

# Investment Consultant Performance Report

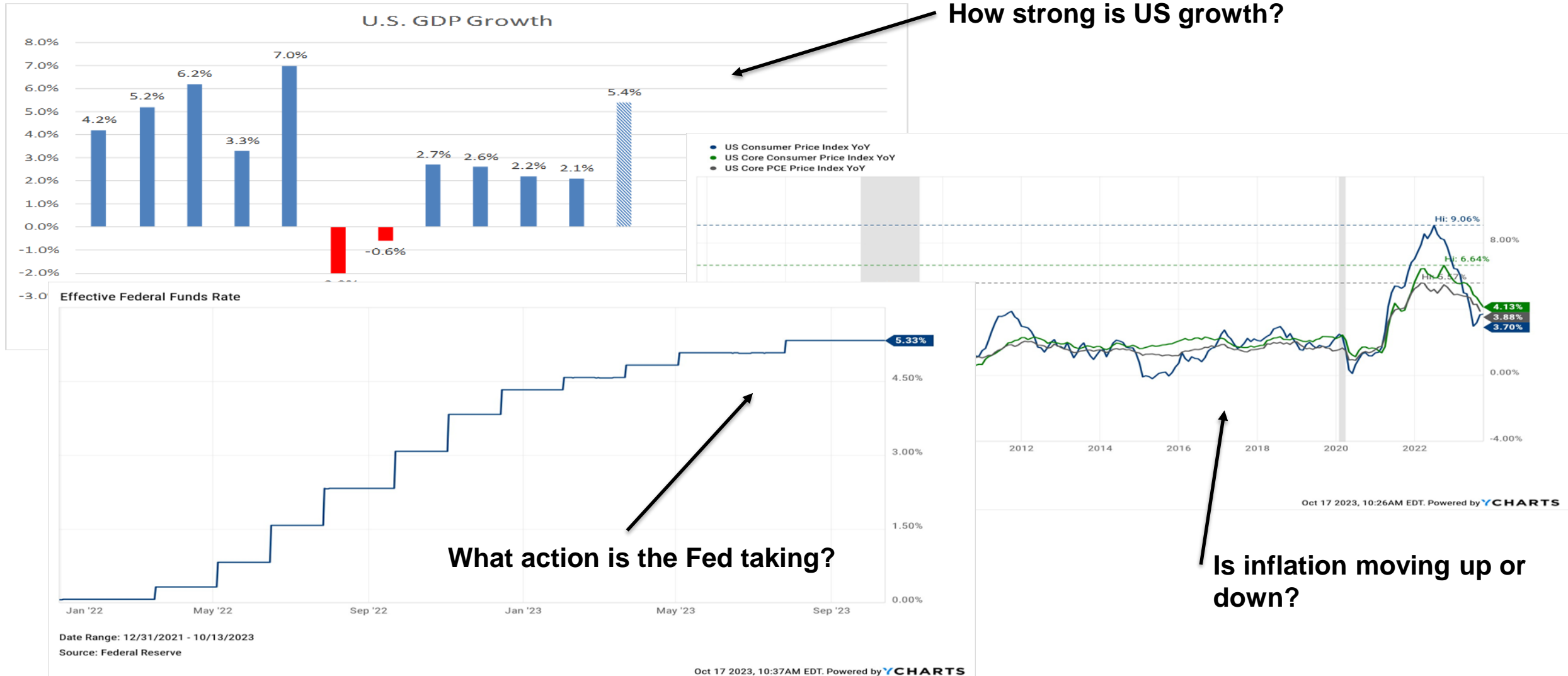
- Factors impacting financial markets/economic context
- Independent calculation of performance
- Results for the Total fund, asset classes, and individual managers
- Investment Policy compliance
- Fees disclosure

# Market Performance Charts

As of June 30, 2024

Strategy	Sector	Index	QTR	YTD	2023	2022	2021	2020	2019	2018	1-Yr	3-Yr	5-Yr	10-Yr	20-Yr
Stocks	US Large Cap	S&P 500	4.3%	15.3%	26.3%	-18.1%	28.7%	18.4%	31.5%	-4.4%	24.5%	10.0%	15.0%	12.8%	10.3%
	US Large Cap Growth	Russell 1000 Growth	8.3%	20.7%	42.7%	-29.1%	27.6%	38.5%	36.4%	-1.5%	33.4%	11.3%	19.3%	16.3%	12.2%
	US Large Cap Value	Russell 1000 Value	-2.2%	6.6%	11.4%	-7.6%	25.1%	2.8%	26.5%	-8.3%	13.0%	5.5%	9.0%	8.2%	8.1%
	US Small Cap	Russell 2000	-3.3%	1.7%	16.9%	-20.5%	14.8%	19.9%	25.5%	-11.0%	10.0%	-2.6%	6.9%	7.0%	7.8%
	Non-US Developed	MSCI EAFE (net)	-0.4%	5.3%	18.2%	-14.5%	11.3%	7.8%	22.0%	-13.8%	11.5%	2.9%	6.5%	4.3%	5.6%
	Emerging Markets	MSCI EM (net)	5.0%	7.5%	9.8%	-20.1%	-2.5%	18.3%	18.4%	-14.6%	12.5%	-5.1%	3.1%	2.8%	7.3%
	Int'l Small Cap	MSCI EAFE Small Cap (net)	-1.8%	0.5%	13.2%	-21.4%	10.1%	12.3%	25.0%	-17.9%	7.8%	-3.3%	4.2%	4.3%	6.5%
Bonds	Treasury	Bloomberg US Govt	0.1%	-0.8%	4.1%	-12.3%	-2.3%	7.9%	6.8%	0.9%	1.6%	-3.2%	-0.6%	0.9%	2.7%
	Broad Market	Bloomberg Aggregate	0.1%	-0.7%	5.5%	-13.0%	-1.5%	7.5%	8.7%	0.0%	2.6%	-3.0%	-0.2%	1.3%	3.1%
	Intermediate	Bloomberg Gov/Credit Int.	0.6%	0.5%	5.2%	-8.2%	-1.4%	6.4%	6.8%	0.9%	4.2%	-1.2%	0.7%	1.5%	2.9%
	High Yield	Bloomberg HY BaB 2% IC	1.2%	2.5%	12.6%	-10.6%	4.6%	7.7%	15.2%	-1.9%	10.0%	1.6%	3.9%	4.3%	6.3%
	Short Duration HY	ICE BofA 1-3 Yrs BB US Cash Pay HY	1.4%	2.8%	8.9%	-3.1%	3.2%	5.4%	8.7%	1.3%	8.1%	3.1%	4.0%	4.0%	5.5%
	Global Bonds	FTSE WGBI	-1.6%	-4.0%	5.2%	-18.3%	-7.0%	10.1%	5.9%	-0.8%	-0.6%	-6.9%	-3.2%	-1.2%	1.8%
GTAA	Unconstrained	65% MSCI World /35% FTSE WGBI	1.2%	6.0%	17.0%	-18.1%	11.0%	14.6%	19.9%	-5.8%	12.6%	2.0%	6.6%	5.7%	6.2%
Real Estate	Core	NCREIF ODCE Equal Weighted (net)	-0.8%	-3.2%	-13.4%	7.6%	21.9%	0.8%	5.2%	7.3%	-10.4%	1.1%	2.6%	5.8%	5.8%
Hedge Fund of Funds	Diversified FOFs	HFRI FOF Composite	0.4%	4.6%	6.1%	-5.3%	6.2%	10.9%	8.4%	-4.0%	8.5%	2.1%	4.8%	3.5%	3.5%
	Equity Long-Short	HFRI Equity Hedge	1.0%	6.1%	11.4%	-10.1%	11.7%	17.9%	13.7%	-7.1%	11.8%	1.9%	7.8%	5.6%	5.5%
Commodities	Commodities	Goldman Sachs Commodity	0.7%	11.1%	-4.3%	26.0%	40.4%	-23.7%	17.6%	-13.8%	15.0%	12.7%	8.3%	-3.1%	-1.5%

# Market Performance Charts



# What will I find in a performance report?

## Quantitative Analysis

- Portfolio Summary
- Total Fund Performance and Risk
- Asset Allocation Summary
- Manager Performance and Risk
- Investment Fee Summary

## Qualitative Analysis

- Market Summary
- Manager Watch List
- Compliance

# Investment Consultant Performance Report

## **Quantitative Analysis**

# Portfolio Summary

**Negative Cash Flow =**  
Contributions do not meet  
cash needs

Summary of Cash Flows						
	Fourth Quarter	One Year	Three Years	Five Years	Seven Years	Ten Years
Beginning Market Value	\$924,597,987	\$862,844,724	\$843,785,054	\$758,464,698	\$591,310,305	\$426,764,282
Net Cash Flow	-\$5,623,254	-\$40,608,335	-\$107,635,221	-\$110,572,711	-\$115,359,793	-\$89,116,718
Net Investment Change	\$42,435,191	\$139,173,536	\$225,260,091	\$313,517,937	\$485,459,412	\$623,762,360
Ending Market Value	\$961,409,924	\$961,409,924	\$961,409,924	\$961,409,924	\$961,409,924	\$961,409,924

- The present assumed actuarial rate as determined by the plan actuary is 7.0%.
- The Fund's fiscal year end is December 31st.

Did investments add  
value after fees?

# Total Fund Performance

Are asset allocation decisions meeting our goal?

			Ending December 31, 2019					
			2019 Q4	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs
<b>Total Fund</b>	<b>\$961,409,924</b>	<b>100.0%</b>	<b>4.7%</b>	<b>16.9%</b>	<b>9.1%</b>	<b>7.9%</b>	<b>9.6%</b>	<b>9.6%</b>
<i>Total Fund Benchmark</i>			4.8%	17.0%	8.6%	7.5%	8.9%	9.1%
<b>Total Domestic Large Cap Equity</b>	<b>\$226,859,596</b>	<b>23.6%</b>	<b>9.7%</b>	<b>31.9%</b>	<b>15.6%</b>	<b>11.9%</b>	<b>15.2%</b>	<b>13.6%</b>
<b>Total Domestic Small/Mid Cap Equity</b>	<b>\$125,592,040</b>	<b>13.1%</b>	<b>8.0%</b>	<b>24.7%</b>	<b>9.7%</b>	<b>9.5%</b>	<b>13.5%</b>	<b>13.5%</b>
<b>Total International Equity</b>	<b>\$62,256,229</b>	<b>6.5%</b>	<b>9.5%</b>	<b>27.0%</b>	<b>12.5%</b>	<b>8.4%</b>	<b>8.2%</b>	<b>6.2%</b>
<b>Total Investment Grade Fixed Income</b>	<b>\$103,012,795</b>	<b>10.7%</b>	<b>0.3%</b>	<b>6.4%</b>	<b>3.2%</b>	<b>2.6%</b>	<b>2.0%</b>	<b>3.2%</b>
<b>Total High Yield Fixed Income</b>	<b>\$79,458,894</b>	<b>8.3%</b>	<b>2.4%</b>	<b>14.6%</b>	<b>6.4%</b>	<b>6.5%</b>	<b>6.4%</b>	<b>8.0%</b>
<b>Total Real Estate - Core</b>	<b>\$133,456,713</b>	<b>13.9%</b>	<b>1.4%</b>	<b>5.4%</b>	<b>6.6%</b>	<b>8.4%</b>	<b>9.7%</b>	<b>11.2%</b>
<b>Total Real Estate - Value Add</b>	<b>\$77,459,758</b>	<b>8.1%</b>	<b>3.2%</b>	<b>9.5%</b>	<b>9.6%</b>	<b>11.0%</b>	--	--
<b>Total Hedge Fund of Funds - Multi Strategy</b>	<b>\$9,918,951</b>	<b>1.0%</b>						
<b>Total Opportunistic Strategies</b>	<b>\$79,481,967</b>	<b>8.3%</b>						
<b>Total Global Tactical Asset Allocation</b>	<b>\$48,430,983</b>	<b>5.0%</b>	<b>5.1%</b>	<b>20.9%</b>	<b>8.5%</b>	<b>7.4%</b>	<b>8.1%</b>	--
<b>Total Private Equity</b>	<b>\$9,532,634</b>	<b>1.0%</b>						
<b>Total Other</b>	<b>\$5,430,242</b>	<b>0.6%</b>						
<b>Total Cash Equivalents</b>	<b>\$519,123</b>	<b>0.1%</b>						

Is manager selection adding value?

Note: Time-weighted returns are not shown for asset classes for which internal rate of return (IRR) is a more appropriate measure. IRR can be found on the corresponding manager page.

	Fiscal Year Ends December 31										
	2019	2018	2017	2016	2015	2014	2013	2012	2011	2010	2009
<b>Total Fund</b>	<b>16.9%</b>	<b>-1.9%</b>	<b>13.2%</b>	<b>8.6%</b>	<b>3.5%</b>	<b>8.8%</b>	<b>19.4%</b>	<b>11.6%</b>	<b>3.4%</b>	<b>13.8%</b>	<b>16.0%</b>
<i>Total Fund Benchmark</i>	17.0%	-2.3%	12.1%	8.6%	3.2%	7.2%	17.7%	12.4%	2.9%	14.3%	15.0%

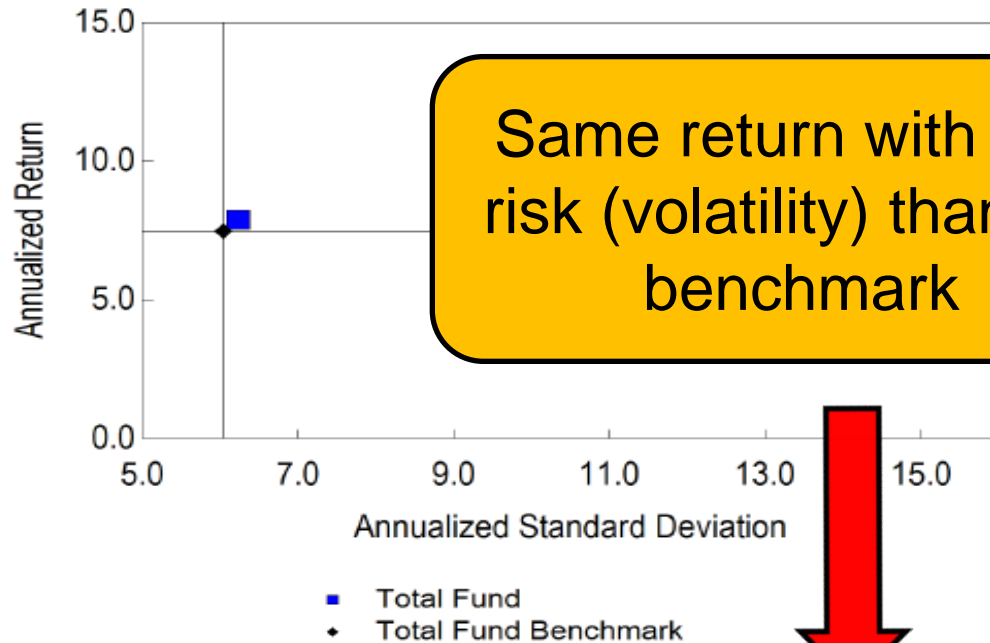
# Total Fund Composite Benchmark

Sample Pension Fund Custom Composite Benchmark		
Total Fund		
6/1/2018	Present	22.5% S&P 500 / 12.5% Russell 2500 / 5% MSCI EAFE / 15% BBgBarc US Govt/Credit Int TR / 7.5% BBgBarc Capital High Yield Ba + B 2% Capped / 20% NCREIF ODCE Equal Weighted Net / 5% 65% MSCI World Index/35% CitigroupWGBI / HFRI Event-Driven (Total) Index 10% / Russell 2000 2.5%
4/1/2015	5/31/2018	22.5% S&P 500 / 12.5% Russell 2500 / 5% MSCI EAFE / 15% BBgBarc US Govt/Credit Int TR / 7.5% BBgBarc Capital High Yield Ba + B 2% Capped / 22.5% NCREIF ODCE Equal Weighted Net / 10% HFRI Fund of Funds Composite Index / 5% 65% MSCI World Index/35% CitigroupWGBI
4/1/2014	3/31/2015	25% S&P 500 / 15% Russell 2500 / BBgBarc US Govt/Credit Int TR 10% / 10% BBgBarc Capital High Yield Ba + B 2% Capped / 17.5% NCREIF ODCE Equal Weighted Net / 7.5% MSCI EAFE / 10% HFRI Fund of Funds Composite Index / 5% 65% MSCI World Index/35% CitigroupWGBI
12/1/2013	3/31/2014	22.5% S&P 500 / 15% Russell 2500 / BBgBarc US Govt/Credit Int TR 15% / 10% BBgBarc Capital High Yield Ba + B 2% Capped / 15% NCREIF ODCE Equal Weighted Net / 7.5% MSCI EAFE / 10% HFRI Fund of Funds Composite Index / 5% 65% MSCI World Index/35% CitigroupWGBI
7/1/2011	11/30/2013	22.5% S&P 500 / 15% Russell 2500 / 15% BBgBarc US Govt/Credit TR / 10% BBgBarc Capital High Yield Ba + B 2% Capped / 15% NCREIF ODCE Equal Weighted Net / 7.5% MSCI EAFE / 10% HFRI Fund of Funds Composite Index / 5% 65% MSCI World Index/35% CitigroupWGBI
11/1/2010	6/30/2011	25% S&P 500 / 15% Russell 2500 / 15% BBgBarc US Govt/Credit TR / 10% BBgBarc Capital High Yield Ba + B 2% Capped / 15% NCREIF ODCE Equal Weighted Net / 10% MSCI EAFE / 10% HFRI Fund of Funds Composite Index
4/1/2009	10/31/2010	25% S&P 500 / 10% Russell MidCap / 5% Russell 2500 / 15% BBgBarc US Govt/Credit TR / 10% BBgBarc Capital High Yield Ba + B 2% Capped / 15% NCREIF ODCE Equal Weighted Net / 10% MSCI EAFE / 10% HFRI Fund of Funds Composite Index
1/1/2009	3/31/2009	30% S&P 500 / 10% Russell MidCap / 5% Russell 2500 / 10% BBgBarc US Govt/Credit TR / 10% BBgBarc Capital High Yield Ba + B 2% Capped / 15% NCREIF ODCE Equal Weighted Net / 10% MSCI EAFE / 10% HFRI Fund of Funds Composite Index
7/1/2008	12/31/2008	32.5% S&P 500 / 10% Russell MidCap / 5% Russell 2500 / 10% BBgBarc US Govt/Credit TR / 7.5% BBgBarc Capital High Yield Ba + B 2% Capped / 15% NCREIF ODCE Equal Weighted Net / 10% MSCI EAFE / 10% HFRI Fund of Funds Composite Index
4/1/2007	6/30/2008	35% S&P 500 / 10% Russell MidCap / 7% Russell 2500 / 13% BBgBarc US Govt/Credit TR / 5% BBgBarc Capital High Yield Ba + B 2% Capped / 15% NCREIF ODCE Equal Weighted Net / 10% MSCI EAFE / 5% ZZHFRI Fund of Funds
7/1/2006	3/31/2007	57% S&P 500 / 23% BBgBarc US Govt/Credit TR / 15% NCREIF ODCE Equal Weighted Net / 5% MSCI EAFE / 10% HFRI Fund of Funds Composite Index
10/1/2005	6/30/2006	60% S&P 500 / 30% BBgBarc US Govt/Credit TR / 10% NCREIF ODCE Equal Weighted Net
4/1/1979	9/30/2005	60% S&P 500 / 40% BBgBarc US Govt/Credit TR

What market indices are used for each asset class?

# Total Fund Risk

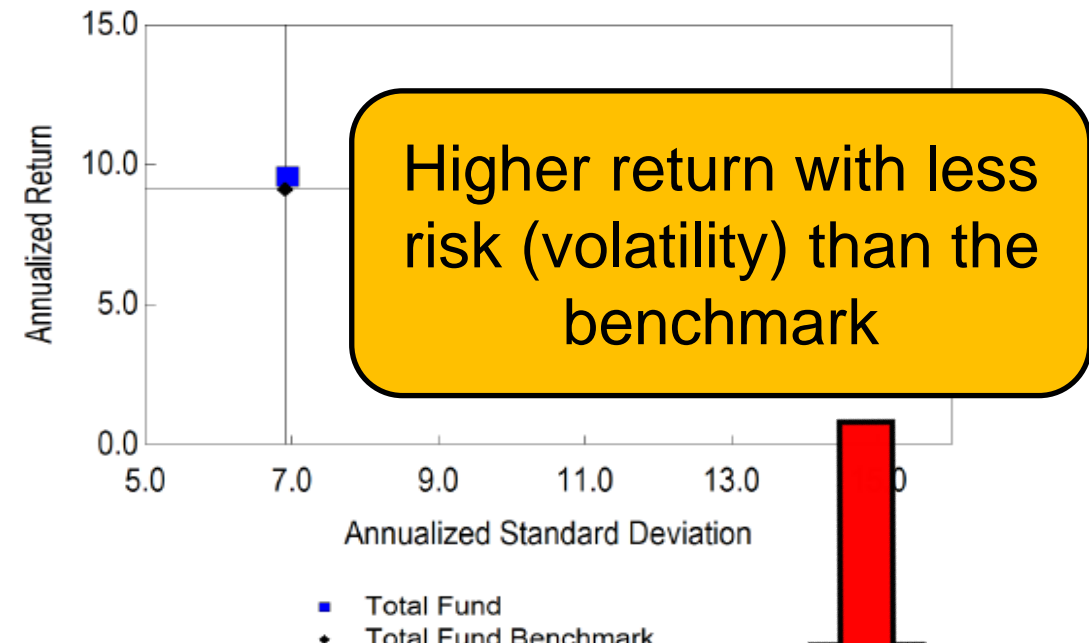
Annualized Return vs. Annualized Standard Deviation  
5 Years Ending December 31, 2019



5 Years Ending December 31, 2019

	Anlzd Return	Anlzd Standard Deviation
Total Fund	7.6%	5.7%
Total Fund Benchmark	7.6%	6.5%

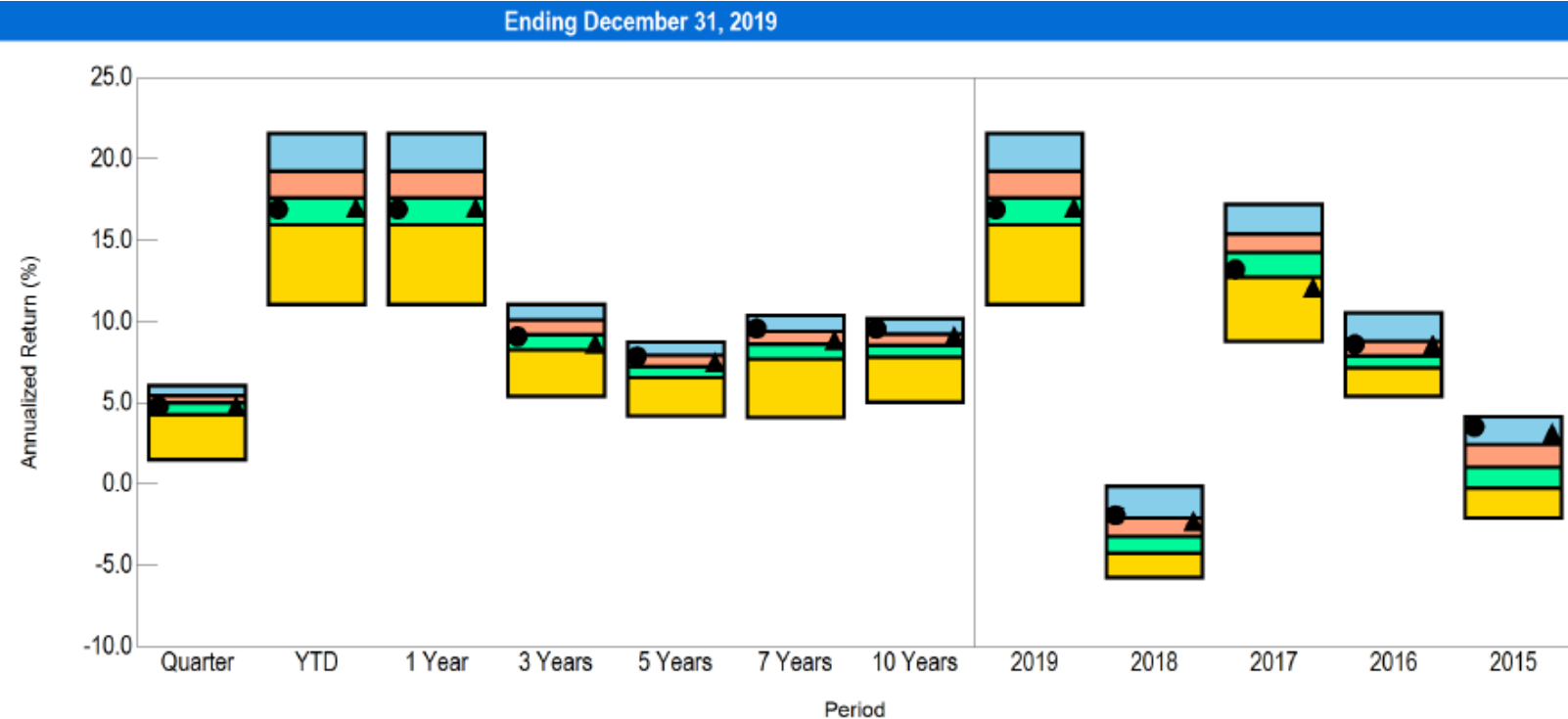
Annualized Return vs. Annualized Standard Deviation  
10 Years Ending December 31, 2019



10 Years Ending December 31, 2019

	Anlzd Return	Anlzd Standard Deviation
Total Fund	9.2%	6.5%
Total Fund Benchmark	9.0%	6.9%

# Performance Relative to Peers



	Return (Rank)											
5th Percentile	6.0	21.6	21.6	11.1	8.7	10.3	10.2	21.6	-0.2	17.2	10.5	4.1
25th Percentile	5.5	19.3	19.3	10.1	8.0	9.4	9.2	19.3	-2.1	15.4	8.8	2.5
Median	5.0	17.7	17.7	9.2	7.3	8.6	8.6	17.7	-3.2	14.3	7.9	1.1
75th Percentile	4.3	16.0	16.0	8.3	6.6	7.7	7.8	16.0	-4.2	12.8	7.2	-0.2
95th Percentile	1.5	11.1	11.1	5.4	4.2	4.1	5.1	11.1	-5.7	8.8	5.4	-2.0
# of Portfolios	358	356	356	349	341	323	300	356	335	260	271	283
● Total Fund	4.8 (62)	16.9 (63)	16.9 (63)	9.1 (55)	7.9 (28)	9.6 (19)	9.6 (15)	16.9 (63)	-1.9 (23)	13.2 (69)	8.6 (32)	3.5 (11)
▲ Total Fund Benchmark	4.8 (61)	17.0 (61)	17.0 (61)	8.6 (68)	7.5 (41)	8.9 (43)	9.1 (30)	17.0 (61)	-2.3 (27)	12.1 (83)	8.6 (34)	3.2 (16)

# Asset Allocation Summary

		Current vs. Policy			
		Current	Policy	Policy Range	Difference
Domestic Large Cap Equity		23.6%	22.5%	17.5% - 27.5%	1.1%
Domestic Small/Mid Cap		9.1%	12.5%	7.5% - 17.5%	0.6%
International Equity		6.5%	5.0%	0.0% - 10.0%	1.5%
Investment Grade Fixed Income		10.7%	15.0%	10.0% - 20.0%	-4.3%
High Yield Fixed Income	\$79,458,894	8.3%	7.5%	2.5% - 12.5%	0.8%
Real Estate - Core	\$133,456,713	13.9%	12.5%	7.5% - 17.5%	1.4%
Real Estate - Value Add	\$77,459,758	8.1%	7.5%	2.5% - 12.5%	0.6%
Hedge Fund of Funds - Multi-Strategy	\$9,918,951	1.0%	0.0%	0.0% - 5.0%	1.0%
Opportunistic Strategies	\$79,481,967	8.3%	10.0%	5.0% - 15.0%	-1.7%
Global Tactical Asset Allocation	\$48,430,983	5.0%	5.0%	0.0% - 10.0%	0.0%
Private Equity	\$9,532,634	1.0%	2.5%	0.0% - 5.0%	-1.5%
Other	\$5,430,242	0.6%	-	-	-
Cash Equivalents	\$519,123	0.1%	-	-	-
<b>Total</b>	<b>\$961,409,924</b>	<b>100.0%</b>	<b>100.0%</b>		

Time to rebalance?

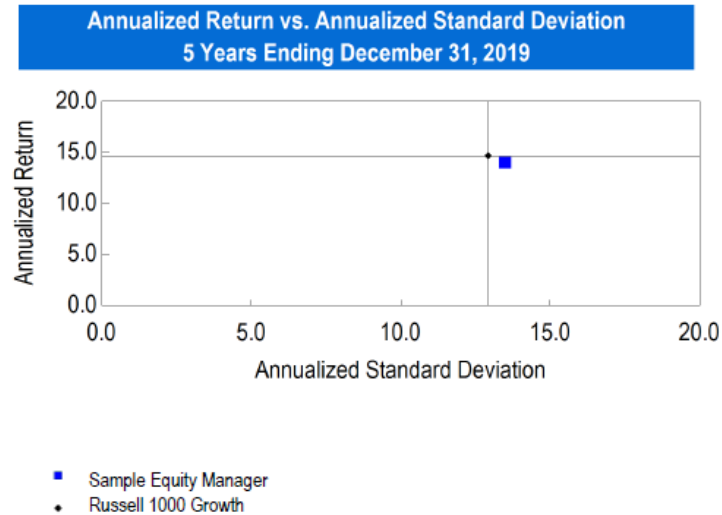
How much is needed?

# Manager Performance Summary

			Ending December 31, 2019							
	Market Value	% of Portfolio	2019 Q4	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Inception	Inception Date
Total Fund	\$961,409,924	100.0%	4.7%	16.9%	9.1%	7.9%	9.6%	9.6%	9.6%	Apr-79
Total Fund Benchmark			4.8%	17.0%	8.6%	7.5%	8.9%	9.1%	9.9%	Apr-79
Total Domestic Large Cap Equity	\$226,859,596	23.6%	9.7%	31.9%	15.6%	11.9%	15.2%	13.6%	--	Jul-05
Manager A	\$76,541,455	8.0%	10.9%	31.3%	14.8%	12.0%	15.3%	13.6%	10.8%	Jul-05
S&P 500			9.1%	31.5%	15.3%	11.7%	14.7%	13.6%	9.4%	Jul-05
Manager B	\$75,353,498	7.8%	10.4%	34.6%	20.6%	14.0%	17.0%	--	17.1%	Jun-10
Russell 1000 Growth			10.6%	36.4%	20.5%	14.6%	16.9%	15.2%	17.1%	Jun-10
Manager C	\$74,964,642	7.8%	7.8%	29.7%	11.5%	9.7%	13.4%	12.8%	8.8%	Jul-05
Russell 1000 Value			7.4%	26.5%	9.7%	8.3%	12.2%	11.8%	7.8%	Jul-05
Total Domestic Small/Mid Cap Equity	\$125,592,040	13.1%	8.0%	24.7%	9.7%	9.5%	13.5%	13.5%	--	Jul-05
Manager D	\$125,592,040	13.1%	8.0%	24.7%	9.7%	9.5%	13.5%	13.9%	9.9%	Jul-05
Russell 2500			8.5%	27.8%	10.3%	8.9%	12.3%	12.6%	9.0%	Jul-05
Total International Equity	\$62,256,229	6.5%	9.5%	27.0%	12.5%	8.4%	8.2%	6.2%	4.4%	Apr-07
Manager EE	\$34,724,647	3.6%	13.9%	34.3%	17.3%	10.4%	10.1%	8.2%	6.0%	Oct-07
MSCI EAFE			8.2%	22.0%	9.6%	5.7%	6.3%	5.5%	1.9%	Oct-07
MSCI EAFE Growth			8.4%	27.9%	12.8%	7.7%	7.9%	6.9%	3.1%	Oct-07
MSCI ACWI ex USA			8.9%	21.5%	9.9%	5.5%	5.4%	5.0%	1.8%	Oct-07
Manager F	\$27,531,582	2.9%	4.4%	18.7%	7.4%	6.2%	6.2%	--	7.2%	Jul-12
MSCI EAFE Value			7.8%	16.1%	6.3%	3.5%	4.8%	4.0%	6.4%	Jul-12
MSCI ACWI ex USA			8.9%	21.5%	9.9%	5.5%	5.4%	5.0%	6.9%	Jul-12

# Manager Performance Detail

Account Information		Sample Equity Manager		
Account Name	Sample Equity Manager	Ending December 31, 2019		
Account Structure	Separate Account			
Investment Style	Active			
Inception Date	6/30/10			
Account Type	US Stock Large Cap Growth			
Benchmark	Russell 1000 Growth			
Universe	eV US Large Cap Growth Equity Gross			
		Fourth Quarter		Since 7/1/10
		Beginning Market Value	\$70,482,581	\$39,301,249
		Net Cash Flow	-\$2,199,101	-\$57,116,289
		Net Investment Change	\$7,070,018	\$93,168,539
		Ending Market Value	\$75,353,498	\$75,353,498

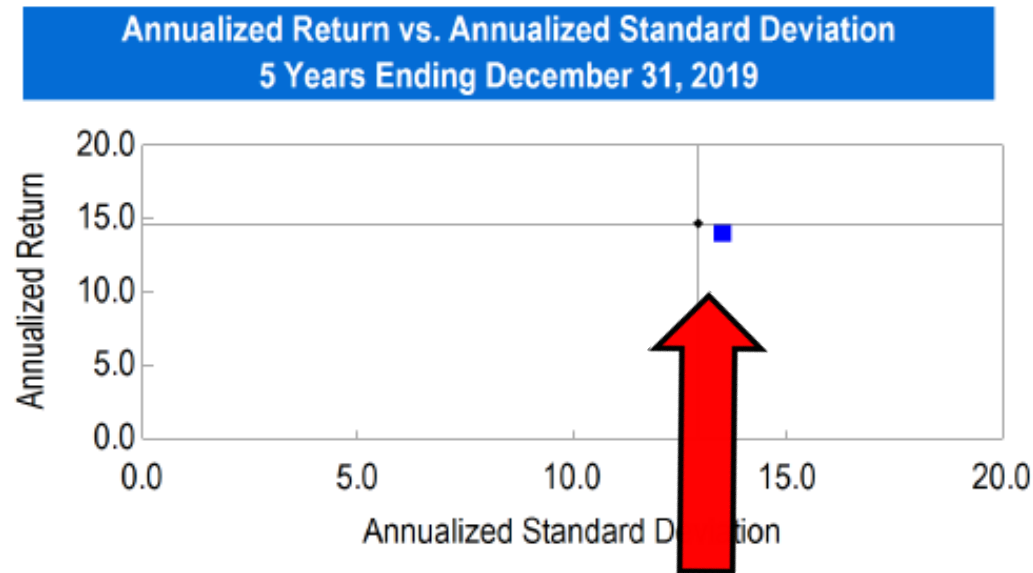


3 Years Ending December 31, 2019				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Sample Equity Manager	20.6%	13.6%	101.5%	101.4%
Russell 1000 Growth	20.5%	13.3%	100.0%	100.0%

5 Years Ending December 31, 2019				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Sample Equity Manager	14.0%	13.5%	101.6%	105.2%
Russell 1000 Growth	14.6%	12.9%	100.0%	100.0%

							Calendar Years															
	2019 Q4 Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank			2019 Rank	2018 Rank	2017 Rank	2016 Rank	2015 Rank	2014 Rank	Inception	Inception Date								
Sample Equity Manager	10.4%	31	34.6%	47	20.6%	42	14.0%	43	34.6%	47	-0.7%	52	31.4%	34	1.9%	74	7.5%	27	14.9%	16	17.1%	Jun-10
Russell 1000 Growth	10.6%	27	36.4%	32	20.5%	45	14.6%	33	36.4%	32	-1.5%	57	30.2%	42	7.1%	26	5.7%	42	13.0%	38	17.1%	Jun-10

# Manager Performance Detail



Less return with more risk (volatility) than the benchmark

3 Years Ending December 31, 2019				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Sample Equity Manager	20.6%	13.6%	101.5%	101.4%
Russell 1000 Growth	20.5%	13.3%	100.0%	100.0%

5 Years Ending December 31, 2019				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Sample Equity Manager	14.0%	13.5%	101.6%	105.2%
Russell 1000 Growth	14.6%	12.9%	100.0%	100.0%

# Investment Fee Summary

## Sample Pension Fund Investment Performance Report as of March 31, 2020

Account	Fee Schedule	Market Value As of 3/31/2020	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
<b>Total Domestic Large Cap Equity</b>	-	<b>\$64,109,619</b>	<b>35.8%</b>	--	--
Manager A	0.08% of First 50.0 Mil, 0.06% of Next 50.0 Mil, 0.04% Thereafter	\$34,755,363	19.4%	\$27,804	0.08%
Manager B	0.08% of First 50.0 Mil, 0.06% of Next 50.0 Mil, 0.04% Thereafter		16.4%	\$23,483	0.08%
<b>Total Domestic Small/Mid Cap Equity</b>	-		<b>4.7%</b>	--	--
Manager C			4.7%	\$76,333	0.90%
<b>Total Domestic Small Cap Equity</b>	-			--	--
Manager D				\$54,473	0.80%
<b>Total International Equity</b>	-			--	--
Manager E				\$60,682	0.75%
<b>Total Investment Grade Fixed Income</b>	-			--	--
Manager F				\$30,367	0.20%
<b>Total High Yield Fixed Income</b>	-			--	--
Manager G				\$80,968	0.50%
<b>Total Real Estate - Core</b>	-		<b>17.5%</b>	--	--
Manager H			8.7%	\$134,876	0.87%
Manager I			8.8%	\$163,324	1.03%
<b>Total Real Estate - Value Add</b>	-		<b>5.8%</b>	--	--
Manager J	0.90% of Assets	\$10,218,391	5.7%	\$91,966	0.90%
Manager K	1.25% of Assets	\$121,912	0.1%	\$1,524	1.25%
<b>Total Opportunistic High Yield</b>	-	<b>\$4,413,850</b>	<b>2.5%</b>	--	--
Manager L	0.60% of Assets	\$4,413,850	2.5%	\$26,483	0.60%
<b>Total Global Tactical Asset Allocation</b>	-	<b>\$11,684,472</b>	<b>6.5%</b>	--	--
Manager M	0.75% of Assets	\$11,684,472	6.5%	\$87,634	0.75%
<b>Total Private Equity</b>	-	<b>\$2,574,442</b>	<b>1.4%</b>	--	--
Manager N	1.00% of Assets	\$2,574,442	1.4%	\$25,744	1.00%
<b>Investment Management Fee</b>		<b>\$179,280,754</b>	<b>100.0%</b>	<b>\$885,663</b>	<b>0.49%</b>

Est. Annual Fee  
\$885,663  
or  
0.49%

# Why are returns missing for some managers?

	Market Value	% of Portfolio	Ending December 31, 2019						Inception	Inception Date
			2019 Q4	1 Yr	3 Yrs	5 Yrs	7 Yrs	10 Yrs		
<b>Total Opportunistic Strategies</b>	<b>\$79,481,967</b>	<b>8.3%</b>								
Manager N	\$53,269,666	5.5%	0.8%	6.1%	--	--	--	--	5.1%	May-18
HFRI Credit Index			1.7%	6.5%	4.1%	3.9%	4.5%	5.4%	3.0%	May-18
Manager O	\$23,471,757	2.4%								
Manager P	\$2,740,544	0.3%	0.0%	--	--	--	--	--	7.9%	Jun-19
<b>Total Global Tactical Asset Allocation</b>	<b>\$48,430,983</b>	<b>5.0%</b>	<b>5.1%</b>	<b>20.9%</b>	<b>8.5%</b>	<b>7.4%</b>	<b>8.1%</b>	<b>--</b>	<b>7.8%</b>	<b>Jul-11</b>
Manager Q	\$48,430,983	5.0%	5.1%	20.9%	8.5%	7.4%	8.1%	--	7.8%	Jul-11
65% MSCI World Index/35% CitigroupWGBI			5.4%	19.9%	9.7%	6.5%	7.2%	7.0%	6.6%	Jul-11
<b>Total Private Equity</b>	<b>\$9,532,634</b>	<b>1.0%</b>								
Manager R	\$24,424	0.0%								
Manager S	\$200,447	0.0%								
Manager T	\$9,307,763	1.0%								
<b>Total Other</b>	<b>\$5,430,242</b>	<b>0.6%</b>								
Manager U	\$5,430,242	0.6%								
<b>Total Cash Equivalents</b>	<b>\$519,123</b>	<b>0.1%</b>								
Manager V	\$519,123	0.1%								



# “IRR” Internal Rate of Return

Account Information	
Account Name	Sample Private Equity Manager
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	1/01/18
Account Type	Private Equity
Benchmark	
Universe	

Sample Private Equity Manager Ending December 31, 2019		
	Fourth Quarter	Inception 1/1/18
Beginning Market Value	\$9,864,218	\$0
Net Cash Flow	\$0	\$7,953,451
Net Investment Change	-\$556,455	\$1,354,312
Ending Market Value	\$9,307,763	\$9,307,763

Note: Investment is valued as of December 31, 2019.

Sample Private Equity Manager reported since inception of the fund through December 31, 2019:

- Net Internal Rate of Return for 1st close investors is 30.5%
- Net Internal Rate of Return for 2nd close investors is 23.4%

Also known as  
Dollar  
Weighted  
Return



# Time Weighted vs. Dollar Weighted Returns

- Time Weighted Returns (also called geometric mean return)
  - Time Weighted Return (TWR) is generally used to measure the performance of funds investing in public markets.
  - TWR measures a fund's compounded rate of return over time.
  - TWR does not account for the timing of cash flows into and out of the fund.
  - TWR is appropriate for calculating the return for funds in which the manager does not control when investors enter and exit a fund.

# Time Weighted vs. Dollar Weighted Returns

- Dollar Weighted Returns (also referred to as “IRR”)
  - Internal Rate of Return (IRR) is generally used to measure the performance of illiquid, non-marketable securities such as private equity.
  - It is calculated by finding the rate of return that will set the present values of all cash flows equal to the value of the initial investment.
  - IRR is appropriate for calculating the return for funds in which the manager has some level of control over the timing of cash flows as how they exercise this control is critical to assessing their skill.

# Investment Consultant Performance Report

## **Qualitative Analysis**

# Manager Watchlist – Performance Related

## Sample Mid Cap Value Equity Manager

### Correspondence/Transfer Summary

- In June of 2004, manager was funded with \$13.3 million.
- A mid cap value search will be presented at today's meeting.

### Manager Summary

- IPS conducted an on-site due diligence meeting with the manager on May 28, 2015.
- IPS conducted due diligence meetings with the manager on October 9, 2015 and February 1, 2016.

**Recommendation: Consider candidates for replacement.**

### Compliance Summary

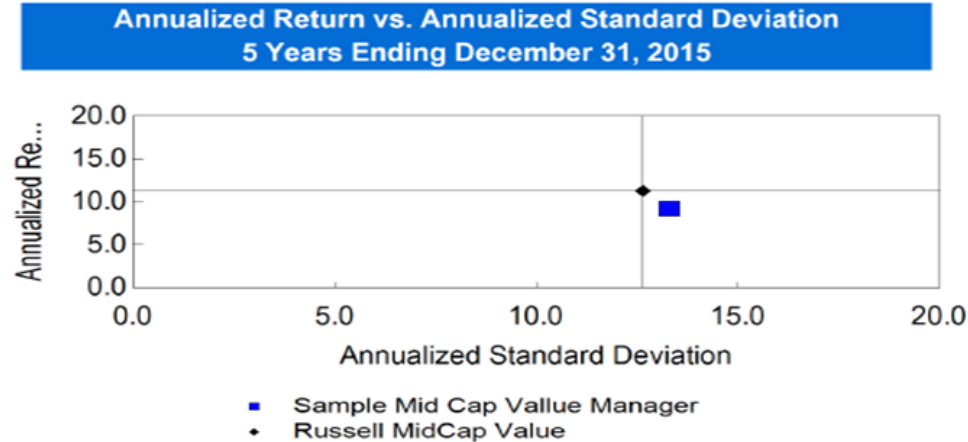
Exceptions : None.

Action to be taken: None.

Items of Interest: None.

# Manager Watchlist – Performance Related

Account Information	
Account Name	Sample Mid Cap Value Manager
Account Structure	Separate Account
Investment Style	Active
Inception Date	7/01/04
Account Type	US Stock Mid Cap Value
Benchmark	Russell MidCap Value
Universe	eA US Mid Cap Value Equity Gross



Sample Mid Cap Value Manager Ending December 31, 2015		
	Fourth Quarter	Inception 7/1/04
Beginning Market Value	\$11,852,486	\$13,363,600
- Withdrawals	\$0	-\$43,430,351
- Fees	-\$18,893	-\$473,295
+ Contributions	\$0	\$29,784,158
= Net Cash Flow	\$0	-\$13,931,777
+ Net Investment Change	\$425,328	\$12,845,992
= Ending Market Value	\$12,277,815	\$12,277,815

3 Years Ending December 31, 2015				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Sample Mid Cap Value Manager	11.7%	11.6%	97.6%	109.2%
Russell MidCap Value	13.4%	10.9%	100.0%	100.0%

5 Years Ending December 31, 2015				
	Anlzd Return	Anlzd Standard Deviation	Up Mkt Capture Ratio	Down Mkt Capture Ratio
Sample Mid Cap Value Manager	9.2%	13.3%	93.0%	105.1%
Russell MidCap Value	11.3%	12.6%	100.0%	100.0%

									Calendar Years									Inception		
	2015 Q4	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	2015	Rank	2014	Rank	2013	Rank	2012	Rank	2011	Rank	Return	Since
Sample Mid Cap Value Manager	3.6%	35	-6.9%	80	11.7%	83	9.2%	90	-6.9%	80	12.2%	43	33.5%	72	13.3%	83	-1.6%	57	8.0%	Jul-04
Russell MidCap Value	3.1%	50	-4.8%	60	13.4%	59	11.3%	50	-4.8%	60	14.7%	20	33.5%	72	18.5%	34	-1.4%	54	9.0%	Jul-04

Note: Returns are gross of fees.

# Manager Watchlist – Performance Related

- Performance Related Issue
  - Did you stick to your discipline?
  - Any change in the process/style drift?
  - Proposed changes with the team/compensation?
  - Requested changes with the Investment Policy?
  - Assets/clients left the strategy?
  - Anticipated turn-around?
  - Fee reduction/performance-based fee?



# Manager Watchlist – Ownership Change

## Sample Real Estate Manager

### Manager Summary

- On June 15, 2017, Manager K and Manager U announced an agreement whereby Manager K will acquire Manager U. The transaction closed September 1, 2017. The two firms combined their real estate teams and Manager U is a unit of Manager K. Manager U retained its brand name and is Manager K's exclusive real estate investment management platform. Following the completion of the transaction, Manager U continues to be managed by its current team, led by Group Chief Executive Officer, John Doe1, who reports to John Doe2, President, Manager K. IPS conducted a due diligence meeting with Manager U on August 1, 2017 to discuss these changes.
- IPS conducted due diligence meetings with Manager K on January 31, 2017 and August 1, 2017.

**Recommendation: Monitor due to ownership change.**

### Compliance Summary

Manager verified the portfolio is currently, and has been during the past quarter, in compliance with the firm's commingled investment vehicle guidelines and/or offering document governing the management of the investment. With respect to the portfolio(s) under management, the manager acknowledges sole fiduciary responsibility under ERISA for adherence with the commingled investment vehicle and/or offering document guidelines.

**Items of Interest: Personnel Changes** - In an email dated 2/19/19, manager noted the following personnel changes. Jane Doe was promoted to President of Manager K. Jane will become Chair of the Manager K U.S. Management and Investment Committees, in addition to continuing her responsibilities as COO. John Doe3 will continue as CEO and work closely with Jane. In addition, Manager K, the investment fund's trustee, has added two independent directors to its Board. Jane Doe 2 and John Doe4 joined the Board of Directors in January.

**Form ADV** - Manager noted that as a bank, Manager K does not file a Form ADV.

# Manager Watchlist – Ownership Change

- Change in Ownership
  - Key personnel changes?
    - Chief Investment Officer
    - Portfolio Management Team
  - Signed employment contracts? Term?
  - New lines of business?
  - Involvement of new parent company or partner/affiliate?



# Manager Watchlist – Personnel Change

## Sample Small/Mid Cap Equity Manager

### Manager Summary

- IPS conducted a due diligence meetings with Manager D on March 28, 2018 and March 20, 2019 (on-site).

**Recommendation: Consider candidates for replacement.**

### Compliance Summary

**Exceptions :** None.

**Action to be taken:** None.

**Items of Interest: Personnel Changes** - Due to the growth of the Small/Mid-Cap Core investment strategy, the Firm has decided to transition the role of Chief Investment Officer to Jane Doe. This transition allows John Doe, who has been the lead Portfolio Manager on the Small/Mid Cap Core investment strategy since 2001, to fully focus his efforts on the investment management and client engagement needs of this growing investment strategy. The investment philosophy, process and team-based approach will remain unchanged. **Form ADV** – Manager D filed its annual amendment on March 28, 2019 which contains the following material changes: 1) The name of the firm changed from Manager Da. to Manager D, effective November 5, 2018, as a result of a group-wide adoption by the parent organization of the brand name Manager Dd. The name change had no effect on the firm's ownership or operations.

# Manager Watchlist – Personnel Change

- Change in Portfolio Management
  - Why did the PM leave?
  - What involvement did new PM have in the process previously?
  - Any other anticipated changes to team?
  - Anticipated changes to the process?
  - Employment contracts or bonuses?



# Compliance Violation

## Sample Investment Grade Fixed Income Manager

### Manager Summary

- IPS conducted due diligence meetings with Manager H on January 7, 2017, January 11, 2019 and April 24, 2019.
- IPS conducted an on-site due diligence meetings with Manager H on June 20, 2017 and August 28, 2018.

**Recommendation: None.**

### Compliance Summary

**Investment Policy states:** The following categories of securities and trading practices are not permissible investments using the Fund's assets: 4) Supernational bonds.

**Exceptions :** Security – Cusip 656836AB9 North American Development Bank, 2.5% due 10/26/2022. Units – 230,000, Cost \$225,234, Market Value - \$231,971. Security is a supernational bond.

**Manager response Summary:** In the quarterly compliance checklist, the manager stated the bond was a accidentally purchased in the portfolio. The bond was sold out of the account to bring the account back into compliance with the investment policy statement. The proceeds were \$223,721.

**Action to be taken:** IPS requested the manager reimburse the Fund \$1,513 for the loss on the sale of the asset. The manager deducted \$1,513 from their quarterly investment manager fee invoice for the 4th quarter of 2018.

**Items of Interest: None.**

# Compliance Violation

- How/why did the violation occur?
- Changes that have been made to avoid future violations?
- Compensation due?
- Isolated incident?
- E&O -amount / carrier notification?



## Key Takeaways

- Performance reports can be both quantitative and qualitative in nature.
- Performance reports should give up-to-date information about fund performance in a consistent, accessible, and understandable manner.
- Finding and applying the right evaluation standards for your investments is important. If you don't, you might end up drawing the wrong conclusions.
- Encourage Trustees to review performance reports before meetings.