



Board of Trustees - Monthly Performance Report - April 30, 2020

All returns are provided by Callan LLC and are annualized for periods greater than one year.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	
	Market Values as of 4/30/2020*	Returns as of 4/30/2020							
		1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years	Return Type
1 TOTAL FUND •	63,090,613,953	5.27%	-5.60%	-5.86%	-0.81%	0.45%	5.97%	5.84%	
2 TOTAL FUND w/o FX Overlay •	63,088,785,398	5.27%	-5.60%	-5.87%	-0.81%	0.46%	5.98%	5.84%	
3 Passive Index Benchmark ¹ •		7.97%	-9.71%	-9.91%	-3.99%	-2.81%	3.67%	3.67%	
4 Performance Benchmark ² •		5.24%	-4.99%	-4.88%	0.65%	2.33%	6.06%	5.37%	
5 Total Fund Return Objective ³		-0.23%	0.64%	1.42%	4.25%	5.33%	6.59%	6.62%	
6 PUBLIC EQUITY	24,261,671,165	11.84%	-13.19%	-15.24%	-7.20%	-7.41%	3.08%	3.64%	Gross
7 PUBLIC EQUITY w/o FX Overlay	24,259,842,610	11.84%	-13.19%	-15.24%	-7.20%	-7.39%	3.10%	3.66%	Gross
8 MSCI ACWI IMI		11.01%	-12.74%	-13.90%	-6.27%	-6.22%	3.77%	4.05%	
9 INTERNATIONAL EQUITY	6,075,687,743	8.87%	-15.05%	-18.00%	-11.32%	-11.80%	-0.23%	0.45%	Gross
10 MSCI ACWI IMI EX-US		8.15%	-15.61%	-17.93%	-11.91%	-11.78%	-0.50%	-0.10%	
11 GLOBAL EQUITY	11,564,666,661	11.92%	-10.48%	-12.27%	-3.61%	-3.19%	4.51%	4.63%	Gross
12 MSCI ACWI IMI		11.01%	-12.74%	-13.90%	-6.27%	-6.22%	3.77%	4.05%	
13 DOMESTIC EQUITY	6,619,094,544	14.53%	-15.51%	-17.05%	-8.61%	-9.27%	3.82%	5.78%	Gross
14 RUSSELL 3000 INDEX		13.24%	-10.33%	-10.42%	-1.14%	-1.04%	8.02%	8.33%	
15 FIXED INCOME PLUS	14,090,782,082	4.19%	-4.30%	-2.81%	0.97%	4.02%	4.03%		Gross
16 PUBLIC INCOME BENCHMARK ⁴		3.84%	-4.40%	-2.94%	0.49%	3.39%	3.58%		
17 US FIXED INCOME AGGREGATE	3,785,465,671	2.41%	2.47%	4.45%	7.41%	10.74%	5.24%	3.95%	Gross
18 BB AGGREGATE		1.78%	3.00%	4.98%	7.56%	10.84%	5.17%	3.80%	
19 US INVESTMENT GRADE CORPORATE	4,086,982,156	5.43%	-0.75%	1.55%	6.17%	10.50%	6.04%	5.03%	Gross
20 BB CORPORATE		5.24%	-0.91%	1.42%	5.74%	9.88%	5.61%	4.57%	
21 NON US FIXED INCOME	1,199,362,109	1.19%	0.59%	2.38%	3.96%	7.05%	4.86%	3.90%	Gross
22 BB GLOBAL TREASURY EX-US		0.95%	0.51%	2.28%	3.97%	6.96%	4.96%	4.11%	
23 GLOBAL HIGH YIELD	1,377,569,490	4.29%	-8.42%	-8.69%	-5.53%	-4.86%	1.59%	2.91%	Gross
24 BB US HIGH YIELD 2% ISSUER CAP		4.53%	-8.75%	-8.73%	-5.09%	-4.08%	1.87%	3.45%	
25 EMERGING MARKET DEBT	765,693,067	3.53%	-15.50%	-15.32%	-12.35%	-7.79%	-1.06%	0.82%	Gross
26 EMD BENCHMARK ⁵		3.08%	-11.74%	-11.63%	-8.19%	-3.77%	0.45%	1.76%	
27 TIPS	388,557,564	2.70%	2.47%	4.65%	6.50%	8.95%	4.10%	3.01%	Gross
28 BB US TIPS		2.78%	2.37%	4.52%	6.76%	9.46%	4.21%	3.08%	
29 REITS	1,475,859,876	7.84%	-22.12%	-21.35%	-15.57%	-14.14%	-0.21%	3.46%	Gross
30 S&P GLOBAL REIT		7.71%	-24.16%	-23.55%	-18.53%	-17.14%	-2.33%	-0.08%	
31 LISTED INFRASTRUCTURE	721,149,020	8.09%	-18.11%	-15.97%	-10.58%	-7.47%	2.94%	4.52%	Gross
32 S&P GLOBAL LISTED INFRASTRUCTURE		9.41%	-23.86%	-22.66%	-18.58%	-15.55%	-1.79%	-0.35%	
33 FIXED INCOME PLUS CASH	290,106,360	0.32%	0.63%	0.79%	1.90%	2.27%	2.02%		Gross
34 90 DAY T-BILLS		0.01%	0.45%	0.58%	1.61%	2.07%	1.81%		
35 PRIVATE EQUITY & SPECIAL OPPORTUNITIES •	9,739,170,937	N/A	2.85%	3.90%	6.89%	9.90%	20.09%	16.48%	
36 CAMBRIDGE PRIVATE EQUITY •		N/A	3.75%	5.67%	11.22%	14.78%	14.95%	12.69%	
37 PRIVATE EQUITY •	6,222,155,605	N/A	3.31%	5.05%	15.79%	20.00%	22.07%	19.60%	
38 PRIVATE EQUITY CUSTOM BENCHMARK ⁶ •		N/A	3.75%	5.67%	11.22%	14.78%	14.95%	10.77%	
39 SPECIAL OPPORTUNITIES •	3,511,707,362	N/A	2.08%	1.99%	-5.97%	-4.47%	16.05%	11.98%	
40 CAMBRIDGE PRIVATE EQUITY •		N/A	3.75%	5.67%	11.22%	14.78%	14.95%	12.69%	
41 IN-STATE EMERGING MANAGERS •	5,307,970								
42 REAL ESTATE •	4,022,865,311	N/A	0.33%	0.41%	0.44%	1.08%	2.39%	5.57%	Gross
43 NCREIF TOTAL INDEX •		N/A	1.03%	1.55%	4.54%	5.79%	6.52%	8.00%	
44 RE SEPARATE ACCTS & DIRECT •	3,724,741,443	N/A	0.16%	0.18%	-0.11%	0.55%	2.18%	5.44%	Gross
45 RE FUNDS & CO-INVEST •	298,123,868	N/A	4.15%	6.14%	16.42%	15.05%			Gross
46 INFRA. & PRIVATE INCOME •	5,205,808,306	N/A	1.18%	1.70%	4.90%	7.01%	11.24%	11.48%	
47 INFRA. & INCOME OPPORTUNITIES ⁷ •			2.86%	3.13%	8.72%	13.99%	10.02%	7.28%	
48 INFRASTRUCTURE •	2,408,879,610	N/A	1.49%	2.14%	4.03%	6.67%	14.70%	16.60%	
49 FTSE DEVELOPED CORE INFRA. TRI •		N/A	3.20%	3.46%	10.14%	17.14%	12.79%	8.03%	
50 PRIVATE CREDIT •	1,601,251,745	N/A	0.80%	1.38%	4.42%	5.21%	6.56%	6.18%	
51 BB US HIGH YIELD 2% ISSUER CAP •		N/A	2.33%	2.61%	6.58%	9.38%	5.85%	6.00%	
52 INCOME OPPORTUNITIES •	1,195,676,950	N/A	1.03%	1.23%	7.49%	10.03%	5.10%	7.16%	
53 ABSOLUTE RETURN	3,804,874,980	N/A	-4.27%	-3.77%	-1.05%	-0.74%	2.54%	2.31%	Net
54 ABSOLUTE RETURN BENCHMARK ⁸		N/A	-6.15%	-6.56%	-3.76%	-3.42%	1.18%	3.09%	
55 ASSET ALLOCATION	1,965,441,172	0.71%	-3.25%	-2.83%	-1.21%	0.19%	1.53%	1.31%	Gross
56 ASSET ALLOCATION BENCHMARK ⁹		3.15%	-2.75%	-2.62%	1.16%	2.37%	4.60%	4.13%	
57 APF ALLOCATION CASH	1,155,563,698	0.05%	0.56%	0.70%	1.74%	2.17%			Gross
58 APF OPERATING CASH	376,177,767	0.01%	0.20%	0.38%	1.32%	1.70%	1.64%	1.05%	Gross
59 90 DAY T-BILLS		0.01%	0.45%	0.58%	1.61%	2.07%	1.81%	1.19%	
60 RISK PARITY	433,699,707	4.31%	-10.89%	-9.49%	-5.26%	-0.68%			
61 HFR 12% Vol Institutional Index		3.58%	-11.17%	-11.04%	-6.13%	-3.06%			

* Reported market values represent total fund holdings, which consists of 99.15% APF and 0.85% AMH, and are consistent with the timing of the APF and AMH Financial

• For investments within Private Equity and Special Opportunities, Real Estate, and Infrastructure, Private Credit, and Income Opportunities asset classes, returns are lagged one (1) quarter. Composites that incorporate these investments as well as associated benchmarks are also lagged one (1) quarter.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)		
		Market Values as of 4/30/2020*	Returns as of 4/30/2020							
			1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years	
62	PUBLIC EQUITY	24,261,671,165	11.84%	-13.19%	-15.24%	-7.20%	-7.41%	3.08%	3.64%	Gross
63	PUBLIC EQUITY w/o FX Overlay	24,259,842,610	11.84%	-13.19%	-15.24%	-7.20%	-7.39%	3.10%	3.66%	Gross
64	MSCI ACWI IMI		11.01%	-12.74%	-13.90%	-6.27%	-6.22%	3.77%	4.05%	
65	INTERNATIONAL EQUITY	6,075,687,743	8.87%	-15.05%	-18.00%	-11.32%	-11.80%	-0.23%	0.45%	Gross
66	MSCI ACWI IMI EX-US		8.15%	-15.61%	-17.93%	-11.91%	-11.78%	-0.50%	-0.10%	
67	Macquarie Emerging Markets	185,941,526	11.26%	-12.30%	-16.20%	-3.31%	-5.72%	4.58%	4.13%	Gross
68	JP Morgan Emerging Markets	377,354,458	8.94%	-13.41%	-16.46%	-10.12%	-9.27%	4.02%	4.35%	Gross
69	Mondrian Investment Partners	437,983,555	9.67%	-15.03%	-18.76%	-12.34%	-13.51%	-1.71%	-0.72%	Gross
70	SSGA MSCI Emerging Markets	103,526,744	9.12%	-12.44%	-16.62%	-10.44%	-11.68%	0.52%	-0.03%	Gross
71	William Blair Emerging Markets	337,117,485	11.17%	-13.68%	-15.60%	-6.74%	-6.65%	4.42%	2.06%	Gross
72	MEASA Fund	63,047,291	-22.28%	-23.57%	-20.04%	-21.66%	-23.05%			Net
73	MSCI Emerging Markets Index		9.16%	-12.52%	-16.60%	-10.69%	-12.00%			
74	DFA Emerging Markets Value	376,175,151	10.78%	-16.86%	-23.06%	-20.71%	-21.25%	-4.03%		Gross
75	MSCI Emerging Markets Value Index		8.47%	-16.26%	-21.90%	-19.70%	-19.86%	-3.45%		
76	DFA Emerging Markets Small Cap	119,493,065	13.35%	-17.97%	-21.74%	-17.60%	-18.00%	-4.80%		Gross
77	MSCI Emerging Markets Small Cap Index		13.94%	-18.55%	-21.80%	-18.29%	-19.26%	-5.97%		
78	Trustbridge Emerging Markets	248,055,016	7.37%	-2.80%	-3.04%	3.97%	-2.20%	10.92%		Gross
79	MSCI China Index ND		6.31%	0.27%	-4.55%	4.32%	-2.05%	8.31%		
80	Wells Capital	169,578,470	7.29%	-0.64%	-3.81%	5.34%	-0.22%	10.53%		Gross
81	Wells Capital Custom ¹¹		6.59%	-0.61%	-3.94%	3.79%	-1.39%	4.18%		
82	Mellon MSCI World ex-USA	116,689,568	6.90%	-15.91%	-17.53%	-12.33%	-11.43%	-0.51%	-0.13%	Gross
83	DFA International Large Cap	414,103,540	7.39%	-18.19%	-20.74%	-15.40%	-15.52%	-1.99%	-0.97%	Gross
84	Int'l Passive/Quasi-Passive Custom ¹²		6.97%	-16.29%	-17.91%	-12.28%	-11.47%	-0.55%	-0.27%	
85	DFA International Small Cap Value	307,126,024	11.71%	-22.18%	-26.19%	-17.61%	-19.82%	-6.80%	-1.41%	Gross
86	MSCI World ex-USA Small Cap Value Index		10.04%	-22.18%	-24.83%	-16.21%	-17.18%	-4.28%	-0.73%	
87	DFA International Small Company	300,545,880	11.20%	-19.44%	-21.89%	-13.31%	-13.85%	-2.39%	1.42%	Gross
88	SSGA International Developed Small Cap	353,365,315	11.64%	-17.32%	-19.68%	-10.85%	-11.58%	-0.81%	1.91%	Gross
89	MSCI World ex-USA Small Cap Index		11.70%	-17.62%	-20.01%	-11.13%	-11.97%	-1.13%	1.62%	
90	Acadian Asset Mgmt	359,921,005	7.23%	-14.57%	-16.28%	-14.58%	-14.30%	-0.59%	1.95%	Gross
91	MSCI Custom Benchmark ¹³		5.54%	-22.04%	-24.82%	-20.29%	-20.85%	-5.54%	-2.87%	
92	LSV International Large Cap	446,055,058	6.60%	-21.09%	-24.66%	-18.30%	-18.61%	-4.16%	-2.25%	Gross
93	Schroders International Large Cap	504,870,513	8.94%	-17.23%	-21.03%	-15.01%	-15.58%	-3.12%	-0.43%	Gross
94	MSCI All Country World ex-USA Value Index		6.35%	-20.49%	-24.01%	-20.08%	-20.51%	-4.99%	-3.39%	
95	Johnston International Large Cap	402,153,316	10.72%	-10.11%	-12.88%	-2.46%	-3.07%	6.62%	6.35%	Gross
96	JP Morgan International Large Cap	452,431,722	8.47%	-7.59%	-8.22%	0.07%	3.14%	5.79%	4.94%	Gross
97	MSCI World ex-USA Growth Index		8.20%	-10.79%	-11.07%	-4.32%	-1.94%	4.35%	2.88%	
98	GLOBAL EQUITY	11,564,666,661	11.92%	-10.48%	-12.27%	-3.61%	-3.19%	4.51%	4.63%	Gross
99	MSCI ACWI IMI		11.01%	-12.74%	-13.90%	-6.27%	-6.22%	3.77%	4.05%	
100	AQR Global Equity	1,091,942,430	11.62%	-12.49%	-14.30%	-7.37%	-8.81%	1.76%	3.65%	Gross
101	SSGA MSCI World	114,890,944	10.96%	-11.77%	-12.35%	-4.49%	-3.97%	5.27%	5.29%	Gross
102	CDAM Global Equity	354,947,749	18.16%	-19.74%	-19.43%	-13.37%	-13.23%			Gross
103	MSCI World Index		10.92%	-11.89%	-12.43%	-4.42%	-4.00%	4.99%	4.92%	
104	SSGA Russell Fundamental Developed Lrg Co	1,223,706,943	9.34%	-17.19%	-19.64%	-12.68%	-12.79%	0.64%	2.19%	Gross
105	Russell Fundamental Divldp Lrg Co Index		9.36%	-17.25%	-19.73%	-12.63%	-12.72%	0.73%	2.31%	
106	Lazard Asset Management	879,714,505	9.87%	-14.41%	-15.42%	-8.64%	-7.30%	2.88%	3.43%	Gross
107	McKinley Capital Management	292,467,713	13.43%	-9.48%	-9.59%	-0.88%	1.26%	6.55%	5.70%	Gross
108	RBA Global Equity	313,066,216	9.01%	-9.16%	-9.33%	-0.73%	-0.25%			Gross
109	WCM Global Equity	421,296,385	13.44%	-2.03%	-0.93%	4.83%	10.38%			Gross
110	MSCI All-Country World Index		10.71%	-11.97%	-12.94%	-5.17%	-4.96%	4.46%	4.37%	
111	APF Tactical Tilts	4,854,453,735	12.59%	-3.69%	-6.48%	5.77%	5.81%	6.05%	3.72%	Gross
112	SSGA MSCI ACWI IMI	94,963,203	11.00%	-12.51%	-13.69%	-6.39%	-6.23%	4.03%		Gross
113	APF Global Equities	95,667,468	12.78%	-13.01%	-16.50%	-10.06%	-9.78%			Gross
114	Arrowstreet Global Equity	921,347,947	11.84%	-12.18%	-13.99%	-6.19%	-5.14%			Gross
115	Longview Global Equity	906,194,163	11.92%	-15.61%	-17.86%	-7.55%	-7.36%			Gross
116	MSCI All-Country World IMI		11.01%	-12.74%	-13.90%	-6.27%	-6.22%	3.77%	4.05%	
117	DOMESTIC EQUITY	6,619,094,544	14.53%	-15.51%	-17.05%	-8.61%	-9.27%	3.82%	5.78%	Gross
118	RUSSELL 3000 INDEX		13.24%	-10.33%	-10.42%	-1.14%	-1.04%	8.02%	8.33%	
119	Mellon S&P 500	70,192,322	12.80%	-9.24%	-9.28%	1.23%	1.48%	9.48%	9.33%	Gross
120	S&P 500 Index		12.82%	-9.26%	-9.29%	0.62%	0.86%	9.04%	9.12%	
121	Mellon FTSE RAFI US Large Cap	671,041,162	12.66%	-15.29%	-17.00%	-8.58%	-8.92%	3.10%	5.06%	Gross
122	FTSE RAFI US 1000 Index		12.71%	-15.33%	-17.05%	-8.62%	-8.96%	3.09%	5.11%	
123	AGI - Large Cap	716,842,337	15.04%	-2.99%	0.49%	12.92%	13.96%	14.77%	12.60%	Gross
124	SSGA Large Cap	295,548,960	14.31%	-2.58%	-0.54%	12.92%	13.99%	15.45%	12.88%	Gross
125	DSM - Large Cap	830,851,517	14.37%	-2.52%	-0.14%	10.60%	10.78%	16.97%	13.60%	Gross
126	CastleArk - Large Cap	62,624,886	14.74%	-4.10%	-1.11%	8.35%	8.15%	14.50%	12.64%	Gross
127	APF SPDR Yield	329,332,900	13.05%	-22.45%	-26.12%	-18.96%	-19.34%	-1.84%		Gross
128	APF SPDR Momentum	276,503,502	14.60%	-16.72%	-18.41%	-12.12%	-12.41%	0.72%		Gross
129	APF SPDR Low Vol	405,384,281	11.21%	-17.09%	-18.33%	-11.27%	-9.73%	3.77%		Gross
130	Russell 1000 Growth Index		14.80%	-3.54%	-1.39%	10.71%	10.84%	15.69%	13.34%	
131	Russell 1000 Index		13.21%	-9.78%	-9.68%	-0.11%	0.09%	8.68%	8.74%	
132	Lyrical - Large Cap	675,590,892	19.68%	-23.09%	-25.73%	-18.38%	-22.94%	-6.56%	-1.21%	Gross
133	SKBA - Large Cap	321,535,869	13.29%	-16.45%	-20.73%	-13.25%	-13.07%	1.38%	4.10%	Gross
134	LSV - Large Cap Value	806,295,641	13.03%	-19.12%	-23.20%	-14.37%	-15.77%	-0.59%		Gross
135	APF Domestic Equity	144,708,048	17.43%	-27.62%	-31.67%					Gross
136	Russell 1000 Value Index		11.24%	-16.70%	-18.49%	-11.27%	-11.01%	1.42%	3.90%	
137	Mellon S&P 400	82,816,886	14.17%	-17.53%	-19.69%	-14.04%	-14.84%	-0.21%	3.48%	Gross
138	S&P 400 Index		14.18%	-17.58%	-19.73%	-14.13%	-14.94%	-0.03%	3.58%	
139	Jennison Associates LLC	251,823,334	18.19%	-17.16%	-18.45%	-13.53%	-14.75%	0.87%	3.26%	Gross
140	Russell 2000 Index		13.74%	-18.47%	-21.08%	-15.32%	-16.39%	-0.82%	2.88%	
141	RBC Asset Mgmt	116,999,485	12.84%	-14.05%	-14.34%	-8.82%	-7.40%	5.97%	6.76%	Gross
142	Eagle Asset Mgmt	125,479,801	15.47%	-8.67%	-7.95%	-3.58%	-5.15%	8.41%	9.70%	Gross
143	Russell 2000 Growth Index		14.89%	-13.76%	-14.71%	-8.95%	-9.22%	4.21%	5.19%	
144	Russell 2000 Index		13.74%	-18.47%	-21.08%	-15.32%	-16.39%	-0.82%	2.88%	
145	T Rowe Price	157,301,342	12.21%	-20.06%	-22.52%	-16.62%	-17.31%	-1.26%	4.54%	Gross
146	Pzena Investment Mgmt	181,023,665	19.44%	-26.69%	-31.46%	-24.50%	-25.92%	-7.41%	0.74%	Gross
147	Russell 2000 Value Index		12.34%	-23.60%	-27.72%	-22.04%	-23.84%	-6.06%	0.30%	
148	Russell 2000 Index		13.74%	-18.47%	-21.08%	-15.32%	-16.39%	-0.82%	2.88%	
149	AGI Structured Alpha	97,197,714	12.08%	-43.12%	-43.24%	-36.25%	-35.91%	-5.74%		Net
150	S&P 500 Index		12.82%	-9.26%	-9.29%	0.62%	0.86%	9.04%		

		(A)	(B)	(C)	(D)	(E)	(F)	(G)		
	Market Values as of 4/30/2020*	Returns as of 4/30/2020								
		1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years		
151	FIXED INCOME PLUS	14,090,782,082	4.19%	-4.30%	-2.81%	0.97%	4.02%	4.03%	Gross	
152	PUBLIC INCOME BENCHMARK ⁴		3.84%	-4.40%	-2.94%	0.49%	3.39%	3.58%		
153	US FIXED INCOME AGGREGATE	3,785,465,671	2.41%	2.47%	4.45%	7.41%	10.74%	5.24%	3.95%	Gross
154	BB AGGREGATE		1.78%	3.00%	4.98%	7.56%	10.84%	5.17%	3.80%	
155	APF Fixed Income - Aggregate	3,785,465,671	2.41%	2.47%	4.45%	7.41%	10.74%	5.24%	3.95%	Gross
156	US INVESTMENT GRADE CORPORATE	4,086,982,156	5.43%	-0.75%	1.55%	6.17%	10.50%	6.04%	5.03%	Gross
157	BB CORPORATE		5.24%	-0.91%	1.42%	5.74%	9.88%	5.61%	4.57%	
158	APF Corporate Bonds	4,086,982,156	5.43%	-0.75%	1.55%	6.17%	10.50%	6.04%	5.03%	Gross
159	NON US FIXED INCOME	1,199,362,109	1.19%	0.59%	2.38%	3.96%	7.05%	4.86%	3.90%	Gross
160	BB GLOBAL TREASURY EX-US		0.95%	0.51%	2.28%	3.97%	6.96%	4.96%	4.11%	
161	Rogge Global Partners	304,267,211	1.27%	0.26%	2.41%	4.00%	7.26%	5.00%	4.04%	Gross
162	APF Global Government Bonds	895,094,899	1.16%	0.63%	2.31%	3.89%	6.93%	4.91%	3.84%	Gross
163	GLOBAL HIGH YIELD	1,377,569,490	4.29%	-8.42%	-8.69%	-5.53%	-4.86%	1.59%	2.91%	Gross
164	BB US HIGH YIELD 2% ISSUER CAP		4.53%	-8.75%	-8.73%	-5.09%	-4.08%	1.87%	3.45%	
165	Oaktree High Yield	593,462,652	3.73%	-8.53%	-8.80%	-4.78%	-3.97%	1.65%	2.66%	Gross
166	APF High Yield	384,329,567	4.97%	-8.99%	-9.28%	-5.86%	-4.74%	1.67%		Gross
167	BB US High Yield 2% Issuer Cap Index		4.53%	-8.75%	-8.73%	-5.09%	-4.08%	1.87%	3.45%	
168	HY Fixed Income Custom Blend ¹⁴		4.53%	-8.75%	-8.73%	-5.09%	-4.08%	1.87%	3.53%	
169	Capital Guardian High Yield	399,777,271	4.48%	-8.65%	-8.89%	-7.43%	-7.62%	0.98%	3.41%	Gross
170	Cap Guard Custom Blend ¹⁵		4.53%	-8.75%	-8.73%	-5.09%	-4.08%	1.87%	3.48%	
171	EMERGING MARKET DEBT	765,693,067	3.53%	-15.50%	-15.32%	-12.35%	-7.79%	-1.06%	0.82%	Gross
172	EMD BENCHMARK ⁵		3.08%	-11.74%	-11.63%	-8.19%	-3.77%	0.45%	1.76%	
173	Investec EMD BL	166,757,569	4.30%	-13.66%	-14.09%					Gross
174	PGIM EMD BL	288,142,275	3.61%	-17.44%	-17.21%					Gross
175	EMD Benchmark ⁵		3.08%	-11.74%	-11.63%					
176	Payden EMD HC	152,485,662	2.34%	-15.18%	-13.85%					Gross
177	JPM EMBI Global Diversified		2.25%	-12.76%	-11.44%					
178	Colchester EMD LC	158,299,141	3.72%	-13.80%	-14.16%					Gross
179	JPM GBI-EM Global Diversified		3.92%	-10.74%	-11.89%					
180	TIPS	388,557,564	2.70%	2.47%	4.65%	6.50%	8.95%	4.10%	3.01%	Gross
181	BB US TIPS		2.78%	2.37%	4.52%	6.76%	9.46%	4.21%	3.08%	
182	APF TIPS	246,935,351	2.64%	2.47%	4.75%	6.89%	9.56%	4.30%	3.17%	Gross
183	BB U.S. TIPS		2.78%	2.37%	4.52%	6.76%	9.46%	4.21%	3.08%	
184	Alaska Permanent Capital Mgmt	141,622,212	2.81%	2.47%	4.47%	6.17%	8.40%	3.84%	2.85%	Gross
185	AK Perm Cap Mgmt Custom ¹⁶		2.78%	2.37%	4.52%	6.20%	8.42%	3.80%	2.85%	
186	REITS	1,475,859,876	7.84%	-22.12%	-21.35%	-15.57%	-14.14%	-0.21%	3.46%	Gross
187	S&P GLOBAL REIT		7.71%	-24.16%	-23.55%	-18.53%	-17.14%	-2.33%	-0.08%	
188	AEW Global RE Securities	493,037,541	5.69%	-22.89%	-21.91%	-16.01%	-14.90%	0.38%	2.05%	Gross
189	SSGA REITS	982,822,335	9.00%	-23.12%	-22.50%	-16.89%	-15.31%	-0.98%		Gross
190	S&P GLOBAL REIT		7.71%	-24.16%	-23.55%	-18.53%	-17.14%	-2.33%		
191	LISTED INFRASTRUCTURE	721,149,020	8.09%	-18.11%	-15.97%	-10.58%	-7.47%	2.94%	4.52%	Gross
192	S&P GLOBAL LISTED INFRASTRUCTURE		9.41%	-23.86%	-22.66%	-18.58%	-15.55%	-1.79%	-0.35%	
193	Lazard Listed Infrastructure	207,838,989	6.79%	-14.35%	-10.80%	-3.91%	-1.46%	5.46%	8.42%	Gross
194	FTSE Core Developed Infra (Hedged)		6.07%	-13.39%	-9.88%	-3.67%	-2.08%	6.93%	6.63%	
195	Cohen & Steers Listed Infrastructure	160,040,670	5.63%	-13.40%	-10.87%	-4.72%	-1.52%	7.27%	5.86%	Gross
196	FTSE Core Developed Infra Custom		6.91%	-14.84%	-12.23%	-6.37%	-3.99%	5.68%	5.42%	
197	SSGA Listed Infrastructure	353,269,360	10.00%	-23.71%	-22.49%	-18.10%	-14.83%	-0.89%		Gross
198	S&P Global Listed Infrastructure		9.41%	-23.86%	-22.66%	-18.58%	-15.55%	-1.79%		
199	FIXED INCOME PLUS CASH	290,106,360	0.32%	0.63%	0.79%	1.90%	2.27%	2.02%		Gross
200	90 DAY T-BILLS		0.01%	0.45%	0.58%	1.61%	2.07%	1.81%		
201	APF Fixed Income Plus Cash	290,106,360	0.32%	0.63%	0.79%	1.90%	2.27%	2.02%		Gross
202	ABSOLUTE RETURN	3,804,874,980	N/A	-4.27%	-3.77%	-1.05%	-0.74%	2.54%	2.31%	Net
203	ABSOLUTE RETURN BENCHMARK ⁸		N/A	-6.15%	-6.56%	-3.76%	-3.42%	1.18%	3.09%	
204	ASSET ALLOCATION	1,965,441,172	0.71%	-3.25%	-2.83%	-1.21%	0.19%	1.53%	1.31%	Gross
205	ASSET ALLOCATION BENCHMARK ⁹		3.15%	-2.75%	-2.62%	1.16%	2.37%	4.60%	4.13%	
206	APF ALLOCATION CASH	1,155,563,698	0.05%	0.56%	0.70%					
207	APF OPERATING CASH	376,177,767	0.01%	0.20%	0.38%	1.32%	1.70%	1.64%	1.05%	Gross
208	90 DAY T-BILLS		0.01%	0.45%	0.58%	1.61%	2.07%	1.81%	1.19%	
209	RISK PARITY	433,699,707	4.31%	-10.89%	-9.49%	-5.26%	-0.68%			
210	HFR 12% Vol Institutional Index		3.58%	-11.17%	-11.04%	-6.13%	-3.06%			
211	PanAgora	106,832,903	4.45%	-7.45%	-6.10%	-2.26%	3.53%			Net
212	Bridgewater All Weather	196,945,647	4.40%	-9.87%	-8.06%	-3.66%	-0.35%			Net
213	BlackRock Market Adv	129,921,157	4.03%	-15.40%	-14.32%	-9.89%				Gross

		(A)	(B)	(C)	(D)	(E)	(F)	(G)		
	Market Values as of 4/30/2020*	Returns as of 4/30/2020								
		1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years		
214	PRIVATE EQUITY & SPECIAL OPPORTUNITIES ●	9,739,170,937	N/A	3.74%	3.74%	6.42%	11.09%	20.09%	14.77%	Net
215	CAMBRIDGE PRIVATE EQUITY ●			5.67%	5.67%	11.22%	16.59%	15.45%	12.83%	
216	PRIVATE EQUITY ●	6,222,155,605	N/A	4.78%	4.78%	14.96%	21.20%	21.60%	18.74%	Net
217	PRIVATE EQUITY CUSTOM BENCHMARK ⁶ ●			5.67%	5.67%	11.22%	16.59%	15.45%	10.44%	
218	Pathway Capital Mgmt - Direct PE	2,309,944,010	N/A	4.98%	4.98%	17.34%	22.94%	24.53%	21.15%	Net
219	HarbourVest Legacy	1,012,219,756	N/A	7.68%	7.68%	21.59%	28.54%	28.72%	24.18%	Net
220	Pathway Capital Mgmt - PE	2,593,579,224	N/A	3.95%	3.95%	12.29%	18.45%	19.38%	16.47%	Net
221	BlackRock Co-investment Funds	239,970,603	N/A	0.00%	0.00%	6.17%	17.70%	24.17%	11.37%	Net
222	Kelso Hammer LP	34,001,675	N/A	1.83%	1.83%	5.88%	10.05%	9.61%		Net
223	Ara Fund I	31,966,738	N/A							Net
224	SPECIAL OPPORTUNITIES ●	3,511,707,362	N/A	1.99%	1.99%	-5.97%	-3.26%	16.74%	8.78%	Net
225	CAMBRIDGE PRIVATE EQUITY ●			5.67%	5.67%	11.22%	16.59%	15.45%	12.83%	
226	IN-STATE EMERGING MANAGERS ●	5,307,970	N/A							Net
227	CAMBRIDGE PRIVATE EQUITY ●									
228	Barings AK	233,831	N/A							Net
229	McKinley AK	5,074,139	N/A							Net
230	REAL ESTATE ●	4,022,865,311	N/A	0.26%	0.26%	-0.01%	0.81%	2.05%	5.33%	Net
231	NCREIF TOTAL INDEX ●			1.55%	1.55%	4.54%	6.42%	6.70%	8.25%	
232	RE SEPARATE ACCTS & DIRECT ●	3,724,741,443	N/A	0.06%	0.06%	-0.45%	0.44%	1.95%	5.27%	Net
233	L&B Realty Advisors	1,844,897,713	N/A	0.70%	0.70%	2.88%	3.67%	3.65%	7.86%	Net
234	Sentinel Real Estate	500,854,671	N/A	-0.17%	-0.17%	3.57%	3.58%	-1.88%	2.70%	Net
235	LaSalle Investment Mgmt-United Kingdom	45,582,917	N/A	-34.18%	-34.18%	-66.88%	-67.56%	-32.82%	-29.95%	Net
236	Lincoln Industrial	170,121,567	N/A	6.31%	6.31%	10.66%	12.64%	14.02%	13.89%	Net
237	CB Richard Ellis - Europe	143,019,589	N/A	5.40%	5.40%	5.58%	4.95%	12.26%	13.81%	Net
238	CS Capital	438,402,398	N/A	6.97%	6.97%	15.84%	21.17%	15.98%		Net
239	Heitman Direct	581,862,588	N/A	-3.61%	-3.61%					Net
240	RE FUNDS & CO-INVEST ●	298,123,868	N/A	5.02%	5.02%	12.62%	6.94%			Net
241	HIG Europe RE II	17,610,007	N/A	19.16%	19.16%	35.66%	32.94%			Net
242	Heitman Capital	51,060,832	N/A	1.50%	1.50%	4.45%	6.21%			Net
243	Harbert Europe RE V	33,653,324	N/A	14.57%	14.57%	25.48%	2.09%			Net
244	Brookfield RE III	115,799,706	N/A	2.38%	2.38%					Net
245	KAROD	80,000,000	N/A							
246	INFRA. & PRIVATE INCOME ●	5,205,808,306	N/A	1.70%	1.70%	4.90%	8.72%	11.57%	11.61%	Net
247	INFRA. & INCOME OPPORTUNITIES ⁷ ●			3.13%	3.13%	8.72%	21.48%	10.64%	7.39%	
248	INFRASTRUCTURE ●	2,408,879,610	N/A	2.14%	2.14%	4.03%	8.40%	15.10%	16.71%	Net
249	FTSE DEVELOPED CORE INFRA. TRI ●			3.46%	3.46%	10.14%	26.44%	13.49%	8.12%	
250	GIP	3,411,762	N/A	3.20%	3.20%	6.02%	7.46%	25.99%	31.85%	Net
251	GIP II	340,473,495	N/A	-0.20%	-0.20%	1.50%	3.51%	13.17%	14.43%	Net
252	Gateway IFR	80,882,066	N/A	-0.56%	-0.56%	-21.92%	-27.76%	-5.99%	-1.10%	Net
253	G Sachs	229,414,632	N/A	6.39%	6.39%	14.72%	21.55%	25.48%	23.28%	Net
254	EQT II	15,261,235	N/A	-1.23%	-1.23%	11.60%	11.42%	14.99%	19.48%	Net
255	GIP II Co-Invest 2	93,779,947	N/A	-6.95%	-6.95%	-5.38%	-4.89%	15.78%	22.31%	Net
256	ACTIS Energy 3	40,346,278	N/A	0.11%	0.11%	3.27%	4.79%	4.38%	9.30%	Net
257	LS Power III	145,133,618	N/A	9.02%	9.02%	21.82%	21.19%	25.33%	22.26%	Net
258	North Haven	189,995,685	N/A	5.48%	5.48%	11.48%	15.92%	19.91%	13.61%	Net
259	GIP III	396,265,316	N/A	1.26%	1.26%	3.38%	14.14%	9.79%		Net
260	GIP III Canary	67,736,004	N/A	-6.41%	-6.41%	-11.48%	5.64%	21.57%		Net
261	CIM Fund II	104,598,788	N/A	11.41%	11.41%	20.26%	21.26%			Net
262	IFR ACTIS Energy 4	58,728,350	N/A	6.29%	6.29%	19.64%	24.60%			Net
263	IFR Meridiam III	1,208,218	N/A	N/A	N/A	N/A	N/A			Net
264	IFR GIP III Zenith	132,455,838	N/A	11.26%	11.26%	20.54%	31.39%			Net
265	IFR ENCAP FM IV	8,035,104	N/A	0.96%	0.96%	9.15%	24.96%			Net
266	IFR INFRARED V	36,463,745	N/A	-4.58%	-4.58%	2.62%	3.20%			Net
267	IFR NHIP II Bison	59,359,565	N/A	0.00%	0.00%	-0.01%	-0.04%			Net
268	IFR GIP III Stetson	10,846,541	N/A	-49.58%	-49.58%	-72.42%	-54.22%			Net
269	IFR EFM Moda	57,028,122	N/A	3.24%	3.24%	13.92%	43.33%			Net
270	North Haven India	11,195,332	N/A	-1.33%	-1.33%	-3.32%				Net
271	IFR LS Power IV	27,403,302	N/A	38.83%	38.83%					Net
272	IFR KKR Infrastructure III	71,162,428	N/A	-0.43%	-0.43%	0.82%				Net
273	IFR KKR Starlight II	46,836,463	N/A	0.25%	0.25%	-3.06%				Net
274	IFR Energy Spec VIII	8,283,742	N/A	-6.80%	-6.80%	-33.76%				Net
275	LS Power Bolt	24,424,074	N/A	0.00%	0.00%	4.40%				Net
276	IFR EQT IV	77,519,630	N/A	11.14%	11.14%					Net
277	IFR EQT IV Co-Invest	30,000,000	N/A							Net
278	IFR Peppertree VIII	18,450,000	N/A							
279	IFR NHIP III	22,180,331	N/A							
280	PRIVATE CREDIT ●	1,601,251,745	N/A	1.38%	1.38%	4.42%	6.13%	6.80%	6.26%	Net
281	BB US HIGH YIELD 2% ISSUER CAP ●			2.61%	2.61%	6.58%	14.32%	6.36%	6.14%	
282	Crestline Credit Opportunities Fund	298,208,801	N/A	0.79%	0.79%	3.27%	1.33%	4.10%	4.21%	Net
283	Oaktree III Mezzanine Debt	8,611,342	N/A	6.06%	6.06%	4.36%	20.96%	17.61%	14.83%	Net
284	Audax III Mezzanine Debt	42,426,122	N/A	7.71%	7.71%	29.91%	35.09%	14.61%	13.48%	Net
285	Oaktree Opportunities Fund VIII	8,593,766	N/A	6.73%	6.73%	14.97%	9.66%	11.46%	5.36%	Net
286	Crestline Opps Fund	190,003,858	N/A	-1.56%	-1.56%	4.60%	6.06%	10.27%		Net
287	Pathway Capital Mgmt - Direct Private Credit	625,778,065	N/A	1.44%	1.44%	5.30%	8.01%	8.54%		Net
288	Audax IV Mezzanine Debt	16,489,541	N/A	3.26%	3.26%	8.03%	10.10%	9.90%		Net
289	Aurelius II	181,931,404	N/A	2.70%	2.70%	2.59%	8.91%			Net
290	Crestline SLF II	41,275,401	N/A	3.51%	3.51%	10.78%	16.72%			Net
291	King Street Capital	175,513,576	N/A	1.32%	1.32%	-0.50%	2.15%			Net
292	CL Opps Fund IV	12,419,869	N/A							Net
293	INCOME OPPORTUNITIES ●	1,195,676,950	N/A	1.23%	1.23%	7.47%	12.85%	5.20%	7.02%	Net
294	INFRA. & INCOME OPPORTUNITIES ⁷ ●			3.13%	3.13%	8.72%	21.48%	10.64%	7.39%	
295	American Homes 4 Rent II	153,502,751	N/A	-1.79%	-1.79%	-0.62%	2.06%	0.31%	4.01%	Net
296	Twin Creeks Timber	79,492,620	N/A	0.00%	0.00%	1.16%	1.35%	-2.07%		Net
297	INC Athyrium III	14,876,666	N/A	2.47%	2.47%	4.75%	6.85%			Net
298	Generate Capital	33,948,872	N/A	0.00%	0.00%	32.21%	40.63%			Net
299	INC Broadriver III	20,284,639	N/A	-7.02%	-7.02%	-10.18%	-10.80%			Net
300	Generate Capital II	9,598,531	N/A	0.00%	0.00%	32.69%	35.29%			Net
301	APF ADAC	814,419,143	N/A	2.49%	2.49%	7.03%	13.70%			Net
302	Activate Capital	36,120,042	N/A	-1.55%	-1.55%	-5.06%	7.45%			Net
303	INC OCM Power Opps V	15,736,303	N/A	-2.20%	-2.20%	-9.29%				Net
304	TSSP Agriculture	2,671,425	N/A							
305	Sprott Lending II	15,025,958	N/A							

NOTES and CURRENT BENCHMARK REFERENCES

(Benchmarks applicable in prior periods can be found in the Investment Policy and prior Monthly Performance Reports)

* Market Values		Reported market values represent total fund holdings consistent with Financial Statements	
		As of April 30, 2020, total fund holdings consist of:	
		99.15%	Alaska Permanent Fund
		0.85%	Alaska Mental Health Trust
• Lagged Returns		For investments within the following asset classes, returns are lagged one quarter. Composites that incorporate these investments and benchmarks associated are also lagged one quarter.	
		Real Estate	
		Private Equity and Special Opportunities	
		Infrastructure and Private Income	
1 Passive Benchmark 09/30/2016 to date	60%	MSCI All-Country World Index IMI	
	20%	BB Global Aggregate Index	
	10%	FTSE EPRA/NAREIT Rental Index	
	10%	US TIPs	
2 Performance Benchmark 06/30/2017 to date	39%	MSCI ACWI IMI	
	12%	Cambridge Private Equity (1 Q Lagged)	
	11%	NCREIF Total Index (1 Q Lagged)	
	6%	BB US Corporate	
	6%	BB Aggregate	
	5%	HFRI Total HFOF Universe	
	4%	FTSE Developed Core Infrastructure TRI (1 Q Lagged)	
	3%	BB US High Yield 2% Issuer Cap (1 Q Lagged)	
	3%	90 Day T-Bills	
	2%	S&P Global REIT	
	2%	BB US High Yield 2% Issuer Cap	
	2%	BB Global Treasury ex-US	
	1%	S&P Global Listed Infrastructure	
	1%	BC US TIPs	
	0.5%	JPM EMBI Global Diversified	
	0.5%	JPM GBI-EM Global Diversified TRI	
3 Total Fund Return Objective	100%	Consumer Price Index (All Urban Consumers, U.S. City Average, All Items, Unadjusted Index) plus 5%	
4 Public Income Benchmark 09/30/2016 to date	25%	BB Aggregate	
	25%	BB US Corporate	
	10%	S&P Global REIT	
	10%	BB US High Yield 2% Issuer Cap	
	10%	BB Global Treasury ex-US	
	5%	S&P Global Listed Infrastructure	
	5%	BB US TIPs	
	5%	90 Day T-Bills	
	2.5%	JPM EMBI Global Diversified	
	2.5%	JPM GBI-EM Global Diversified	
5 EMD Benchmark 09/30/2016 to date	50%	JPM EMBI Global Diversified	
	50%	JPM GBI-EM Global Diversified	
6 Private Equity Custom Benchmark 09/30/2016 to date	100%	Cambridge Private Equity (1 Q Lagged)	
7 Infra. & Income Opportunities Benchmark 09/30/2016 to date	60%	FTSE Developed Core Infrastructure TRI (1 Q Lagged)	
	40%	BB US High Yield 2% Issuer Cap (1 Q Lagged)	
8 Absolute Return Benchmark 09/30/2016 to date	100%	HFRI Total HFOF Universe	
9 Asset Allocation Benchmark 06/30/2018 to date	60%	Performance Benchmark	
	40%	90 Day T-Bills	
10 Asset Allocation Overlay Benchmark 06/30/2018 to date	65%	MSCI ACWI IMI Net Unhedged	
	35%	BB US Aggregate	
11 Wells Capital Custom 11/27/2019 to date	100%	MSCI China All Shares Net Total Return USD Index	
12 Int'l Passive/Quasi Passive Custom	100%	MSCI World ex US	
13 MSCI Custom Benchmark 4/30/2016 to date	65%	MSCI World ex US Value TRI	
14 HY Fixed Income Custom Blend 7/31/2016 to date	100%	BB US High Yield 2% Issuer Cap Index	
15 Cap Guard Custom Blend 3/31/2017 to date	100%	BB US High Yield 2% Issuer Cap Index	
16 AK Perm Cap Mgmt Custom 1/1/2020 to date	100%	BB US TIPs	