

Board of Trustees - Monthly Performance Report - April 30, 2023

Returns are provided by Callan LLC, are annualized for periods greater than one year, and are net of fees after 7/1/2020. Also see "Notes and References" below.

		(A)	(B)	(C)	(D)	(E)	(F)	(G)
	4/30 Market Value*	1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years
1 TOTAL FUND •	77,627,391,450	0.44%	-0.27%	3.01%	3.54%	0.53%	11.02%	7.69%
2 Passive Index Benchmark ¹ •		1.04%	0.12%	6.33%	6.57%	-1.41%	7.22%	4.59%
3 Performance Benchmark ² •		0.60%	0.53%	3.98%	3.54%	-0.27%	9.34%	7.18%
4 Total Fund Return Objective ³		0.89%	2.58%	3.78%	6.51%	9.94%	10.77%	8.91%
5 PUBLIC EQUITY	26,643,287,600	0.77%	-1.58%	5.96%	10.33%	1.70%	14.53%	7.39%
6 MSCI ACWI IMI		1.27%	0.88%	8.31%	11.08%	1.55%	12.15%	6.65%
7 INTERNATIONAL EQUITY	7,416,459,548	0.94%	-0.94%	6.54%	9.10%	0.75%	10.96%	2.78%
8 MSCI ACWI IMI EX-US		1.70%	0.36%	8.37%	11.72%	2.21%	9.93%	2.39%
9 GLOBAL EQUITY	10,169,714,776	1.45%	0.07%	7.62%	12.48%	4.24%	15.01%	8.92%
10 MSCI ACWI IMI		1.27%	0.88%	8.31%	11.08%	1.55%	12.15%	6.65%
11 DOMESTIC EQUITY	9,056,736,628	-0.14%	-3.85%	3.71%	8.73%	-0.58%	17.00%	9.56%
12 RUSSELL 3000 INDEX		1.07%	1.34%	8.32%	10.92%	1.50%	14.07%	10.60%
13 FIXED INCOME	14,419,488,545	0.49%	0.57%	3.63%	2.11%	-0.03%	-0.86%	1.54%
14 FIXED INCOME BENCHMARK⁴		0.57%	0.69%	3.66%	1.90%	-0.25%	-1.40%	1.00%
15 US FIXED INCOME AGGREGATE	3,983,086,205	0.58%	0.58%	3.80%	1.12%	0.11%	-2.49%	1.61%
16 BB US AGGREGATE		0.61%	0.49%	3.59%	0.51%	-0.43%	-3.15%	1.18%
17 US INVESTMENT GRADE CORPORATE	4,005,809,857	0.59%	0.32%	4.43%	3.49%	1.66%	-1.35%	2.55%
18 BB US CORPORATE		0.77%	0.28%	4.29%	2.62%	0.68%	-1.97%	1.97%
19 NON US FIXED INCOME	1,894,577,479	0.21%	1.81%	3.49%	0.54%	-1.29%	-2.59%	0.81%
20 BB GLOBAL TREASURY EX-US		0.29%	1.84%	3.46%	0.72%	-1.35%	-2.50%	0.85%
21 GLOBAL HIGH YIELD	1,619,618,831	0.60%	-0.26%	3.25%	7.13%	0.77%	4.60%	3.09%
22 BB US HIGH YIELD BB		0.72%	0.86%	4.18%	7.89%	0.86%	4.56%	3.19%
23 TIPS	740,071,783	0.14%	1.63%	3.56%	0.56%	-3.37%	1.26%	3.15%
24 BB US TIPS		0.11%	1.59%	3.45%	0.13%	-4.00%	0.86%	2.98%
25 FIXED INCOME CASH	737,042,323	0.18%	1.08%	1.37%	2.74%	2.85%	1.07%	1.63%
26 90 DAY T-BILLS		0.31%	1.08%	1.39%	2.72%	2.81%	0.99%	1.44%
27 DOMESTIC STRUCTURED PRODUCTS	1,437,771,923	0.58%	-0.22%	3.04%	-0.75%	-1.36%		
28 BB US SECURITIZED		0.54%	-0.20%	3.02%	-0.33%	-0.84%		
29 ABSOLUTE RETURN	5,321,399,299	1.08%	1.87%	1.82%	3.61%	3.01%	8.95%	5.59%
30 ABSOLUTE RETURN BENCHMARK⁵		0.32%	-0.76%	-0.52%	0.44%	-2.95%	8.09%	4.13%
31 RISK PARITY	219,639,839	0.11%	-0.55%	7.17%	-0.91%	-11.94%	1.71%	
32 HFRI RISK PARITY 12% VOL		-0.03%	-1.12%	5.39%	-1.03%	-10.83%	2.73%	
33 TOTAL FUND CASH	1,067,841,993	0.49%	1.76%	4.08%	5.07%	3.82%		
34 90 DAY T-BILLS		0.31%	1.08%	1.39%	2.72%	2.81%		
35 PRIVATE EQUITY & SPECIAL OPPS •	15,327,417,586	N/A	0.58%	0.58%	-3.25%	-3.85%	21.89%	18.72%
36 CAMBRIDGE PRIVATE EQUITY •		N/A	0.80%	0.80%	-6.68%	-7.67%	19.02%	15.91%
37 PRIVATE EQUITY •	10,826,040,873	N/A	1.39%	1.39%	-4.84%	-4.81%	25.29%	22.55%
38 CAMBRIDGE PRIVATE EQUITY •		N/A	0.80%	0.80%	-6.68%	-7.67%	19.02%	15.91%
39 SPECIAL OPPORTUNITIES •	4,339,867,518	N/A	-1.18%	-1.18%	0.79%	-1.36%	15.71%	12.13%
40 CAMBRIDGE PRIVATE EQUITY •		N/A	0.80%	0.80%	-6.68%	-7.67%	19.02%	15.91%
41 IN-STATE EMERGING MANAGERS •	161,509,196	N/A	-4.33%	-4.33%	-9.64%	-11.92%		
42 CAMBRIDGE PRIVATE EQUITY •		N/A	0.80%	0.80%	-6.68%	-7.67%		
43 REAL ESTATE •	7,981,314,233	N/A	-4.39%	-4.39%	-3.08%	0.16%	6.49%	3.62%
44 REAL ESTATE CUSTOM⁶ •		N/A	-2.18%	-2.18%	-3.04%	0.33%	8.70%	7.77%
45 RE EQUITY INVESTMENTS •	6,452,344,964	N/A	-6.05%	-6.05%	0.53%	4.01%		
46 NCREIF TOTAL INDEX •		N/A	-3.50%	-3.50%	0.19%	3.72%		
47 RE DEBT INVESTMENTS •	413,891,438	N/A	3.54%	3.54%	9.56%	10.91%	13.65%	
48 NCREIF TOTAL INDEX •		N/A	-3.50%	-3.50%	0.19%	3.72%	7.98%	
49 REITS •	1,115,077,831	N/A	2.75%	2.75%	-23.30%	-20.76%	-0.53%	3.68%
50 MSCI US REIT •		N/A	5.22%	5.22%	-21.31%	-18.89%	-0.45%	4.58%
51 PRIVATE INCOME	6,647,002,354	N/A	4.15%	4.15%	2.62%	4.49%	10.67%	9.70%
52 PRIVATE INCOME CUSTOM⁷ •		N/A	2.89%	2.89%	3.94%	6.23%	6.52%	8.27%
53 INFRASTRUCTURE •	3,832,262,334	N/A	4.70%	4.70%	3.44%	6.84%	14.40%	12.45%
54 CAMBRIDGE GLOBAL PVT INFRASTRUCTURE •		N/A	3.45%	3.45%	3.59%	6.47%	5.61%	9.12%
55 PRIVATE CREDIT •	2,065,736,897	N/A	4.80%	4.80%	5.38%	6.60%	9.27%	7.90%
56 CLIFFWATER DIRECT LENDING •		N/A	2.05%	2.05%	4.46%	5.86%	7.84%	6.90%
57 INCOME OPPORTUNITIES •	749,003,122	N/A	-0.31%	-0.31%	-5.00%	-5.29%	4.31%	5.17%
58 PRIVATE INCOME CUSTOM⁷ •		N/A	2.89%	2.89%	3.94%	6.23%	6.52%	8.27%

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		4/30 Market Value*	1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years
59	PUBLIC EQUITY	26,643,287,600	0.77%	-1.58%	5.96%	10.33%	1.70%	14.53%	7.39%
60	MSCI ACWI IMI		1.27%	0.88%	8.31%	11.08%	1.55%	12.15%	6.65%
61	INTERNATIONAL EQUITY	7,416,459,548	0.94%	-0.94%	6.54%	9.10%	0.75%	10.96%	2.78%
62	MSCI ACWI IMI EX-US		1.70%	0.36%	8.37%	11.72%	2.21%	9.93%	2.39%
63	Macquarie Emerging Markets	172,028,285	-3.98%	-6.32%	3.27%	-2.20%	-9.03%	3.59%	0.75%
64	JP Morgan Emerging Markets	311,406,385	-1.56%	-3.65%	5.06%	7.08%	0.32%	7.07%	2.59%
65	Mondrian Investment Partners	323,414,884	-1.50%	-5.42%	4.76%	3.33%	0.41%	5.97%	-0.05%
66	SSGA MSCI Emerging Markets	118,101,280	-1.07%	-4.70%	2.84%	-1.18%	-7.23%	4.40%	-0.90%
67	William Blair Emerging Markets	263,839,301	-2.52%	-5.69%	0.98%	-1.97%	-9.78%	2.73%	0.00%
68	MEASA Fund	98,277,316	-2.03%	-6.22%	-6.05%	-6.63%	-12.61%	15.95%	
69	MSCI Emerging Markets Index		-1.13%	-4.74%	2.78%	-0.30%	-6.51%	4.33%	-1.04%
70	DFA Emerging Markets Value	750,051,652	1.89%	-0.87%	5.29%	5.05%	-2.92%	11.52%	0.25%
71	MSCI Emerging Markets Value Index		0.40%	-2.69%	4.33%	1.97%	-3.64%	7.24%	-1.24%
72	DFA Emerging Markets Small Cap	228,372,128	0.73%	-1.12%	4.79%	5.73%	-2.54%	13.29%	1.34%
73	MSCI Emerging Markets Small Cap Index		0.67%	-1.29%	4.56%	7.19%	-5.67%	15.80%	1.96%
74	Trustbridge Emerging Markets	107,865,236	-11.28%	-17.36%	-8.59%	-14.91%	-9.30%	-7.35%	-6.61%
75	MSCI China Index ND		-5.16%	-11.16%	-0.69%	-12.63%	-5.80%	-6.27%	-5.01%
76	Allspring Global	100,596,391	-5.66%	-10.16%	-1.03%	-12.81%	-6.82%	-0.68%	-0.91%
77	MSCI China All Shares Idx (USD Net Div)		-3.87%	-9.11%	0.94%	-12.60%	-4.05%	-2.30%	-2.50%
78	Mellon MSCI World ex-USA	165,018,769	2.88%	2.80%	11.20%	17.38%	7.38%	12.23%	3.99%
79	DFA International Large Cap	622,233,635	2.80%	2.08%	10.39%	16.87%	6.92%	14.38%	3.75%
80	MSCI World ex US		2.84%	2.67%	11.09%	17.20%	7.05%	12.01%	3.91%
81	DFA International Small Cap Value	614,631,514	2.35%	0.49%	8.67%	17.57%	5.91%	16.73%	2.03%
82	MSCI World ex-USA Small Cap Value Index		2.18%	-0.98%	6.83%	12.18%	0.04%	12.40%	1.27%
83	DFA International Small Company	426,052,146	1.91%	0.02%	7.71%	12.54%	0.53%	12.07%	2.08%
84	SSGA International Developed Small Cap	351,779,162	1.70%	-0.63%	6.81%	11.53%	-1.47%	10.29%	1.92%
85	MSCI World ex-USA Small Cap Index		1.76%	-0.76%	6.84%	11.45%	-1.72%	9.96%	1.58%
86	Acadian Asset Mgmt	420,928,728	2.62%	1.65%	5.40%	7.26%	-2.03%	11.92%	2.89%
87	MSCI World ex US Value		3.26%	1.01%	9.08%	15.65%	6.70%	14.49%	2.24%
88	LSV International Large Cap	938,173,867	3.11%	1.17%	8.47%	14.99%	5.46%	14.11%	2.19%
89	Schroders International Large Cap	713,399,134	1.38%	-0.01%	7.37%	9.32%	0.79%	11.78%	2.17%
90	MSCI All Country World ex-USA Value Index		2.48%	0.00%	7.77%	11.67%	3.76%	12.42%	1.27%
91	Johnston International Large Cap	337,424,830	-1.72%	-2.30%	7.03%	11.53%	5.95%	9.42%	5.52%
92	JP Morgan International Large Cap	352,864,904	2.30%	4.45%	13.10%	18.03%	6.43%	8.86%	5.85%
93	MSCI World ex-USA Growth Index		2.42%	4.38%	13.16%	18.78%	7.14%	9.13%	5.13%
94	GLOBAL EQUITY	10,169,714,776	1.45%	0.07%	7.62%	12.48%	4.24%	15.01%	8.92%
95	MSCI ACWI IMI		1.27%	0.88%	8.31%	11.08%	1.55%	12.15%	6.65%
96	AQR Global Equity	1,102,394,382	1.39%	-0.36%	8.45%	13.38%	3.96%	13.44%	5.63%
97	SSGA MSCI World	61,172,653	1.80%	2.48%	9.79%	15.05%	5.27%	14.13%	8.81%
98	CDAM Global Equity	559,197,170	-1.48%	-3.44%	7.15%	10.10%	1.40%	16.14%	7.29%
99	MSCI World Index		1.75%	2.38%	9.62%	12.88%	3.18%	13.10%	8.14%
100	SSGA Russell Fundamental Developed Lrg Co	1,043,025,142	2.03%	0.31%	7.42%	14.01%	4.87%	17.60%	7.77%
101	Russell Fundamental Dvlpd Lrg Co Index		2.08%	0.40%	7.52%	14.18%	5.82%	18.25%	8.17%
102	Lazard Asset Management	986,438,777	1.49%	0.58%	7.57%	11.37%	2.46%	12.08%	6.23%
103	McKinley Capital Management	344,118,798	2.12%	2.36%	8.10%	10.07%	-2.25%	12.86%	8.19%
104	RBA Global Equity	450,292,556	2.22%	2.93%	8.05%	10.78%	3.45%	12.76%	8.19%
105	WCM Global Equity	340,138,979	0.81%	3.16%	10.93%	12.93%	2.71%	8.63%	10.74%
106	MSCI All-Country World Index		1.44%	1.57%	8.85%	11.33%	2.06%	12.04%	7.03%
107	APF Tactical Tilts	1,876,974,836	0.70%	-2.75%	5.75%	12.66%	5.41%	16.30%	11.07%
108	SSGA MSCI ACWI IMI	624,708,675	1.32%	0.99%	8.42%	11.22%	1.85%	12.46%	6.94%
109	APF Global Equities	148,257,547	0.99%	-2.67%	2.52%	9.03%	1.48%	15.72%	7.73%
110	Arrowstreet Global Equity	1,369,277,574	2.25%	1.23%	6.94%	9.77%	3.20%	16.48%	9.66%
111	Longview Global Equity	1,263,692,718	2.45%	2.16%	9.79%	16.36%	9.08%	15.11%	9.04%
112	MSCI All-Country World IMI		1.27%	0.88%	8.31%	11.08%	1.55%	12.15%	6.65%
113	DOMESTIC EQUITY	9,056,736,628	-0.14%	-3.85%	3.71%	8.73%	-0.58%	17.00%	9.56%
114	RUSSELL 3000 INDEX		1.07%	1.34%	8.32%	10.92%	1.50%	14.07%	10.60%
115	Mellon S&P 500	75,535,656	1.56%	2.71%	9.16%	14.42%	5.57%	15.48%	12.27%
116	S&P 500 Index		1.56%	2.72%	9.17%	11.70%	2.66%	14.52%	11.45%
117	Mellon FTSE RAFI US Large Cap	428,216,945	1.30%	-2.36%	2.99%	9.53%	2.32%	18.24%	10.36%
118	FTSE RAFI US 1000 Index		1.32%	-2.35%	3.01%	9.22%	1.48%	17.99%	10.11%
119	Voya Large Cap	430,215,865	1.48%	7.17%	16.56%	13.81%	-0.38%	14.21%	13.61%
120	SSGA Large Cap	309,421,629	1.49%	4.52%	15.97%	12.38%	1.04%	11.56%	13.23%
121	DSM - Large Cap	534,672,892	0.45%	2.48%	9.54%	9.64%	1.37%	8.91%	10.69%
122	CastleArk - Large Cap	194,791,601	2.33%	6.81%	15.39%	14.12%	2.89%	15.25%	12.61%
123	APF SPDR Yield	312,029,193	-0.30%	-5.53%	1.30%	8.23%	-0.61%	21.72%	9.35%
124	APF SPDR Momentum	108,343,106	-0.48%	-3.85%	2.96%	11.26%	2.53%	15.88%	7.25%
125	APF SPDR Low Vol	319,098,852	0.16%	-2.56%	3.12%	9.48%	3.49%	16.92%	10.33%
126	APF R1000 Low Vol	495,149,660	0.33%	-1.39%	1.14%	7.08%	1.17%		
127	Russell 1000 Growth Index		0.99%	6.61%	15.49%	13.78%	2.34%	13.62%	13.80%
128	Russell 1000 Index		1.24%	1.96%	8.79%	11.29%	1.82%	14.22%	11.07%
129	Lyrical - Large Cap	755,051,486	-2.15%	-10.46%	-0.26%	6.54%	-5.79%	17.85%	4.82%
130	SKBA - Large Cap	366,527,629	0.82%	-3.77%	0.67%	9.84%	4.32%	17.94%	7.82%
131	LSV - Large Cap Value	805,052,861	0.12%	-5.37%	1.42%	8.69%	2.21%	16.80%	6.80%
132	APF Domestic Equity	435,971,951	-0.09%	-10.76%	-0.41%	6.63%	-3.46%	21.97%	
133	APF R1000V Low Vol	369,105,428	0.59%	-1.95%	-0.03%	6.23%	0.68%		
134	Mellon R1000V	99,854,989	1.51%	-2.50%	2.54%	8.74%			
135	Russell 1000 Value Index		1.51%	-2.52%	2.53%	8.79%	1.21%	14.38%	7.75%
136	Mellon S&P 400	17,754,566	-0.78%	-5.68%	3.01%	11.47%	1.51%	16.92%	7.67%
137	S&P 400 Index		-0.78%	-5.71%	2.99%	11.29%	1.33%	16.52%	7.56%
138	Jennison Associates LLC	254,921,668	-0.86%	-6.03%	3.01%	9.39%	-3.37%	18.33%	8.10%
139	Russell 2000 Index		-1.80%	-8.07%	0.89%	4.83%	-3.65%	11.90%	4.15%
140	RBC Asset Mgmt	185,146,653	-0.96%	-3.57%	6.22%	8.24%	3.78%	16.02%	10.24%
141	Eagle Asset Mgmt	522,757,268	-1.24%	-4.65%	2.08%	4.03%	-4.56%	6.71%	5.86%
142	Russell 2000 Growth Index		-1.16%	-4.64%	4.84%	9.44%	0.72%	7.82%	4.00%
143	Russell 2000 Index		-1.80%	-8.07%	0.89%	4.83%	-3.65%	11.90%	4.15%
144	T Rowe Price	306,233,771	-1.56%	-10.28%	-1.05%	1.55%	-4.92%	12.15%	4.29%
145	Pzena Investment Mgmt	581,902,050	-3.90%	-12.16%	-1.40%	8.08%	-0.81%	20.73%	5.67%
146	Russell 2000 Value Index		-2.49%	-11.57%	-3.13%	0.18%	-7.99%	15.44%	3.66%
147	Russell 2000 Index		-1.80%	-8.07%	0.89%	4.83%	-3.65%	11.90%	4.15%
148	APF US Tactical Tilts	637,582,161	0.58%	-4.07%	2.87%	9.87%	2.24%		
149	Mellon R3000	103,845,727	1.09%	1.96%	8.98%	11.53%			
150	Russell 3000 Index		1.07%	1.34%	8.32%	10.92%	1.50%		
151	ACI US Value Yield	407,553,020	2.17%	0.18%	2.34%				
152	Russell 3000 Value Index		1.28%	-3.06%	2.21%				

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153	FIXED INCOME	14,419,488,545	0.49%	0.57%	3.63%	2.11%	-0.03%	1.54%
154	FIXED INCOME BENCHMARK ⁴		0.57%	0.69%	3.66%	1.90%	-0.25%	1.00%
155	US FIXED INCOME AGGREGATE	3,983,086,205	0.58%	0.58%	3.80%	1.12%	0.11%	1.61%
156	BB US AGGREGATE		0.61%	0.49%	3.59%	0.51%	-0.43%	1.18%
157	APF Fixed Income - Aggregate	3,983,086,205	0.58%	0.58%	3.80%	1.12%	0.11%	1.61%
158	US INVESTMENT GRADE CORPORATE	4,005,809,857	0.59%	0.32%	4.43%	3.49%	1.66%	2.55%
159	BB US CORPORATE		0.77%	0.28%	4.29%	2.62%	0.68%	1.97%
160	APF Corporate Bonds	4,005,809,857	0.59%	0.32%	4.43%	3.49%	1.66%	2.55%
161	NON US FIXED INCOME	1,894,577,479	0.21%	1.81%	3.49%	0.54%	-1.29%	0.81%
162	BB GLOBAL TREASURY EX-US		0.29%	1.84%	3.46%	0.72%	-1.35%	0.85%
163	APF Global Government Bonds	1,894,591,213	0.22%	1.82%	3.49%	0.55%	-1.37%	0.77%
164	GLOBAL HIGH YIELD	1,619,618,831	0.60%	-0.26%	3.25%	7.13%	0.77%	3.09%
165	BB US HIGH YIELD BB		0.72%	0.86%	4.18%	7.89%	0.86%	3.19%
166	APF HY Corporate	1,617,651,934	0.60%	-0.14%	3.65%	7.61%		
167	TIPS	740,071,783	0.14%	1.63%	3.56%	0.56%	-3.37%	3.15%
168	BB US TIPS		0.11%	1.59%	3.45%	0.13%	-4.00%	2.98%
169	APF TIPS	740,071,783	0.14%	1.63%	3.56%	0.56%	-3.37%	3.30%
170	FIXED INCOME CASH	737,042,323	0.18%	1.08%	1.37%	2.74%	2.85%	1.63%
171	90 DAY T-BILLS		0.31%	1.08%	1.39%	2.72%	2.81%	1.44%
171	APF Fixed Income Cash	687,911,800	0.16%	1.08%	1.38%	2.75%	2.85%	1.63%
172	APF GLO FXD INC Cash	49,130,523	0.40%	1.55%	1.98%	2.87%	3.05%	1.43%
173	DOMESTIC STRUCTURED PRODUCTS	1,437,771,923	0.58%	-0.22%	3.04%	-0.75%	-1.36%	
174	BB US SECURITIZED		0.54%	-0.20%	3.02%	-0.33%	-0.84%	
175	APF Dom Struc Prod	1,437,771,923	0.58%	-0.22%	3.04%	-0.75%	-1.36%	
176	ABSOLUTE RETURN	5,321,399,299	1.08%	1.87%	1.82%	3.61%	3.01%	5.59%
177	ABSOLUTE RETURN BENCHMARK ⁵		0.32%	-0.76%	-0.52%	0.44%	-2.95%	4.13%
178	RISK PARITY	219,639,839	0.11%	-0.55%	7.17%	-0.91%	-11.94%	1.71%
179	HFRI RISK PARITY 12% VOL		-0.03%	-1.12%	5.39%	-1.03%	-10.83%	2.73%
180	PanAgora	104,306,273	0.14%	-0.79%	6.14%	-3.71%	-14.05%	0.32%
181	Bridgewater All Weather	115,333,566	0.09%	-0.33%	8.12%	1.76%	-9.94%	3.16%
182	TOTAL FUND CASH	1,067,841,993	0.49%	1.76%	4.08%	5.07%	3.82%	
183	90 DAY T-BILLS		0.31%	1.08%	1.39%	2.72%	2.81%	1.44%
184	APF Internal Cash	195,048,793	0.07%	0.98%	1.13%	2.48%	2.59%	0.93%
185	APF Operating Cash	549,735,530	0.37%	1.04%	1.43%	2.80%	2.97%	1.47%
186	APF Gold TF Cash	323,057,670	0.93%	3.11%	9.06%	9.97%	4.75%	

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	
		4/30 Market Value*	1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years
187	PRIVATE EQUITY & SPECIAL OPPS ●	15,327,417,586	N/A	0.58%	0.58%	-3.25%	-4.13%	21.15%	20.15%
188	CAMBRIDGE PRIVATE EQUITY ●			0.80%	0.80%	-6.68%	-8.16%	17.91%	16.14%
189	PRIVATE EQUITY ●	10,826,040,873	N/A	1.39%	1.39%	-4.84%	-4.81%	24.14%	23.02%
190	CAMBRIDGE PRIVATE EQUITY ●			0.80%	0.80%	-6.68%	-8.16%	17.91%	16.14%
191	Pathway Capital Mgmt - Direct PE	6,051,231,459	N/A	1.80%	1.80%	-1.79%	-0.10%	27.55%	25.37%
192	HarbourVest Legacy	902,115,362	N/A	-0.99%	-0.99%	-15.78%	-17.70%	18.66%	22.78%
193	Pathway Capital Mgmt - PE	3,502,946,850	N/A	1.00%	1.00%	-6.55%	-7.22%	21.67%	20.93%
194	BlackRock Co-investment Funds	199,192,765	N/A	8.90%	8.90%	-2.38%	-15.05%	11.83%	16.69%
195	Ara Fund I	67,209,138	N/A	0.00%	0.00%	-4.29%	0.98%	36.08%	
196	Ara Fund II	27,932,367	N/A	0.00%	0.00%	11.36%	29.22%		
197	TPG Growth V	40,243,504	N/A	0.51%	0.51%	10.39%	13.49%		
198	Arctos Sports I	34,918,237	N/A	0.00%	0.00%	26.53%	24.85%		
199	SPECIAL OPPORTUNITIES ●	4,339,867,518	N/A	-1.18%	-1.18%	0.79%	-2.27%	15.61%	14.62%
200	CAMBRIDGE PRIVATE EQUITY ●		N/A	0.80%	0.80%	-6.68%	-8.16%	17.91%	16.14%
201	IN-STATE EMERGING MANAGERS ●	161,509,196	N/A	-4.33%	-4.33%	-9.64%	-13.50%		
202	CAMBRIDGE PRIVATE EQUITY ●		N/A	0.80%	0.80%	-6.68%	-8.16%		
203	Barings AK	84,645,058	N/A	0.00%	0.00%	5.24%	15.20%		
204	McKinley AK	76,864,138	N/A	-8.56%	-8.56%	-20.91%	-29.83%		
205	REAL ESTATE ●	7,981,314,233	N/A	-4.39%	-4.39%	-3.08%	0.28%	6.38%	3.75%
206	REAL ESTATE CUSTOM ⁶ ●		N/A	-2.18%	-2.18%	-3.04%	0.78%	8.79%	7.90%
207	RE EQUITY INVESTMENTS ●	6,452,344,964	N/A	-6.05%	-6.05%	0.53%	5.80%		
208	NCREIF TOTAL INDEX ●		N/A	-3.50%	-3.50%	0.19%	5.53%		
209	RE EQUITY SEPARATE ACCTS & DIRECTS ●	4,403,548,791	N/A	-8.35%	-8.35%	-1.97%	2.41%	2.41%	1.35%
210	L&B Realty Advisors	1,459,423,689	N/A	-14.54%	-14.54%	-12.93%	-11.57%	-4.54%	-1.64%
211	Sentinel Real Estate	442,103,016	N/A	-1.19%	-1.19%	2.06%	10.43%	7.20%	2.92%
212	LaSalle - United Kingdom	126,579,111	N/A	-0.96%	-0.96%	-14.25%	-14.87%	-41.95%	-21.28%
213	Lincoln Industrial	519,919,385	N/A	1.34%	1.34%	27.66%	70.05%	46.11%	31.37%
214	CB Richard Ellis - Europe	158,372,160	N/A	12.81%	12.81%	8.63%	9.53%	0.36%	1.69%
215	CS Capital	681,763,612	N/A	0.30%	0.30%	3.29%	5.35%	6.51%	10.44%
216	Heitman Direct	752,511,817	N/A	-16.92%	-16.92%	-8.76%	-8.25%	-4.79%	
217	APF RE Direct	262,876,003	N/A	-5.24%	-5.24%	38.06%	46.87%		
218	RE EQUITY DEVELOPMENT	471,160,571	N/A	7.58%	7.58%				
219	RE CBRE TCC Dev	27,258,744	N/A	0.00%	0.00%				
220	RE Greystar Dev	309,030,629	N/A	9.36%	9.36%				
221	RE Clarion Dev	111,476,386	N/A	3.02%	3.02%				
222	RE AIMCO Dev	1,456,903	N/A						
223	RE Allen Morris Dev	21,937,909	N/A						
224	RE EQUITY FUNDS & CO-INVESTS	1,577,635,602	N/A	-2.47%	-2.47%	1.47%	10.62%	15.75%	
225	HIG Europe RE II	80,745,272	N/A	11.46%	11.46%	2.81%	2.95%	15.52%	
226	Harbert Europe RE V	83,015,761	N/A	6.97%	6.97%	-8.13%	-0.79%	7.59%	
227	Brookfield RE III	285,099,750	N/A	1.83%	1.83%	4.78%	10.17%	11.56%	
228	Realterm Log Inc	407,303,013	N/A	-5.69%	-5.69%	0.70%	11.43%		
229	Clarion Gables	437,585,012	N/A	-5.71%	-5.71%	1.97%	14.60%		
230	Fairfield AHPF	80,050,974	N/A	0.00%	0.00%	0.00%	0.00%		
231	CBRE Logistics	203,835,820	N/A						
231	RE DEBT INVESTMENTS ●	413,891,438	N/A	3.54%	3.54%	9.56%	11.62%	13.91%	
232	NCREIF TOTAL INDEX ●		N/A	-3.50%	-3.50%	0.19%	5.53%	8.06%	
233	RE DEBT SEPARATE ACCTS ●	343,864,155	N/A	4.03%	4.03%	9.98%	11.68%	10.02%	
234	Heitman Capital	169,258,119	N/A	8.61%	8.61%	19.72%	21.57%	13.27%	
235	Mesa West	174,606,035	N/A	2.66%	2.66%	7.42%	9.08%		
236	RE DEBT FUNDS & CO-INVESTS ●	70,027,283	N/A	1.93%	1.93%	8.15%	11.02%		
237	KCRED	70,027,283	N/A	0.00%	0.00%	0.00%	0.00%		
238	REITS ●	1,115,077,831	N/A	2.75%	2.75%	-23.30%	-26.19%	-0.20%	3.38%
239	MSCI US REIT ●		N/A	5.22%	5.22%	-21.31%	-24.51%	-0.06%	3.69%
240	AEW Dom RE Securities	914,706,992	N/A	1.82%	1.82%	-24.00%	-26.85%		
241	Mellon MSCI US REIT	200,370,839	N/A	5.55%	5.55%	-21.09%	-24.28%		

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	
		4/30 Market Value*	1 Month	3 Months	CYTD	FYTD	1 Year	3 Years	5 Years
242	PRIVATE INCOME ●	6,647,002,354	N/A	4.15%	4.15%	2.62%	4.83%	10.34%	9.85%
243	PRIVATE INCOME CUSTOM ⁷ ●			2.89%	2.89%	3.94%	7.39%	7.28%	8.22%
244	INFRASTRUCTURE ●	3,832,262,334	N/A	4.70%	4.70%	3.44%	8.13%	13.56%	12.68%
245	CAMBRIDGE GLOBAL PVT INFRA ●		N/A	3.45%	3.45%	3.59%	7.93%	6.84%	8.95%
246	PRIVATE INFRASTRUCTURE	3,533,890,225	N/A	4.18%	4.18%	3.85%	8.77%		
247	CAMBRIDGE GLOBAL PVT INFRA ●		N/A	3.45%	3.45%	3.59%	7.93%		
248	GIP II	89,098,994	N/A	8.08%	8.08%	5.77%	10.24%	6.91%	8.51%
249	Gateway IFR	46,530,267	N/A	3.42%	3.42%	-19.86%	-19.38%	0.09%	-6.59%
250	LS Power III	222,007,869	N/A	0.00%	0.00%	10.24%	14.25%	16.93%	20.02%
251	North Haven	18,320,085	N/A	1.05%	1.05%	13.84%	17.37%	-7.59%	0.55%
252	GIP III	303,861,518	N/A	4.63%	4.63%	6.65%	11.93%	11.50%	11.17%
253	GIP III Canary	132,574,166	N/A	16.27%	16.27%	-11.34%	-18.80%	12.31%	13.59%
254	CIM Fund II	215,234,897	N/A	0.00%	0.00%	5.40%	11.02%	14.28%	14.59%
255	IFR Actis Energy 4	17,118,525	N/A	-1.64%	-1.64%	23.75%	22.98%	10.53%	16.77%
256	IFR GIP III Zenith	237,582,409	N/A	3.03%	3.03%	4.85%	8.61%	19.28%	
257	IFR Encap FM IV	15,676,861	N/A	1.35%	1.35%	8.03%	16.88%	6.66%	
258	IFR Infrared V	89,033,638	N/A	8.68%	8.68%	20.41%	19.58%	14.16%	
259	IFR NHIP II Bison	47,641,543	N/A	0.00%	0.00%	-0.05%	-0.07%	-6.16%	
260	IFR GIP III Stetson	43,438,469	N/A	67.98%	67.98%	48.13%	178.31%	71.64%	
261	North Haven India	70,592,101	N/A	2.52%	2.52%	9.06%	11.51%	9.70%	
262	IFR KKR Infrastructure III	161,343,638	N/A	2.85%	2.85%	3.81%	10.28%	8.87%	
263	IFR Energy Spec VIII	45,206,475	N/A	14.06%	14.06%	36.09%	46.34%	7.95%	
264	LS Power Bolt	140,854,556	N/A	0.00%	0.00%	7.86%	7.75%	40.32%	
265	IFR LS Power IV	217,391,801	N/A	0.00%	0.00%	-17.42%	-3.22%	54.93%	
266	IFR EQT IV	175,397,330	N/A	4.34%	4.34%	-1.54%	5.01%	9.75%	
267	IFR Meridiam III	60,742,615	N/A	-2.29%	-2.29%	-6.15%	24.51%	32.92%	
268	IFR EQT IV Co-Invest	22,349,765	N/A	1.55%	1.55%	0.21%	-0.03%	18.83%	
269	IFR Peppertree VIII	98,141,477	N/A	11.97%	11.97%	14.26%	16.16%		
270	IFR NHIP III	176,976,362	N/A	5.25%	5.25%	13.01%	19.27%		
271	IFR GIP IV	401,298,081	N/A	1.41%	1.41%	5.64%	12.73%		
272	IFR KKR Teemo II	23,806,883	N/A	4.35%	4.35%	11.19%	10.75%		
273	Encap ETF	31,087,759	N/A	12.50%	12.50%	17.73%	21.19%		
274	IFR Digital II	72,879,759	N/A	4.00%	4.00%	6.79%	6.70%		
275	IFR EQT Infra V	32,808,103	N/A	5.11%	5.11%	7.94%	7.93%		
276	IFR NHIP III Tele	49,190,725	N/A	8.88%	8.88%	-1.34%	1.41%		
277	IFR Actis V	11,445,106	N/A	0.00%	0.00%	0.00%	0.00%		
278	IFR Stonepeak IV	47,593,964	N/A	2.25%	2.25%	2.45%			
279	IFR Peppertree IX	46,774,770	N/A	12.30%	12.30%	42.46%			
280	IFR KKR Gbl IV	108,321,397	N/A	2.86%	2.86%				
281	IFR KKR Pegasus	27,600,000	N/A	9.21%	9.21%				
282	IFR Antin Infra V	1,610,420	N/A	0.00%	0.00%				
283	IFR EFM V	5,450,000	N/A						
284	Encap ETF II	7,625,000	N/A						
285	LISTED INFRASTRUCTURE ●	298,372,109	N/A	11.41%	11.41%	-1.70%	0.76%	3.30%	5.60%
286	S&P GLOBAL LISTED INFRASTRUCTURE ●		N/A	10.83%	10.83%	-7.70%	-0.99%	0.93%	2.99%
287	Lazard Listed Infrastructure	298,372,109	N/A	11.40%	11.40%	-1.71%	0.75%	5.47%	7.34%
288	FTSE Core Developed Infra (Hedged)		N/A	7.43%	7.43%	-6.89%	-2.98%	4.96%	8.27%
289	PRIVATE CREDIT ●	2,065,736,897	N/A	4.80%	4.80%	5.38%	6.91%	9.35%	7.96%
290	CLIFFWATER DIRECT LENDING ●		N/A	2.05%	2.05%	4.46%	6.56%	7.85%	7.03%
291	Crestline Credit Opportunities Fund	124,221,257	N/A	4.09%	4.09%	-6.32%	-5.41%	1.90%	2.42%
292	Audax III Mezzanine Debt	13,877,516	N/A	-3.26%	-3.26%	10.64%	20.22%	13.90%	14.84%
293	Crestline Opps Fund	85,208,257	N/A	0.65%	0.65%	1.90%	4.41%	7.05%	7.92%
294	Pathway Capital Mgmt - Direct PC	1,192,554,207	N/A	6.14%	6.14%	7.20%	8.24%	12.58%	10.42%
295	Audax IV Mezzanine Debt	14,720,753	N/A	4.99%	4.99%	11.87%	12.25%	13.42%	11.63%
296	Aurelius II	236,106,061	N/A	2.79%	2.79%	3.30%	6.02%	6.00%	
297	Crestline SLF II	46,635,780	N/A	1.30%	1.30%	3.66%	5.67%	10.68%	
298	ADAC Private Credit	192,780,577	N/A	5.13%	5.13%	6.75%	7.43%	11.46%	
299	CL Opps Fund IV	62,216,913	N/A	2.94%	2.94%	8.28%	10.63%	13.51%	
300	Ares SSG SLO III	31,891,302	N/A	3.79%	3.79%	8.36%	12.56%		
301	Crestline SLF III	46,126,473	N/A	3.16%	3.16%	9.42%	12.09%		
302	CL Opps V	10,910,792	N/A	0.00%	0.00%				
303	INCOME OPPORTUNITIES ●	749,003,122	N/A	-0.31%	-0.31%	-5.00%	-6.42%	4.43%	5.20%
304	PRIVATE INCOME CUSTOM ⁷ ●		N/A	2.89%	2.89%	3.94%	7.39%	7.28%	8.22%
305	American Homes 4 Rent II	141,001,033	N/A	-7.28%	-7.28%	-9.74%	1.24%	12.06%	6.84%
306	Twin Creeks Timber	116,984,059	N/A	5.55%	5.55%	9.62%	14.31%	5.62%	2.84%
307	INC Athyrrium III	6,489,380	N/A	-1.18%	-1.18%	-13.68%	-21.19%	-2.94%	0.15%
308	INC Broadriver III	73,156,664	N/A	2.12%	2.12%	4.48%	6.03%	6.67%	
309	Activate Capital	57,067,387	N/A	5.22%	5.22%	2.85%	-12.45%	15.74%	
310	INC OCM Power Opps V	79,342,062	N/A	5.60%	5.60%	9.55%	13.31%	9.84%	
311	Sixth St Agriculture	41,355,330	N/A	0.20%	0.20%	4.11%	4.56%		
312	Sprott Lending II	42,657,712	N/A	-12.83%	-12.83%	-8.99%	-5.14%		
313	Whitehorse Liquid IV	29,931,894	N/A	-0.13%	-0.13%	-6.97%	-7.67%		
314	Kicking Horse Colinvest	39,393,080	N/A	2.04%	2.04%	-0.77%	-0.64%		
315	INC Viva 3	19,691,330	N/A	-1.13%	-1.13%	-7.45%	-6.32%		
316	INC Incline Av II	27,779,737	N/A	0.44%	0.44%	-1.21%	1.94%		
317	Whitehorse Liquid V	9,336,463	N/A	-0.20%	-0.20%				
318	HCP Studio Fund	56,782,163	N/A	1.60%	1.60%				
319	NGP RP II	2,069,220	N/A	0.00%	0.00%				
320	Sprott III	5,963,785	N/A						

NOTES and REFERENCES

* Market Values			Reported market values represent total fund holdings consistent with Financial Statements as of April 30, 2023, consisting of:
	99.09%	Alaska Permanent Fund	
	0.91%	Alaska Mental Health Trust	
All Benchmarks			All benchmarks listed by name reflect the current applicable benchmark per Investment Policy or by manager contract (where applicable). Benchmark returns greater than one month may include different or additional indices applicable during the periods referenced. These can be found in the previous Investment Policies and Monthly Performance Reports.
All Returns			All returns are provided by Callan LLC, are annualized for periods greater than one year, and are net of fees as of July 1, 2020.
• 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	
		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			
07/01/2022 to date	36.0%	MSCI ACWI IMI	
	17.0%	Cambridge Private Equity (1 Q Lagged)	
	7.7%	NCREIF Property (1 Q Lagged)	
	5.5%	BB US Corporate	
	5.5%	BB US Aggregate	
	5.4%	Cambridge Global Private Infrastructure (1 Q Lagged)	
	3.6%	Cliffwater Direct Lending (1 Q Lagged)	
	3.0%	90 Day T-Bills	
	3.0%	HFRI EH Equity Market Neutral	
	3.0%	HFRI Macro	
	3.0%	BB Global Treasury ex-US Hedged	
	2.0%	BB US BB HY	
	2.0%	Barclays US Securitized	
	1.4%	MSCI US REIT (1 Q Lagged)	
	1.0%	HFRI Risk Parity Vol 12	
	1.0%	BB US TIPS	
3 Total Fund Return Objective			
	100%	Consumer Price Index (All Urban Consumers, U.S. City Average, All Items, Unadjusted Index) plus 5%	
4 Fixed Income Benchmark			
07/01/2022 to date	27.5%	BB US Aggregate	
	27.5%	BB US Corporate	
	15.0%	BB Gbl. Treasury ex-US Hedged	
	10.0%	BB US BB HY	
	10.0%	Barclays US Securitized	
	5.0%	90 Day T-Bills	
	5.0%	BB US TIPS	
5 Absolute Return Custom Benchmark			
07/01/2022 to date	50%	HFRI EH Equity Market Neutral	
	50%	HFRI Macro	
6 Real Estate Custom Benchmark			
07/01/2020 to date	85%	NCREIF Property (1 Q Lagged)	
	15%	MSCI US REIT (1 Q Lagged)	
7 Private Income Custom Benchmark			
07/01/2022 to date	60%	Cambridge Global Private Infrastructure (1 Q Lagged)	
	40%	Cliffwater Direct Lending (1 Q Lagged)	