PRELIMINARY

MONTHLY PERFORMANCE REPORT

HOWARD COUNTY RETIREMENT PLANS

As of December 31, 2019

Margaret Belmondo, CIMA®, Senior Consultant

Will Forde, CFA, CAIA, Senior Consultant

Marisa Gorman, Consulting Analyst

BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

CALENDAR YEAR INDEX PERFORMANCE

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Dec	YTD
S&P 500	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	21.8%	-4.4%	3.0%	31.3%
Russell 1000	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	21.7%	-4.8%	2.9%	31.3%
Russell 2000	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	14.6%	-11.0%	2.9%	25.4%
Russell 2500	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	16.8%	-10.0%	2.1%	27.6%
MSCI EAFE	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	25.0%	-13.8%	3.2%	21.9%
MSCI EM	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	37.3%	-14.6%	7.5%	18.3%
MSCI ACWI	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	24.0%	-9.4%	3.5%	26.5%
Private Equity	19.8%	9.5%	12.6%	22.3%	14.6%	10.4%	10.3%	21.0%	13.1%	-	9.9%
BC TIPS	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	3.0%	-1.3%	0.4%	8.4%
BC Municipal	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	5.4%	1.3%	0.3%	7.5%
BC Muni High Yield	7.8%	9.2%	18.1%	-5.5%	13.8%	1.8%	3.0%	9.7%	4.8%	0.3%	10.6%
BC US Corporate HY	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	7.5%	-2.1%	2.0%	14.3%
BC US Agg Bond	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	3.5%	0.0%	-0.1%	8.7%
BC Global Agg	5.5%	5.6%	4.3%	-2.6%	0.6%	-3.2%	2.1%	7.4%	-1.2%	0.6%	6.8%
BC Long Treasuries	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	8.5%	-1.8%	-2.8%	14.8%
BC US Long Credit	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	12.2%	-6.8%	0.1%	23.3%
BC US STRIPS 20+ Yr	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	13.7%	-4.1%	-4.2%	20.8%
JPM GBI-EM Global Div	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	15.2%	-6.2%	4.1%	13.4%
JPM EMBI Glob Div	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	10.3%	-4.3%	2.0%	15.0%
CS Hedge Fund	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	7.1%	-3.2%	-	7.6%
BBG Commodity	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	1.7%	-11.2%	5.0%	7.7%
Alerian MLP	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	-6.5%	-12.4%	8.5%	6.5%
FTSE NAREIT Equity REITs	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	5.2%	-4.6%	-0.6%	25.9%

Source: FactSet, Barclays, Thomson One

*Private Equity return represents calendar year pooled IRR and is subject to a one quarter lag

Howard County Retirement Plans

TOTAL FUND PERFORMANCE SUMMARY (GROSS)

				Ending December 31, 2019							
	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund Composite	**1,151,914,511**	**100.0**	**100.0**	**2.1**	**5.0**	**16.7**	**10.1**	**7.8**	**8.3**	**7.4**	**Apr-97**
Policy Index				*2.2*	*4.6*	*15.9*	*9.0*	*7.0*	*7.8*	*7.4*	*Apr-97*
Allocation Index				*1.8*	*4.4*	*--*	*--*	*--*	*--*	*--*	*Apr-97*
Total US Equity Composite	**285,245,182**	**24.8**	**20.0**	**2.1**	**9.3**	**30.4**	**15.0**	**11.6**	**14.0**	**8.8**	**Jul-97**
Russell 3000				*2.9*	*9.1*	*31.0*	*14.6*	*11.2*	*13.4*	*8.1*	*Jul-97*
US Equity Allocation Index				*2.7*	*9.2*	*30.6*	*13.9*	*11.0*	*13.5*	*--*	*Jul-97*
Total International Equity	**211,624,665**	**18.4**	**20.0**	**5.0**	**10.2**	**23.5**	**11.4**	**6.7**	**5.4**	**5.0**	**Jul-97**
MSCI ACWI ex USA				*4.3*	*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*4.8*	*Jul-97*
Total Fixed Income Composite	**330,357,377**	**28.7**	**30.0**	**0.8**	**1.3**	**9.7**	**5.0**	**4.3**	**5.0**	**5.5**	**Jul-97**
Fixed Income Policy Index				*-0.1*	*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*5.2*	*Jul-97*
Total Real Assets Composite	**40,988,763**	**3.6**	**7.5**	**-0.9**	**-0.9**	**-1.4**	**8.0**	**8.7**	**4.7**	**7.1**	**Jul-03**
NCREIF Property Index 1 Qtr. Lag				*1.4*	*1.4*	*6.2*	*6.8*	*8.6*	*9.8*	*8.8*	*Jul-03*
Cash Composite	**10,367,085**	**0.9**		**0.1**	**0.2**	**1.8**	**1.3**	**0.8**	**0.4**	**1.4**	**Dec-03**
91 Day T-Bills				*0.1*	*0.4*	*2.1*	*1.6*	*1.1*	*0.6*	*1.3*	*Dec-03*
Hedge Fund Composite	**123,788,890**	**10.7**	**12.5**	**0.7**	**1.7**	**7.4**	**5.1**	**4.2**	**--**	**4.7**	**Jan-11**
HFRI FOF: Conservative Index				*1.3*	*1.9*	*6.6*	*3.2*	*2.4*	*2.8*	*2.6*	*Jan-11*
Private Equity Composite	**149,542,550**	**13.0**	**10.0**	**2.8**	**2.8**	**14.4**	**17.4**	**15.7**	**13.4**	**13.1**	**Jul-08**
Cambridge Associates Global All PE (Qtr Lag)				*0.4*	*0.4*	*7.7*	*13.3*	*11.0*	*13.0*	*9.3*	*Jul-08*

Fiscal year end 6/30.

All history prior to 3/1/2019 was provided by AndCo.

Howard County Retirement Plans

TOTAL FUND PERFORMANCE DETAIL (GROSS)

				Ending December 31, 2019							
	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund Composite	**1,151,914,511**	**100.0**	**100.0**	**2.1**	**5.0**	**16.7**	**10.1**	**7.8**	**8.3**	**7.4**	**Apr-97**
Policy Index				*2.2*	*4.6*	*15.9*	*9.0*	*7.0*	*7.8*	*7.4*	*Apr-97*
Allocation Index				*1.8*	*4.4*	*--*	*--*	*--*	*--*	*--*	*Apr-97*
Total US Equity Composite	**285,245,182**	**24.8**	**20.0**	**2.1**	**9.3**	**30.4**	**15.0**	**11.6**	**14.0**	**8.8**	**Jul-97**
Russell 3000				*2.9*	*9.1*	*31.0*	*14.6*	*11.2*	*13.4*	*8.1*	*Jul-97*
US Equity Allocation Index				*2.7*	*9.2*	*30.6*	*13.9*	*11.0*	*13.5*	*--*	*Jul-97*
Large Cap Composite	**221,149,780**	**19.2**	**15.0**	**2.7**	**10.4**	**30.5**	**15.1**	**11.1**	**13.7**	**8.8**	**Apr-01**
Russell 1000				*2.9*	*9.0*	*31.4*	*15.0*	*11.5*	*13.5*	*8.0*	*Apr-01*
LSV Asset Management SMA	69,189,465	6.0		2.6	9.8	26.1	10.0	8.9	13.0	10.0	May-00
Russell 1000 Value				*2.8*	*7.4*	*26.5*	*9.7*	*8.3*	*11.8*	*7.2*	*May-00*
Westfield Capital Management SMA	81,806,265	7.1		2.6	12.5	37.0	21.0	13.7	--	16.4	Jul-10
Russell 1000 Growth				*3.0*	*10.6*	*36.4*	*20.5*	*14.6*	*15.2*	*17.1*	*Jul-10*
BlackRock Equity Index Non-Lendable Fund	70,154,050	6.1		3.0	--	--	--	--	--	3.0	Dec-19
S&P 500				*3.0*	*9.1*	*31.5*	*15.3*	*11.7*	*13.6*	*3.0*	*Dec-19*
Small/Mid Cap Composite	**64,095,402**	**5.6**	**5.0**	**0.1**	**5.6**	**30.0**	**14.8**	**13.2**	**14.7**	**12.3**	**Apr-93**
Russell 2500				*2.1*	*8.5*	*27.8*	*10.3*	*8.9*	*12.6*	*10.4*	*Apr-93*
William Blair SMA	21,229,779	1.8		-0.2	4.5	31.9	19.4	14.3	16.1	12.3	Jun-06
Russell 2500 Growth				*0.9*	*10.6*	*32.7*	*15.2*	*10.8*	*14.0*	*9.9*	*Jun-06*
ICM Small Company - ICSCX	24,518,581	2.1		1.9	6.9	27.3	8.0	10.3	12.5	11.9	Apr-93
Russell 2000 Value				*3.5*	*8.5*	*22.4*	*4.8*	*7.0*	*10.6*	*9.9*	*Apr-93*
Brown Capital Small Company Strategy SMA	18,347,041	1.6		-2.0	5.0	31.6	20.2	16.2	--	18.2	Aug-11
Russell 2000 Growth				*2.3*	*11.4*	*28.5*	*12.5*	*9.3*	*13.0*	*11.6*	*Aug-11*

Howard County Retirement Plans

TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
										Ending December 31, 2019	
Total International Equity	**211,624,665**	**18.4**	**20.0**	**5.0**	**10.2**	**23.5**	**11.4**	**6.7**	**5.4**	**5.0**	**Jul-97**
MSCI ACWI ex USA				*4.3*	*8.9*	*21.5*	*9.9*	*5.5*	*5.0*	*4.8*	*Jul-97*
International Developed Markets Composite	**139,626,616**	**12.1**	**13.0**	**4.6**	**11.5**	**26.6**	**10.9**	**6.5**	**6.3**	**3.8**	**Mar-08**
MSCI EAFE				*3.2*	*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*2.8*	*Mar-08*
Mondrian International Equity Fund, L.P.	65,314,896	5.7		4.4	10.6	20.1	9.2	5.7	5.7	2.4	Dec-07
MSCI EAFE				*3.2*	*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*1.8*	*Dec-07*
Baillie Gifford EAFE Pure K - BGPKX	74,311,720	6.5		4.8	12.3	33.1	--	--	--	7.8	May-18
MSCI EAFE				*3.2*	*8.2*	*22.0*	*9.6*	*5.7*	*5.5*	*2.6*	*May-18*
International Emerging Markets Composite	**71,998,048**	**6.3**	**7.0**	**5.8**	**7.8**	**17.7**	**12.3**	**6.9**	**3.6**	**6.2**	**Feb-06**
MSCI Emerging Markets				*7.5*	*11.8*	*18.4*	*11.6*	*5.6*	*3.7*	*5.0*	*Feb-06*
DFA Emerging Markets Value Portfolio Institutional - DFEVX	28,442,263	2.5		6.2	9.8	10.2	9.1	5.1	2.8	5.7	Feb-06
MSCI Emerging Markets				*7.5*	*11.8*	*18.4*	*11.6*	*5.6*	*3.7*	*5.0*	*Feb-06*
GQG Partners Emerging Markets Equity Fund	43,555,785	3.8		5.5	6.6	23.2	--	--	--	21.0	Dec-18
MSCI Emerging Markets				*7.5*	*11.8*	*18.4*	*11.6*	*5.6*	*3.7*	*14.0*	*Dec-18*
Total Fixed Income Composite	**330,357,377**	**28.7**	**30.0**	**0.8**	**1.3**	**9.7**	**5.0**	**4.3**	**5.0**	**5.5**	**Jul-97**
BBgBarc US Aggregate TR				*-0.1*	*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*5.1*	*Jul-97*
Core Fixed Income Composite	**282,818,269**	**24.6**	**25.0**	**0.2**	**0.5**	**--**	**--**	**--**	**--**	**7.3**	**Mar-19**
BBgBarc US Aggregate TR				*-0.1*	*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*7.6*	*Mar-19*
Dodge & Cox SMA	140,154,852	12.2		0.3	0.8	9.7	4.8	4.1	--	4.7	May-10
BBgBarc US Aggregate TR				*-0.1*	*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*3.6*	*May-10*
PIMCO Total Return	119,649,637	10.4		0.0	0.1	8.5	4.4	3.4	--	4.0	May-10
BBgBarc US Aggregate TR				*-0.1*	*0.2*	*8.7*	*4.0*	*3.0*	*3.7*	*3.6*	*May-10*
State Street Global Advisors TIPS	23,013,779	2.0		0.4	0.8	8.4	3.3	2.6	3.3	3.3	Nov-09
BBgBarc US TIPS TR				*0.4*	*0.8*	*8.4*	*3.3*	*2.6*	*3.4*	*3.4*	*Nov-09*
Emerging Markets Debt Composite	**47,539,108**	**4.1**	**5.0**	**4.6**	**6.1**	**--**	**--**	**--**	**--**	**9.1**	**Mar-19**
JP Morgan GBI EM Global Diversified TR USD				*4.1*	*5.2*	*13.5*	*7.0*	*2.8*	*2.7*	*8.8*	*Mar-19*
Colchester Local Markets Debt Fund	47,539,108	4.1		4.6	6.1	13.8	8.5	--	--	9.3	Oct-15
JP Morgan GBI EM Global Diversified TR USD				*4.1*	*5.2*	*13.5*	*7.0*	*2.8*	*2.7*	*7.3*	*Oct-15*

Howard County Retirement Plans

TOTAL FUND PERFORMANCE DETAIL (GROSS)

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	3 Mo (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
									Ending December 31, 2019		
Total Real Assets Composite	**40,988,763**	**3.6**	**7.5**	**-0.9**	**-0.9**	**-1.4**	**8.0**	**8.7**	**4.7**	**7.1**	**Jul-03**
NCREIF Property Index 1 Qtr. Lag				*1.4*	*1.4*	*6.2*	*6.8*	*8.6*	*9.8*	*8.8*	*Jul-03*
Real Estate Composite	**28,104,268**	**2.4**		**0.2**	**0.2**	**--**	**--**	**--**	**--**	**0.2**	**Mar-19**
NCREIF Property Index 1 Qtr. Lag				*1.4*	*1.4*	*6.2*	*6.8*	*8.6*	*9.8*	*6.2*	*Mar-19*
Realty Associates Fund VIII L.P.	5,827	0.0		-9.2	-9.2	-47.5	-13.7	-4.3	-2.5	-2.7	Jul-07
Partners Group Global RE 2011	4,529,431	0.4		-1.3	-1.3	-17.8	-2.2	1.7	--	2.6	Mar-12
Partners Group Global RE 2014	19,063,702	1.7		2.7	2.7	8.3	12.1	9.9	--	9.7	Dec-14
Partners Group Global RE 2017	4,505,308	0.4		-8.2	-8.2	-4.3	--	--	--	-4.0	Dec-18
NCREIF Property Index 1 Qtr. Lag				*1.4*	*1.4*	*6.2*	*6.8*	*8.6*	*9.8*	*7.4*	*Dec-18*
Real Assets Composite	**12,884,495**	**1.1**		**-3.3**	**-3.3**	**--**	**--**	**--**	**--**	**-7.6**	**Mar-19**
Cambridge Associates Global Natural Resources (1 Qtr Lag)				*-3.6*	*-3.6*	*-10.7*	*3.3*	*-3.0*	*4.4*	*-10.7*	*Mar-19*
Commonfund Natural Resources X	4,934,566	0.4		-2.2	-2.2	2.1	16.0	--	--	16.9	Apr-16
Commonfund Natural Resources XI	1,193,962	0.1		0.6	0.6	-41.3	--	--	--	-34.7	Oct-18
Aether Real Assets IV	5,857,921	0.5		-5.2	-5.2	-3.2	5.3	--	--	3.1	Jun-16
Aether Real Assets V	898,046	0.1		-0.7	-0.7	-70.2	--	--	--	-35.8	Aug-18
Cambridge Associates Global Natural Resources (1 Qtr Lag)				*-3.6*	*-3.6*	*-10.7*	*3.3*	*-3.0*	*4.4*	*-3.9*	*Aug-18*
Cash Composite	**10,367,085**	**0.9**	**0.0**	**0.1**	**0.2**	**1.8**	**1.3**	**0.8**	**0.4**	**1.4**	**Dec-03**
91 Day T-Bills				*0.1*	*0.4*	*2.1*	*1.6*	*1.1*	*0.6*	*1.3*	*Dec-03*
Hedge Fund Composite	**123,788,890**	**10.7**	**12.5**	**0.7**	**1.7**	**7.4**	**5.1**	**4.2**	**--**	**4.7**	**Jan-11**
HFRI FOF: Conservative Index				*1.3*	*1.9*	*6.6*	*3.2*	*2.4*	*2.8*	*2.6*	*Jan-11*
Magnitude International Class A Eligible	60,881,816	5.3		0.3	1.2	6.6	4.7	3.8	--	4.6	Jan-11
HFRI FOF: Conservative Index				*1.3*	*1.9*	*6.6*	*3.2*	*2.4*	*2.8*	*2.6*	*Jan-11*
Blackstone Partners Offshore Fund LTD	62,907,074	5.5		1.0	2.1	8.1	5.5	4.6	--	4.9	Mar-11
HFRI FOF: Conservative Index				*1.3*	*1.9*	*6.6*	*3.2*	*2.4*	*2.8*	*2.5*	*Mar-11*
Private Equity Composite	**149,542,550**	**13.0**	**10.0**	**2.8**	**2.8**	**14.4**	**17.4**	**15.7**	**13.4**	**13.1**	**Jul-08**
Cambridge Associates Global All PE (Qtr Lag)				*0.4*	*0.4*	*7.7*	*13.3*	*11.0*	*13.0*	*9.3*	*Jul-08*

Magnitude International Class A Eligible is preliminary as of 12/31/2019 and subject to change when finalized.

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