

# Fourth Quarter 2016 Performance Report

Adams County Retirement Plan **February 7, 2017** 

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# 4<sup>th</sup> Quarter 2016 Capital Markets Exhibits





Source: Morningstar Direct, S&P, MSCI, Barclays



### Asset Class Returns Before and After the Election

December 31, 2015 - November 8, 2016 November 9, 2016 - December 31, 2016 Calendar Year 2016 Return 20 16.0 15 Rate of Return (%) 10 7.1 4.9 4.0 3.2 5 2.1 -1.1 -2.2-2.3 -5 -4.1-4.7 -10 U.S. Equity **Emerging Markets** U.S. Dollar Developed Non-Commodities U.S. Fixed Income Global Fixed U.S. Equity Income Source: Morningstar Direct **Asset Class Observations** U.S. Equity Potential for corporate tax cuts and de-regulation spurred optimism Developed Non-U.S. Equity Less affected by U.S. election but uncertainty around Brexit and the trajectory of monetary policy muted expectations Negative sentiment surrounding trade agreements and a stronger U.S. dollar added downside risk **Emerging Markets** Commodities Expectations for increased inflation and infrastructure spending boosted commodity returns U.S. Fixed Income Rising inflation expectations drove yields higher and prices lower Global Fixed Income Pressure mounted from rising inflation expectations, yields, and a stronger U.S. dollar Proposed fiscal stimulus and the Fed's rate hike produced appreciation U.S. Dollar

Notes: U.S. Equity represented by Russell 3000 Index, Developed Non-U.S. Equity represented by MSCI EAFE Index, Emerging Markets represented by MSCI Emerging Markets Index, Commodities represented by Bloomberg Commodities Index, U.S. Fixed Income represented by Barclays U.S. Aggregate Bond Index, Global Fixed Income represented by Barclays U.S. Aggregate Bond Index, U.S. Dollar Index.



# U.S. Value Outperforms

#### U.S. Equity Style Performance

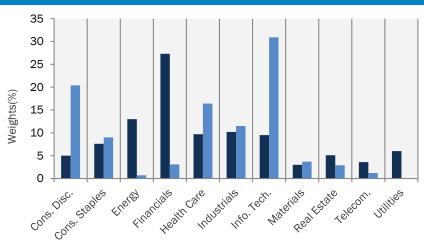


Source: Morningstar Direct, Russell

Note: Russell Style Indices shown in upper left chart; Russell 1000® Value, Russell 1000® Growth, Russell Mid Cap® Value, Russell Mid Cap® Growth, Russell 2000® Value, and Russell 2000® Growth.

■ 4th Quarter 2016 ■ Calendar Year 2016

#### Value & Growth Sector Weights

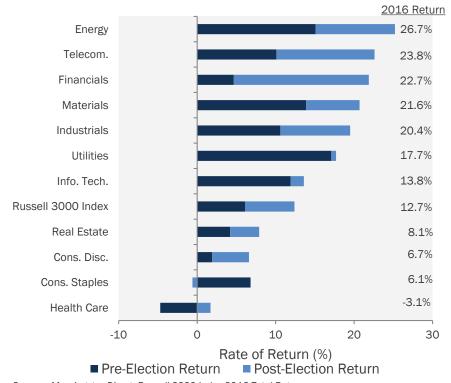


■ Russell 3000 Value

Source: Morningstar Direct

Russell 3000 Growth

#### "Value" Sectors Outperform Post-Election



Source: Morningstar Direct, Russell 3000 Index 2016 Total Returns

#### Style Observations

- Financial stocks including banks and asset managers rallied postelection due to rising interest rates and expectations for a more relaxed regulatory environment.
- Other traditional value sectors such as Energy and Materials also performed well post-election driven by regulatory expectations and the anticipation of increased infrastructure spending.

# The Great Bond Rotation?



- Despite the recent uptick in yields, interest rates are still low when compared to long-term history.
- In 2016, the 10-year treasury yield increased 1.1% from a low of 1.4% post Brexit to 2.5% at year end.
- Post-election, real rates increased dramatically while inflation expectations had a more modest, though still positive impact.

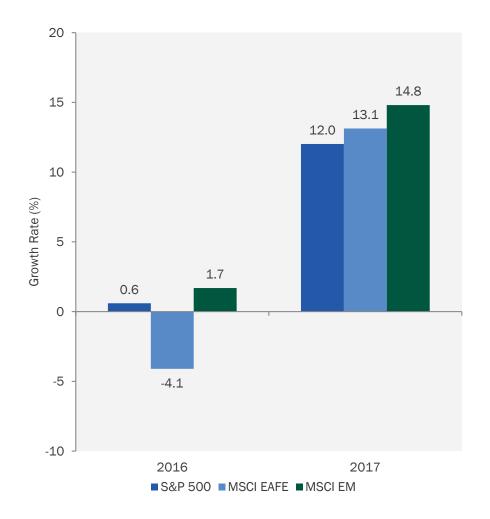


# **Global Equity Valuations**

#### Global Equity P/E Ratios

# P/E Ratio (TTM) P/E Ratio (NTM) 30 23.2 20.0 20 Price to Earnings (x) 17.3 14.8 14.3 11.9 10 0 ■ MSCI USA ■ MSCI EAFE ■ MSCI EM

#### Estimated Earnings Per Share Growth (YoY %)



Source: MSCI



Source: FactSet Market Aggregates

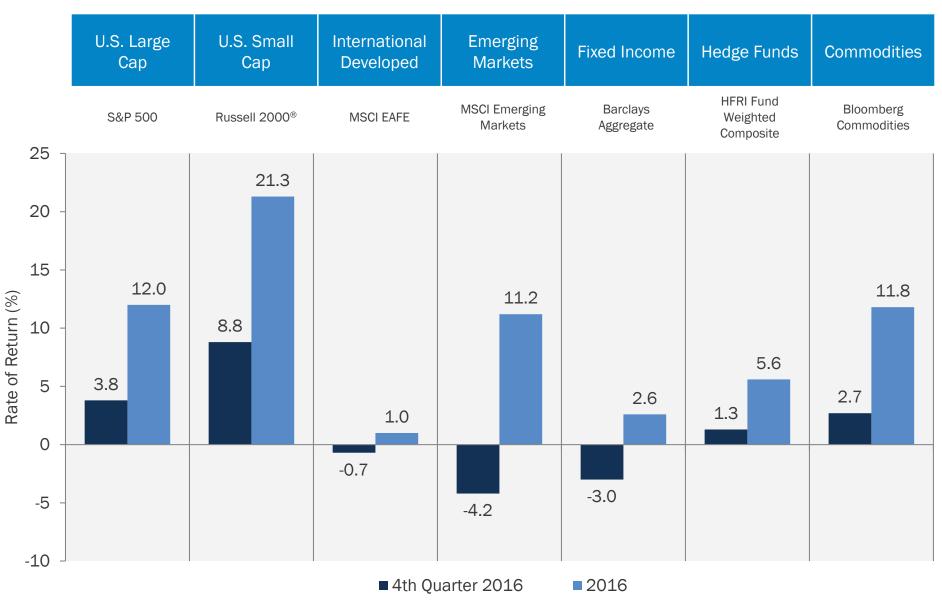
# 2017 Outlook

2017 starts with the confluence of a complex and fluid set of circumstances, each with the potential of a wide range of outcomes in terms of market impact.

Theme	Upside Scenario	Downside Scenario
Fiscal Policy Stimulus	Expansionary fiscal policy such as corporate tax cuts are <u>quickly agreed upon</u> , providing a swift boost to corporate earnings. Infrastructure spending and deregulation, while having a longer implementation period, also achieves consensus to move forward.	Fiscal hawks push back and <u>significantly delay</u> proposals, instead seeking tax reform and spending that does not increase the deficit or the national debt.
Global Trade Policy	The tone of early trade negotiations is balanced, resulting in a framework that allows for compromises for both the US and its trade partners, mitigating concerns of negative impacts on economic growth and foreign policy relationship.	The administration uses its Presidential powers to quickly move forward with tariffs, provoking a <u>trade</u> war that has an abrupt negative impact on the revenue of exporters and its suppliers and causes a sharp upward spike in inflation expectations.
US Monetary Policy	The US Federal Reserve tightens monetary policy <u>inline</u> with <u>market expectations</u> (currently two rate hikes for 2017).	High inflation surprises the Fed, leading to an accelerated pace of monetary policy tightening and resulting in a sharp spike in volatility across global equity, fixed income and currency markets.
Elections and Referendums	Concerns over elections outcomes – particularly in Europe – are overblown as transfers of political party power are orderly and proposed changes are more symbolic than economically-substantive, calming markets.	Anti-establishment candidates <u>sweep major</u> <u>European elections</u> , and amid unstable political coalitions, markets begin to price in a highly uncertain future for the EU and the Eurozone.
China's Financial Conditions	China <u>successfully manages to moderate</u> ballooning debt levels and slow capital outflows without a negative impact on economic growth.	Capital <u>outflows sharply accelerate</u> , and China decides on a one-time large devaluation of the Yuan, creating turmoil and defaults in debt markets as liquidity dramatically falls.



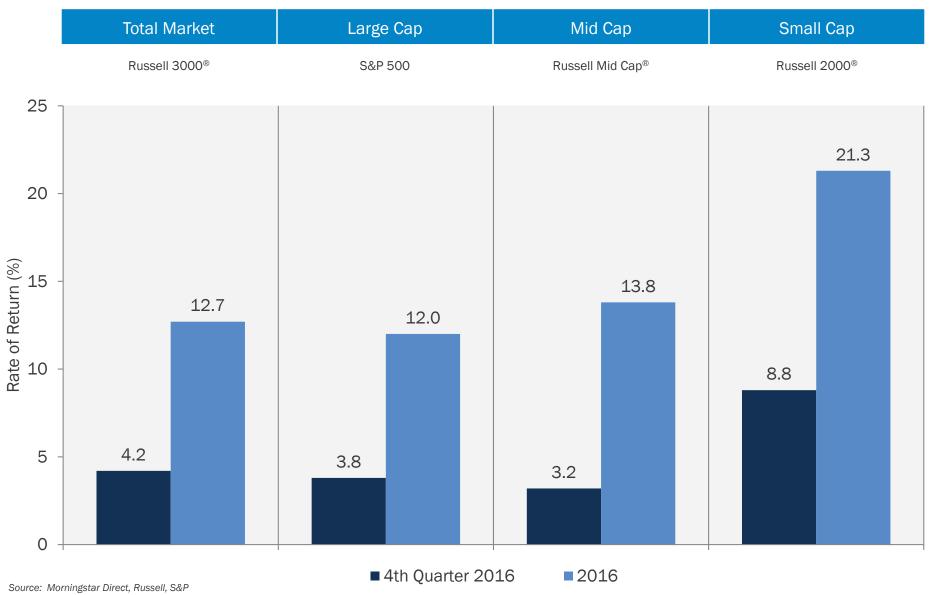
# Fourth Quarter Market Overview



Source: Morningstar Direct, S&P, Russell, MSCI, Barclays, HFRI, Bloomberg



# U.S. Equity Market Performance







# S&P 500 Scorecard

		Sect	or Retu	irns	
	<u>Div.</u> <u>Yield<sup>(1)</sup></u>	<u>P/E</u> <u>Ratio<sup>(2)</sup></u>	<u>15-Yr</u> <u>Avg.<sup>(3)</sup></u>		
Energy	2.5%	32.4x	14.6x		7.3%
Telecom	4.4%	15.7x	20.2x		4.8%
Financials	1.6%	16.2x	14.7x		21.1% 22.8%
Industrials	2.1%	21.1x	18.1x		7.2% 18.9%
Materials	2.1%	21.2x	18.7x		4.7% 16.7%
Utilities	3.6%	21.3x	15.8x		0.1%
Technology	1.5%	21.4x	22.0x		1.2%
S&P 500	2.0%	20.5x	17.4x		3.8% 12.0%
Consumer Discretionary	1.5%	20.5x	19.3x		2.3% 6.0%
Consumer Staples	2.7%	23.4x	19.2x	-2.0%	5.4%
Real Estate	3.4%	28.7x		-10.1%	2.2%
Health Care	1.8%	21.3x	20.9x	-4.0% <b>-</b> 2.7%	

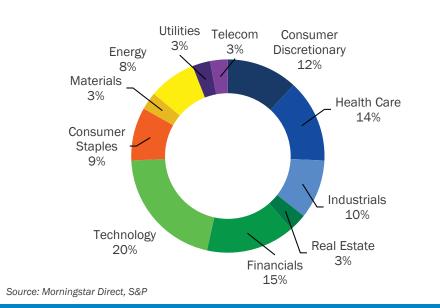
4<sup>th</sup> Quarter 2016 2016

Source: Morningstar, S&P

<sup>(4)</sup> Real Estate sector was created in September 2016. Characteristics are not yet available.



#### **Sector Weights**



#### Top Five S&P 500 Index Holdings

	Name	Sector	% of S&P	YTD 2016 Return	YTD 2016 Contribution to Return
1.	Apple, Inc.	Technology	3.1%	12.5%	+0.40%
2.	Microsoft Corp.	Technology	2.4%	15.1%	+0.37%
3.	Exxon Mobil Corp.	Energy	2.0%	19.9%	+0.36%
4.	Johnson & Johnson	Health Care	1.7%	15.3%	+0.24%
5.	Amazon	Cons. Discr.	1.5%	11.0%	+0.16%

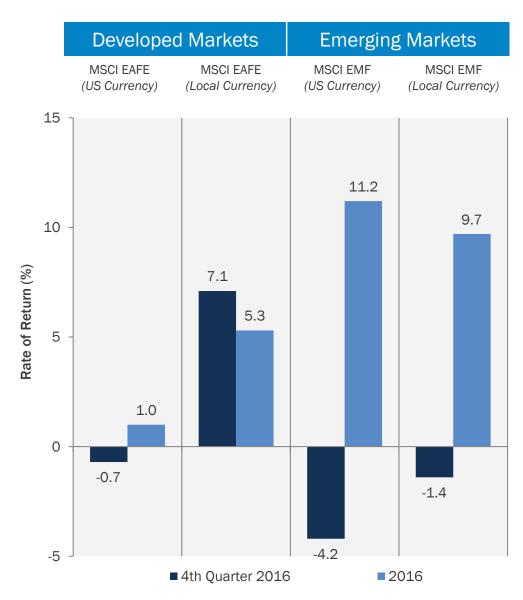
Source: Morningstar Direct, S&P

<sup>&</sup>lt;sup>(1)</sup>Trailing 12 month as of 12/31/16.

<sup>(2)</sup>Trailing 12 month P/E as of 12/31/2016.

<sup>(3)15-</sup>year average trailing 12 month P/E as of 12/31/2016.

# Non-U.S. Equity Market Performance



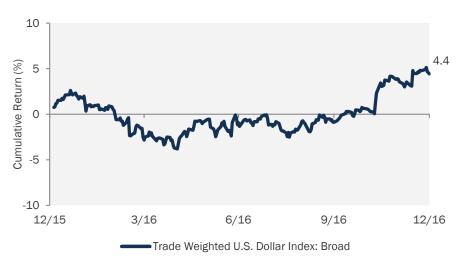


# ELLWOOD



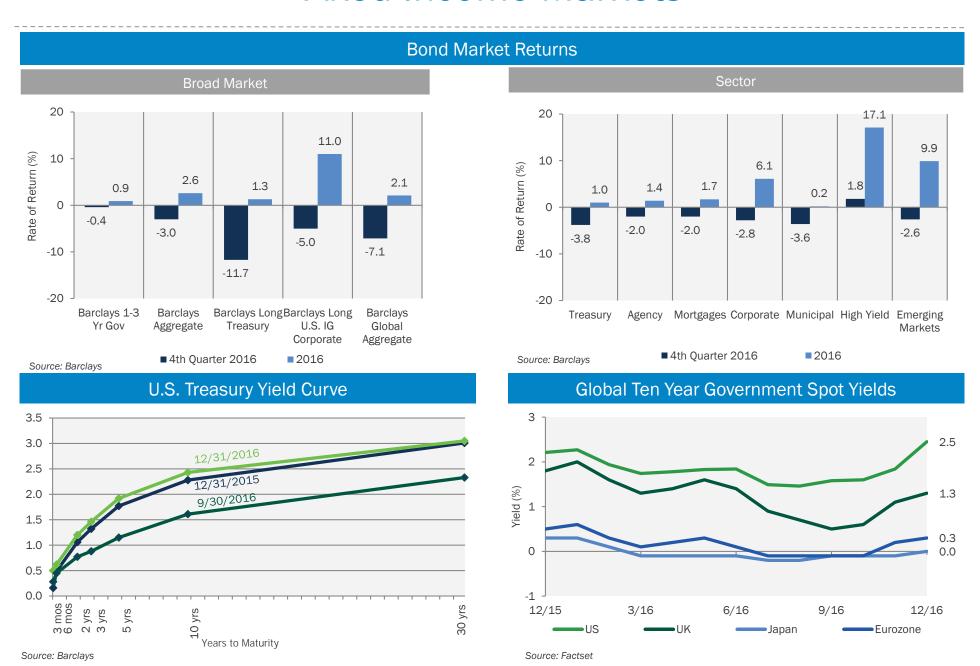


#### U.S. Dollar vs. Foreign Currencies



Source: Federal Reserve Board; US trade-weighted index.

# **Fixed Income Markets**





# Real Assets Performance

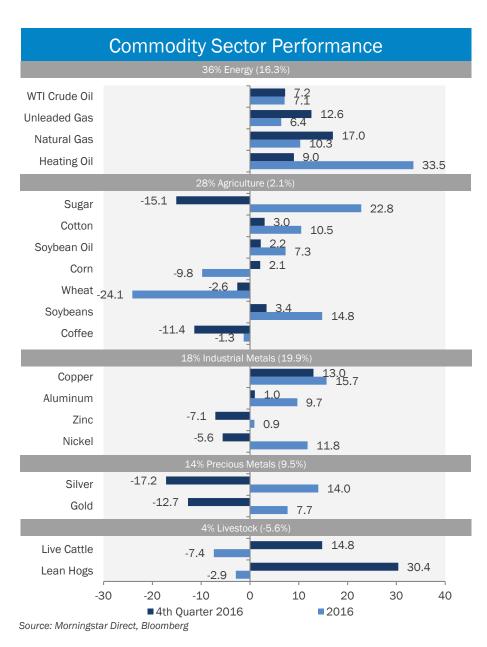
**Asset Class Performance** 4th Quarter 2016 2016 40 32.3 Rate of Return (%) 30 20 11.8 6.7 10 4.0 0 -1.5 -10 ■ Bloomberg Commodity Index ■S&P Global Natural Resources Stock Index ■ Barclays US TIPS (1-10 Year) Index

Source: Morningstar Direct, Bloomberg, S&P, Barclays

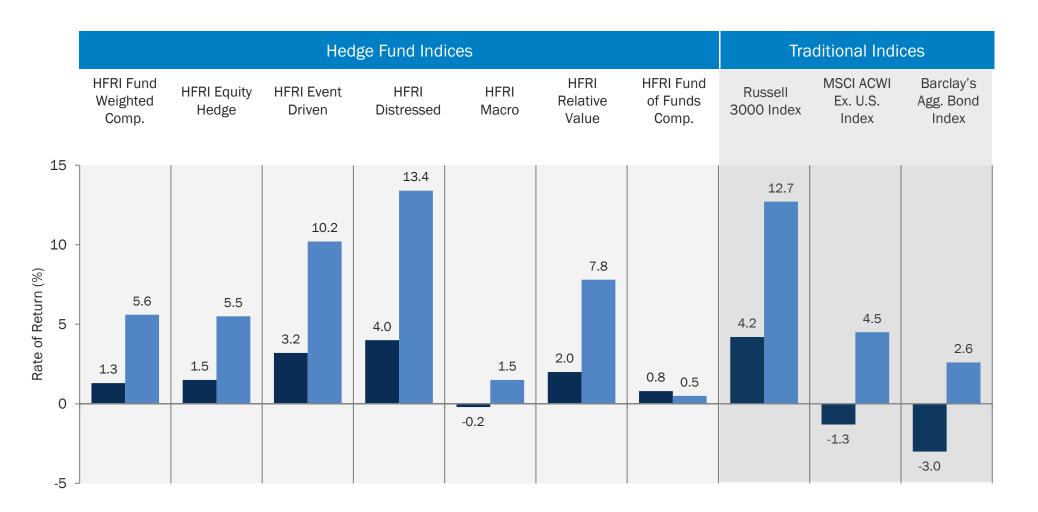
# Historical WTI Crude Oil Prices 160 140 120 100 80 60 40 20 0

Source: St. Louis Federal Reserve





# Hedge Fund Performance



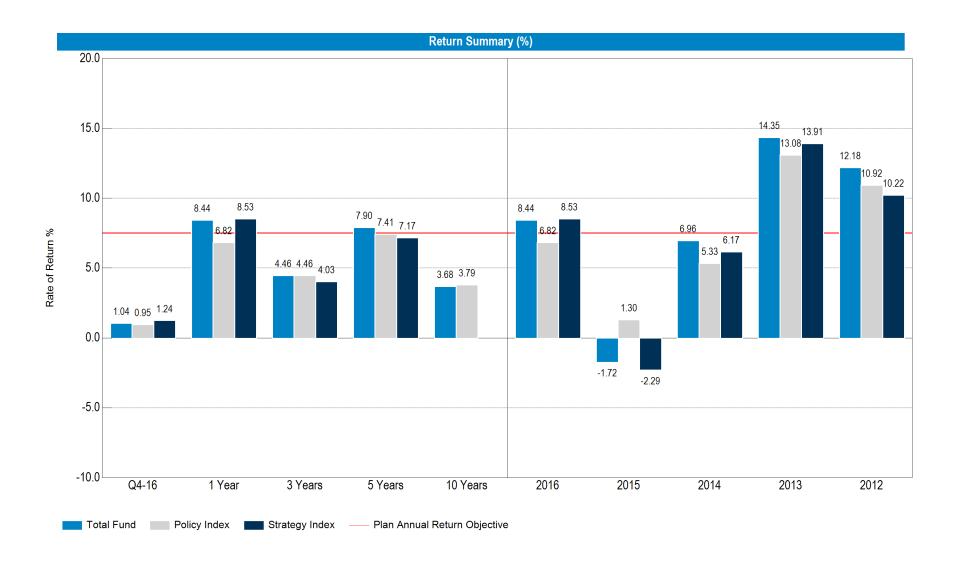
■ 4th Quarter 2016 ■ 2016

Source: Hedge Fund Research, Inc. and Morningstar Direct.



#### Total Fund

Total Fund Performance As of December 31, 2016

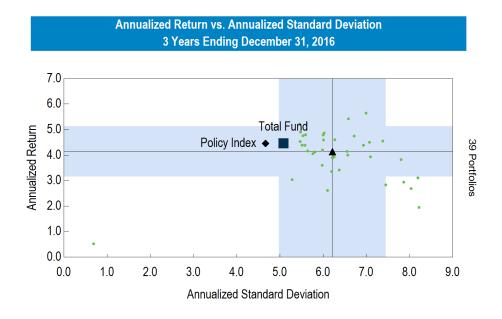




#### **Total Fund**

Total Fund Performance

As of December 31, 2016



#### **Quarterly and Cumulative Excess Performance** Total Fund vs. Policy Index 4.0 3.0 2.0 Exc Ret 1.0 -1.0 -2.0 Q3-12 Q2-13 Q2-15 Q2-16 Q3-13 Q2-14 Q3-14 Q4-14 Q1-15 Year Quarterly Outperformance --- Cumulative Excess Performance Quarterly Underperformance

Total Fund	Policy Index
	•
12	12
	3.72
	-4.95
4.46	4.46
13.99	13.98
4.34	4.34
0.00	0.00
1.03	1.00
2.83	2.41
7.74	5.88
5.08	4.67
-0.03	0.00
0.85	0.93
0.00	0.00
1.67	0.00
0.00	
0.89	1.00
0.95	1.00
	13.99 4.34 0.00 1.03 2.83 7.74 5.08 -0.03 0.85 0.00 1.67 0.00

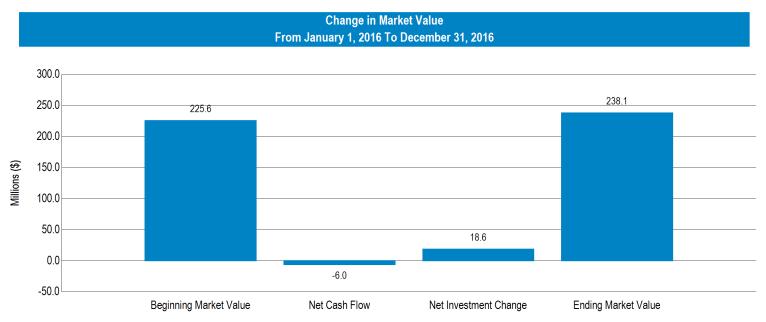
Market Proxy: Policy Index Risk-Free Proxy: 91 Day T-Bills



#### Total Fund

Total Fund Portfolio Reconciliation

Summary of Cash Flows								
	Last Three Months	Year-To-Date						
Beginning Market Value	\$235,561,282.78	\$225,558,147.84						
Net Cash Flow	\$132,671.37	-\$6,001,914.22						
Net Investment Change	\$2,422,179.47	\$18,559,900.00						
Ending Market Value	\$238,116,133.62	\$238,116,133.62						





#### Total Fund

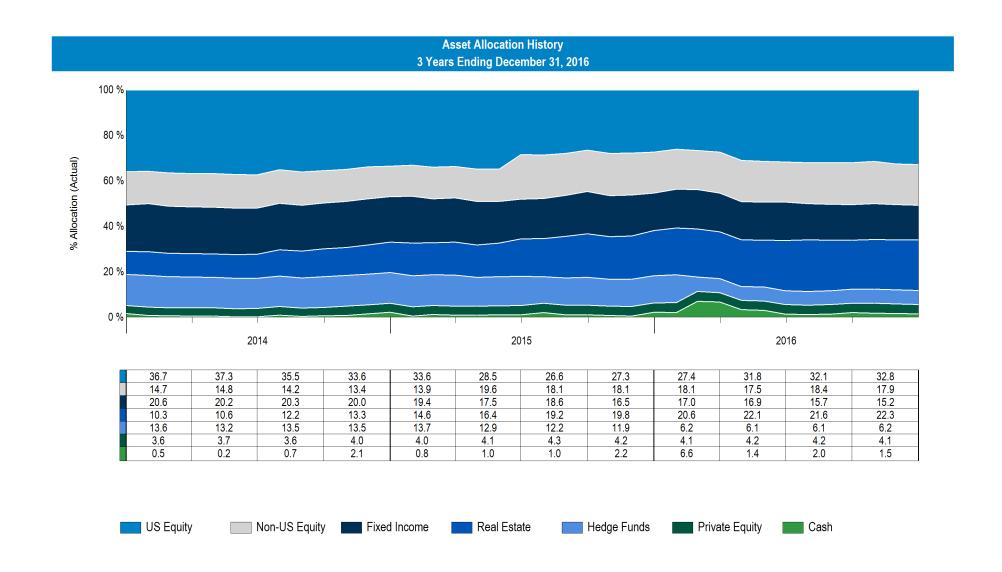
Total Fund Allocation As of December 31, 2016

	Asset Allocation vs. Target										
	Policy Range	Policy	%	Current	%	Difference*	%				
US Equity	25.0% - 35.0%	\$71,434,840	30.0%	\$78,192,987	32.8%	\$6,758,147	2.8%				
SSgA S&P 500 Flagship Fund		\$35,717,420	15.0%	\$38,133,589	16.0%	\$2,416,169	1.0%				
Tortoise MLP Account		\$23,811,613	10.0%	\$28,022,581	11.8%	\$4,210,967	1.8%				
FIAM SMID Cap Core		\$11,905,807	5.0%	\$12,036,817	5.1%	\$131,010	0.1%				
Non-US Equity	15.0% - 25.0%	\$47,623,227	20.0%	\$42,551,529	17.9%	-\$5,071,698	-2.1%				
DFA World Ex-US Value		\$17,858,710	7.5%	\$16,937,946	7.1%	-\$920,764	-0.4%				
EuroPacific Growth		\$17,858,710	7.5%	\$15,386,555	6.5%	-\$2,472,155	-1.0%				
Aberdeen Emerging Markets		\$11,905,807	5.0%	\$10,227,028	4.3%	-\$1,678,778	-0.7%				
Fixed Income	10.0% - 25.0%	\$35,717,420	15.0%	\$36,284,132	15.2%	\$566,712	0.2%				
Denver Investments Core Fixed Income		\$11,905,807	5.0%	\$15,370,148	6.5%	\$3,464,341	1.5%				
Metropolitan West Total Return		\$11,905,807	5.0%	\$11,107,975	4.7%	-\$797,832	-0.3%				
Babson Capital Floating Rate Income Fund		\$11,905,807	5.0%	\$9,806,010	4.1%	-\$2,099,797	-0.9%				
Real Estate	10.0% - 25.0%	\$47,623,227	20.0%	\$53,053,172	22.3%	\$5,429,945	2.3%				
Principal US Property Account		\$23,811,613	10.0%	\$29,841,016	12.5%	\$6,029,403	2.5%				
Harbert US Real Estate Fund V		\$5,952,903	2.5%	\$9,131,917	3.8%	\$3,179,014	1.3%				
Harbert US Real Estate Fund VI		\$5,952,903	2.5%	\$5,147,708	2.2%	-\$805,196	-0.3%				
Principal Real Estate Debt Fund		\$11,905,807	5.0%	\$8,932,531	3.8%	-\$2,973,276	-1.2%				
Hedge Funds	5.0% - 15.0%	\$23,811,613	10.0%	\$14,718,067	6.2%	-\$9,093,546	-3.8%				
Grosvenor Institutional Partners		\$11,905,807	5.0%	\$14,718,067	6.2%	\$2,812,260	1.2%				
Private Equity	0.0% - 10.0%	\$11,905,807	5.0%	\$9,780,546	4.1%	-\$2,125,261	-0.9%				
Mesirow Private Equity III				\$1,559,400	0.7%						
Mesirow Private Equity IV				\$2,926,510	1.2%						
Adams Street 2012 Global Fund				\$2,506,957	1.1%						
NGP Natural Resources XI				\$984,792	0.4%						
RCP Fund XI				\$60,000	0.0%						
Strategic Value Special Situations III				\$1,742,887	0.7%						
Cash	0.0% - 5.0%	\$0	0.0%	\$3,535,701	1.5%	\$3,535,701	1.5%				
Operating Account		\$0	0.0%	\$3,535,701	1.5%	\$3,535,701	1.5%				
Total		\$238,116,134	100.0%	\$238,116,134	100.0%						



#### Total Fund

Total Fund Allocation History





#### Total Fund

Total Fund Cash Flow Summary

	Cash Flow Summary			
	-	Quarter Ending De	ecember 31, 2016	
	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
SSgA S&P 500 Flagship Fund	\$36,718,645	\$0	\$1,414,944	\$38,133,589
Tortoise MLP Account	\$27,179,759	\$52,542	\$790,279	\$28,022,581
FIAM SMID Cap Core	\$11,631,654	\$19,046	\$386,117	\$12,036,817
DFA World Ex-US Value	\$16,413,282	\$0	\$524,664	\$16,937,946
EuroPacific Growth	\$16,052,457	\$0	-\$665,903	\$15,386,555
Aberdeen Emerging Markets	\$10,855,263	\$0	-\$628,235	\$10,227,028
Denver Investments Core Fixed Income	\$15,870,388	\$12,231	-\$512,471	\$15,370,148
Metropolitan West Total Return	\$11,409,589	\$0	-\$301,614	\$11,107,975
Babson Capital Floating Rate Income Fund	\$9,717,391	-\$115,424	\$204,043	\$9,806,010
Grosvenor Institutional Partners	\$14,416,706	\$0	\$301,361	\$14,718,067
Principal US Property Account	\$29,109,891	\$0	\$731,125	\$29,841,016
Harbert US Real Estate Fund V	\$9,359,030	-\$227,112	\$0	\$9,131,917
Harbert US Real Estate Fund VI	\$4,248,711	\$898,996	\$0	\$5,147,708
Principal Real Estate Debt Fund	\$8,085,135	\$666,144	\$181,252	\$8,932,531
Mesirow Private Equity III	\$1,759,137	-\$199,737	\$0	\$1,559,400
Mesirow Private Equity IV	\$3,195,359	-\$268,849	\$0	\$2,926,510
Adams Street 2012 Global Fund	\$2,506,957	\$0	\$0	\$2,506,957
NGP Natural Resources XI	\$620,122	\$370,134	-\$5,464	\$984,792
RCP Fund XI		\$60,000	\$0	\$60,000
Strategic Value Special Situations III	\$1,742,887	\$0	\$0	\$1,742,887
Operating Account	\$4,668,919	-\$1,135,300	\$2,082	\$3,535,701
Total	\$235,561,283	\$132,671	\$2,422,179	\$238,116,134



#### Total Fund

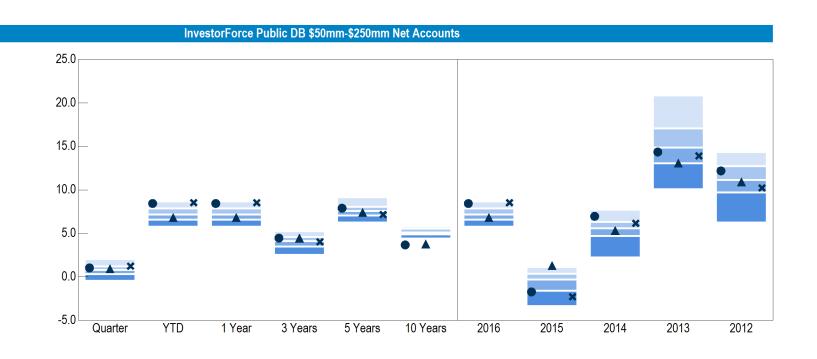
Total Fund Cash Flow Summary

	Cash Flow Summary			
		YTD Ending Dec	ember 31, 2016	
	Beginning Market Value	Net Cash Flow	Net Investment Change	Ending Market Value
SSgA S&P 500 Flagship Fund	\$34,038,561	\$10,527	\$4,084,501	\$38,133,589
Tortoise MLP Account	\$16,847,625	\$6,682,401	\$4,492,555	\$28,022,581
FIAM SMID Cap Core	\$10,733,349	\$71,591	\$1,231,876	\$12,036,817
DFA World Ex-US Value	\$20,414,435	-\$5,500,000	\$2,023,511	\$16,937,946
EuroPacific Growth	\$20,467,812	-\$5,500,000	\$418,743	\$15,386,555
Aberdeen Emerging Markets		\$11,000,000	-\$772,972	\$10,227,028
Denver Investments Core Fixed Income	\$16,631,105	-\$1,947,178	\$686,221	\$15,370,148
Metropolitan West Total Return		\$11,359,054	-\$251,080	\$11,107,975
Babson Capital Floating Rate Income Fund	\$9,475,515	-\$452,405	\$782,900	\$9,806,010
zPIMCO Total Return	\$11,108,615	-\$11,629,004	\$520,390	
Grosvenor Institutional Partners	\$14,395,503	\$0	\$322,564	\$14,718,067
zGAM US Institutional Trading II	\$12,540,338	-\$12,720,323	\$179,985	
Principal US Property Account	\$29,281,310	-\$2,000,000	\$2,559,706	\$29,841,016
Harbert US Real Estate Fund V	\$9,098,890	-\$1,065,870	\$1,098,897	\$9,131,917
Harbert US Real Estate Fund VI		\$5,315,884	-\$168,177	\$5,147,708
Principal Real Estate Debt Fund	\$6,251,511	\$2,119,319	\$561,701	\$8,932,531
Mesirow Private Equity III	\$2,414,071	-\$859,737	\$5,066	\$1,559,400
Mesirow Private Equity IV	\$3,442,218	-\$696,349	\$180,641	\$2,926,510
Adams Street 2012 Global Fund	\$2,237,714	\$243,612	\$25,631	\$2,506,957
NGP Natural Resources XI	\$199,326	\$646,962	\$138,504	\$984,792
RCP Fund XI		\$60,000	\$0	\$60,000
Strategic Value Special Situations III	\$1,071,745	\$240,000	\$431,142	\$1,742,887
Operating Account	\$4,908,506	-\$1,380,399	\$7,594	\$3,535,701
Total	\$225,558,148	-\$6,001,914	\$18,559,900	\$238,116,134



#### Total Fund

Total Fund Universe Performance



	Return (Ran	k)									
5th Percentile	2.04	8.65	8.65	5.24	9.14	5.79	8.65	1.11	7.70	20.83	14.32
25th Percentile	1.24	7.90	7.90	4.60	8.05	5.58	7.90	0.39	6.34	17.09	12.75
Median	0.84	7.20	7.20	4.14	7.59	5.13	7.20	-0.29	5.60	14.87	11.15
75th Percentile	0.33	6.61	6.61	3.51	7.07	4.90	6.61	-1.57	4.72	13.06	9.73
95th Percentile	-0.42	5.80	5.80	2.55	6.25	4.43	5.80	-3.32	2.27	10.09	6.26
# of Portfolios	41	41	41	39	36	28	41	75	66	58	54
Total Fund	1.04 (36)	8.44 (12)	8.44 (12)	4.46 (36)	7.90 (34)	3.68 (98)	8.44 (12)	-1.72 (79)	6.96 (13)	14.35 (59)	12.18 (32)
▲ Policy Index	0.95 (41)	6.82 (71)	6.82 (71)	4.46 (36)	7.41 (59)	3.79 (98)	6.82 (71)	1.30 (2)	5.33 (65)	13.08 (75)	10.92 (56)
➤ Strategy Index	1.24 (26)	8.53 (11)	8.53 (11)	4.03 (58)	7.17 (69)	()	8.53 (11)	-2.29 (89)	6.17 (31)	13.91 (69)	10.22 (68)



#### Total Fund

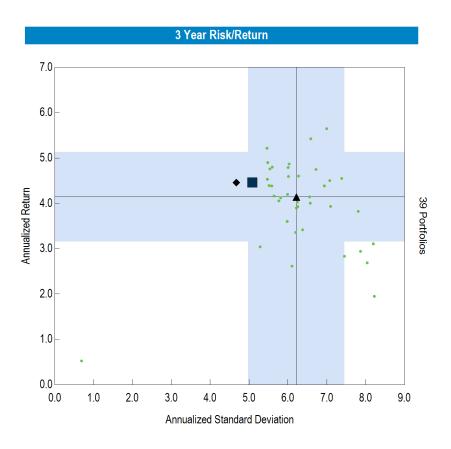
Total Fund Performance

		Performar	nce Sumr	nary									
	Ending December 31, 2016												
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)
Total Fund	238,116,134	100.0	1.0	8.4	8.4	4.5	7.9	3.7	8.4	-1.7	7.0	14.3	12.2
Policy Index			0.9	6.8	6.8	4.5	7.4	3.8	6.8	1.3	5.3	13.1	10.9
Strategy Index			1.2	8.5	8.5	4.0	7.2		8.5	-2.3	6.2	13.9	10.2
InvestorForce Public DB \$50mm-\$250mm Net Median			0.8	7.2	7.2	4.1	7.6	5.1	7.2	-0.3	5.6	14.9	11.1
Total Equity	120,744,515	50.7	1.5	10.3	10.3	2.7	9.5	2.9	10.3	-8.1	6.8	24.4	16.9
MSCI ACWI			1.2	7.9	7.9	3.1	9.4	3.6	7.9	-2.4	4.2	22.8	16.1
InvestorForce Public DB Total Eq Net Median			2.3	9.8	9.8	4.9	11.3	4.7	9.8	-1.4	5.9	29.0	16.5
Total US Equity	78,192,987	32.8	3.4	14.1	14.1	5.1	12.1	6.0	14.1	-8.7	11.5	33.5	14.3
US Equity Composite Index			3.5	14.8	14.8	3.8	10.9	5.3	14.8	-11.5	10.2	31.7	13.7
Russell 3000			4.2	12.7	12.7	8.4	14.7	7.1	12.7	0.5	12.6	33.6	16.4
InvestorForce Public DB US Eq Net Median			4.4	12.9	12.9	7.8	13.9	6.9	12.9	-0.1	11.0	34.2	15.9
Total International Equity	42,551,529	17.9	-1.8	4.1	4.1	-2.1	4.6	-1.6	4.1	-6.3	-3.7	10.6	20.5
MSCI ACWI ex USA			-1.3	4.5	4.5	-1.8	5.0	1.0	4.5	-5.7	-3.9	15.3	16.8
InvestorForce Public DB ex-US Eq Net Median			-2.4	4.4	4.4	-1.3	5.9	1.1	4.4	-3.8	-3.7	16.8	18.2
Total Fixed Income	36,284,132	15.2	-1.7	4.6	4.6	2.9	2.9	5.2	4.6	0.0	4.3	-1.9	8.1
Fixed Income Composite Index			-1.3	5.0	5.0	3.4	2.5		5.0	0.3	4.9	-1.7	4.2
BBgBarc US Aggregate TR			-3.0	2.6	2.6	3.0	2.2	4.3	2.6	0.6	6.0	-2.0	4.2
InvestorForce Public DB Total Fix Inc Net Median			-2.1	2.5	2.5	2.3	2.5	4.9	2.5	0.0	3.6	-1.4	6.4
Total Hedge Funds	14,718,067	6.2	2.1	5.2	5.2	3.1	4.7	2.5	5.2	0.3	3.8	7.8	6.4
HFRI Fund of Funds Composite Index			1.1	0.7	0.7	1.3	3.5	1.3	0.7	-0.3	3.4	9.0	4.8
InvestorForce Public DB Hedge Funds Net Median			1.7	2.1	2.1	2.1	4.6	3.0	2.1	-0.5	4.2	11.9	7.1
Total Real Estate	53,053,172	22.3	1.8	8.6	8.6	11.3	11.8	4.7	8.6	11.7	13.7	13.5	11.6
Real Estate Composite Index			1.8	7.9	7.9	10.2	10.6		7.9	12.3	10.4	12.5	9.8
NCREIF-ODCE Net			1.8	7.7	7.7	11.0	11.1	4.8	7.7	13.9	11.5	12.9	9.8
Total Private Equity	9,780,546	4.1	-0.1	8.4	8.4	9.2	11.4	5.8	8.4	4.6	14.7	21.8	8.2
Russell 3000			4.2	12.7	12.7	8.4	14.7	7.1	12.7	0.5	12.6	33.6	16.4

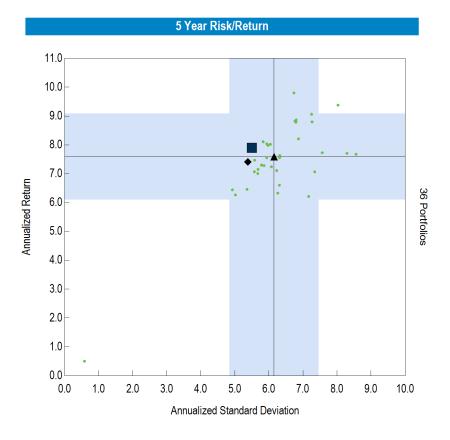


#### **Total Fund**

Total Fund Quarterly Risk/Return



- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvestorForce Public DB \$50mm-\$250mm Net



- Total Fund
- Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB \$50mm-\$250mm Net



#### Total Fund

As of December 31, 2016

Total Fund Information

Summary of Cash Flows									
	Year-To-Date	2016	2015						
Beginning Market Value	\$225,558,147.84	\$225,558,147.84	\$235,260,360.36						
Net Cash Flow	-\$6,001,914.22	-\$6,001,914.22	-\$5,779,168.33						
Net Investment Change	\$18,559,900.00	\$18,559,900.00	-\$3,923,044.19						
Ending Market Value	\$238,116,133.62	\$238,116,133.62	\$225,558,147.84						
Time Weighted Return	8.44%	8.44%	-1.72%						
Dollar Weighted Return	8.18%	8.18%	-1.84%						

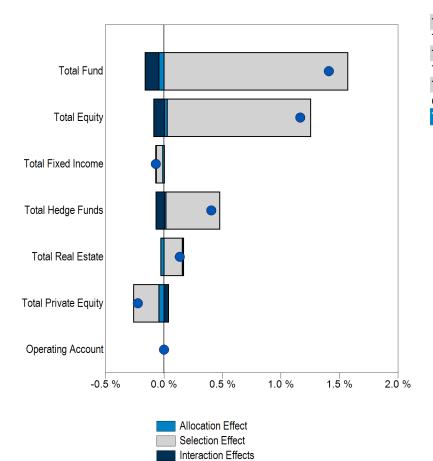


#### **Total Fund**

Total Fund Attribution Analysis

As of December 31, 2016

# Attribution Effects 1 Year Ending December 31, 2016



Total Effect

Attribution Summary 1 Year Ending December 31, 2016											
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects				
Total Equity	10.3%	7.9%	2.4%	1.2%	0.0%	-0.1%	1.2%				
Total Fixed Income	4.6%	5.0%	-0.4%	-0.1%	0.0%	0.0%	-0.1%				
Total Hedge Funds	5.2%	0.7%	4.5%	0.5%	0.0%	-0.1%	0.4%				
Total Real Estate	8.6%	7.9%	0.8%	0.2%	0.0%	0.0%	0.1%				
Total Private Equity	8.4%	12.7%	-4.4%	-0.2%	0.0%	0.0%	-0.2%				
Operating Account	-										
Total	8.2%	7.0%	1.2%	1.6%	0.0%	-0.1%	1.4%				



#### Total Fund

Total Fund Risk Statistics

			3 Y	ear Risk S	Statistics				
	Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Beta	Tracking Error	Up Market Capture Ratio (%)	Down Market Capture Ratio (%)	Sharpe Ratio	Information Ratio
Total Fund	4.46	5.85	0.48	0.89	1.63	99.90	99.80	0.74	0.00
Policy Index	4.46	6.33	0.00	1.00	0.00	100.00	100.00	0.68	
Total Equity	2.69	11.84	-0.53	1.03	2.80	106.79	107.97	0.22	-0.16
MSCI ACWI	3.13	11.21	0.00	1.00	0.00	100.00	100.00	0.27	
Total US Equity	5.11	12.40	1.42	0.96	2.09	97.79	91.94	0.40	0.62
US Equity Composite Index	3.82	12.67	0.00	1.00	0.00	100.00	100.00	0.29	
SSgA S&P 500 Flagship Fund	8.92	10.75	0.05	1.00	0.07	100.22	99.89	0.82	0.76
S&P 500	8.87	10.74	0.00	1.00	0.00	100.00	100.00	0.81	
Tortoise MLP Account	-1.03	20.23	4.58	0.97	5.22	101.70	90.32	-0.06	0.91
Alerian MLP TR USD	-5.80	20.23	0.00	1.00	0.00	100.00	100.00	-0.29	
FIAM SMID Cap Core	7.29	13.65	0.69	0.95	3.46	101.67	99.65	0.53	0.11
Russell 2500	6.93	13.86	0.00	1.00	0.00	100.00	100.00	0.49	
Total International Equity	-2.08	12.59	-0.35	0.97	2.46	98.23	100.36	-0.17	-0.12
MSCI ACWI ex USA	-1.78	12.69	0.00	1.00	0.00	100.00	100.00	-0.15	
DFA World Ex-US Value	-1.61	13.95	0.81	1.01	2.17	106.19	100.07	-0.12	0.37
MSCI ACWI ex USA Value	-2.40	13.69	0.00	1.00	0.00	100.00	100.00	-0.18	
EuroPacific Growth	-0.60	11.19	0.88	0.83	4.24	79.25	82.26	-0.06	0.28
MSCI ACWI ex USA	-1.78	12.69	0.00	1.00	0.00	100.00	100.00	-0.15	
Total Fixed Income	2.95	2.61	-0.72	1.09	0.64	97.85	116.59	1.09	-0.67
Fixed Income Composite Index	3.38	2.33	0.00	1.00	0.00	100.00	100.00	1.40	
Denver Investments Core Fixed Income	3.25	3.38	0.34	0.96	0.43	97.14	89.15	0.92	0.49
BBgBarc US Govt/Credit TR	3.04	3.51	0.00	1.00	0.00	100.00	100.00	0.83	



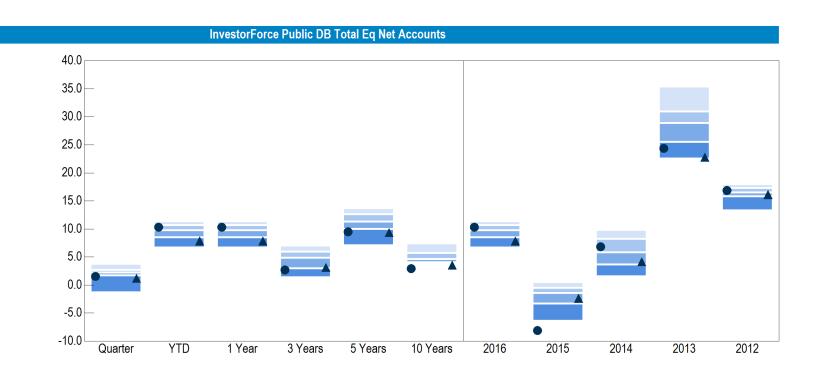
#### Total Fund

Total Fund Risk Statistics

	Annualized Return (%)	Annualized Standard Deviation	Annualized Alpha (%)	Beta	Tracking Error	Up Market Capture Ratio (%)	Down Market Capture Ratio (%)	Sharpe Ratio	Information Ratio
Babson Capital Floating Rate Income Fund	3.38	2.75	-0.24	0.96	0.45	92.26	97.45	1.19	-0.84
Credit Suisse Leveraged Loans	3.76	2.82	0.00	1.00	0.00	100.00	100.00	1.29	
Total Hedge Funds	3.07	3.20	2.15	0.73	2.14	104.64	65.49	0.92	0.85
HFRI Fund of Funds Composite Index	1.26	3.51	0.00	1.00	0.00	100.00	100.00	0.32	
Grosvenor Institutional Partners	1.68	3.48	-0.98	1.39	1.59	128.59	152.63	0.45	-0.15
HFRI FOF: Conservative Index	1.92	2.33	0.00	1.00	0.00	100.00	100.00	0.77	
Total Real Estate	11.32	2.24	6.61	0.46	2.42	112.39		5.01	0.47
Real Estate Composite Index	10.18	3.34	0.00	1.00	0.00	100.00		3.01	
Principal US Property Account	11.75	1.54	9.65	0.19	3.91	42.27		7.53	0.19
NCREIF-ODCE Net	11.02	4.57	0.00	1.00	0.00	100.00		2.39	
Total Private Equity	9.16	5.55	9.44	-0.03	12.67	24.29	-35.85	1.63	0.06
Russell 3000	8.43	11.04	0.00	1.00	0.00	100.00	100.00	0.75	



#### **Total Equity**



	Return (Rar	nk)									
5th Percentile	3.75	11.33	11.33	7.04	13.71	7.42	11.33	0.49	9.82	35.42	17.95
25th Percentile	2.70	10.70	10.70	5.97	12.65	5.74	10.70	-0.48	8.29	31.02	17.33
Median	2.28	9.82	9.82	4.92	11.34	4.65	9.82	-1.38	5.86	28.97	16.54
75th Percentile	1.73	8.57	8.57	2.99	10.01	4.09	8.57	-3.24	3.70	25.57	15.85
95th Percentile	-1.29	6.73	6.73	1.44	7.15	3.96	6.73	-6.37	1.58	22.61	13.36
# of Portfolios	35	35	35	29	23	6	35	92	78	67	45
Total Equity	1.53 (79)	10.31 (34	) 10.31 (34)	2.69 (84)	9.50 (84)	2.92 (99)	10.31 (34)	-8.12 (99)	6.83 (40)	24.37 (83)	16.87 (44)
▲ MSCI ACWI	1.19 (86)	7.86 (82	7.86 (82)	3.13 (72)	9.36 (87)	3.56 (99)	7.86 (82)	-2.36 (68)	4.16 (71)	22.80 (95)	16.13 (66)



# **Domestic Equity Managers**



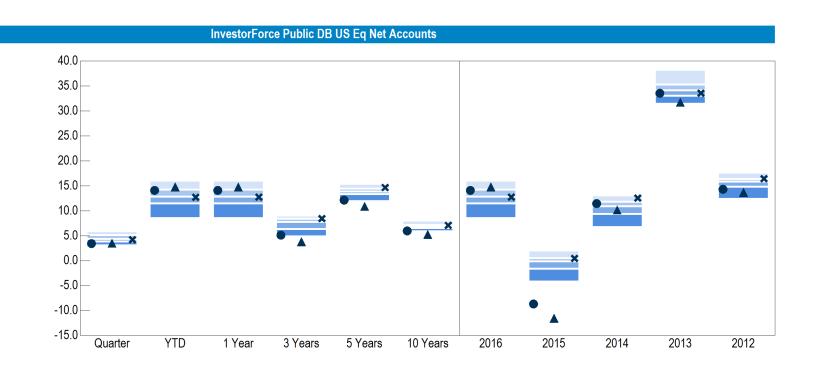
#### Total US Equity

Total US Equity Performance

			Ending December 31, 2016					Incep	tion	
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total US Equity	78,192,987	100.0	3.4	14.1	14.1	5.1	12.1	6.0	4.2	Jan-00
US Equity Composite Index			3.5	14.8	14.8	3.8	10.9	5.3	4.0	Jan-00
Russell 3000			4.2	12.7	12.7	8.4	14.7	7.1	5.0	Jan-00
InvestorForce Public DB US Eq Net Rank			94	27	27	95	94	92	99	Jan-00
InvestorForce Public DB US Eq Net Median			4.4	12.9	12.9	7.8	13.9	6.9	5.6	Jan-00
SSgA S&P 500 Flagship Fund	38,133,589	48.8	3.9	12.0	12.0	8.9	14.7	7.0	8.2	Nov-03
S&P 500			3.8	12.0	12.0	8.9	14.7	6.9	8.1	Nov-03
Large Blend MStar MF Rank			45	27	27	7	20	29	29	Nov-03
Large Blend MStar MF Median			3.8	10.9	10.9	7.7	14.1	6.6	7.9	Nov-03
Tortoise MLP Account	28,022,581	35.8	2.9	15.1	15.1	-1.0			6.9	Feb-12
Alerian MLP TR USD			2.0	18.3	18.3	-5.8	2.2	8.0	1.9	Feb-12
All Cap MStar MF Rank			65	35	35	98			99	Feb-12
All Cap MStar MF Median			4.4	11.9	11.9	6.7	13.7	6.9	12.7	Feb-12
FIAM SMID Cap Core	12,036,817	15.4	3.3	11.4	11.4	7.3			12.8	Apr-13
Russell 2500			6.1	17.6	17.6	6.9	14.5	7.7	11.1	Apr-13
SMID Blend MStar MF Rank			92	89	89	43			18	Apr-13
SMID Blend MStar MF Median			8.1	18.8	18.8	6.7	14.5	7.1	11.2	Apr-13



#### Total US Equity

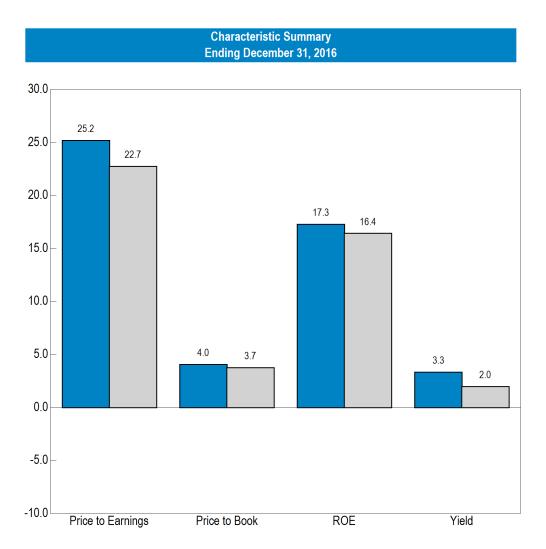


	Return (R	ank)									
5th Percentile	5.87	16.00	16.00	9.04	15.34	8.00	16.00	2.01	13.09	38.23	17.63
25th Percentile	5.18	14.27	14.27	8.44	14.47	7.25	14.27	0.56	11.84	35.32	16.41
Median	4.37	12.89	12.89	7.80	13.92	6.90	12.89	-0.10	10.96	34.16	15.89
75th Percentile	3.90	11.54	11.54	6.38	13.37	6.59	11.54	-1.55	9.38	33.04	14.83
95th Percentile	3.11	8.57	8.57	4.90	11.95	5.92	8.57	-4.15	6.79	31.47	12.44
# of Portfolios	85	85	85	77	68	45	85	165	145	121	96
Total US Equity	3.43 (94	14.08 (27	14.08 (27)	5.11 (95)	12.13 (94)	5.96 (92)	14.08 (27)	-8.66 (99)	11.45 (35)	33.54 (69)	14.31 (84)
▲ US Equity Composite Index	3.51 (94	14.79 (14	14.79 (14)	3.82 (97)	10.88 (98)	5.29 (99)	14.79 (14)	-11.5 (99)	10.18 (67)	31.74 (93)	13.69 (89)
× Russell 3000	4.21 (59	9) 12.73 (54	12.73 (54)	8.43 (26)	14.67 (14)	7.07 (38)	12.73 (54)	0.48 (28)	12.56 (12)	33.55 (69)	16.41 (25)



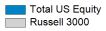
#### Total US Equity

As of December 31, 2016



	Total US Equity	Russell 3000
RETURN SUMMARY STATISTICS		
Number of Periods	12	12
Maximum Return	7.30	6.27
Minimum Return	-12.72	-7.25
Annualized Return	5.11	8.44
Total Return	16.13	27.50
Annualized Excess Return Over Risk Free	4.99	8.31
Annualized Excess Return	-3.32	0.00
RISK SUMMARY STATISTICS		
Beta	1.31	1.00
Upside Deviation	4.73	4.31
Downside Deviation	13.28	
RISK/RETURN SUMMARY STATISTIC	:S	
Annualized Standard Deviation	10.42	7.18
Alpha	-1.38	0.00
Sharpe Ratio	0.48	1.16
Excess Return Over Market / Risk	-0.32	0.00
Tracking Error	4.98	0.00
Information Ratio	-0.67	
CORRELATION STATISTICS		
CORRELATION STATISTICS R-Squared	0.82	1.00

Market Proxy: Russell 3000 Risk-Free Proxy: 91 Day T-Bills





#### SSgA S&P 500 Flagship Fund

	Account Information	
Account Name		SSgA S&P 500 Flagship Fund
Account Structure		Commingled Fund
Investment Style		Active
Inception Date		11/01/03
Account Type		US Equity
Benchmark		S&P 500
Universe		Large Blend MStar MF

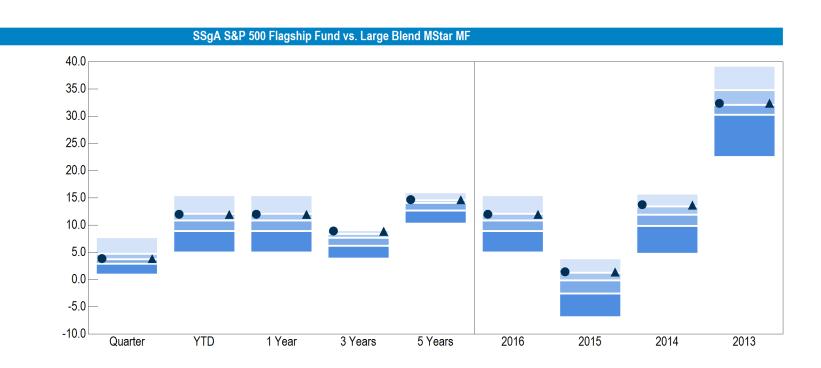
Characteristics		
	Portfolio	S&P 500
Number of Holdings	505	505
Weighted Avg. Market Cap. (\$B)	139.11	138.54
Median Market Cap. (\$B)	18.88	18.83
Price To Earnings	23.09	22.27
Price To Book	4.68	4.38
Price To Sales	3.51	3.34
Return on Equity (%)	20.89	18.52
Yield (%)	2.10	2.10
Beta	1.00	1.00
R-Squared	1.00	1.00

Top Ten Holdings	
APPLE	3.22%
MICROSOFT	2.52%
EXXON MOBIL	1.95%
JOHNSON & JOHNSON	1.63%
JP MORGAN CHASE & CO.	1.61%
BERKSHIRE HATHAWAY 'B'	1.60%
AMAZON.COM	1.54%
GENERAL ELECTRIC	1.46%
FACEBOOK CLASS A	1.40%
AT&T	1.36%
Total	18.29%

3 Year	Risk/Return Statistics	
	SSgA S&P 500 Flagship Fund	S&P 500
RETURN SUMMARY STATISTICS		
Number of Periods	36	36
Maximum Return	8.45	8.44
Minimum Return	-6.04	-6.03
Annualized Return	8.92	8.87
Total Return	29.22	29.05
Annualized Excess Return Over Risk Free	8.80	8.75
Annualized Excess Return	0.05	0.00
RISK SUMMARY STATISTICS		
Beta	1.00	1.00
Upside Deviation	7.76	7.76
Downside Deviation	5.91	5.90
RISK/RETURN SUMMARY STATISTIC	S	
Annualized Standard Deviation	10.75	10.74
Alpha	0.00	0.00
Sharpe Ratio	0.82	0.81
Excess Return Over Market / Risk	0.00	0.00
Tracking Error	0.07	0.00
Information Ratio	0.76	
CORRELATION STATISTICS		
R-Squared	1.00	1.00
Correlation	1.00	1.00



### SSgA S&P 500 Flagship Fund



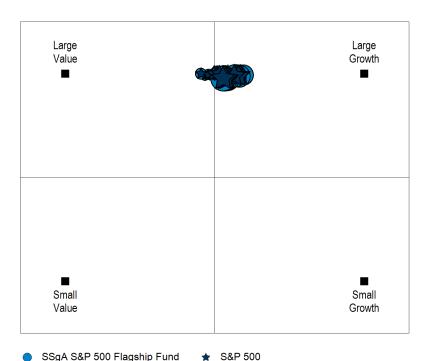
	Return (F	Rank)										
5th Percentile	7.79	15.45	15.45	9.0	7	15.98	15.45	3.8	35 15	.76	39.28	
25th Percentile	4.78	12.14	12.14	8.4	4	14.59	12.14	1.2	28 13	.49	34.86	
Median	3.79	10.89	10.89	7.6	9	14.13	10.89	-0.1	2 11	.93	32.14	
75th Percentile	2.92	8.95	8.95	6.2	6	12.72	8.95	-2.5	55 9	.90	30.30	
95th Percentile	0.96	4.98	4.98	3.8	8	10.27	4.98	-6.9	)1 4	.77	22.56	
# of Portfolios	347	338	338	31	5	296	338	35	52	342	316	
SSgA S&P 500 Flagship Fund	3.85	(45) 12.00	(27) 12.00	(27) 8.9	2 (7)	14.69	(20) 12.00	(27) 1.4	l2 (23) 13	.76 (20)	32.37	(44)
▲ S&P 500	3.82	(45) 11.96	(27) 11.96	(27) 8.8	7 (7)	14.66	(21) 11.96	(27) 1.3	38 (24) 13	.69 (20)	32.39	(44)



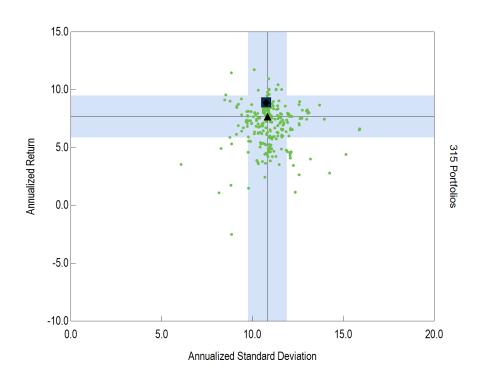
#### SSgA S&P 500 Flagship Fund

As of December 31, 2016

#### U.S. Effective Style Map 3 Years Ending December 31, 2016



# Annualized Return vs. Annualized Standard Deviation 3 Years Ending December 31, 2016

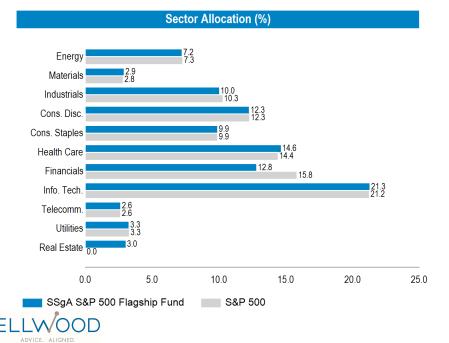


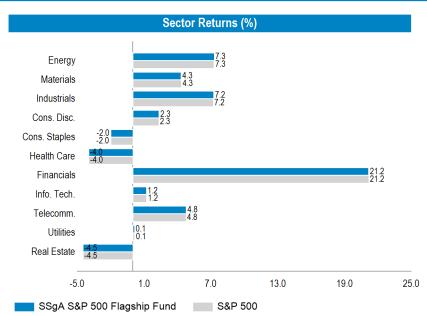
- SSgA S&P 500 Flagship Fund
- ◆ S&P 500
- ▲ Universe Median
- 68% Confidence Interval
- Large Blend MStar MF



#### SSgA S&P 500 Flagship Fund

	SSGA S&P 500 Flagship Fund Performance At	tribution vs. S&P 500							
		Attribution Effects							
	Total	Selection	Allocation						
	Effects	Effect	Effect						
Energy	0.00%	0.00%	0.00%						
Materials	0.00%	0.00%	0.00%						
Industrials	0.01%	0.01%	0.00%						
Consumer Discretionary	0.00%	0.00%	0.00%						
Consumer Staples	0.00%	0.00%	0.00%						
Health Care	0.00%	0.00%	0.00%						
Financials	-0.11%	0.00%	-0.11%						
Information Technology	0.00%	0.00%	0.00%						
Telecommunication Services	0.00%	0.00%	0.00%						
Utilities	0.00%	0.00%	0.00%						
Real Estate	0.12%	0.00%	0.12%						
Cash	0.00%	0.00%							
Portfolio	0.02% =	0.01% +	0.02%						





### Tortoise MLP Account

Ac	count Information
Account Name	Tortoise MLP Account
Account Structure	Separate Account
Investment Style	Active
Inception Date	2/01/12
Account Type	US Equity
Benchmark	Alerian MLP TR USD
Universe	All Cap MStar MF

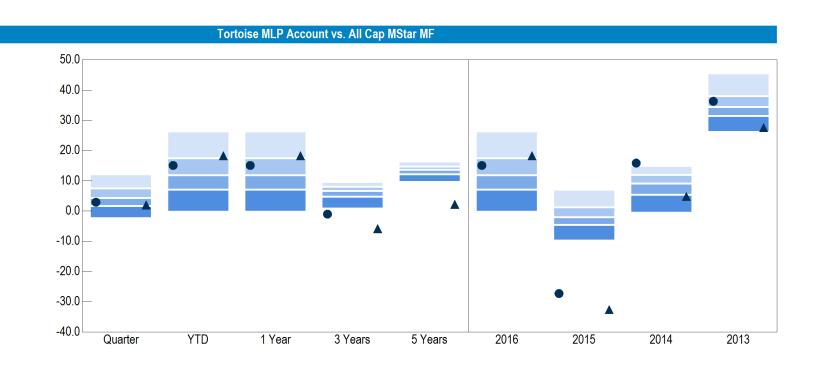
Characteri	stics	
	Portfolio	
Number of Holdings	26	
Weighted Avg. Market Cap. (\$B)	15.84	
Median Market Cap. (\$B)	7.74	
Price To Earnings	28.01	
Price To Book	3.17	
Price To Sales	4.44	
Return on Equity (%)	12.66	
Yield (%)	6.01	
Beta		
R-Squared		

Top Ten Holdings	
MAGELLAN MIDSTREAM PTNS. UTS.	9.00%
PLAINS ALL AMER.PIPE.LP. UNIT	8.35%
ENTERPRISE PRDS.PTNS.LP.	8.27%
BUCKEYE PARTNERS	5.62%
EQT MIDSTREAM PARTNERS	5.61%
ONEOK PARTNERS	5.50%
MPLX	5.46%
ENERGY TRANSFER EQ.	5.37%
WESTERN GAS PARTNERS	4.89%
TESORO LOGISTICS	4.48%
Total	62.55%

RETURN SUMMARY STATISTICS	Tortoise MLP Account	Alerian MLP TR USD
Number of Periods	36	36
Maximum Return	10.22	11.04
Minimum Return	-17.63	-15.28
Annualized Return	-1.03	-5.80
Total Return	-3.07	-16.42
Annualized Excess Return Over Risk Free	-1.15	-5.92
Annualized Excess Return	4.77	0.00
RISK SUMMARY STATISTICS		
Beta	0.97	1.00
Upside Deviation	9.38	11.16
Downside Deviation	15.05	12.94
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	20.23	20.23
Alpha	0.40	0.00
Sharpe Ratio	-0.06	-0.29
Excess Return Over Market / Risk	0.24	0.00
Tracking Error	5.22	0.00
Information Ratio	0.91	
CORRELATION STATISTICS		
R-Squared	0.93	1.00
Correlation	0.97	1.00



#### Tortoise MLP Account



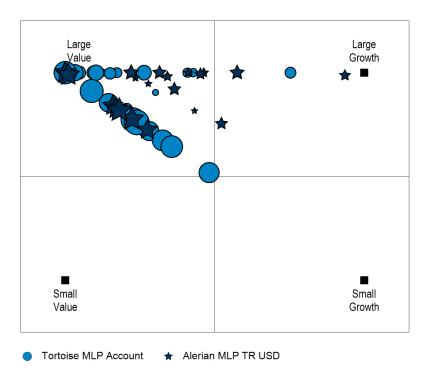
	Return (	Rank)																
5th Percentile	12.13		26.34		26.34		9.59		16.36		26.34		7.04		14.90		45.43	
25th Percentile	7.54		17.52		17.52		8.09		14.72		17.52		1.34		11.99		38.10	
Median	4.38		11.92		11.92		6.72		13.69		11.92		-1.98		9.09		34.49	
75th Percentile	1.73		7.10		7.10		4.74		12.24		7.10		-4.51		5.43		31.45	
95th Percentile	-2.34		-0.14		-0.14		0.88		9.62		-0.14		-9.70		-0.49		26.22	
# of Portfolios	1,854		1,822		1,822		1,677		1,565		1,822		1,816		1,721		1,612	
Tortoise MLP Account	2.91	(65)	15.07	(35)	15.07	(35)	-1.03	(98)		()	15.07	(35)	-27.29	(99)	15.86	(3)	36.30	(37)
Alerian MLP TR USD	2.04	(73)	18.31	(23)	18.31	(23)	-5.80	(99)	2.25	(99)	18.31	(23)	-32.59	(99)	4.80	(79)	27.58	(94)



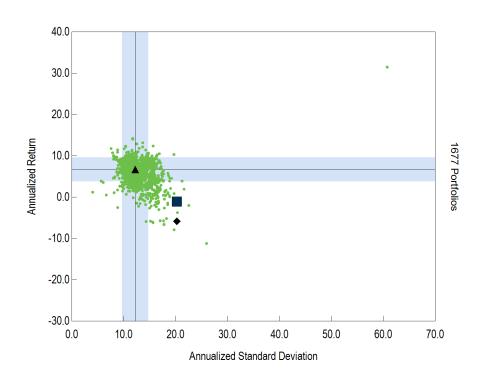
### Tortoise MLP Account

As of December 31, 2016

#### U.S. Effective Style Map 3 Years Ending December 31, 2016



# Annualized Return vs. Annualized Standard Deviation 3 Years Ending December 31, 2016



- Tortoise MLP Account
- Alerian MLP TR USD
- ▲ Universe Median
- 68% Confidence Interval
- All Cap MStar MF



## FIAM SMID Cap Core

	Account Information
Account Name	FIAM SMID Cap Core
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	4/01/13
Account Type	US Equity
Benchmark	Russell 2500
Universe	SMID Blend MStar MF

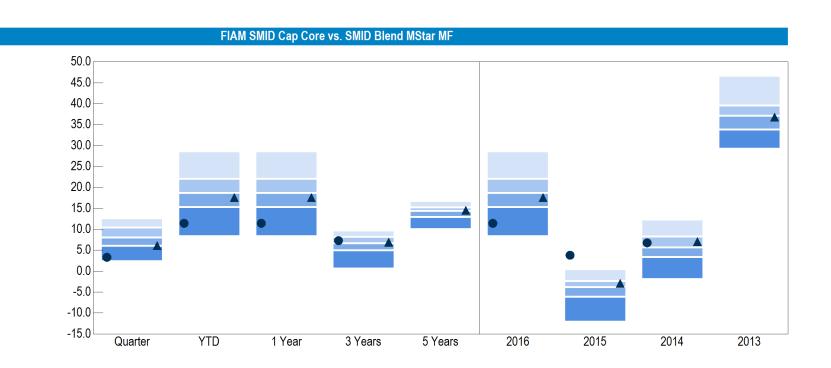
Characteristics		
	Portfolio	Russell 2500
Number of Holdings	106	2,476
Weighted Avg. Market Cap. (\$B)	6.33	4.24
Median Market Cap. (\$B)	5.06	1.10
Price To Earnings	26.39	24.83
Price To Book	4.20	3.17
Price To Sales	3.70	2.27
Return on Equity (%)	15.81	12.10
Yield (%)	0.99	1.35
Beta	0.91	1.00
R-Squared	0.87	1.00

Top Ten Holdings	
CARLISLE COS.	2.10%
IDEX	2.10%
BANKUNITED	2.01%
E*TRADE FINANCIAL	1.98%
CASH - USD	1.84%
CAVIUM	1.82%
MONOLITHIC PWR.SYS.	1.74%
CALLON PTL.DEL.	1.73%
OLD DOMINION FGT.LINES	1.66%
GENESEE & WYOMING 'A'	1.61%
Total	18.58%

3 Year R	isk/Return Statistics	
	FIAM SMID Cap Core	Russell 2500
RETURN SUMMARY STATISTICS		
Number of Periods	36	36
Maximum Return	8.34	8.51
Minimum Return	-8.82	-7.97
Annualized Return	7.29	6.93
Total Return	23.51	22.25
Annualized Excess Return Over Risk Free	7.17	6.80
Annualized Excess Return	0.37	0.00
RISK SUMMARY STATISTICS		
Beta	0.95	1.00
Upside Deviation	7.59	8.71
Downside Deviation	7.75	8.19
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	13.65	13.86
Alpha	0.06	0.00
Sharpe Ratio	0.53	0.49
Excess Return Over Market / Risk	0.03	0.00
Tracking Error	3.46	0.00
Information Ratio	0.11	
CORRELATION STATISTICS		
R-Squared	0.94	1.00
Correlation	0.97	1.00



### FIAM SMID Cap Core



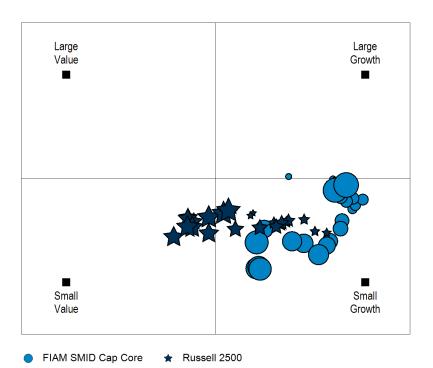
	Return (F	Rank)														
5th Percentile	12.62	28.57	28.5	7	9.67		16.78		28.57		0.45		12.28		46.69	
25th Percentile	10.46	22.06	22.0	3	8.24		15.32		22.06		-2.31		8.31		39.64	
Median	8.08	18.76	18.7	3	6.75		14.46		18.76		-3.78		5.75		37.16	
75th Percentile	6.11	15.36	15.3	3	5.00		12.98		15.36		-6.07		3.42		33.89	
95th Percentile	2.46	8.40	8.4	)	0.65		10.08		8.40		-12.05		-1.83		29.27	
# of Portfolios	333	324	32	1	288		260		324		302		280		262	
FIAM SMID Cap Core	3.32	(92) 11.43	(89) 11.4	3 (89)	7.29	(43)		()	11.43	(89)	3.81	(1)	6.77	(40)		()
Russell 2500	6.12	(75) 17.59	(58) 17.5	(58)	6.93	(49)	14.54	(48)	17.59	(58)	-2.90	(35)	7.07	(37)	36.80	(55)



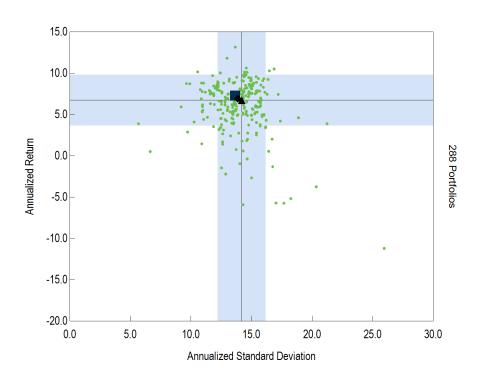
#### FIAM SMID Cap Core

As of December 31, 2016

#### U.S. Effective Style Map 3 Years Ending December 31, 2016



# Annualized Return vs. Annualized Standard Deviation 3 Years Ending December 31, 2016

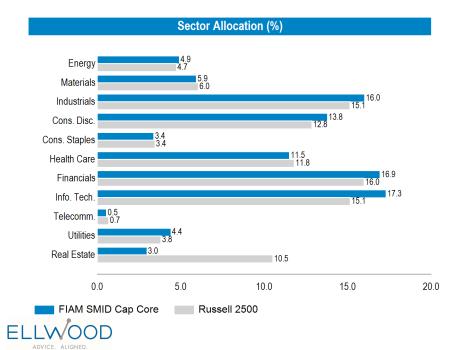


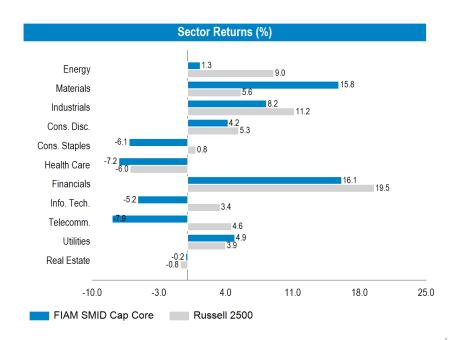
- FIAM SMID Cap Core
- ◆ Russell 2500
- ▲ Universe Median
- 68% Confidence Interval
- SMID Blend MStar MF



#### FIAM SMID Cap Core

Pyramis SMID Performance Attribution vs. Russell 2500							
	Attribution Effects						
	Total	Selection	Allocation				
	Effects	Effect	Effect				
Energy	-0.36%	-0.38%	0.02%				
Materials	0.60%	0.61%	-0.01%				
Industrials	-0.37%	-0.47%	0.10%				
Consumer Discretionary	-0.11%	-0.16%	0.05%				
Consumer Staples	-0.24%	-0.24%	0.00%				
Health Care	-0.12%	-0.14%	0.02%				
Financials	-0.39%	-0.58%	0.19%				
Information Technology	-1.41%	-1.48%	0.07%				
Telecommunication Services	-0.07%	-0.07%	-0.01%				
Utilities	0.07%	0.04%	0.02%				
Real Estate	0.07%	0.02%	0.06%				
Cash	0.00%	0.00%	0.00%				
Portfolio	-2.33% =	-2.84% +	0.51%				





# Non US Equity Managers

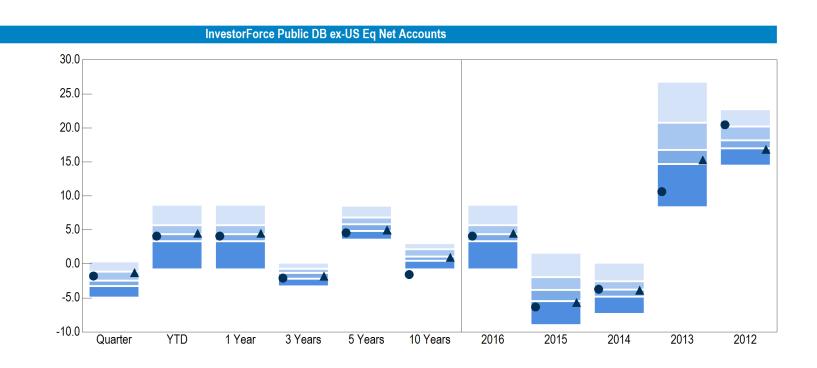


## Total International Equity

			Ending December 31, 2016						Inception		
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since	
Total International Equity	42,551,529	100.0	-1.8	4.1	4.1	-2.1	4.6	-1.6	3.7	Dec-01	
MSCI ACWI ex USA			-1.3	4.5	4.5	-1.8	5.0	1.0	5.9	Dec-01	
InvestorForce Public DB ex-US Eq Net Rank			32	64	64	70	81	99	99	Dec-01	
InvestorForce Public DB ex-US Eq Net Median			-2.4	4.4	4.4	-1.3	5.9	1.1	5.7	Dec-01	
DFA World Ex-US Value	16,937,946	39.8	3.2	10.7	10.7	-1.6	5.6		1.0	Aug-11	
MSCI ACWI ex USA Value			3.3	8.9	8.9	-2.4	4.6	0.3	1.1	Aug-11	
Foreign Value MStar MF Rank			17	11	11	53	76		87	Aug-11	
Foreign Value MStar MF Median			0.0	2.8	2.8	-1.4	6.4	0.6	2.3	Aug-11	
EuroPacific Growth	15,386,555	36.2	-4.1	1.0	1.0	-0.6	7.2		3.4	Aug-11	
MSCI ACWI ex USA			-1.3	4.5	4.5	-1.8	5.0	1.0	1.4	Aug-11	
MSCI ACWI ex USA Growth			-5.7	0.1	0.1	-1.3	5.3	1.5	1.5	Aug-11	
Foreign Large Blend MStar MF Rank			83	53	53	23	25		23	Aug-11	
Foreign Large Blend MStar MF Median			-2.1	1.1	1.1	-1.7	6.2	0.7	2.5	Aug-11	
Aberdeen Emerging Markets	10,227,028	24.0	-5.8						-5.3	Aug-16	
MSCI Emerging Markets			-4.2	11.2	11.2	-2.6	1.3	1.8	-2.9	Aug-16	
Diversified Emerging Mkts MStar MF Rank			58						66	Aug-16	
Diversified Emerging Mkts MStar MF Median			-5.5	8.3	8.3	-2.6	2.0	1.6	-4.0	Aug-16	



## **Total International Equity**



	Return (Rar	ık)									
5th Percentile	0.37	8.67	8.67	0.16	8.54	3.02	8.67	1.62	0.18	26.76	22.72
25th Percentile	-1.09	5.70	5.70	-0.68	6.85	2.20	5.70	-1.90	-2.52	20.79	20.20
Median	-2.42	4.42	4.42	-1.28	5.88	1.10	4.42	-3.78	-3.73	16.79	18.18
75th Percentile	-3.24	3.34	3.34	-2.17	4.87	0.50	3.34	-5.45	-4.78	14.73	17.00
95th Percentile	-4.93	-0.78	-0.78	-3.30	3.59	-0.76	-0.78	-8.99	-7.31	8.33	14.47
# of Portfolios	64	64	64	60	48	32	64	120	114	88	81
Total International Equity	-1.78 (32)	4.09 (64)	4.09 (64)	-2.08 (70)	4.58 (81)	-1.56 (99)	4.09 (64)	-6.33 (81)	-3.71 (50)	10.62 (90)	20.46 (24)
▲ MSCI ACWI ex USA	-1.25 (27)	4.50 (48)	4.50 (48)	-1.78 (64)	5.00 (72)	0.96 (53)	4.50 (48)	-5.66 (78)	-3.87 (54)	15.29 (68)	16.83 (78)



## DFA World Ex-US Value

As of December 31, 2016

Account Information						
Account Name	DFA World Ex-US Value					
Account Structure	Mutual Fund					
Investment Style	Active					
Inception Date	8/01/11					
Account Type	International					
Benchmark	MSCI ACWI ex USA Value					
Universe	Foreign Value MStar MF					

Characteristics		
	Portfolio	MSCI ACWI ex USA Value
Number of Holdings	2,213	1,061
Weighted Avg. Market Cap. (\$B)	2.04	47.86
Median Market Cap. (\$B)	0.41	6.46
Price To Earnings	16.41	15.28
Price To Book	1.32	1.54
Price To Sales	1.16	1.58
Return on Equity (%)	8.02	9.84
Yield (%)	2.44	3.75
Beta	1.09	1.00
R-Squared	0.98	1.00

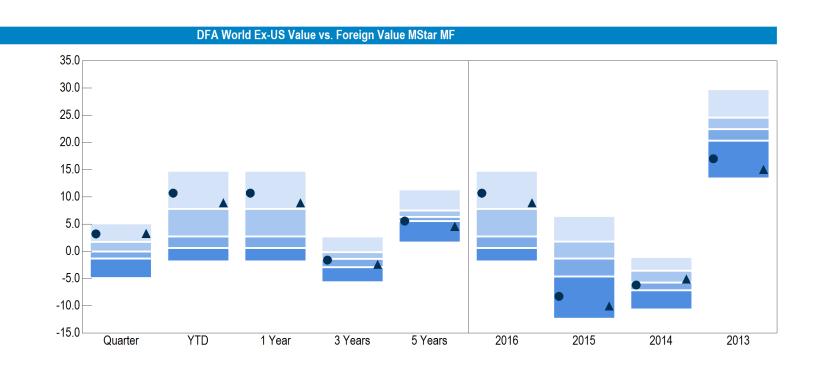
Top Ten Holdings	
BELLWAY	0.79%
LANXESS	0.77%
HISCOX (DI)	0.77%
ARKEMA	0.76%
MELROSE INDUSTRIES	0.69%
HELVETIA HOLDING N	0.66%
WOOD GROUP (JOHN)	0.65%
RHEINMETALL	0.60%
KESKO 'B'	0.56%
BLUESCOPE STEEL	0.51%
Total	6.78%

3 Year R	tisk/Return Statistics	
	DFA World Ex-US Value	MSCI ACWI ex USA Value
RETURN SUMMARY STATISTICS		
Number of Periods	36	36
Maximum Return	9.26	8.72
Minimum Return	-7.58	-7.78
Annualized Return	-1.61	-2.40
Total Return	-4.74	-7.04
Annualized Excess Return Over Risk Free	-1.73	-2.52
Annualized Excess Return	0.80	0.00
RISK SUMMARY STATISTICS		
Beta	1.01	1.00
Upside Deviation	9.41	9.05
Downside Deviation	7.39	7.64
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	13.95	13.69
Alpha	0.07	0.00
Sharpe Ratio	-0.12	-0.18
Excess Return Over Market / Risk	0.06	0.00
Tracking Error	2.17	0.00
Information Ratio	0.37	
CORRELATION STATISTICS		
R-Squared	0.98	1.00
Correlation	0.99	1.00



\*Holdings as of 11/30/16.

#### DFA World Ex-US Value



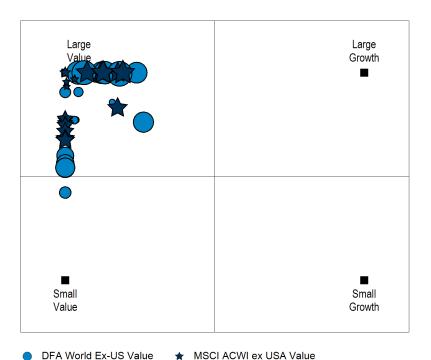
	Return (F	Rank)														
5th Percentile	5.14	14.77	14.7	7	2.70		11.37		14.77		6.49		-1.05		29.81	
25th Percentile	1.74	7.80	7.8	0	-0.10		7.52		7.80		1.83		-3.55		24.59	
Median	-0.03	2.79	2.7	9	-1.38		6.38		2.79		-1.32		-5.74		22.51	
75th Percentile	-1.29	0.64	0.6	4	-2.88		5.59		0.64		-4.57		-7.12		20.35	
95th Percentile	-4.92	-1.83	-1.8	3	-5.64		1.66		-1.83		-12.38		-10.66		13.44	
# of Portfolios	96	96	g	6	85		76		96		96		89		83	
DFA World Ex-US Value	3.20	(17) 10.70	(11) 10.7	0 (11)	-1.61	(53)	5.57	(76)	10.70	(11)	-8.27	(92)	-6.19	(57)	17.02	(86)
MSCI ACWI ex USA Value	3.29	(17) 8.92	(13) 8.9	2 (13)	-2.40	(63)	4.58	(85)	8.92	(13)	-10.06	(94)	-5.10	(44)	15.04	(92)



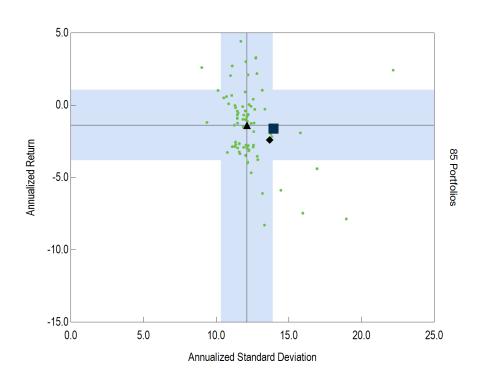
## DFA World Ex-US Value

As of December 31, 2016

# Non U.S. Effective Style Map vs. EAFE 3 Years Ending December 31, 2016



# Annualized Return vs. Annualized Standard Deviation 3 Years Ending December 31, 2016

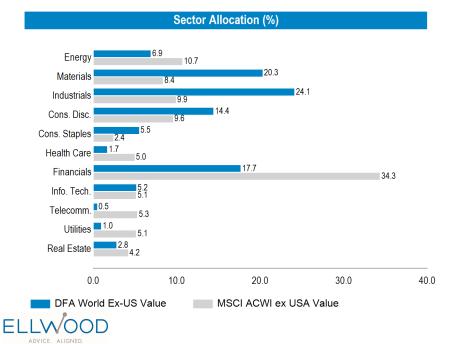


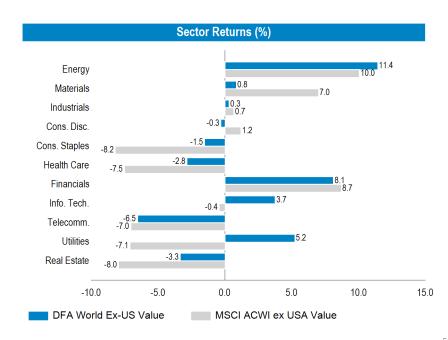
- DFA World Ex-US Value
- ◆ MSCI ACWI ex USA Value
- ▲ Universe Median
- 68% Confidence Interval
- Foreign Value MStar MF



#### DFA World Ex-US Value

	DFA World Ex-US Value Performance Attribution	n vs. MSCI ACWI ex USA Value							
		Attribution Effects							
	Total	Selection	Allocation						
	Effects	Effect	Effect						
Energy	-0.29%	0.27%	-0.56%						
Materials	-0.41%	-2.03%	1.61%						
Industrials	0.01%	-1.27%	1.28%						
Consumer Discretionary	-0.16%	-0.69%	0.53%						
Consumer Staples	0.11%	0.20%	-0.08%						
Health Care	0.33%	0.28%	0.04%						
Financials	-1.55%	0.91%	-2.46%						
Information Technology	0.21%	0.21%	0.00%						
Telecommunication Services	0.34%	0.26%	0.08%						
Utilities	0.42%	0.38%	0.04%						
Real Estate	0.24%	0.20%	0.04%						
Cash	0.00%	0.00%							
Portfolio	-0.76% =	-1.28% +	0.52%						





### EuroPacific Growth

	Account Information
Account Name	EuroPacific Growth
Account Structure	Mutual Fund
Investment Style	Active
Inception Date	8/01/11
Account Type	International
Benchmark	MSCI ACWI ex USA
Universe	Foreign Large Blend MStar MF

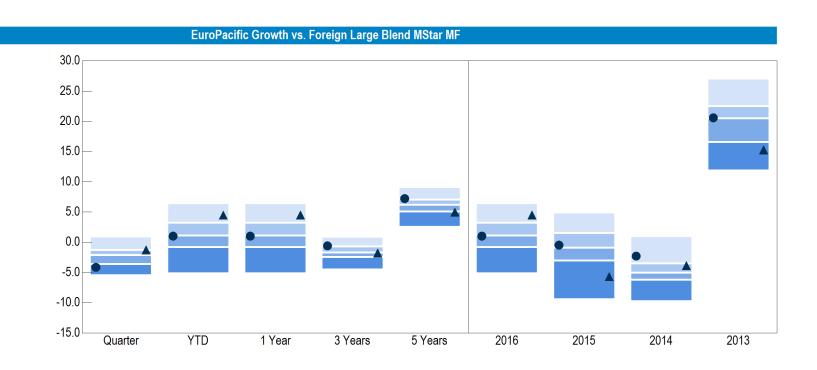
Characteristics								
	Portfolio	MSCI ACWI ex USA						
Number of Holdings	349	1,856						
Weighted Avg. Market Cap. (\$B)	56.72	49.20						
Median Market Cap. (\$B)	15.70	6.74						
Price To Earnings	23.76	20.17						
Price To Book	3.97	2.53						
Price To Sales	3.07	1.91						
Return on Equity (%)	17.73	13.24						
Yield (%)	1.95	2.93						
Beta	0.89	1.00						
R-Squared	0.88	1.00						

Top Ten Holdings	
TAIWAN SEMICON.MNFG.	2.00%
ALIBABA GROUP HLDG.SPN. ADR 1:1	1.95%
NINTENDO	1.87%
NOVO NORDISK 'B'	1.86%
PRUDENTIAL	1.85%
TENCENT HOLDINGS	1.84%
AIA GROUP	1.84%
SOFTBANK GROUP	1.81%
NOVARTIS 'R'	1.80%
HDFC BANK	1.74%
Total	18.57%

3 Year Risk	/Return Statistics	
	<b>EuroPacific Growth</b>	MSCI ACWI ex USA
RETURN SUMMARY STATISTICS		
Number of Periods	36	36
Maximum Return	7.11	8.13
Minimum Return	-6.69	-7.64
Annualized Return	-0.60	-1.78
Total Return	-1.78	-5.23
Annualized Excess Return Over Risk Free	-0.72	-1.90
Annualized Excess Return	1.18	0.00
RISK SUMMARY STATISTICS		
Beta	0.83	1.00
Upside Deviation	7.81	8.81
Downside Deviation	6.27	7.20
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	11.19	12.69
Alpha	0.07	0.00
Sharpe Ratio	-0.06	-0.15
Excess Return Over Market / Risk	0.11	0.00
Tracking Error	4.24	0.00
Information Ratio	0.28	
CORRELATION STATISTICS		
R-Squared	0.89	1.00
Correlation	0.94	1.00



#### EuroPacific Growth



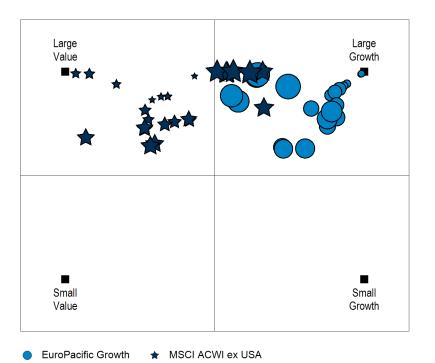
	Return (Rank	)								
5th Percentile	0.96	6.42	6.42	0.90	9.07	6.42	4.89	0.99	27.07	
25th Percentile	-1.22	3.24	3.24	-0.67	7.08	3.24	1.56	-3.48	22.57	
Median	-2.06	1.14	1.14	-1.65	6.23	1.14	-0.88	-5.00	20.56	
75th Percentile	-3.57	-0.76	-0.76	-2.42	5.14	-0.76	-3.00	-6.14	16.61	
95th Percentile	-5.40	-5.11	-5.11	-4.44	2.59	-5.11	-9.39	-9.70	11.89	
# of Portfolios	190	181	181	155	146	181	176	169	174	
EuroPacific Growth	-4.15 (83)	1.01 (	(53) 1.01	(53) -0.60	(23) 7.22	(25) 1.01	(53) -0.48	(42) -2.29	(18) 20.58	(50)
MSCI ACWI ex USA	-1.25 (27)	4.50 (	(18) 4.50	(18) -1.78	(53) 5.00	(77) 4.50	(18) -5.66	(90) -3.87	(29) 15.29	(80)



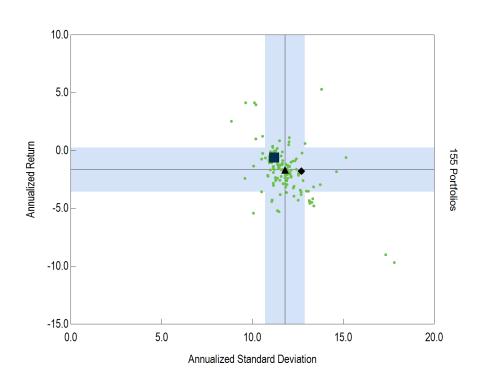
#### EuroPacific Growth

As of December 31, 2016

# Non U.S. Effective Style Map vs. EAFE 3 Years Ending December 31, 2016



# Annualized Return vs. Annualized Standard Deviation 3 Years Ending December 31, 2016



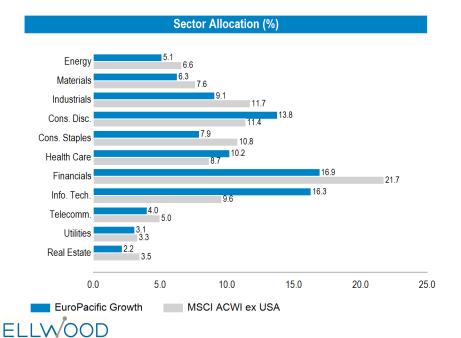
- EuroPacific Growth
- MSCI ACWI ex USA
- ▲ Universe Median
- 68% Confidence Interval
- Foreign Large Blend MStar MF



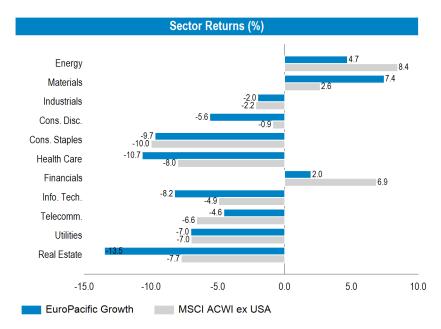
#### EuroPacific Growth

As of December 31, 2016

	EuroPacific Growth Performance Attribution vs.	MSCI ACWI ex USA						
		Attribution Effects						
	Total	Selection	Allocation					
	Effects	Effect	Effect					
Energy	-0.32%	-0.13%	-0.19%					
Materials	0.26%	0.39%	-0.12%					
Industrials	0.07%	0.22%	-0.15%					
Consumer Discretionary	-0.67%	-0.84%	0.17%					
Consumer Staples	0.31%	0.19%	0.12%					
Health Care	-0.39%	-0.36%	-0.03%					
Financials	-1.16%	-0.56%	-0.60%					
Information Technology	-0.87%	-0.93%	0.06%					
Telecommunication Services	0.15%	0.14%	0.00%					
Utilities	0.01%	0.01%	0.00%					
Real Estate	-0.02%	-0.05%	0.03%					
Cash	0.01%	0.00%	0.01%					
Portfolio	-2.61% =	-1.91% +	-0.70%					



ADVICE. ALIGNED.



## Aberdeen Emerging Markets

	Account Information
Account Name	Aberdeen Emerging Markets
Account Structure	Mutual Fund
Investment Style	Active
Inception Date	8/31/16
Account Type	International
Benchmark	MSCI Emerging Markets
Universe	Diversified Emerging Mkts MStar MF

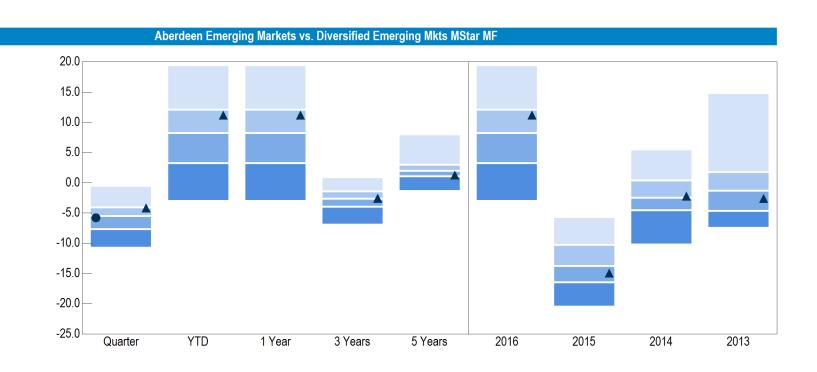
Characteristics		
	Portfolio	MSCI Emerging Markets
Number of Holdings	66	832
Weighted Avg. Market Cap. (\$B)	30.86	48.42
Median Market Cap. (\$B)	13.87	4.55
Price To Earnings	19.48	18.30
Price To Book	3.44	2.61
Price To Sales	2.92	5.15
Return on Equity (%)	18.70	16.29
Yield (%)	2.53	2.56
Beta		1.00
R-Squared		1.00

Top Ten Holdings	
SAMSUNG ELTN.PREF.	5.38%
TAIWAN SEMICON.MNFG.	3.94%
HOUSING DEVELOPMENT FIN.	3.68%
ASTRA INTERNATIONAL	3.66%
AIA GROUP	2.86%
GPO FINANCE BANORTE	2.78%
CHINA MOBILE	2.71%
ITC	2.68%
BNC.BRADESCO PF.SPN.ADR 1:1	2.59%
FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10	2.58%
Total	32.85%

Risk/Return S	Statistics Since Inception	1
	Aberdeen Emerging Markets	MSCI Emerging Markets
RETURN SUMMARY STATISTICS		
Number of Periods	4	4
Maximum Return	0.94	1.29
Minimum Return	-7.22	-4.60
Annualized Return	-5.30	-2.93
Total Return	-5.30	-2.93
Annualized Excess Return Over Risk Free	-5.42	-3.06
Annualized Excess Return	-2.36	0.00
RISK SUMMARY STATISTICS		
Beta	1.46	1.00
Upside Deviation	0.78	2.11
Downside Deviation		
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	13.70	9.14
Alpha	-0.25	0.00
Sharpe Ratio	-0.40	-0.33
Excess Return Over Market / Risk	-0.17	0.00
Tracking Error	5.19	0.00
Information Ratio	-0.46	
CORRELATION STATISTICS		
R-Squared	0.95	1.00
Correlation	0.98	1.00



### Aberdeen Emerging Markets

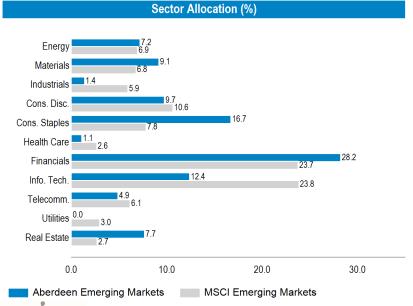


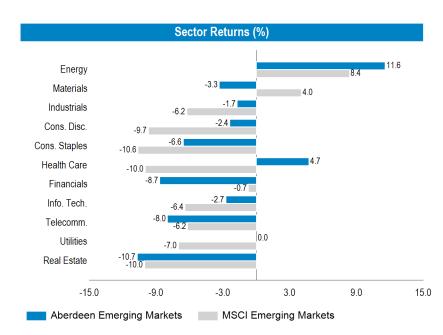
	Return (	Rank)															
5th Percentile	-0.52	19.44		19.44		0.88		7.97		19.44		-5.70		5.52		14.82	
25th Percentile	-4.04	12.1°		12.11		-1.39		3.02		12.11		-10.21		0.41		1.82	
Median	-5.47	8.27		8.27		-2.62		2.02		8.27		-13.75		-2.44		-1.27	
75th Percentile	-7.66	3.28		3.28		-3.95		1.09		3.28		-16.45		-4.53		-4.60	
95th Percentile	-10.73	-2.97		-2.97		-6.88		-1.33		-2.97		-20.45		-10.19		-7.45	
# of Portfolios	217	213		213		178		140		213		206		182		145	
Aberdeen Emerging Markets	-5.79	(58) -	()	-	()		()		()		()		()	-	()		()
MSCI Emerging Markets	-4.16	(26) 11.19	(34)	11.19	(34)	-2.55	(50)	1.28	(73)	11.19	(34)	-14.92	(62)	-2.19	(49)	-2.60	(59)



#### Aberdeen Emerging Markets

	Aberdeen Emerging Markets Performance Attribution vs	s. MSCI Emerging Markets	
		Attribution Effects	
	Total	Selection	Allocation
	Effects	Effect	Effect
Energy	0.25%	0.23%	0.03%
Materials	-0.58%	-0.75%	0.18%
Industrials	0.35%	0.24%	0.10%
Consumer Discretionary	0.80%	0.73%	0.06%
Consumer Staples	-0.26%	0.39%	-0.65%
Health Care	0.31%	0.19%	0.12%
Financials	-2.28%	-2.36%	0.09%
Information Technology	1.18%	0.83%	0.36%
Telecommunication Services	-0.01%	-0.06%	0.05%
Utilities	0.21%	0.09%	0.12%
Real Estate	-0.55%	-0.12%	-0.43%
Cash	0.00%	0.00%	0.00%
Portfolio	-0.57% =	-0.59% +	0.02%



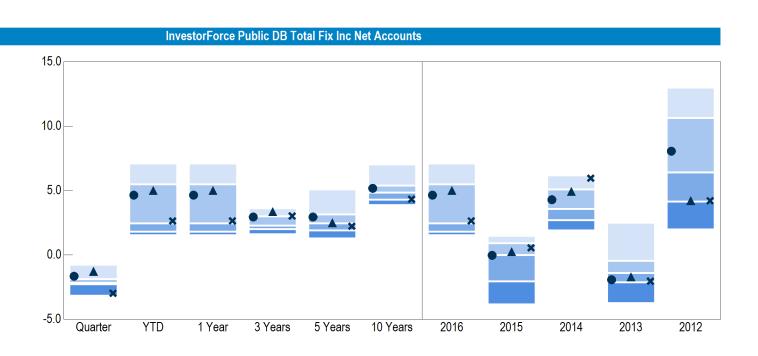


## Total Fixed Income

				Ending December 31, 2016					Inception		
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since	
Total Fixed Income	36,284,132	100.0	-1.7	4.6	4.6	2.9	2.9	5.2	5.3	Dec-01	
Fixed Income Composite Index			-1.3	5.0	5.0	3.4	2.5			Dec-01	
BBgBarc US Aggregate TR			-3.0	2.6	2.6	3.0	2.2	4.3	4.5	Dec-01	
InvestorForce Public DB Total Fix Inc Net Rank			21	37	37	32	30	29	46	Dec-01	
InvestorForce Public DB Total Fix Inc Net Median			-2.1	2.5	2.5	2.3	2.5	4.9	5.2	Dec-01	
Denver Investments Core Fixed Income	15,370,148	42.4	-3.2	3.7	3.7	3.2	2.7	4.8	6.2	Dec-89	
BBgBarc US Govt/Credit TR			-3.4	3.0	3.0	3.0	2.3	4.4	6.2	Dec-89	
Intermediate-Term Bond MStar MF Rank			94	40	40	33	56	43	22	Dec-89	
Intermediate-Term Bond MStar MF Median			-2.6	3.2	3.2	3.0	2.9	4.7	6.0	Dec-89	
Metropolitan West Total Return	11,107,975	30.6	-2.6						-2.6	Sep-16	
BBgBarc US Aggregate TR			-3.0	2.6	2.6	3.0	2.2	4.3	-3.0	Sep-16	
Intermediate-Term Bond MStar MF Rank			58						58	Sep-16	
Intermediate-Term Bond MStar MF Median			-2.6	3.2	3.2	3.0	2.9	4.7	-2.6	Sep-16	
Babson Capital Floating Rate Income Fund	9,806,010	27.0	2.1	8.5	8.5	3.4			3.6	Sep-13	
Credit Suisse Leveraged Loans			2.3	9.9	9.9	3.8	5.3	4.3	4.0	Sep-13	
Bank Loan MStar MF Rank			41	65	65	43			47	Sep-13	
Bank Loan MStar MF Median			2.0	9.6	9.6	3.2	4.9	4.0	3.6	Sep-13	



#### Total Fixed Income



	Return (Ra	nk)									
5th Percentile	-0.76	7.11	7.11	3.62	5.09	7.02	7.11	1.48	6.17	2.49	12.9
25th Percentile	-1.85	5.51	5.51	3.03	3.17	5.41	5.51	0.94	5.11	-0.44	10.6
Median	-2.15	2.46	2.46	2.29	2.46	4.85	2.46	0.00	3.58	-1.39	6.42
75th Percentile	-2.26	1.83	1.83	2.01	1.92	4.32	1.83	-2.02	2.72	-2.11	4.16
95th Percentile	-3.15	1.55	1.55	1.62	1.31	3.88	1.55	-3.83	1.92	-3.72	2.00
# of Portfolios	47	47	47	42	37	21	47	101	86	75	64
Total Fixed Income	-1.65 (21)	4.65 (37)	4.65 (37)	2.95 (32)	2.95 (30)	5.18 (29)	4.65 (37)	-0.03 (51)	4.29 (37)	-1.92 (69)	8.06 (41)
Fixed Income Composite Index	-1.27 (12)	5.01 (32)	5.01 (32)	3.38 (13)	2.51 (45)	()	5.01 (32)	0.26 (41)	4.93 (27)	-1.70 (61)	4.21 (71)
➤ BBgBarc US Aggregate TR	-2.98 (91)	2.65 (48)	2.65 (48)	3.03 (25)	2.23 (55)	4.34 (73)	2.65 (48)	0.55 (37)	5.97 (10)	-2.02 (72)	4.21 (71)



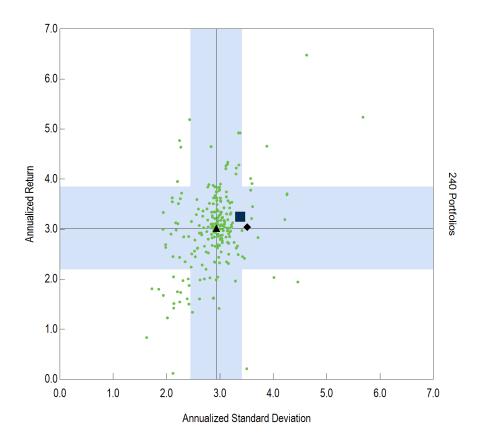
#### Denver Investments Core Fixed Income

As of December 31, 2016

Account Information									
Account Name	Denver Investments Core Fixed Income								
Account Structure	Separate Account								
Investment Style	Active								
Inception Date	12/31/89								
Account Type	Fixed								
Benchmark	BBgBarc US Govt/Credit TR								
Universe	Intermediate-Term Bond MStar MF								

3 Y	ear Risk/Return Statistics	
	Denver Investments Core Fixed Income	BBgBarc US Govt/Credit TR
RETURN SUMMARY STATISTICS		
Number of Periods	36	36
Maximum Return	2.50	2.64
Minimum Return	-2.67	-2.65
Annualized Return	3.25	3.04
Total Return	10.06	9.40
Annualized Excess Return Over Risk Free	3.13	2.92
Annualized Excess Return	0.21	0.00
RISK SUMMARY STATISTICS		
Beta	0.96	1.00
Upside Deviation	2.23	2.25
Downside Deviation	2.41	2.38
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	3.38	3.51
Alpha	0.03	0.00
Sharpe Ratio	0.92	0.83
Excess Return Over Market / Risk	0.06	0.00
Tracking Error	0.43	0.00
Information Ratio	0.49	-
CORRELATION STATISTICS		
R-Squared	0.99	1.00
Correlation	0.99	1.00

# Annualized Return vs. Annualized Standard Deviation 3 Years Ending December 31, 2016

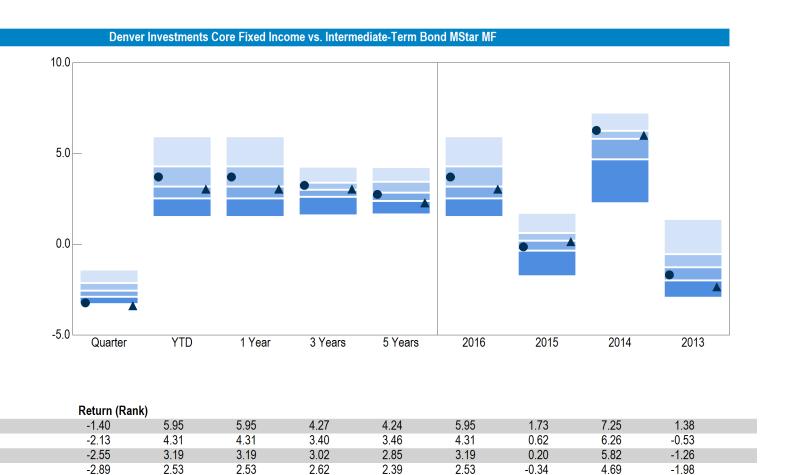


- Denver Investments Core Fixed Income
- ◆ BBgBarc US Govt/Credit TR
- ▲ Universe Median
- 68% Confidence Interval
- Intermediate-Term Bond MStar MF



#### **Denver Investments Core Fixed Income**

As of December 31, 2016



1.66

228

2.75

2.29

(56)

(78)

1.52

251

3.71

3.05

(40)

(54)

-1.76

244

-0.14

0.15

(66)

(55)

2.27

233

6.27

6.01

(25)

(35)

-2.93

228

-1.69

-2.35

(65)

(85)



5th Percentile

Median

25th Percentile

75th Percentile

95th Percentile

# of Portfolios

**Denver Investments Core Fixed Income** 

BBgBarc US Govt/Credit TR

-3.29

259

-3.23

-3.39

(94)

(97)

1.52

251

3.71

3.05

(40)

(54)

1.52

251

3.71

3.05

(40)

(54)

1.60

240

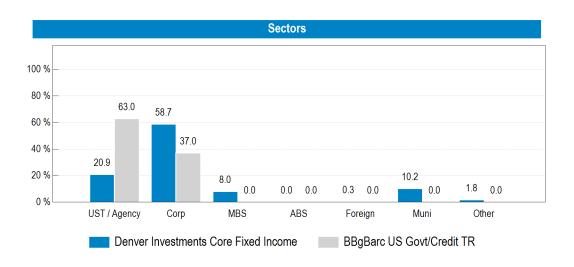
3.25

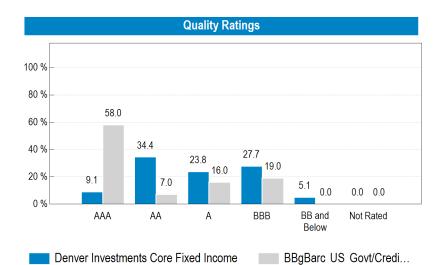
3.04

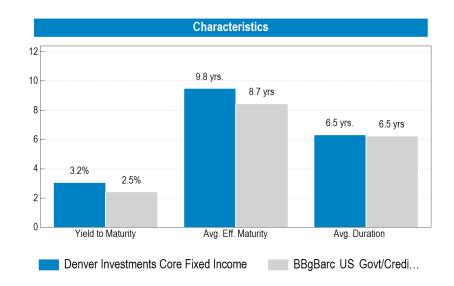
(33)

(49)

#### Denver Investments Core Fixed Income









## Metropolitan West Total Return

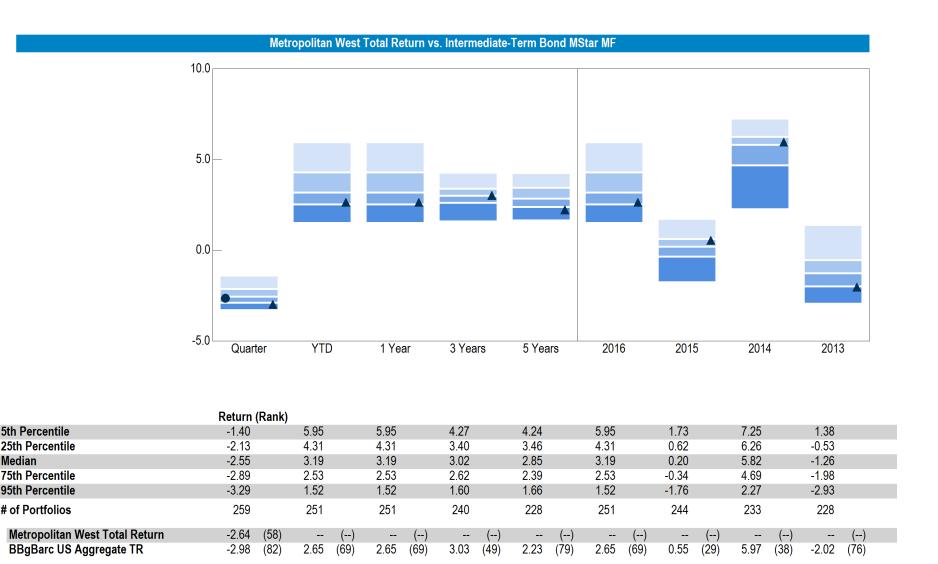
	Account Information
Account Name	Metropolitan West Total Return
Account Structure	Mutual Fund
Investment Style	Active
Inception Date	9/30/16
Account Type	US Fixed Income
Benchmark	BBgBarc US Aggregate TR
Universe	Intermediate-Term Bond MStar MF

Risk/Retu	urn Statistics Since Inception	
	Metropolitan West Total Return	BBgBarc US Aggregate TR
RETURN SUMMARY STATISTICS		
Number of Periods	3	3
Maximum Return	0.08	0.14
Minimum Return	-2.06	-2.37
Annualized Return	-2.64	-2.98
Total Return	-2.64	-2.98
Annualized Excess Return Over Risk Free	-2.75	-3.08
Annualized Excess Return	0.33	0.00
RISK SUMMARY STATISTICS		
Beta	0.85	1.00
Upside Deviation		
Downside Deviation	3.39	3.92
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	3.75	4.40
Alpha	-0.03	0.00
Sharpe Ratio	-0.73	-0.70
Excess Return Over Market / Risk	0.09	0.00
Tracking Error	0.64	0.00
Information Ratio	0.51	
CORRELATION STATISTICS		
R-Squared	1.00	1.00
Correlation	1.00	1.00



#### Metropolitan West Total Return

As of December 31, 2016





5th Percentile

Median

25th Percentile

75th Percentile

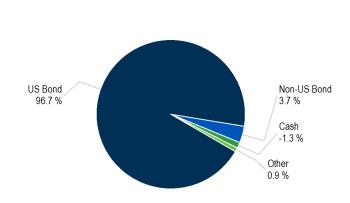
95th Percentile

# of Portfolios

### Metropolitan West Total Return

As of December 31, 2016

#### Mutual Fund Allocation as of 12/31/2016



Fund Information as	of 12/31/2016
Fund Name	METROPOLITAN WEST TOTAL RETURN BOND I
Ticker	MWTIX
Category	Intermediate-Term Bond
Benchmark	BBgBarc US Aggregate TR
Expense Ratio	0.44%
Fund Assets (\$mm)	49,380.65
Share Class Inception Date	3/31/2000
Manager Tenure	20

Top Holdings as of 12/31/2016	
US 5YR NOTE (CBT) MAR17	6.22%
US TREASURY NOTE 1.75%	4.29%
US TREASURY BOND 2.875%	3.26%
90DAY EURO\$ FUTR DEC17	2.85%
US TREASURY NOTE 2%	2.72%
US 2YR NOTE (CBT) MAR17	2.61%
US TREASURY NOTE 0.75%	2.53%
US TREASURY NOTE 0.75%	2.47%
US TREASURY NOTE 1.25%	1.98%
90DAY EURO\$ FUTR JUN18	1.42%

Fund Characteristics as of 12/31/2016	
Sharpe Ratio (3 Year)	
Average Duration	5.56
Average Coupon	2.80%
Average Effective Maturity	7.52
R-Squared (3 Year)	
Alpha (3 Year)	
Beta (3 Year)	

Fixed Income Sectors as of 12/31/2016							
GOVERNMENT	40.33%						
MUNICIPAL	0.81%						
CORPORATE	21.19%						
SECURITIZED	39.45%						
CASH & EQUIVALENTS	4.44%						
DERIVATIVE	4.58%						

Maturities as of 12/31/2016	
1 to 3 Years	13.61%
3 to 5 Years	10.62%
5 to 7 Years	4.39%
7 to 10 Years	10.92%
10 to 15 Years	4.73%
15 to 20 Years	5.26%
20 to 30 Years	29.75%
Greater than 30 Years	5.47%

Credit Quality as	of 12/31/2016
AAA	67.40%
AA	5.08%
A	12.95%
BBB	9.44%
ВВ	1.74%
В	0.64%
Below B	2.75%
Not Rated	0.00%



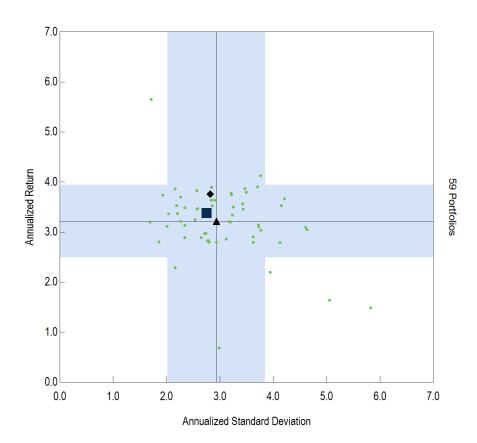
#### Babson Capital Floating Rate Income Fund

As of December 31, 2016

	Account Information
Account Name	Babson Capital Floating Rate Income Fund
Account Structure	Commingled Fund
Investment Style	Active
Inception Date	9/01/13
Account Type	Fixed
Benchmark	Credit Suisse Leveraged Loans
Universe	Bank Loan MStar MF

3 Ye	ear Risk/Return Statistics	
	Babson Capital Floating Rate Income Fund	Credit Suisse Leveraged Loans
RETURN SUMMARY STATISTICS		
Number of Periods	36	36
Maximum Return	2.54	2.64
Minimum Return	-1.11	-1.10
Annualized Return	3.38	3.76
Total Return	10.50	11.70
Annualized Excess Return Over Risk Free	3.26	3.64
Annualized Excess Return	-0.38	0.00
RISK SUMMARY STATISTICS		
Beta	0.96	1.00
Upside Deviation	2.02	2.13
Downside Deviation	1.37	1.15
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	2.75	2.82
Alpha	-0.02	0.00
Sharpe Ratio	1.19	1.29
Excess Return Over Market / Risk	-0.14	0.00
Tracking Error	0.45	0.00
Information Ratio	-0.84	
CORRELATION STATISTICS		
R-Squared	0.98	1.00
Correlation	0.99	1.00

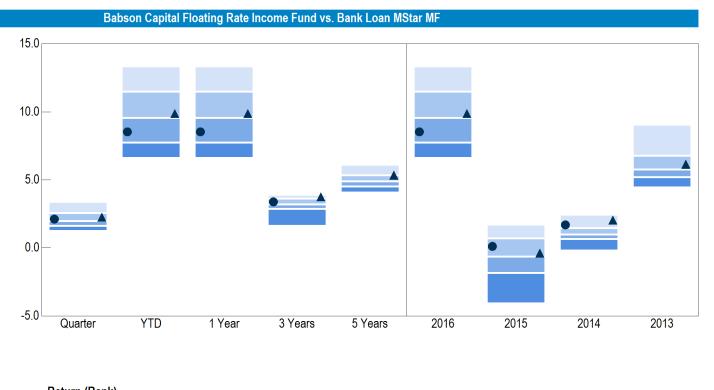
## Annualized Return vs. Annualized Standard Deviation 3 Years Ending December 31, 2016



- Babson Capital Floating Rate Income Fund
- Credit Suisse Leveraged Loans
- ▲ Universe Median
- 68% Confidence Interval
- Bank Loan MStar MF



## Babson Capital Floating Rate Income Fund



	R	eturn (	Rank)															
51	h Percentile	3.39	13.33	1	3.33		3.90		6.10		13.33		1.71		2.43		9.05	
2	oth Percentile	2.58	11.50	1	1.50		3.64		5.36		11.50		0.71		1.48		6.79	
N	edian	1.98	9.56		9.56		3.22		4.90		9.56		-0.63		1.00		5.77	
7	ith Percentile	1.64	7.75		7.75		2.89		4.54		7.75		-1.83		0.67		5.20	
9	ith Percentile	1.26	6.63		6.63		1.62		4.08		6.63		-4.06		-0.18		4.47	
#	of Portfolios	63	62		62		59		45		62		61		54		45	
•	Babson Capital Floating Rate Income Fund	2.12	(41) 8.53	(65)	8.53	(65)	3.38	(43)		()	8.53	(65)	0.12	(33)	1.69	(15)		()
<b>A</b>	Credit Suisse Leveraged Loans	2.25	(36) 9.88	(50)	9.88	(50)	3.76	(17)	5.35	(30)	9.88	(50)	-0.38	(45)	2.06	(11)	6.15	(44)

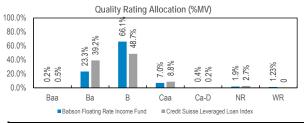


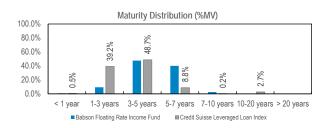
#### Babson Capital Floating Rate Income Fund

As of December 31, 2016

## Loan Portfolio Characteristics As of December 31, 2016

	Babson Capital Floating Rate Fund	Credit Suisse Leveraged Loan Index				
Average Current Yield (%)	5.0%	5.2%				
3 year Discount Margin (%)	4.2%	4.6%				
Average Quality	B1/B2	B1				
Weighted Avg. Life (Years)	4.8	4.6				





	Babson Capital Floating Rate Income Fund	Credit Suisse Leveraged Loan Index					
Aerospace	2.1%	2.6%					
Automotive	1.5%	1.6%					
Broadcasting	2.2%	2.7%					
Cable/Wireless Video	1.4%	3.0%					
Chemicals	4.8%	3.3%					
Consumer Durables	1.3%	0.6%					
Consumer Non-Durables	2.3%	1.8%					
Diversified Media	3.2%	6.0%					
Energy	5.5%	3.7%					
Financial	8.1%	3.4%					
Food And Drug	0.9%	1.1%					
Food/Tobacco	1.9%	4.1%					
Forest Prod/Containers	6.0%	2.4%					
Gaming/Leisure	0.7%	5.8%					
Healthcare	11.8%	12.5%					
Housing	2.7%	2.6%					
Information Technology	10.4%	11.6%					
Land Transportation	0.2%	0.5%					
Manufacturing	10.0%	4.5%					
Metals/Minerals	0.5%	1.7%					
Retail	2.6%	5.3%					
Service	13.4%	12.3%					
Shipping	0.0%	0.8%					
Telecommunications	1.5%	2.8%					
Utility	5.1%	3.1%					
Wireless Communications	0.1%	0.4%					



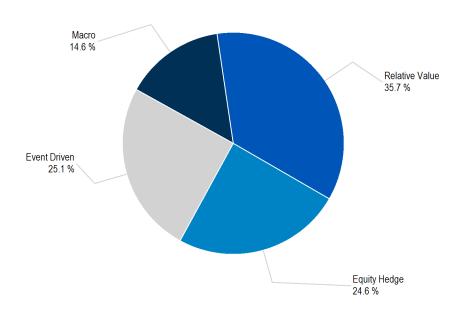
## Total Hedge Funds

		ng Decemb	ecember 31, 2016				Inception			
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Hedge Funds	14,718,067	100.0	2.1	5.2	5.2	3.1	4.7	2.5	3.7	Sep-04
HFRI Fund of Funds Composite Index			1.1	0.7	0.7	1.3	3.5	1.3	3.0	Sep-04
InvestorForce Public DB Hedge Funds Net Rank			31	18	18	15	48	65	99	Sep-04
InvestorForce Public DB Hedge Funds Net Median			1.7	2.1	2.1	2.1	4.6	3.0	4.9	Sep-04
Grosvenor Institutional Partners	14,718,067	100.0	2.1	2.2	2.2	1.7	5.6	3.0	4.1	Sep-04
HFRI FOF: Conservative Index			2.0	2.3	2.3	1.9	3.5	1.3	2.5	Sep-04
InvestorForce Public DB Hedge Funds Net Rank			31	49	49	74	30	51	99	Sep-04
InvestorForce Public DB Hedge Funds Net Median			1.7	2.1	2.1	2.1	4.6	3.0	4.9	Sep-04



### Total Hedge Funds





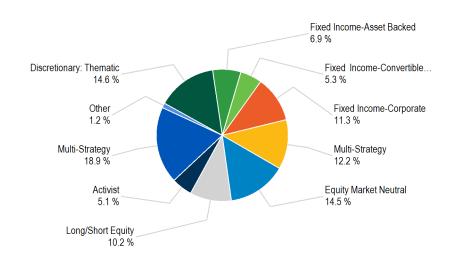
	edge Fund Strategy Allocation As of December 31, 2016	
Strategy	Market Value	Percent
Equity Hedge	\$3,625,059.90	24.63%
Event Driven	\$3,694,234.82	25.10%
Macro	\$2,147,365.98	14.59%
Relative Value	\$5,251,406.31	35.68%
TOTALS	\$14,718,067.00	100.00%



### Total Hedge Funds

As of December 31, 2016

# Hedge Fund Allocation: Sub-Strategies As of December 31, 2016



	Total Hedge Fund Sub-Strategy Allo As of December 31, 2016	cation	
Strategy	Sub Strategy	Market Value	Percent
Equity Hedge	Equity Market Neutral	\$2,126,760.68	14.45%
	Long/Short Equity	\$1,498,299.22	10.18%
Event Driven	Activist	\$747,677.80	5.08%
	Multi-Strategy	\$2,774,355.63	18.85%
	Other	\$172,201.38	1.17%
Macro	Discretionary: Thematic	\$2,147,365.98	14.59%
Relative Value	Fixed Income-Asset Backed	\$1,017,018.43	6.91%
	Fixed Income-Convertible Arbitrage	\$781,529.36	5.31%
	Fixed Income-Corporate	\$1,664,613.38	11.31%
	Multi-Strategy	\$1,788,245.14	12.15%
	TOTALS	\$14,718,067.00	100.00%



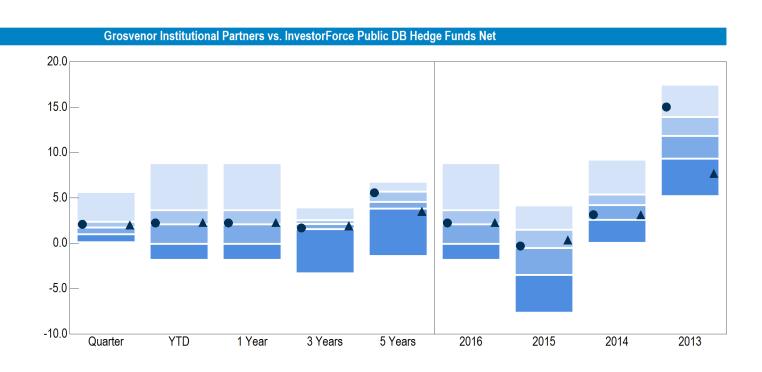
### Grosvenor Institutional Partners

	Account Information
Account Name	Grosvenor Institutional Partners
Account Structure	Hedge Fund
Investment Style	Active
Inception Date	9/01/04
Account Type	Hedge Fund
Benchmark	HFRI FOF: Conservative Index
Universe	InvestorForce Public DB Hedge Funds Net

	3 Year Risk/Return Statistics	
	<b>Grosvenor Institutional Partners</b>	HFRI FOF: Conservative Index
RETURN SUMMARY STATISTICS		
Number of Periods	36	36
Maximum Return	1.63	1.30
Minimum Return	-2.97	-1.37
Annualized Return	1.68	1.92
Total Return	5.14	5.88
Annualized Excess Return Over Risk Free	1.56	1.80
Annualized Excess Return	-0.24	0.00
RISK SUMMARY STATISTICS		
Beta	1.39	1.00
Upside Deviation	1.71	1.19
Downside Deviation	2.73	1.50
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	3.48	2.33
Alpha	-0.08	0.00
Sharpe Ratio	0.45	0.77
Excess Return Over Market / Risk	-0.07	0.00
Tracking Error	1.59	0.00
Information Ratio	-0.15	
CORRELATION STATISTICS		
R-Squared	0.86	1.00
Correlation	0.93	1.00



### **Grosvenor Institutional Partners**



	Return (Rar	nk)								
5th Percentile	5.65	8.81	8.81	3.94	6.79	8.81	4.17	9.19	17.45	
25th Percentile	2.39	3.67	3.67	2.56	5.72	3.67	1.49	5.41	13.95	
Median	1.74	2.10	2.10	2.14	4.58	2.10	-0.52	4.23	11.85	
75th Percentile	1.01	-0.04	-0.04	1.58	3.85	-0.04	-3.48	2.60	9.34	
95th Percentile	0.14	-1.80	-1.80	-3.29	-1.38	-1.80	-7.65	0.05	5.20	
# of Portfolios	16	16	16	14	12	16	55	45	43	
Grosvenor Institutional Partners	2.09 (31	) 2.24 (	(49) 2.24	(49) 1.68	(74) 5.57	(30) 2.24	(49) -0.30	(49) 3.15	(69) 15.03	(13)
▲ HFRI FOF: Conservative Index	2.03 (32	2) 2.28 (	(49) 2.28	(49) 1.92	(70) 3.51	(83) 2.28	(49) 0.37	(41) 3.14	(69) 7.70	(90)



### Total Real Estate

			Ending December 31, 2016				Inception			
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Real Estate	53,053,172	100.0	1.8	8.6	8.6	11.3	11.8	4.7	7.0	Sep-04
Real Estate Composite Index			1.8	7.9	7.9	10.2	10.6			Sep-04
NCREIF-ODCE Net			1.8	7.7	7.7	11.0	11.1	4.8	7.2	Sep-04
Principal US Property Account	29,841,016	56.2	2.5	9.0	9.0	11.7	12.1	4.8	7.1	Sep-04
NCREIF-ODCE Net			1.8	7.7	7.7	11.0	11.1	4.8	7.2	Sep-04
Harbert US Real Estate Fund V	9,131,917	17.2	0.0	12.5	12.5	-	-		16.5	Jul-14
NCREIF Property Index			1.7	8.0	8.0	11.0	10.9	6.9	10.9	Jul-14
Harbert US Real Estate Fund VI	5,147,708	9.7	0.0			-	-		-11.1	Apr-16
NCREIF Property Index			1.7	8.0	8.0	11.0	10.9	6.9	5.6	Apr-16
Principal Real Estate Debt Fund	8,932,531	16.8	2.2	7.6	7.6	-	-		8.6	May-14
8% Return Target			1.9	8.0	8.0	8.0	8.0	8.0	8.0	May-14



### Total Real Estate

	Non-Marketable Securities Overview As of December 31, 2016												
Account Type	Account	Vintage Year	Commitment		Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	DPI (dist / takedowns)	RVPI (RV / takedowns)	TVPI (TV / takedown)	Takedown (takedowns / commit)	IRR
	Harbert US Real Estate Fund V		\$11,300,000	\$9,503,217	\$2,650,307	\$9,131,917	\$11,782,224	\$1,796,783	27.89%	96.09%	123.98%	84.10%	15.00
	Harbert US Real Estate Fund VI	2016	\$10,000,000	\$5,320,758	\$4,874	\$5,147,708	\$5,152,582	\$4,679,242	0.09%	96.75%	96.84%	53.21%	-4.69
	Principal Real Estate Debt Fund	2014	\$10,500,000	\$10,262,749	\$2,353,141	\$8,932,531	\$11,285,672	\$237,251	22.93%	87.04%	109.97%	97.74%	8.56
	Total Account		\$31,800,000	\$25,086,725	\$5,008,322	\$23,212,156	\$28,220,478	\$6,713,275	19.96%	92.53%	112.49%	78.89%	10.61



### Principal US Property Account

	Account Information
Account Name	Principal US Property Account
Account Structure	Other
Investment Style	Active
Inception Date	9/01/04
Account Type	Real Estate
Benchmark	NCREIF-ODCE Net
Universe	

3 Year Risk/Return Statistics					
	Principal US Property Account	NCREIF-ODCE Net			
RETURN SUMMARY STATISTICS					
Number of Periods	36	36			
Maximum Return	2.54	3.58			
Minimum Return	0.26	0.00			
Annualized Return	11.75	11.02			
Total Return	39.55	36.83			
Annualized Excess Return Over Risk Free	11.63	10.90			
Annualized Excess Return	0.73	0.00			
RISK SUMMARY STATISTICS					
Beta	0.19	1.00			
Upside Deviation	1.54	2.27			
Downside Deviation					
RISK/RETURN SUMMARY STATISTICS					
Annualized Standard Deviation	1.54	4.57			
Alpha	0.76	0.00			
Sharpe Ratio	7.53	2.39			
Excess Return Over Market / Risk	0.47	0.00			
Tracking Error	3.91	0.00			
Information Ratio	0.19				
CORRELATION STATISTICS					
R-Squared	0.32	1.00			
Correlation	0.56	1.00			



### Harbert US Real Estate Fund V

	Account Information
Account Name	Harbert US Real Estate Fund V
Account Structure	Other
Investment Style	Active
Inception Date	7/01/14
Account Type	Real Estate
Benchmark	NCREIF Property Index
Universe	

Risk/Ret	urn Statistics Since Inception	
	Harbert US Real Estate Fund V	NCREIF Property Index
RETURN SUMMARY STATISTICS		
Number of Periods	30	30
Maximum Return	13.72	3.57
Minimum Return	-0.78	0.00
Annualized Return	16.48	10.86
Total Return	46.44	29.39
Annualized Excess Return Over Risk Free	16.34	10.72
Annualized Excess Return	5.63	0.00
RISK SUMMARY STATISTICS		
Beta	1.46	1.00
Upside Deviation	14.94	2.22
Downside Deviation	1.90	
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	10.82	4.51
Alpha	0.05	0.00
Sharpe Ratio	1.51	2.38
Excess Return Over Market / Risk	0.52	0.00
Tracking Error	8.83	0.00
Information Ratio	0.64	
CORRELATION STATISTICS		
R-Squared	0.37	1.00
Correlation	0.61	1.00



### Harbert US Real Estate Fund VI

	Account Information
Account Name	Harbert US Real Estate Fund VI
Account Structure	Other
Investment Style	Active
Inception Date	4/01/16
Account Type	Real Estate
Benchmark	NCREIF Property Index
Universe	

Risk/Return Statistics Since Inception								
· · · · · · · · · · · · · · · · · · ·	Harbert US Real Estate Fund VI	NCREIF Property Index						
RETURN SUMMARY STATISTICS								
Number of Periods	9	9						
Maximum Return	0.00	2.03						
Minimum Return	-10.90	0.00						
Annualized Return	-11.14	5.63						
Total Return	-11.14	5.63						
Annualized Excess Return Over Risk Free	-11.37	5.40						
Annualized Excess Return	-16.77	0.00						
RISK SUMMARY STATISTICS								
Beta	-2.30	1.00						
Upside Deviation		0.56						
Downside Deviation	26.01	-						
RISK/RETURN SUMMARY STATISTICS								
Annualized Standard Deviation	12.55	3.21						
Alpha	0.17	0.00						
Sharpe Ratio	-0.91	1.68						
Excess Return Over Market / Risk	-1.34	0.00						
Tracking Error	14.66	0.00						
Information Ratio	-1.14							
CORRELATION STATISTICS								
R-Squared	0.34	1.00						
Correlation	-0.59	1.00						

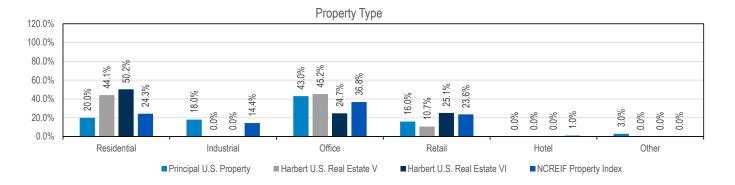


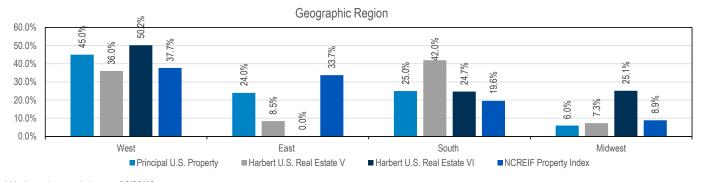
### Private Equity Real Estate

As of December 31, 2016

# Private Equity Real Estate Portfolio Characteristics As of December 31, 2016

	Principal U.S. Property Account	Harbert U.S. Real Estate Fund V, LP	Harbert U.S. Real Estate Fund VI, LP
Gross Asset Value	\$9.34 Billion	\$360.27 Million	\$105.83 Million
Net Asset Value	\$7.10 Billion	\$339.22 Million	\$104.03 Million
Leverage Ratio	21.3%	66.0%	74.0%
Number of Investments	141	25	8
Number of Markets	43	9	6
Portfolio Occupancy	90.0%	83.0%	89.0%





<sup>\*</sup> Harbert characteristics as of 9/30/16.



### Principal Real Estate Debt Fund

Account Information							
Account Name	Principal Real Estate Debt Fund						
Account Structure	Other						
Investment Style	Active						
Inception Date	5/01/14						
Account Type	Real Estate						
Benchmark	8% Return Target						
Universe							

Risk/Re	eturn Statistics Since Inception	
'	Principal Real Estate Debt Fund	8% Return Target
RETURN SUMMARY STATISTICS		
Number of Periods	32	32
Maximum Return	3.84	0.64
Minimum Return	-1.78	0.64
Annualized Return	8.58	8.00
Total Return	24.56	22.78
Annualized Excess Return Over Risk Free	8.45	7.87
Annualized Excess Return	0.58	0.00
RISK SUMMARY STATISTICS		
Beta	53,364.30	1.00
Upside Deviation	2.74	0.00
Downside Deviation		
RISK/RETURN SUMMARY STATISTICS		
Annualized Standard Deviation	3.91	0.00
Alpha	-34,334.03	0.00
Sharpe Ratio	2.16	2,052,389.95
Excess Return Over Market / Risk	0.15	0.00
Tracking Error	3.91	0.00
Information Ratio	0.15	
CORRELATION STATISTICS		
R-Squared	0.00	1.00
Correlation	0.05	1.00



### Principal Real Estate Debt Fund

As of December 31, 2016

### Debt Portfolio Characteristics As of December 31, 2016

	Principal Real Estate Debt Fund
Loan Balance	\$638.43 Million
# of Active Loans	24
Coupon Rate	6.59%
LTV	70.4%
Debt Yield	9.06%
Remaining Months to Maturity	19.0
Remaining Average Life	0.84
Remaining Duration	0.08

Holdings Summary										
# of Loans Principal Balance LV* Debt Yield DSCR Occupancy										
Senior Mortgages	7	\$255,930,435.00								
Sub Debt	17	\$382,498,287.00								
Weighted Averages	24	\$638,428,722.00	70%	9.06%	2.31	87%				

<sup>\*</sup> LTV reflects Loan to Value net of letters of credit and escrows held by PrinREI.



### Total Private Equity

		Ending December 31, 2016							Inception	
	Market Value (\$)	% of Portfolio	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Private Equity	9,780,546	100.0	-0.1	8.4	8.4	9.2	11.4	5.8	4.7	Oct-05
Russell 3000			4.2	12.7	12.7	8.4	14.7	7.1	7.8	Oct-05
Mesirow Private Equity III	1,559,400	15.9	0.0	1.0	1.0	8.7	11.1	7.2	3.0	Sep-05
Mesirow Private Equity IV	2,926,510	29.9	0.0	5.7	5.7	9.3	12.1		3.1	Mar-07
Adams Street 2012 Global Fund	2,506,957	25.6	0.0	1.1	1.1	6.4			-5.6	Feb-12
NGP Natural Resources XI	984,792	10.1	-0.6	28.6	28.6				0.0	Nov-14
RCP Fund XI	60,000	0.6							0.0	Dec-16
Strategic Value Special Situations III	1,742,887	17.8	0.0	35.2	35.2	-	-		2.8	Oct-14



### Total Private Equity

	Non-Marketable Securities Overview As of December 31, 2016												
Account Type	Account	Vintage Year	Commitment	Cumulative Takedown	Cumulative Distributions	Value (RV)	Total Value (RV + Dist)	Unfunded Commitment	DPI (dist / takedowns)	RVPI (RV / takedowns)	TVPI (TV / takedown)	Takedown (takedowns / commit)	IRR
Private Equity	Mesirow Private Equity III	2005	\$4,000,000	\$3,840,000	\$4,802,606	\$1,559,400	\$6,362,006	\$160,000	125.07%	40.61%	165.68%	96.00%	8.51
	Mesirow Private Equity IV	2006	\$4,500,000	\$3,982,500	\$3,374,526	\$2,926,510	\$6,301,036	\$517,500	84.73%	73.48%	158.22%	88.50%	9.55
	Adams Street 2012 Global Fund	2012	\$4,000,000	\$2,495,600	\$240,583	\$2,506,957	\$2,747,540	\$1,504,400	9.64%	100.46%	110.10%	62.39%	4.64
	NGP Natural Resources XI	2014	\$2,000,000	\$946,162	\$83,329	\$984,792	\$1,068,121	\$1,053,838	8.81%	104.08%	112.89%	47.31%	23.20
	RCP Fund XI	2016	\$6,000,000	\$60,000	\$0	\$60,000	\$60,000	\$5,940,000	0.00%	100.00%	100.00%	1.00%	0.00
	Strategic Value Special Situations III	2013	\$2,000,000	\$1,540,000	\$0	\$1,742,887	\$1,742,887	\$460,000	0.00%	113.17%	113.17%	77.00%	7.41
	Total Account		\$22,500,000	\$12,864,262	\$8,501,044	\$9,780,546	\$18,281,590	\$9,635,738	66.08%	76.03%	142.11%	57.17%	8.69



### Adams County Retirement Plan

	Benchmark History								
		As of December 31, 2016							
Total Fund									
11/1/2014	Present	MSCI ACWI 55% / HFRI Fund of Funds Composite Index 10% / NCREIF-ODCE Net 15% / 8% Return Target 5% / BBgBarc US Aggregate TR 10% / Credit Suisse Leveraged Loans 5%							
10/1/2013	10/31/2014	BBgBarc US Aggregate TR 25% / NCREIF-ODCE Net 10% / MSCI ACWI 50% / HFRI Fund of Funds Composite Index 10% / Credit Suisse Leveraged Loans 5%							
10/1/2010	9/30/2013	BBgBarc US Aggregate TR 25% / NCREIF-ODCE Net 10% / MSCI ACWI 50% / HFRI Fund of Funds Composite Index 15%							
9/1/2009	9/30/2010	BBgBarc US Aggregate TR 20% / HFRI FOF: Conservative Index 10% / NCREIF-ODCE Net 10% / MSCI ACWI 60%							
7/1/2007	8/31/2009	BBgBarc US Aggregate TR 20% / HFRI FOF: Conservative Index 10% / NCREIF-ODCE Net 10% / Russell 3000 40% / MSCI ACWI ex USA 20%							
7/1/2005	6/30/2007	MSCI EAFE 15% / BBgBarc US Aggregate TR 20% / HFRI FOF: Conservative Index 10% / NCREIF-ODCE Net 10% / Russell 3000 45%							
10/1/2004	6/30/2005	S&P 500 38% / BBgBarc US Govt/Credit TR 10% / MSCI EAFE 10% / BBgBarc US Aggregate TR 10% / Russell 2000 12% / HFRI FOF: Conservative Index 10% / NCREIF-ODCE Net 10%							
1/1/2004	9/30/2004	S&P 500 38% / BBgBarc US Govt/Credit TR 20% / MSCI EAFE 10% / BBgBarc US Aggregate TR 20% / Russell 2000 12%							
7/1/2001	12/31/2003	S&P 500 40% / BBgBarc US Govt/Credit TR 20% / MSCI EAFE 10% / Russell 2000 Growth 10% / BBgBarc US Aggregate TR 20%							
4/1/2000	6/30/2001	S&P 500 40% / BBgBarc US Govt/Credit Int TR 30% / BBgBarc US Govt/Credit TR 10% / MSCI EAFE 10% / Russell 2000 Growth 10%							
1/1/1998	3/31/2000	S&P 500 40% / BBgBarc US Govt/Credit Int TR 30% / BBgBarc US Govt/Credit TR 10% / MSCI EAFE 10% / Russell 2000 10%							
1/1/1995	12/31/1997	S&P 500 35% / BBgBarc US Govt/Credit Int TR 41% / BBgBarc US Govt/Credit TR 14% / MSCI EAFE 10%							
Total US Equity									
2/1/2012	Present	Russell 3000 67% / Alerian MLP TR USD 33%							
1/1/2000	1/31/2012	Russell 3000 100%							
Total Fixed Income									
10/1/2014	Present	BBgBarc US Aggregate TR 67% / Credit Suisse Leveraged Loans 33%							
10/1/2013	9/30/2014	BBgBarc US Aggregate TR 83% / Credit Suisse Leveraged Loans 17%							
Total Real Estate									
7/1/2014	Present	NCREIF-ODCE Net 50% / NCREIF Property Index 25% / 8% Return Target 25%							
10/1/2013	6/30/2014	NCREIF-ODCE Net 66.7% / 8% Return Target 33.3%							



### Adams County Retirement Plan

Manager Roster								
		As of December 31, 20	116					
	Account Type	Benchmark	Universe	Market Value	Allocation	Inception		
Aberdeen Emerging Markets	Non-US Equity	MSCI Emerging Markets	Diversified Emerging Mkts MStar MF	\$10,227,028	4.3%	8/31/2016		
Adams Street 2012 Global Fund	Private Equity			\$2,506,957	1.1%	2/1/2012		
Babson Capital Floating Rate Income Fund	Fixed Income	Credit Suisse Leveraged Loans	Bank Loan MStar MF	\$9,806,010	4.1%	9/1/2013		
Denver Investments Core Fixed Income	Fixed Income	BBgBarc US Govt/Credit TR	Intermediate-Term Bond MStar MF	\$15,370,148	6.5%	12/31/1989		
DFA World Ex-US Value	Non-US Equity	MSCI ACWI ex USA Value	Foreign Value MStar MF	\$16,937,946	7.1%	8/1/2011		
EuroPacific Growth	Non-US Equity	MSCI ACWI ex USA	Foreign Large Blend MStar MF	\$15,386,555	6.5%	8/1/2011		
FIAM SMID Cap Core	US Equity	Russell 2500	SMID Blend MStar MF	\$12,036,817	5.1%	4/1/2013		
Grosvenor Institutional Partners	Hedge Funds	HFRI FOF: Conservative Index	InvestorForce Public DB Hedge Funds Net	\$14,718,067	6.2%	9/1/2004		
Harbert US Real Estate Fund V	Real Estate	NCREIF Property Index		\$9,131,917	3.8%	7/1/2014		
Harbert US Real Estate Fund VI	Real Estate	NCREIF Property Index		\$5,147,708	2.2%	4/1/2016		
Mesirow Private Equity III	Private Equity			\$1,559,400	0.7%	9/1/2005		
Mesirow Private Equity IV	Private Equity			\$2,926,510	1.2%	3/1/2007		
Metropolitan West Total Return	Fixed Income	BBgBarc US Aggregate TR	Intermediate-Term Bond MStar MF	\$11,107,975	4.7%	9/30/2016		
NGP Natural Resources XI	Private Equity			\$984,792	0.4%	11/1/2014		
Operating Account	Cash			\$3,535,701	1.5%	10/1/1998		
Principal Real Estate Debt Fund	Real Estate	8% Return Target		\$8,932,531	3.8%	5/1/2014		
Principal US Property Account	Real Estate	NCREIF-ODCE Net		\$29,841,016	12.5%	9/1/2004		
RCP Fund XI	Private Equity			\$60,000	0.0%	12/1/2016		
SSgA S&P 500 Flagship Fund	US Equity	S&P 500	Large Blend MStar MF	\$38,133,589	16.0%	11/1/2003		
Strategic Value Special Situations III	Private Equity			\$1,742,887	0.7%	10/1/2014		
Tortoise MLP Account	US Equity	Alerian MLP TR USD	All Cap MStar MF	\$28,022,581	11.8%	2/1/2012		
Total		Policy Index	InvestorForce Public DB \$50mm- \$250mm Net	\$238,116,134	100.0%	1/1/1990		



### Total Fund

Account	Fee Schedule	Market Value As of 12/31/2016	% of Portfolio	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
SSgA S&P 500 Flagship Fund	0.05% of First \$50.0 Mil, 0.04% of Next \$50.0 Mil	\$38,133,589	16.0%	\$19,067	0.05%
Tortoise MLP Account	0.75% of Assets	\$28,022,581	11.8%	\$210,169	0.75%
FIAM SMID Cap Core	0.65% of Assets	\$12,036,817	5.1%	\$78,239	0.65%
DFA World Ex-US Value	0.57% of Assets	\$16,937,946	7.1%	\$96,546	0.57%
EuroPacific Growth	0.49% of Assets	\$15,386,555	6.5%	\$75,394	0.49%
Aberdeen Emerging Markets	1.10% of Assets	\$10,227,028	4.3%	\$112,497	1.10%
Denver Investments Core Fixed Income	0.30% of First \$25.0 Mil, 0.25% Thereafter	\$15,370,148	6.5%	\$46,110	0.30%
Metropolitan West Total Return	0.43% of Assets	\$11,107,975	4.7%	\$47,764	0.43%
Babson Capital Floating Rate Income Fund	0.48% of Assets	\$9,806,010	4.1%	\$47,069	0.48%
Grosvenor Institutional Partners	1.25% of First \$25.0 Mil, 1.00% of Next \$25.0 Mil	\$14,718,067	6.2%	\$183,976	1.25%
Principal US Property Account	1.00% of Assets	\$29,841,016	12.5%	\$298,410	1.00%
Harbert US Real Estate Fund V	Performance-based 1.50 and 20.00	\$9,131,917	3.8%	\$136,979	1.50%
Harbert US Real Estate Fund VI	Performance-based 1.25 and 20.00	\$5,147,708	2.2%	\$64,346	1.25%
Principal Real Estate Debt Fund	Performance-based 0.65 and 15.00	\$8,932,531	3.8%	\$58,061	0.65%
Mesirow Private Equity III	1.00% of Assets	\$1,559,400	0.7%	\$15,594	1.00%
Mesirow Private Equity IV	1.00% of Assets	\$2,926,510	1.2%	\$29,265	1.00%
Adams Street 2012 Global Fund	1.00% of Assets	\$2,506,957	1.1%	\$25,070	1.00%
NGP Natural Resources XI	Performance-based 1.50 and 20.00	\$984,792	0.4%	\$14,772	1.50%
RCP Fund XI	1.00% of Assets	\$60,000	0.0%	\$600	1.00%
Strategic Value Special Situations III	Performance-based 1.75 and 20.00	\$1,742,887	0.7%	\$30,501	1.75%
Operating Account	No Fee	\$3,535,701	1.5%		
Investment Management Fee		\$238,116,134	100.0%	\$1,590,430	0.67%



# **Endnotes**

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# **Endnotes**

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