

Board of Trustees - Monthly Performance Report - December 31, 2019

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

	Market Values as of 12/31/2019*	(A)	(B)	(C)	(D)	(E)	(F)	(G)	Return Type
		1 Month	3 Months	FYTD (6 months)	CYTD (12 months)	1 Year (12 Months)	3 Years (36 Months)	5 Years (60 months)	
Returns as of 12/31/2019									
1 TOTAL FUND ●	68,361,097,083	1.71%	4.07%	5.38%	15.71%	15.71%	9.95%	8.31%	
2 TOTAL FUND w/o FX Overlay ●	68,359,274,558	1.71%	4.07%	5.38%	15.70%	15.70%	9.96%	8.31%	
3 Passive Index Benchmark ¹ ●		2.32%	5.71%	6.57%	20.40%	20.40%	9.46%	6.47%	
4 Performance Benchmark ² ●		1.78%	4.30%	5.81%	16.57%	16.57%	9.60%	7.09%	
5 Total Fund Return Objective ³		0.32%	1.31%	2.79%	7.29%	7.29%	7.10%	6.82%	
PUBLIC EQUITY									
6 PUBLIC EQUITY	25,695,512,563	3.86%	9.66%	9.49%	26.53%	26.53%	12.13%	8.32%	Gross
7 PUBLIC EQUITY w/o FX Overlay	25,693,689,857	3.86%	9.66%	9.48%	26.52%	26.52%	12.15%	8.33%	Gross
8 MSCI ACWI IMI		3.55%	9.05%	8.85%	26.35%	26.35%	12.09%	8.34%	
9 INTERNATIONAL EQUITY	7,409,653,056	5.15%	10.68%	8.15%	22.09%	22.09%	10.63%	6.17%	Gross
10 MSCI ACWI IMI EX-US		4.41%	9.20%	7.33%	21.63%	21.63%	9.84%	5.71%	
11 GLOBAL EQUITY	10,293,655,023	3.60%	8.87%	9.88%	26.90%	26.90%	12.09%	8.48%	Gross
12 MSCI ACWI IMI		3.55%	9.05%	8.85%	26.35%	26.35%	12.09%	8.34%	
13 DOMESTIC EQUITY	7,989,993,074	3.02%	9.69%	10.17%	30.04%	30.04%	12.88%	10.37%	Gross
14 RUSSELL 3000 INDEX		2.89%	9.10%	10.37%	31.02%	31.02%	14.57%	11.24%	
FIXED INCOME PLUS									
15 FIXED INCOME PLUS	16,186,245,577	0.73%	1.35%	3.89%	13.70%	13.70%	5.94%		Gross
16 PUBLIC INCOME BENCHMARK ⁴		0.58%	1.02%	3.53%	12.79%	12.79%	5.48%		
17 US FIXED INCOME AGGREGATE	4,311,962,834	-0.01%	0.38%	2.83%	9.66%	9.66%	4.27%	3.31%	Gross
18 BB AGGREGATE		-0.07%	0.18%	2.45%	8.72%	8.72%	4.03%	3.05%	
19 US INVESTMENT GRADE CORPORATE	4,361,007,195	0.46%	1.53%	4.55%	15.73%	15.73%	6.31%	5.07%	Gross
20 BB CORPORATE		0.32%	1.18%	4.27%	14.54%	14.54%	5.92%	4.60%	
21 NON US FIXED INCOME	1,243,626,038	-0.50%	-1.35%	1.53%	7.39%	7.39%	4.26%	3.70%	Gross
22 BB GLOBAL TREASURY EX-US		-0.43%	-1.44%	1.65%	7.40%	7.40%	4.31%	3.90%	
23 GLOBAL HIGH YIELD	1,644,214,869	1.88%	2.67%	3.46%	13.56%	13.56%	5.84%	5.55%	Gross
24 BB US HIGH YIELD 2% ISSUER CAP		2.00%	2.61%	3.98%	14.32%	14.32%	6.36%	6.14%	
25 EMERGING MARKET DEBT	1,081,231,826	3.74%	4.32%	3.51%	13.89%	13.89%	6.55%	4.37%	Gross
26 EMD BENCHMARK ⁵		3.07%	3.51%	3.89%	14.31%	14.31%	6.92%	4.57%	
27 TIPS	371,300,449	0.33%	0.70%	1.77%	7.55%	7.55%	3.17%	2.52%	Gross
28 BB US TIPS		0.38%	0.79%	2.15%	8.43%	8.43%	3.32%	2.62%	
29 REITS	1,658,672,664	0.09%	1.38%	7.36%	24.14%	24.14%	8.94%	8.64%	Gross
30 S&P GLOBAL REIT		-0.27%	0.80%	6.57%	23.12%	23.12%	7.55%	5.55%	
31 LISTED INFRASTRUCTURE	825,947,600	3.87%	4.29%	6.41%	26.25%	26.25%	12.86%	9.31%	Gross
32 S&P GLOBAL LISTED INFRASTRUCTURE		4.24%	4.90%	5.27%	25.75%	25.75%	10.30%	5.61%	
33 FIXED INCOME PLUS CASH	688,248,329	0.15%	0.49%	1.10%	2.86%	2.86%			Gross
34 90 DAY T-BILLS		0.14%	0.46%	1.03%	2.28%	2.28%			
PRIVATE EQUITY & SPECIAL OPPORTUNITIES									
35 PRIVATE EQUITY & SPECIAL OPPORTUNITIES ●	9,228,891,060	N/A	-1.36%	2.83%	8.98%	8.98%	19.81%	21.83%	
36 CAMBRIDGE PRIVATE EQUITY ●		N/A	0.90%	5.25%	9.50%	9.50%	14.21%	12.36%	
37 PRIVATE EQUITY ●	5,797,599,605	N/A	1.93%	10.15%	17.67%	17.67%	22.81%	19.54%	
38 PRIVATE EQUITY CUSTOM BENCHMARK ⁶ ●		N/A	0.90%	5.25%	9.50%	9.50%	14.21%	9.58%	
39 SPECIAL OPPORTUNITIES ●	3,431,231,754	N/A	-6.52%	-7.80%	-3.43%	-3.43%	15.22%	35.22%	
40 CAMBRIDGE PRIVATE EQUITY ●		N/A	0.90%	5.25%	9.50%	9.50%	14.21%	12.36%	
REAL ESTATE									
41 REAL ESTATE ●	4,000,475,809	N/A	0.64%	0.02%	0.78%	0.78%	2.76%	6.54%	Gross
42 NCREIF TOTAL INDEX ●		N/A	1.41%	2.94%	6.24%	6.24%	6.76%	8.57%	
43 RE SEPARATE ACCTS & DIRECT ●	3,832,311,319	N/A	0.47%	-0.29%	0.47%	0.47%	2.64%	6.46%	Gross
44 RE FUNDS & CO-INVEST ●	168,164,490	N/A	5.62%	9.68%					Gross
INFRA. & PRIVATE INCOME									
45 INFRA. & PRIVATE INCOME ●	5,353,250,189	N/A	2.06%	3.14%	7.14%	7.14%	11.95%	11.63%	
46 INFRA. & INCOME OPPORTUNITIES ⁷ ●			2.40%	5.42%	12.79%	12.79%	9.34%	7.30%	
47 INFRASTRUCTURE ●	2,493,737,178	N/A	1.50%	1.85%	7.41%	7.41%	15.12%	16.48%	
48 FTSE DEVELOPED CORE INFRA. TRI ●		N/A	3.10%	6.46%	17.17%	17.17%	11.48%	8.48%	
49 PRIVATE CREDIT ●	1,541,866,596	N/A	1.13%	3.00%	4.50%	4.50%	7.59%	6.35%	
50 BB US HIGH YIELD 2% ISSUER CAP ●		N/A	1.33%	3.87%	6.35%	6.35%	6.07%	5.38%	
51 INCOME OPPORTUNITIES ●	1,317,646,415	N/A	4.42%	6.18%	9.35%	9.35%	5.11%		
ABSOLUTE RETURN									
52 ABSOLUTE RETURN	4,359,107,704	N/A	2.24%	3.07%	5.93%	5.93%	5.02%	3.41%	Net
53 ABSOLUTE RETURN BENCHMARK ⁸		N/A	3.50%	2.93%	10.38%	10.38%	4.52%	4.91%	
ASSET ALLOCATION									
54 ASSET ALLOCATION	3,537,614,361	0.38%	0.83%	1.66%	9.03%	9.03%	2.82%	2.53%	Gross
55 ASSET ALLOCATION BENCHMARK ⁹		1.12%	2.75%	3.88%	10.68%	10.68%	6.70%	5.33%	
56 APF ALLOCATION CASH	2,372,645,445	0.14%	0.47%	1.03%					Gross
57 APF OPERATING CASH	439,715,145	0.14%	0.42%	0.93%	2.06%	2.06%	1.56%	0.98%	Gross
58 90 DAY T-BILLS		0.14%	0.46%	1.03%	2.28%	2.28%	1.67%	1.07%	
59 ASSET ALLOCATION OVERLAY	59,204,550	2.07%	5.39%	5.65%	22.27%	22.27%			Gross
60 Asset Allocation Overlay Benchmark ¹⁰		2.28%	5.89%	6.64%	20.16%	20.16%			
61 RISK PARITY	666,049,222	1.33%	1.90%	4.68%					Net
62 HFR 12% Vol Institutional Index		2.64%	4.24%	5.51%					

* Reported market values represent total fund holdings, which consists of 99.17% APF and 0.83% AMH, and are consistent with the timing of the APF and AMH Financial Statements.

● 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.

	Market Values as of 12/31/2019*	(A)	(B)	(C)	(D)	(E)	(F)	(G)		
		1 Month	3 Months	FYTD	CYTD	1 Year	3 Years	5 Years		
63	PUBLIC EQUITY	25,695,512,563	3.86%	9.66%	9.49%	26.53%	26.53%	12.13%	8.32%	Gross
64	PUBLIC EQUITY w/o FX Overlay	25,693,689,857	3.86%	9.66%	9.48%	26.52%	26.52%	12.15%	8.33%	Gross
65	MSCI ACWI IMI		3.55%	9.05%	8.85%	26.35%	26.35%	12.09%	8.34%	
66	INTERNATIONAL EQUITY	7,409,653,056	5.15%	10.68%	8.15%	22.09%	22.09%	10.63%	6.17%	Gross
67	MSCI ACWI IMI EX-US		4.41%	9.20%	7.33%	21.63%	21.63%	9.84%	5.71%	
68	Macquarie Emerging Markets	221,881,855	7.92%	16.33%	15.38%	27.48%	27.48%	17.26%	9.03%	Gross
69	JP Morgan Emerging Markets	451,713,473	6.95%	11.51%	7.59%	24.04%	24.04%	15.56%	9.17%	Gross
70	Mondrian Investment Partners	539,097,504	6.72%	13.21%	7.89%	19.40%	19.40%	9.75%	4.23%	Gross
71	SSGA MSCI Emerging Markets	124,161,957	7.38%	11.97%	7.41%	18.78%	18.78%	11.51%	5.66%	Gross
72	William Blair Emerging Markets	399,409,169	6.02%	10.91%	10.50%	30.22%	30.22%	15.89%	7.07%	Gross
73	MEASA Fund	78,845,914	0.45%	3.03%	-2.03%	-0.71%	-0.71%			Net
74	MSCI Emerging Markets Index		7.46%	11.84%	7.09%	18.44%	18.44%			
75	DFA Emerging Markets Value	489,539,176	6.65%	10.23%	3.05%	10.59%	10.59%	9.22%		Gross
76	MSCI Emerging Markets Value Index		7.04%	9.94%	2.82%	11.96%	11.96%	8.58%		
77	DFA Emerging Markets Small Cap	152,685,736	6.83%	10.19%	5.29%	15.67%	15.67%	8.36%		Gross
78	MSCI Emerging Markets Small Cap Index		6.11%	9.52%	4.50%	11.51%	11.51%	6.71%		
79	Trustbridge Emerging Markets	255,833,082	7.27%	11.90%	7.23%	23.69%	23.69%	19.57%		Gross
80	MSCI China Index ND		8.33%	14.71%	9.29%	23.46%	23.46%	15.56%		
81	Wells Capital	176,293,933	8.18%	12.98%	9.51%	26.96%	26.96%			Gross
82	Mellan MSCI World ex-USA	141,486,999	3.15%	7.22%	6.30%	21.28%	21.28%	9.24%	5.50%	Gross
83	DFA International Large Cap	521,841,407	3.21%	8.09%	6.74%	20.53%	20.53%	8.91%	5.47%	Gross
84	Int'l Passive/Quasi-Passive Custom ¹¹		3.19%	7.86%	6.85%	22.49%	22.49%	9.34%	5.42%	
85	DFA International Small Cap Value	416,105,462	5.59%	12.23%	11.63%	21.77%	21.77%	6.56%	6.80%	Gross
86	MSCI World ex-USA Small Cap Value Index		4.73%	11.19%	11.48%	22.83%	22.83%	8.65%	6.93%	
87	DFA International Small Company	384,770,520	4.93%	12.12%	10.99%	25.12%	25.12%	9.98%	8.58%	Gross
88	SSGA International Developed Small Cap	439,964,874	4.53%	11.27%	10.99%	25.42%	25.42%	10.65%	8.41%	Gross
89	MSCI World ex-USA Small Cap Index		4.63%	11.40%	11.10%	25.41%	25.41%	10.42%	8.17%	
90	Acadian Asset Mgmt	429,913,665	2.87%	5.30%	2.03%	11.09%	11.09%	9.19%	6.77%	Gross
91	MSCI Custom Benchmark ¹²		3.60%	7.56%	6.02%	17.02%	17.02%	6.36%	4.49%	
92	LSV International Large Cap	592,043,435	4.27%	10.30%	8.44%	20.01%	20.01%	8.91%	5.46%	Gross
93	Schroders International Large Cap	639,319,379	4.45%	10.37%	7.62%	19.67%	19.67%	8.23%	6.21%	Gross
94	MSCI All Country World ex-USA Value Index		4.52%	8.21%	5.17%	15.72%	15.72%	6.89%	3.65%	
95	Johnston International Large Cap	461,608,213	3.85%	13.85%	11.96%	34.40%	34.40%	17.42%	11.13%	Gross
96	JP Morgan International Large Cap	492,960,233	4.32%	9.72%	9.03%	32.83%	32.83%	13.62%	8.73%	Gross
97	MSCI World ex-USA Growth Index		2.78%	8.09%	7.60%	27.92%	27.92%	12.34%	7.18%	
98	GLOBAL EQUITY	10,293,655,023	3.60%	8.87%	9.88%	26.90%	26.90%	12.09%	8.48%	Gross
99	MSCI ACWI IMI		3.55%	9.05%	8.85%	26.35%	26.35%	12.09%	8.34%	
100	AQR Global Equity	1,274,087,102	2.83%	8.73%	8.08%	22.80%	22.80%	10.08%	8.02%	Gross
101	SSGA MSCI World	131,073,835	3.04%	8.67%	8.96%	27.73%	27.73%	12.89%	9.13%	Gross
102	CDAM Global Equity	440,520,029	2.55%	7.68%	7.51%	29.45%	29.45%			Gross
103	MSCI World Index		3.00%	8.56%	9.14%	27.67%	27.67%	12.57%	8.74%	
104	SSGA Russell Fundamental Developed Lrg Co	1,522,756,058	3.24%	8.35%	8.65%	23.98%	23.98%	10.32%	7.72%	Gross
105	Russell Fundamental Dvlpd Lrg Co Index		3.30%	8.48%	8.84%	24.22%	24.22%	10.45%	7.89%	
106	Lazard Asset Management	1,040,098,248	3.43%	7.62%	8.01%	26.69%	26.69%	11.61%	8.19%	Gross
107	McKinley Capital Management	323,482,378	4.15%	10.65%	9.63%	32.99%	32.99%	14.23%	9.21%	Gross
108	RBA Global Equity	345,274,411	3.13%	8.06%	9.49%	26.24%	26.24%			Gross
109	WCM Global Equity	425,254,559	3.83%	7.15%	5.82%	35.45%	35.45%			Gross
110	MSCI All-Country World Index		3.52%	8.95%	8.92%	26.60%	26.60%	12.44%	8.41%	
111	APF Tactical Tilts	2,392,017,745	5.04%	9.62%	13.10%	28.92%	28.92%	11.59%	4.81%	Gross
112	SSGA MSCI ACWI IMI	110,025,105	3.52%	9.08%	8.46%	26.30%	26.30%	12.27%		Gross
113	APF Global Equities	114,567,377	3.68%	7.40%	7.70%	22.98%	22.98%			Gross
114	Arrowstreet Global Equity	1,071,258,590	3.48%	9.17%	9.07%	25.34%	25.34%			Gross
115	Longview Global Equity	1,103,239,586	2.58%	10.38%	12.56%	26.36%	26.36%			Gross
116	MSCI All-Country World IMI		3.55%	9.05%	8.85%	26.35%	26.35%	12.09%		
117	DOMESTIC EQUITY	7,989,993,074	3.02%	9.69%	10.17%	30.04%	30.04%	12.88%	10.37%	Gross
118	RUSSELL 3000 INDEX		2.89%	9.10%	10.37%	31.02%	31.02%	14.57%	11.24%	
119	Mellan S&P 500	77,372,705	3.00%	9.67%	11.59%	33.05%	33.05%	15.73%	11.91%	Gross
120	S&P 500 Index		3.02%	9.07%	10.92%	31.49%	31.49%	15.27%	11.70%	
121	Mellan FTSE RAFI US Large Cap	808,587,137	3.00%	8.33%	10.15%	27.94%	27.94%	10.96%	9.39%	Gross
122	FTSE RAFI US 1000 Index		3.00%	8.33%	10.16%	27.98%	27.98%	10.96%	9.47%	
123	AGI - Large Cap	713,322,431	3.52%	11.58%	12.37%	38.17%	38.17%	18.47%	13.57%	Gross
124	SSGA Large Cap	297,159,969	3.20%	13.82%	13.53%	38.62%	38.62%	20.75%	13.64%	Gross
125	DSM - Large Cap	832,239,280	4.06%	12.15%	10.76%	37.55%	37.55%	22.73%	14.60%	Gross
126	CastleArk - Large Cap	63,328,725	3.22%	10.62%	9.56%	31.42%	31.42%	18.88%	13.71%	Gross
127	APF SPDR Yield	445,786,090	3.25%	8.57%	9.69%	26.94%	26.94%	10.26%		Gross
128	APF SPDR Momentum	340,697,905	1.77%	6.42%	7.71%	26.24%	26.24%	10.23%		Gross
129	APF SPDR Low Vol	496,390,321	1.74%	6.31%	8.65%	30.36%	30.36%	13.40%		Gross
130	Russell 1000 Growth Index		3.02%	10.62%	12.27%	36.39%	36.39%	20.49%	14.63%	
131	Russell 1000 Index		2.89%	9.04%	10.59%	31.43%	31.43%	15.05%	11.48%	
132	Lyrical - Large Cap	909,670,384	2.94%	11.00%	9.91%	25.60%	25.60%	5.56%	5.32%	Gross
133	SKBA - Large Cap	405,595,531	2.91%	7.83%	9.43%	25.00%	25.00%	10.29%	9.16%	Gross
134	LSV - Large Cap Value	1,049,908,276	2.38%	9.70%	11.49%	27.01%	27.01%	9.28%		Gross
135	APF Domestic Equity	211,774,440	4.59%	11.42%						Gross
136	Russell 1000 Value Index		2.75%	7.41%	8.86%	26.54%	26.54%	9.68%	8.29%	
137	Mellan S&P 400	103,119,760	2.87%	7.13%	7.04%	26.26%	26.26%	9.05%	8.92%	Gross
138	S&P 400 Index		2.81%	7.06%	6.97%	26.20%	26.20%	9.26%	9.03%	
139	Jennison Associates LLC	308,787,561	3.28%	9.30%	6.03%	26.70%	26.70%	10.60%	8.07%	Gross
140	Russell 2000 Index		2.88%	9.94%	7.30%	25.52%	25.52%	8.59%	8.23%	
141	RBC Asset Mgmt	136,579,479	1.96%	8.66%	6.43%	30.61%	30.61%	11.82%	10.58%	Gross
142	Eagle Asset Mgmt	136,316,319	2.41%	9.44%	4.75%	25.34%	25.34%	15.60%	11.47%	Gross
143	Russell 2000 Growth Index		2.29%	11.39%	6.75%	28.48%	28.48%	12.49%	9.34%	
144	Russell 2000 Index		2.88%	9.94%	7.30%	25.52%	25.52%	8.59%	8.23%	
145	T Rowe Price	203,024,400	3.01%	7.18%	7.61%	26.88%	26.88%	8.02%	9.94%	Gross
146	Pzena Investment Mgmt	264,123,460	5.00%	15.13%	10.16%	26.30%	26.30%	4.89%	8.74%	Gross
147	Russell 2000 Value Index		3.50%	8.49%	7.87%	22.39%	22.39%	4.77%	6.99%	
148	Russell 2000 Index		2.88%	9.94%	7.30%	25.52%	25.52%	8.59%	8.23%	
149	AGI Structured Alpha	186,208,901	3.07%	9.92%	12.31%	36.38%	36.38%	16.69%		Net
150	S&P 500 Index		3.02%	9.07%	10.92%	31.49%	31.49%	15.27%		

	Market Values as of 12/31/2019*	(A)	(B)	(C)	(D)	(E)	(F)	(G)		
		1 Month	3 Months	FYTD	CYTD	1 Year	3 Years	5 Years		
151	FIXED INCOME PLUS	16,186,245,577	0.73%	1.35%	3.89%	13.70%	13.70%	5.94%	Gross	
152	PUBLIC INCOME BENCHMARK ⁴		0.58%	1.02%	3.53%	12.79%	12.79%	5.48%		
153	US FIXED INCOME AGGREGATE	4,311,962,834	-0.01%	0.38%	2.83%	9.66%	9.66%	4.27%	3.31%	Gross
154	BB AGGREGATE		-0.07%	0.18%	2.45%	8.72%	8.72%	4.03%	3.05%	
155	APF Fixed Income - Aggregate	4,311,962,834	-0.01%	0.38%	2.83%	9.66%	9.66%	4.27%	3.31%	Gross
156	US INVESTMENT GRADE CORPORATE	4,361,007,195	0.46%	1.53%	4.55%	15.73%	15.73%	6.31%	5.07%	Gross
157	BB CORPORATE		0.32%	1.18%	4.27%	14.54%	14.54%	5.92%	4.60%	
158	APF Corporate Bonds	4,361,007,195	0.46%	1.53%	4.55%	15.73%	15.73%	6.31%	5.07%	Gross
159	NON US FIXED INCOME	1,243,626,038	-0.50%	-1.35%	1.53%	7.39%	7.39%	4.26%	3.70%	Gross
160	BB GLOBAL TREASURY EX-US		-0.43%	-1.44%	1.65%	7.40%	7.40%	4.31%	3.90%	
161	Rogge Global Partners	297,092,469	-0.48%	-1.40%	1.55%	7.63%	7.63%	4.37%	3.84%	Gross
162	APF Global Government Bonds	946,533,569	-0.51%	-1.33%	1.54%	7.33%	7.33%	4.38%	3.65%	Gross
163	GLOBAL HIGH YIELD	1,644,214,869	1.88%	2.67%	3.46%	13.56%	13.56%	5.84%	5.55%	Gross
164	BB US HIGH YIELD 2% ISSUER CAP		2.00%	2.61%	3.98%	14.32%	14.32%	6.36%	6.14%	
165	Oaktree High Yield	650,700,573	1.14%	2.77%	4.40%	14.62%	14.62%	5.83%	5.29%	Gross
166	APF High Yield	554,733,634	1.97%	2.38%	3.77%	14.03%	14.03%			Gross
167	BB US High Yield 2% Issuer Cap Index		2.00%	2.61%	3.98%	14.32%	14.32%	6.36%	6.14%	
168	HY Fixed Income Custom Blend ¹³		2.00%	2.61%	3.98%	14.32%	14.32%	6.36%	6.26%	
169	Capital Guardian High Yield	438,780,661	2.89%	2.90%	1.60%	11.32%	11.32%	5.49%	6.15%	Gross
170	Cap Guard Custom Blend ¹⁴		2.00%	2.61%	3.98%	14.32%	14.32%	6.37%	6.21%	
171	EMERGING MARKET DEBT	1,081,231,826	3.74%	4.32%	3.51%	13.89%	13.89%	6.55%	4.37%	Gross
172	EMD BENCHMARK ⁵		3.07%	3.51%	3.89%	14.31%	14.31%	6.92%	4.57%	
173	Investec EMD BL	245,265,871	3.89%	4.06%						Gross
174	PGIM EMD BL	420,741,518	3.83%	4.30%						Gross
175	EMD Benchmark ⁵		3.07%	3.51%						
176	Payden EMD HC	205,689,549	2.53%	2.91%						Gross
177	JPM EMBI Global Diversified		2.01%	1.81%						
178	Colchester EMD LC	209,522,551	4.61%	6.11%						Gross
179	JPM GBI-EM Global Diversified		4.13%	5.20%						
180	TIPS	371,300,449	0.33%	0.70%	1.77%	7.55%	7.55%	3.17%	2.52%	Gross
181	BB US TIPS		0.38%	0.79%	2.15%	8.43%	8.43%	3.32%	2.62%	
182	APF TIPS	235,743,976	0.10%	0.56%	2.04%	8.33%	8.33%	3.35%	2.66%	Gross
183	BB U.S. TIPS		0.38%	0.79%	2.15%	8.43%	8.43%	3.32%	2.62%	
184	Alaska Permanent Capital Mgmt	135,556,473	0.68%	0.97%	1.62%	6.92%	6.92%	2.85%	2.41%	Gross
185	BB U.S. TIPS 1-10 Year Index		0.70%	1.00%	1.61%	6.85%	6.85%	2.79%	2.36%	
186	REITS	1,658,672,664	0.09%	1.38%	7.36%	24.14%	24.14%	8.94%	8.64%	Gross
187	S&P GLOBAL REIT		-0.27%	0.80%	6.57%	23.12%	23.12%	7.55%	5.55%	
188	AEW Global RE Securities	631,355,275	0.16%	1.61%	7.55%	23.68%	23.68%	9.65%	7.65%	Gross
189	SSGA REITS	1,027,317,389	0.05%	1.24%	7.25%	24.38%	24.38%			Gross
190	S&P GLOBAL REIT		-0.27%	0.80%	6.57%	23.12%	23.12%			
191	LISTED INFRASTRUCTURE	825,947,600	3.87%	4.29%	6.41%	26.25%	26.25%	12.86%	9.31%	Gross
192	S&P GLOBAL LISTED INFRASTRUCTURE		4.24%	4.90%	5.27%	25.75%	25.75%	10.30%	5.61%	
193	Lazard Listed Infrastructure	233,012,451	3.03%	3.67%	7.72%	24.52%	24.52%	14.61%	13.13%	Gross
194	FTSE Core Developed Infra (Hedged)		3.21%	2.80%	6.89%	26.34%	26.34%	13.43%	9.42%	
195	Cohen & Steers Listed Infrastructure	179,551,848	4.01%	3.37%	6.90%	27.54%	27.54%	14.97%	8.36%	Gross
196	FTSE Core Developed Infra Custom		4.00%	3.75%	6.67%	26.20%	26.20%	13.45%	8.08%	
197	SSGA Listed Infrastructure	413,383,301	4.28%	5.07%	5.67%	26.74%	26.74%			Gross
198	S&P Global Listed Infrastructure		4.24%	4.90%	5.27%	25.75%	25.75%			
199	FIXED INCOME PLUS CASH	688,248,329	0.15%	0.49%	1.10%	2.86%	2.86%			Gross
200	90 DAY T-BILLS		0.14%	0.46%	1.03%	2.28%	2.28%			
201	APF Fixed Income Plus Cash	688,248,329	0.15%	0.49%	1.10%	2.86%	2.86%			Gross
202	ABSOLUTE RETURN	4,359,107,704	N/A	2.24%	3.07%	5.93%	5.93%	5.02%	3.41%	Net
203	ABSOLUTE RETURN BENCHMARK ⁸		N/A	3.50%	2.93%	10.38%	10.38%	4.52%	4.91%	
204	ASSET ALLOCATION	3,537,614,361	0.38%	0.83%	1.66%	9.03%	9.03%	2.82%	2.53%	Gross
205	ASSET ALLOCATION BENCHMARK ⁹		1.12%	2.75%	3.88%	10.68%	10.68%	6.70%	5.33%	
206	APF ALLOCATION CASH	2,372,645,445	0.14%	0.47%	1.03%					
207	APF OPERATING CASH	439,715,145	0.14%	0.42%	0.93%	2.06%	2.06%	1.56%	0.98%	Gross
208	90 DAY T-BILLS		0.14%	0.46%	1.03%	2.28%	2.28%	1.67%	1.07%	
209	ASSET ALLOCATION OVERLAY	59,204,550	2.07%	5.39%	5.65%	22.27%	22.27%			
210	Asset Allocation Overlay Benchmark ¹⁰		2.28%	5.89%	6.64%	20.16%	20.16%			
211	RISK PARITY	666,049,222	1.33%	1.90%	4.68%					Net
212	HFR 12% Vol Institutional Index		2.64%	4.24%	5.51%					
213	PanAgora	229,181,370	0.39%	-0.22%	4.10%					Net
214	Bridgewater All Weather	218,874,013	2.18%	2.99%	4.78%					Net
215	BlackRock Market Adv	217,993,839	1.45%	3.07%	5.18%					Net

		(A)	(B)	(C)	(D)	(E)	(F)	(G)		
	Market Values as of 12/31/2019*	1 Month	3 Months	FYTD	CYTD	1 Year	3 Years	5 Years		
216	PRIVATE EQUITY & SPECIAL OPPORTUNITIES ●	9,228,891,060	N/A	-1.50%	2.54%	8.38%	8.38%	19.12%	21.13%	Net
217	CAMBRIDGE PRIVATE EQUITY ●			0.90%	5.25%	9.50%	9.50%	14.21%	12.37%	
218	PRIVATE EQUITY ●	5,797,599,605	N/A	1.68%	9.65%	16.60%	16.60%	21.74%	18.47%	Net
219	PRIVTE EQUITY CUSTOM BENCHMARK ⁶ ●			0.90%	5.25%	9.50%	9.50%	14.21%	9.59%	
220	Pathway Capital Mgmt - Direct PE	2,001,562,869	N/A	-0.77%	11.78%	20.97%	20.97%	24.51%	20.66%	Net
221	HarbourVest Legacy	1,022,754,967	N/A	3.97%	12.92%	21.80%	21.80%	27.14%	23.40%	Net
222	Pathway Capital Mgmt - PE	2,477,141,188	N/A	2.99%	8.02%	14.56%	14.56%	19.59%	15.81%	Net
223	BlackRock Co-investment Funds	240,335,910	N/A	-1.28%	4.46%	15.18%	15.18%	23.69%	11.52%	Net
224	Kelso Hammer LP	33,389,085	N/A	1.69%	3.97%	8.57%	8.57%	12.40%		Net
225	Ara Fund I	21,215,754	N/A							
226	SPECIAL OPPORTUNITIES ●	3,431,231,754	N/A	-6.52%	-7.80%	-3.43%	-3.43%	15.09%	35.13%	Net
227	CAMBRIDGE PRIVATE EQUITY ●			0.90%	5.25%	9.50%	9.50%	14.21%	12.37%	
228	REAL ESTATE ●	4,000,475,809	N/A	0.49%	-0.28%	0.18%	0.18%	2.27%	6.11%	Net
229	NCREIF TOTAL INDEX ●			1.41%	2.94%	6.24%	6.24%	6.76%	8.57%	
230	RE SEPARATE ACCTS & DIRECT ●	3,832,311,319	N/A	0.36%	-0.51%	0.02%	0.02%	2.24%	6.09%	Net
231	L&B Realty Advisors	1,841,710,665	N/A	0.80%	2.17%	3.38%	3.38%	3.83%	8.84%	Net
232	Sentinel Real Estate	506,749,809	N/A	2.68%	3.75%	4.15%	4.15%	-1.32%	2.84%	Net
233	LaSalle Investment Mgmt-United Kingdom	109,558,838	N/A	-26.73%	-49.67%	-60.53%	-60.53%	-27.14%	-23.22%	Net
234	Lincoln Industrial	161,178,120	N/A	1.31%	4.09%	6.34%	6.34%	12.52%	12.99%	Net
235	CB Richard Ellis - Europe	142,200,447	N/A	-3.49%	0.17%	-1.19%	-1.19%	10.80%		Net
236	CS Capital	400,073,227	N/A	5.82%	8.29%	18.54%	18.54%	15.46%		Net
237	Heitman Direct	670,840,214	N/A	-0.15%						Net
238	RE FUNDS & CO-INVEST ●	168,164,490	N/A	4.32%	7.24%	1.52%	1.52%			Net
239	HIG Europe RE II	17,149,602	N/A	13.46%	13.92%	17.22%	17.22%			Net
240	Heitman Capital	51,053,579	N/A	1.47%	2.91%	6.13%	6.13%			Net
241	Harbert Europe RE V	22,855,769	N/A	9.59%	9.52%	-21.11%	-21.11%			Net
242	Brookfield RE III	77,105,540	N/A	3.87%						Net
243	INFRA. & PRIVATE INCOME ●	5,353,250,189	N/A	2.06%	3.14%	7.13%	7.13%	11.94%	11.62%	Net
244	INFRA. & INCOME OPPORTUNITIES ⁷ ●			2.40%	5.42%	12.79%	12.79%	9.34%	7.30%	
245	INFRASTRUCTURE ●	2,493,737,178	N/A	1.50%	1.85%	7.41%	7.41%	15.12%	16.48%	Net
246	FTSE DEVELOPED CORE INFRA. TRI ●			3.10%	6.46%	17.17%	17.17%	11.48%	8.48%	
247	GIP	17,069,643	N/A	1.86%	2.73%	19.42%	19.42%	27.20%	31.55%	Net
248	GIP II	392,088,509	N/A	0.58%	1.70%	9.95%	9.95%	14.85%	15.26%	Net
249	Gateway IFR	82,056,983	N/A	-4.06%	-21.48%	-25.19%	-25.19%	-4.87%	-3.06%	Net
250	G Sachs	294,322,416	N/A	1.75%	7.83%	20.30%	20.30%	23.49%	23.24%	Net
251	EQT II	14,998,237	N/A	9.87%	13.00%	13.35%	13.35%	13.29%	19.71%	Net
252	GIP II Co-Invest 2	106,593,531	N/A	0.01%	1.68%	21.12%	21.12%	23.19%	24.48%	Net
253	ACTIS Energy 3	35,605,413	N/A	-0.97%	3.16%	7.63%	7.63%	3.85%	8.02%	Net
254	LS Power III	135,233,162	N/A	12.61%	11.74%	10.33%	10.33%	25.42%	19.77%	Net
255	North Haven	218,219,582	N/A	2.19%	5.69%	14.47%	14.47%	16.90%		Net
256	GIP III	397,155,239	N/A	1.30%	2.09%	3.58%	3.58%	7.47%		Net
257	GIP III Canary	129,743,498	N/A	-2.52%	-5.41%	5.56%	5.56%			Net
258	CIM Fund II	96,414,571	N/A	7.39%	7.94%	6.91%	6.91%			Net
259	IFR ACTIS Energy 4	55,254,249	N/A	-1.68%	12.57%	34.32%	34.32%			Net
260	IFR Meridiam III	902,205	N/A	N/A	N/A	N/A	N/A			Net
261	IFR GIP III Zenith	119,579,519	N/A	3.10%	8.34%	17.92%	17.92%			Net
262	IFR ENCAP FM IV	8,333,069	N/A	8.02%	8.11%	22.25%	22.25%			Net
263	IFR INFRARED V	37,341,823	N/A	-0.01%	7.54%	3.95%	3.95%			Net
264	IFR NHIP II Bison	59,365,989	N/A	-0.01%	-0.01%	4.53%	4.53%			Net
265	IFR GIP III Stetson	22,832,096	N/A	-22.93%	-45.31%	-58.85%	-58.85%			Net
266	IFR EFM Moda	58,088,140	N/A	8.70%	10.34%	38.43%	38.43%			Net
267	North Haven India	12,592,308	N/A	-1.43%	-2.01%					Net
268	IFR LS Power IV	10,355,585	N/A	-5.67%						Net
269	IFR KKR Infrastructure III	56,819,850	N/A	4.48%	1.25%					Net
270	IFR KKR Starlight II	46,717,448	N/A	-1.56%	-3.30%					Net
271	IFR Energy Spec VIII	4,336,139	N/A	-9.24%	-28.93%					Net
272	LS Power Bolt	20,075,344	N/A	1.95%	4.40%					Net
273	IFR EQT IV	31,342,630	N/A	-9.38%						Net
274	IFR EQT IV Co-Invest	30,300,000	N/A							
275	PRIVATE CREDIT ●	1,541,866,596	N/A	1.13%	3.00%	4.50%	4.50%	7.59%	6.35%	Net
276	BB US HIGH YIELD 2% ISSUER CAP ●			1.33%	3.87%	6.35%	6.35%	6.07%	5.38%	
277	Crestline Credit Opportunities Fund	324,580,759	N/A	1.61%	2.46%	0.60%	0.60%	5.42%	4.36%	Net
278	Oaktree III Mezzanine Debt	9,400,300	N/A	-2.73%	-1.60%	21.31%	21.31%	16.61%	14.17%	Net
279	Audax III Mezzanine Debt	40,396,979	N/A	7.63%	20.61%	28.02%	28.02%	12.98%	12.55%	Net
280	Oaktree Opportunities Fund VIII	10,459,699	N/A	-0.18%	7.71%	-12.57%	-12.57%	10.07%	4.01%	Net
281	Crestline Opps Fund	194,940,587	N/A	3.34%	6.26%	11.55%	11.55%	11.53%		Net
282	Pathway Capital Mgmt - Direct Private Cred	495,699,425	N/A	1.87%	3.81%	7.76%	7.76%	8.65%		Net
283	Audax IV Mezzanine Debt	16,497,263	N/A	2.37%	4.62%	8.72%	8.72%			Net
284	Aurelius II	204,490,081	N/A	-1.23%	-0.10%	2.74%	2.74%			Net
285	Crestline SLF II	36,699,532	N/A	4.24%	7.02%					Net
286	King Street Capital	196,146,702	N/A	-2.75%	-1.80%					Net
287	CL Opps Fund IV	12,555,269	N/A							
288	INCOME OPPORTUNITIES ●	1,317,646,415	N/A	4.41%	6.17%	9.32%	9.32%	5.00%	6.67%	Net
289	INFRA. & INCOME OPPORTUNITIES ⁷ ●			2.40%	5.42%	12.79%	12.79%	9.34%	7.30%	
290	American Homes 4 Rent II	153,270,332	N/A	0.43%	1.19%	4.27%	4.27%	1.14%	4.30%	Net
291	Twin Creeks Timber	77,802,598	N/A	0.28%	1.16%	-2.13%	-2.13%	-1.83%		Net
292	INC Athyrium III	15,542,508	N/A	3.10%	2.23%	4.20%	4.20%			Net
293	Generate Capital	123,387,299	N/A	32.19%	32.21%	40.57%	40.57%			Net
294	INC Broadriver III	17,054,140	N/A	-2.34%	-3.41%	2.67%	2.67%			Net
295	Generate Capital II	35,262,946	N/A	32.74%	32.69%	34.49%	34.49%			Net
296	APF ADAC	842,400,094	N/A	1.96%	4.43%	7.99%	7.99%			Net
297	Activate Capital	36,672,434	N/A	-5.13%	-3.56%					Net
298	INC OCM Power Opps V	16,254,064	N/A	-2.63%	-7.24%					Net

NOTES and CURRENT BENCHMARK REFERENCES

(Benchmarks applicable in prior periods can be found in the Investment Policy)

* Market Values	Reported market values represent total fund holdings consistent with Financial Statements	
	As of December 31, 2019, total fund holdings consist of:	
	99.17%	Alaska Permanent Fund
	0.83%	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	60%	MSCI All-Country World Index IMI
09/30/2016 to date	20%	BB Global Aggregate Index
	10%	FTSE EPRA/NAREIT Rental Index
	10%	US TIPs
2 Performance Benchmark	39%	MSCI ACWI IMI
06/30/2017 to date	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	25%	BB Aggregate
09/30/2016 to date	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	50%	JPM EMBI Global Diversified
09/30/2016 to date	50%	JPM GBI-EM Global Diversified
6 Private Equity Custom Benchmark	100%	Cambridge Private Equity (1 Q Lagged)
09/30/2016 to date		
7 Infra. & Income Opportunities Benchmark	60%	FTSE Developed Core Infrastructure TRI (1 Q Lagged)
09/30/2016 to date	40%	BB US High Yield 2% Issuer Cap (1 Q Lagged)
8 Absolute Return Benchmark	100%	HFRI Total HFOF Universe
09/30/2016 to date		
9 Asset Allocation Benchmark	60%	Performance Benchmark
06/30/2018 to date	40%	90 Day T-Bills
10 Asset Allocation Overlay Benchmark	65%	MSCI ACWI IMI Net Unhedged
06/30/2018 to date	35%	BB US Aggregate
11 Int'l Passive/Quasi Passive Custom	100%	MSCI World ex US
12 MSCI Custom Benchmark	65%	MSCI World ex US Value TRI
4/30/2016 to date		
13 HY Fixed Income Custom Blend	100%	BB US High Yield 2% Issuer Cap Index
7/31/2016 to date		
14 Cap Guard Custom Blend	100%	BB US High Yield 2% Issuer Cap Index
3/31/2017 to date		