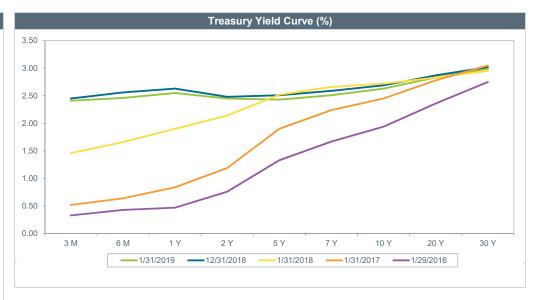


Capital Markets Review As of January 31, 2019

General Market Commentary

- After a turbulent December, global equity markets rebounded sharply in January. Market
 participants traded on optimism over trade discussions between the US and China, generally strong
 corporate earnings reports, and the release of the December jobs report, which noted that US
 employers added 128,000 more jobs than anticipated.
- Additionally, stocks traded higher and bond yields fell on news that the Federal Reserve would not
 increase interest rates at the January meeting. The FOMC also stated that the Fed would take a
 "patient" approach to raising interest rates, and Chairman Powell noted that "the case for raising
 rates has weakened," which was viewed as a reversal from comments made in the fourth quarter of
 2018.
- Equity markets posted positive returns in January as the S&P 500 (Cap Wtd) Index returned 8.01% and the MSCI EAFE (Net) Index returned 6.57%. Emerging markets returned 8.77% as measured by the MSCI EM (Net) Index.
- The Bloomberg US Aggregate Bond Index returned 1.06% in January, outperforming the 0.43% return by the Bloomberg US Treasury Intermediate Term Index. International fixed income markets returned 1.96%, as measured by the FTSE Non-US World Gov't Bond Index.
- Public real estate, as measured by the FTSE NAREIT Eq REITs Index (TR), returned 11.75% in January and 9.43% over the trailing five-year period.
- The Cambridge US Private Equity Index returned 18.01% for the trailing one-year period and 13.40% for the trailing five-year period ending September 2018.
- Absolute return strategies, as measured by the HFRI FOF Comp Index, returned 2.60% for the month and -3.84% over the trailing one-year period.
- Crude oil's price increased by 18.45% during the month, but has decreased by 16.90% YoY.

Economic Indicators	Jan-19		Dec-18	Jan-18	10 Yr	20 Yr
Federal Funds Rate (%)	2.40	_	2.40	1.34	0.43	1.93
Breakeven Inflation - 1 Year (%)	-0.86	•	-2.84	2.13	0.86	N/A
Breakeven Inflation - 5 Year (%)	1.73	_	1.49	2.01	1.71	N/A
Breakeven Inflation - 10 Year (%)	1.86	_	1.71	2.11	1.99	N/A
Breakeven Inflation - 30 Year (%)	1.94	_	1.82	2.15	2.16	N/A
Bloomberg US Agg Bond Index - Yield (%)	3.15	▼	3.28	2.97	2.63	3.97
Bloomberg US Agg Bond Index - OAS (%)	0.47	▼	0.54	0.34	0.58	0.64
Bloomberg US Agg Credit Index - OAS (%)	1.21	▼	1.43	0.82	1.49	1.47
Bloomberg US Corp: HY Index - OAS (%)	4.23	▼	5.26	3.19	5.39	5.54
Capacity Utilization (%)	78.22	▼	78.83	76.98	75.89	77.29
Unemployment Rate (%)	4.0	A	3.9	4.1	6.8	5.9
PMI - Manufacturing (%)	56.6	A	54.3	59.6	53.8	52.8
Baltic Dry Index - Shipping	668	•	1,271	1,152	1,406	2,312
Consumer Conf (Conf Board)	120.20	▼	126.60	124.30	83.64	92.82
CPI YoY (Headline) (%)	1.6	▼	1.9	2.1	1.6	2.2
CPI YoY (Core) (%)	2.2	_	2.2	1.8	1.8	2.0
PPI YoY (%)	0.3	▼	1.4	2.9	1.5	2.3
M2 YoY (%)	4.3	A	3.9	4.4	6.2	6.3
US Dollar Total Weighted Index	90.53	▼	91.79	84.86	81.50	86.31
WTI Crude Oil per Barrel (\$)	54	A	45	65	73	60
Gold Spot per Oz (\$)	1,321	A	1,282	1,345	1,309	884



Treasury Yield Curve (%)	Jan-19	Dec-18	Jan-18	Jan-17	Jan-16
3 Month	2.41	2.45	1.46	0.52	0.33
6 Month	2.46	2.56	1.66	0.64	0.43
1 Year	2.55	2.63	1.90	0.84	0.47
2 Year	2.45	2.48	2.14	1.19	0.76
5 Year	2.43	2.51	2.52	1.90	1.33
7 Year	2.51	2.59	2.66	2.24	1.67
10 Year	2.63	2.69	2.72	2.45	1.94
20 Year	2.83	2.87	2.83	2.78	2.36
30 Year	2.99	3.02	2.95	3.05	2.75

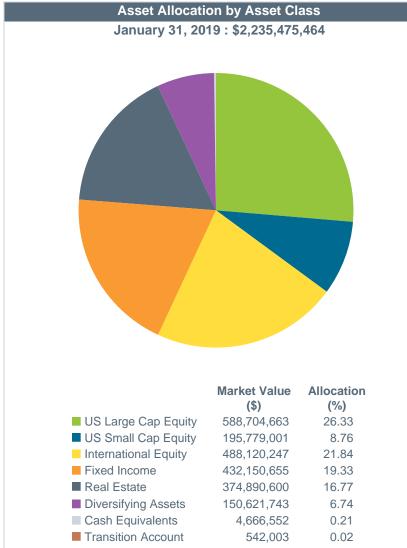
Market Performance (%)	MTD	QTD	CYTD	1 Yr	3 Yr	5 Yr	7 Yr	10 Yr
S&P 500 (Cap Wtd)	8.01	8.01	8.01	-2.31	14.02	10.96	13.23	15.00
Russell 2000	11.25	11.25	11.25	-3.52	14.71	7.26	11.05	14.52
MSCI EAFE (Net)	6.57	6.57	6.57	-12.51	7.74	2.66	5.93	8.11
MSCI EAFE SC (Net)	8.06	8.06	8.06	-15.59	9.39	4.99	8.76	12.11
MSCI EM (Net)	8.77	8.77	8.77	-14.24	14.89	4.77	2.89	9.66
Bloomberg US Agg Bond	1.06	1.06	1.06	2.25	1.95	2.44	2.12	3.68
ICE BofAML 3 Mo US T-Bill	0.20	0.20	0.20	1.95	1.08	0.66	0.50	0.40
NCREIF ODCE (Gross)	N/A	N/A	N/A	8.35	8.24	10.41	10.99	7.00
FTSE NAREIT Eq REITs Index (TR)	11.75	11.75	11.75	11.23	7.99	9.43	9.24	15.54
HFRI FOF Comp Index	2.60	2.60	2.60	-3.84	3.07	1.98	3.03	3.30
Bloomberg Cmdty Index (TR)	5.45	5.45	5.45	-8.23	2.66	-7.88	-7.46	-2.74

NCREIF performance is reported quarterly; MTD and QTD returns are shown as "N/A" on interim-quarter months and until available. Data shown is as of most recent quarter-end. Treasury data courtesy of the US Department of the Treasury. Economic data courtesy of Bloomberg Professional Service.

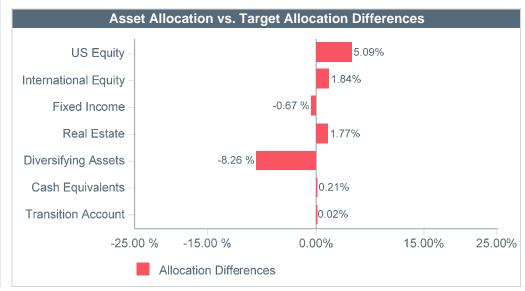
Breakeven Inflation does not have 20 years of history; therefore, its 20-year average is shown as "N/A."



Asset Allocation by Asset Class, Asset Allocation vs. Target, and Schedule of Investable Assets



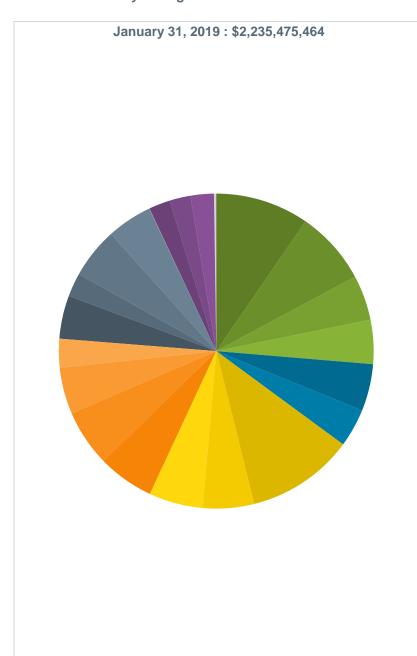
	Asset Allocation	vs. Target All	ocation		
	Market Value (\$)	Allocation (%)	Min (%)	Target (%)	Max (%)
Total Fund	2,235,475,464	100.00	-	100.00	-
US Equity	784,483,664	35.09	20.00	30.00	40.00
International Equity	488,120,247	21.84	10.00	20.00	25.00
Fixed Income	432,150,655	19.33	10.00	20.00	30.00
Real Estate	374,890,600	16.77	0.00	15.00	20.00
Diversifying Assets	150,621,743	6.74	0.00	15.00	20.00
Cash Equivalents	4,666,552	0.21	0.00	0.00	10.00
Transition Account	542,003	0.02	0.00	0.00	0.00



Schedule of Investable Assets												
Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return	Unit Value						
CYTD	2,107,578,103	44,531	127,852,830	2,235,475,464	6.06	106.06						







	Market Value (\$)	Allocation (%)
■ Eagle Capital Large Cap Value (SA)	214,552,806	9.60
■ INTECH Enhanced (SA)	169,399,849	7.58
■ Mellon Large Cap Growth Index (CF)	103,570,620	4.63
■ Loomis Sayles Large Cap Growth (CF)	101,181,388	4.53
■ William Blair Small Cap Value (SA)	107,479,620	4.81
■ Pinnacle Associates US SMID Cap Growth (SA)	88,299,380	3.95
Silchester International Value (CF)	246,507,934	11.03
Baillie Gifford EAFE Fund (CF)	117,280,379	5.25
Acadian Emerging Markets II (CF)	124,331,934	5.56
Richmond Capital Core (SA)	129,562,210	5.80
■ Taplin Canida & Habacht Intermediate Duration (SA)	129,538,710	5.79
Franklin Templeton Global Multisector Plus (CF)	106,866,242	4.78
■ Loomis Sayles Multisector Full Discretion (CF)	66,183,492	2.96
■ Harrison Street Core Property, LP	98,983,364	4.43
■ PGIM Real Estate PRISA II (CF)	54,343,540	2.43
■ Principal US Property (CF)	116,751,400	5.22
■ UBS Trumbull Property (CF)	103,814,056	4.64
■ Vanguard RE Idx;ETF (VNQ)	998,240	0.04
■ Harvest Fund Advisors MLP (SA)	48,691,642	2.18
■ Tortoise Capital Advisors MLP (SA)	48,178,696	2.16
■ Hancock Timberland (CF)	53,751,405	2.40
■ Dreyfus Gvt Csh Mgt;Inst (DGCXX)	4,666,552	0.21
■ Transition Account	542,003	0.02

Market values shown are preliminary and subject to change. Allocations shown may not sum up to 100% exactly due to rounding.



	Allocatio	n			Performance (%)								
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Total Fund	2,235,475,464	100.00	6.06	6.06	6.06	-3.37	-3.41	9.72	6.53	8.55	10.35	6.12	07/01/1999
Total Fund Policy Index			5.66	5.66	5.66	-2.88	-1.69	9.31	6.53	8.14	9.90	5.70	
Difference			0.40	0.40	0.40	-0.49	-1.72	0.41	0.00	0.41	0.45	0.42	
Total Equity	1,272,603,910	56.93	9.29	9.29	9.29	-6.45	-8.01	12.76	7.78	10.49	12.92	5.79	07/01/1999
US Equity	784,483,664	35.09	9.90	9.90	9.90	-7.10	-3.49	13.10	9.28	12.19	14.57	6.12	07/01/1999
US Equity Index			8.58	8.58	8.58	-6.95	-2.26	14.19	10.41	13.00	15.12	6.03	
Difference			1.32	1.32	1.32	-0.15	-1.23	-1.09	-1.13	-0.81	-0.55	0.09	
International Equity	488,120,247	21.84	8.32	8.32	8.32	-5.37	-14.64	12.24	5.08	7.26	9.45	5.70	07/01/1999
International Equity Index			7.56	7.56	7.56	-4.77	-12.58	9.59	3.11	4.96	7.61	3.68	
Difference			0.76	0.76	0.76	-0.60	-2.06	2.65	1.97	2.30	1.84	2.02	
Fixed Income	432,150,655	19.33	1.65	1.65	1.65	2.72	1.75	3.64	2.54	2.98	5.57	5.29	07/01/1999
Fixed Income Index			1.38	1.38	1.38	2.56	2.10	1.95	2.44	2.13	3.68	4.78	
Difference			0.27	0.27	0.27	0.16	-0.35	1.69	0.10	0.85	1.89	0.51	
Real Estate	374,890,600	16.77	0.12	0.12	0.12	1.57	7.55	7.61	9.39	9.29	6.58	5.86	12/01/2005
NCREIF ODCE Index (AWA) (Gross)			0.00	0.00	0.00	1.76	8.35	8.24	10.41	10.99	7.00	7.24	
Difference			0.12	0.12	0.12	-0.19	-0.80	-0.63	-1.02	-1.70	-0.42	-1.38	
Diversifying Assets	150,621,743	6.74	8.83	8.83	8.83	-4.78	-0.07	8.29	1.42	5.70	N/A	6.98	03/01/2011
Diversifying Assets Index			8.81	8.81	8.81	-4.07	-1.91	6.68	0.70	3.98	7.37	4.21	
Difference			0.02	0.02	0.02	-0.71	1.84	1.61	0.72	1.72	N/A	2.77	



Usl Jarge Cap Equity Eagle Capital Large Cap Value (SA) 214,552,806 9.60 10.06 7.78 7.78 7.78 7.78 7.78 7.78 7.78 7.80 7.78 7.80 7.78 7.78 7.80		Allocation	า					P	erformand					
Eagle Capital Large Cap Value (SA) 214,552,806 9.60 10.06 10.06 5.02 3.11 15.22 11.83 13.92 16.50 9.92 02/01/2007 Missall 1000 Value (SA) 15.22 2.28 2.28 2.28 2.01 1.70 3.60 2.75 2.30 3.11 4.26 NTECH Enhanced Index 169,399,849 7.58 8.54 8.54 8.67 4.88 1.03 10.25 12.74 14.62 8.55 02/01/2007 NTECH Enhanced Index 0.53 0.53 0.53 0.53 1.18 2.52 1.99 0.71 0.49 0.52 0.01 Mellon Large Cap Growth Index (CF) 103,570,520 4.63 8.99 8.99 8.33 0.24 16.0 1.297 1.40 1.62 1.01 0.01			%	MTD	QTD	CYTD	FYTD			5 Years	7 Years	10 Years		Inception Date
Russell 1000 Val Index 7,78 7,78 7,78 7,78 4,485 4,481 11,62 8,33 11,62 13,39 5,66 7,755 7,76	US Large Cap Equity													
Difference 2.28 2	Eagle Capital Large Cap Value (SA)	214,552,806	9.60	10.06	10.06	10.06	-5.02	-3.11	15.22	11.08	13.92	16.50	9.92	02/01/2007
NTECH Enhanced (SA)	Russell 1000 Val Index			7.78	7.78	7.78	-4.85	-4.81	11.62	8.33	11.62	13.39	5.66	
NTECH Enhanced Index 8.01 8.01 8.01 8.05 9.231 14.02 10.98 13.23 15.14 8.68 Enhanced Index 0.53 0.53 0.53 0.53 0.53 0.53 0.53 0.53 0.53 0.55 0.75 0.75 0.77 0.49 0.52 0.71 0.49 0.72	Difference			2.28	2.28	2.28	-0.17	1.70	3.60	2.75	2.30	3.11	4.26	
Difference 0.53 0.53 0.53 0.53 0.53 0.54 0.12 0.71 0.49 0.52 0.13	INTECH Enhanced (SA)	169,399,849	7.58	8.54	8.54	8.54	-8.07	-4.83	12.03	10.25	12.74	14.62	8.55	02/01/2008
Mellon Large Cap Growth Index (CF)	INTECH Enhanced Index			8.01	8.01	8.01	-6.59	-2.31	14.02	10.96	13.23	15.14	8.68	
Russell 1000 Grh Index Difference 10,181,388	Difference			0.53	0.53	0.53	-1.48	-2.52	-1.99	-0.71	-0.49	-0.52	-0.13	
Difference -0.01 -0.01 -0.01 -0.01 -0.01 -0.01 -0.02 N/A N/A N/A N/A N/A -0.11	Mellon Large Cap Growth Index (CF)	103,570,620	4.63	8.98	8.98	8.98	-8.34	0.12	N/A	N/A	N/A	N/A	12.46	08/01/2017
Loomis Sayles Large Cap Growth (CF) 101,181,388 4.53 8.60 8.60 8.60 4.07 -2.10 N/A N/A N/A N/A N/A 11.50 08/01/2017 Russell 1000 Grth Index -0.39 0.39 0.39 8.99 8.99 8.99 -8.33 0.24 16.60 12.97 14.60 16.86 12.57 Difference -0.39 0.39 0.39 0.39 4.26 -2.34 N/A N/A N/A N/A N/A N/A N/A 1.07 US SMID Cap Equity William Blairs Small Cap Value (SA) 107,479,620 4.81 11.32 11.32 11.32 -10.15 5.99 10.99 N/A N/A N/A N/A 5.35 11/01/2014 Russell 2000 Val Index 10.94 10.94 10.94 10.94 9.77 -4.51 13.76 6.62 10.19 13.28 6.36 Difference -0.38 0.38 0.38 0.38 -4.41 -2.77 N/A N/A N/A N/A -1.01 Pinnacle Associates US SMID Cap Growth (SA) 88,299,380 3.95 13.09 13.09 13.09 13.09 -8.22 4.22 14.18 7.82 11.84 N/A 12.97 03/01/2016 Russell 2500 Grth Index 11.18 1.18 1.18 1.18 2.34 -2.86 -2.03 -1.20 -0.74 N/A -0.59 International Equity Silchester International Value (CF) 246,507,934 11.03 6.65 6.65 6.65 -5.01 -12.26 9.93 5.37 8.93 N/A 9.86 06/01/2009 Difference -0.04 -0.04 -0.04 -0.04 0.78 1.47 1.85 3.95 3.76 N/A 4.57 Baillie Gifford LAFE Fund (CF) 117,280,379 5.25 10.61 10.61 10.61 10.61 -10.59 -17.05 14.33 5.20 8.20 N/A 9.63 06/01/2009 Baillie Gifford Index -0.04 -0.04 0.78 1.47 1.85 3.95 3.76 N/A 4.57 Acadian Emerging Markets II (CF) 124,331,934 5.56 9.57 9.57 9.57 9.57 9.57 9.50 -1.04 1.48 9.17 1.48 9.77 2.89 9.66 1.65 Difference -0.80 0.80 0.80 0.80 -1.33 -3.50 0.85 -0.67 0.19 N/A 0.62 Fixed Income Fixed Incom	Russell 1000 Grth Index			8.99	8.99	8.99	-8.33	0.24	16.60	12.97	14.60	16.86	12.57	
Russell 1000 Grth Index 8,99 8,99 8,33 0.24 16,60 12,97 14,60 16,86 12,57	Difference			-0.01	-0.01	-0.01	-0.01	-0.12	N/A	N/A	N/A	N/A	-0.11	
Difference -0.39	Loomis Sayles Large Cap Growth (CF)	101,181,388	4.53	8.60	8.60	8.60	-4.07	-2.10	N/A	N/A	N/A	N/A	11.50	08/01/2017
William Blair Small Cap Value (SA)	Russell 1000 Grth Index			8.99	8.99	8.99	-8.33	0.24	16.60	12.97	14.60	16.86	12.57	
William Blair Small Cap Value (SA) 107,479,620 4.81 11.32 11.32 11.32 -10.15 -5.92 10.99 N/A N/A N/A 5.35 11/01/2014 Russell 2000 Val Index 10.94 10.94 10.94 -9.77 -4.51 13.76 6.62 10.19 13.28 6.36 Difference 0.38 0.38 0.38 -0.38 -1.41 -2.77 N/A N/A N/A 1.01 Pinnacle Associates US SMID Cap Growth (SA) 88,299,380 3.95 13.09 13.09 13.09 -8.22 -4.23 14.18 7.82 11.84 N/A 12.97 03/01/2010 Russell 2500 Grith Index 11.19 11.19 11.19 11.19 11.19 11.19 11.19 11.18 1.18 2.34 -2.86 -2.03 -1.20 -0.74 N/A -0.59 International Equity 31.28 1.18 1.18 1.18 1.18 1.18 2.18 9.93 5.37 8.93 N/A 9.86<	Difference			-0.39	-0.39	-0.39	4.26	-2.34	N/A	N/A	N/A	N/A	-1.07	
Russell 2000 Val Index Difference	US SMID Cap Equity													
Difference 0.38 0.38 0.38 -0.38 -1.41 -2.77 N/A N/A N/A -1.01 Pinnacle Associates US SMID Cap Growth (SA) 88,299,380 3.95 13.09 13.09 13.09 -8.22 -4.23 14.18 7.82 11.84 N/A 12.97 03/01/2010 11.91 11.91 11.91 11.91 -10.56 -1.37 16.21 9.02 12.58 16.78 13.56 Difference 1.18 1.18 1.18 2.34 -2.86 -2.03 -1.20 -0.74 N/A -0.59 International Equity Silchester International Value (CF) 246,507,934 11.03 6.65 6.65 6.65 -5.01 -12.26 9.93 5.37 8.93 N/A 9.86 06/01/2009 NSCI EAFE Val Index (USD) (Net) 6.69 6.69 6.69 6.69 -5.79 -13.73 8.08 1.42 5.17 7.45 5.29 Difference -0.04 -0.04 -0.04 -0.04 0.78 1.47 1.85 3.95 3.76 N/A 4.57 Baillie Gifford EAFE Fund (CF) 117,280,379 5.25 10.61 10.61 10.61 -10.59 -17.05 14.33 5.20 8.20 N/A 9.63 06/01/2009 NSCI EAFE Fund (CF) 124,331,934 5.56 9.57 9.57 9.57 -0.69 -17.74 14.04 4.10 3.08 N/A 2.27 02/01/2011 NSCI Emg Mkts Index (USD) (Net) 8.77 8.77 8.77 0.64 -14.24 14.89 4.77 2.89 9.66 1.65 Difference 0.80 0.80 0.80 0.80 -1.33 -3.50 -0.85 -0.67 0.19 N/A 0.62 Fixed Income Richmond Capital Core (SA) 1.29,562,210 5.80 1.03 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Nichmond Capital Index 1.06 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77	William Blair Small Cap Value (SA)	107,479,620	4.81	11.32	11.32	11.32	-10.15	-5.92	10.99	N/A	N/A	N/A	5.35	11/01/2014
Pinnacle Associates US SMID Cap Growth (SA) 88,299,380 3.95 13.09 13.09 13.09 -8.22 -4.23 14.18 7.82 11.84 N/A 12.97 03/01/2010 03/	Russell 2000 Val Index			10.94		10.94		-4.51	13.76	6.62	10.19	13.28	6.36	
Russell 2500 Grth Index	Difference			0.38	0.38	0.38	-0.38	-1.41	-2.77	N/A	N/A	N/A	-1.01	
Difference 1.18 1.18 1.18 2.34 -2.86 -2.03 -1.20 -0.74 N/A -0.59	. ,	88,299,380	3.95											03/01/2010
International Equity Silchester International Value (CF)	Russell 2500 Grth Index			11.91	11.91				16.21				13.56	
Silchester International Value (CF) 246,507,934 11.03 6.65 6.65 6.65 -5.01 -12.26 9.93 5.37 8.93 N/A 9.86 06/01/2009 MSCI EAFE Val Index (USD) (Net) 6.69 6.69 6.69 -5.79 -13.73 8.08 1.42 5.17 7.45 5.29 Difference -0.04 -0.04 -0.04 0.78 1.47 1.85 3.95 3.76 N/A 4.57 Baillie Gifford EAFE Fund (CF) 117,280,379 5.25 10.61 10.61 -10.59 -17.05 14.33 5.20 8.20 N/A 9.63 06/01/2009 Baillie Gifford Index 7.61 7.61 7.61 7.51 -5.52 -12.48 7.24 3.76 6.56 8.67 7.28 Difference 3.00 3.00 3.00 -5.07 -4.57 7.09 1.44 1.64 N/A 2.27 02/01/2011 MSCI Emg Mkts Index (USD) (Net) 8.77 8.77 8.77 0.69 -17	Difference			1.18	1.18	1.18	2.34	-2.86	-2.03	-1.20	-0.74	N/A	-0.59	
MSCI EAFE Val Index (USD) (Net) 6.69 6.69 6.69 6.69 7.79 7.45 7.45 7.45 7.45 7.45 7.45 7.45 7.45	International Equity													
Difference -0.04 -0.04 -0.04 -0.04 0.78 1.47 1.85 3.95 3.76 N/A 4.57 Baillie Gifford EAFE Fund (CF) 117,280,379 5.25 10.61 10.61 10.61 -10.59 -17.05 14.33 5.20 8.20 N/A 9.63 06/01/2009 Baillie Gifford Index 7.61 7.61 7.61 7.61 -5.52 -12.48 7.24 3.76 6.56 8.67 7.28 Difference 3.00 3.00 3.00 -5.07 -4.57 7.09 1.44 1.64 N/A 2.35 Acadian Emerging Markets II (CF) 124,331,934 5.56 9.57 9.57 -0.69 -17.74 14.04 4.10 3.08 N/A 2.27 02/01/2011 MSCI Emg Mkts Index (USD) (Net) 8.77 8.77 8.77 0.64 -14.24 14.89 4.77 2.89 9.66 1.65 Difference 0.80 0.80 0.80 -1.33 -3.50 -0.85 </td <td>Silchester International Value (CF)</td> <td>246,507,934</td> <td>11.03</td> <td>6.65</td> <td>6.65</td> <td>6.65</td> <td></td> <td>-12.26</td> <td>9.93</td> <td>5.37</td> <td>8.93</td> <td>N/A</td> <td>9.86</td> <td>06/01/2009</td>	Silchester International Value (CF)	246,507,934	11.03	6.65	6.65	6.65		-12.26	9.93	5.37	8.93	N/A	9.86	06/01/2009
Baillie Gifford EAFE Fund (CF) 117,280,379 5.25 10.61 10.61 -10.59 -17.05 14.33 5.20 8.20 N/A 9.63 06/01/2008 Baillie Gifford Index 7.61 7.61 7.61 7.61 7.552 -12.48 7.24 3.76 6.56 8.67 7.28 Difference 3.00 3.00 3.00 -5.07 -4.57 7.09 1.44 1.64 N/A 2.35 Acadian Emerging Markets II (CF) 124,331,934 5.56 9.57 9.57 9.57 -0.69 -17.74 14.04 4.10 3.08 N/A 2.27 02/01/2011 MSCI Emg Mkts Index (USD) (Net) 8.77 8.77 8.77 0.64 -14.24 14.89 4.77 2.89 9.66 1.65 Difference 0.80 0.80 0.80 -1.33 -3.50 -0.85 -0.67 0.19 N/A 0.62 Fixed Income Richmond Capital Core (SA) 129,562,210 5.80 1.03	MSCI EAFE Val Index (USD) (Net)			6.69	6.69	6.69	-5.79	-13.73	8.08	1.42	5.17		5.29	
Baillie Gifford Index 7.61 7.61 7.61 7.61 7.552 -12.48 7.24 3.76 6.56 8.67 7.28 Difference 3.00 3.00 3.00 -5.07 -4.57 7.09 1.44 1.64 N/A 2.35 Acadian Emerging Markets II (CF) 124,331,934 5.56 9.57 9.57 9.57 -0.69 -17.74 14.04 4.10 3.08 N/A 2.27 02/01/2011 MSCI Emg Mkts Index (USD) (Net) 8.77 8.77 8.77 0.64 -14.24 14.89 4.77 2.89 9.66 1.65 Difference 0.80 0.80 0.80 -1.33 -3.50 -0.85 -0.67 0.19 N/A 0.62 Fixed Income Richmond Capital Core (SA) 129,562,210 5.80 1.03 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Richmond Capital Index 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61	Difference			-0.04	-0.04	-0.04	0.78	1.47	1.85	3.95	3.76	N/A	4.57	
Difference 3.00 3.00 3.00 -5.07 -4.57 7.09 1.44 1.64 N/A 2.35 Acadian Emerging Markets II (CF) 124,331,934 5.56 9.57 9.57 9.57 -0.69 -17.74 14.04 4.10 3.08 N/A 2.27 02/01/2011 MSCI Emg Mkts Index (USD) (Net) 8.77 8.77 8.77 0.64 -14.24 14.89 4.77 2.89 9.66 1.65 Difference 0.80 0.80 0.80 -1.33 -3.50 -0.85 -0.67 0.19 N/A 0.62 Fixed Income Richmond Capital Core (SA) 129,562,210 5.80 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Richmond Capital Index 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77	Baillie Gifford EAFE Fund (CF)	117,280,379	5.25	10.61	10.61	10.61	-10.59	-17.05	14.33	5.20	8.20	N/A	9.63	06/01/2009
Acadian Emerging Markets II (CF) 124,331,934 5.56 9.57 9.57 9.57 -0.69 -17.74 14.04 4.10 3.08 N/A 2.27 02/01/2011 MSCI Emg Mkts Index (USD) (Net) 8.77 8.77 0.64 -14.24 14.89 4.77 2.89 9.66 1.65 Difference 0.80 0.80 0.80 -1.33 -3.50 -0.85 -0.67 0.19 N/A 0.62 Fixed Income Richmond Capital Core (SA) 129,562,210 5.80 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Richmond Capital Index 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77	Baillie Gifford Index			7.61	7.61	7.61	-5.52	-12.48	7.24	3.76	6.56	8.67	7.28	
MSCI Emg Mkts Index (USD) (Net) 8.77 8.77 8.77 0.64 -14.24 14.89 4.77 2.89 9.66 1.65 Difference 0.80 0.80 0.80 -1.33 -3.50 -0.85 -0.67 0.19 N/A 0.62 Fixed Income Richmond Capital Core (SA) 129,562,210 5.80 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Richmond Capital Index 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77	Difference			3.00	3.00	3.00	-5.07	-4.57	7.09	1.44	1.64	N/A	2.35	
Difference 0.80 0.80 0.80 -1.33 -3.50 -0.85 -0.67 0.19 N/A 0.62 Fixed Income Richmond Capital Core (SA) 129,562,210 5.80 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Richmond Capital Index 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77	Acadian Emerging Markets II (CF)	124,331,934	5.56	9.57	9.57	9.57	-0.69	-17.74	14.04	4.10	3.08	N/A	2.27	02/01/2011
Fixed Income Richmond Capital Core (SA) 129,562,210 5.80 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Richmond Capital Index 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77	MSCI Emg Mkts Index (USD) (Net)					8.77			14.89		2.89			
Richmond Capital Core (SA) 129,562,210 5.80 1.03 1.03 2.65 2.25 2.14 2.66 2.50 4.33 5.10 06/01/1999 Richmond Capital Index 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77	Difference			0.80	0.80	0.80	-1.33	-3.50	-0.85	-0.67	0.19	N/A	0.62	
Richmond Capital Index 1.06 1.06 1.06 2.71 2.25 1.95 2.44 2.12 3.61 4.77														
·		129,562,210	5.80											06/01/1999
Difference -0.03 -0.03 -0.06 0.00 0.19 0.22 0.38 0.72 0.33	·													
	Difference			-0.03	-0.03	-0.03	-0.06	0.00	0.19	0.22	0.38	0.72	0.33	

Market values and performance shown are preliminary and subject to change. Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30. Performance for Harrison Street Core Property LP, PGIM Real Estate PRISA II (CF) and UBS Trumbull Property (CF) is available quarterly; interim months assume a 0.00% return.



	Allocation	1	Performance (%)										
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Taplin Canida & Habacht Intermediate Duration (SA)	129,538,710	5.79	1.55	1.55	1.55	1.73	2.06	2.85	2.18	2.48	4.35	4.85	06/01/1999
ICE BofAML US Corp & Gov't 1-10 Yr Index			0.84	0.84	0.84	2.47	2.60	1.61	1.91	1.81	3.16	4.31	
Difference			0.71	0.71	0.71	-0.74	-0.54	1.24	0.27	0.67	1.19	0.54	
Franklin Templeton Global Multisector Plus (CF)	106,866,242	4.78	2.53	2.53	2.53	4.82	1.06	N/A	N/A	N/A	N/A	6.16	03/01/2016
Frank. Temp. Global Multisector Fund Index			1.68	1.68	1.68	2.72	-0.92	3.31	1.34	1.21	6.68	2.66	
Difference			0.85	0.85	0.85	2.10	1.98	N/A	N/A	N/A	N/A	3.50	
Loomis Sayles Multisector Full Discretion (CF)	66,183,492	2.96	1.68	1.68	1.68	1.54	1.29	7.03	4.25	5.65	9.81	6.45	10/01/2007
Bloomberg Gbl Agg Bond Index			1.52	1.52	1.52	2.74	-0.87	2.92	1.17	0.98	2.98	3.04	
Difference			0.16	0.16	0.16	-1.20	2.16	4.11	3.08	4.67	6.83	3.41	
Real Estate													
Harrison Street Core Property, LP	98,983,364	4.43	0.00	0.00	0.00	1.81	7.06	8.60	N/A	N/A	N/A	8.34	11/01/2015
NCREIF ODCE Index (AWA) (Gross)			0.00	0.00	0.00	1.76	8.35	8.24	10.41	10.99	7.00	8.68	
Difference			0.00	0.00	0.00	0.05	-1.29	0.36	N/A	N/A	N/A	-0.34	
PGIM Real Estate PRISA II (CF)	54,343,540	2.43	0.00	0.00	0.00	1.16	10.61	8.00	N/A	N/A	N/A	9.67	01/01/2015
NCREIF ODCE Index (AWA) (Gross)			0.00	0.00	0.00	1.76	8.35	8.24	10.41	10.99	7.00	9.69	
Difference			0.00	0.00	0.00	-0.60	2.26	-0.24	N/A	N/A	N/A	-0.02	
Principal US Property (CF)	116,751,400	5.22	0.28	0.28	0.28	1.57	7.65	8.49	10.43	N/A	N/A	10.33	01/01/2014
NCREIF ODCE Index (AWA) (Gross)			0.00	0.00	0.00	1.76	8.35	8.24	10.41	10.99	7.00	10.23	
Difference			0.28	0.28	0.28	-0.19	-0.70	0.25	0.02	N/A	N/A	0.10	
UBS Trumbull Property (CF)	103,814,056	4.64	0.00	0.00	0.00	1.52	6.09	5.78	7.91	8.26	5.72	5.77	12/01/2005
NCREIF ODCE Index (AWA) (Gross)			0.00	0.00	0.00	1.76	8.35	8.24	10.41	10.99	7.00	7.24	
Difference			0.00	0.00	0.00	-0.24	-2.26	-2.46	-2.50	-2.73	-1.28	-1.47	
Vanguard RE Idx;ETF (VNQ)	998,240	0.04	11.84	11.84	11.84	4.65	9.78	7.25	8.69	8.58	14.68	14.04	12/01/2008
MSCI US REIT Index (USD) (Gross)			11.78	11.78	11.78	4.27	11.32	7.99	9.31	9.14	15.67	15.01	
Difference			0.06	0.06	0.06	0.38	-1.54	-0.74	-0.62	-0.56	-0.99	-0.97	
Diversifying Assets													
Harvest Fund Advisors MLP (SA)	48,691,642	2.18	15.15	15.15	15.15	-8.62	-6.18	8.61	-2.09	4.33	N/A	6.28	03/01/2011
S&P MLP Index (TR)			13.16	13.16	13.16	-6.99	-5.46	9.54	-4.40	1.06	10.07	2.05	
Difference			1.99	1.99	1.99	-1.63	-0.72	-0.93	2.31	3.27	N/A	4.23	
Tortoise Capital Advisors MLP (SA)	48,178,696	2.16	13.69	13.69	13.69	-4.99	-6.14	7.97	-2.17	4.06	N/A	5.18	03/01/2011
S&P MLP Index (TR)			13.16	13.16	13.16	-6.99	-5.46	9.54	-4.40	1.06	10.07	2.05	
Difference			0.53	0.53	0.53	2.00	-0.68	-1.57	2.23	3.00	N/A	3.13	

Market values and performance shown are preliminary and subject to change. Performance shown is net of fees and is annualized for periods greater than one year. Allocations may not sum up to 100% due to the exclusion of managers in liquidation. Please see the addendum for custom benchmark definitions. Fiscal year for the COJ ends 09/30. Performance for Harrison Street Core Property LP, PGIM Real Estate PRISA II (CF) and UBS Trumbull Property (CF) is available quarterly; interim months assume a 0.00% return.



	Allocation						Po	erformand	e (%)				
	Market Value (\$)	%	MTD	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	7 Years	10 Years	Since Incep.	Inception Date
Hancock Timberland (CF)	53,751,405	2.40	0.02	0.02	0.02	-0.83	12.49	9.61	7.64	7.65	3.80	3.87	10/01/2006
NCREIF Timberland Index			0.00	0.00	0.00	0.97	3.44	3.22	4.98	6.04	3.83	5.83	
Difference			0.02	0.02	0.02	-1.80	9.05	6.39	2.66	1.61	-0.03	-1.96	
Dreyfus Gvt Csh Mgt;Inst (DGCXX)	4,666,552	0.21	0.20	0.20	0.20	0.69	2.09	1.15	0.72	0.54	0.42	1.39	04/01/2001
FTSE 3 Mo T-Bill Index			0.20	0.20	0.20	0.77	1.96	1.05	0.64	0.48	0.37	1.37	
Difference			0.00	0.00	0.00	-0.08	0.13	0.10	0.08	0.06	0.05	0.02	



City of Jacksonville Employees' Retirement System Addendum

Performance Related Comments:

- Performance is annualized for periods greater than one year.
- Performance and market values shown are preliminary and subject to change.
- The inception date shown indicates the first full month of performance following initial funding.
- The market value shown for the Transition Account includes residual assets from terminated managers.
- RVK began monitoring the assets of the City of Jacksonville Retirement System on 01/01/2019. Prior historical data was provided by the custodian and previous consultant.

Custom Composite Benchmark Comments:

- Total Fund Policy Index: The passive Total Fund Policy Index is calculated monthly and currently consists of 35% Russell 3000 Index, 20% MSCI ACW Ex US Index (USD) (Net), 19% Fixed Income Index, 15% NCREIF ODCE Index (AWA) (Gross), 10% Diversifying Assets Index, and 1% FTSE 3 Month T-Bill Index.
- US Equity Index: The passive US Equity Index consists of 100% DJ US TSM Index through 06/2009 and 100% Russell 3000 Index thereafter.
- International Equity Index: The passive International Equity Index consists of 100% MSCI EAFE Index (USD) (Gross) through 01/2011 and 100% MSCI ACW Ex US Index (USD) (Net) thereafter.
- Fixed Income Index: The passive Fixed Income Index consists of 100% Bloomberg US Agg Bond Index through 10/2017 and 100% Bloomberg US Universal Bond Index thereafter.
- **Diversifying Assets Index**: The passive Diversifying Assets Index is calculated monthly and consists of 50% S&P MLP Index (TR)/50% NCREIF Timberland Index through 10/2017 and 67% S&P MLP Index (TR)/33% NCREIF Timberland Index thereafter.

Custom Manager Benchmark Comments

- INTECH Enhanced Index: The passive INTECH Enhanced Index consists of 100% Russell 1000 Index through 09/2009 and 100% S&P 500 Index (Cap Wtd) thereafter.
- Richmond Capital Index: The passive Richmond Capital Index consists of 100% ICE BofAML US Domestic Master through 06/2011 and 100% Bbrg Barc US Aggregate Index thereafter.
- Franklin Templeton Index: The passive Franklin Templeton Index consists of 100% ICE BofAML Gbl Hi Yld Index through 12/2009 and 100% Bloomberg Multiverse Index thereafter.
- Baillie Gifford Index: The passive Baillie Gifford Index consists of 100% MSCI EAFE Grth Index (USD) (Net) through 10/2017 and 100% MSCI ACW Ex US Grth Index (USD) (Net) thereafter.



