b>	<b>6.10</b>	<b>6.10</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>8.03</b>	<b>04/01/2021</b>
Cambridge US Prvt Eq Index	4.00	4.00	27.72	47.75	22.15	20.35	15.96	25.69	14.50	9.41	17.70	
Difference	2.10	2.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-9.67	
<b>GCM Grosvenor BUSL LP</b>	<b>6.10</b>	<b>6.10</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>8.03</b>	<b>04/01/2021</b>
<b>Opportunistic Investments</b>												
<b>Varde Dislocation Fund LP</b>	<b>-0.48</b>	<b>-0.48</b>	<b>7.19</b>	<b>31.63</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>33.87</b>	<b>07/01/2020</b>
<b>Apollo Accord Fund IV LP</b>	<b>6.81</b>	<b>6.81</b>	<b>18.82</b>	<b>26.35</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>26.35</b>	<b>10/01/2020</b>
<b>Transition Account</b>												
<b>NT STIF (Transition Account)</b>	<b>0.05</b>	<b>0.05</b>	<b>0.16</b>	<b>0.26</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.28</b>	<b>06/01/2020</b>
ICE BofAML 3 Mo US T-Bill Index	0.02	0.02	0.04	0.07	1.18	1.16	0.63	0.67	2.28	1.87	0.09	
Difference	0.03	0.03	0.12	0.19	N/A	N/A	N/A	N/A	N/A	N/A	0.19	

Performance shown is net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.



North Dakota Board of University and School Lands  
Total Fund Attribution - IDP  
Total Fund vs. Target Allocation Index (Net)

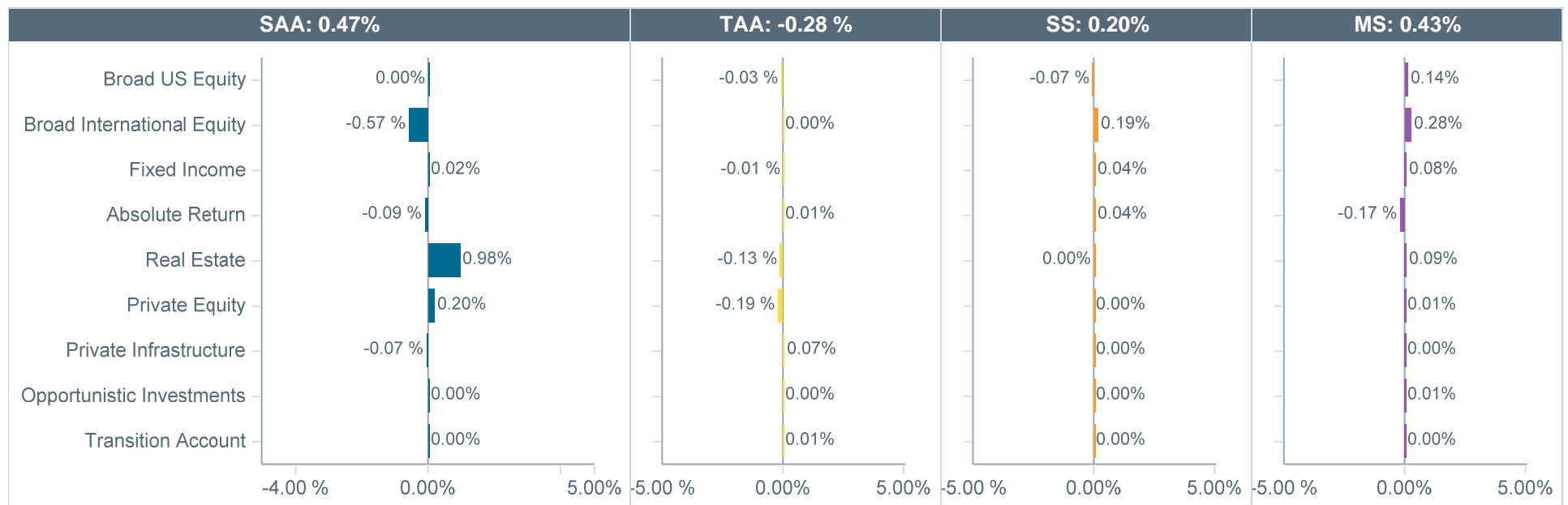
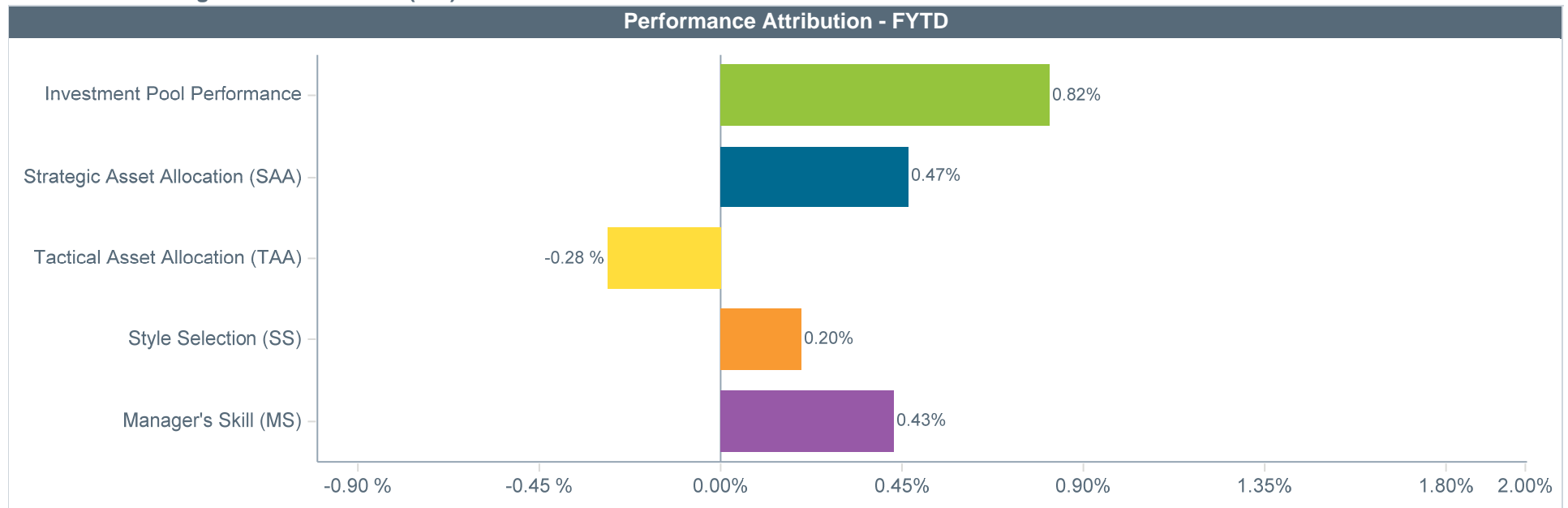
Quarter To Date Ending September 30, 2021



Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.

North Dakota Board of University and School Lands  
Total Fund Attribution - IDP  
Total Fund vs. Target Allocation Index (Net)

Fiscal Year To Date as of September 30, 2021



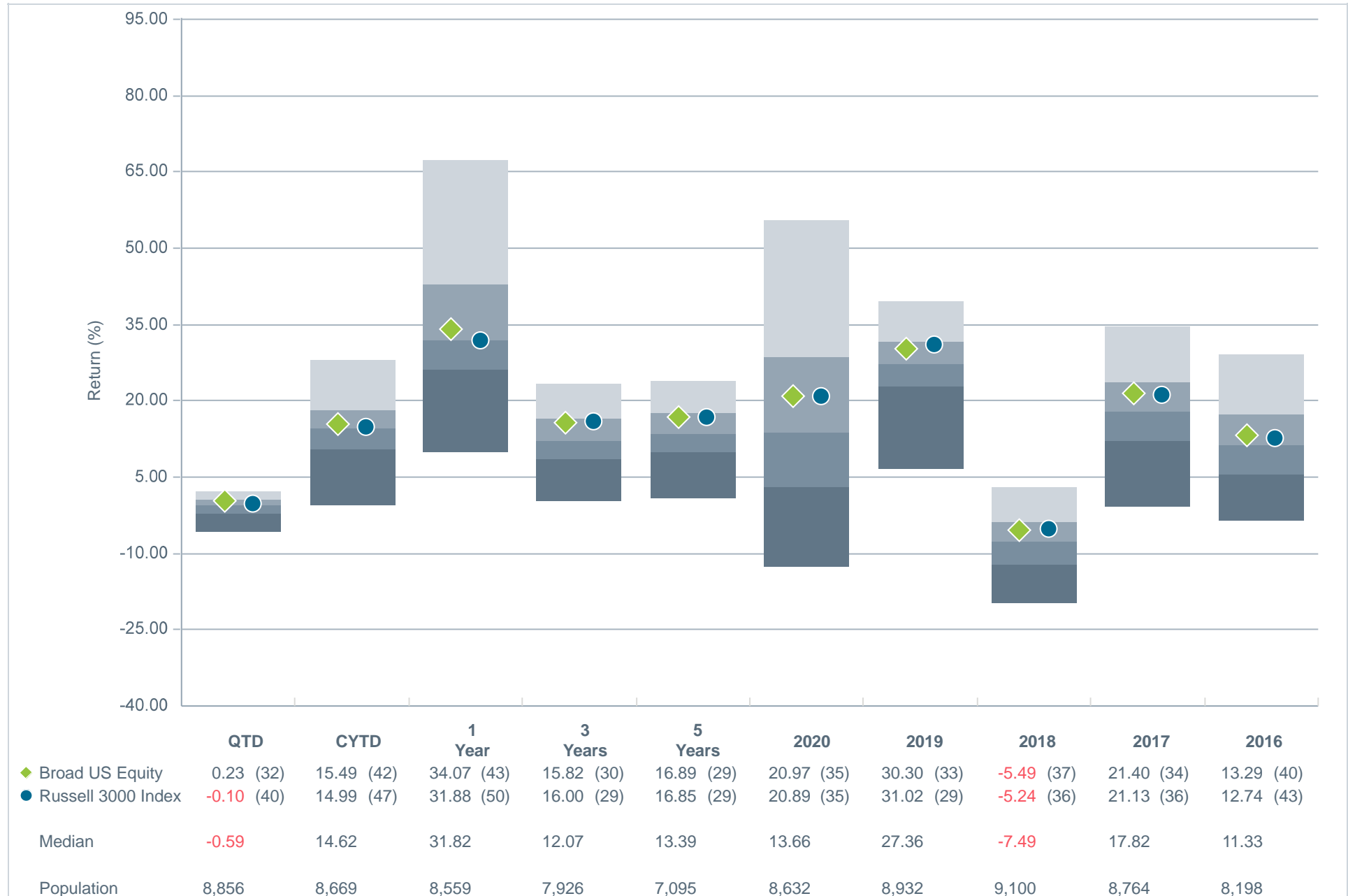
Attribution shown is calculated using the Investment Decision Process (IDP) method. Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation. Fiscal year ends 06/30.

# Composite Profiles



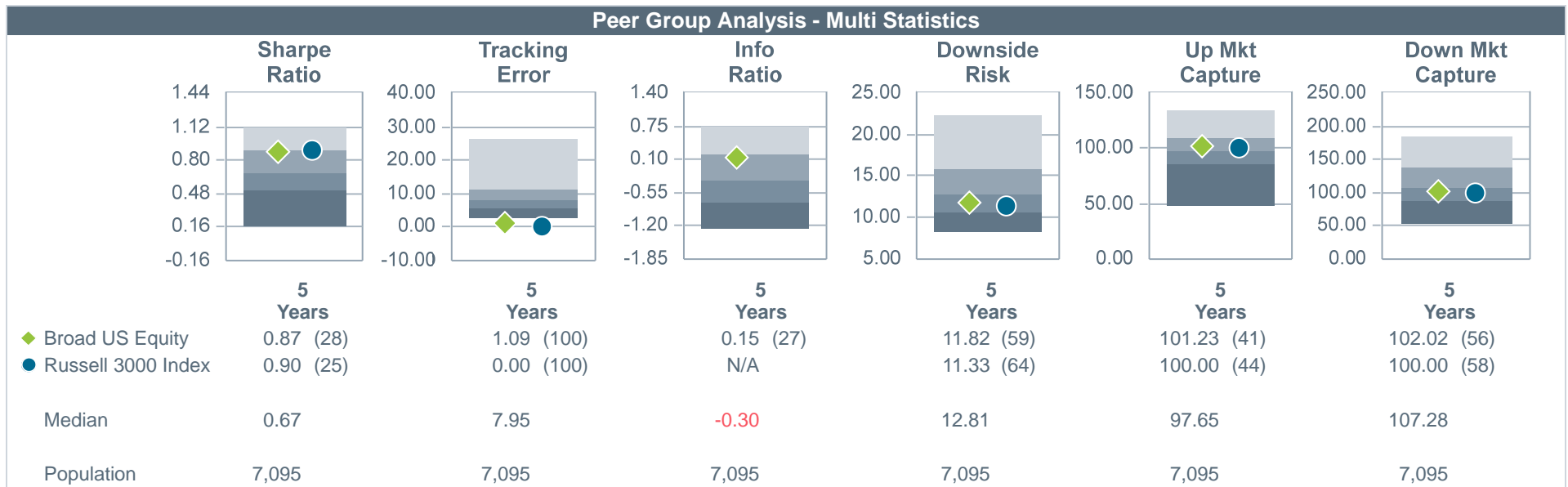
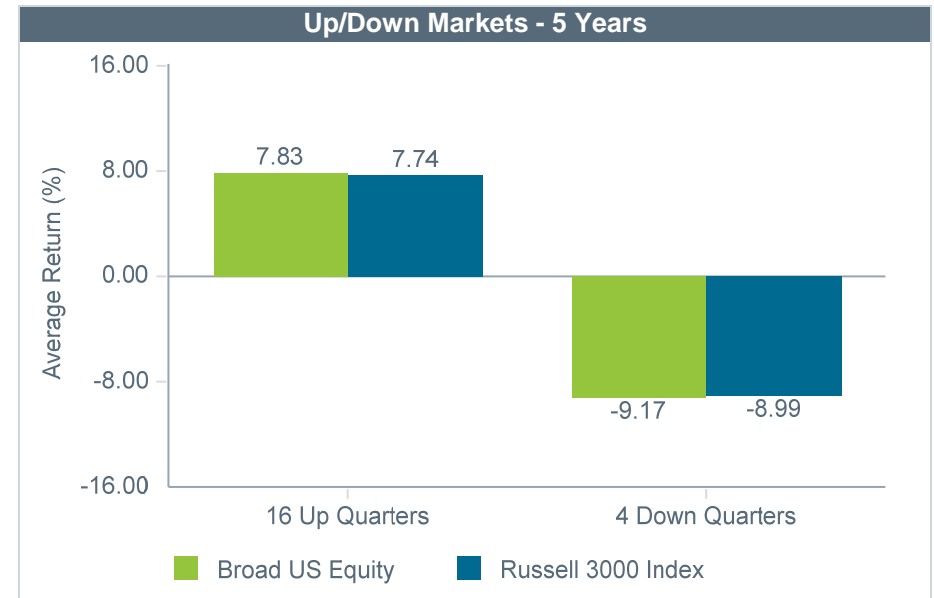
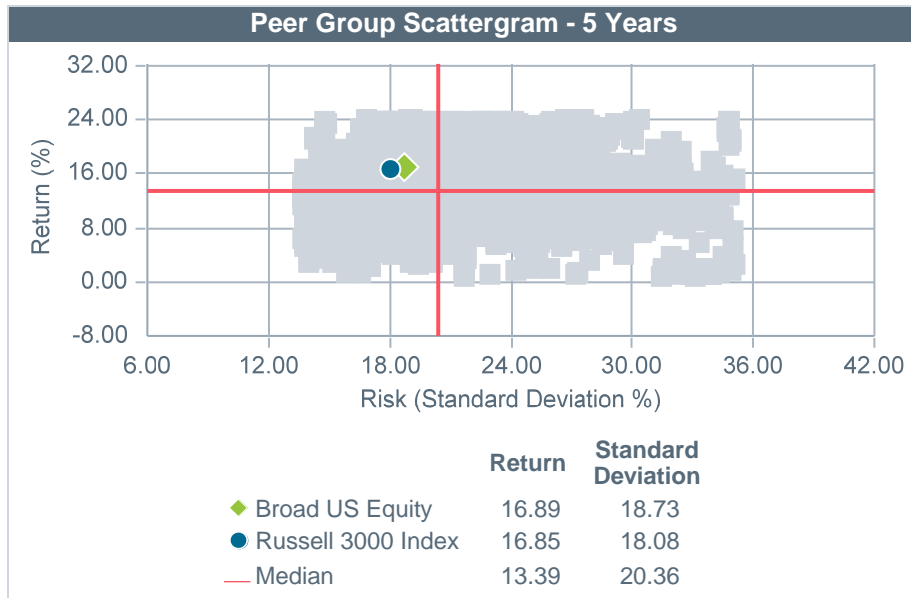
North Dakota Board of University and School Lands  
IM U.S. Equity (MF)  
Peer Group Analysis

As of September 30, 2021



Performance shown is net of fees. Parentheses contain percentile ranks.

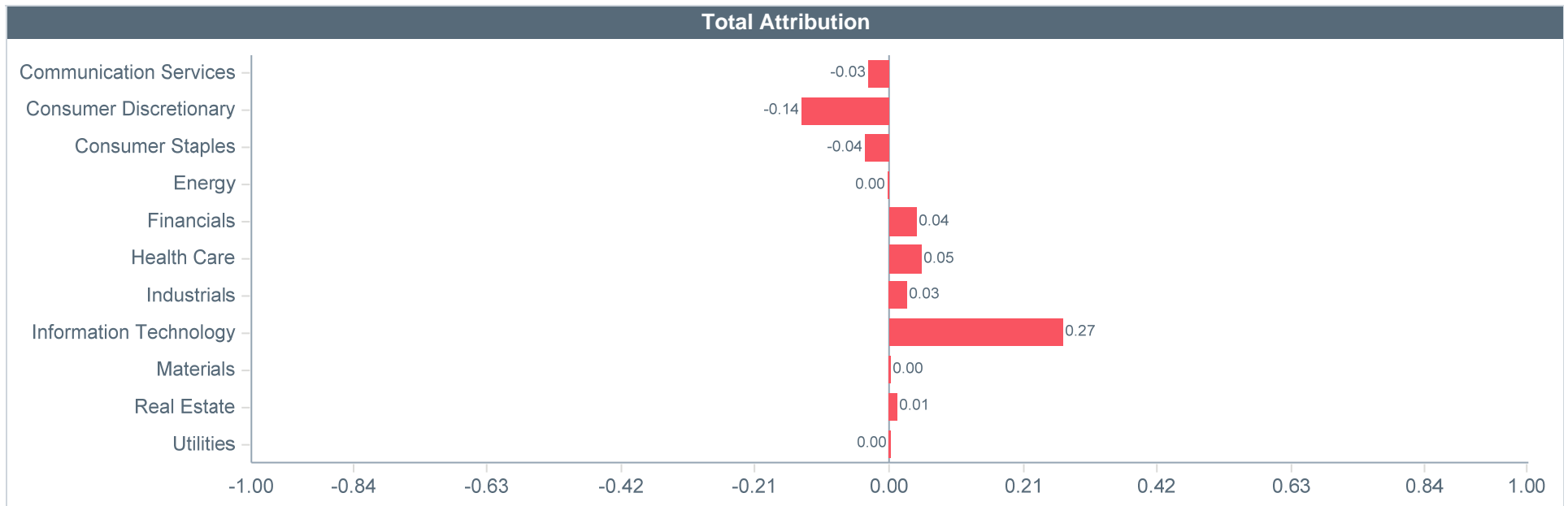
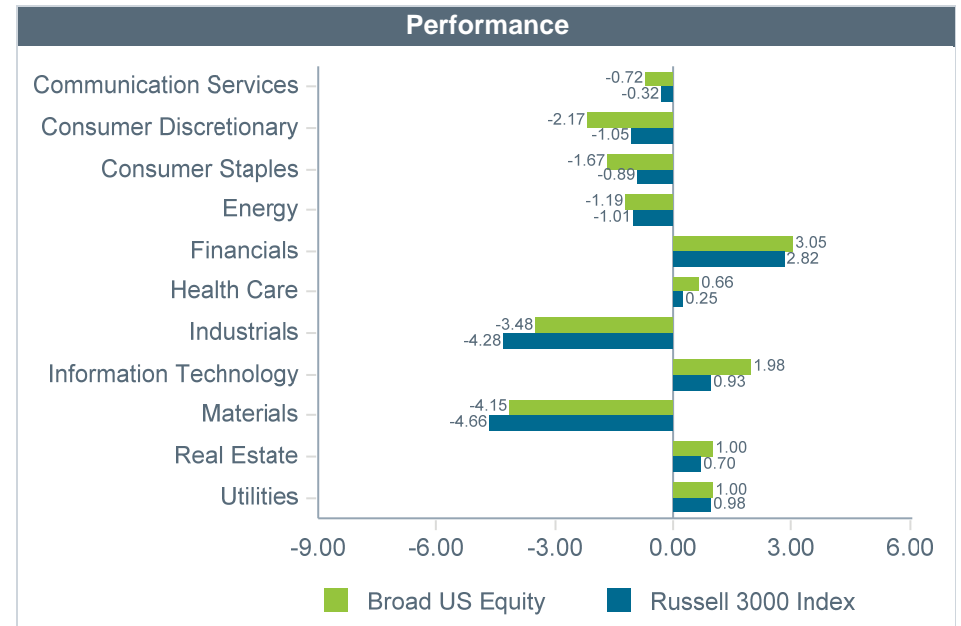
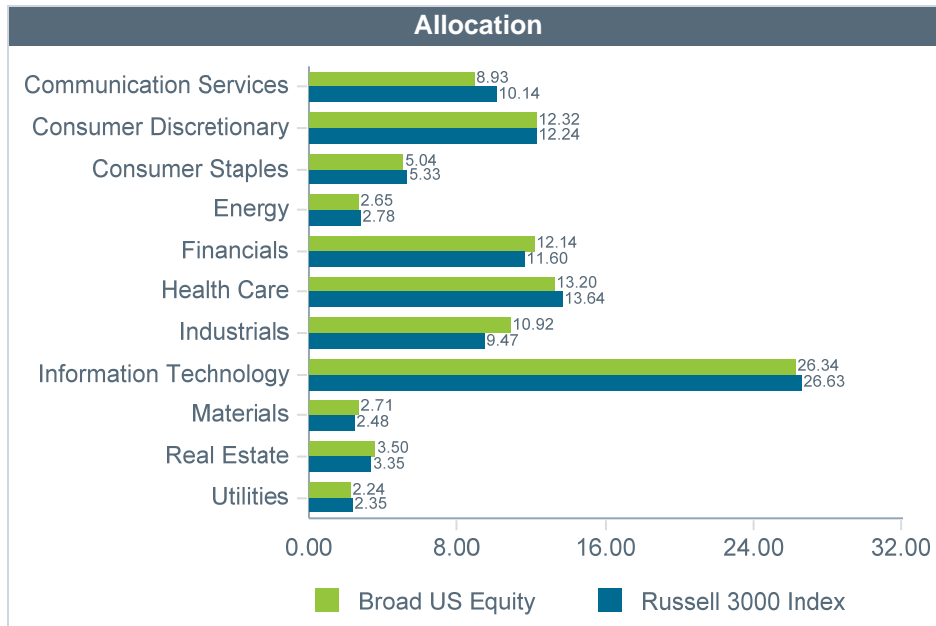




Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.

North Dakota Board of University and School Lands  
Broad US Equity vs. Russell 3000 Index  
Buy and Hold Sector Attribution Graph

1 Quarter Ending September 30, 2021

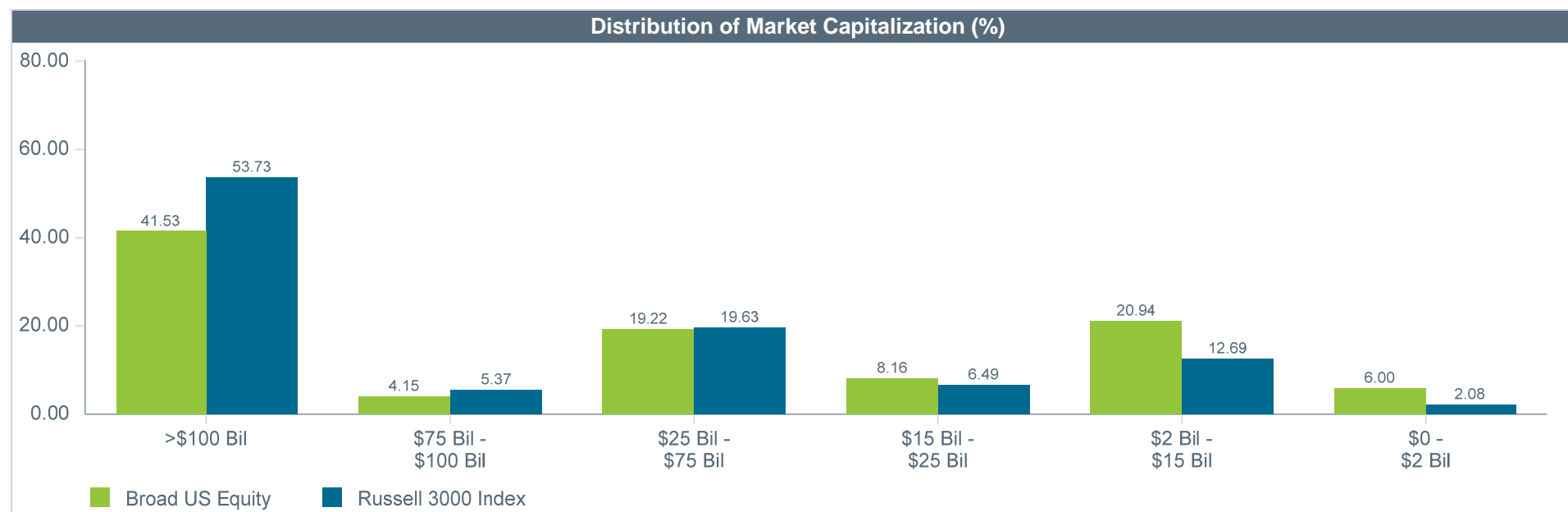


North Dakota Board of University and School Lands  
Broad US Equity vs. Russell 3000 Index  
Portfolio Characteristics

As of September 30, 2021

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	3.90	5.05	-1.15	3.47
Microsoft Corp	3.73	4.83	-1.10	4.27
Amazon.com Inc	2.50	3.24	-0.74	-4.51
Meta Platforms Inc	1.42	1.85	-0.43	-2.39
Alphabet Inc	1.41	1.83	-0.42	9.49
Alphabet Inc	1.31	1.70	-0.39	6.34
Tesla Inc	1.08	1.40	-0.32	14.09
Berkshire Hathaway Inc	0.90	1.15	-0.25	-1.79
NVIDIA Corporation	0.87	1.13	-0.26	3.59
JPMorgan Chase & Co	0.86	1.10	-0.24	5.85
% of Portfolio	17.98	23.28	-5.30	

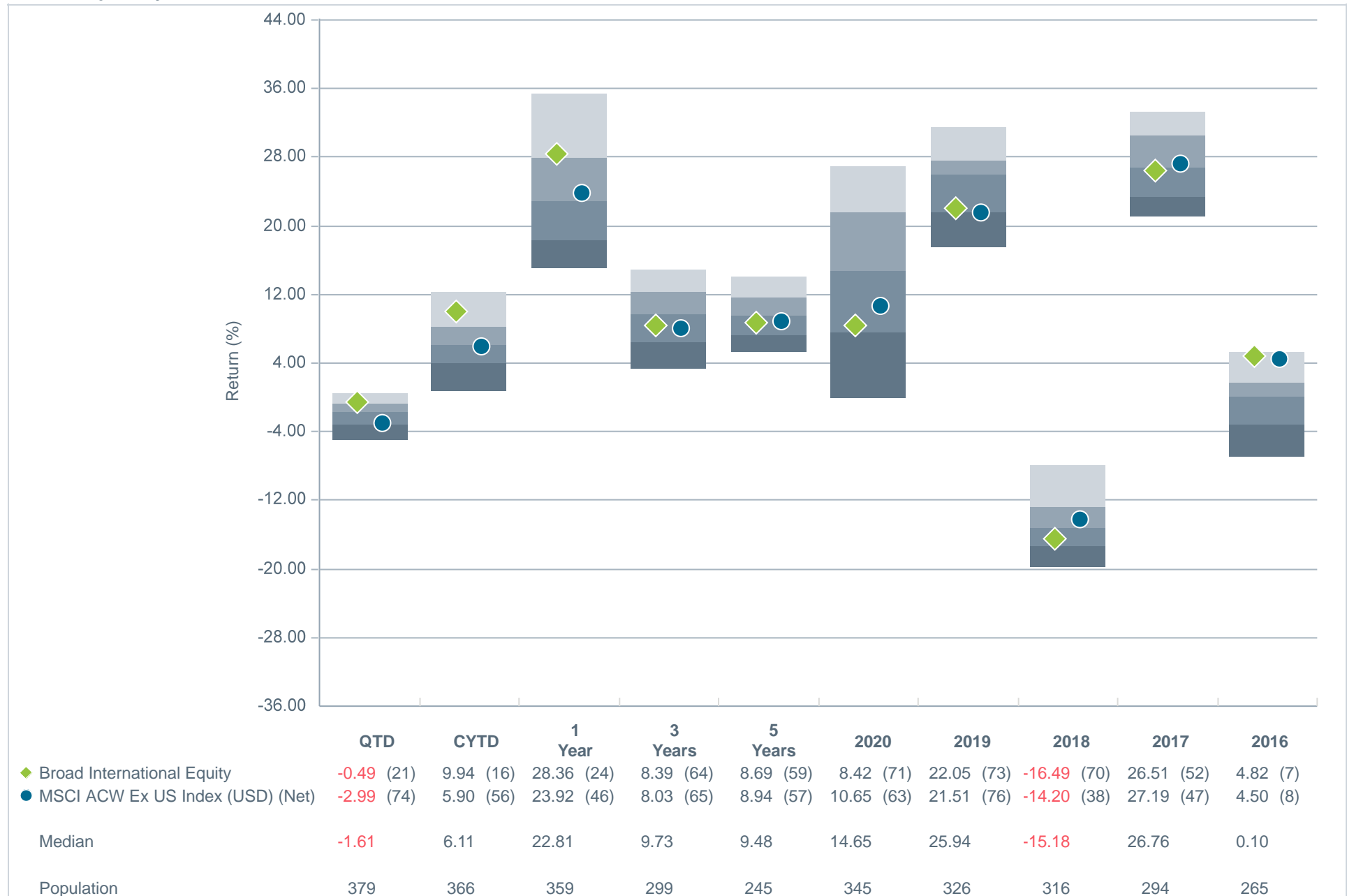
Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	359,198	461,435
Median Mkt. Cap (\$M)	11,318	2,481
Price/Earnings Ratio	23.41	23.75
Price/Book Ratio	3.96	4.30
5 Yr. EPS Growth Rate (%)	19.67	20.13
Current Yield (%)	1.25	1.33
Beta (5 Years, Monthly)	1.01	1.00
Number of Securities	1,215	3,052



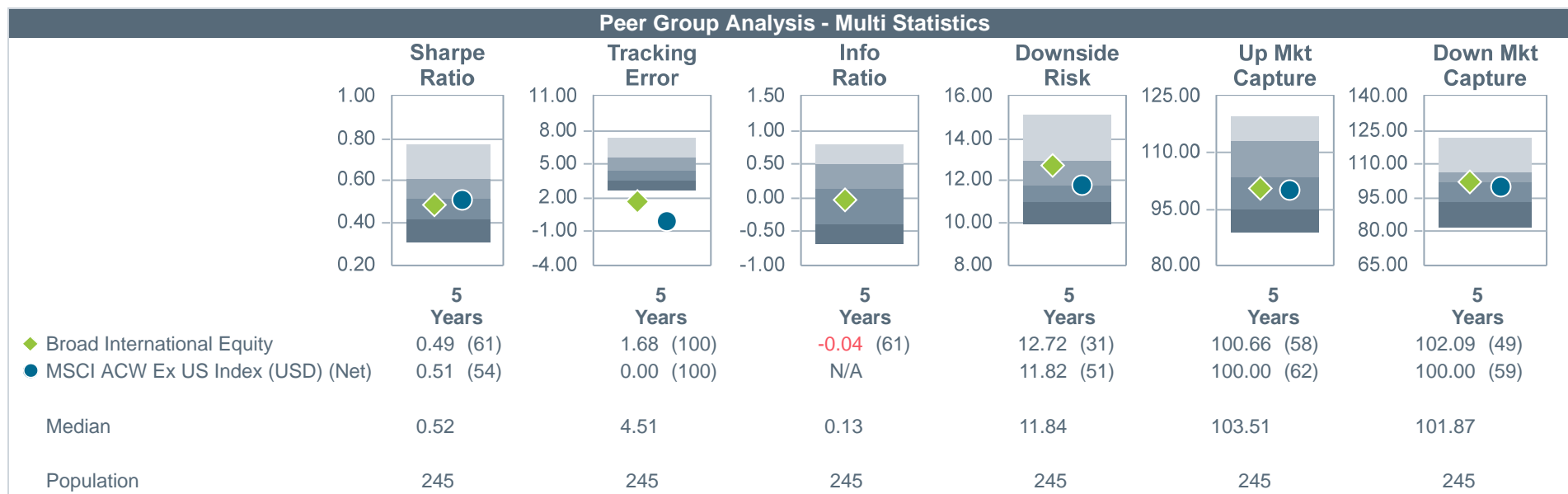
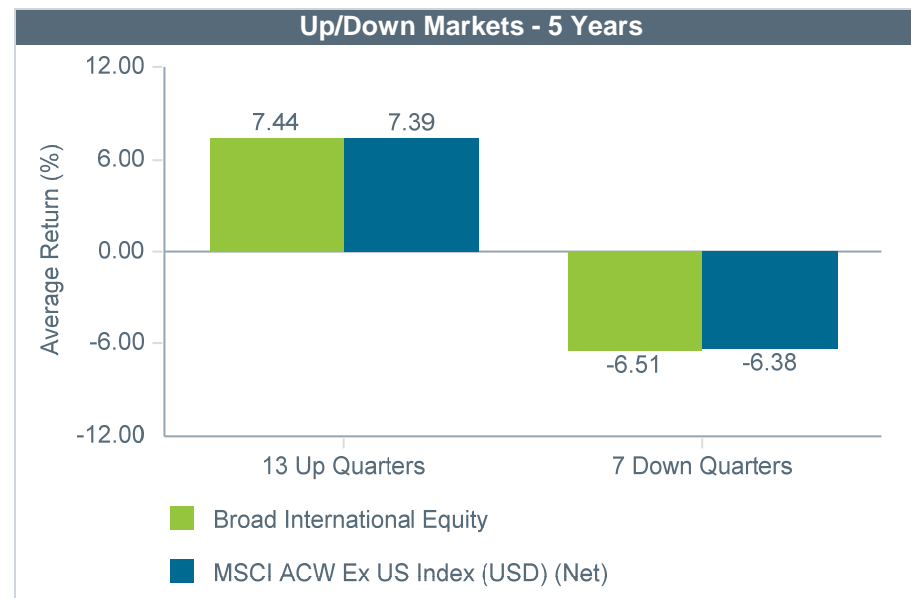
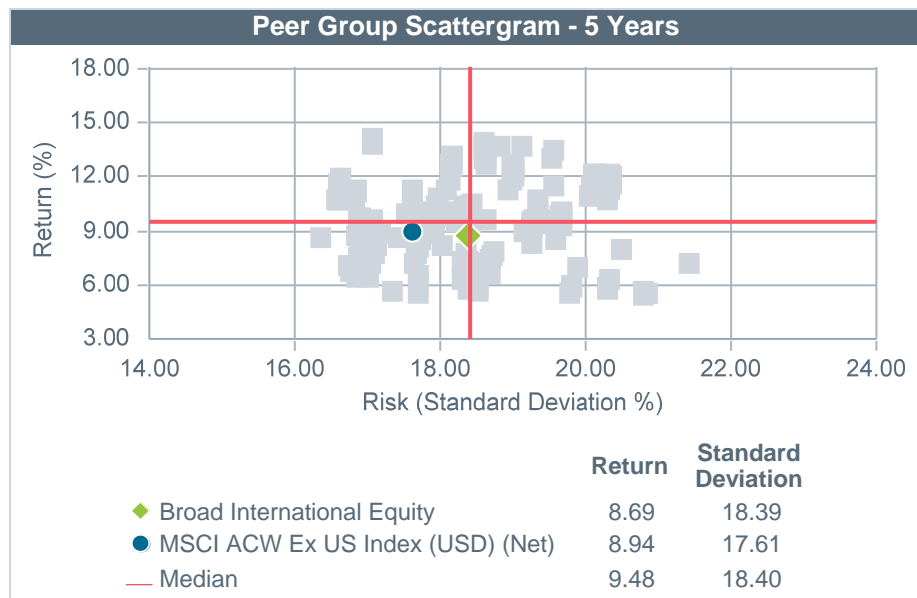
Alphabet Inc. is shown twice in the Top Ten Equity Holdings, but represents two different share classes: GOOGL (Class A) and GOOG (Class C).

North Dakota Board of University and School Lands  
IM International Large Cap Equity (MF)  
Peer Group Analysis

As of September 30, 2021



Performance shown is net of fees. Parentheses contain percentile ranks.

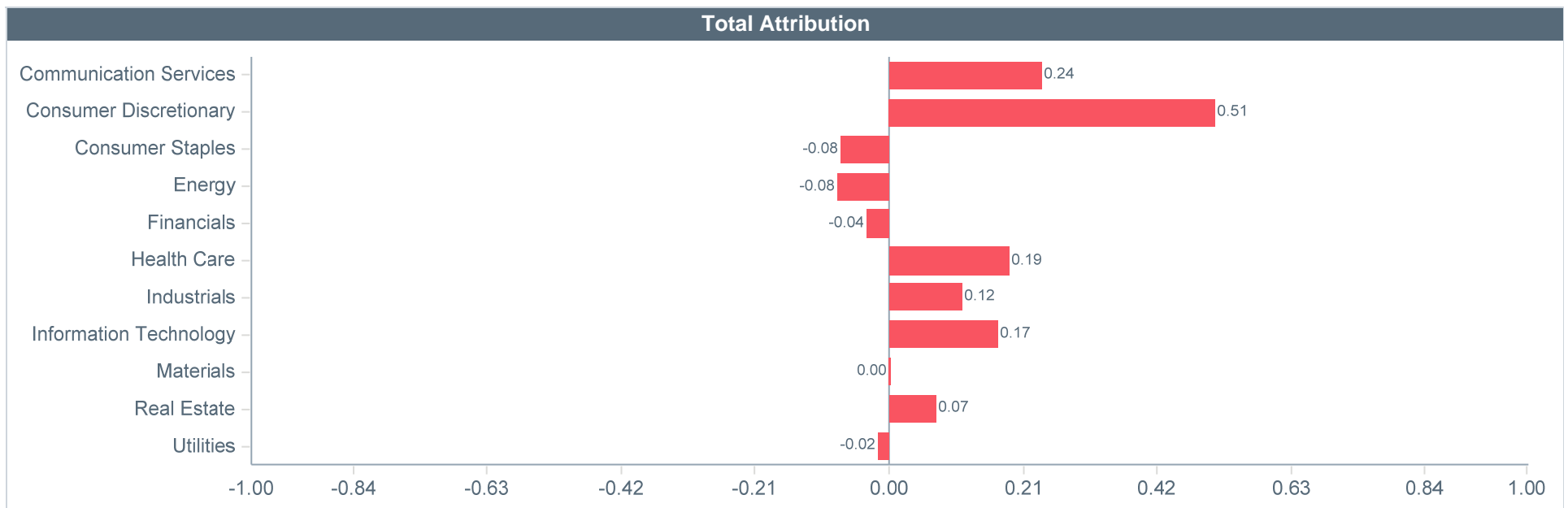
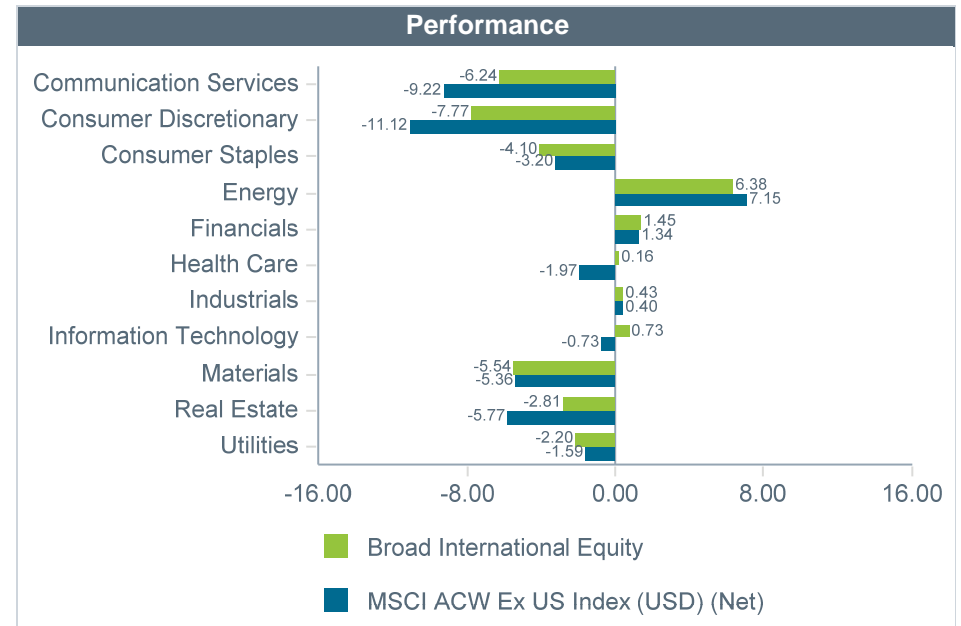
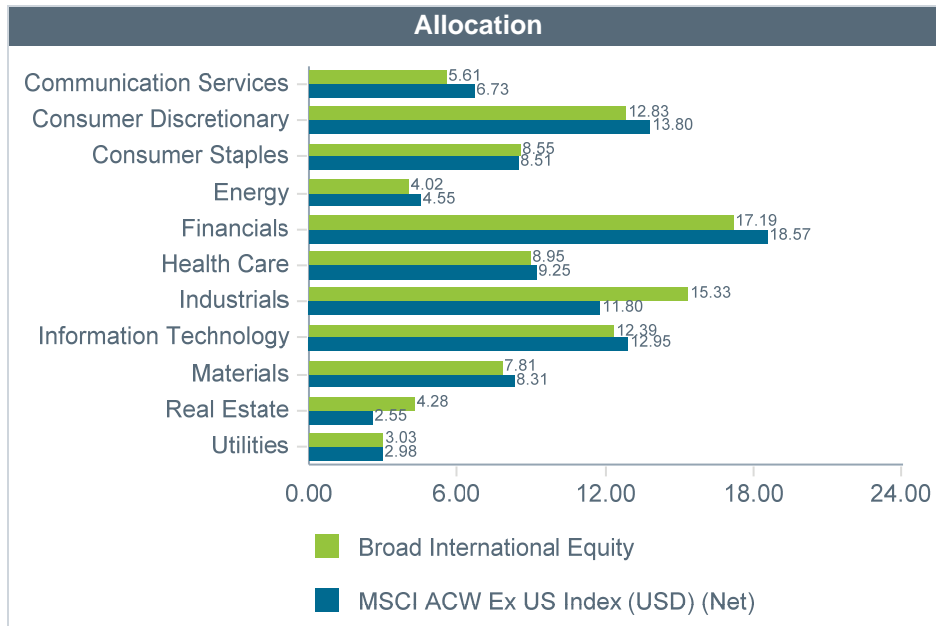


Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.



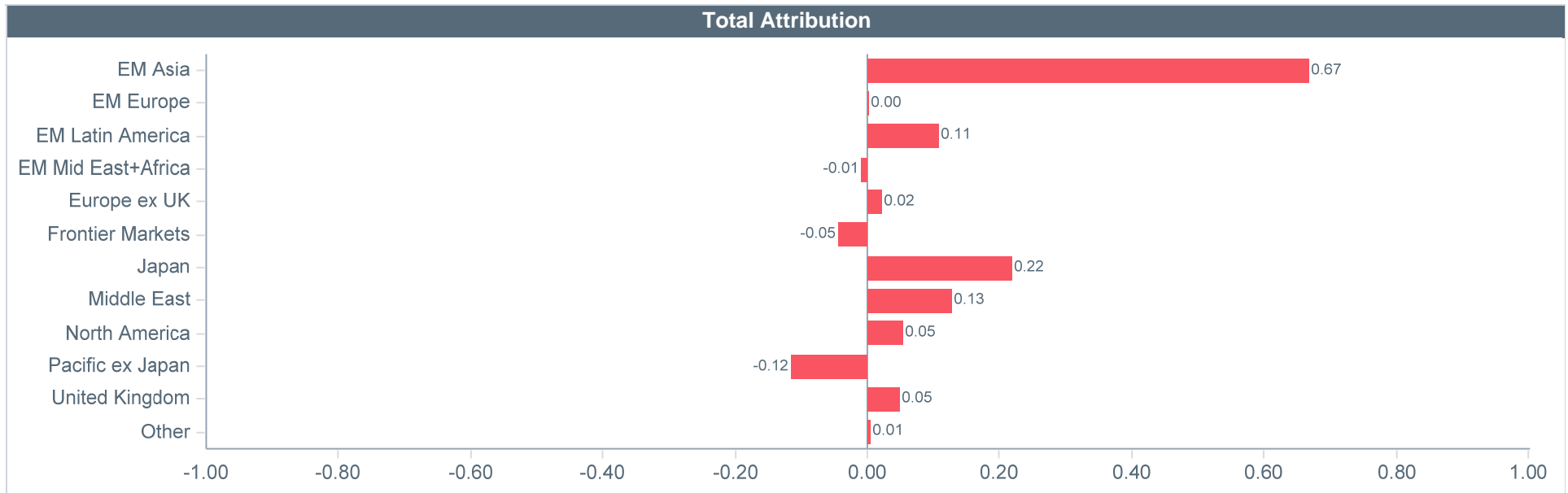
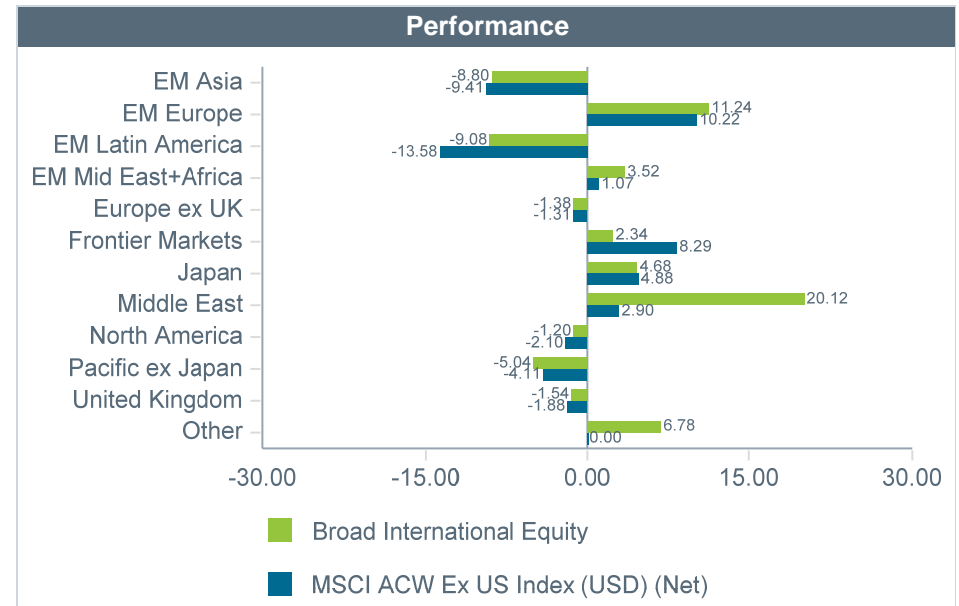
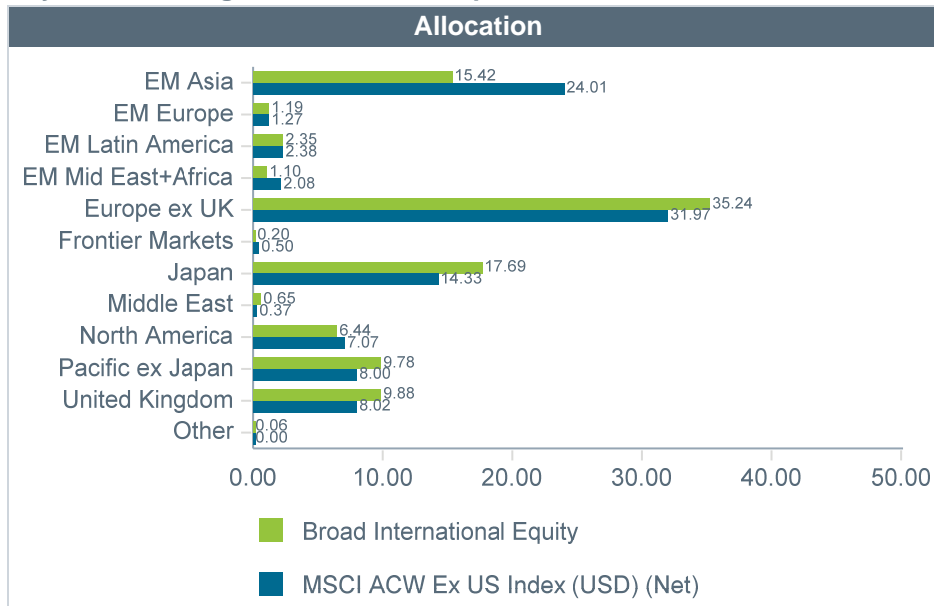
North Dakota Board of University and School Lands  
Broad International Equity vs. MSCI ACW Ex US Index (USD) (Net)  
Buy and Hold Sector Attribution Graph

1 Quarter Ending September 30, 2021



North Dakota Board of University and School Lands  
Broad International Equity vs. MSCI ACW Ex US Index (USD) (Net)  
Buy and Hold Region Attribution Graph

1 Quarter Ending September 30, 2021



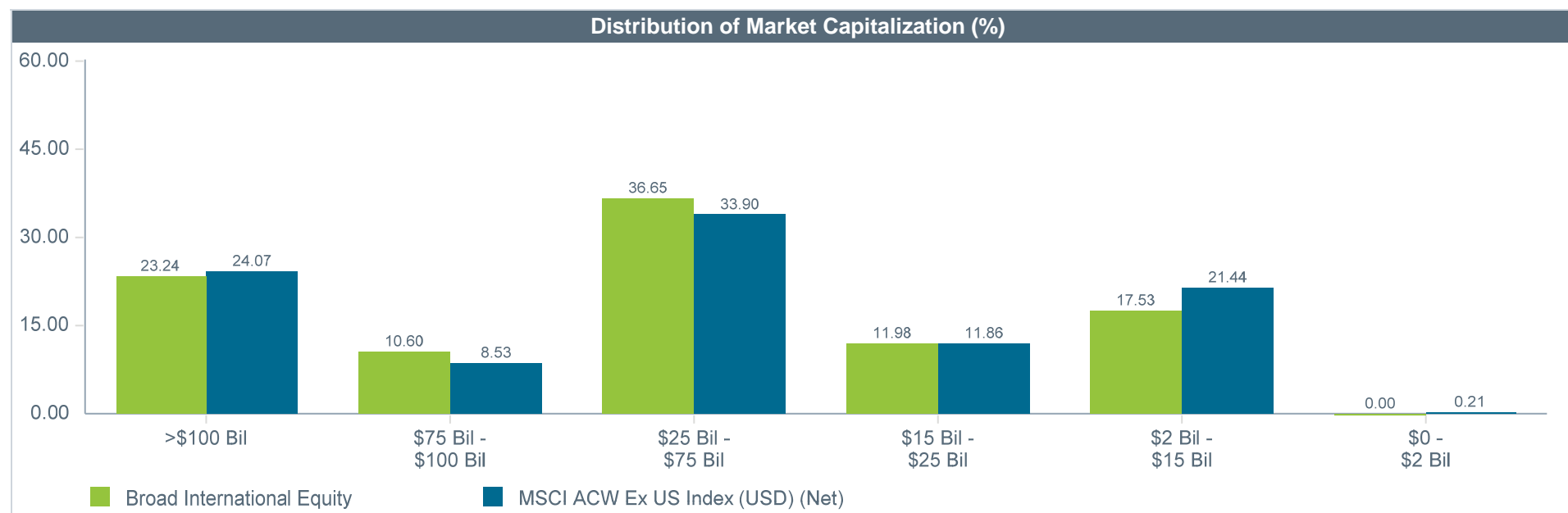
Allocation to "Other" consists Luxembourg.

North Dakota Board of University and School Lands  
Broad International Equity vs. MSCI ACW Ex US Index (USD) (Net)  
Portfolio Characteristics

As of September 30, 2021

Top Ten Equity Holdings				
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Nestle SA, Cham Und Vevey	1.87	1.31	0.56	-3.09
ASML Holding NV	1.68	1.18	0.50	8.97
Roche Holding AG	1.39	0.97	0.42	-2.80
Lvmh Moet Hennessy Louis Vuitton	1.07	0.75	0.32	-8.34
Toyota Motor Corp	1.01	0.72	0.29	7.41
Astrazeneca PLC	0.98	0.70	0.28	1.65
Novartis AG	0.98	0.69	0.29	-9.72
Novo Nordisk A/S	0.88	0.61	0.27	16.20
Shopify Inc	0.82	0.58	0.24	-7.07
Royal Bank of Canada	0.76	0.53	0.23	-0.82
% of Portfolio	11.44	8.04	3.40	

Portfolio Characteristics		
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	75,668	91,439
Median Mkt. Cap (\$M)	9,949	10,100
Price/Earnings Ratio	15.93	15.06
Price/Book Ratio	2.66	2.69
5 Yr. EPS Growth Rate (%)	12.65	13.36
Current Yield (%)	2.71	2.64
Beta (5 Years, Monthly)	1.03	1.00
Number of Securities	1,304	2,348

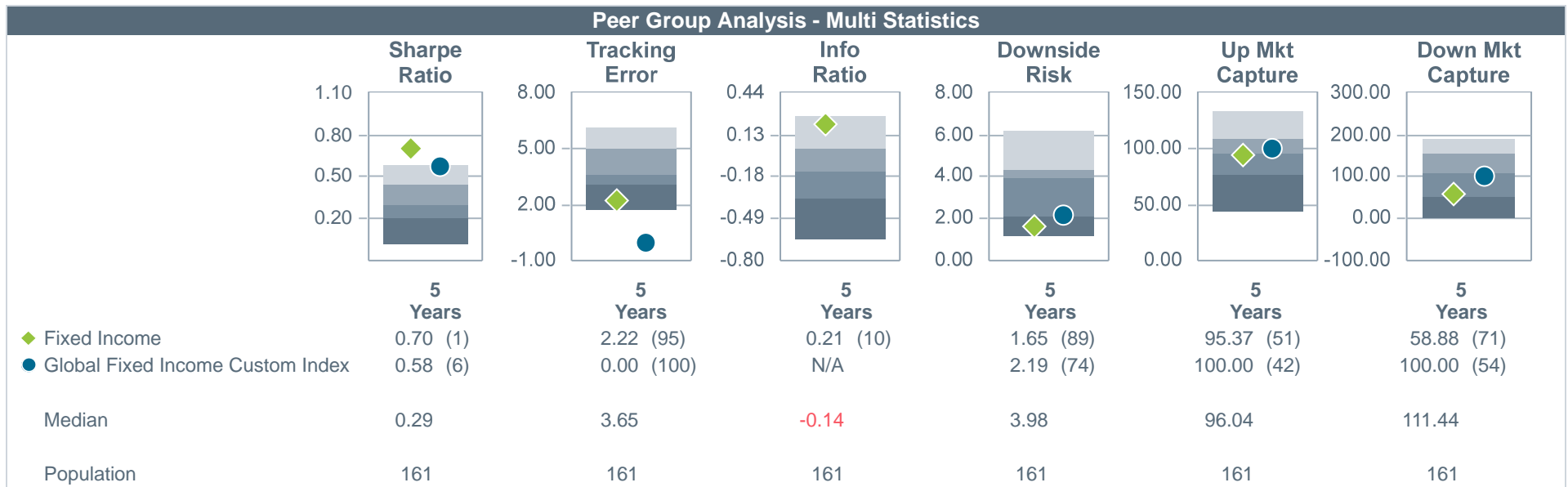
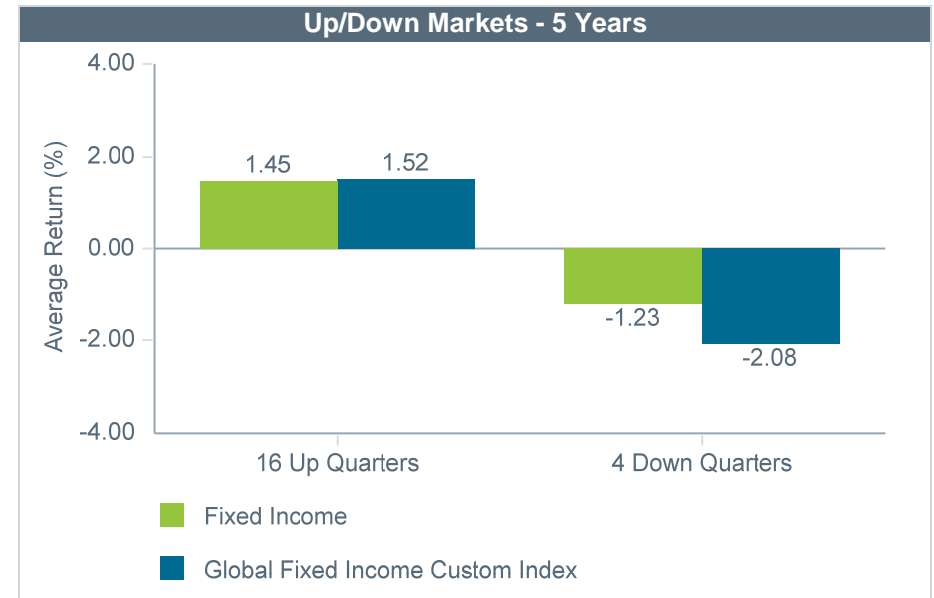
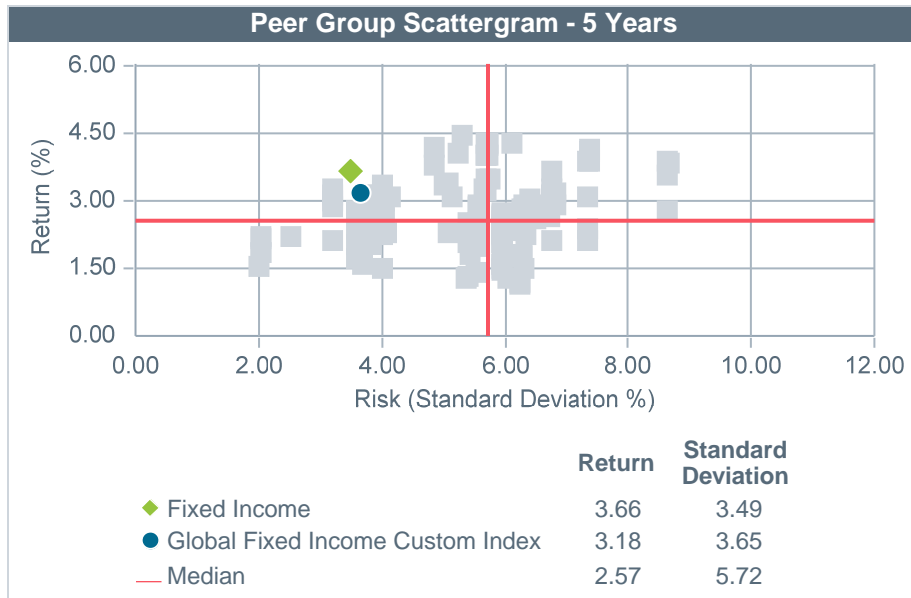


North Dakota Board of University and School Lands  
IM Global Fixed Income (MF)  
Peer Group Analysis

As of September 30, 2021



Performance shown is net of fees. Parentheses contain percentile ranks.



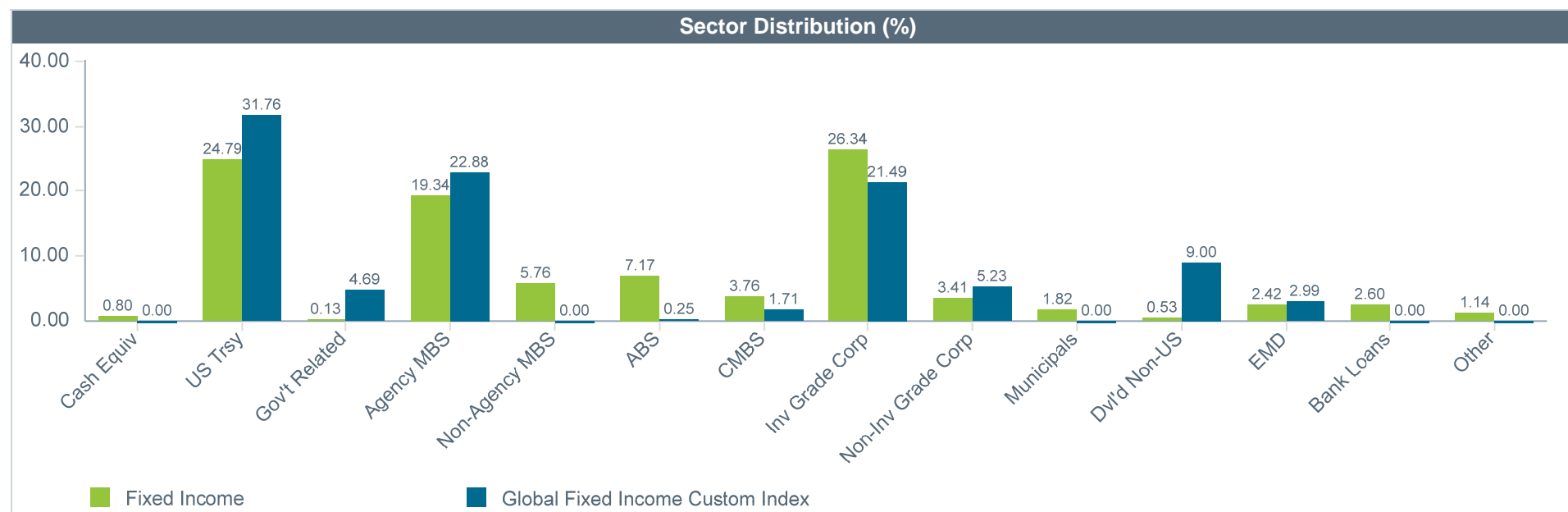
Performance shown is net of fees. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks.



North Dakota Board of University and School Lands  
Fixed Income vs. Global Fixed Income Custom Index  
Portfolio Characteristics

As of September 30, 2021

Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	5.85	6.49
Avg. Maturity	8.02	8.53
Avg. Quality	A2	N/A
Coupon Rate (%)	2.73	2.82
Yield To Worst (%)	1.97	1.89
Current Yield (%)	2.83	N/A



FLP Bank Loans, AG Direct Lending Fund III LP, AG Direct Lending Fund IV LP, ND Land - PTF Cash (SA), Schrodgers Flexible Secured Income and Ares Pathfinder Fund LP are excluded from portfolio characteristics and sector distribution. Allocation to "Other" consists of CDOs and Convertibles.

North Dakota Board of University and School Lands  
Alternative Investment Fund Performance Listing

As of September 30, 2021

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
AG Direct Lending Fund III, LP	2018	Private Credit - Direct Lending	150,000,000	138,000,000	21,807,386	151,211,661	10.87	N/A	4.62	1.25
AG Direct Lending Fund IV, LP	2020	Private Credit - Direct Lending	100,000,000	43,148,632	573,704	45,764,008	N/M	N/A	N/M	1.07
Apollo Accord Fund IV, L.P.	2020	Private Credit - Opportunistic Credit	100,000,000	18,500,000	3,287,460	17,869,578	33.68	N/A	-0.02	1.14
Ares Pathfinder Fund, LP	2020	Private Credit - Specialty Finance	100,000,000	25,594,154	308,151	31,854,111	N/M	N/A	N/M	1.26
Varde Dislocation Fund, LP	2020	Private Credit - Distressed/Special Situations	100,000,000	50,000,000	100,849	57,914,165	22.71	N/A	-0.03	1.16
Grosvenor - BUSL, LP	2021	Private Equity - Multi-Stage	130,000,000	14,891,938	0	15,993,977	N/M	N/A	N/M	1.07
			<b>680,000,000</b>	<b>290,134,724</b>	<b>26,077,549</b>	<b>320,607,499</b>	<b>14.29</b>		<b>3.94</b>	<b>1.19</b>

Certain valuations (marked with a \*\*) are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the Bloomberg US Agg Bond Index assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.

# Investment Manager Profiles



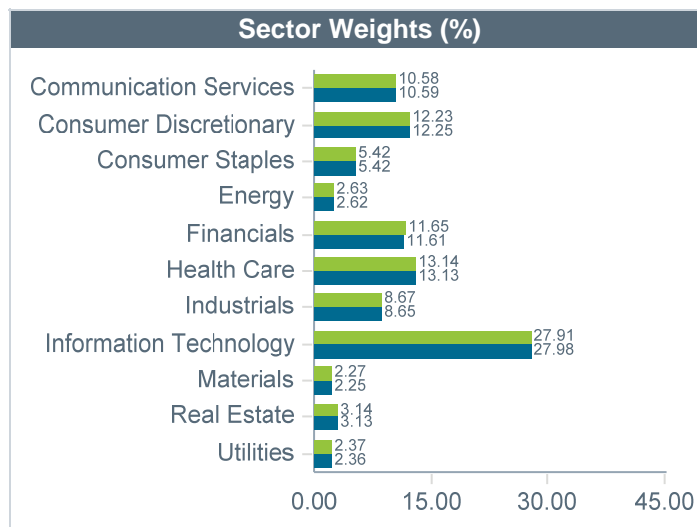
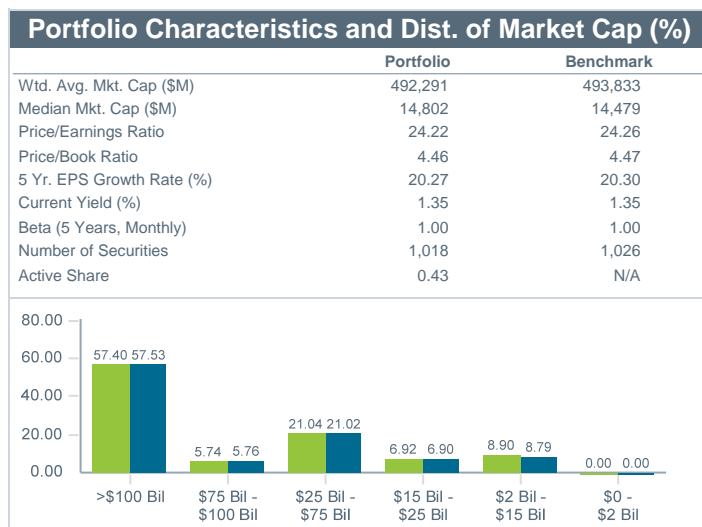
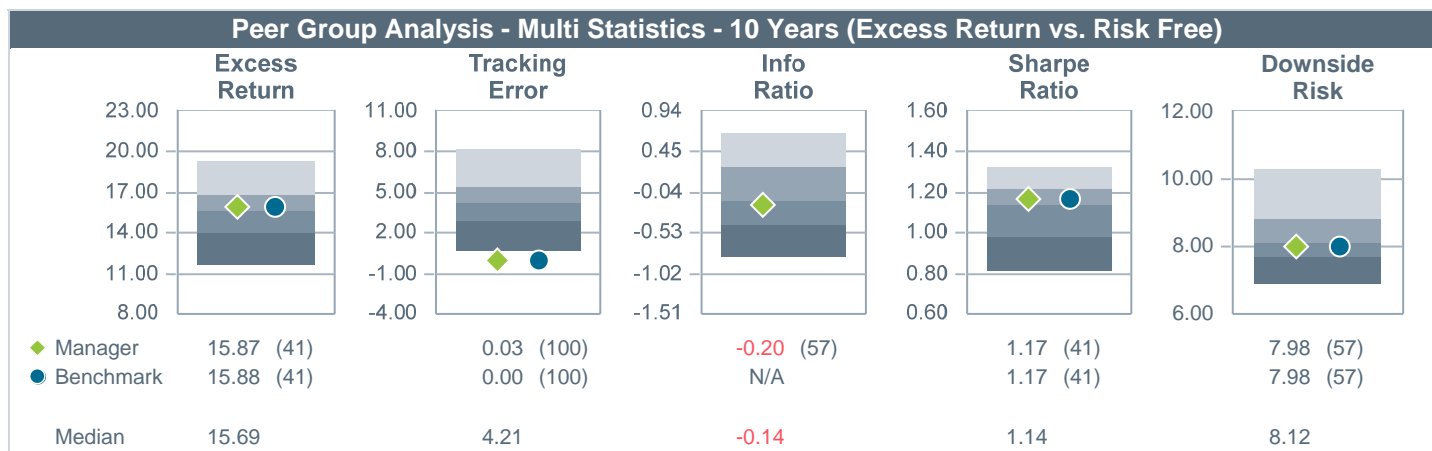
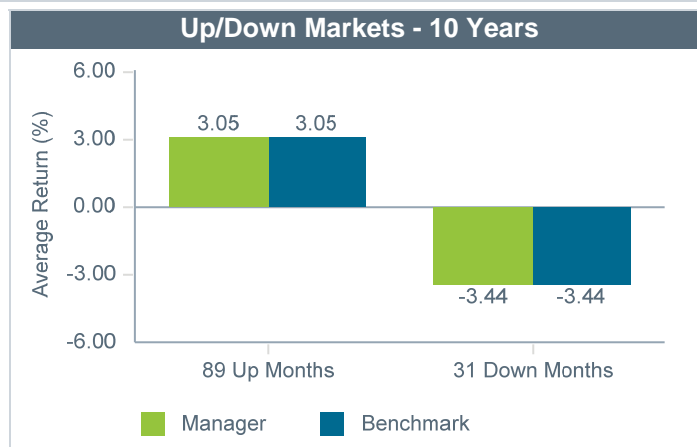
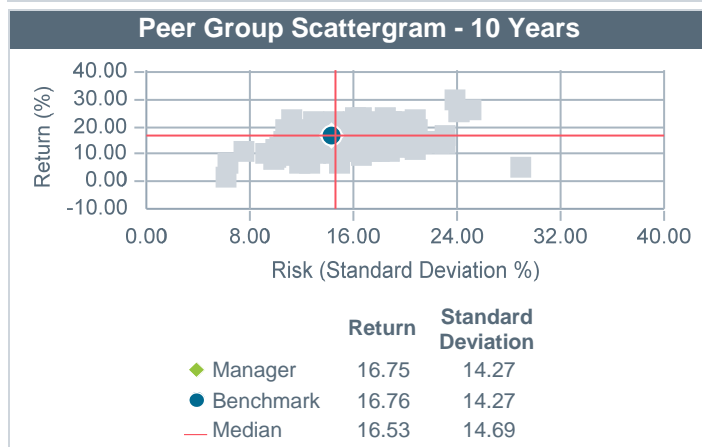
Manager: State Street Russell 1000 Index Lending (CF)

As of September 30, 2021

Benchmark: Russell 1000 Index

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.21	30.95	16.41	17.11	14.09	16.75	20.91	31.42	-4.77	21.70	12.03
Benchmark	0.21	30.96	16.43	17.11	14.09	16.76	20.96	31.43	-4.78	21.69	12.05
Difference	0.00	-0.01	-0.02	0.00	0.00	-0.01	-0.05	-0.01	0.01	0.01	-0.02
Peer Group Median	0.13	30.87	15.68	16.72	13.69	16.53	17.99	30.25	-5.00	21.73	11.07
Rank	47	50	39	40	39	40	37	40	48	51	40
Population	803	796	784	765	741	685	903	978	1,052	1,104	1,180



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

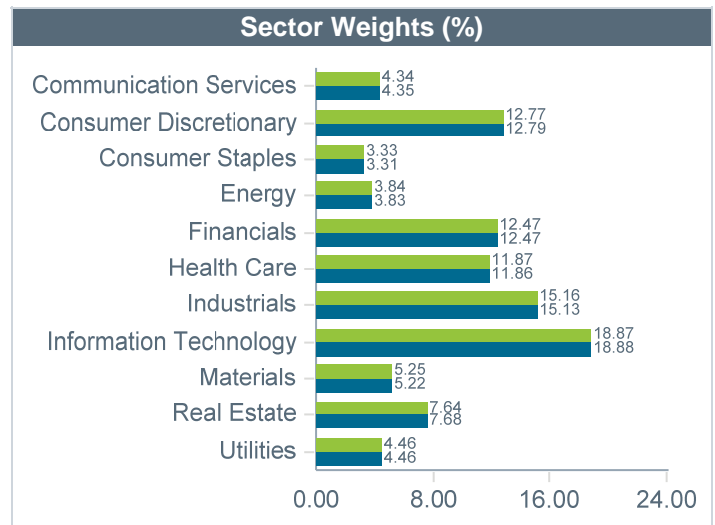
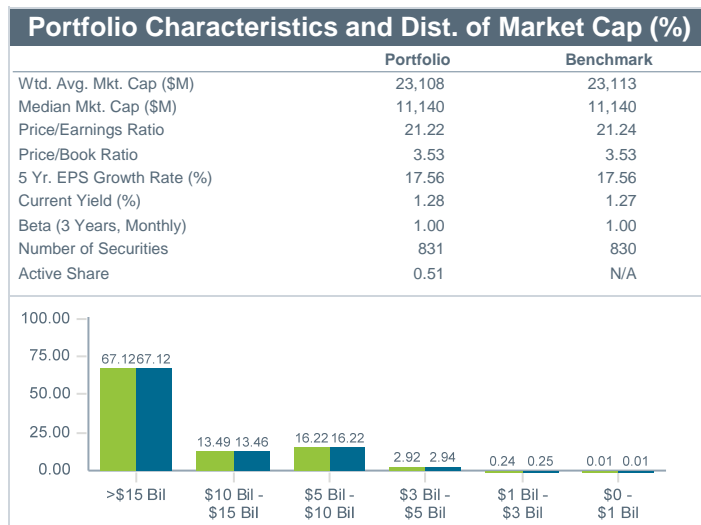
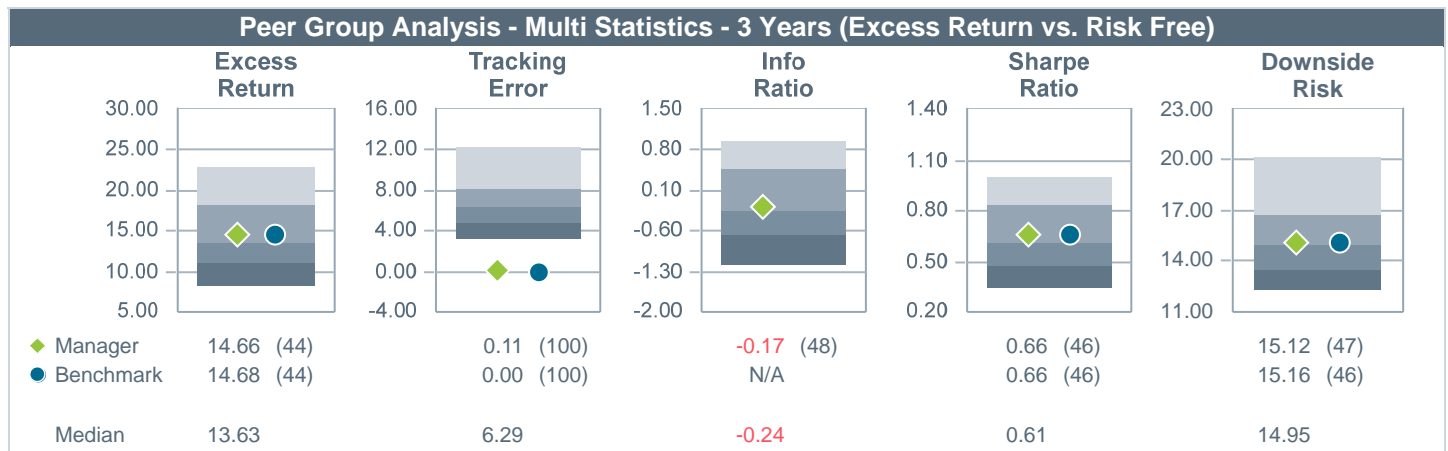
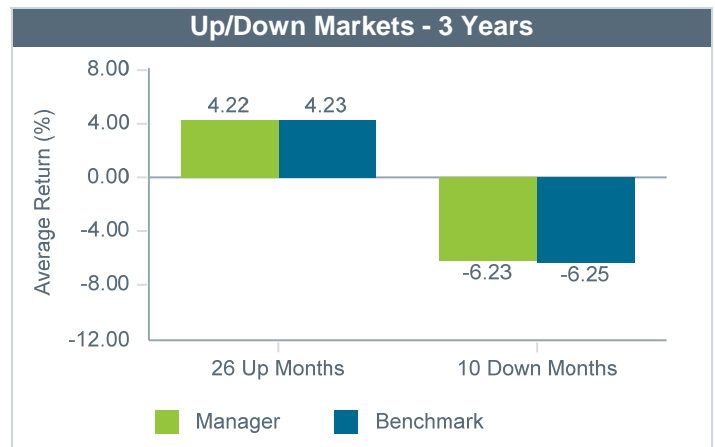
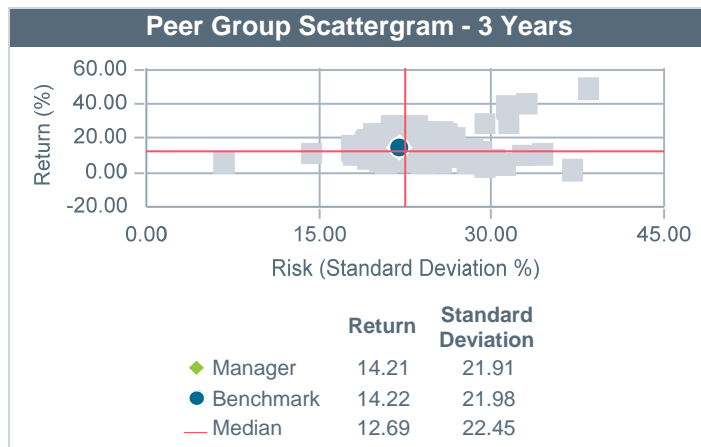
Manager: State Street Russell Mid Cap Index (SA)

As of September 30, 2021

Benchmark: Russell Mid Cap Index

Peer Group: IM U.S. Mid Cap Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.92	38.05	14.21	N/A	N/A	N/A	17.05	30.38	-8.97	N/A	N/A
Benchmark	-0.93	38.11	14.22	14.39	12.15	15.52	17.10	30.54	-9.06	18.52	13.80
Difference	0.01	-0.06	-0.01	N/A	N/A	N/A	-0.05	-0.16	0.09	N/A	N/A
Peer Group Median	-0.44	36.48	12.69	13.93	12.08	14.90	17.12	30.27	-9.95	18.68	11.46
Rank	60	45	44	N/A	N/A	N/A	51	49	44	N/A	N/A
Population	871	829	782	704	608	509	831	851	886	856	794



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



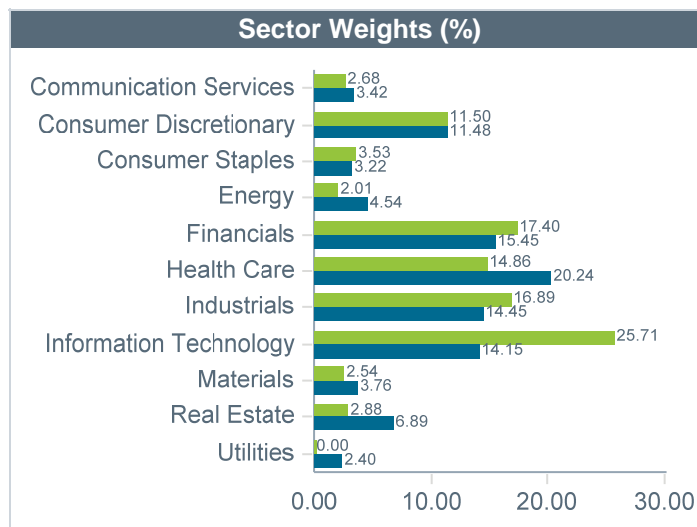
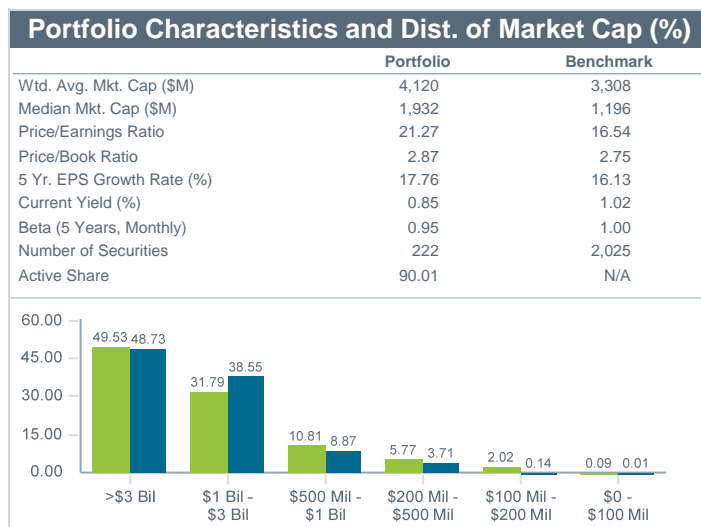
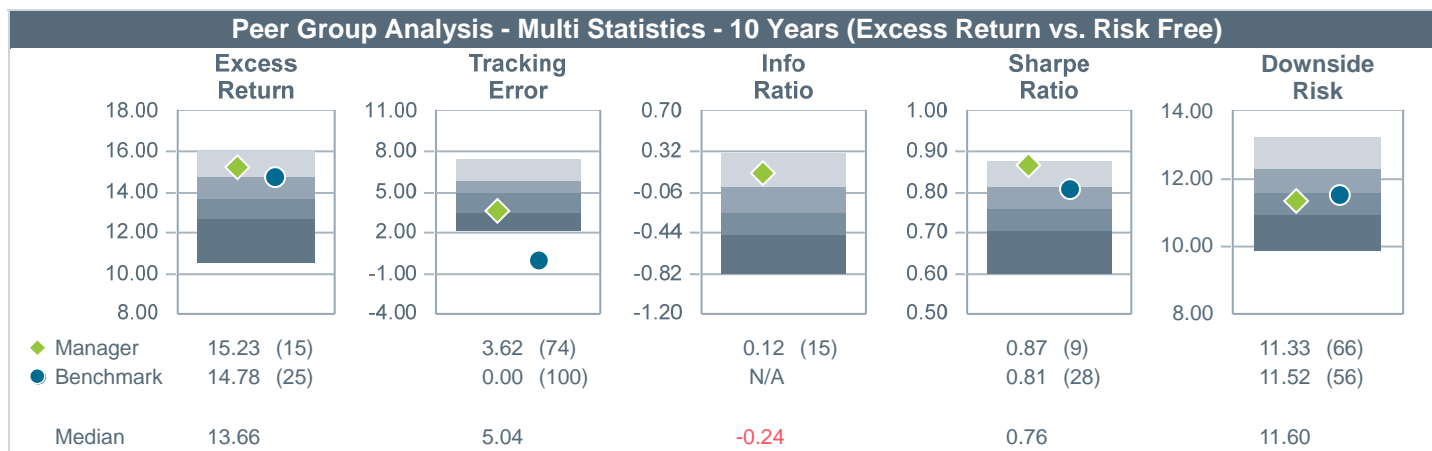
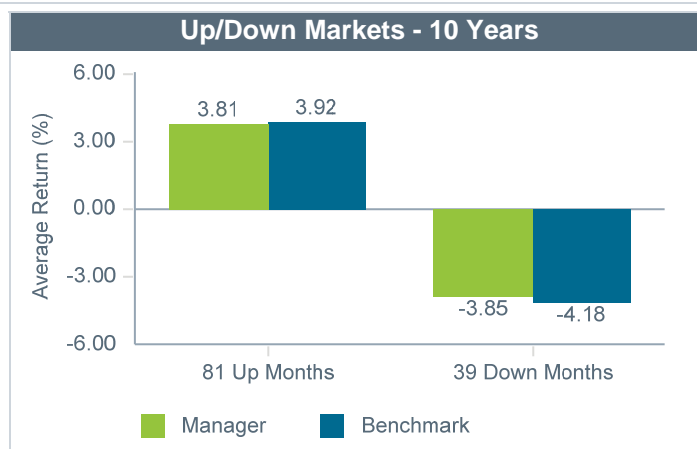
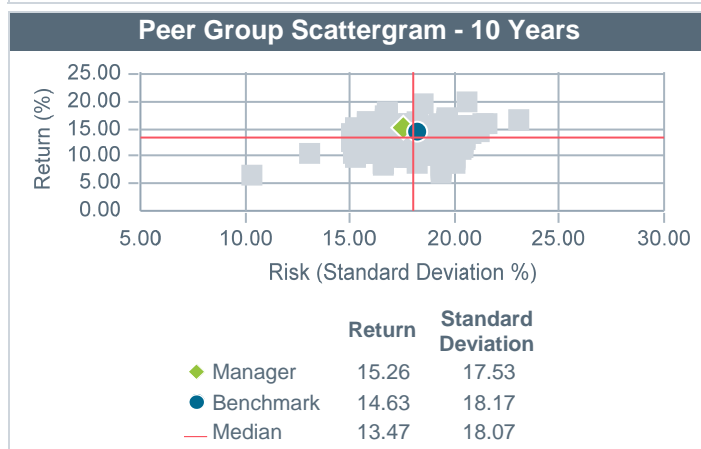
Manager: NT Small Cap Core (SA)

As of September 30, 2021

Benchmark: Russell 2000 Index

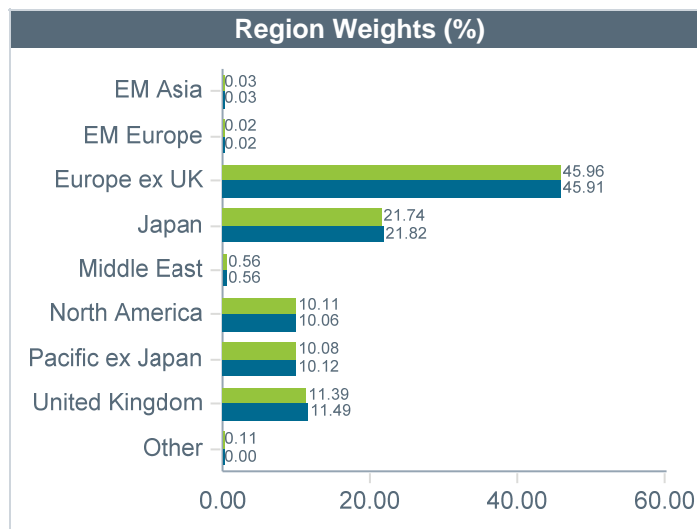
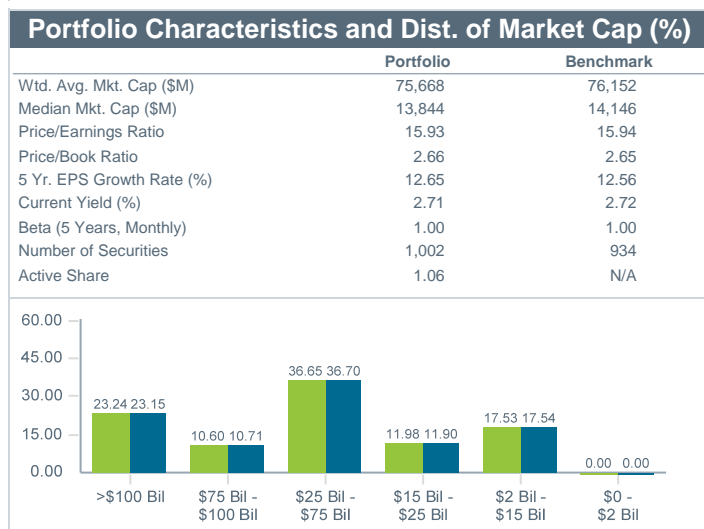
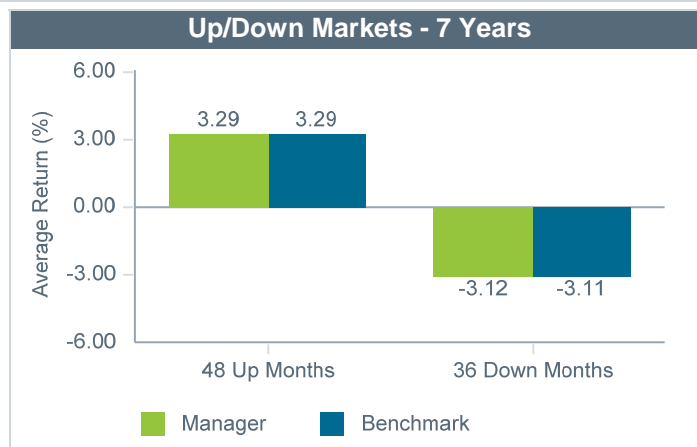
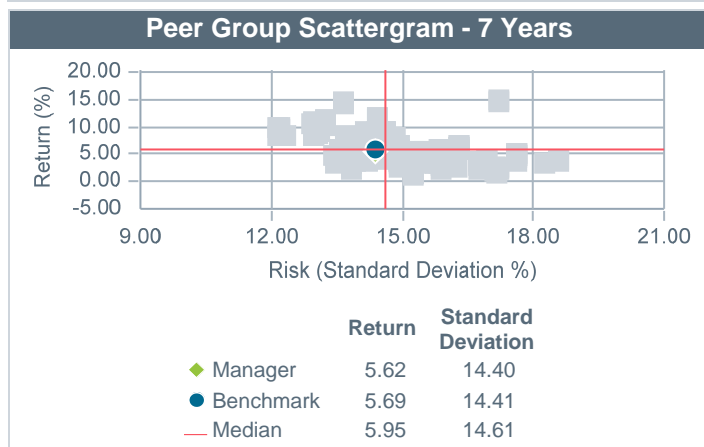
Peer Group: IM U.S. Small Cap Core Equity (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.33	52.21	12.90	16.58	13.59	15.26	23.90	23.13	-7.63	21.82	18.20
Benchmark	-4.36	47.68	10.54	13.45	11.90	14.63	19.96	25.53	-11.01	14.65	21.31
Difference	4.69	4.53	2.36	3.13	1.69	0.63	3.94	-2.40	3.38	7.17	-3.11
Peer Group Median	-2.28	49.87	9.14	11.82	10.42	13.47	10.36	23.89	-12.66	12.38	21.34
Rank	8	40	9	2	2	12	8	59	7	2	79
Population	752	736	700	621	518	428	759	778	816	812	743



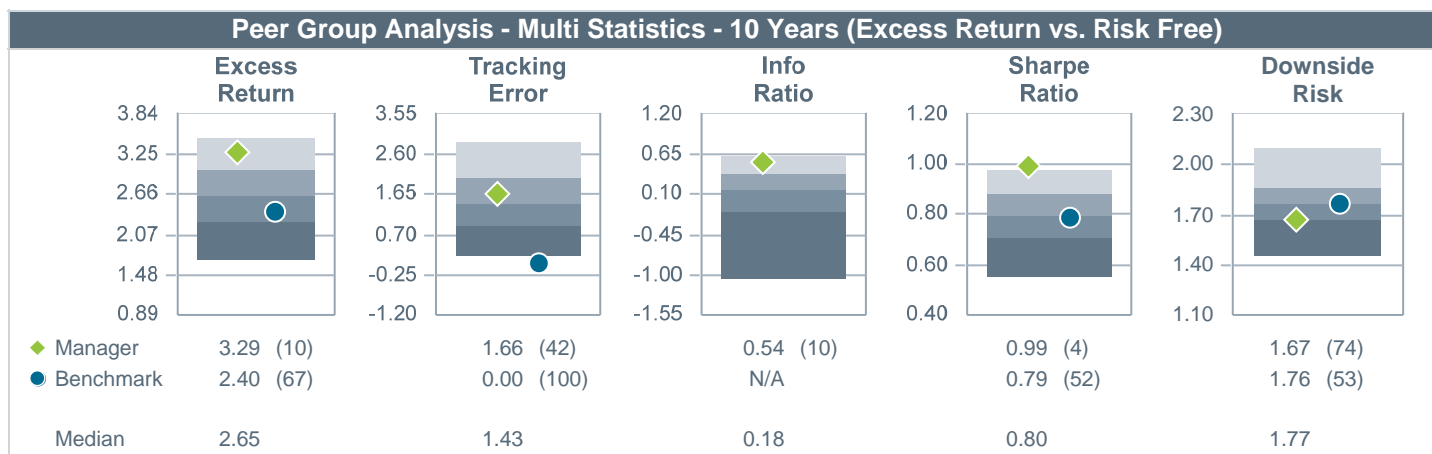
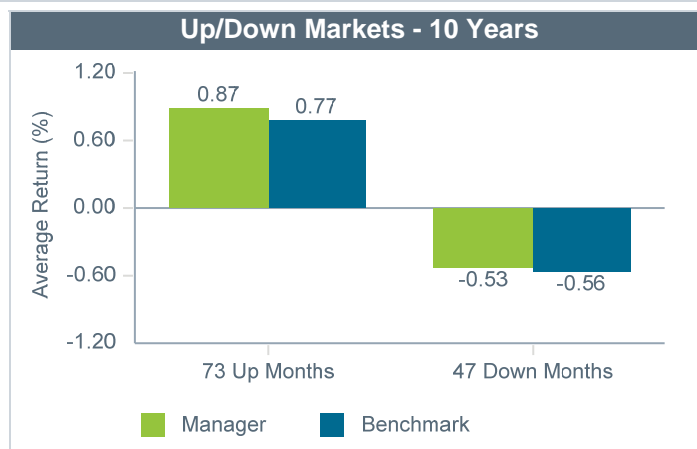
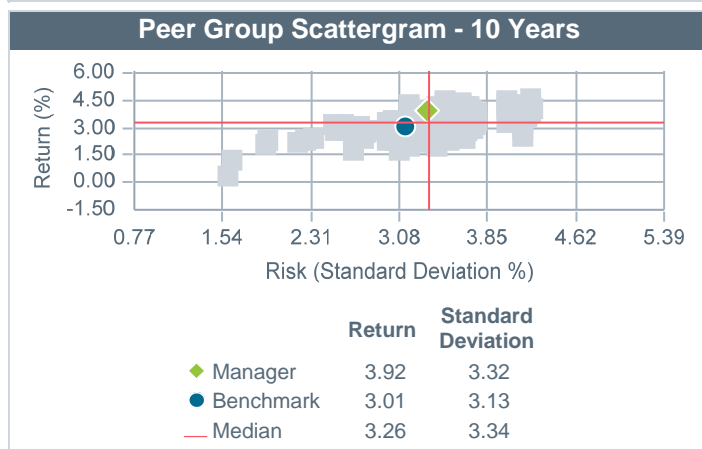
Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.65	26.50	7.81	8.82	5.62	N/A	7.52	22.38	-14.16	24.15	2.66
Benchmark	-0.66	26.50	7.87	8.88	5.69	7.88	7.59	22.49	-14.09	24.21	2.75
Difference	0.01	0.00	-0.06	-0.06	-0.07	N/A	-0.07	-0.11	-0.07	-0.06	-0.09
Peer Group Median	-1.61	22.81	9.73	9.48	5.95	7.99	14.65	25.94	-15.18	26.76	0.10
Rank	23	30	66	59	56	N/A	76	73	38	70	16
Population	379	359	299	245	213	187	345	326	316	294	265

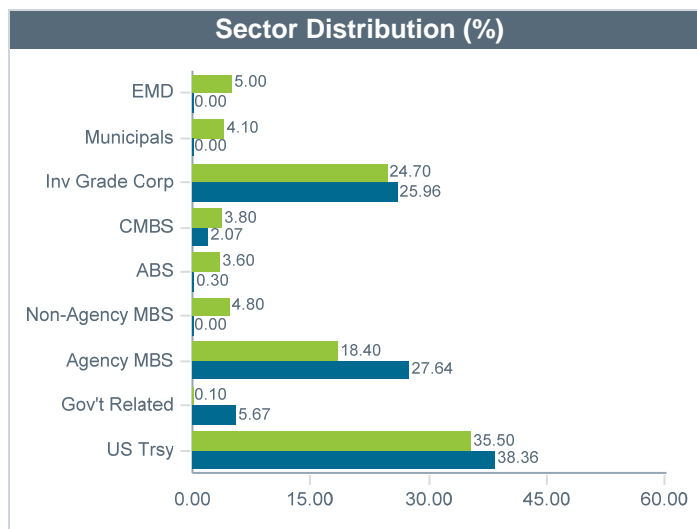


Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "Other" consists of Luxembourg.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.15	0.70	5.66	3.68	3.81	3.92	7.58	9.42	0.16	4.99	3.83
Benchmark	0.05	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	3.54	2.65
Difference	0.10	1.60	0.31	0.74	0.55	0.91	0.07	0.70	0.15	1.45	1.18
Peer Group Median	0.03	0.18	5.58	3.17	3.27	3.26	8.19	8.76	-0.63	3.59	2.86
Rank	21	30	46	18	13	10	70	30	12	6	21
Population	502	490	465	411	351	305	488	511	506	498	469



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.24	6.71
Spread Duration	4.02	N/A
Avg. Maturity	8.43	8.63
Avg. Quality	Aa3	Aa1/Aa2
Yield To Maturity (%)	1.81	1.57
Coupon Rate (%)	2.74	2.48
Current Yield (%)	2.54	N/A
Holdings Count	260	12,226



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

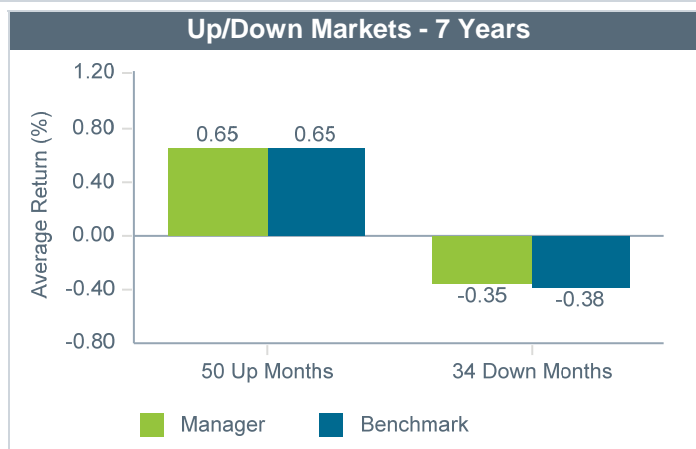
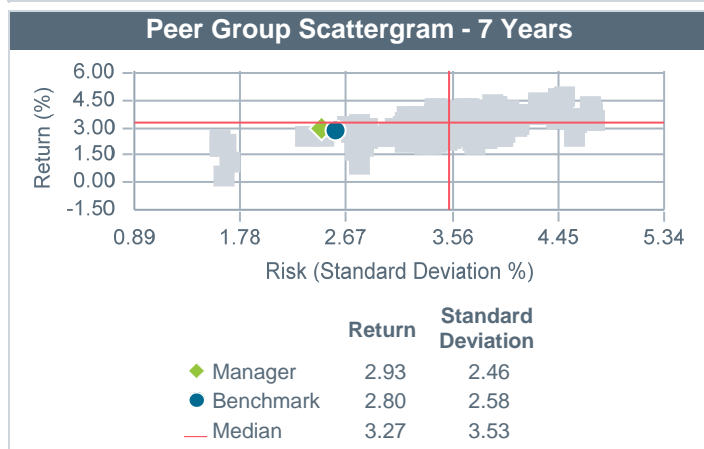
Manager: JP Morgan Core Bond (SA)

As of September 30, 2021

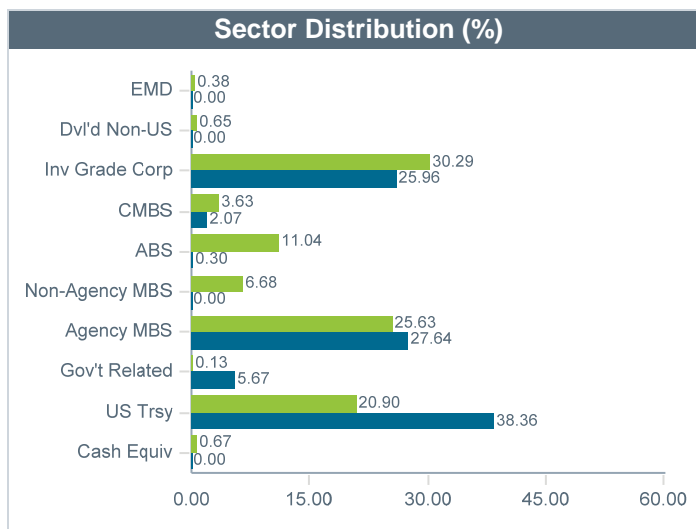
Benchmark: JP Morgan FI Custom Index

Peer Group: IM U.S. Broad Market Core Fixed Income (MF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.07	0.24	4.70	2.82	2.93	N/A	6.31	6.70	1.01	2.71	1.88
Benchmark	0.05	-0.01	4.77	2.68	2.80	2.56	6.43	6.80	0.88	2.14	2.08
Difference	0.02	0.25	-0.07	0.14	0.13	N/A	-0.12	-0.10	0.13	0.57	-0.20
Peer Group Median	0.03	0.18	5.58	3.17	3.27	3.26	8.19	8.76	-0.63	3.59	2.86
Rank	39	48	91	74	75	N/A	92	93	3	88	91
Population	502	490	465	411	351	305	488	511	506	498	469



Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	6.01	6.71
Spread Duration	3.95	N/A
Avg. Maturity	7.96	8.63
Avg. Quality	A2	Aa1/Aa2
Yield To Maturity (%)	1.75	1.57
Coupon Rate (%)	2.35	2.48
Current Yield (%)	2.84	N/A
Holdings Count	2,819	12,226



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

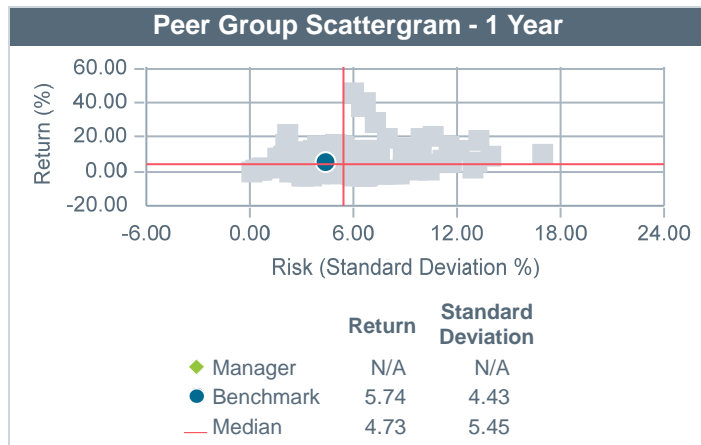
Manager: Loomis Sayles Credit Asset (SA)

As of September 30, 2021

Benchmark: Loomis Sayles CA Custom Index

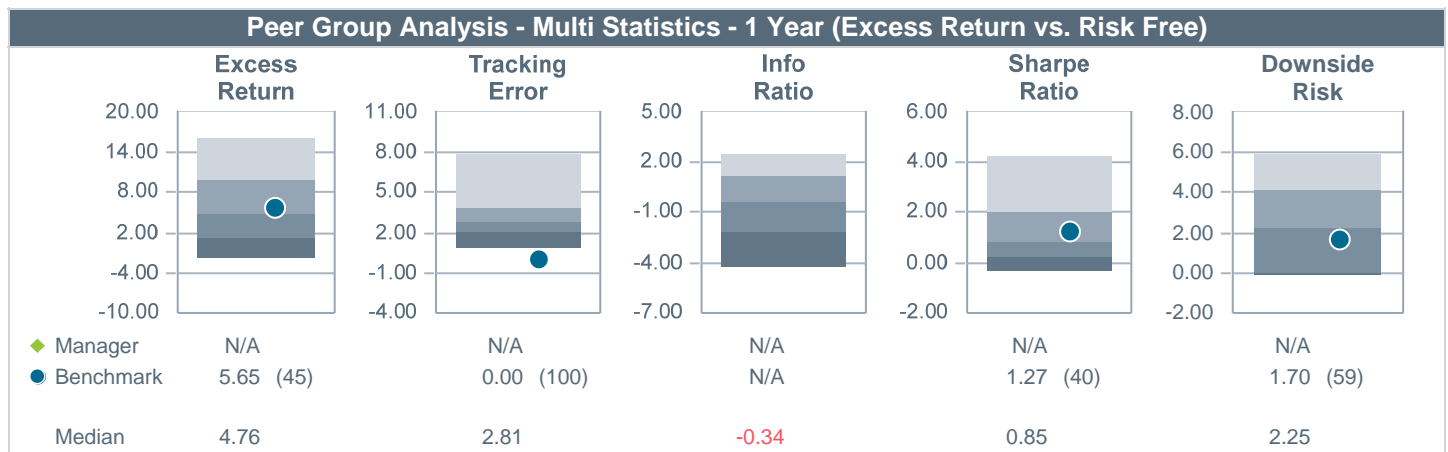
Peer Group: IM Global Fixed Income (SA+CF)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	0.75	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Benchmark	0.50	5.74	6.53	5.11	4.92	5.55	7.54	13.03	-1.64	6.11	9.83
Difference	0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Peer Group Median	-0.02	4.73	5.53	4.52	3.90	3.95	8.42	9.47	-1.73	7.57	6.13
Rank	23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Population	192	192	186	182	168	130	216	236	253	261	275

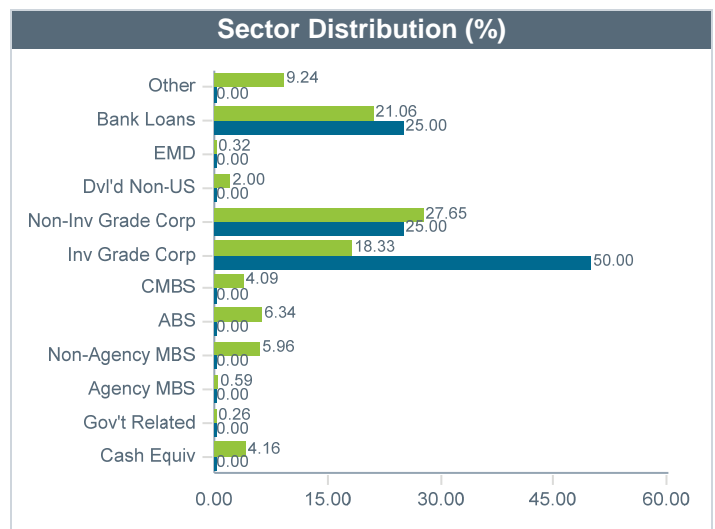


**Up/Down Markets - 1 Year**

Data is currently unavailable.



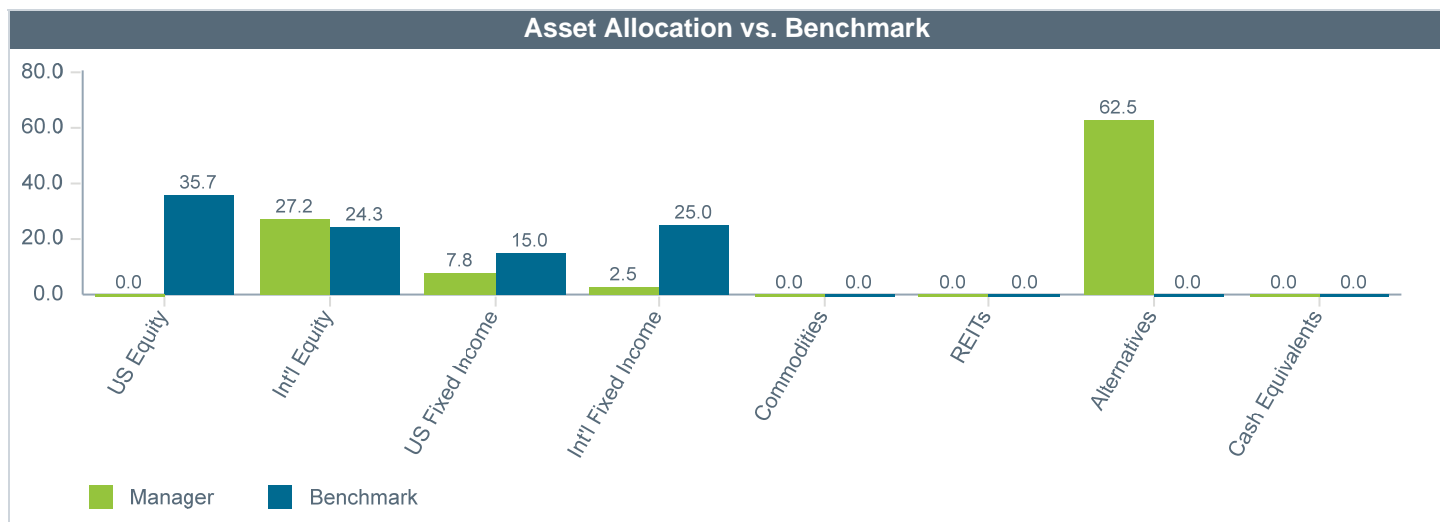
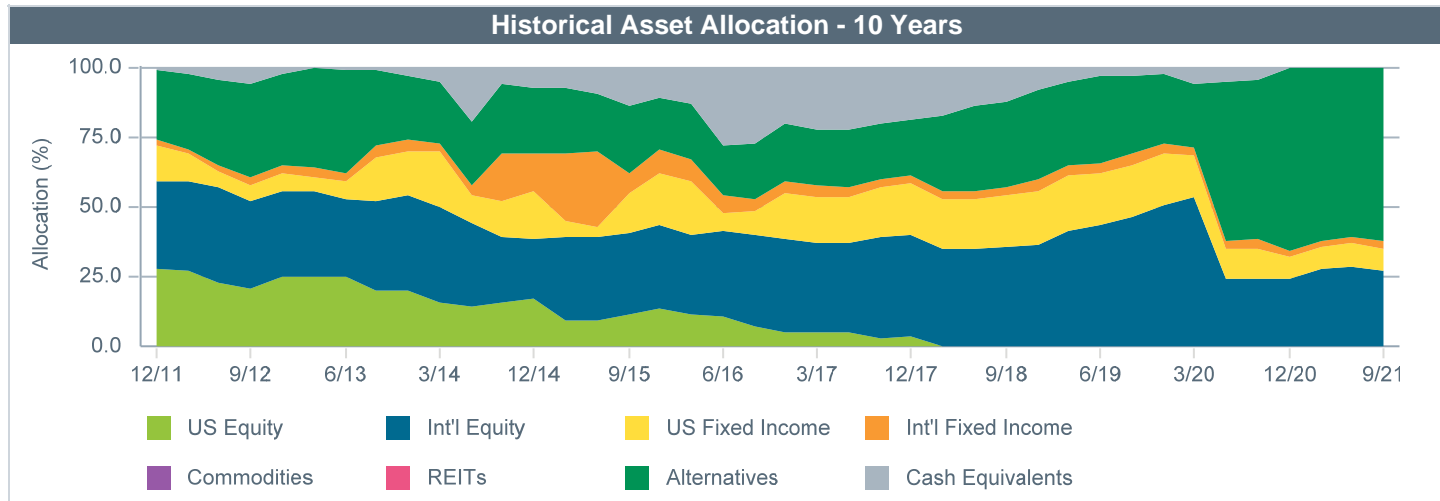
Portfolio Characteristics		
	Portfolio	Benchmark
Effective Duration	3.87	5.40
Spread Duration	5.06	N/A
Avg. Maturity	6.72	8.98
Avg. Quality	Ba1	Ba1
Yield To Maturity (%)	3.55	3.34
Coupon Rate (%)	4.04	4.21
Current Yield (%)	3.81	N/A
Holdings Count	1,176	10,353



Performance shown is gross of fees and product specific prior to client inception. Calculation is based on quarterly periodicity. Parentheses contain percentile ranks. Insufficient return data to calculate return statistic. Allocation to "Other" consists of Convertibles and CDO.



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-2.01	8.99	2.57	3.61	2.48	4.34	-2.40	11.64	-5.27	13.07	3.45
Benchmark	-0.97	15.48	9.55	8.83	7.00	7.99	14.05	18.55	-6.00	17.09	5.69
Difference	-1.04	-6.49	-6.98	-5.22	-4.52	-3.65	-16.45	-6.91	0.73	-4.02	-2.24

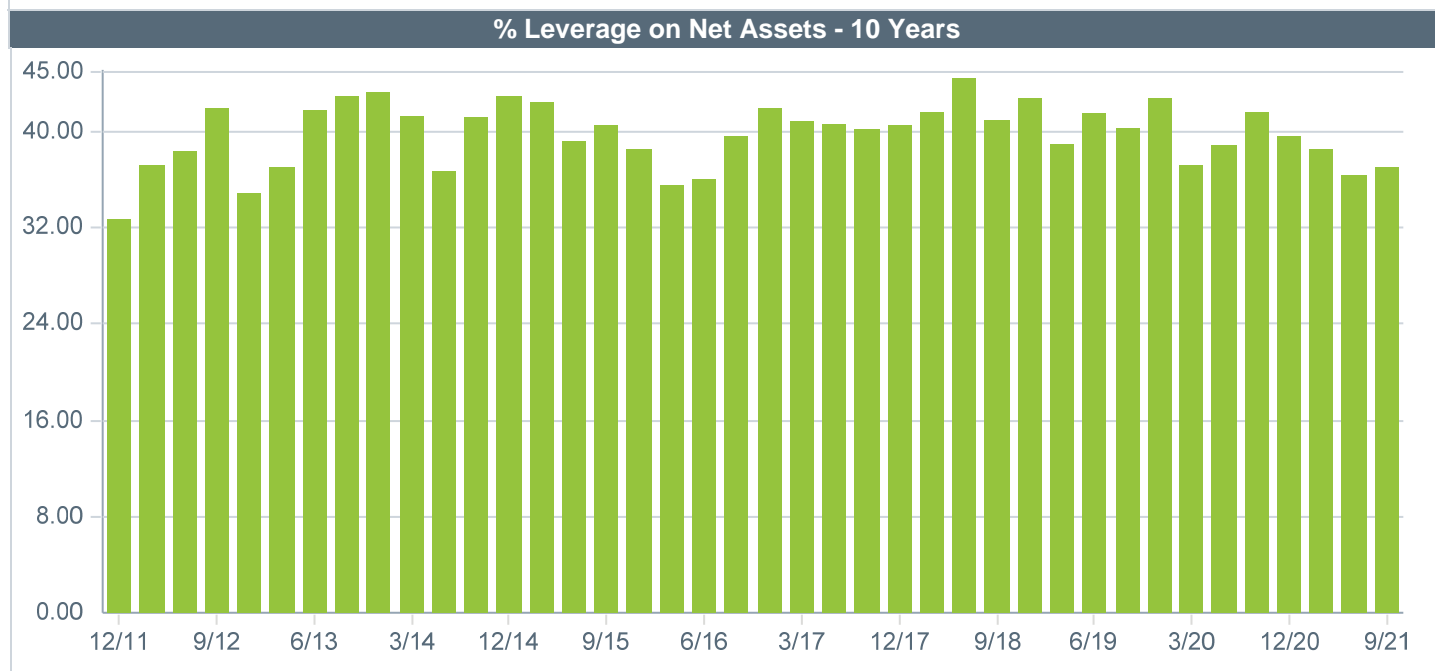
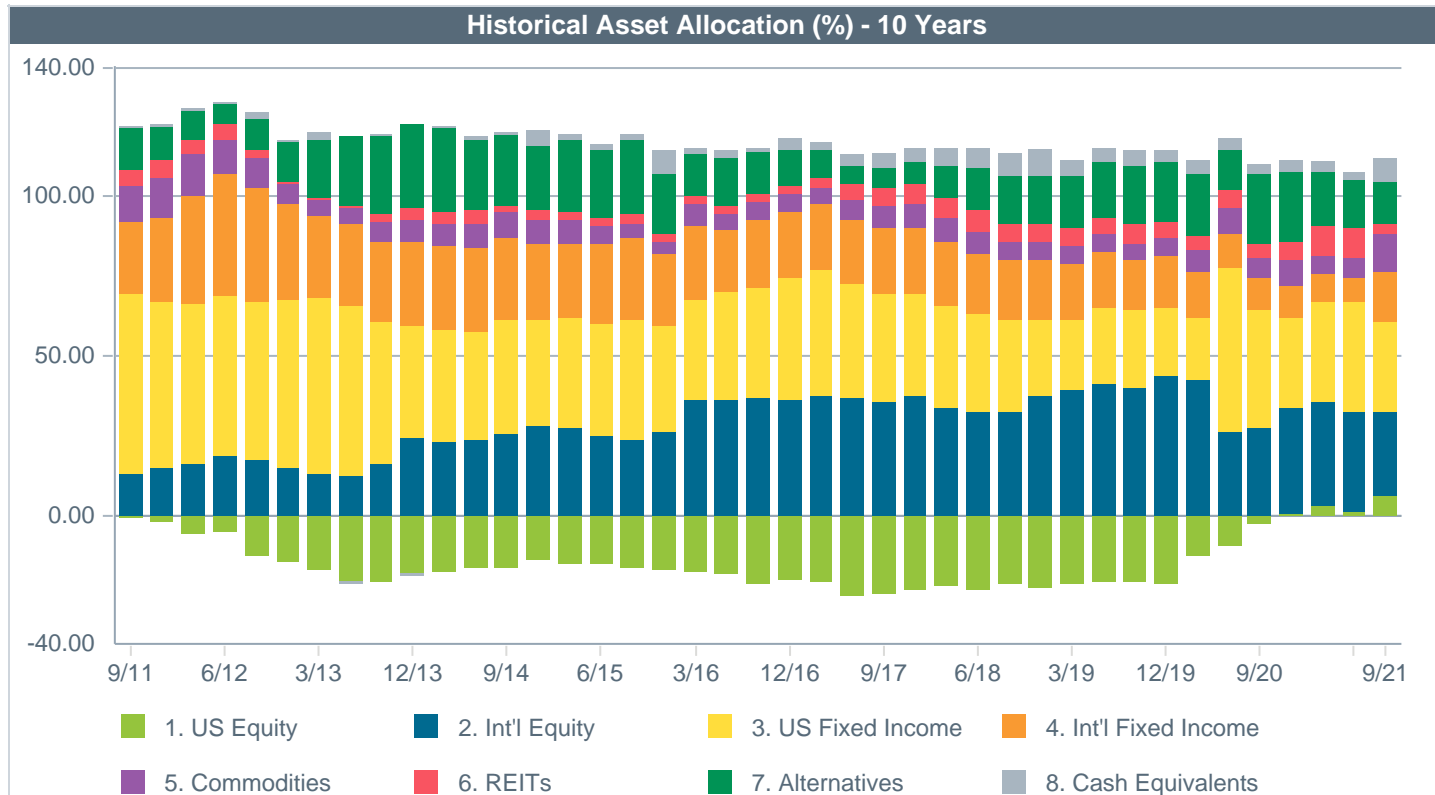


Historical Statistics - 10 Years					Actual Correlation - 10 Years	
	Manager	Benchmark	S&P 500 Index (Cap Wtd)	Bloomberg US Agg Bond Index		Actual Correlation
Standard Deviation	7.36	8.84	13.21	2.98	60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	0.87
Sharpe Ratio	0.53	0.84	1.19	0.81	S&P 500 Index (Cap Wtd)	0.80
Downside Risk	5.08	5.33	7.81	1.64	Russell 2000 Index	0.73
Excess Return	3.90	7.47	15.73	2.39	MSCI EAFE Index (USD) (Net)	0.85
					MSCI Emg Mkts Index (USD) (Net)	0.85
					Bloomberg US Agg Bond Index	0.06
					Bloomberg US Trsy US TIPS Index	0.24
					Wilshire US REIT Index	0.57
					HFRI FOF Comp Index	0.79
					Bloomberg Cmdty Index (TR)	0.53
					ICE BofAML 3 Mo US T-Bill Index	-0.22
					Cons Price Index (Unadjusted)	0.03

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Allocation to Int'l Eq includes Emg Mkts. Allocation to US Fixed Inc includes ABS/Struct'd Products and Hi Yld/Distr'd Debt. Allocation to Int'l Fixed Inc includes Emg Debt. Allocation to Alts includes Merger Arbitrage, Systematic Global Macro, Relative Value Interest Rates & FX (Global); Emg Mkts, Cyclical Focus and Special Opp vs. S&P 500; US Small Value vs. Russell 2000; Dvlp'd ex-US, Dvlp'd ex-US Small Value and ACWI ex-US Equity Ext vs. EAFE.

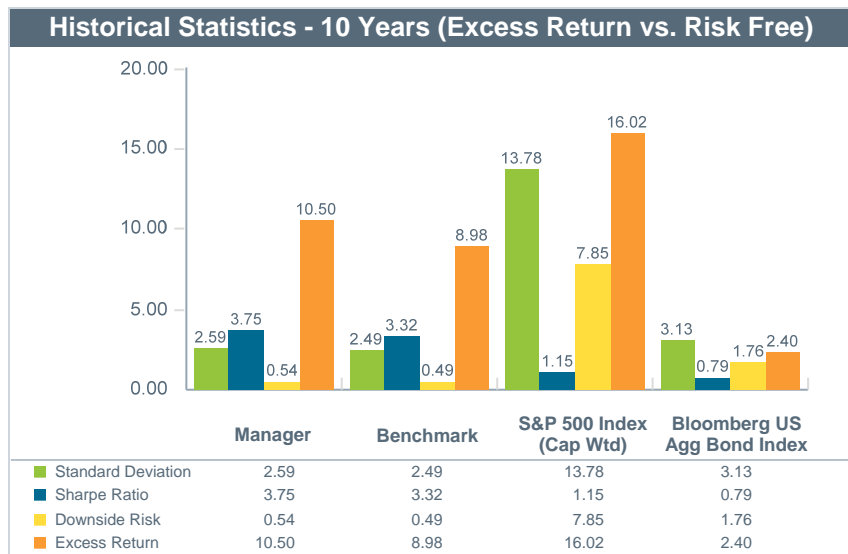


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	-0.87	26.61	7.34	5.61	3.49	4.24	4.59	7.62	-6.14	12.04	13.73
Benchmark	0.21	9.50	7.57	6.61	5.59	6.13	9.89	12.97	-1.62	8.94	6.47
Difference	-1.08	17.11	-0.23	-1.00	-2.10	-1.89	-5.30	-5.35	-4.52	3.10	7.26



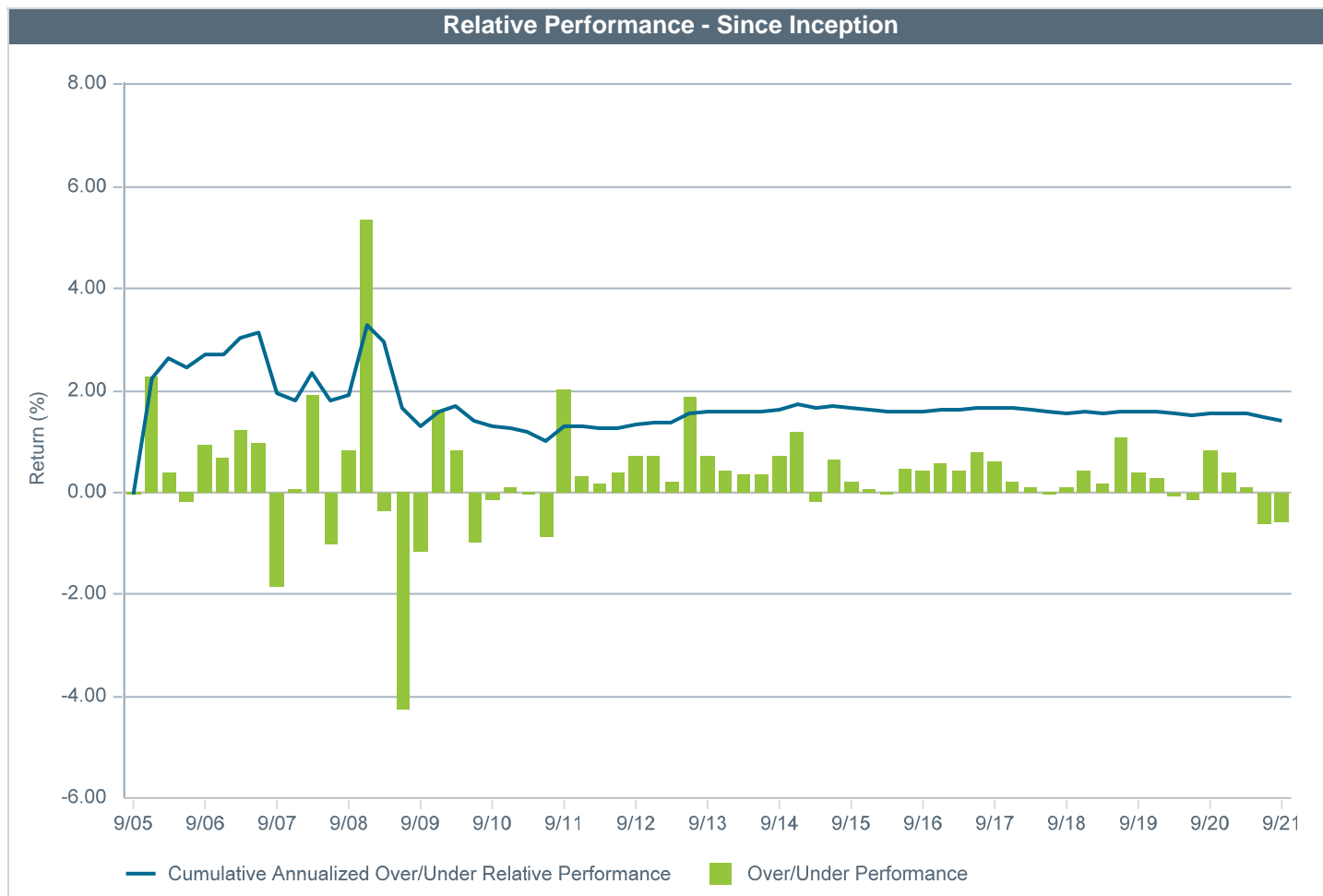
Performance shown is net of fees and product specific. Manager may use leverage up to one-half of net assets. This is accomplished through a line of credit from external banks, the proceeds of which are used to gain incremental exposure to the desired underlying fund(s). Current gross exposures sum to 136.97% due to the use of 36.97% leverage on net assets. Historical Commodities and REITs allocations shown are available at a one-quarter lag due to the disclosure guidelines set by the investment manager for the underlying fund strategies. Please see the Addendum for custom index definition.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	6.00	13.81	7.87	8.59	10.13	11.57	2.18	7.40	8.99	9.84	10.38
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	-0.63	-0.82	0.81	1.08	1.23	1.65	0.99	2.06	0.64	2.22	1.61



**Actual Correlation - 10 Years**

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.94
S&P 500 Index (Cap Wtd)	-0.19
Russell 2000 Index	-0.19
MSCI EAFE Index (USD) (Net)	-0.16
MSCI Emg Mkts Index (USD) (Net)	-0.34
Bloomberg US Agg Bond Index	-0.37
Bloomberg US Trsy US TIPS Index	-0.48
Wilshire US REIT Index	-0.04
HFRI FOF Comp Index	-0.20
Bloomberg Cmdb Index (TR)	-0.14
ICE BofAML 3 Mo US T-Bill Index	-0.44
Cons Price Index (Unadjusted)	-0.06



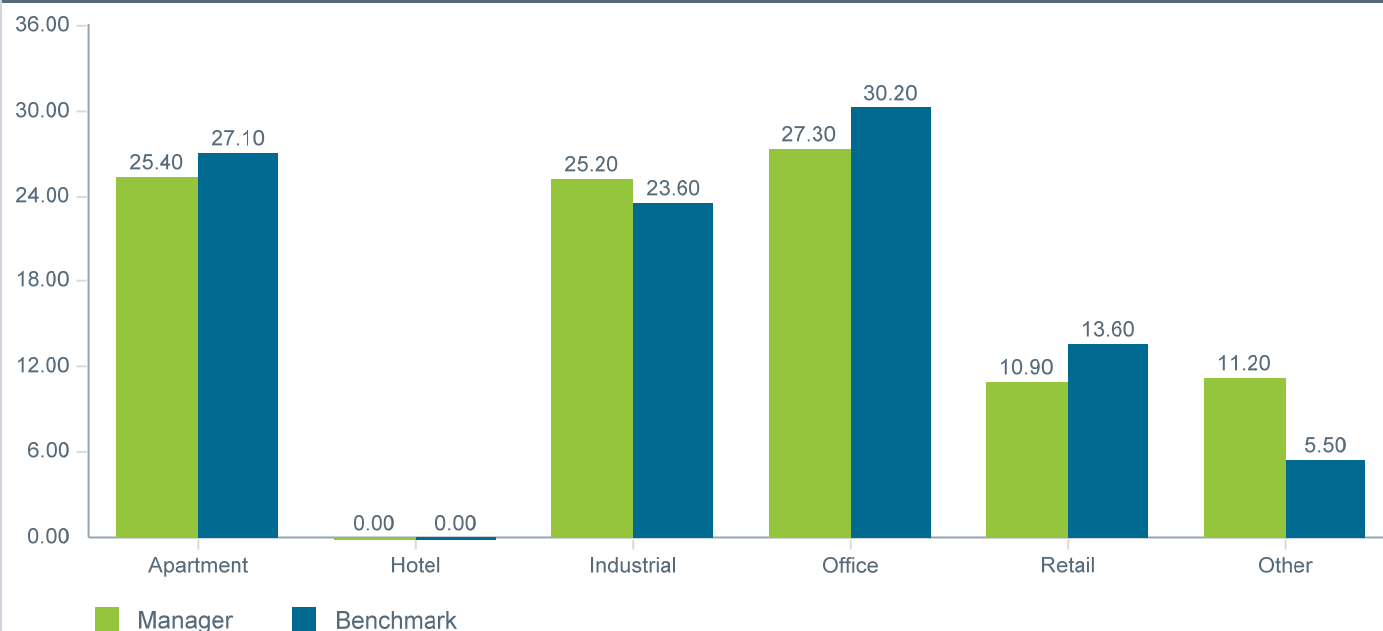
### Investment Strategy

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

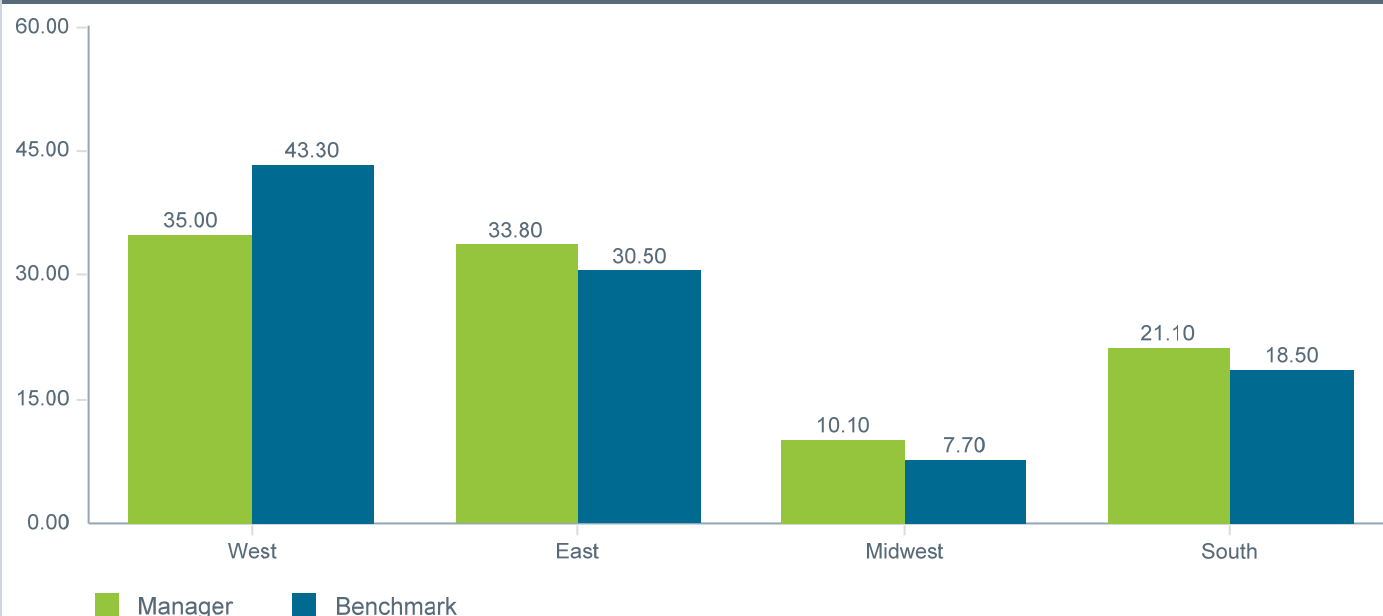
### Investment Profile

Fund Inception	1973
Legal Structure	LLC
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	35,163
Fund Leverage %	17.90
Portfolio Occupancy %	94.00
Cash Reserve %	0.50
Number of Investments	471
Number of Limited Partners	419

### Property Type Allocation (%)

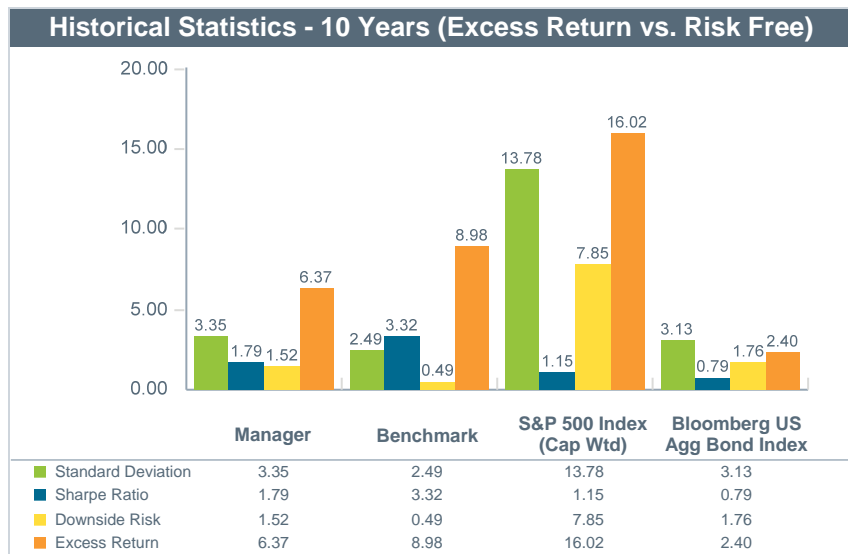


### Geographic Allocation (%)



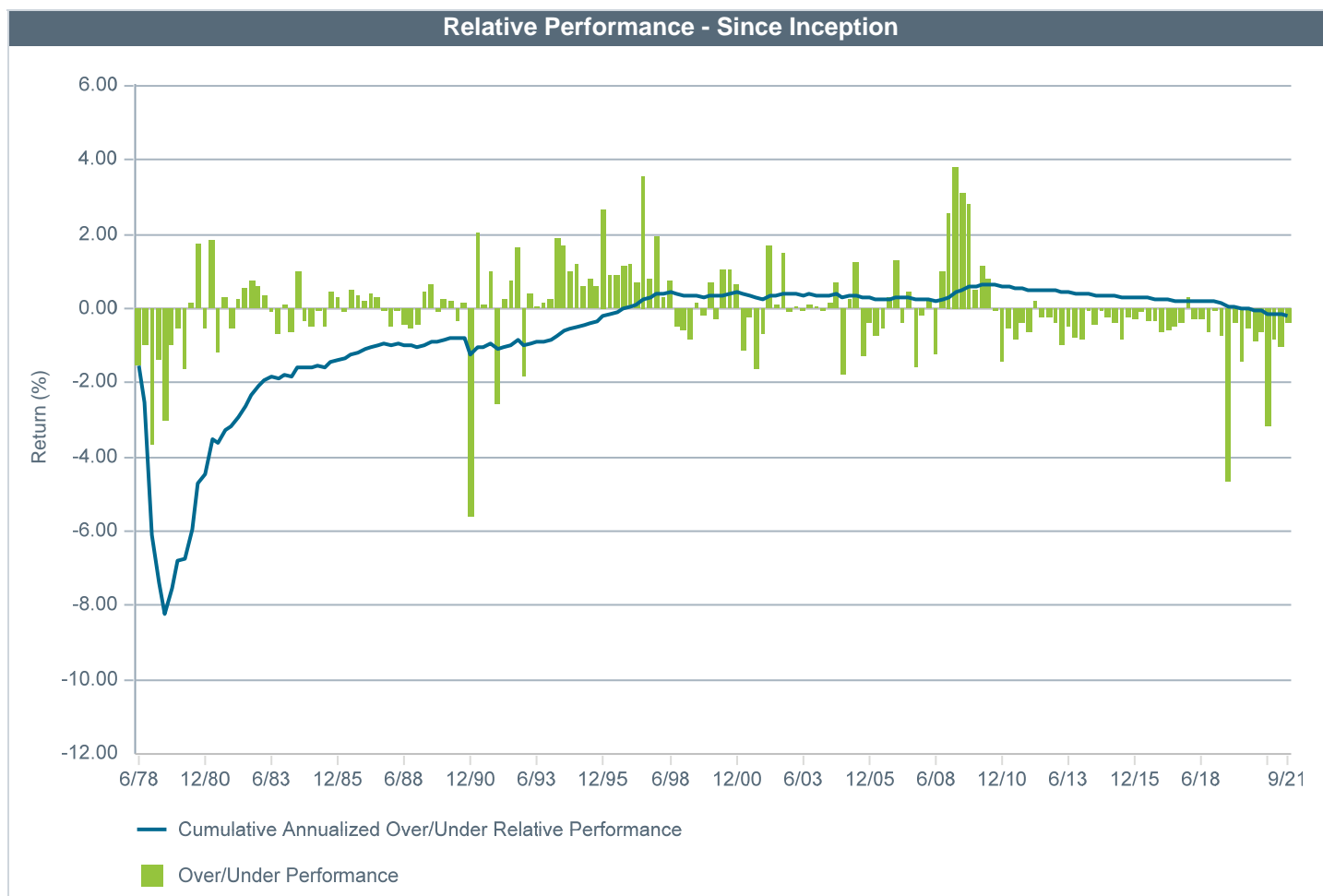
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	6.22	8.55	1.88	3.70	5.71	7.12	-4.04	-2.10	6.99	6.30	7.21
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	-0.41	-6.08	-5.18	-3.81	-3.19	-2.80	-5.23	-7.44	-1.36	-1.32	-1.56



**Actual Correlation - 10 Years**

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.87
S&P 500 Index (Cap Wtd)	-0.26
Russell 2000 Index	-0.32
MSCI EAFE Index (USD) (Net)	-0.28
MSCI Emg Mkts Index (USD) (Net)	-0.37
Bloomberg US Agg Bond Index	-0.29
Bloomberg US Trsy US TIPS Index	-0.31
Wilshire US REIT Index	-0.02
HFRI FOF Comp Index	-0.32
Bloomberg Cmnty Index (TR)	-0.15
ICE BofAML 3 Mo US T-Bill Index	-0.45
Cons Price Index (Unadjusted)	0.02



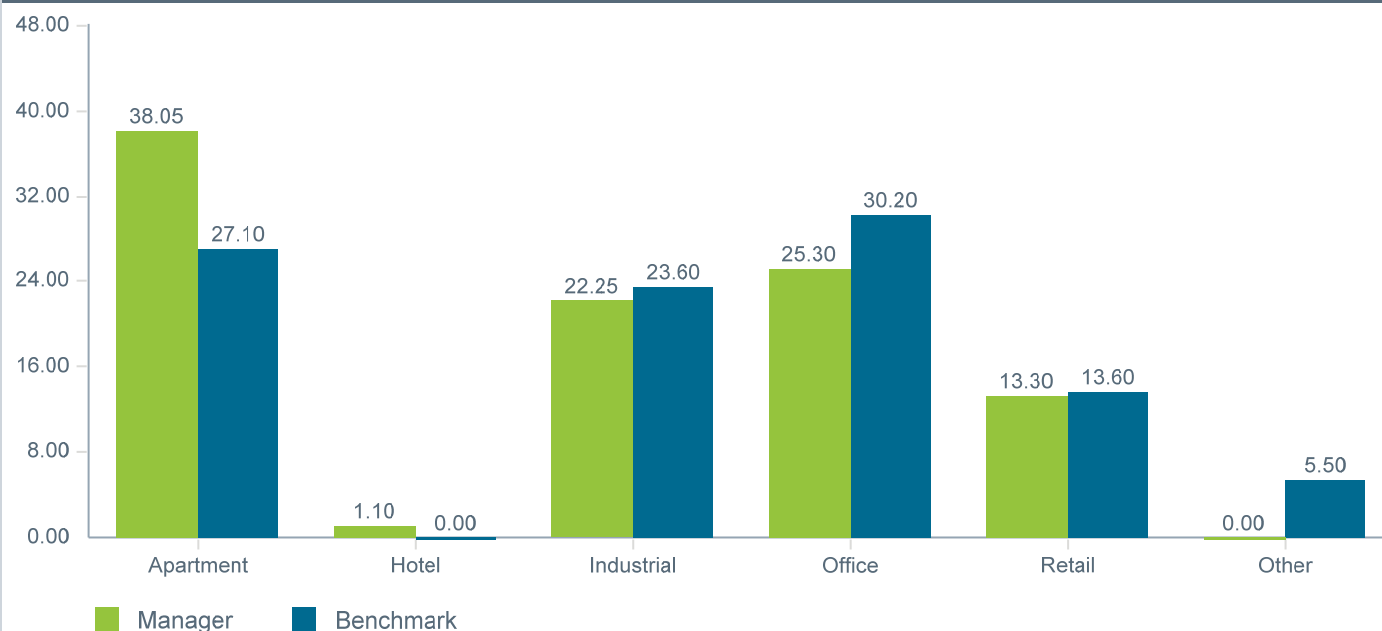
### Investment Strategy

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

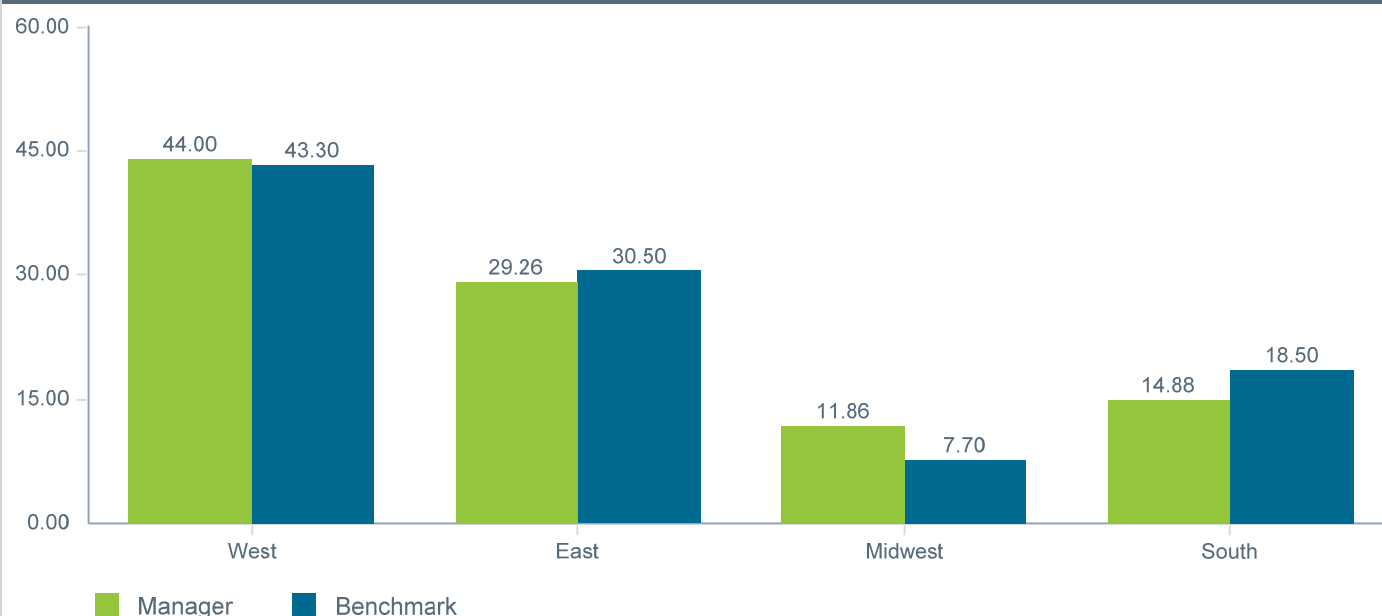
### Investment Profile

Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	17,816
Fund Leverage %	17.00
Portfolio Occupancy %	93.00
Cash Reserve %	5.50
Number of Investments	172
Number of Limited Partners	446

### Property Type Allocation (%)



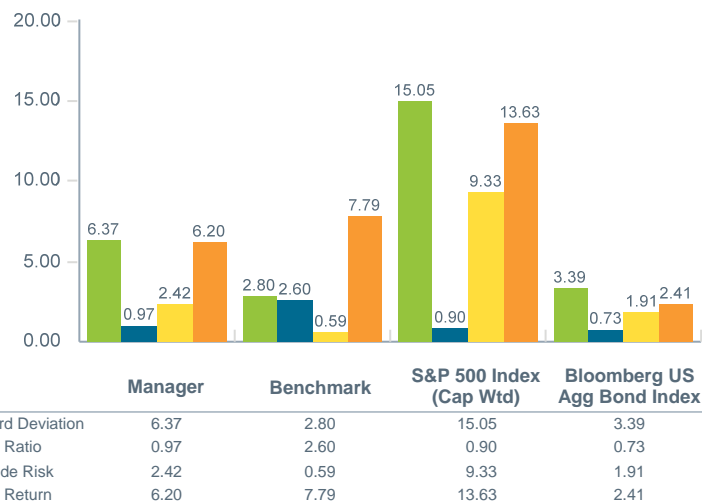
### Geographic Allocation (%)



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.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	2.33	-3.25	-2.44	3.49	7.05	N/A	-9.32	3.03	9.71	18.00	6.60
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	-4.30	-17.88	-9.50	-4.02	-1.85	N/A	-10.51	-2.31	1.36	10.38	-2.17

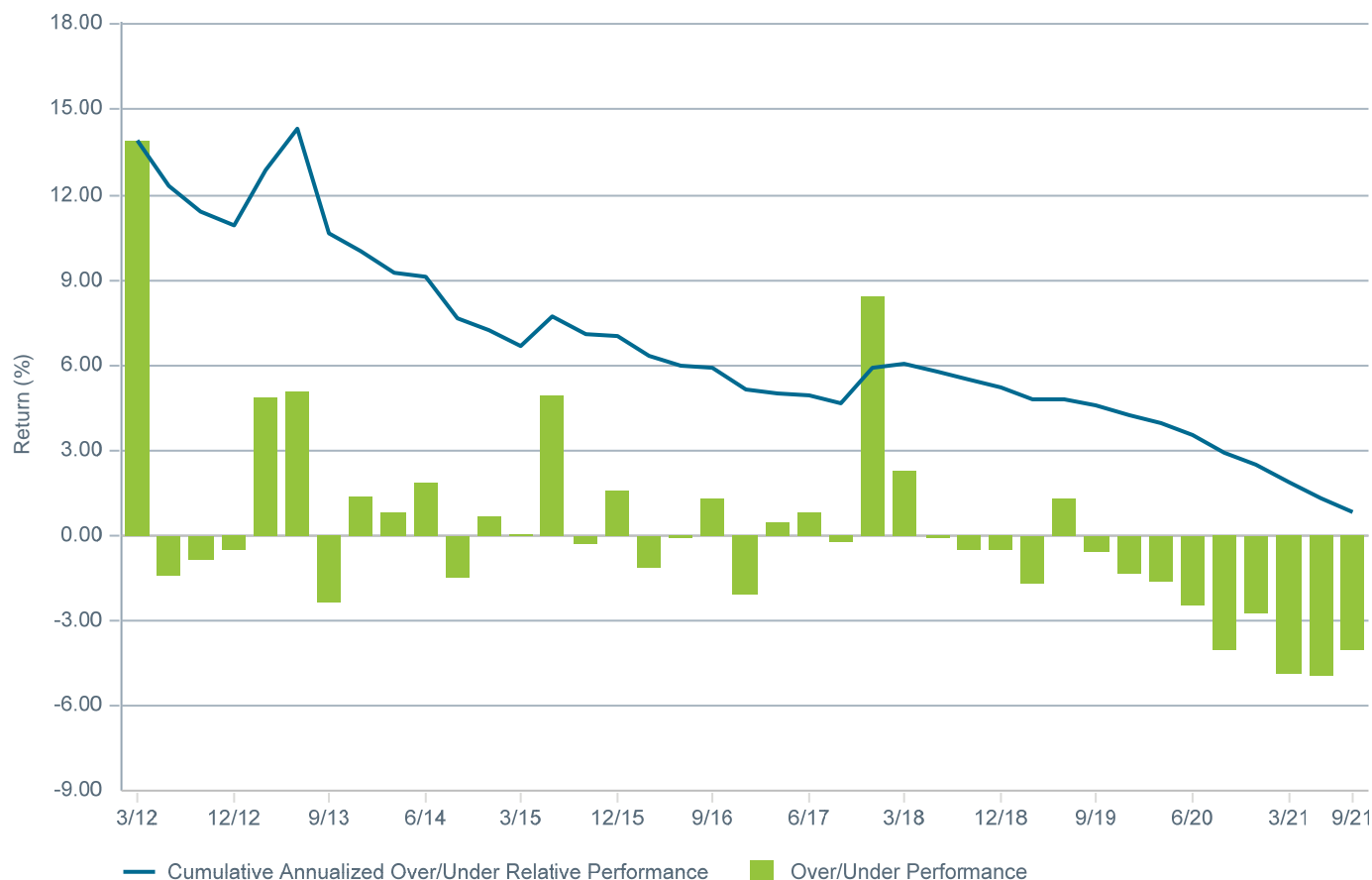
#### Historical Statistics - 7 Years (Excess Return vs. Risk Free)



#### Actual Correlation - 7 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.46
S&P 500 Index (Cap Wtd)	-0.24
Russell 2000 Index	-0.24
MSCI EAFE Index (USD) (Net)	-0.15
MSCI Emg Mkts Index (USD) (Net)	-0.18
Bloomberg US Agg Bond Index	-0.18
Bloomberg US Trsy US TIPS Index	-0.36
Wilshire US REIT Index	-0.21
HFRI FOF Comp Index	-0.24
Bloomberg Cmdb Index (TR)	-0.23
ICE BofAML 3 Mo US T-Bill Index	-0.02
Cons Price Index (Unadjusted)	-0.23

#### Relative Performance - Since Inception





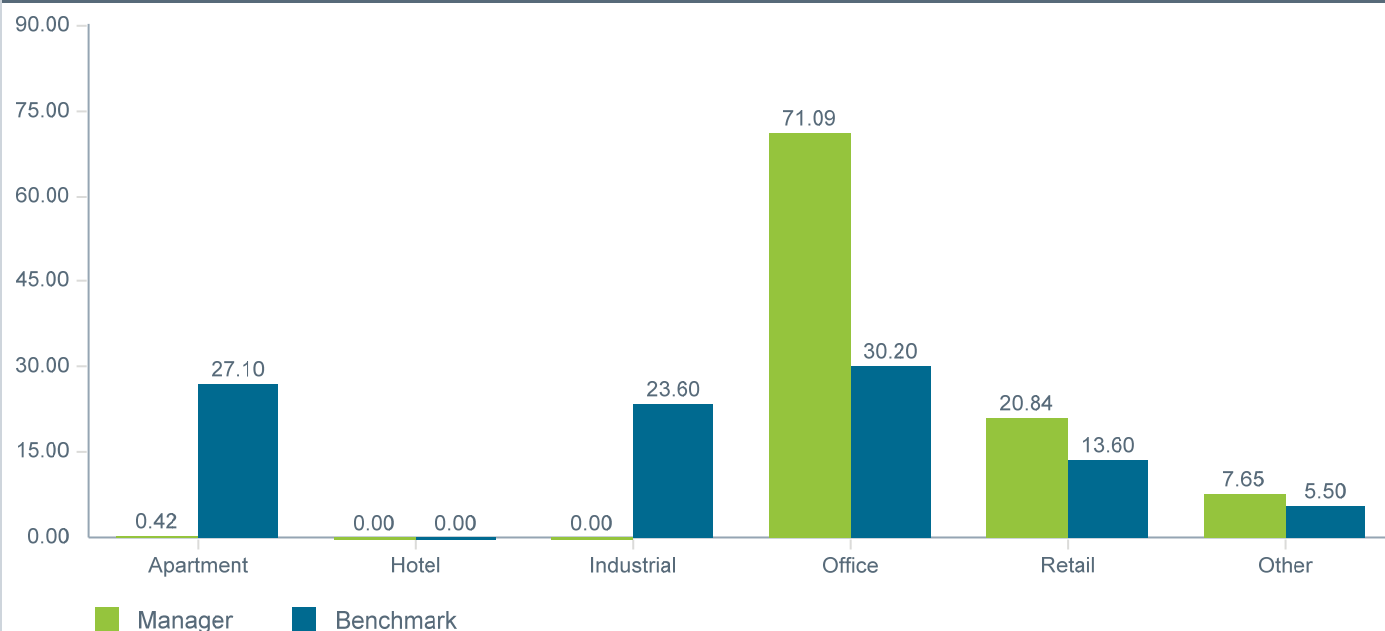
### Investment Strategy

The Fund pursues a concentrated core-plus real estate strategy that acquires, manages and enhances the value of core and core-plus office, retail and mixed-used assets in major metropolitan markets. Target assets are stabilized or nearly stabilized core properties with high-quality, creditworthy and diversified tenant rosters producing predictable and growing income, with the potential for operational improvements to enhance NOI and drive capital appreciation. Additionally, the Fund also targets assets that are moderately- to substantially-leased but could benefit from repositioning. It operates with leverage of 50% or less and may invest up to 20% of its gross assets in higher-risk, non-core real estate investment opportunities.

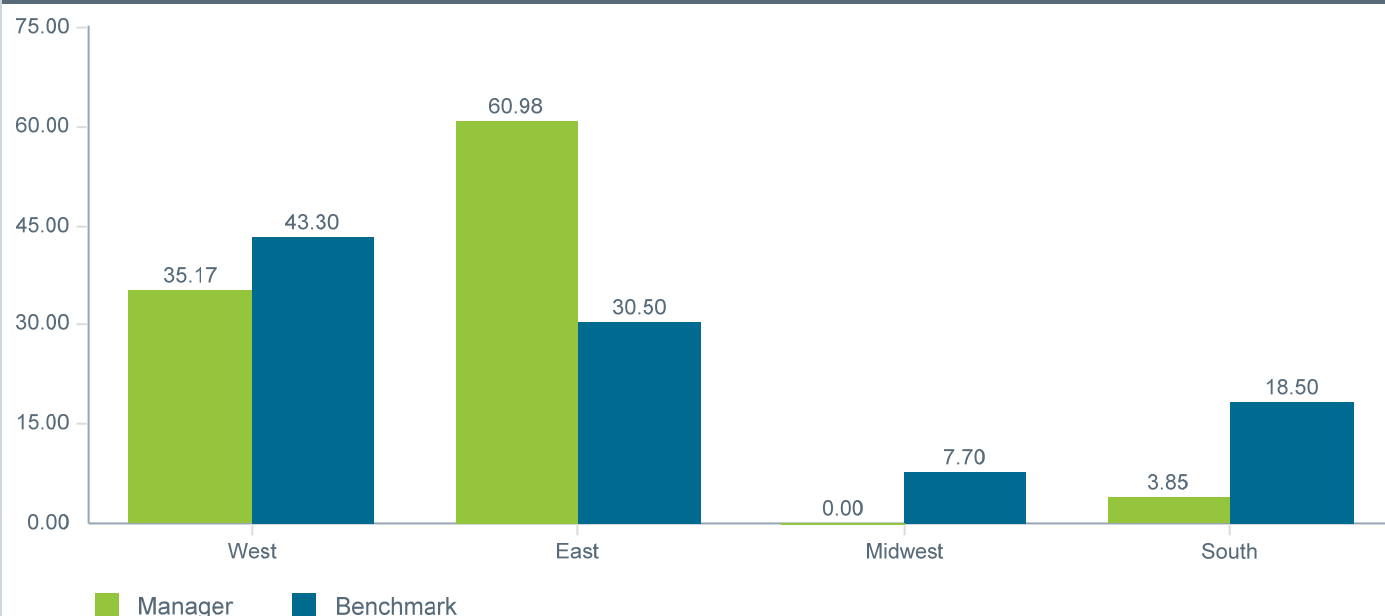
### Investment Profile

Fund Inception	2011
Legal Structure	REIT
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	4,100
Fund Leverage %	45.35
Portfolio Occupancy %	77.79
Cash Reserve %	1.93
Number of Investments	25
Number of Limited Partners	50

### Property Type Allocation (%)

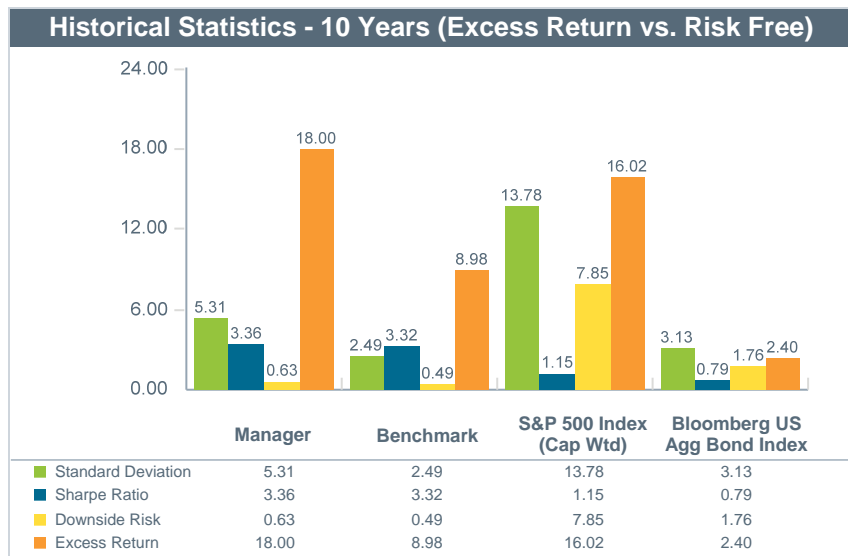


### Geographic Allocation (%)



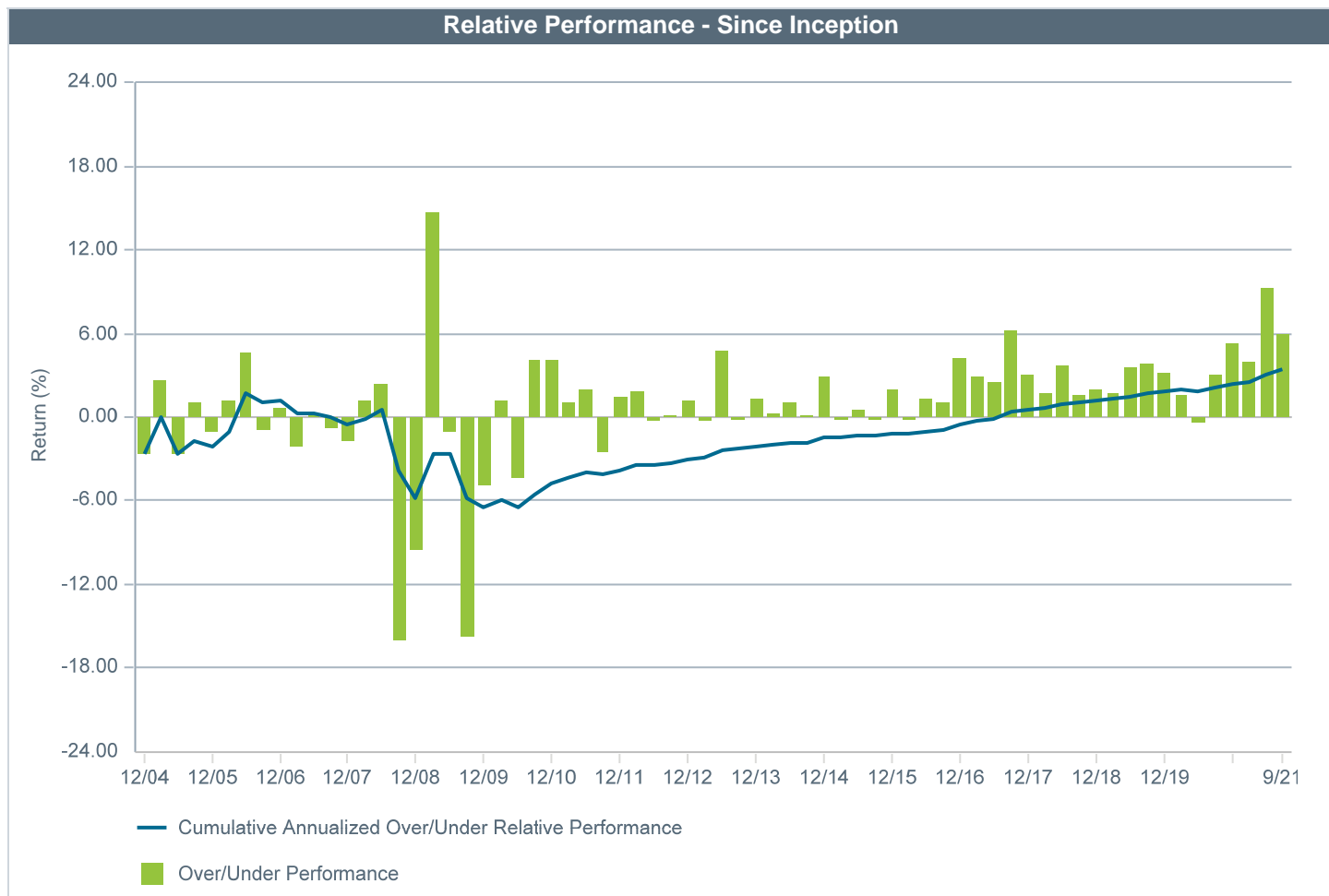
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Manager allocation to "Other" consists of One Times Square. 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	2020	2019	2018	2017	2016
Manager	12.99	45.29	23.12	22.97	21.18	19.82	11.16	18.88	18.19	24.16	16.08
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	6.36	30.66	16.06	15.46	12.28	9.90	9.97	13.54	9.84	16.54	7.31



**Actual Correlation - 10 Years**

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.59
S&P 500 Index (Cap Wtd)	0.00
Russell 2000 Index	0.00
MSCI EAFE Index (USD) (Net)	0.01
MSCI Emg Mkts Index (USD) (Net)	-0.12
Bloomberg US Agg Bond Index	-0.33
Bloomberg US Trsy US TIPS Index	-0.23
Wilshire US REIT Index	0.12
HFRI FOF Comp Index	0.05
Bloomberg Cndty Index (TR)	0.22
ICE BofAML 3 Mo US T-Bill Index	-0.09
Cons Price Index (Unadjusted)	0.26



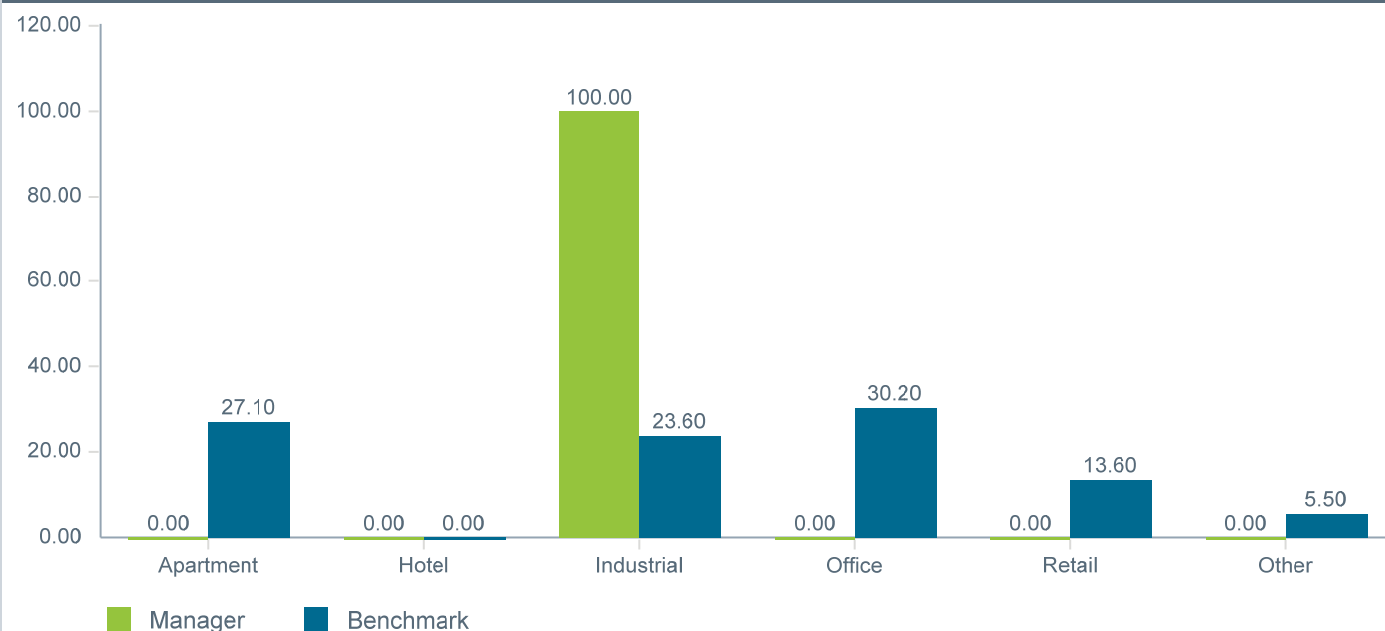
### Investment Strategy

The Fund pursues a concentrated core-plus real estate investment strategy focusing on the industrial sector and seeks to combine attractive current income with long-term capital growth by acquiring, operating, renovating and disposing of assets located in the US. The Fund's investment activities focus on properties near key passenger and cargo airports, seaports, and ground transportation systems in major metropolitan areas. It operates with a leverage limit of 45% and does not invest in "value-added" real estate investment opportunities.

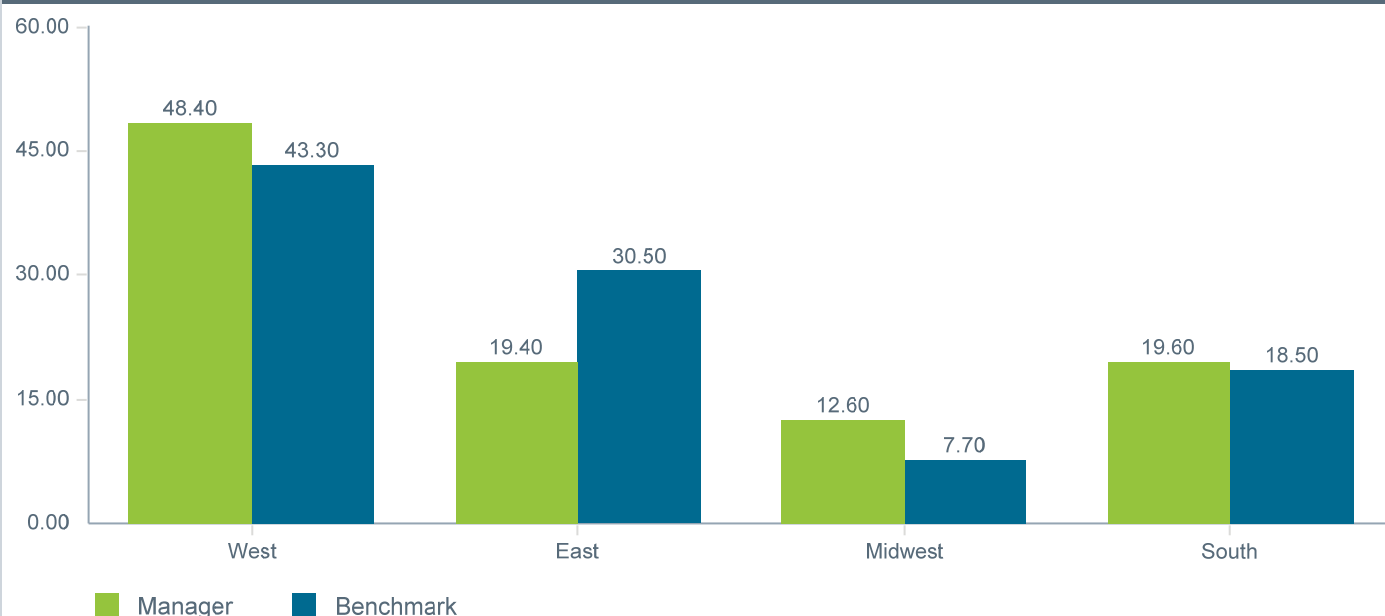
### Investment Profile

Fund Inception	2004
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	19,774
Fund Leverage %	16.30
Portfolio Occupancy %	94.50
Cash Reserve %	0.30
Number of Investments	737
Number of Limited Partners	102

### Property Type Allocation (%)

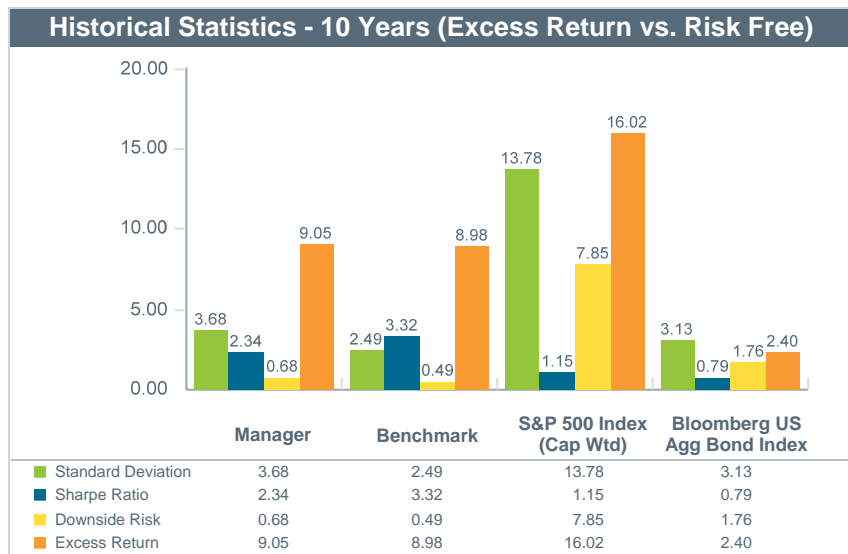


### Geographic Allocation (%)



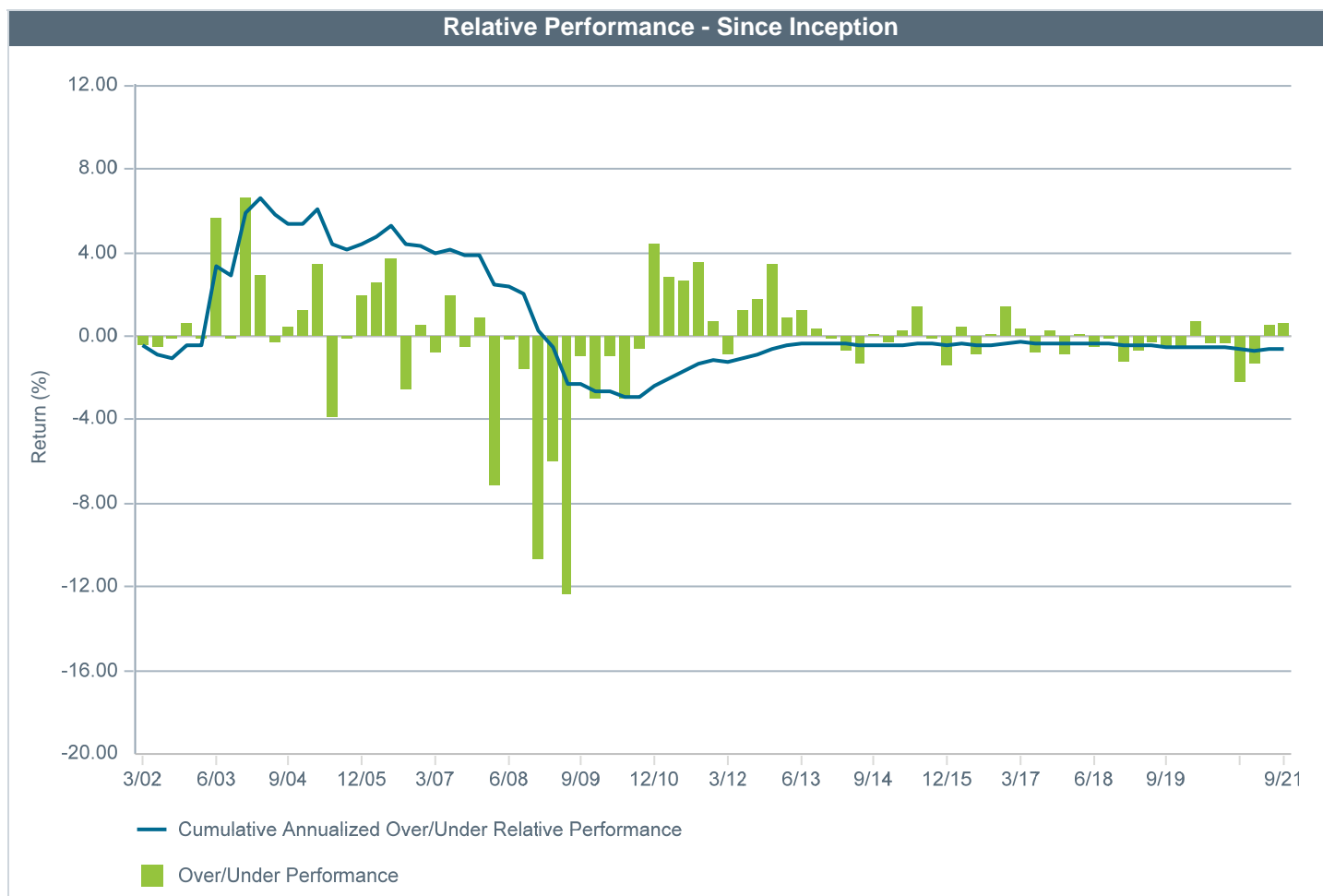
Performance shown is gross of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Benchmark allocation to "Other" consists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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	2017	2016
Manager	7.26	11.77	4.95	6.21	7.91	9.97	-1.08	3.01	6.59	6.50	9.90
Benchmark	6.63	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.62	8.77
Difference	0.63	-2.86	-2.11	-1.30	-0.99	0.05	-2.27	-2.33	-1.76	-1.12	1.13



**Actual Correlation - 10 Years**

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.83
S&P 500 Index (Cap Wtd)	-0.25
Russell 2000 Index	-0.26
MSCI EAFE Index (USD) (Net)	-0.20
MSCI Emg Mkts Index (USD) (Net)	-0.38
Bloomberg US Agg Bond Index	-0.30
Bloomberg US Trsy US TIPS Index	-0.30
Wilshire US REIT Index	-0.17
HFRI FOF Comp Index	-0.27
Bloomberg Cmnty Index (TR)	-0.14
ICE BofAML 3 Mo US T-Bill Index	-0.42
Cons Price Index (Unadjusted)	0.00



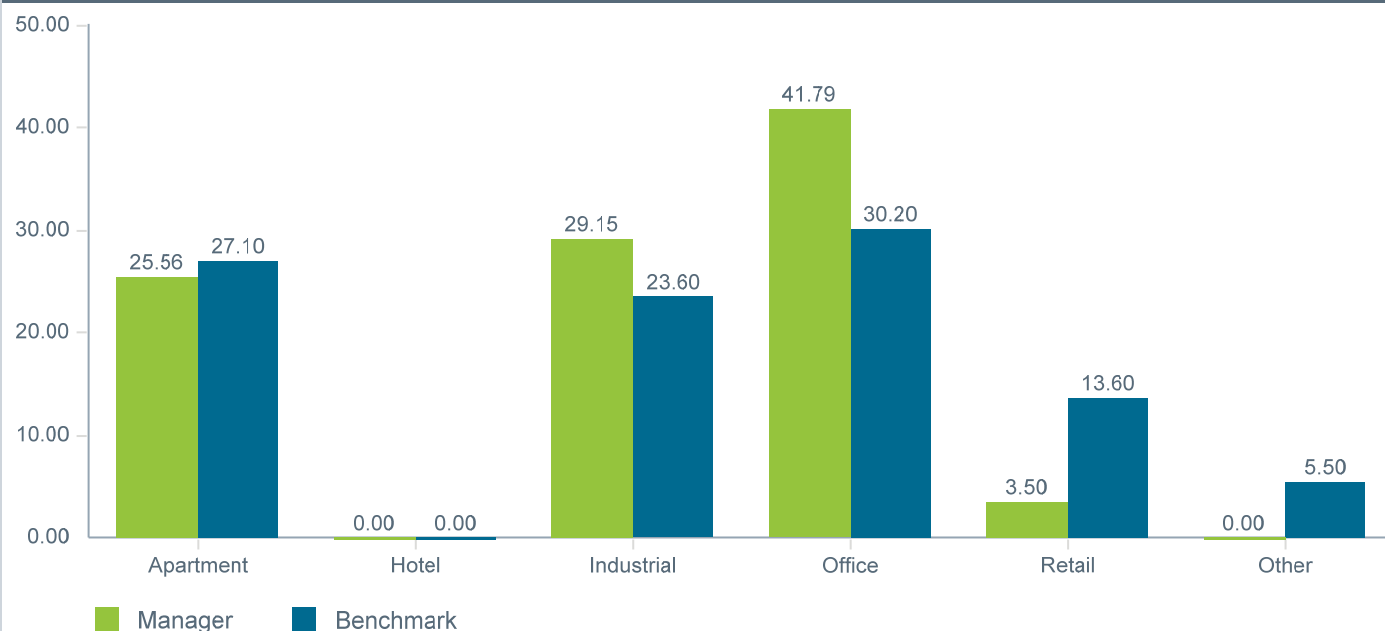
### Investment Strategy

The Fund pursues a core-plus real estate strategy and focuses on producing high income returns with the potential for capital appreciation. The Fund's broad investment scope allows it to participate in market opportunities across private equity and debt markets, as well as all property sectors and US geographic regions. It invests primarily in leveraged direct core real estate and may dedicate up to 25% of its gross asset value to non-core investments, including up to 15% in mezzanine debt and up to 10% in build-to-core opportunities. Investments are concentrated in the four primary property types, while volatile and/or specialized sectors such as hotels and self-storage investments are avoided. The Fund operates with leverage of 40% or less.

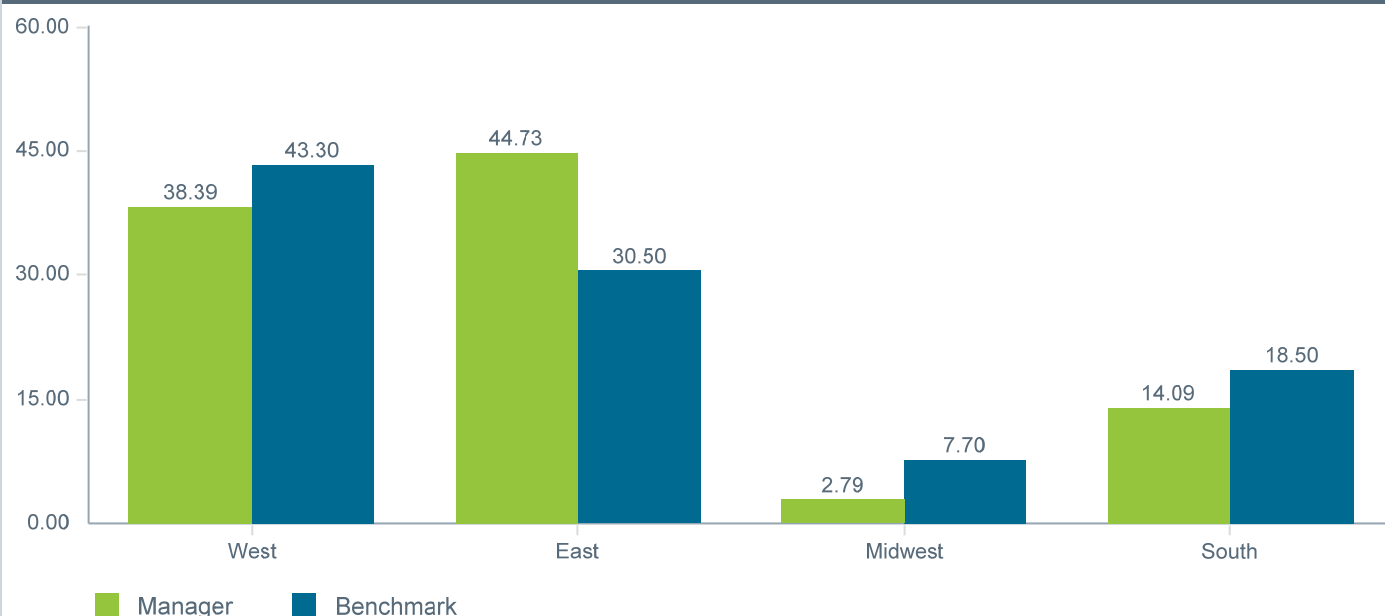
### Investment Profile

Fund Inception	2002
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	3,564
Fund Leverage %	39.86
Portfolio Occupancy %	92.63
Cash Reserve %	13.71
Number of Investments	57
Number of Limited Partners	52

### 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.

# Addendum & Glossary





North Dakota Board of University and School Lands  
Long-Term Monitoring Tool

As of September 30, 2021

Asset Allocation							
Asset Class	Market Value	Within Target Range?		Current (%)	Targets		
		Yes	No		Min.	Target	Max.
Broad US Equity	\$ 1,155,007,591	✓		19.05%	14.0%	19.0%	24.0%
Broad International Equity	\$ 1,113,687,891	✓		18.37%	14.0%	19.0%	24.0%
Fixed Income	\$ 1,409,748,105	✓		23.25%	17.0%	22.0%	27.0%
Absolute Return	\$ 866,645,666	✓		14.29%	10.0%	15.0%	20.0%
Real Estate	\$ 839,841,995	✓		13.85%	10.0%	15.0%	20.0%
Private Equity	\$ 15,993,977	✓		0.26%	0.0%	5.0%	10.0%
Private Infrastructure	-	✓		0.00%	0.0%	5.0%	10.0%
Opportunistic Investments	\$ 75,783,742	✓		1.25%	0.0%	0.0%	5.0%
Transition Account	\$ 586,320,785		✓	9.67%	0.0%	0.0%	0.0%
Total Fund	\$ 6,063,029,753			100.00%			

Monitoring Guideline (Over a Full Market Cycle of 5 Years)				Explanation
Total Fund		Yes	No	
Total Fund returns exceed the Target Allocation Index over a 5-year period.			✓	The Total Fund returned 7.18% vs. 8.57% for the index.
Broad US Equity		Yes	No	
The composite returns exceed the Russell 3000 Index over a 5 year period.		✓		The composite returned 16.89% vs. 16.85% for the index. Includes managers which are no longer in the portfolio.
Rank above the IM U.S. Equity Median.		✓		The composite has a ranking of 29. Includes managers which are no longer in the portfolio.
State Street Russell 1000 Index SL (CF)		Yes	No	
The fund returns are in line with the Russell 1000 Index over a 5 year period.				5 year data is unavailable.
Rank above the IM U.S. Large Cap Equity Median.				5 year data is unavailable.
State Street Russell Mid Cap Index (SA)		Yes	No	
The fund returns are in line with the Russell Mid Cap Index over a 5 year period.				5 year data is unavailable.
Rank above the IM U.S. Mid Cap Equity Median.				5 year data is unavailable.
NT Small Cap Core (SA)		Yes	No	
The fund returns exceed the Russell 2000 Index over a 5 year period.		✓		The fund returned 16.58% vs. 13.45% for the index.
Rank above the IM U.S. Small Cap Core Equity Median.		✓		The fund has a ranking of 2.
Broad International Equity		Yes	No	
The composite returns exceed the MSCI ACW Ex US Index (USD) (Net) over a 5 year period.			✓	The composite returned 8.69% vs. 8.94% for the index. Includes managers which are no longer in the portfolio. Current managers added 07/2014.
Rank above the IM International Large Cap Equity Median.			✓	The composite has a ranking of 59. Includes managers which are no longer in the portfolio. Current managers added 07/2014.
State Street World Ex US Index (CF)		Yes	No	
The fund returns are in line with the MSCI Wrlld Ex US Index (USD) (Net) over a 5 year period.		✓		The fund returned 8.82% vs. 8.88% for the index.
Rank above the IM International Large Cap Equity Median.			✓	The fund has a ranking of 59.
Fixed Income		Yes	No	
The composite returns exceed the Global Fixed Income Custom Index over a 5 year period.		✓		The composite returned 3.65% vs. 3.18% for the index.
Rank above the IM Global Fixed Income Median.		✓		The composite has a ranking of 16.
Payden & Rygel Long Term (SA)		Yes	No	
The fund returns exceed the Bloomberg US Agg Bond Index over a 5 year period.		✓		The fund returned 3.68% vs. 2.94% for the index.
Rank above the IM U.S. Broad Market Core Fixed Income Median.		✓		The fund has a ranking of 18.
JP Morgan Core Bond (SA)		Yes	No	
The fund returns exceed the JP Morgan FI Custom Index over a 5 year period.		✓		The fund returned 2.82% vs. 2.73% for the index.
Rank above the IM U.S. Broad Market Core Fixed Income Median.			✓	The fund has a ranking of 74.

# North Dakota Board of University and School Lands Long-Term Monitoring Tool

As of September 30, 2021

Fixed Income (Continued)			
Loomis Sayles Credit Asset (SA)		Yes	No
The fund returns exceed the Loomis Sayles CA Custom Index over a 5 year period			5 year data is unavailable.
Rank above the IM Global Fixed Income Median.			5 year data is unavailable.
AG Direct Lending Fund III, LP		Yes	No
The fund returns exceed the Credit Suisse Leverage Loan Index over a 5 year period.			5 year data is unavailable.
Rank above the IM U.S. Intermediate Duration (MF) Median.			5 year data is unavailable.
AG Direct Lending Fund IV, LP		Yes	No
The fund returns exceed the Credit Suisse Leverage Loan Index over a 5 year period.			5 year data is unavailable.
Rank above the IM U.S. Intermediate Duration (MF) Median.			5 year data is unavailable.
Schroders Flexible Secured Income (SA)		Yes	No
The fund returns exceed the 3 Month LIBOR Index (USD)+1.75% over a 5 year period.			5 year data is unavailable
ND Land - PTF Cash (SA)		Yes	No
The fund returns exceed the BofA ML 3 Mo US T-Bill Index over a 5 year period.			5 year data is unavailable.
Absolute Return		Yes	No
The composite returns exceed the Absolute Return Custom Index over a 5 year period.			✓ The composite returned 5.09% vs. 9.21% for the index.
GMO:Bchmk-Fr All;IV (GBMBX)		Yes	No
The fund returns exceed the 60% MSCI ACWI (Net)/40% B Gbl Agg Idx over a 5 year period.			✓ The fund returned 3.61% vs. 8.83% for the index.
PIMCO:All Ast Ath;Inst (PAUIX)		Yes	No
The fund returns exceed the All Asset Custom Index (EqI Wtd) over a 5 year period.			✓ The fund returned 5.61% vs. 6.61% for the index.
Real Estate		Yes	No
The composite returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.		✓	The composite returned 7.60% vs. 6.56% for the index.
Morgan Stanley Prime Property (CF)		Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.		✓	The fund returned 7.46% vs. 6.56% for the index.
UBS Trumbull Property LP (CF)		Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.			✓ The fund returned 2.95% vs. 6.56% for the index.
Jamestown Premier Property (CF)		Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.			✓ The fund returned 1.96% vs. 6.56% for the index.
Prologis Targeted US Logistics LP (CF)		Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.		✓	The fund returned 19.87% vs. 6.56% for the index.
JP Morgan US Real Estate Income and Growth, LP (CF)		Yes	No
The fund returns exceed the NCREIF ODCE Index (AWA) (Net) over a 5 year period.			✓ The fund returned 5.56% vs. 6.56% for the index.
Color Key			
Performance:			
Green: Manager outperformed benchmark.			
Yellow: Manager underperformed benchmark by 100 basis points or less.			
Red: Manager underperformed benchmark by more than 100 basis points.			
Peer Group Ranks:			
Green: Manager ranks in the top 50th percentile compared to its peers.			
Yellow: Manager ranks between the 51st and 64th percentile compared to its peers.			
Red: Manager ranks in the 65th percentile or lower compared to its peers.			

North Dakota Board of University and School Lands  
Comparative Performance - Gross

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
<b>Total Fund</b>	<b>0.96</b>	<b>0.96</b>	<b>9.10</b>	<b>18.96</b>	<b>7.65</b>	<b>7.72</b>	<b>6.29</b>	<b>7.80</b>	<b>8.29</b>	<b>07/01/2009</b>
Target Allocation Index (Gross)	0.50	0.50	8.13	18.12	9.60	8.79	7.29	8.71	9.22	
Difference	0.46	0.46	0.97	0.84	-1.95	-1.07	-1.00	-0.91	-0.93	
<b>Broad US Equity</b>	<b>0.23</b>	<b>0.23</b>	<b>15.51</b>	<b>34.12</b>	<b>15.91</b>	<b>16.99</b>	<b>14.11</b>	<b>15.88</b>	<b>15.53</b>	<b>07/01/2009</b>
Russell 3000 Index	-0.10	-0.10	14.99	31.88	16.00	16.85	13.93	16.60	15.80	
Difference	0.33	0.33	0.52	2.24	-0.09	0.14	0.18	-0.72	-0.27	
<b>Broad International Equity</b>	<b>-0.43</b>	<b>-0.43</b>	<b>10.16</b>	<b>28.72</b>	<b>8.70</b>	<b>8.97</b>	<b>5.89</b>	<b>8.59</b>	<b>7.62</b>	<b>07/01/2009</b>
MSCI ACW Ex US Index (USD) (Net)	-2.99	-2.99	5.90	23.92	8.03	8.94	5.68	7.48	7.27	
Difference	2.56	2.56	4.26	4.80	0.67	0.03	0.21	1.11	0.35	
<b>Fixed Income</b>	<b>0.56</b>	<b>0.56</b>	<b>1.64</b>	<b>4.80</b>	<b>5.98</b>	<b>3.93</b>	<b>3.91</b>	<b>4.03</b>	<b>4.86</b>	<b>07/01/2009</b>
Global Fixed Income Custom Index	0.07	0.07	-1.07	0.20	5.53	3.18	3.37	3.20	4.06	
Difference	0.49	0.49	2.71	4.60	0.45	0.75	0.54	0.83	0.80	
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	3.85	
Difference	0.51	0.51	3.20	5.70	0.63	0.99	0.65	1.02	1.01	
<b>Absolute Return</b>	<b>-1.17</b>	<b>-1.17</b>	<b>8.62</b>	<b>18.92</b>	<b>6.06</b>	<b>5.96</b>	<b>4.48</b>	<b>N/A</b>	<b>4.04</b>	<b>07/01/2014</b>
Absolute Return Custom Index	-0.63	-0.63	6.12	16.33	9.98	9.21	7.51	8.55	7.00	
Difference	-0.54	-0.54	2.50	2.59	-3.92	-3.25	-3.03	N/A	-2.96	
Consumer Price Index+5%	2.20	2.20	9.24	10.66	7.95	7.72	7.15	7.01	7.06	
Difference	-3.37	-3.37	-0.62	8.26	-1.89	-1.76	-2.67	N/A	-3.02	
<b>Private Equity</b>	<b>6.10</b>	<b>6.10</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>8.03</b>	<b>04/01/2021</b>
Cambridge US Prvt Eq Index	4.00	4.00	27.72	47.75	22.15	20.35	16.59	15.96	17.70	
Difference	2.10	2.10	N/A	N/A	N/A	N/A	N/A	N/A	-9.67	
<b>Real Estate</b>	<b>7.74</b>	<b>7.74</b>	<b>15.70</b>	<b>16.93</b>	<b>7.87</b>	<b>9.05</b>	<b>N/A</b>	<b>N/A</b>	<b>9.56</b>	<b>07/01/2015</b>
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	8.23	
Difference	1.11	1.11	2.55	2.30	0.81	1.54	N/A	N/A	1.33	
<b>Opportunistic Investments</b>	<b>1.15</b>	<b>1.15</b>	<b>9.38</b>	<b>29.46</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>34.43</b>	<b>07/01/2020</b>

Performance shown is gross of fees except where noted, and annualized for periods greater than one year. Composite inception dates are based on availability of data for each asset class. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

North Dakota Board of University and School Lands  
Comparative Performance - Gross

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Broad US Equity</b>													
<b>State Street Russell 1000 Index SL (CF)</b>	<b>0.20</b>	<b>0.20</b>	<b>15.18</b>	<b>30.95</b>	<b>16.41</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>20.91</b>	<b>31.40</b>	<b>-4.77</b>	<b>16.71</b>	<b>06/01/2017</b>
Russell 1000 Index	0.21	0.21	15.19	30.96	16.43	17.11	14.09	16.76	20.96	31.43	-4.78	16.74	
Difference	-0.01	-0.01	-0.01	-0.01	-0.02	N/A	N/A	N/A	-0.05	-0.03	0.01	-0.03	
IM U.S. Large Cap Equity (SA+CF) Median	0.13	0.13	15.89	30.87	15.68	16.72	13.69	16.53	17.99	30.25	-5.00	16.22	
Rank	47	47	61	50	39	N/A	N/A	N/A	37	40	48	39	
<b>State Street Russell Mid Cap Index (SA)</b>													
<b>State Street Russell Mid Cap Index (SA)</b>	<b>-0.91</b>	<b>-0.91</b>	<b>15.19</b>	<b>38.09</b>	<b>14.24</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>17.09</b>	<b>30.42</b>	<b>-8.94</b>	<b>14.17</b>	<b>06/01/2017</b>
Russell Mid Cap Index	-0.93	-0.93	15.17	38.11	14.22	14.39	12.15	15.52	17.10	30.54	-9.06	14.15	
Difference	0.02	0.02	0.02	-0.02	0.02	N/A	N/A	N/A	-0.01	-0.12	0.12	0.02	
IM U.S. Mid Cap Equity (SA+CF) Median	-0.13	-0.13	15.18	38.10	13.63	15.21	12.75	15.84	16.08	30.18	-8.97	14.46	
Rank	61	61	50	51	48	N/A	N/A	N/A	48	49	50	53	
<b>NT Small Cap Core (SA)</b>													
<b>NT Small Cap Core (SA)</b>	<b>0.33</b>	<b>0.33</b>	<b>17.45</b>	<b>52.54</b>	<b>13.51</b>	<b>17.28</b>	<b>14.31</b>	<b>16.01</b>	<b>24.69</b>	<b>23.98</b>	<b>-6.97</b>	<b>12.31</b>	<b>07/01/2014</b>
Russell 2000 Index	-4.36	-4.36	12.41	47.68	10.54	13.45	11.90	14.63	19.96	25.53	-11.01	10.30	
Difference	4.69	4.69	5.04	4.86	2.97	3.83	2.41	1.38	4.73	-1.55	4.04	2.01	
IM U.S. Small Cap Core Equity (SA+CF) Median	-1.36	-1.36	18.29	51.69	11.85	14.87	13.18	16.11	17.85	25.11	-10.65	11.74	
Rank	26	26	54	44	36	24	27	52	24	58	24	41	
<b>Broad International Equity</b>													
<b>State Street World Ex US Index (CF)</b>	<b>-0.65</b>	<b>-0.65</b>	<b>9.23</b>	<b>26.53</b>	<b>7.83</b>	<b>8.84</b>	<b>5.64</b>	<b>N/A</b>	<b>7.54</b>	<b>22.40</b>	<b>-14.14</b>	<b>4.59</b>	<b>07/01/2014</b>
MSCI Wrld Ex US Index (USD) (Net)	-0.66	-0.66	9.19	26.50	7.87	8.88	5.69	7.88	7.59	22.49	-14.09	4.63	
Difference	0.01	0.01	0.04	0.03	-0.04	-0.04	-0.05	N/A	-0.05	-0.09	-0.05	-0.04	
IM International Large Cap Equity (SA+CF) Median	-1.19	-1.16	8.64	25.57	9.35	10.17	7.24	9.61	11.79	23.96	-14.18	6.17	
Rank	39	39	44	46	62	65	76	N/A	65	60	49	78	

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

North Dakota Board of University and School Lands  
Comparative Performance - Gross

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Fixed Income</b>													
<b>Payden &amp; Rygel Long Term (SA)</b>	<b>0.19</b>	<b>0.19</b>	<b>-0.72</b>	<b>0.87</b>	<b>5.85</b>	<b>3.88</b>	<b>4.01</b>	<b>4.11</b>	<b>7.77</b>	<b>9.64</b>	<b>0.36</b>	<b>5.87</b>	<b>08/01/1995</b>
Bloomberg US Agg Bond Index	0.05	0.05	-1.56	-0.90	5.35	2.94	3.26	3.01	7.51	8.72	0.01	5.11	
Difference	0.14	0.14	0.84	1.77	0.50	0.94	0.75	1.10	0.26	0.92	0.35	0.76	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.10	0.10	-1.15	0.01	6.03	3.57	3.79	3.65	8.52	9.20	0.06	5.51	
Rank	24	24	34	29	61	27	31	17	72	26	27	15	
<b>JP Morgan Core Bond (SA)</b>	<b>0.10</b>	<b>0.10</b>	<b>-0.22</b>	<b>0.33</b>	<b>4.79</b>	<b>2.92</b>	<b>3.03</b>	<b>N/A</b>	<b>6.40</b>	<b>6.80</b>	<b>1.11</b>	<b>2.65</b>	<b>08/01/2012</b>
JP Morgan FI Custom Index	0.05	0.05	-0.49	-0.01	4.77	2.68	2.80	2.56	6.43	6.80	0.88	2.37	
Difference	0.05	0.05	0.27	0.34	0.02	0.24	0.23	N/A	-0.03	0.00	0.23	0.28	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	0.10	0.10	-1.15	0.01	6.03	3.57	3.79	3.65	8.52	9.20	0.06	3.32	
Rank	51	51	16	43	99	94	98	N/A	97	98	6	97	
<b>Loomis Sayles Credit Asset (SA)</b>	<b>0.75</b>	<b>0.75</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>3.43</b>	<b>04/01/2021</b>
Loomis Sayles CA Custom Index	0.50	0.50	1.59	5.74	6.53	5.11	4.92	5.55	7.54	13.03	-1.64	3.34	
Difference	0.25	0.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.09	
<b>AG Direct Lending III LP</b>	<b>3.22</b>	<b>3.22</b>	<b>11.40</b>	<b>16.34</b>	<b>11.45</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.32</b>	<b>11.14</b>	<b>N/A</b>	<b>11.17</b>	<b>09/01/2018</b>
CS Lvg'd Loan Index	1.13	1.13	4.65	8.46	4.09	4.64	4.25	5.04	2.78	8.17	1.14	4.20	
Difference	2.09	2.09	6.75	7.88	7.36	N/A	N/A	N/A	6.54	2.97	N/A	6.97	
IM U.S. Intermediate Duration Fixed Income (MF) Median	0.06	0.06	-0.39	0.22	3.82	2.19	2.16	2.05	5.57	5.28	0.64	3.62	
Rank	1	1	1	1	1	N/A	N/A	N/A	1	1	N/A	1	
<b>AG Direct Lending IV LP</b>	<b>1.83</b>	<b>1.83</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>9.93</b>	<b>06/01/2021</b>
CS Lvg'd Loan Index	1.13	1.13	4.65	8.46	4.09	4.64	4.25	5.04	2.78	8.17	1.14	1.55	
Difference	0.70	0.70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.38	
IM U.S. Intermediate Duration Fixed Income (MF) Median	0.40	0.24	0.04	0.81	4.75	2.89	2.88	2.73	6.42	6.01	1.24	0.26	
Rank	1	1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	
<b>Ares Pathfinder Fund LP</b>	<b>7.18</b>	<b>7.18</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>86.74</b>	<b>03/01/2021</b>
<b>Schroders Flexible Secured Income (SA)</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.20</b>	<b>09/01/2021</b>
3 Month LIBOR Index (USD)+1.75%	0.47	0.47	1.46	1.96	3.24	3.22	2.91	2.66	2.85	4.39	3.86	0.15	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.05	
<b>ND Land - PTF Cash (SA)</b>	<b>0.07</b>	<b>0.07</b>	<b>0.35</b>	<b>0.39</b>	<b>1.36</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>	<b>0.64</b>	<b>2.56</b>	<b>1.71</b>	<b>1.39</b>	<b>07/01/2017</b>
ICE BofAML 3 Mo US T-Bill Index	0.02	0.02	0.04	0.07	1.18	1.16	0.87	0.63	0.67	2.28	1.87	1.27	
Difference	0.05	0.05	0.31	0.32	0.18	N/A	N/A	N/A	-0.03	0.28	-0.16	0.12	

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

North Dakota Board of University and School Lands  
Comparative Performance - Gross

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
FLP (Loans)	1.26	1.26	3.27	4.46	4.70	5.32	5.52	5.61	4.52	4.89	6.15	6.96	08/01/1995

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.



North Dakota Board of University and School Lands  
Comparative Performance - Gross

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Absolute Return</b>													
<b>GMO:Bchmk-Fr All;IV (GBMBX)</b>	<b>-1.79</b>	<b>-1.79</b>	<b>4.13</b>	<b>9.92</b>	<b>3.45</b>	<b>4.50</b>	<b>3.36</b>	<b>N/A</b>	<b>-1.57</b>	<b>12.59</b>	<b>-4.46</b>	<b>2.91</b>	<b>07/01/2014</b>
60% MSCI ACW (Net)/40% Bbrg Gbl Agg Idx	-0.97	-0.97	4.86	15.48	9.55	8.83	7.00	7.99	14.05	18.55	-6.00	6.36	
Difference	-0.82	-0.82	-0.73	-5.56	-6.10	-4.33	-3.64	N/A	-15.62	-5.96	1.54	-3.45	
Consumer Price Index+5%	2.20	2.20	9.24	10.66	7.95	7.72	7.15	7.01	6.43	7.40	7.01	7.06	
Difference	-3.99	-3.99	-5.11	-0.74	-4.50	-3.22	-3.79	N/A	-8.00	5.19	-11.47	-4.15	
<b>PIMCO:All Ast Ath;Inst (PAUIX)</b>													
<b>All Asset Custom Index (EqI Wtd)</b>	<b>0.21</b>	<b>0.21</b>	<b>3.94</b>	<b>9.50</b>	<b>7.57</b>	<b>6.61</b>	<b>5.59</b>	<b>6.13</b>	<b>9.89</b>	<b>12.97</b>	<b>-1.62</b>	<b>5.23</b>	
Difference	-0.85	-0.85	8.80	18.28	0.79	0.00	-1.13	N/A	-4.32	-4.34	-3.60	-1.45	
Consumer Price Index+5%	2.20	2.20	9.24	10.66	7.95	7.72	7.15	7.01	6.43	7.40	7.01	7.06	
Difference	-2.84	-2.84	3.50	17.12	0.41	-1.11	-2.69	N/A	-0.86	1.23	-12.23	-3.28	

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

North Dakota Board of University and School Lands  
Comparative Performance - Gross

As of September 30, 2021

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2020	2019	2018	Since Incep.	Inception Date
<b>Real Estate</b>													
<b>Morgan Stanley Prime Property (CF)</b>	6.04	6.04	11.52	13.40	7.72	8.51	N/A	N/A	2.11	7.38	9.05	9.25	07/01/2015
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	8.23	
Difference	-0.59	-0.59	-1.63	-1.23	0.66	1.00	N/A	N/A	0.92	2.04	0.70	1.02	
<b>UBS Trumbull Property LP (CF)</b>	6.23	6.23	10.66	8.56	1.87	3.70	N/A	N/A	-4.08	-2.11	6.98	4.92	07/01/2015
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	8.23	
Difference	-0.40	-0.40	-2.49	-6.07	-5.19	-3.81	N/A	N/A	-5.27	-7.45	-1.37	-3.31	
<b>Jamestown Premier Property (CF)</b>	2.14	2.14	-2.37	-3.90	-2.57	3.43	N/A	N/A	-9.27	3.02	9.96	5.16	07/01/2015
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	8.23	
Difference	-4.49	-4.49	-15.52	-18.53	-9.63	-4.08	N/A	N/A	-10.46	-2.32	1.61	-3.07	
<b>Prologis Targeted US Logistics LP (CF)</b>	13.56	13.56	37.79	47.15	23.91	23.50	N/A	N/A	11.25	19.51	18.56	22.60	04/01/2016
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.61	
Difference	6.93	6.93	24.64	32.52	16.85	15.99	N/A	N/A	10.06	14.17	10.21	14.99	
<b>JP Morgan US RE Inc &amp; Grth LP (CF)</b>	7.58	7.58	13.50	12.47	5.28	6.50	N/A	N/A	-0.95	3.21	6.75	6.62	07/01/2016
NCREIF ODCE Index (AWA) (Gross)	6.63	6.63	13.15	14.63	7.06	7.51	8.90	9.92	1.19	5.34	8.35	7.55	
Difference	0.95	0.95	0.35	-2.16	-1.78	-1.01	N/A	N/A	-2.14	-2.13	-1.60	-0.93	
<b>Private Equity</b>													
<b>Cambridge US Prvt Eq Index</b>	6.10	6.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.03	04/01/2021
Cambridge US Prvt Eq Index	4.00	4.00	27.72	47.75	22.15	20.35	16.59	15.96	25.69	14.50	9.41	17.70	
Difference	2.10	2.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-9.67	
<b>GCM Grosvenor BUSL LP</b>	6.10	6.10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.03	04/01/2021
<b>Opportunistic Investments</b>													
<b>Varde Dislocation Fund LP</b>	-0.48	-0.48	7.19	31.63	N/A	N/A	N/A	N/A	N/A	N/A	N/A	33.87	07/01/2020
<b>Apollo Accord Fund IV LP</b>	6.81	6.81	18.82	26.35	N/A	N/A	N/A	N/A	N/A	N/A	N/A	26.35	10/01/2020
<b>Transition Account</b>													
<b>NT STIF (Transition Account)</b>	0.06	0.06	0.19	0.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.33	06/01/2020
ICE BofAML 3 Mo US T-Bill Index	0.02	0.02	0.04	0.07	1.18	1.16	0.87	0.63	0.67	2.28	1.87	0.09	
Difference	0.04	0.04	0.15	0.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.24	

Performance shown is gross of fees, except for FLP & ECLP Bank Loans which are shown net of fees, and annualized for periods greater than one year. Manager inception dates shown represent the first full month following initial funding. Please see the Addendum for custom index definitions. RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Fiscal year ends 06/30.

**Performance Related Comments**

- Manager inception dates shown represent the first full month following initial funding.
- RVK began monitoring the assets of North Dakota Board of University and School Lands in Q3 2014. Prior historical data was provided by North Dakota Board of University and School Lands.
- Indices show N/A for since inception returns when the fund contains more history than the corresponding benchmark.
- Historical gross performance for composites was calculated by aggregating gross performance for each of the composites' underlying managers. Managers' gross performance was provided by North Dakota Board of University and School Lands. As of 07/2014, composite and manager performance is provided and calculated by RVK.
- During 07/2020, Varde Dislocation Fund, LP was funded and Gresham Commodities (SA) was liquidated.
- During 09/2020, Apollo Accord Fund IV, LP was funded.
- During 03/2021, Loomis Sayles Credit Asseet (SA), Ares Pathfinder Fund LP and GCM Grosvenor BUSL LP was funded. Harvest MLP (SA) and ECLP (Loans) were liquidated.
- During 05/2021, Angelo Gordon Direct Lending IV Fund LP was funded.
- During 08/2021, QMA Int'l Sm Cap Equity, DFA Emg Mkts Core Eq:I and Brandywine Gbl Opp Fixed Income were liquidated. Schroders Securitized Credit (Structured Credit) transitioned into Schroders Flexible Secured Income (Secured Income)
- During 09/2021, Harding Loevner:LEM;IZ was liquidated.

**Index Comments**

- The Target Allocation Index (Net) is a static custom index that is calculated monthly and consists of:
  - From 05/2020 through present: 19% Russell 3000 Index, 19% MSCI ACW Ex US Index (USD) (Net), 22% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 15% Absolute Return Index, 5% Cambridge US Private Equity Index, and 5% MSCI World Infrastructure Index.
  - From 07/2019 through 04/2020: 18.5% Russell 3000 Index, 18.5% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 15% Absolute Return Custom Index, and 10% DIS Custom Index.
  - From 02/2018 through 06/2019: 17% Russell 3000 Index, 17% MSCI ACW Ex US Index (USD) (Net), 21% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
  - From 07/2016 through 01/2018: 17% Russell 3000 Index, 15% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Net), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
  - From 04/2016 through 06/2016: 17.6% Russell 3000 Index, 15.5% MSCI ACW Ex US Index (USD) (Net), 23.8% Global Fixed Income Custom Index, 12% NCREIF ODCE Index (AWA) (Net), 20.7% Absolute Return Custom Index, and 10.4% DIS Custom Index.
  - From 01/2016 through 03/2016: 17.7% Russell 3000 Index, 15.6% MSCI ACW Ex US Index (USD) (Net), 25.3% Global Fixed Income Custom Index, 10% NCREIF ODCE Index (AWA) (Net), 21% Absolute Return Custom Index, and 10.4% DIS Custom Index.
  - From 10/2015 through 12/2015: 17.9% Russell 3000 Index, 15.9% MSCI ACW Ex US Index (USD) (Net), 25.5% Global Fixed Income Custom Index, 9% NCREIF ODCE Index (AWA) (Net), 21.1% Absolute Return Custom Index, and 10.6% DIS Custom Index.
  - From 07/2015 through 09/2015: 19.5% Russell 3000 Index, 17.4% MSCI ACW Ex US Index (USD) (Net), 26.2% Global Fixed Income Custom Index, 4.1% NCREIF ODCE Index (AWA) (Net), 22% Absolute Return Custom Index, and 10.8% DIS Custom Index.
  - From 07/2014 through 06/2015: The index was calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.
  - From 01/2013 through 06/2014: 18.7% Russell 1000 Index, 12.4% Russell 2500 Index, 7.5% FTSE EPRA/NAREIT US Index, 12.4% MSCI EAFE Index (USD) (Net), 33.3% Bloomberg US Agg Bond Index, 0.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, and 5% Bloomberg Gbl Agg Ex USD Index (Hedged).
  - From 07/2009 through 12/2012: 15% Russell 1000 Index, 10% Russell 2500 Index, 6% FTSE EPRA/NAREIT US Index, 10% MSCI EAFE Index (USD) (Net), 32.3% Bloomberg US Agg Bond Index, 1.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, 5% Bloomberg Gbl Agg Ex USD Index (Hedged), and 10% ICE BofAML Cnvt Bonds Index (All Qual).

**Index Comments Cont.**

- The Target Allocation Index (Gross) is a static custom index that is calculated monthly and consists of:
  - From 05/2020 through present: 19% Russell 3000 Index, 19% MSCI ACW Ex US Index (USD) (Net), 22% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 15% Absolute Return Index, 5% Cambridge US Private Equity Index, and 5% MSCI World Infrastructure Index.
  - From 07/2019 through 04/2020: 18.5% Russell 3000 Index, 18.5% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 15% Absolute Return Custom Index, and 10% DIS Custom Index.
  - From 02/2018 through 06/2019: 17% Russell 3000 Index, 17% MSCI ACW Ex US Index (USD) (Net), 21% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
  - From 07/2016 through 01/2018: 17% Russell 3000 Index, 15% MSCI ACW Ex US Index (USD) (Net), 23% Global Fixed Income Custom Index, 15% NCREIF ODCE Index (AWA) (Gross), 20% Absolute Return Custom Index, and 10% DIS Custom Index.
  - From 04/2016 through 06/2016: 17.6% Russell 3000 Index, 15.5% MSCI ACW Ex US Index (USD) (Net), 23.8% Global Fixed Income Custom Index, 12% NCREIF ODCE Index (AWA) (Gross), 20.7% Absolute Return Custom Index, and 10.4% DIS Custom Index.
  - From 01/2016 through 03/2016: 17.7% Russell 3000 Index, 15.6% MSCI ACW Ex US Index (USD) (Net), 25.3% Global Fixed Income Custom Index, 10% NCREIF ODCE Index (AWA) (Gross), 21% Absolute Return Custom Index, and 10.4% DIS Custom Index.
  - From 10/2015 through 12/2015: 17.9% Russell 3000 Index, 15.9% MSCI ACW Ex US Index (USD) (Net), 25.5% Global Fixed Income Custom Index, 9% NCREIF ODCE Index (AWA) (Gross), 21.1% Absolute Return Custom Index, and 10.6% DIS Custom Index.
  - From 07/2015 through 09/2015: 19.5% Russell 3000 Index, 17.4% MSCI ACW Ex US Index (USD) (Net), 26.2% Global Fixed Income Custom Index, 4.1% NCREIF ODCE Index (AWA) (Gross), 22% Absolute Return Custom Index, and 10.8% DIS Custom Index.
  - From 07/2014 through 06/2015: The index was calculated monthly using beginning of month asset class weights applied to each corresponding primary benchmark return.
  - From 01/2013 through 06/2014: 18.7% Russell 1000 Index, 12.4% Russell 2500 Index, 7.5% FTSE EPRA/NAREIT US Index, 12.4% MSCI EAFE Index (USD) (Net), 33.3% Bloomberg US Agg Bond Index, 0.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, and 5% Bloomberg Gbl Agg Ex USD Index (Hedged).
  - From 07/2009 through 12/2012: 15% Russell 1000 Index, 10% Russell 2500 Index, 6% FTSE EPRA/NAREIT US Index, 10% MSCI EAFE Index (USD) (Net), 32.3% Bloomberg US Agg Bond Index, 1.70% CS Lvg'd Loan Index, 10% Bloomberg US Corp Hi Yld Index, 5% Bloomberg Gbl Agg Ex USD Index (Hedged), and 10% ICE BofAML Cnvt Bonds Index (All Qual).
- The Global Fixed Income Custom Index consists of the Bloomberg US Unv Bond Index. Prior to 03/2019, the index consisted of 75% Bloomberg US Unv Bond Index and 25% Bloomberg Multiverse Index.
- The Absolute Return Custom Index consists of 60% MSCI ACW IM Index (USD) (Net) and 40% Bloomberg US Agg Bond Index.
- The JP Morgan FI Custom Index consists of the Bloomberg US Agg Bond Index. Prior to 03/2021, the index consisted of Bloomberg US Gov't Crdt Int Trm Bond Index.

The All Asset Custom Index (EqI Wtd) is an equal-weighted hybrid created independently by RVK specifically for PIMCO's All Asset strategies, and it consists of the following benchmarks:

1. Short Term Strategies: ICE BofAML 1 Yr T-Bill Index
2. US Core and Long Maturity Bond Strategies: Bloomberg US Agg Bond Index
3. EM and Gbl Bond Strategies: PIMCO GLADI Index\*
4. Crdt Strategies: ICE BofAML US Hi Yld Master II Index
5. Inflation Related Strategies: Bloomberg US Trsy US TIPS Index
6. US Equity Strategies: Russell 3000 Index
7. Global Equity Strategies: MSCI ACW Index (USD) (Net)
8. Alternative Strategies: ICE BofAML 3 Mo US T-Bill Index + 3%

\*Performance for the PIMCO Gbl Advantage Bond Index (London Close) prior to 01/01/2004 consists of the JPM EMBI Gbl Dvf'd Index (TR).

**Peer Groups**

- Total Fund - All Master Trust Universe
- US Equity - IM US Equity (MF)
- International Equity - IM International Large Cap Equity (MF)
- Fixed Income - IM Global Fixed Income (MF)

## Glossary

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

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

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

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

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

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

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

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

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

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

**Sector** - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data.

**Country/Region** - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider.

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

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

## 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.



## Glossary

- Federal Funds Rate** - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.
- Option-Adjusted Spread** - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.
- Purchasing Managers Index (PMI)** - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.
- Real Gross Domestic Product (Real GDP)** - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.
- Unemployment Rate** - The percentage of the total labor force that is unemployed but actively seeking employment.
- US Dollar Total Weighted Index** - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.
- VIX** - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."
- Cash Flow Effect** - The composite's active return minus the sum of each managers' active return minus the benchmark effect.
- Consistency** - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.
- Convexity** - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.
- Correlation** - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.
- Coupon Rate** - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.
- Current Yield** - The annual income of a security divided by the security's current price.
- Down Market Capture** - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.
- Downside Risk** - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.
- Earnings Per Share** - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.
- Effective Duration** - The approximate percentage change in a bond's price for a 100 basis point change in yield.
- Excess Return vs. Market** - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.
- Excess Return vs. Risk Free** - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.
- Excess Risk** - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.
- Expense Ratios** - Morningstar is the source for mutual fund expense ratios.
- Gain/Loss** - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.
- Indices** - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.
- Information Ratio** - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.
- Liability Driven Investing (LDI)** - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.
- Estimated Funded Status** - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.
- Estimated PV of Liabilities** - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.
- Duration of Liabilities** - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.
- Duration of Assets** - The dollar-weighted average duration of all the individual Plan assets.
- Estimated Plan Hedge Ratio** - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and

## Glossary

multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

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

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

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

### Peer Groups -

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

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

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

1 - Highest Statistical Value

100 - Lowest Statistical Value

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

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

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

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

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

**Portfolio Characteristics** - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

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

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

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

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

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

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



## Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



## Glossary

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

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

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

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

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

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

PORTLAND

BOISE

CHICAGO

NEW YORK

**Disclaimer of Warranties and Limitation of Liability** - This document was prepared by RVK, Inc. (RVK) and may include information and data from some or all of the following sources: client staff; custodian banks; investment managers; specialty investment consultants; actuaries; plan administrators/record-keepers; index providers; as well as other third-party sources as directed by the client or as we believe necessary or appropriate. RVK has taken reasonable care to ensure the accuracy of the information or data, but makes no warranties and disclaims responsibility for the accuracy or completeness of information or data provided or methodologies employed by any external source. This document is provided for the client's internal use only and does not constitute a recommendation by RVK or an offer of, or a solicitation for, any particular security and it is not intended to convey any guarantees as to the future performance of the investment products, asset classes, or capital markets.

