## ND TEACHERS FUND FOR RETIREMENT INVESTMENT PERFORMANCE REPORT AS OF JUNE 30, 2023

		Ju	ine-23					Dece	mber-22			September-22					Curr FYT		Prior FY		3 Years Ended		5 Years Ended					
	Market Value	Alloc Actual	ation Policy	Quar Gross <sup>(3)</sup>	rter Net	Market Value	Alloc Actual		Qua Gross <sup>(3)</sup>	rter Net	Market Value	Alloc Actual		Qua Gross <sup>(3)</sup>	arter Net	Market Value	Alloci Actual	ation Policy	Qua Gross <sup>(3)</sup>	arter Net	Gross <sup>(3)</sup>	Net	Gross <sup>(3)</sup>	Net	6/30/2 Gross <sup>(3)</sup>	2023 Net	6/30/2 Gross <sup>(3)</sup>	2023 Net
TOTAL FUND	3,123,497,648				3.12%	3,040,088,854				3.47%	2,952,304,730				4.37%	2,843,471,211						7.48%		-6.31%	8.67%	8.41%	7.07%	6.83%
POLICY TARGET BENCHMARK ATTRIBUTION ANALYSIS				2.97%	2.97%				3.62%	3.62%				4.88%	4.88%				-3.28%	-3.28%	8.23%	8.23%	-6.22%	-6.22%	8.62%	8.62%	7.06%	7.06%
Asset Allocation Manager Selection				-0.05% 0.26%	-0.05% 0.20%				-0.30% 0.19%	-0.30% 0.15%				-0.61% 0.16%	-0.61% 0.11%				0.15% -0.29%		-0.83% 0.31%	-0.83%	-0.83% 0.97%		-0.80% 0.85%	-0.80% 0.59%	-0.62% 0.63%	-0.62% 0.39%
TOTAL RELATIVE RETURN				0.21%	0.15%				-0.11%	-0.15%				-0.45%	-0.51%				-0.14%	-0.20%	-0.51%	-0.74%	0.14%	-0.09%	0.05%	-0.21%	0.01%	-0.23%
GLOBAL EQUITY Benchmark	1,766,303,487	56.5%	55.0%	6.10% 5.80%	6.06% 5.80%	1,711,028,580	56.3%	55.0%	5.51% 5.57%	5.48% 5.57%	1,602,866,947	54.3%	55.0%	7.94% 8.44%	7.86% 8.44%	1,516,758,357	53.3%	55.0%	-4.58% -4.84%	-4.65% -4.84%		15.05% 15.26%					9.28% 9.73%	9.04% 9.73%
PUBLIC EQUITY	1,322,140,103	42.3%	45.0%	6.22%	6.15%	1,306,346,306	43.0%	45.0%	7.16%	7.13%	1,217,303,205	41.2%	45.0%	9.93%	9.83%	1,152,793,178	40.5%	45.0%	-6.31%	-6.40%	17.23%	16.90%	-15.82%	-16.08%	11.94%	11.62%	8.30%	8.02%
Benchmark				5.81%	5.81%				6.70%	6.70%				9.98%	9.98%				-6.34%	-6.34%	16.29%	16.29%	-16.31%		11.22%	11.22%	7.94%	7.94%
Epoch Global Choice MSCI World	-	0.0%		N/A	N/A	-	0.0%		N/A	N/A	(16)	0.0%		N/A	N/A	108,013,211	3.8%	4.4%	-5.81% <b>-6.19%</b>	-5.92% <b>-6.19%</b>	N/A	N/A	-15.60% -14.34%		N/A 0.00%	N/A 0.00%	N/A 0.00%	N/A 0.00%
LSV Global Value Equity	-	0.0%		N/A	N/A		0.0%		N/A	N/A	7	0.0%		N/A	N/A	143,629,455	5.1%	5.6%		-7.80%	N/A	N/A			N/A	N/A	N/A	N/A
MSCI ACWI IMI (1)	040454	0.000				000 500	0.000				004 770	0.001					0.00/	0.00/	-6.63%	-6.63%				-16.52%	0.00%	0.00%	0.00%	0.00%
Equity Transition Account	246,154	0.0%	0.00/	N/A	N/A	283,536	0.0%	0.00/	N/A	N/A	364,772	0.0%	0.00/	N/A	N/A	-	0.0%	0.0%	N/A	N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A
Total World Equity MSCI World	246,154	0.0%		N/A	N/A	283,536	0.0%	0.0%	N/A	N/A	364,762	0.0%	0.0%	N/A	N/A	251,642,666	8.8%	10.0%	-6.89% -6.19%		N/A -6.19%	N/A -6.19%	-12.90% -14.34%		N/A 3.77%	N/A 3.77%	N/A 4.09%	N/A 4.09%
Domestic Equity Benchmark	808,927,662	25.9%	27.3%	8.27% 8.08%	8.21% 8.08%	784,500,846	25.8%	26.7%	7.15% 6.79%	7.13% 6.79%	730,651,282	24.7%	27.0%	7.64% 7.10%	7.59% 7.10%	580,806,735	20.4%	21.0%	-3.97% -4.13%		19.91% 18.50%	19.62% 18.50%	-13.34% -15.55%		14.00% 13.75%	13.74% 13.75%	11.91% 10.41%	11.69% 10.41%
Large Cap Domestic LA Capital Large Cap Growth	22,503,804	0.7%		13.74%	13.74%	19,850,693	0.7%		11.46%	11.40%	17,778,665	0.6%		3.62%	3.14%	170,985,221	6.0%	6.7%	-3.62%	-3.67%	26.61%	25.89%	-16.03%	-16.20%	15.14%	14.77%	15.89%	15.57%
LA Capital 60% Large Cap/40% Large Cap Active Extension NTAM Collective Russell 1000 Index Fund	300,578,808	9.6%		9.83% 8.58%	9.83%	274,577,492	9.0% 5.3%		7.00%	6.97%	256,116,168	8.7% 5.1%		6.62% N/A	6.61% N/A	99,378,476	3.5% 0.0%	3.4% 0.0%	-4.15% N/A	-4.18% N/A	20.10% N/A		-10.78%		15.21% N/A	15.11% N/A	12.93% N/A	12.82% N/A
NTAM - Quant Enhanced Parametric/Clifton Group Enhanced	112,974,606 113,225,394	4.4% 3.6% 3.6%		8.53% 8.53%	8.58% 7.37% 8.53%	105,569,284 104,668,984	3.5% 3.4%		6.26% 7.23%	6.26% 7.23%	99,087,338 97,391,175	3.4% 3.3%		8.83% 7.78%	8.83% 7.78%	96,354,889 93,723,820	3.4% 3.3%	3.4% 3.4%	-4.68%	-5.06% -4.97%	18.63% 19.20%	17.88%	-7.61%	-7.73% -13.08%	15.44% 13.87%	15.15% 13.83%	11.02% 11.95%	10.84% 11.93%
Total Large Cap Domestic Equity Russell 1000	687,412,722	22.0%	23.2%	9.12%	9.08%	666,824,756	21.9%	22.7%	7.16%	7.15%	620,937,012		23.0%	7.78%	7.76%	460,442,407	16.2%	16.8%	-4.23%	-4.34%	20.71%	20.49%	-12.55%	-12.72%	14.59%	14.43%	13.42%	13.27%
				8.58%	8.58%				7.46%	7.46%				7.24%	7.24%				-4.61%	-4.61%	19.36%	19.36%	-13.04%	-13.04%	14.09%	14.09%	11.92%	11.92%
Small Cap Domestic Atlanta Capital Small Cap Equity Fund	40,501,953	1.3%		2.46%	2.46%	38,871,592	1.3%		9.62%	9.46%	35,435,020	1.2%		9.90%		42,604,476	1.5%	1.4%			16.47%				14.10%		9.76%	9.09%
Riverbridge Small Cap Growth Sycamore Small Cap Value	39,174,290 37,399,032	1.3% 1.2%		6.56% 1.29%	6.17% 1.13%	36,283,677 36,365,624	1.2% 1.2%		9.58% 2.88%	9.58% 2.88%	33,038,514 35,268,121	1.1% 1.2%		0.61% 11.64%		32,418,244 45,341,608	1.1% 1.6%	1.4% 1.4%	0.96% -3.10%	0.79% -3.24%	12.74%	17.75% 12.16%	-7.68%	-8.25%	N/A N/A	N/A N/A	N/A N/A	N/A N/A
NTAM Collective Russell 2000 Index Fund Total Small Cap Domestic Equity	4,439,664 121,514,940	0.1% 3.9%	4.1%	5.25% 3.49%	5.25% 3.32%	6,155,198 117,676,090	0.2% 3.9%	4.0%	2.83% 7.07%	2.83% 7.02%	5,972,616 109,714,270	0.2% 3.7%	4.1%	N/A 7.63%		120,364,328	0.0% 4.2%	0.0% 4.2%			N/A 15.73%	N/A		N/A -16.92%	N/A 11.15%		N/A 6.33%	N/A 5.78%
Russell 2000				5.20%	5.20%				2.74%	2.74%				6.23%	6.23%				-2.19%	-2.19%		12.31%	-25.20%	-25.20%	10.83%	10.83%	4.21%	4.21%
Total International Equity MSCI ACWI ex-US IMI (Net) (2)	512,966,287	16.4%	17.7%	3.13% 2.38%	3.06% 2.38%	521,561,924	17.2%	18.3%	7.18% 6.56%	7.13% 6.56%	486,287,161	16.5%	18.0%	14.47% 14.15%		320,343,778	11.3%	14.0%	-9.79% -9.74%	-9.85% -9.74%	14.14% 12.40%		-21.62% -18.90%		7.70% 7.21%	7.38% 7.21%	4.46% 3.47%	4.20% 3.47%
International All Cap William Blair International Leaders	77,043,391	2.5%		3.06%	2.96%	75,333,869	2.5%		9.05%	9.05%	68,997,922	2.3%		12.92%	12.82%	66,959,302	2.4%	3.2%	-7.57%	-7.66%	17.29%	16.97%	-28.26%	20 520/	5.22%	4.88%	5.97%	5.62%
Arrowstreet International Equity	123,390,243	4.0%		5.52%	5.40%	117,861,905	3.9%		6.89%	6.77%	110,260,427	3.7%		15.19%	15.01%	94,108,754	3.3%	3.7%	-9.37%	-9.40%	17.75%	17.26%	N/A	N/A	N/A	N/A	N/A	N/A
State Street MSCI ACWI ex-US Index Total International All Cap	2,461,970 202,895,604	0.1% 6.5%	6.7%	2.57% 4.31%	2.57% 4.20%	7,084,143 200,279,917	0.2% 6.6%	7.1%	6.91% 7.69%	6.91% 7.62%	6,618,378 185,876,727	0.2% 6.3%	7.0%	N/A 14.44%		161,068,056	0.0% 5.7%	0.0% 6.8%		N/A N/A	N/A N/A	N/A		N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
MSCI ACWI ex-US IMI (Net)				2.38%	2.38%				6.56%	6.56%				14.15%	14.15%				-9.69%	-9.69%	12.47%	12.47%	-19.86%	-19.86%	7.33%	7.33%	3.38%	3.38%
Developed International Large Cap NTAM - MSCI World ex-US Index	34,125,716	1.1%		2.98%	2.97%	46,070,956	1.5%		8.06%	8.06%	42,584,362	1.4%		17.32%	17.32%	38,903,026	1.4%	1.6%	-9.93%			17.56%			9.69%	9.65%	4.96%	4.92%
State Street MSCI World ex-US Index Total Developed International Large Cap	158,653,697 192,779,413	5.1% 6.2%	6.9%	3.26% 3.35%	3.26% 3.35%	154,678,694 200,749,650	5.1% 6.6%	6.9%	8.39% 8.31%	8.39% 8.31%	142,532,059 185,116,421	4.8% 6.3%	6.8%	N/A 18.26%		38,903,026	0.0% 1.4%	0.0% 1.6%	-9.93%		N/A 19.24%			N/A	N/A N/A	N/A N/A	N/A N/A	N/A
MSCI World Ex US				3.03%	3.03%				8.02%	8.02%				16.18%	16.18%				-9.20%	-9.20%	17.41%	17.41%	-16.76%	-16.76%	9.30%	9.30%	4.58%	4.58%
Developed International Small Cap DFA Intl. Small Cap Value Portfolio (3)	14,055,918	0.5%		0.87%	0.87%	14,027,925	0.5%		6.53%	6.53%	13,152,257	0.4%		19.29%		27,081,720	1.0%	1.1%			15.25%	15.25%	-13.72%		12.69%	12.69%	2.19%	2.19%
Wellington International Small Cap Opportunities State Street MSCI World ex-US Small Cap Index	13,583,136 3,540,621	0.4% 0.1%		0.73% 0.64%	0.50% 0.61%	13,607,133 7,021,027	0.4% 0.2%		3.74% 5.03%	3.48% 5.02%	13,133,630 6,677,383	0.4% 0.2%		19.30% N/A	18.72% N/A	25,968,745	0.9% 0.0%	1.1% 0.0%	-9.39% N/A	-9.59% N/A	12.94% N/A	11.62% N/A	-27.13% N/A	-27.77% N/A	6.74% N/A	5.73% N/A	0.56% N/A	-0.36% N/A
Total Developed International Small Cap MSCI World Ex US Small Cap (4)	31,179,675	1.0%	1.1%	0.93% 0.49%	0.83% 0.49%	34,656,085	1.1%	1.1%	5.11% 4.99%	5.01% 4.99%	32,963,270	1.1%	1.1%	18.89% 15.21%	18.71% 15.21%	53,050,465	1.9%	2.1%	N/A -9.83%	N/A -9.83%	N/A 9.59%	N/A 9.59%	N/A -25.53%	N/A -25.53%	N/A 5.70%	N/A 5.70%	N/A 0.24%	N/A 0.24%
Emerging Markets																												
Axiom Emerging Markets Equity Fund (3) DFA Emerging Markets All Cap Core	58,356,180 23,507,982	1.9% 0.8%		-1.07% N/A	-1.23% N/A	58,835,908	1.9% 0.0%		4.22% N/A	4.08% N/A	56,470,591	1.9% 0.0%		6.23% N/A	6.09% N/A	47,367,787	1.7% 0.0%	2.6%	-13.77% N/A	-13.87% N/A	-5.56% N/A	-6.07% N/A	-30.92%	-31.58% N/A	-1.84% N/A	-2.66% N/A	0.13% N/A	-0.37% N/A
DFA Emerging Markets Small Cap Portfolio (3) State Street MSCI Emerging Markets Ex China Index	1 2,973,200	0.0% 0.1%		3.99% N/A	3.99% N/A	20,489,033	0.7% 0.0%		4.56% N/A	4.56% N/A	19,574,581	0.7% 0.0%		10.18% N/A	10.18% N/A	19,954,444	0.7% 0.0%	0.9%	-8.90% N/A	-8.90% N/A	9.15% N/A	9.15% N/A	-18.29% N/A	-18.29% N/A	11.53% N/A	11.53% N/A	4.43% N/A	4.43% N/A
State Street MSCI China Index State Street MSCI Emerging Markets Index	1,274,233	0.0%		N/A -2.97%	N/A -2.97%	- 6,551,332	0.0%		N/A 4.12%	N/A 4.12%	- 6,285,570	0.0% 0.2%		N/A N/A	N/A N/A	-	0.0%	0.0%	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A	N/A N/A
Total Emerging Markets Equity MSCI Emerging Markets	86,111,596	2.8%	3.1%	0.29%	0.20%	85,876,273	2.8%	3.1%	4.29%	4.20%	82,330,742	2.8%	3.1%	7.45%	7.36%	67,322,231	2.4%		-12.39% -11.57%	-12.46%	-1.53% 1.75%	-1.87%	-27.73%	-28.23%	1.65%	1.04%	1.36% 0.93%	1.00%
Private Equity				0.0070	0.0070				0.0070	0.0070				0.7070	0.1070								20.2070	20.2070	2.0270	2.0270	0.0070	0.0070
Total Adams St-Brinson Partnership Funds 1998-2003 Total Adams St-Brinson Non-US Partnership Funds 1999-2004	180,481 98,414	0.0%		0.83% 6.91%	0.83% 6.91%	178,997 92.055	0.0% 0.0%		-2.52% 2.57%	-2.52% 2.57%	183,898 89,750	0.0%		2.79% 40.11%		207,102	0.0%		0.00% 0.00%		1.04% 53.64%	1.04%			-1.32% 13.03%	-1.32% 13.03%	-0.75% 8.36%	-0.75% 8.36%
Adams Street 2008 Non-US Partnership Fd	2,185,831	0.1%		6.29%	6.29%	2,056,394	0.1%		6.29%	6.29%	2,096,060	0.0%		-2.60%	-2.60%	2,259,612	0.0%		2.35%	2.35%	12.63%	12.63%	-15.96%	-15.96%	12.34%	12.34%	12.33%	12.33%
Adams Street Direct Co-investment Fund 2006 Total Adams Street 2010 Funds	1 4,532,394	0.0%		2.17% 3.72%	2.17% 3.72%	8,539 4,500,571	0.0%		4.60%	4.60%	8,164 4,734,373	0.0%		-0.06% -1.69%		8,168 5,087,470	0.0% 0.2%		-0.36% 0.63%	-0.36% 0.63%	6.43% 1.02%	6.43% 1.02%		-8.29% 1.86%	-6.25% 20.31%		-21.26% 17.52%	-21.26% 17.52%
Adams Street 2015 Global Fund Adams Street 2016 Global Fund	20,972,661 20,343,249	0.7% 0.7%		6.25% 7.08%	6.25% 7.08%	20,291,940 18,997,885	0.7% 0.6%		-1.57% 0.64%	-1.57% 0.64%	21,029,793 18,876,536	0.7% 0.6%		-3.10% -1.80%	-1.80%	22,007,950 19,222,292	0.8% 0.7%		1.17% 3.49%	1.17% 3.49%	2.53% 9.53%	2.53% 9.53%	19.13%	19.13%			20.25% 18.84%	20.25% 18.84%
Adams Street 2017 Global Fund Adams Street 2018 Global Fund	42,868,226 40,029,298	1.4% 1.3%		5.83% 5.71%	5.83% 5.71%	40,506,424 37,865,513	1.3% 1.2%		-0.30% 0.52%	-0.30% 0.52%	40,627,694 36,556,183	1.4% 1.2%		-2.04% -1.74%		41,474,747 34,395,829	1.5% 1.2%		3.55% 5.19%	3.55% 5.19%	7.03% 9.83%	7.03% 9.83%	28.72%		26.83% 26.57%	26.83% 26.57%	19.55% N/A	19.55% N/A
Adams Street 2019 Global Fund Adams Street 2020 Global Fund	35,295,548 23,783,029	1.1%		6.37% 6.16%	6.37% 6.16%	32,115,676 20,988,226	1.1%		-0.64% -0.08%	-0.64%	30,141,353 19,346,440	1.0%		-3.32% 4.20%	-3.32%	28,113,291 15,492,633	1.0%		3.59% 0.00%	3.59%	5.85%	5.85% 10.53%	28.10%	28.10%	46.85% N/A		N/A N/A	N/A N/A
Adams Street 2020 Global Fund Blacknock PEP	13,690,377	0.4%		9.02%	9.02%	10,963,199	0.4%		1.16%	1.16%	8,833,929 112,253,254	0.3%		10.61%	10.61%	4,545,289	0.2%		0.00%	0.00%	21.99%	21.99%		20.00 % N/A 8.55%	N/A	N/A	N/A 16.48%	N/A 16.48%
Blackrock PEP 2020 Series	121,479,425 51,375,780	1.6%		4.80% 6.67%	4.80%	113,945,278 41,530,620	1.4%		0.00%	0.00%	35,445,412	1.2%		5.50% 8.71%	8.71%	29,397,003	1.0%		0.00%	0.00%	15.97%	15.97%	7.00%	7.00%	24.05% N/A	N/A	N/A	N/A
Sixth Street Partners - TAO Other Miscellaneous Funds	52,785,714 14,542,956	1.7% 0.5%		7.36% -0.76%	7.36% -0.76%	45,061,280 15,579,677	1.5% 0.5%		2.09% 5.19%	2.09% 5.19%	40,123,193 15,217,712			1.75% -7.18%	-7.18%	36,646,766 19,560,942	1.3% 0.7%		0.00% -0.08%	0.00% -0.08%	-3.17%	11.52% -3.17%	-14.39%	6.80% -14.39%	N/A -2.89%	N/A -2.89%	N/A -1.53%	N/A -1.53%
Total Private Equity (3)	444,163,384	14.2%	10.0%	5.74%	5.74%	404,682,274	13.3%	10.0%	0.37%	0.37%	385,563,742	13.1%	10.0%	1.54%	1.54%	363,965,179	12.8%	10.0%	1.38%	1.38%	9.24%	9.24%	11.73%	11.73%	22.02%	22.02%	15.25%	15.25%

## ND TEACHERS FUND FOR RETIREMENT INVESTMENT PERFORMANCE REPORT AS OF JUNE 30, 2023

INVESTMENT PERFORMANCE REPORT AS OF JUNE 30, 2023														Current Prior Year														
	June-23					March-23 Allocation Quarter						Decem				September-22 Allocation Quarter						rent FD	Prior FY:		3 Years Ended 6/30/2023		5 Years E	
	Market Value	Alloca Actual	tion Policy	Quar Gross <sup>(3)</sup>	rter Net	Market Value			Qua Gross <sup>(3)</sup>	nter Net	Market Value	Alloca Actual	tion Policy	Quar Gross <sup>(3)</sup>	ter Net	Market Value	Alloca Actual		Quar Gross <sup>(3)</sup>	ter Net	Gross <sup>(3)</sup>	Net	Gross <sup>(3)</sup>	Net	6/30/2 Gross <sup>(3)</sup>	2023 Net	6/30/2 Gross <sup>(3)</sup>	023 Net
GLOBAL FIXED INCOME Benchmark	790,640,387	25.3%	26.0%	0.32% -0.05%	0.29% -0.05%	745,302,808	24.5%	26.0%	2.67% 3.15%	2.65% 3.15%	745,933,390	25.3%	26.0%	1.80% 2.59%	1.77% 2.59%	750,115,832	26.4%	26.0%	-3.13% -3.49%		1.56% 2.08%		-8.41% -11.04%	0.0470	-0.86% -1.81%	0.0070	2.44% 1.62%	2.31% 1.62%
Domestic Fixed Income Benchmark	790,640,387	25.3%	26.0%	0.32% -0.05%	0.29% -0.05%	745,302,808	24.5%	26.0%	2.67% 3.15%	2.65% 3.15%	745,933,390	25.3%	26.0%		1.77% 2.59%	750,115,832	26.4%	26.0%	-3.13% -3.49%		1.56% 2.08%	1.43% 2.08%	-8.41% -11.04%		-0.86% -1.81%	-0.98% -1.81%	2.44% 1.62%	2.31% 1.62%
Investment Grade Fixed Income PIMC0 Distressed Senior Credit Opportunities II (3) Prudenital Core Fixed Income State Street Gov Index Western Asset U.S. Core Fixed Income State Street Long U.S. Treasury Index NL Fund PIMCO Core Plus Constrained Manufile/Declaration Total Return Bond Fund (3) Allspring Medium Quality Credit	24,359,444 131,381,488 24,964,213 90,920,329 80,813,798 - 128,204,369 50,916,049 22,885,035	0.8% 4.2% 0.8% 2.6% 0.0% 4.1% 1.6% 0.7%		2.14% -0.55% -0.29% -1.35% -0.36% N/A -0.54% 0.86%	2.14% -0.59% -0.29% -1.35% -0.36% N/A -0.58% 0.86%	47,708,435 132,976,634 15,938,643 58,659,114 81,600,781 - 129,742,296 50,832,448	1.6% 4.4% 0.5% 1.9% 2.7% 0.0% 4.3% 1.7% 0.0%		2.11% 3.14% N/A N/A 1.94% 2.95% 1.63% N/A	2.11% 3.14% N/A N/A 1.94% 2.91% 1.63% N/A	46,818,928 184,477,120 - 40,832,920 181,638,612 67,815,505	1.6% 6.2% 0.0% 0.0% 1.4% 6.2% 2.3% 0.0%		0.69% 2.24% N/A N/A -1.02% 2.26% 0.32% N/A	0.69% 2.20% N/A N/A -1.02% 2.23% 0.32% N/A	47,441,528 184,091,517 46,991,826 184,459,628 68,974,552	1.7% 6.5% 0.0% 0.0% 1.7% 6.5% 2.4% 0.0%	1.7% 6.2% 1.8% 6.2% 2.2%	0.05% -4.60% N/A N/A -9.62% -4.81% -1.61% N/A	0.05% -4.63% N/A N/A -9.62% -4.94% -1.61% N/A	5.07% 0.04% N/A N/A N/A -0.33% 1.18% N/A	5.07% -0.06% N/A N/A N/A -0.57% 1.18% N/A	1.64% -11.41% N/A N/A -18.46% -10.93% -5.18% N/A	1.64% -11.51% N/A N/A -18.47% -11.15% -5.18% N/A	5.05% -3.38% N/A N/A N/A -3.33% 0.84% N/A	5.05% -3.48% N/A N/A N/A -3.54% 0.84% N/A	4.79% 1.21% N/A N/A N/A 1.34% 2.41% N/A	4.79% 1.08% N/A N/A N/A 1.16% 2.41% N/A
Fixed Income Transition Account	0	0.0%	40.00/	N/A	N/A	21,624	0.0%	10.00/	N/A	N/A	-	0.0%	10.0%	N/A	N/A	-	0.0%	40.00/	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total Investment Grade Fixed Income Bloomberg Aggregate	554,444,724	17.8%	18.0%	-0.57% -0.84%	-0.59% -0.84%	517,479,976	17.0%	18.0%	2.97% 2.96%	2.96%	521,583,085	17.7%	18.0%	1.56% 1.87%	1.54%	531,959,051	18.7%	18.0%	-4.43% -4.75%	-4.48% -4.75%	-0.62% -0.94%	-0.74% -0.94%	-10.54% -10.29%	-10.66% -10.29%	-3.34% -3.97%	-3.45% -3.97%	1.42% 0.77%	1.31% 0.77%
Below Investment Grade Fixed Income Ares ND Credit Strategies (3) Cerberus ND Private Credit Fund (3) S&P LSTA Leveraged Loan B Index	68,598,599 76,311,305	2.2% 2.4%		4.99% 2.09% <b>3.25%</b>	4.99% 2.09% <b>3.25%</b>	65,337,935 81,405,736	2.1% 2.7%		1.16% 2.06% <b>3.89%</b>	1.16% 2.06% <b>3.89%</b>	64,585,606 79,766,390	2.2% 2.7%		1.35% 2.12% <b>2.80%</b>	1.35% 2.12% <b>2.80%</b>	63,726,540 69,286,295	2.2% 2.4%	2.2% 2.4%	0.00% 1.28% <b>1.18%</b>	0.00% 1.28% <b>1.18%</b>	7.65% 7.76% <b>11.57%</b>	7.65% 7.76% <b>11.57%</b>	8.95% 7.08% <b>-2.98%</b>	8.95% 7.08% <b>-2.98%</b>	10.01% 8.63% <b>6.53%</b>	10.01% 8.63% <b>6.53%</b>	7.91% 8.74% <b>4.49%</b>	7.91% 8.74% <b>4.49%</b>
Loomis Sayles High Yield PIMCO BRAVO II (3) GS Mezzanine Partners 2006 Offshore, L.P. (3) GS Mezzanine Partners V Offshore, L.P. (3) Bloomberg High Yield 2% Issuer Constrained Index	89,871,346 1,413,923 1 489	2.9% 0.0% 0.0% 0.0%		0.95% -10.06% 2.89% 0.92% <b>1.75%</b>	0.85% -10.06% 2.89% 0.92% <b>1.75%</b>	79,425,340 1,606,453 14,409 32,959	2.6% 0.1% 0.0% 0.0%		2.72% -7.91% 1.76% 7.80% <b>3.57%</b>	2.61% -7.91% 1.76% 7.80% <b>3.57%</b>	77,527,643 2,425,863 14,182 30,622	2.6% 0.1% 0.0% 0.0%		4.22% 22.05% 79.34% 7.44% <b>4.17%</b>	4.10% 22.05% 79.34% 7.44% <b>4.17%</b>	81,181,034 3,891,304 12,642 58,967	2.9% 0.1% 0.0% 0.0%	3.2% 0.1% 0.0% 0.0%	-0.17% 0.00% -21.41% -6.47% <b>-0.64%</b>	-0.28% 0.00% -21.41% -6.47% <b>-0.64%</b>		7.42% -35.44% 47.56% 9.32% <b>9.07%</b>	-15.12% -1.13% 6.99% -12.02% <b>-12.82%</b>		2.38% -6.41% 18.74% 16.90% <b>3.12%</b>	1.90% -6.41% 18.74% 16.90% <b>3.12%</b>		2.18% -7.07% 13.66% 22.31% <b>3.34%</b>
Total Below Investment Grade Fixed Income Bloomberg High Yield 2% Issuer Constrained Index	236,195,662	7.6%	8.0%	2.43% 1.75%	2.39% 1.75%	227,822,832	7.5%	8.0%	1.95% 3.57%	1.91% 3.57%	224,350,305	7.6%	8.0%	2.38% 4.17%	2.34% 4.17%	218,156,781	7.7%	8.0%	0.35% -0.64%	0.31% -0.64%	7.29% 9.07%	7.12% 9.07%	-1.69% -12.82%	-1.88% -12.82%	6.60% 3.12%	6.40% 3.12%	5.61% 3.34%	5.38% 3.34%
GLOBAL REAL ASSETS Benchmark	553,753,045	17.7%	18.0%		-1.49% -1.17%	558,553,464	18.4%	18.0%	-0.93% -1.54%		557,453,737	18.9%	18.0%		-1.50% -2.46%	570,352,773	20.1%	18.0%	-0.66% 1.28%	-0.71% 1.28%	-4.34% -3.87%	-4.66% -3.87%	18.64% 19.33%		7.82% 6.78%	7.40% 6.78%	6.64% 5.52%	6.22% 5.52%
Global Real Estate Invesco Core Real Estate - U.S.A., L.P. Invesco U.S. Value-Add Fund V, L.P. (3) Invesco U.S. Value-Add Fund V, L.P. (3) Invesco Real Estate U.S. Fund VI (3) Invesco Asia Real Estate Fund III, L.P. (3) JP Morgan Strategic & Special Staudion Property Blend JP Morgan Strategic & Special Staudion Property Blend JP Morgan Creater Europe Opportunistic Property Fund (3) Total Global Real Estate NCREF TOTAL INDEX	157,483,194 551,786 28,146,335 16,811,570 6,480,482 117,052,201 240,144 <b>326,765,712</b>	5.0% 0.0% 0.5% 0.2% 3.7% 0.0% <b>10.5%</b>	9.0%	-6.41%	-6.56% -31.55% 0.43% -4.07% -6.48% -2.38% -0.40% -4.46% -1.98%	168,985,561 808,225 26,798,553 15,249,566 6,947,459 119,932,040 241,731 <b>338,963,134</b>	5.6% 0.0% 0.5% 0.2% 3.9% 0.0% 11.1%	9.0%	-4.98% -2.46% -6.10% -1.18% 10.67% -3.70% 5.46% -4.18% -1.81%	-5.06% -2.46% -6.10% -1.18% 10.67% -3.93% 5.46% -4.30% -1.81%	178,448,113 830,502 27,969,742 13,618,443 6,293,986 124,859,398 229,816 <b>352,249,999</b>	6.0% 0.0% 0.5% 0.2% 4.2% 0.0% <b>11.9%</b>	9.0%	0.10% N/A -8.58% -5.66% 9.37% -1.62%	1.34% -38.00% 0.10% N/A -8.58% -5.66% 9.37% -1.65% -3.50%	176,427,440 2,012,790 28,775,231 13,131,652 6,897,511 132,608,727 210,523 <b>360,063,874</b>	6.2% 0.1% 1.0% 0.5% 0.2% 4.7% 0.0% <b>12.7%</b>	9.0%	0.00% 0.00% 0.00% N/A 0.00% -2.05% -6.29% -0.79% 0.57%	0.00% 0.00% N/A 0.00% -2.27% -6.29% -0.88% 0.57%	-9.82% -58.61% -5.60% N/A -5.38% -12.92% 7.65%	-10.10% -58.61% -5.60% N/A -5.38% -13.54% 7.65%	27.19% 3.60% 18.37% N/A -9.77% 28.76% -12.90% <b>25.58%</b>		7.33% -21.85% 10.40% N/A -2.09% 6.56% -0.14% <b>7.18%</b> <b>6.79%</b>	6.99% -21.85% 10.40% N/A -2.09% 5.58% -0.14% 6.65% 6.79%	6.05% -10.69% N/A N/A 4.96% 5.79% -5.11% 6.14% 5.90%	5.70% -10.69% N/A 4.96% 4.86% -5.11% 5.62% 5.90%
OTHER REAL ASSETS Benchmark	226,987,333	7.3%	9.0%	3.20% -0.37%	3.11% -0.37%	219,590,330	7.2%	9.0%	4.59% -1.26%	4.49% -1.26%	205,203,738	7.0%	9.0%		-1.27% -1.41%	210,288,899	7.4%	9.0%	-0.43% 1.99%	-0.42% 1.99%		5.92% -1.08%	8.32% 17.22%		8.77% 6.72%	8.52% 6.72%	7.34% 5.00%	7.08% 5.00%
Timber TIR Teredo Timber, LLC TIR Springbank, LLC Total Timber (3) NCREIF Timberland Index	10,519,161 27,029,636 <b>37,548,797</b>	0.3% 0.9% <b>1.2%</b>	1.2%	2.13% -1.27% <b>-0.34%</b> <b>1.71%</b>	2.13% -1.27% <b>-0.34%</b> <b>1.71%</b>	10,568,346 28,304,489 <b>38,872,836</b>	0.3% 0.9% <b>1.3%</b>	1.3%	14.46% -1.27% <b>2.51%</b> 1.75%	-1.27%	9,233,357 29,532,216 <b>38,765,573</b>	0.3% 1.0% <b>1.3%</b>	1.3%	0.90% -9.59% <b>-7.30%</b> <b>4.89%</b>	0.90% -9.59% <b>-7.30%</b> <b>4.89%</b>	9,151,089 33,395,644 <b>42,546,733</b>	0.3% 1.2% <b>1.5%</b>	1.5%	0.00% 0.00% <b>0.00%</b> <b>2.38%</b>	0.00% 0.00% <b>0.00%</b> 2.38%	17.95% -11.86% -5.29% 11.13%	-5.29%	15.73% 5.24% <b>7.37%</b> <b>12.01%</b>	15.73% 5.24% <b>7.37%</b> 12.01%	13.56% -1.11% <b>2.17%</b> <b>8.67%</b>	13.56% -1.11% <b>2.17%</b> <b>8.67%</b>	9.55% 1.53% <b>3.36%</b> <b>5.80%</b>	9.55% 1.53% <b>3.36%</b> <b>5.80%</b>
Infrastructure Rohahn Group Asian Infrastructure & Related Resources (3) JP Morgan Infrastructure Fund II (3) ISQ Global Infrastructure Fund II (3) Macquarie Infrastructure Pantners IV (3) Macquarie Infrastructure Pantners IV (3) Grosvenor Customized Infrastructure Strategies, LP (3) Grosvenor Customized Infrastructure Strategies II (3) Grosvenor Customized Infrastructure Strategies II (3) Total Infrastructure <i>Soft Norther DOCE/Soft CPLU (lagged one quarter)</i> Cash Equivalents	6,992,754 56,461,877 29,556,779 7,693,794 34,446,400 26,520,856 4,451,602 9,252,777 14,061,695 <b>189,438,536</b>	0.2% 1.8% 0.9% 0.2% 1.1% 0.8% 0.1% 0.3% 0.5% <b>6.1%</b>	7.8%	1.98% 5.29% 3.19% 7.94% 1.36% 2.92% 15.53% 8.07% 0.99% <b>3.93%</b> <b>-0.69%</b>	1.98% 4.92% 3.19% 7.94% 1.36% 2.92% 15.53% 8.07% 0.99% <b>3.82%</b> -0.69%	6,783,899 54,450,164 29,907,759 5,741,831 33,998,952 23,160,153 4,304,597 9,627,273 12,742,866 <b>180,717,494</b>	0.2% 1.8% 1.0% 0.2% 1.1% 0.1% 0.3% 0.3% 0.4% <b>5.9%</b>	7.7%	-1.84% 8.54% 7.55% 1.31% 0.93% 1.23% 11.06% 5.79% 5.38% 5.05% -1.76%	-1.84% 8.12% 7.55% 1.31% 0.93% 1.23% 11.06% 5.79% 5.38% 4.92% -1.76%	6,869,035 50,599,496 27,754,070 2,513,091 33,633,371 22,848,585 4,164,319 9,325,425 8,730,773 <b>166,438,165</b>	0.2% 1.7% 0.9% 0.1% 1.1% 0.8% 0.3% 0.3% 5.6%	7.7%	-1.55% -0.20% 28.96% 1.03% 1.85% 0.87% 2.13% -1.15% <b>0.30%</b>	-0.42% -1.75% -0.20% 28.96% 1.03% 1.85% 0.87% 2.13% -1.15% <b>0.24%</b> <b>-2.48%</b>	6,894,226 53,060,908 31,004,094 1,955,882 33,428,680 20,137,959 4,307,799 9,719,225 7,233,393 <b>167,742,166</b>	0.2% 1.9% 1.1% 0.1% 0.7% 0.2% 0.3% 0.3% <b>5.9%</b>	7.5%	0.24% 0.00% -0.64% -27.83% -0.67% 0.08% -0.72% -0.11% 0.00% -0.54% 1.91%	0.24% 0.03% -0.64% -27.83% -0.67% 0.08% -0.72% -0.11% 0.00% <b>-0.53%</b> <b>1.91%</b>	-0.08% 12.50% 10.04% 1.78% 2.67% 6.21% 28.49% 16.63% 5.19% <b>8.92%</b> - <b>3.04%</b>	-0.08% 11.49% 10.04% 1.78% 2.67% 6.21% 28.49% 16.63% 5.19% 8.61% -3.04%	1.33% 1.85% 12.90% N/A 15.50% 18.12% 6.18% 10.66% N/A <b>8.50%</b> 18.33%	1.33% 1.23% 12.90% N/A 15.50% 18.12% 6.18% 10.66% N/A 8.26% 18.33%	-0.68% 8.64% 14.21% N/A 12.66% N/A 16.44% 17.33% N/A 10.75% 6.49%	-0.68% 7.78% 14.21% N/A 12.66% N/A 16.44% 17.33% N/A 10.41% 6.49%	-7.49% 7.75% 10.12% N/A N/A 11.07% 14.62% N/A <b>8.50%</b> <b>4.98%</b>	-7.49% 6.96% 10.12% N/A N/A 11.07% 14.62% N/A 8.13% 4.98%
Cash Equivalents Northem Trust Collective STIF Bank of ND Total Cash Equivalents 90 Day T-Bill	9,152,027 135,735 <b>9,287,762</b>	0.3% 0.0% <b>0.3%</b>	1.0%	1.28% 1.24% <b>1.26%</b> 1.17%	1.28% 1.24% <b>1.26%</b> 1.17%	15.083.099 6,775,341 <b>21,858,439</b>	0.5% 0.2% <b>0.7%</b>	1.0%	1.18% 1.10% <b>1.14%</b> <b>1.07%</b>	1.18% 1.10% <b>1.14%</b> 1.07%	36,971,997 5,759,213 <b>42,731,210</b>	1.3% 0.2% <b>1.4%</b>	1.0%	0.89% 0.90% <b>0.92%</b> 0.84%	0.89% 0.90% <b>0.92%</b> 0.84%	3,276,888 2,967,360 <b>6,244,248</b>	0.1% 0.1% <b>0.2%</b>	1.0%	0.53% 0.53% <b>0.54%</b> 0.46%	0.53% 0.53% <b>0.54%</b> 0.46%	3.93% 3.83% <b>3.93%</b> 3.59%	3.93% 3.83% <b>3.93%</b> <b>3.59%</b>	0.22% 0.22% <b>0.22%</b> 0.17%	0.22% 0.22% <b>0.22%</b> <b>0.17%</b>	1.40% 1.37% <b>1.40%</b> 1.27%	1.40% 1.37% <b>1.40%</b> 1.27%	1.58% 1.57% <b>1.60%</b> <b>1.55%</b>	1.58% 1.57% <b>1.60%</b> 1.55%
Residual Holdings Residual Holdings Account	3,512,968	0.1%	0.0%	N/A	N/A	3,345,563	0.1%	0.0%	N/A	N/A	3,319,446	0.1%	0.0%	N/A	N/A	-	0.0%	0.0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTE: Monthly returns and market values are preliminary and subject to change. New asset class structure began October 1, 2011. Composite returns for new composites not available prior to that date. Portfolios moved between asset classes will show historical returns in new position. () Prior to July 1, 2019, the benchmark was MSCI W orld.

Prior to October 1, 2022; the bonchmark was more instance.
 Prior to October 1, 2022; the bonchmark was target weighted between MSCI World Ex US and MSCI EM.
 All limited partnership-type and mutual funda investment returns will only be expected net of fees, which is astroard practice by the investment consultant.
 Between Machine 1, 2022 and September 30, 2022; benchmark was EPAC, Developed World, <\$28</li>