



Summit Strategies Group

8182 Maryland Avenue, 6th Floor

St. Louis, Missouri 63105

314.727.7211

Howard County Retirement Plans

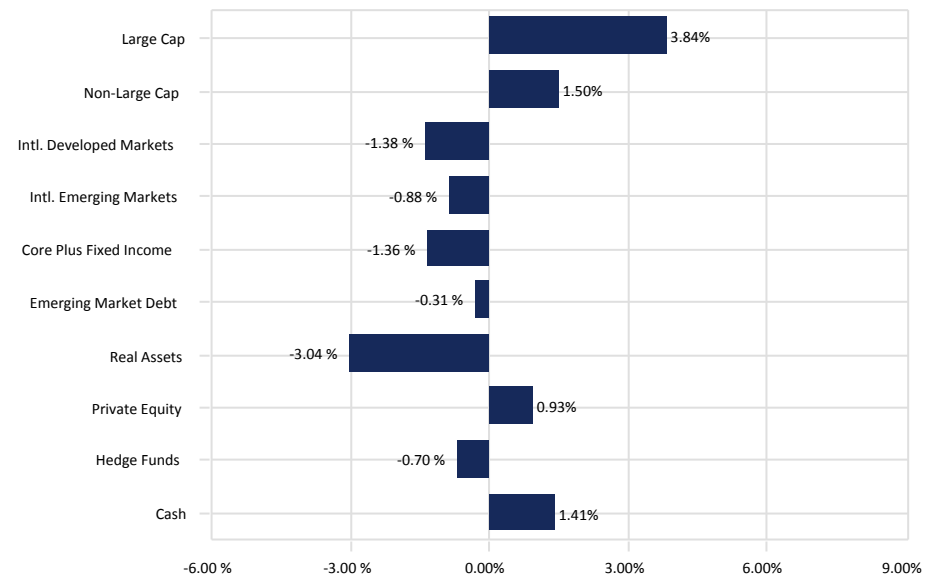
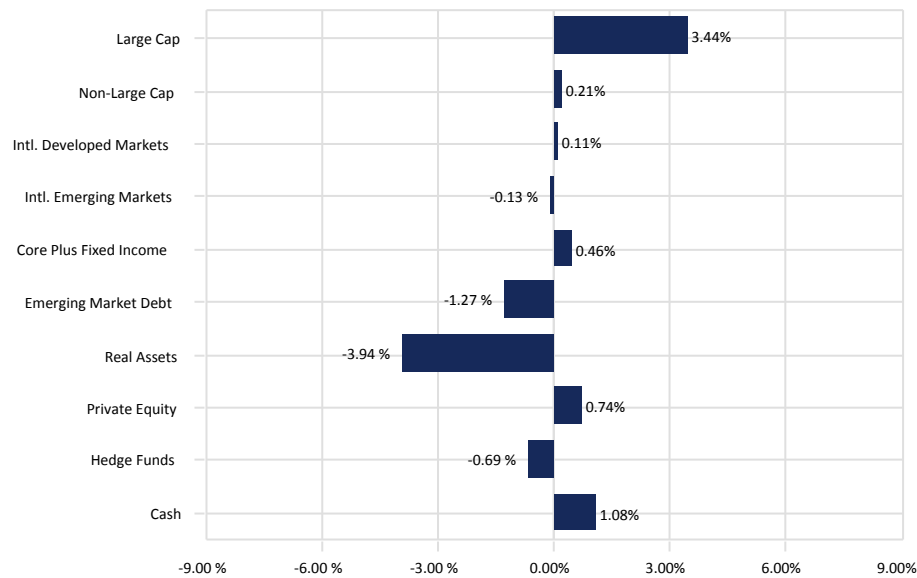
Monthly Flash Report

July 31, 2017

Howard County Retirement Plans

Asset Allocation vs. Target Allocation

July 31, 2017



July 31, 2017

	Market Value (\$)	Allocation (%)	Target (%)
Large Cap	172,093,379	18.44	15.00
Non-Large Cap	48,585,857	5.21	5.00
Intl. Developed Markets	122,304,018	13.11	13.00
Intl. Emerging Markets	64,131,830	6.87	7.00
Core Plus Fixed Income	237,572,090	25.46	25.00
Emerging Market Debt	34,810,832	3.73	5.00
Real Assets	33,182,098	3.56	7.50
Private Equity	100,245,487	10.74	10.00
Hedge Funds	110,214,127	11.81	12.50
Cash	10,033,952	1.08	0.00
Total Fund	933,173,670	100.00	100.00

December 31, 2016

	Market Value (\$)	Allocation (%)	Target (%)
Large Cap	159,594,476	18.84	15.00
Non-Large Cap	55,036,044	6.50	5.00
Intl. Developed Markets	98,468,346	11.62	13.00
Intl. Emerging Markets	51,843,903	6.12	7.00
Core Plus Fixed Income	200,243,300	23.64	25.00
Emerging Market Debt	39,724,694	4.69	5.00
Real Assets	37,773,341	4.46	7.50
Private Equity	92,571,805	10.93	10.00
Hedge Funds	99,979,362	11.80	12.50
Cash	11,981,952	1.41	0.00
Total Fund	847,217,222	100.00	100.00

Howard County Retirement Plans

Composite Asset Allocation & Performance - Gross of Fees

July 31, 2017

	Asset \$	Asset %	Performance(%)							Since Inception	Inception Date
			1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year		
Total Fund Composite	933,173,670	100.00	1.49	3.56	9.51	1.49	11.93	6.51	9.09	7.31	Apr-1997
Total Implementation Index			1.46	3.34	8.58	1.46	9.79	6.04	8.11	6.85	
Excess Return			0.03	0.22	0.93	0.03	2.14	0.47	0.98	0.46	
Total Policy Index			1.50	3.39	8.79	1.50	9.98	6.13	8.09	7.38	Apr-1997
Total Fund EX Alternatives	722,714,055	77.45	1.87	3.89	10.47	1.87	12.50	6.22	9.02	6.54	Jul-2008
Total Fund EX Real Assets	899,991,573	96.44	1.54	3.59	9.86	1.54	12.15	6.47	9.23	7.39	Dec-2003
Total Equity Composite	407,115,085	43.63	2.77	5.57	15.33	2.77	19.86	7.65	13.01	6.99	Apr-2000
US Equity Composite	220,679,236	23.65	1.95	4.67	12.36	1.95	19.46	11.14	16.51	8.26	Jul-1997
Russell 3000 Index			1.89	3.86	10.99	1.89	16.13	10.52	14.79	7.50	
Excess Return			0.06	0.81	1.37	0.06	3.33	0.62	1.72	0.76	
US Equity Allocation Index			1.77	3.68	10.32	1.77	16.41	10.52	14.75	8.79	Jan-2004
Large Cap Composite	172,093,379	18.44	2.35	4.90	12.63	2.35	18.70	10.19	16.17	8.20	Apr-2001
Russell 1000 Index			1.98	4.00	11.44	1.98	15.95	10.58	14.85	7.12	
Excess Return			0.37	0.90	1.19	0.37	2.75	-0.39	1.32	1.08	
Non-Large Cap Composite	48,585,857	5.21	0.57	3.85	11.44	0.57	21.68	14.02	17.67	12.18	Apr-1993
Russell 2500 Index			1.04	2.40	7.07	1.04	15.08	9.12	14.43	10.46	
Excess Return			-0.47	1.45	4.37	-0.47	6.60	4.90	3.24	1.72	
International Equity Composite	186,435,849	19.98	3.76	6.71	19.46	3.76	20.19	3.05	8.20	4.81	Jul-1997
MSCI AC World ex USA (Net)			3.69	7.38	18.30	3.69	19.01	2.37	7.70	-	
Excess Return			0.07	-0.67	1.16	0.07	1.18	0.68	0.50	-	
International Developed Markets Composite	122,304,018	13.11	2.92	6.24	17.09	2.92	16.68	3.18	9.33	3.09	Mar-2008
MSCI EAFE Index (Net)			2.89	6.65	17.53	2.89	18.32	3.26	9.55	2.75	
Excess Return			0.03	-0.41	-0.44	0.03	-1.64	-0.08	-0.22	0.34	
International Emerging Markets Composite	64,131,830	6.87	5.40	7.70	24.13	5.40	27.21	2.51	5.69	6.36	Feb-2006
MSCI Emerging Markets Index (Net)			6.04	10.37	25.77	6.04	25.30	2.76	5.14	5.54	
Excess Return			-0.64	-2.67	-1.64	-0.64	1.91	-0.25	0.55	0.82	
Fixed Income Composite	272,382,921	29.19	0.82	1.84	5.22	0.82	3.53	4.28	3.61	5.64	Jul-1997
Fixed Income Policy Index			0.43	1.10	2.71	0.43	-0.51	2.71	2.02	5.40	
Excess Return			0.39	0.74	2.51	0.39	4.04	1.57	1.59	0.24	

Howard County Retirement Plans

Composite Asset Allocation & Performance - Gross of Fees

July 31, 2017

	Asset \$	Asset %	Performance(%)							Since Inception	Inception Date
			1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year		
Real Assets Composite	33,182,098	3.56	0.18	2.52	1.90	0.18	6.59	7.17	6.48	6.73	Jul-2003
NCREIF Property Index [3 Month Lag]			0.58	1.61	3.90	0.58	7.17	10.44	10.62	9.22	
Excess Return			-0.40	0.91	-2.00	-0.40	-0.58	-3.27	-4.14	-2.49	
NCREIF Fund Index-ODCE (VW) [M]			0.00	1.70	3.50	0.00	7.87	11.34	11.79	8.23	Jul-2003
Alternatives Composite	210,459,615	22.55	0.21	2.43	6.30	0.21	10.09	8.18	9.15	8.24	Jul-2008
Private Equity Composite	100,245,487	10.74	0.31	4.38	9.80	0.31	15.32	14.53	15.05	11.95	Jul-2008
Hedge Fund Composite	110,214,127	11.81	0.11	0.70	3.18	0.11	5.55	3.86	5.41	4.63	Jan-2011
HFRI FOF: Conservative Index			0.47	0.36	2.03	0.47	4.64	1.65	3.57	2.35	
Excess Return			-0.36	0.34	1.15	-0.36	0.91	2.21	1.84	2.28	
Cash Composite	10,033,952	1.08	0.06	0.16	0.25	0.06	0.25	0.11	0.07	1.32	Dec-2003
Citigroup 3 Month T-Bill			0.08	0.21	0.38	0.08	0.51	0.23	0.16	1.22	
Excess Return			-0.02	-0.05	-0.13	-0.02	-0.26	-0.12	-0.09	0.10	

Howard County Retirement Plans

Manager Allocation & Performance - Gross of Fees

July 31, 2017

			Performance(%)								
	Asset \$	Asset %	1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year	Since Inception	Inception Date
US Equity											
Invesco	56,650,057	6.07	2.43	3.86	10.87	2.43	16.01	9.54	14.66	7.33	Apr-2001
S&P 500			2.06	4.14	11.59	2.06	16.04	10.87	14.78	6.84	
Excess Return			0.37	-0.28	-0.72	0.37	-0.03	-1.33	-0.12	0.49	
LSV Asset Management*	56,219,428	6.02	1.72	3.44	7.03	1.72	18.66	9.35	17.08	9.97	Jun-2000
Russell 1000 Value Index			1.33	2.88	6.05	1.33	13.76	8.45	14.00	6.85	
Excess Return			0.39	0.56	0.98	0.39	4.90	0.90	3.08	3.12	
Westfield	59,223,894	6.35	2.88	7.35	20.53	2.88	21.42	11.69	16.74	16.11	Jul-2010
Russell 1000 Growth Index			2.66	5.05	17.02	2.66	18.05	12.66	15.60	16.71	
Excess Return			0.22	2.30	3.51	0.22	3.37	-0.97	1.14	-0.60	
William Blair	14,958,343	1.60	0.89	4.47	17.75	0.89	19.93	13.82	18.59	11.45	Jun-2006
Russell 2500 Growth Index			1.33	3.69	12.11	1.33	16.15	10.01	14.87	9.06	
Excess Return			-0.44	0.78	5.64	-0.44	3.78	3.81	3.72	2.39	
Investment Counselors of Maryland	20,505,417	2.20	0.29	1.38	3.24	0.29	21.06	12.32	16.04	12.26	Apr-1993
Russell 2000 Value Index			0.63	0.91	1.18	0.63	19.21	9.50	13.76	10.34	
Excess Return			-0.34	0.47	2.06	-0.34	1.85	2.82	2.28	1.92	
Brown Capital Management	13,122,097	1.41	0.65	7.24	18.48	0.65	24.88	16.38	21.50	18.73	Aug-2011
Russell 2000 Growth Index			0.85	3.37	10.91	0.85	17.76	10.22	14.58	11.91	
Excess Return			-0.20	3.87	7.57	-0.20	7.12	6.16	6.92	6.82	
International Equity											
Mondrian International	58,632,988	6.28	2.58	5.01	14.93	2.58	16.08	2.38	9.14	1.70	Dec-2007
MSCI EAFE Index (Net)			2.89	6.65	17.53	2.89	18.32	3.26	9.55	1.56	
Excess Return			-0.31	-1.64	-2.60	-0.31	-2.24	-0.88	-0.41	0.14	
Pyramis	63,671,031	6.82	3.24	7.63	19.13	3.24	17.73	3.88	9.54	5.87	Aug-2005
MSCI EAFE Index (Net)			2.89	6.65	17.53	2.89	18.32	3.26	9.55	5.39	
Excess Return			0.35	0.98	1.60	0.35	-0.59	0.62	-0.01	0.48	
DFA Emerging Markets	64,131,830	6.87	5.40	7.70	24.13	5.40	27.21	2.55	5.69	6.54	Feb-2006
MSCI Emerging Markets (Net)			6.04	10.37	25.77	6.04	25.30	2.76	5.14	5.54	
Excess Return			-0.64	-2.67	-1.64	-0.64	1.91	-0.21	0.55	1.00	

All returns are time-weighted and calculated using custodian data.

* Inception date differs from manager; Summit does not calculate partial month returns.

Howard County Retirement Plans

Manager Allocation & Performance - Gross of Fees

July 31, 2017

	Performance(%)										
	Asset \$	Asset %	1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year	Since Inception	Inception Date
Fixed Income											
Dodge & Cox	115,024,416	12.33	0.74	1.60	3.73	0.74	3.11	3.76	3.74	4.74	May-2010
Blmbg. Barc. U.S. Aggregate			0.43	1.10	2.71	0.43	-0.51	2.71	2.02	3.48	
Excess Return			0.31	0.50	1.02	0.31	3.62	1.05	1.72	1.26	
PIMCO Total Return	101,373,079	10.86	0.59	1.70	3.97	0.59	1.85	3.13	2.75	4.14	May-2010
Blmbg. Barc. U.S. Aggregate			0.43	1.10	2.71	0.43	-0.51	2.71	2.02	3.48	
Excess Return			0.16	0.60	1.26	0.16	2.36	0.42	0.73	0.66	
SSgA TIPS	21,174,594	2.27	0.45	-0.54	1.30	0.45	-1.06	0.75	-0.04	3.27	Nov-2009
Blmbg. Barc. U.S. TIPS			0.45	-0.55	1.30	0.45	-1.04	0.77	-0.02	3.29	
Excess Return			0.00	0.01	0.00	0.00	-0.02	-0.02	-0.02	-0.02	
Colchester LMD	34,810,832	3.73	2.00	4.64	14.39	2.00	10.63	-	-	15.87	Oct-2015
JPM GBI-EM Global Diversified			2.07	4.55	12.65	2.07	7.97	-	-	12.37	
Excess Return			-0.07	0.09	1.74	-0.07	2.66	-	-	3.50	
Real Assets											
TA Realty Associates VIII	4,351,009	0.47	1.47	2.29	1.04	1.47	3.91	8.99	7.85	1.04	Jul-2007
NCREIF Property Index [3 Month Lag]			0.58	1.61	3.90	0.58	7.17	10.44	10.62	6.84	
Excess Return			0.89	0.68	-2.86	0.89	-3.26	-1.45	-2.77	-5.80	
TA Realty Associates IX	1,725,793	0.18	-0.08	-1.35	-0.82	-0.08	1.00	8.81	9.37	9.22	Apr-2010
NCREIF Property Index [3 Month Lag]			0.58	1.61	3.90	0.58	7.17	10.44	10.62	11.46	
Excess Return			-0.66	-2.96	-4.72	-0.66	-6.17	-1.63	-1.25	-2.24	
Partners Group Global RE 2011	8,757,335	0.94	0.00	3.66	-2.20	0.00	1.39	3.38	5.59	4.70	Mar-2012
Partners Group Global RE 2014	14,393,288	1.54	0.00	2.78	5.32	0.00	11.73	-	-	6.94	Dec-2014
Commonfund Natural Resources X	1,677,950	0.18	0.00	5.44	12.66	0.00	98.47	-	-	21.45	Apr-2016
Aether Real Assets IV	2,276,722	0.24	0.00	-6.05	-7.19	0.00	-11.17	-	-	-9.66	Jun-2016
Private Equity											
Siguler Guff Distressed Opps III	2,549,903	0.27	1.10	1.44	8.24	1.10	12.46	6.90	9.31	8.93	Jul-2008
Greenspring IV	4,684,427	0.50	0.00	0.36	1.99	0.00	13.28	14.67	20.58	16.26	Jul-2009
Pantheon Global Secondaries IV	895,040	0.10	0.00	4.31	8.79	0.00	12.06	4.54	10.00	11.96	Sep-2010
LGT Crown Asia-Pacific II	13,661,114	1.46	0.71	4.87	6.98	0.71	9.15	15.92	12.55	-15.11	Jul-2011

All returns are time-weighted and calculated using custodian data.

* Inception date differs from manager; Summit does not calculate partial month returns.

Howard County Retirement Plans

Manager Allocation & Performance - Gross of Fees

July 31, 2017

	Performance(%)										
	Asset \$	Asset %	1 Month	3 Month	CYTD	FYTD	1 Year	3 Year	5 Year	Since Inception	Inception Date
Private Equity (continued)											
Greenspring V	7,874,846	0.84	0.00	8.01	18.23	0.00	22.98	22.27	20.75	17.80	Sep-2011
Adveq Europe V	5,393,116	0.58	0.00	3.04	7.93	0.00	7.31	-1.61	-	2.60	Jan-2013
LGT Crown Global Secondaries III	5,567,442	0.60	0.66	5.50	7.20	0.66	12.33	13.54	-	17.24	Feb-2013
Flag Private Equity V	10,992,025	1.18	0.00	3.49	12.08	0.00	22.30	15.54	-	13.11	Oct-2013
HarbourVest Partners 2013 Direct	18,601,253	1.99	0.00	3.74	7.77	0.00	14.88	17.76	-	19.59	Jan-2014
Greenspring VI	6,580,181	0.71	0.00	10.45	18.05	0.00	26.69	16.55	-	14.78	Apr-2014
Greenspring Secondaries Fund I	2,923,249	0.31	0.00	0.37	10.07	0.00	24.14	24.36	-	22.29	May-2014
Adveq Europe VI	1,692,480	0.18	0.00	3.65	2.90	0.00	-12.50	-	-	-0.96	Feb-2015
Flag Private Equity VI	7,169,335	0.77	1.74	1.74	14.97	1.74	26.78	-	-	15.59	Aug-2015
57 Stars	2,802,697	0.30	0.00	-5.28	4.38	0.00	1.09	-	-	-8.11	Oct-2015
NB Crossroads XXI	3,376,374	0.36	0.00	4.11	5.99	0.00	5.00	-	-	-3.05	Nov-2015
LGT Crown Asia-Pacific III	2,280,985	0.24	1.06	7.33	7.45	1.06	9.10	-	-	6.98	Dec-2015
HarbourVest IV	3,201,021	0.34	0.00	11.87	13.58	0.00	-	-	-	13.58	Jan-2017
Hedge Funds											
Magnitude International	54,138,067	5.80	-0.36	0.47	2.48	-0.36	3.83	3.72	4.77	4.60	Jan-2011
HFRI FOF: Conservative Index			0.47	0.36	2.03	0.47	4.64	1.65	3.57	2.35	
Excess Return			-0.83	0.11	0.45	-0.83	-0.81	2.07	1.20	2.25	
Blackstone Offshore F1	56,076,060	6.01	0.57	0.91	3.86	0.57	7.27	3.99	6.06	4.73	Mar-2011
HFRI FOF: Conservative Index			0.47	0.36	2.03	0.47	4.64	1.65	3.57	2.18	
Excess Return			0.10	0.55	1.83	0.10	2.63	2.34	2.49	2.55	
Cash											
Cash - General Employees	4,867,439	0.52	0.06	0.15	0.24	0.06	0.24	0.13	0.09	1.32	Jan-2004
Cash - Police & Fire	5,162,441	0.55	0.05	0.16	0.25	0.05	0.25	0.08	0.05	1.28	Jan-2004

All returns are time-weighted and calculated using custodian data.

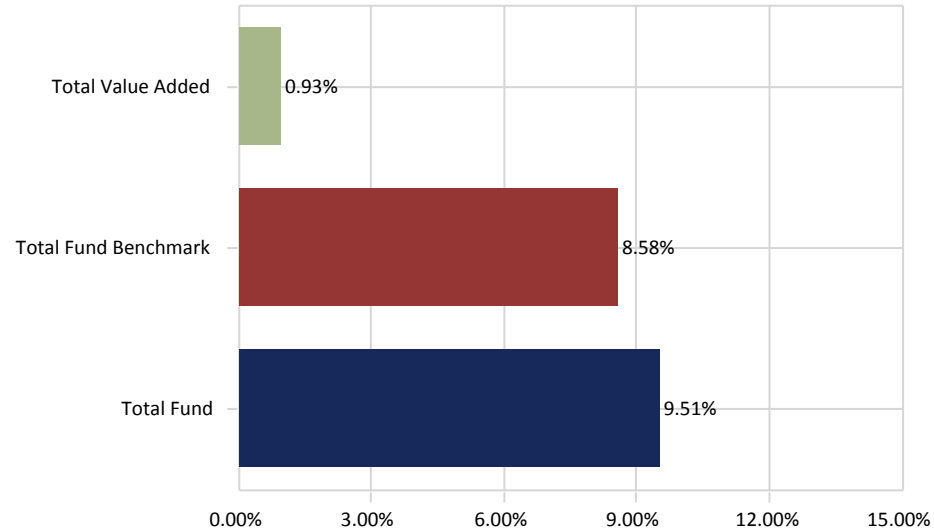
* Inception date differs from manager; Summit does not calculate partial month returns.

Howard County Retirement Plans

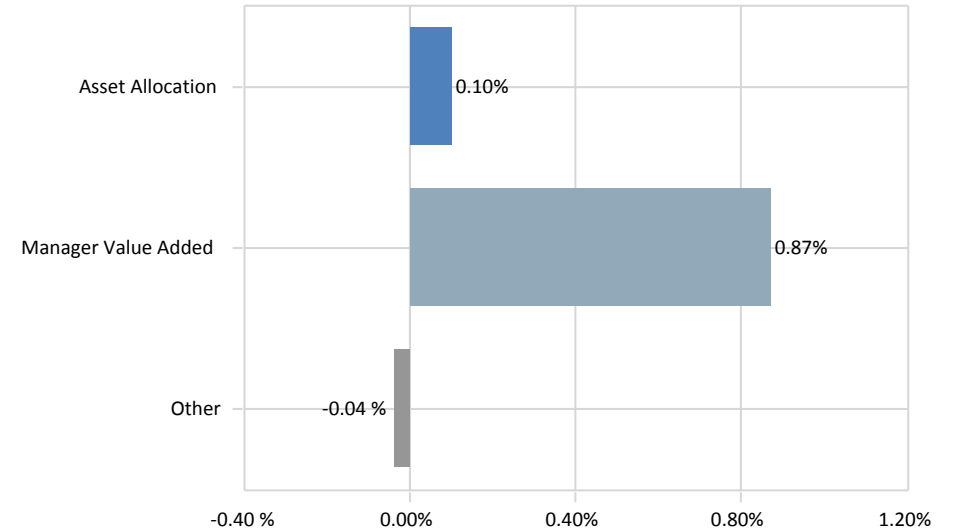
Total Fund Attribution

Year To Date Ending July 31, 2017

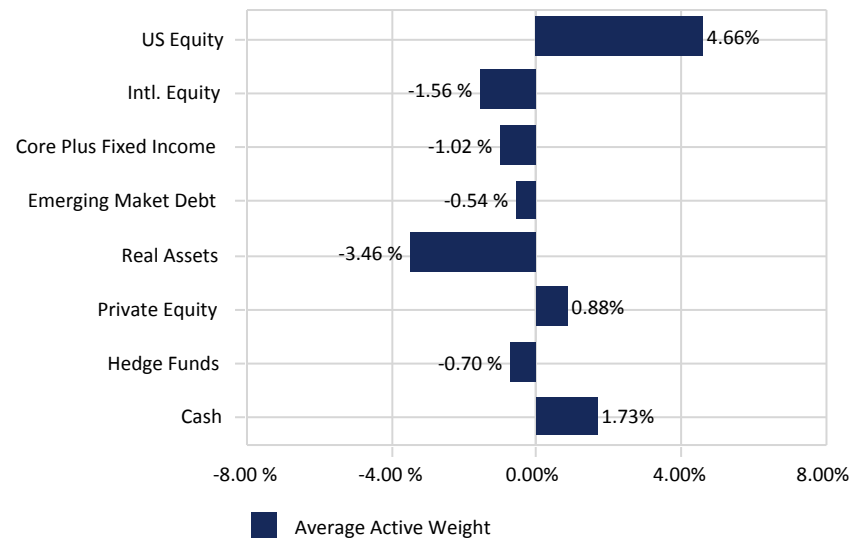
Total Fund Performance



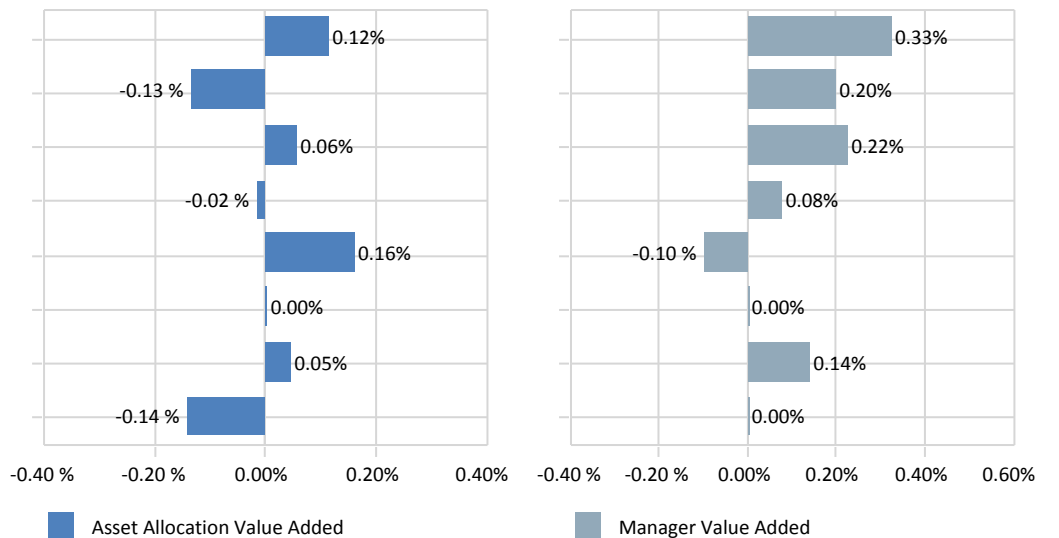
Total Value Added:0.93%



Total Asset Allocation:0.10%



Total Manager Value Added:0.87%



Howard County Retirement Plans

Historical Footnotes

July 31, 2017

All asset class and master trust returns prior to 4/1/00 were approximated by using the actual quarterly returns from each plan and weighting them by the plans' beginning of period asset values.

Large Cap and Non-Large Cap Composites prior to 12/31/03 are approximated by using the actual quarterly returns for each manager and weighting them by the the accounts' beginning of period asset values.

Howard County Retirement Plans

Total Fund Policy Composition

July 31, 2017

	(%)		(%)
Dec-2015		Dec-2007	
S&P 500	15.00	S&P 500	24.00
Russell 2500 Index	5.00	Russell 2500 Index	15.00
MSCI EAFE Index (Net)	13.00	MSCI EAFE Index	16.00
MSCI Emerging Markets (Net)	7.00	MSCI Emerging Markets Index	5.00
Blmbg. Barc. U.S. Aggregate	25.00	Blmbg. Barc. U.S. Aggregate	35.00
JPM GBI-EM Global Diversified	5.00	NCREIF Property Index [3 Month Lag]	5.00
NCREIF Property Index [3 Month Lag]	7.50	Citigroup 3 Month T-Bill	0.00
Private Equity Composite	10.00		
HFRI FOF: Conservative Index	12.50	Jul-2006	
Citigroup 3 Month T-Bill	0.00	S&P 500	24.00
		Russell 2500 Index	15.00
Jan-2012		MSCI EAFE Index	16.00
S&P 500	16.90	MSCI Emerging Markets Index	5.00
Russell 2500 Index	5.60	Blmbg. Barc. U.S. Aggregate	35.00
MSCI EAFE Index (Net)	14.60	NCREIF Property Index [3 Month Lag]	5.00
MSCI Emerging Markets (Net)	7.90		
Blmbg. Barc. U.S. Aggregate	32.50	Oct-2003	
NCREIF Property Index [3 Month Lag]	5.00	S&P 500	25.00
Private Equity Composite	10.00	S&P MidCap 400	10.00
HFRI Fund of Funds Composite Index	7.50	Russell 2000 Index	10.00
Citigroup 3 Month T-Bill	0.00	MSCI EAFE Index	15.00
		Blmbg. Barc. U.S. Aggregate	30.00
Jul-2008		Blmbg. Barc. U.S. Corp: High Yield	5.00
S&P 500	22.00	NCREIF Property Index [3 Month Lag]	5.00
Russell 2500 Index	13.80		
MSCI EAFE Index	14.70		
MSCI Emerging Markets Index	4.50		
Blmbg. Barc. U.S. Aggregate	35.00		
NCREIF Property Index [3 Month Lag]	5.00		
Citigroup 3 Month T-Bill	5.00		
Citigroup 3 Month T-Bill	0.00		

Howard County Retirement Plans

Total Fund Policy Composition

July 31, 2017

	(%)		(%)
Jun-2002		Jul-1990	
S&P 500	26.00	S&P 500	55.00
S&P MidCap 400	11.00	Blmbg. Barc. U.S. Aggregate	45.00
Russell 2000 Index	11.00		
MSCI EAFE Index	15.00		
Blmbg. Barc. U.S. Aggregate	32.00		
Blmbg. Barc. U.S. Corp: High Yield	5.00		
Apr-2002			
S&P 500	40.00		
Russell 2000 Index	10.00		
MSCI EAFE Index	10.00		
Blmbg. Barc. U.S. Aggregate	35.00		
Blmbg. Barc. U.S. Corp: High Yield	5.00		
Jul-1998			
S&P 500	40.00		
Russell 2000 Index	10.00		
MSCI EAFE Index	10.00		
Blmbg. Barc. U.S. Aggregate	40.00		
Jan-1997			
S&P 500	60.00		
Blmbg. Barc. U.S. Aggregate	40.00		
Jan-1996			
S&P 500	50.00		
Blmbg. Barc. U.S. Aggregate	50.00		
Oct-1994			
S&P 500	55.00		
Blmbg. Barc. U.S. Aggregate	45.00		

DISCLAIMER

Summit Strategies Group (Summit) has prepared this report for the exclusive use by the client for which it was prepared. The information herein was obtained from various sources, such as the client's custodian(s) accounting statements, commercially available databases, and other economic and financial market data sources. While Summit believes these sources to be reliable, Summit does not guarantee nor shall be liable for the market values, returns, or other information contained in this report. The market commentary, portfolio holdings, and characteristics are as of the date shown and are subject to change. Past performance is not an indication of future performance. No graph, chart, or formula can, in and of itself, be used to determine which securities or investments to buy or sell. Any forward-looking projection contained herein is based on assumptions that Summit believes may be reasonable, but are subject to a wide range of risks, uncertainties, and the possibility of loss. Accordingly, there is no assurance that any estimated performance figures will occur in the amounts and during the periods indicated, or at all. Actual results and performance will differ from those expressed or implied by such forward-looking projections. Any information contained in this report is for informational purposes only and should not be construed to be an offer to buy or sell any securities, investment consulting, or investment management services.