

Municipal Fire and Police Retirement System of Iowa

Monthly Summary
September 30, 2024

Report Items

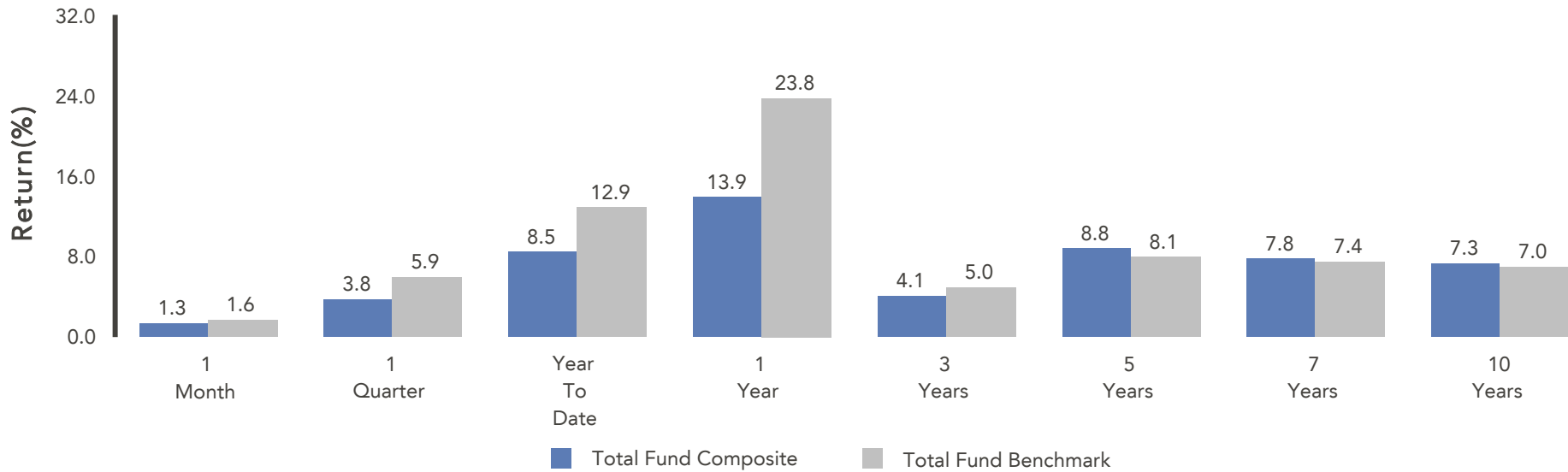
- None

Action Items

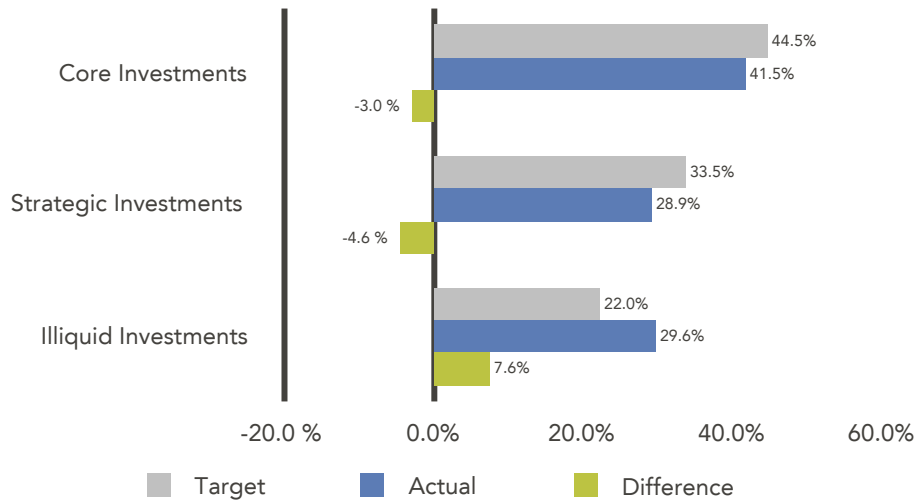
- Review Private Market Pacing Plan

Total Fund Composite

Performance Summary
As of September 30, 2024



Total Fund Composite vs. Target Allocation

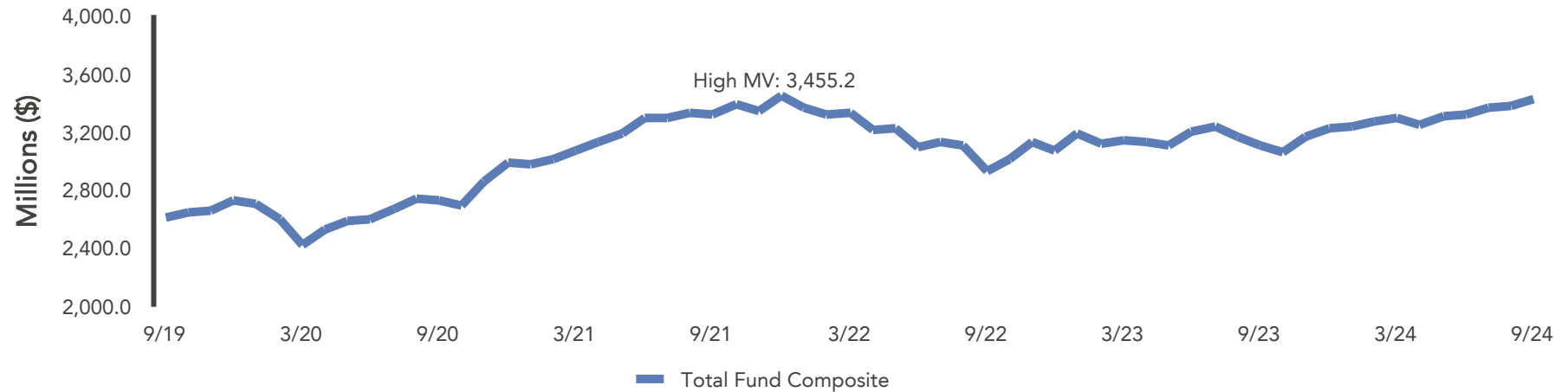


Summary of Cash Flows

	1 Year (\$)	3 Years (\$)	5 Years (\$)
Beginning Market Value	3,106,549,005	3,330,257,970	2,620,967,237
Net Cash Flow	-108,298,491	-327,094,716	-540,653,342
Gain/Loss	437,623,887	432,711,147	1,355,560,507
Ending Market Value	3,435,874,402	3,435,874,402	3,435,874,402

Total Fund Composite

Portfolio Summary
As of September 30, 2024



	Market Value (\$)	% of Portfolio	Policy %	Difference (\$)
Total Fund Composite	3,435,874,402	100.0	100.0	
Core Investments	1,425,254,912	41.5	44.5	-103,777,915
Core Domestic Equity Composite	431,694,314	12.6	11.5	36,568,758
Core International Equity Composite	308,292,179	9.0	10.0	-35,295,261
Core Global Equity Composite	20,318,525	0.6	0.0	20,284,167
Core Fixed Income Composite	253,120,959	7.4	9.5	-73,287,110
Core Real Estate Composite	162,006,449	4.7	8.0	-112,863,503
Core Infrastructure Composite	107,791,248	3.1	3.0	4,715,016
Absolute Return Composite	74,112,179	2.2	2.5	-11,784,681
Cash Composite	67,919,058	2.0	0.0	67,884,699
Strategic Investments	994,373,664	28.9	33.5	-156,575,543
Illiquid Investments	1,016,245,826	29.6	22.0	260,353,458
Private Real Assets Composite	90,560,351	2.6	2.0	21,842,863
Private Credit Composite	60,149,945	1.8	2.0	-8,567,543
Private Equity Composite	865,535,531	25.2	18.0	247,078,138

Total Fund Composite

Manager Status

Investment Manager	Asset Class	Status	Reason
JP Morgan 130-30	Large-Cap Core	In Compliance	--
INTECH Investment Management	Large-Cap Core	In Compliance	--
DFA US Small Cap Trust	Small-Cap Core	In Compliance	--
Mondrian Investment Partners Fund	Non-U.S. Large-Cap Value	In Compliance	--
Baillie Gifford International Choice Fund	Non-U.S. Large-Cap Growth	In Compliance	--
SSgA MSCI ACWI	Global Core Equity	In Compliance	--
Dodge & Cox	Core Fixed Income	In Compliance	--
JP Morgan Strategic Property Fund	Core Real Estate	In Compliance	--
Principal Enhanced Property Fund	Core Real Estate	In Compliance	--
IFM Global Infrastructure Fund	Global Infrastructure	In Compliance	--
Grantham, Mayo, Van Otterloo & Co	Strategic Allocation	In Compliance	--
JP Morgan Global Portfolio	Strategic Allocation	In Compliance	--
BlackRock Global	Strategic Allocation	In Compliance	--
Schroders Div Growth Port	Strategic Allocation	In Compliance	--

Total Fund Composite

Portfolio Allocation
Month Ending September 30, 2024

	Begin Market Value \$	Net Cash Flow (\$)	Ending MV (\$)	% of Portfolio	Policy (%)
Total Fund Composite	3,382,258,761	6,135,639	3,435,874,402	100.0	100.0
Core Investments	1,367,727,391	30,098,926	1,425,254,912	41.5	44.5
Core Domestic Equity Composite	424,080,961	-421,677	431,694,314	12.6	11.5
Core International Equity Composite	297,516,466	-181,406	308,292,179	9.0	10.0
Core Global Equity Composite	19,870,303	-4,915	20,318,525	0.6	0.0
Core Fixed Income Composite	249,414,844	-98,953	253,120,959	7.4	9.5
Core Real Estate Composite	161,948,577	-409,729	162,006,449	4.7	8.0
Core Infrastructure Composite	105,034,771	-204,917	107,791,248	3.1	3.0
Absolute Return Composite	73,544,016	-50	74,112,179	2.2	2.5
Cash Composite	36,317,453	31,420,572	67,919,058	2.0	0.0
Strategic Investments	995,727,296	-16,131,345	994,373,664	28.9	33.5
Illiquid Investments	1,018,804,074	-7,831,942	1,016,245,826	29.6	22.0
Private Real Assets Composite	89,914,970	1,330,280	90,560,351	2.6	2.0
Private Credit Composite	59,588,332	-	60,149,945	1.8	2.0
Private Equity Composite	869,300,773	-9,162,222	865,535,531	25.2	18.0

Total Fund Composite

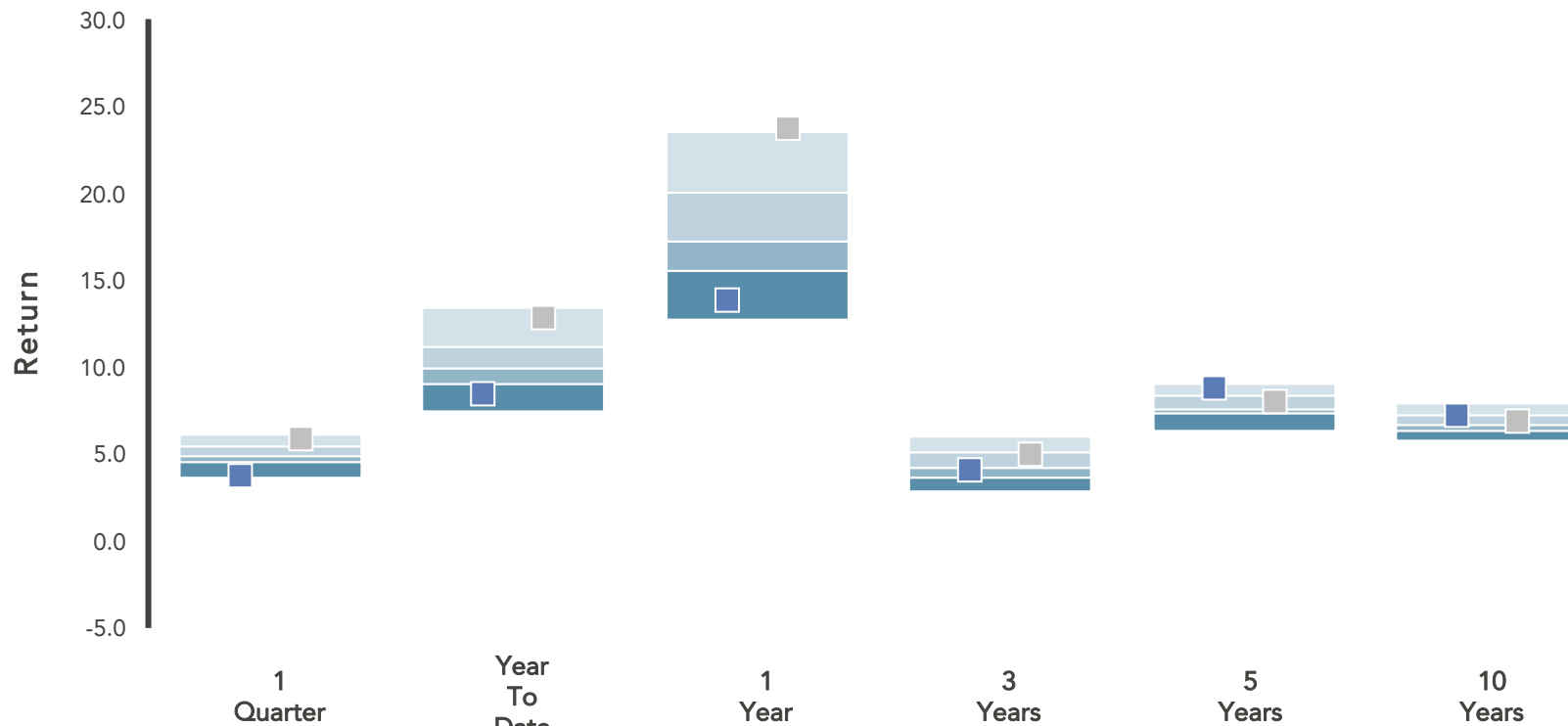
Annualized Performance (Net of Fees)
As of September 30, 2024

	3 Mo (%)	YTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	SI (%)	Inception Date
Total Fund Composite	3.8	8.5	3.8	13.9	4.1	8.8	7.3	7.8	Apr 92
Total Fund Benchmark	5.9	12.9	5.9	23.8	5.0	8.1	7.0	7.2	
Core Investments	5.7	11.5	5.7	17.9	3.7	7.8	5.9	7.6	Apr 03
Core Investments Benchmark	4.5	9.4	4.5	15.7	1.6	6.6	6.3	7.7	
Core Domestic Equity Composite	5.7	24.1	5.7	39.1	12.4	17.3	13.3	12.2	Apr 03
Russell 3000 Index	6.2	20.6	6.2	35.2	10.3	15.3	12.8	11.5	
Core International Equity Composite	10.5	13.9	10.5	25.6	1.0	7.0	5.2	8.2	Apr 03
MSCI AC World ex USA (Net)	8.1	14.2	8.1	25.4	4.1	7.6	5.2	8.0	
Core Global Equity Composite	6.9	18.2	6.9	31.4	7.6	12.1	9.4	8.9	May 11
MSCI AC World Index (Net)	6.6	18.7	6.6	31.8	8.1	12.2	9.4	8.8	
Core Fixed Income Composite	5.7	6.4	5.7	14.2	0.8	2.5	2.7	3.6	Apr 03
Core Fixed Income Benchmark	5.2	4.9	5.2	12.1	-1.4	0.2	1.5	3.5	
Core Real Estate Composite	0.6	-3.3	0.6	-9.8	-2.1	1.5	5.0	6.7	Jul 99
NFI-ODCE	0.0	-3.2	0.0	-8.0	-1.0	2.1	5.2	6.3	
Core Infrastructure Composite	3.8	3.7	3.8	6.4	-	-	-	8.5	Dec 21
CPI +4%	1.3	5.9	1.3	6.5	8.9	8.4	7.0	8.7	
Absolute Return Composite	2.7	4.3	2.7	1.0	-	-	-	-0.3	Jan 23
BTOP50 Unlevered Index	-1.2	3.7	-1.2	1.4	4.7	4.2	-	2.3	
Strategic Investments	5.1	12.3	5.1	22.9	4.9	8.3	6.3	6.8	Apr 99
Strategic Investments Benchmark	6.7	14.2	6.7	25.5	5.3	8.9	7.5	6.4	
Illiquid Investments	0.0	1.0	0.0	1.3	4.3	11.4	10.6	9.9	Apr 03
Private Real Assets Composite	-4.8	-18.1	-4.8	-20.5	-1.7	1.0	6.0	1.9	Apr 03
Private Credit Composite	2.1	8.0	2.1	11.4	8.9	-	-	11.4	Aug 20
Private Equity Composite	0.3	3.0	0.3	3.5	4.6	13.0	11.6	11.3	May 03

Total Fund Composite

Total Fund Composite vs. InvMetrics Public DB \$1B-\$5B Net

Peer Universe Comparison
As of September 30, 2024



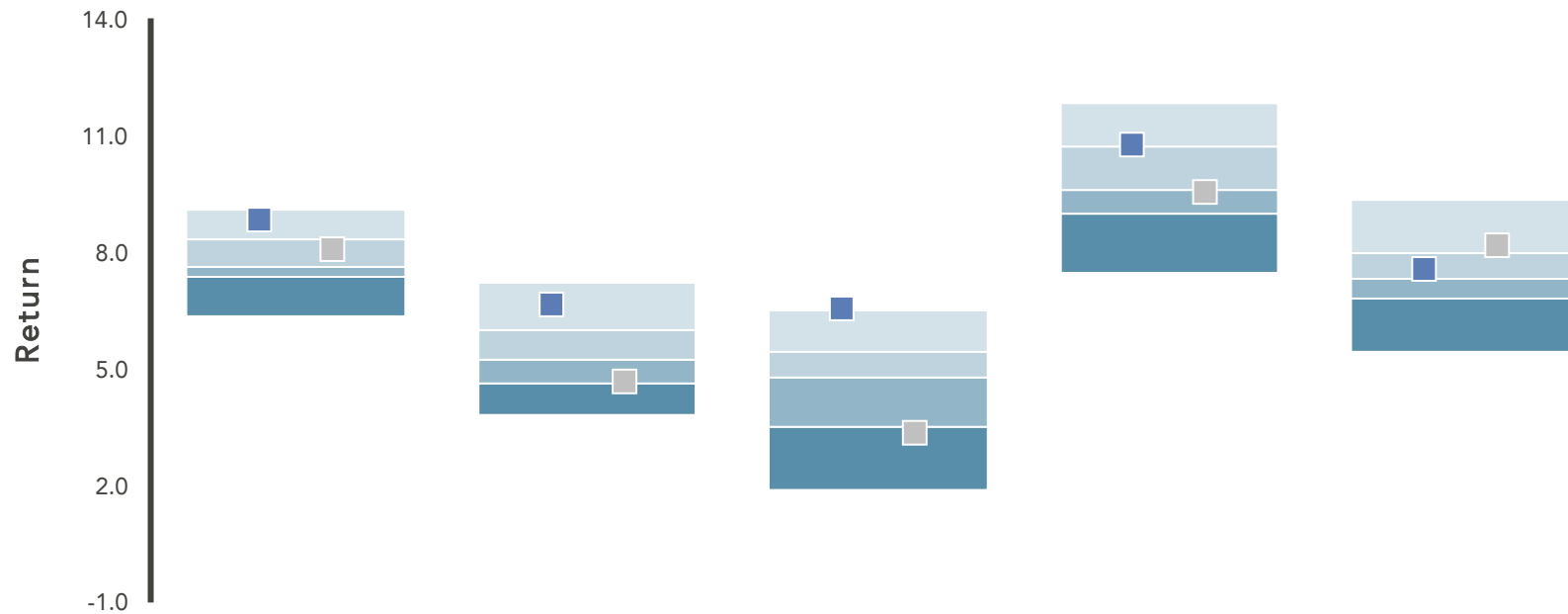
	1 Quarter	Year To Date	1 Year	3 Years	5 Years	10 Years
■ Total Fund Composite	3.8 (93)	8.5 (83)	13.9 (89)	4.1 (54)	8.8 (16)	7.3 (23)
■ Total Fund Benchmark	5.9 (15)	12.9 (9)	23.8 (5)	5.0 (28)	8.1 (32)	7.0 (35)
5th Percentile	6.1	13.4	23.6	6.1	9.1	7.9
1st Quartile	5.5	11.2	20.1	5.1	8.4	7.2
Median	4.9	9.9	17.3	4.2	7.7	6.7
3rd Quartile	4.5	9.0	15.6	3.7	7.4	6.4
95th Percentile	3.7	7.5	12.8	2.8	6.4	5.8
Population	43	43	43	41	41	39

Total Fund Composite

vs. InvMetrics Public DB \$1B-\$5B Net

Peer Universe Comparison

As of September 30, 2024



■ Total Fund Composite
■ Total Fund Benchmark

	5 Years	5 Years Ending Sep-2023	5 Years Ending Sep-2022	5 Years Ending Sep-2021	5 Years Ending Sep-2020
Total Fund Composite	8.8 (16)	6.7 (10)	6.6 (5)	10.8 (20)	7.6 (36)
Total Fund Benchmark	8.1 (32)	4.7 (73)	3.4 (80)	9.6 (52)	8.2 (20)
5th Percentile	9.1	7.2	6.5	11.9	9.4
1st Quartile	8.4	6.0	5.4	10.7	8.0
Median	7.7	5.3	4.8	9.6	7.3
3rd Quartile	7.4	4.6	3.5	9.0	6.8
95th Percentile	6.4	3.8	1.9	7.5	5.4
Population	41	103	97	131	101

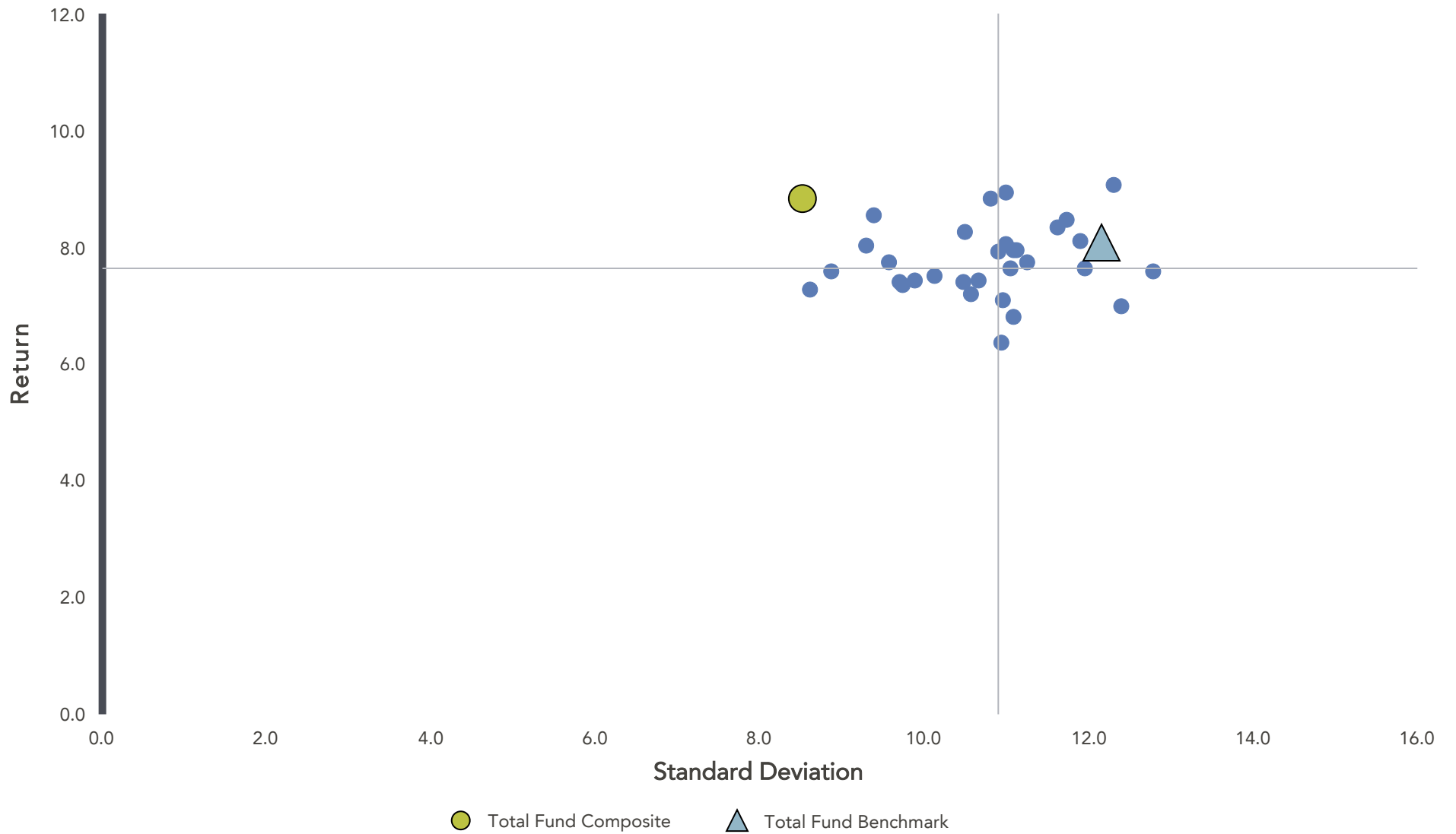
Total Fund Composite

InvMetrics Public DB \$1B-\$5B Net

Peer Universe Comparison

As of September 30, 2024

Risk vs. Return - 5 Years



Total Fund Composite

Annualized Performance (Net of Fees)
As of September 30, 2024

	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	SI (%)	Inception Date
Total Fund Composite	1.3	3.8	8.5	13.9	4.1	8.8	7.8	7.3	7.8	Apr 92
Total Fund Benchmark	1.6	5.9	12.9	23.8	5.0	8.1	7.4	7.0	7.2	
Total Fund Composite Ex Alternatives	1.8	5.5	11.8	20.0	4.2	8.0	6.7	6.1	6.9	Jun 04
Core Investments	2.0	5.7	11.5	17.9	3.7	7.8	6.5	5.9	7.6	Apr 03
Core Investments Benchmark	1.5	4.5	9.4	15.7	1.6	6.6	6.2	6.3	7.7	
Core Public Equity Composite	2.6	7.6	19.7	33.2	7.1	12.3	9.6	8.2	9.8	Apr 03
Core Public Equity Benchmark	2.4	7.1	17.4	30.2	7.3	11.5	9.6	9.0	9.6	
Core Domestic Equity Composite	1.9	5.7	24.1	39.1	12.4	17.3	14.4	13.3	12.2	Apr 03
Russell 3000 Index	2.1	6.2	20.6	35.2	10.3	15.3	13.7	12.8	11.5	
JP Morgan 130-30	1.8	4.5	26.7	42.0	14.8	19.5	16.3	14.4	12.9	Apr 08
S&P 500 Index	2.1	5.9	22.1	36.4	11.9	16.0	14.5	13.4	11.5	
INTECH Investment Management	2.7	7.7	27.9	41.4	10.9	15.5	13.7	13.0	11.4	Apr 08
Russell 1000 Index	2.1	6.1	21.2	35.7	10.8	15.6	14.2	13.1	11.4	
DFA US Small Cap Trust	0.9	8.5	10.1	25.1	5.9	11.6	8.6	9.8	11.0	Feb 03
Russell 2000 Index	0.7	9.3	11.2	26.8	1.8	9.4	7.4	8.8	10.1	
Core International Equity Composite	3.7	10.5	13.9	25.6	1.0	7.0	5.0	5.2	8.2	Apr 03
MSCI AC World ex USA (Net)	2.7	8.1	14.2	25.4	4.1	7.6	5.4	5.2	8.0	
Mondrian Investment Partners Fund	3.3	11.2	14.8	25.4	6.5	7.3	4.9	4.5	6.7	Jun 99
MSCI AC World ex USA (Net)	2.7	8.1	14.2	25.4	4.1	7.6	5.4	5.2	-	
Baillie Gifford International Choice Fund	4.1	9.6	12.8	26.0	-4.8	5.7	4.5	5.6	8.3	Mar 03
MSCI AC World ex USA (Net)	2.7	8.1	14.2	25.4	4.1	7.6	5.4	5.2	7.9	

Total Fund Composite

Annualized Performance (Net of Fees)
As of September 30, 2024

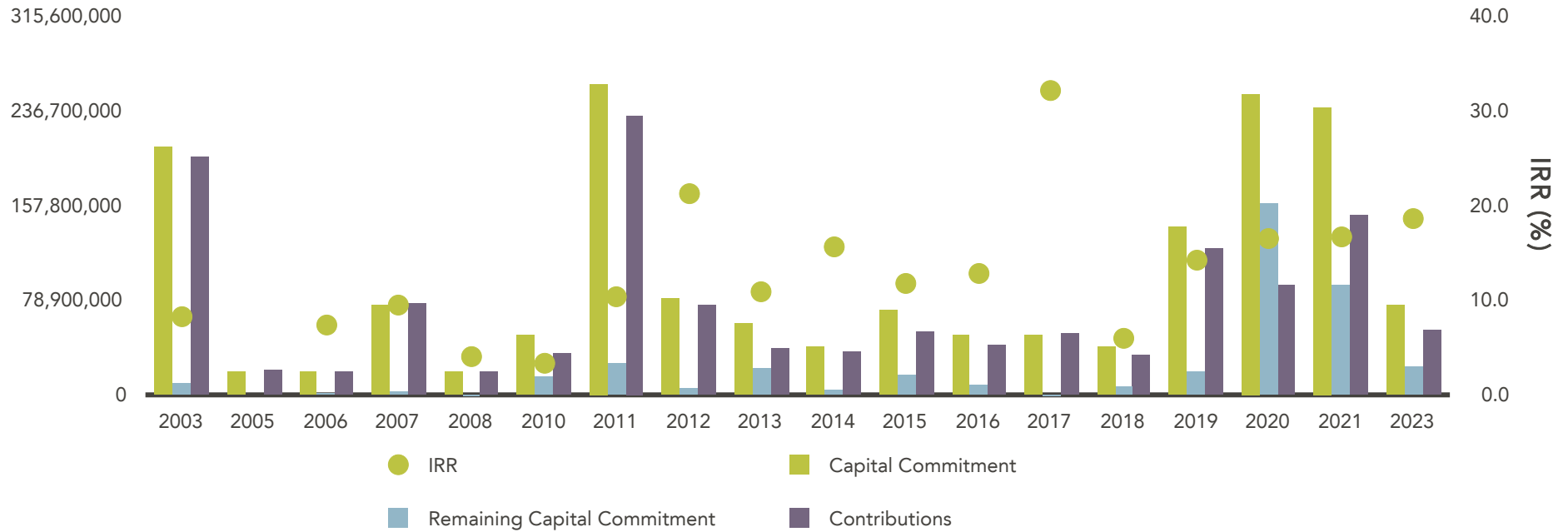
	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	SI (%)	Inception Date
Core Global Equity Composite	2.3	6.9	18.2	31.4	7.6	12.1	10.0	9.4	8.9	May 11
MSCI AC World Index (Net)	2.3	6.6	18.7	31.8	8.1	12.2	10.2	9.4	8.8	
SSgA MSCI ACWI	2.3	6.9	18.2	31.4	7.6	12.1	10.0	9.4	8.9	May 11
MSCI AC World Index (Net)	2.3	6.6	18.7	31.8	8.1	12.2	10.2	9.4	8.8	
MSCI AC World IMI Index (Net)	2.3	6.8	17.8	31.0	7.4	11.9	9.8	9.2	8.6	
Core Fixed Income Composite	1.5	5.7	6.4	14.2	0.8	2.5	3.0	2.7	3.6	Apr 03
Core Fixed Income Benchmark	1.4	5.2	4.9	12.1	-1.4	0.2	1.1	1.5	3.5	
Dodge & Cox	1.5	5.7	6.4	14.2	0.8	2.5	3.1	-	3.2	Nov 14
Blmbg. U.S. Universal Index	1.4	5.2	4.9	12.1	-1.1	0.7	1.7	2.2	2.1	
Blmbg. U.S. Aggregate Index	1.3	5.2	4.4	11.6	-1.4	0.3	1.5	1.8	1.8	
Core Real Estate Composite	0.2	0.6	-3.3	-9.8	-2.1	1.5	2.7	5.0	6.7	Jul 99
NFI-ODCE	0.0	0.0	-3.2	-8.0	-1.0	2.1	3.2	5.2	6.3	
JP Morgan Strategic Property Fund	0.2	0.6	-4.0	-11.3	-2.9	0.9	2.1	4.3	6.7	Jul 99
NFI-ODCE	0.0	0.0	-3.2	-8.0	-1.0	2.1	3.2	5.2	6.3	
Principal Enhanced Property Fund	0.5	0.5	-0.5	-3.5	1.4	4.2	5.3	8.0	5.0	Jun 06
NFI-ODCE	0.0	0.0	-3.2	-8.0	-1.0	2.1	3.2	5.2	4.6	
Core Infrastructure Composite	2.6	3.8	3.7	6.4	-	-	-	-	8.5	Dec 21
CPI +4%	0.5	1.3	5.9	6.5	8.9	8.4	7.7	7.0	8.7	
IFM Global Infrastructure Fund	2.6	3.8	3.7	6.4	-	-	-	-	8.5	Dec 21
CPI +4%	0.5	1.3	5.9	6.5	8.9	8.4	7.7	7.0	8.7	

Total Fund Composite

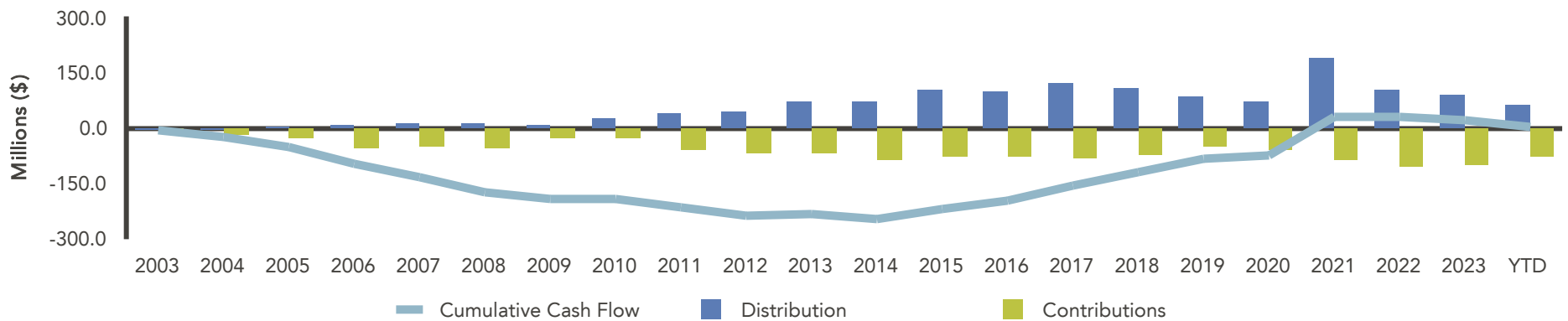
Annualized Performance (Net of Fees)
As of September 30, 2024

	1 Mo (%)	3 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)	SI (%)	Inception Date
Absolute Return Composite	0.8	2.7	4.3	1.0	-	-	-	-	0.1	Dec 22
BTOP50 Unlevered Index	0.9	-1.2	3.7	1.4	4.7	4.2	-	-	2.4	
MFPRSI Absolute Return	0.8	2.7	4.3	1.0	-	-	-	-	0.1	Dec 22
BTOP50 Unlevered Index	0.9	-1.2	3.7	1.4	4.7	4.2	-	-	2.4	
Strategic Investments	1.5	5.1	12.3	22.9	4.9	8.3	6.9	6.3	6.8	Apr 99
Strategic Investments Benchmark	2.1	6.7	14.2	25.5	5.3	8.9	7.8	7.5	6.4	
Grantham, Mayo, Van Otterloo & Co	0.7	4.7	9.6	18.2	5.9	7.5	6.1	5.4	7.6	Feb 03
GMO Benchmark	1.9	5.7	14.4	24.8	6.3	9.3	8.0	7.4	7.5	
JP Morgan Global Portfolio	1.6	5.4	15.2	28.2	6.6	10.5	8.9	8.6	8.3	May 04
JP Morgan Benchmark	2.1	6.3	15.1	26.6	5.9	9.0	7.8	7.4	7.2	
BlackRock Global	1.8	5.0	11.7	22.8	3.1	8.0	-	-	6.4	Jan 18
Total Fund Benchmark	1.6	5.9	12.9	23.8	5.0	8.1	7.4	7.0	7.2	
Schroders Div Growth Port	1.9	5.2	12.5	22.1	3.9	7.0	5.6	5.2	5.1	Jul 14
Total Fund Benchmark	1.6	5.9	12.9	23.8	5.0	8.1	7.4	7.0	6.7	

Vintage Year Commitments and Cashflows



Cash Flow Analysis



Private Equity

Composite Summary
As of September 30, 2024

Investments		Commitments		Contributions & Distributions		Valuations		Performance			
Account Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	RVPI	TVPI	Since Inception (%)
Adams Street Partners											
Adams Street Partnership Fund 2003 US Fund, L.P.	2003	77,250,000	3,862,500	73,387,500	119,247,809	462,693	119,710,502	1.6	0.0	1.6	7.9
Adams Street Partnership Fund 2003 Non US Fund, L.P.	2003	25,750,000	1,158,750	24,591,250	38,892,681	883,561	39,776,242	1.6	0.0	1.6	9.6
Adams Street Partnership Fund 2006 US Fund, L.P.	2006	12,000,000	648,000	11,397,900	18,324,059	481,095	18,805,154	1.6	0.0	1.6	7.8
Adams Street Partnership Fund 2006 Non US Fund, L.P.	2006	6,000,000	297,000	5,703,000	8,044,472	152,670	8,197,142	1.4	0.0	1.4	5.5
Adams Street 2006 Direct Fund, L.P.	2006	2,000,000	39,000	1,961,000	4,201,597	150,166	4,351,763	2.1	0.1	2.2	8.7
Adams Street 2014 Global Fund, L.P.	2014	20,000,000	1,522,556	18,477,444	20,099,759	19,693,825	39,793,584	1.1	1.1	2.2	14.0
Adams Street Co-Investment Fund III A, L.P.	2014	20,000,000	2,106,000	17,894,000	27,520,216	15,979,525	43,499,741	1.5	0.9	2.4	17.4
Adams Street Partners US SMB Fund, L.P.	2016	30,000,000	4,751,647	25,248,353	10,290,970	46,238,803	56,529,773	0.4	1.8	2.2	19.4
Adams Street Cyclone Fund, L.P.	2020	220,000,000	153,747,306	66,252,694	11,709,099	79,679,702	91,388,801	0.2	1.2	1.4	20.0
Sub Total		413,000,000	168,132,759	244,913,141	258,330,662	163,722,040	422,052,702	1.1	0.7	1.7	9.9
Harbourvest											
HarbourVest VII Venture Fund, L.P.	2003	20,000,000	665,000	19,335,000	31,257,133	267,839	31,524,972	1.6	0.0	1.6	6.9
HarbourVest VIII Buyout Fund, L.P.	2007	15,000,000	450,000	14,550,000	26,221,919	139,468	26,361,387	1.8	0.0	1.8	10.6
HarbourVest VIII Venture Fund, L.P.	2007	5,000,000	100,000	4,900,000	9,363,307	1,365,803	10,729,110	1.9	0.3	2.2	11.1
HarbourVest IX Venture Fund, L.P.	2011	20,000,000	1,000,000	19,056,160	41,324,998	20,013,217	61,338,215	2.2	1.1	3.2	20.0
HIPPEP VI-European Small-Medium Buyout Fund, L.P.	2011	14,000,000	-2,534,427	16,534,427	29,352,488	5,637,985	34,990,473	1.8	0.3	2.1	13.1
Dover Street VIII, L.P.	2012	60,000,000	4,800,000	55,200,000	89,584,075	3,493,886	93,077,961	1.6	0.1	1.7	19.5
Sub Total		134,000,000	4,480,573	129,575,587	227,103,920	30,918,198	258,022,118	1.8	0.2	2.0	12.7
Industry Ventures, LLC											
Industry Ventures Partnership Holdings VI, L.P.	2021	35,000,000	13,248,572	21,751,428	585,142	23,848,042	24,433,184	0.0	1.1	1.1	7.2
Sub Total		35,000,000	13,248,572	21,751,428	585,142	23,848,042	24,433,184	0.0	1.1	1.1	7.2
Neuberger Berman											
NB Crossroads 2010 Fund, L.P.	2010	50,000,000	14,750,000	35,250,000	36,860,420	5,974,863	42,835,283	1.0	0.2	1.2	3.4
NB Crossroads Fund XX, L.P.	2013	60,000,000	21,600,000	38,400,000	40,336,069	35,785,912	76,121,981	1.1	0.9	2.0	10.9
Sub Total		110,000,000	36,350,000	73,650,000	77,196,489	41,760,775	118,957,264	1.0	0.6	1.6	7.5

Private Equity

Composite Summary
As of September 30, 2024

Investments		Commitments		Contributions & Distributions		Valuations		Performance			
Account Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	RVPI	TVPI	Since Inception (%)
Siguler Guff & Co., LLC											
Siguler Guff Distressed Opportunities Fund III, L.P.	2007	55,000,000	1,650,000	57,027,646	83,282,072	4,146,345	87,428,416	1.5	0.1	1.5	9.0
Siguler Guff BRIC Opportunities Fund II, L.P.	2008	20,000,000	400,000	19,600,000	24,673,658	1,251,464	25,925,122	1.3	0.1	1.3	4.1
Siguler Guff Hawkeye- 2011-1 Series	2011	150,000,000	26,919,300	123,080,700	197,475,574	27,635,794	225,111,368	1.6	0.2	1.8	10.6
Siguler Guff Hawkeye- 2011-2 Series	2011	75,000,000	709,800	74,290,200	76,282,574	22,007,491	98,290,064	1.0	0.3	1.3	5.1
Siguler Guff Hawkeye- 2012-1 Series	2012	20,000,000	350,000	19,650,000	25,491,618	6,424,674	31,916,291	1.3	0.3	1.6	11.8
Siguler Guff Hawkeye- 2015-1 Series	2015	70,000,000	17,256,670	52,743,330	51,352,580	49,345,136	100,697,717	1.0	0.9	1.9	11.7
Siguler Guff Hawkeye- 2016-1 Series	2016	20,000,000	3,509,000	16,491,000	3,121,909	18,446,360	21,568,269	0.2	1.1	1.3	4.7
Siguler Guff Hawkeye- 2018-1 Series	2018	40,000,000	7,046,000	32,954,000	9,808,847	34,377,241	44,186,088	0.3	1.0	1.3	6.0
Siguler Guff Hawkeye- 2019-1 Series	2019	115,000,000	18,192,831	97,232,500	27,214,619	124,315,195	151,529,814	0.3	1.3	1.6	17.9
Siguler Guff Hawkeye- 2020-1 Series	2020	30,000,000	5,044,000	24,956,000	4,219,941	31,757,531	35,977,472	0.2	1.3	1.4	12.1
Siguler Guff Hawkeye- 2021-1 Series	2021	30,000,000	3,588,000	26,412,000	5,153,456	38,518,269	43,671,725	0.2	1.5	1.7	20.8
Siguler Guff Hawkeye- 2021-2 Series	2021	145,000,000	63,753,914	81,790,000	10,045,893	96,183,819	106,229,712	0.1	1.2	1.3	19.3
Siguler Guff Hawkeye- 2023-1 Series	2023	30,000,000	3,282,000	27,025,000	307,000	32,957,268	33,264,268	0.0	1.2	1.2	18.1
Siguler Guff Hawkeye- 2023-3 Series	2023	30,000,000	8,285,000	23,430,000	1,715,000	21,595,677	23,310,677	0.1	0.9	1.0	-0.9
Sub Total		830,000,000	159,986,514	676,682,376	520,144,742	508,962,263	1,029,107,005	0.8	0.8	1.5	10.1
Top Tier Capital Partners											
Top Tier Venture Velocity Fund 2, L.P.	2017	50,000,000	139,858	51,893,469	77,210,940	48,855,309	126,066,250	1.5	1.0	2.5	32.1
Top Tier Venture Velocity Fund 3, L.P.	2019	25,000,000	522,561	24,477,439	6,326,738	17,841,197	24,167,935	0.3	0.7	1.0	-0.4
Top Tier Venture Velocity Fund 4, L.P.	2021	30,000,000	10,249,718	19,900,282	191,859	20,456,264	20,648,124	0.0	1.0	1.0	2.7
Top Tier Venture Velocity Prime, L.P.	2023	15,000,000	11,599,106	3,561,285	306,461	5,670,541	5,977,002	0.1	1.6	1.7	112.4
Sub Total		120,000,000	22,511,243	99,832,476	84,035,999	92,823,312	176,859,311	0.9	0.9	1.8	25.4
Total		1,642,000,000	404,709,661	1,246,405,007	1,167,396,954	862,034,630	2,029,431,585	0.9	0.7	1.6	10.7

*Fund level valuations are reflective of the most recently received quarter-end statement released by fund manager and adjusted for subsequent cash flows to date. Most fund valuations are reported on a one or two quarter lag. Fund level values shown here may differ from custodian fund values shown on page 26-30 due to the timing of manager and custodian statement release.

Private Equity

Composite Summary
As of September 30, 2024

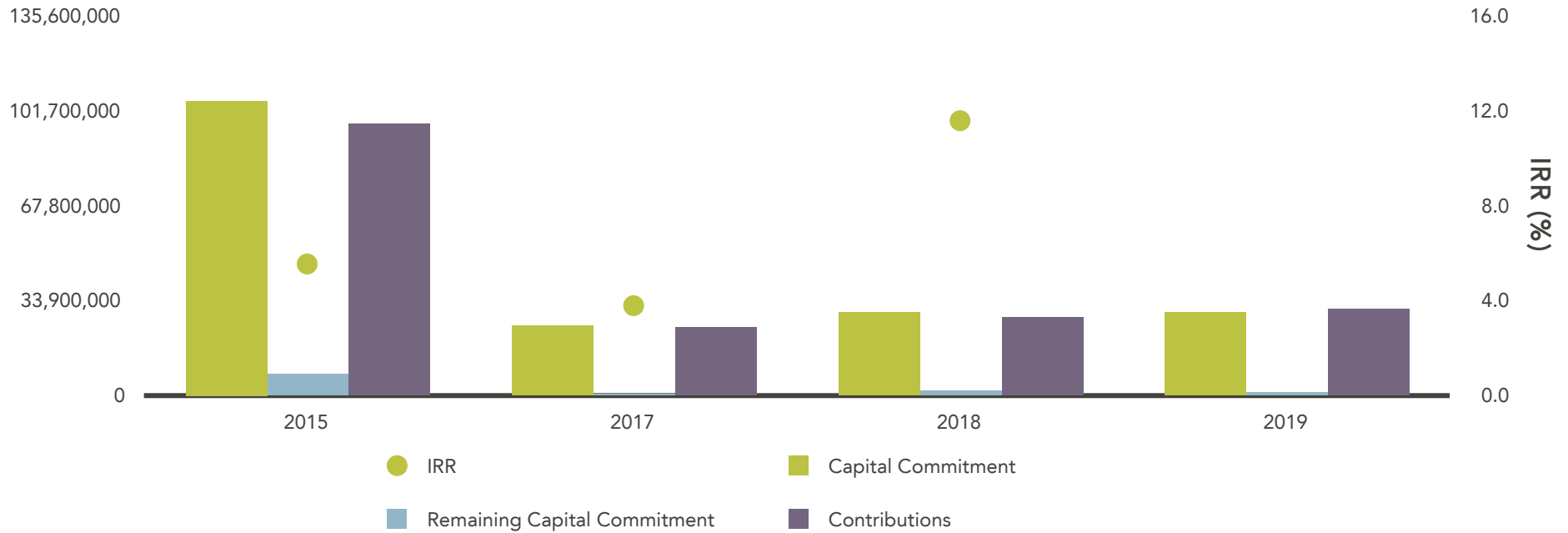
Investments		Performance							
Account Name	Vintage Year	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	Since Inception (%)	KS-PME	ICM/PME	PME Benchmark Name
Adams Street Partners									
Adams Street Partnership Fund 2003 US Fund, L.P.	2003	-32.4	-15.2	3.1	4.2	7.9	1.0	7.0	Russell 3000 Index
Adams Street Partnership Fund 2003 Non US Fund, L.P.	2003	-10.1	2.9	3.5	3.0	9.6	1.2	6.3	FTSE All World Ex U.S.
Adams Street Partnership Fund 2006 US Fund, L.P.	2006	-30.5	-15.9	13.7	13.4	7.8	0.9	10.2	Russell 3000 Index
Adams Street Partnership Fund 2006 Non US Fund, L.P.	2006	-29.5	-15.6	0.5	2.8	5.5	1.1	3.8	FTSE All World Ex U.S.
Adams Street 2006 Direct Fund, L.P.	2006	7.7	-18.1	6.3	17.8	8.7	1.3	1.0	MSCI AC World Index (Net)
Adams Street 2014 Global Fund, L.P.	2014	2.3	-4.0	14.8	15.5	14.0	1.2	9.9	MSCI AC World Index (Net)
Adams Street Co-Investment Fund III A, L.P.	2014	1.0	3.1	18.6	17.1	17.4	1.4	10.1	MSCI AC World Index (Net)
Adams Street Partners US SMB Fund, L.P.	2016	3.1	3.8	22.1	19.4	19.4	1.2	14.7	Russell 3000 Index
Adams Street Cyclone Fund, L.P.	2020	7.2	9.7	-	-	20.0	1.0	17.4	Russell 3000 Index
Sub Total		4.0	3.7	17.8	15.7	9.9	1.1	8.4	
Harbourvest									
HarbourVest VII Venture Fund, L.P.	2003	-16.7	-19.5	-1.5	0.9	6.9	1.0	8.0	Russell 3000 Index
HarbourVest VIII Buyout Fund, L.P.	2007	1.5	-3.6	12.3	11.8	10.6	1.2	4.5	MSCI AC World Index (Net)
HarbourVest VIII Venture Fund, L.P.	2007	14.1	-8.5	16.2	16.1	11.1	1.0	11.9	Russell 3000 Index
HarbourVest IX Venture Fund, L.P.	2011	-0.5	-9.2	26.8	25.9	20.0	1.4	13.2	Russell 3000 Index
HIPEP VI-European Small-Medium Buyout Fund, L.P.	2011	10.0	-1.4	19.2	15.4	13.1	1.2	8.9	MSCI AC World Index (Net)
Dover Street VIII, L.P.	2012	-11.3	-11.3	9.4	12.1	19.5	1.2	12.8	Russell 3000 Index
Sub Total		0.2	-8.2	18.5	17.1	12.7	1.1	9.5	
Industry Ventures, LLC									
Industry Ventures Partnership Holdings VI, L.P.	2021	1.2	2.8	-	-	7.2	0.9	10.8	Russell 2000 Index
Sub Total		1.2	2.8	-	-	7.2	0.9	10.8	
Neuberger Berman									
NB Crossroads 2010 Fund, L.P.	2010	-6.3	-14.1	-8.2	-8.0	3.4	0.6	14.1	Russell 3000 Index
NB Crossroads Fund XX, L.P.	2013	4.8	6.9	15.4	12.2	10.9	0.9	13.4	Russell 3000 Index
Sub Total		3.1	3.0	9.6	6.2	7.5	0.7	13.8	

Private Equity

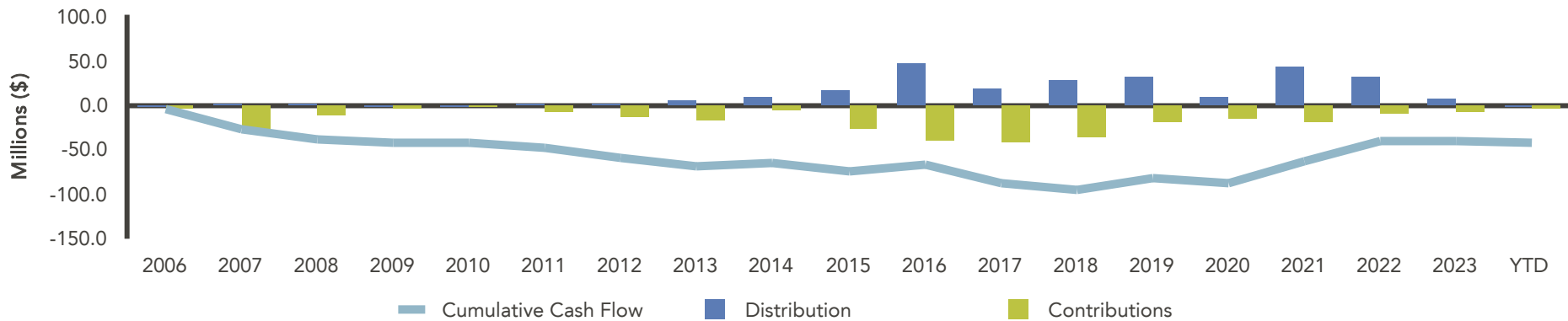
Composite Summary
As of September 30, 2024

Investments		Performance							
Account Name	Vintage Year	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	Since Inception (%)	KS-PME	ICM/PME	PME Benchmark Name
Siguler Guff & Co., LLC									
Siguler Guff Distressed Opportunities Fund III, L.P.	2007	-5.5	-8.4	2.2	4.0	9.0	0.8	13.0	Russell 3000 Index
Siguler Guff BRIC Opportunities Fund II, L.P.	2008	-13.9	-21.7	-6.6	-6.8	4.1	0.7	9.9	MSCI AC World Index (Net)
Siguler Guff Hawkeye- 2011-1 Series	2011	-4.6	-3.6	7.5	8.4	10.6	0.9	13.5	Russell 3000 Index
Siguler Guff Hawkeye- 2011-2 Series	2011	2.3	-1.8	-1.5	4.9	5.1	0.7	13.4	Russell 3000 Index
Siguler Guff Hawkeye- 2012-1 Series	2012	-5.9	-3.2	12.1	9.6	11.8	1.0	11.8	Russell 3000 Index
Siguler Guff Hawkeye- 2015-1 Series	2015	-2.0	-0.4	13.9	12.5	11.7	0.9	13.8	Russell 3000 Index
Siguler Guff Hawkeye- 2016-1 Series	2016	-0.5	1.8	2.9	3.3	4.7	0.6	13.8	Russell 3000 Index
Siguler Guff Hawkeye- 2018-1 Series	2018	-10.9	5.6	7.3	-	6.0	0.7	13.8	Russell 3000 Index
Siguler Guff Hawkeye- 2019-1 Series	2019	5.7	13.4	-	-	17.9	1.1	15.0	Russell 3000 Index
Siguler Guff Hawkeye- 2020-1 Series	2020	3.9	9.9	-	-	12.1	1.0	12.7	Russell 3000 Index
Siguler Guff Hawkeye- 2021-1 Series	2021	7.2	17.8	-	-	20.8	1.5	3.9	Russell 3000 Index
Siguler Guff Hawkeye- 2021-2 Series	2021	13.2	-	-	-	19.3	1.0	19.5	Russell 3000 Index
Siguler Guff Hawkeye- 2023-1 Series	2023	20.9	-	-	-	18.1	0.9	27.0	Russell 3000 Index
Siguler Guff Hawkeye- 2023-3 Series	2023	-	-	-	-	-0.9	0.9	18.1	Russell 3000 Index
Sub Total		3.8	6.5	10.4	10.0	10.1	0.9	13.3	
Top Tier Capital Partners									
Top Tier Venture Velocity Fund 2, L.P.	2017	-5.3	-10.4	29.6	25.6	32.1	1.6	14.2	Russell 3000 Index
Top Tier Venture Velocity Fund 3, L.P.	2019	-10.5	-16.3	-0.4	-	-0.4	0.7	12.1	Russell 3000 Index
Top Tier Venture Velocity Fund 4, L.P.	2021	0.3	-	-	-	2.7	0.8	16.7	Russell 3000 Index
Top Tier Venture Velocity Prime, L.P.	2023	-	-	-	-	112.4	1.5	23.4	Russell 3000 Index
Sub Total		-2.7	-9.8	21.2	20.7	25.4	1.3	13.8	
Total		2.9	2.6	13.0	12.0	10.7	1.0	11.6	

Vintage Year Commitments and Cashflows



Cash Flow Analysis



Private Real Assets

Composite Summary
As of September 30, 2024

Investments		Commitments		Contributions & Distributions		Valuations		Performance			
Account Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	RVPI	TVPI	Since Inception (%)
Contrarian Distressed Real Estate Debt Fund III, L.P.	2015	50,000,000	6,644,185	43,398,680	37,050,080	11,462,767	48,512,847	0.9	0.3	1.1	2.5
Equus Investment Partnership X, L.P.	2015	30,000,000	1,383,987	28,616,013	35,748,296	7,572,577	43,320,873	1.2	0.3	1.5	10.7
Long Wharf Real Estate Partners V, L.P.	2015	25,000,000	-	25,000,000	18,850,680	11,914,204	30,764,884	0.8	0.5	1.2	5.0
InfraRed Active Real Estate Fund IV, L.P.	2017	25,000,000	350,070	24,649,930	11,611,458	15,888,700	27,500,158	0.5	0.6	1.1	3.8
Equus Investment Partnership XI, L.P.	2018	30,000,000	1,973,513	28,026,487	21,918,265	18,162,618	40,080,883	0.8	0.6	1.4	11.6
Contrarian Distressed Real Estate Debt Fund IV, L.P.	2019	30,000,000	1,196,217	31,042,509	2,268,708	25,559,485	27,828,193	0.1	0.8	0.9	-3.6
Total		190,000,000	11,547,972	180,733,619	127,447,487	90,560,351	218,007,838	0.7	0.5	1.2	5.2

*Fund level valuations are reflective of the most recently received quarter-end statement released by fund manager and adjusted for subsequent cash flows to date. Most fund valuations are reported on a one or two quarter lag. Fund level values shown here may differ from custodian fund values shown on page 26-30 due to the timing of manager and custodian statement release.

Private Real Assets

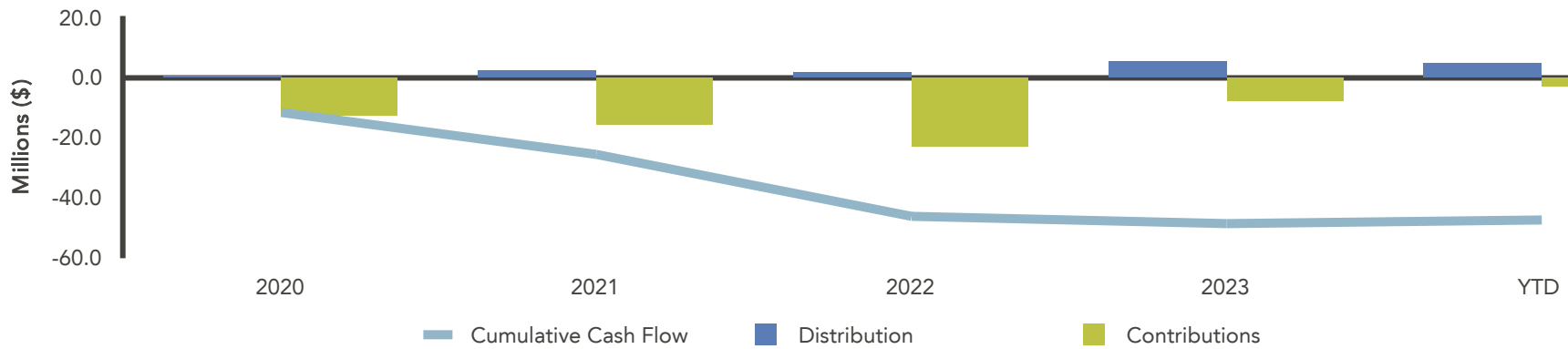
Composite Summary
As of September 30, 2024

Investments		Performance							
Account Name	Vintage Year	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	Since Inception (%)	KS-PME	ICM/PME	PME Benchmark Name
Contrarian Distressed Real Estate Debt Fund III, L.P.	2015	-52.6	-13.5	-5.1	0.1	2.5	0.6	13.0	Russell 3000 Index
Equus Investment Partnership X, L.P.	2015	-15.2	1.0	8.3	11.5	10.7	0.9	14.1	Russell 3000 Index
Long Wharf Real Estate Partners V, L.P.	2015	-16.9	-4.3	0.8	5.7	5.0	0.8	11.1	MSCI AC World Index (Net)
InfraRed Active Real Estate Fund IV, L.P.	2017	5.7	-3.4	6.0	-	3.8	0.8	11.9	MSCI AC World Index (Net)
Equus Investment Partnership XI, L.P.	2018	-13.4	12.0	12.2	-	11.6	0.9	14.8	Russell 3000 Index
Contrarian Distressed Real Estate Debt Fund IV, L.P.	2019	-11.6	-0.2	-3.2	-	-3.6	0.6	13.8	Russell 3000 Index
Total		-17.4	-0.8	2.5	4.8	5.2	0.8	13.1	

Vintage Year Commitments and Cashflows



Cash Flow Analysis



Private Credit

Composite Summary
As of September 30, 2024

Investments		Commitments		Contributions & Distributions		Valuations		Performance			
Account Name	Vintage Year	Commitment (\$)	Unfunded Commitment (\$)	Cumulative Contributions (\$)	Cumulative Distributions (\$)	Valuation (\$)	Total Value (\$)	DPI	RVPI	TVPI	Since Inception (%)
Golub Capital Partners 12, L.P.	2019	25,000,000	2,500,000	22,500,000	8,854,054	22,500,000	31,354,054	0.4	1.0	1.4	11.4
Golub Capital Partners Rollover Fund 2, L.P.	2022	10,000,000	1,250,000	8,750,000	1,982,678	8,750,000	10,732,678	0.2	1.0	1.2	8.5
Bain Capital Global Direct Lending 2021 (L Master), L.P.	2021	30,000,000	1,896,233	28,103,767	4,585,936	28,899,945	33,485,881	0.2	1.0	1.2	8.2
Siguler Guff Hawkeye- 2023-2 Series	2023	30,000,000	26,950,000	3,050,000	-	3,050,000	3,050,000	-	1.0	1.0	0.0
Total		95,000,000	32,596,233	62,403,767	15,422,668	63,199,945	78,622,613	0.2	1.0	1.3	9.8

*Fund level valuations are reflective of the most recently received quarter-end statement released by fund manager and adjusted for subsequent cash flows to date. Most fund valuations are reported on a one or two quarter lag. Fund level values shown here may differ from custodian fund values shown on page 26-30 due to the timing of manager and custodian statement release.

Private Credit

Composite Summary
As of September 30, 2024

Investments		Performance							
Account Name	Vintage Year	1 Year (%)	3 Years (%)	5 Years (%)	7 Years (%)	Since Inception (%)	KS-PME	ICM/PME	PME Benchmark Name
Golub Capital Partners 12, L.P.	2019	8.1	8.6	-	-	11.4	1.2	4.3	ICE BofA U.S. High Yield Index
Golub Capital Partners Rollover Fund 2, L.P.	2022	8.0	-	-	-	8.5	1.1	2.6	ICE BofA U.S. High Yield Index
Bain Capital Global Direct Lending 2021 (L Master), L.P.	2021	7.5	7.8	-	-	8.2	1.0	7.4	ICE BofA U.S. High Yield Index
Siguler Guff Hawkeye- 2023-2 Series	2023	-	-	-	-	0.0	1.0	3.8	ICE BofA U.S. High Yield Index
Total		7.7	8.2	-	-	9.8	1.1	5.4	

Total Fund Composite
 Asset Class Fee Summary

Fee Schedule
 As of September 30, 2024

Asset Class	Expense Ratio & Estimated Annual Fee ¹
Core Investments	0.47% \$6,658,759
Strategic Investments	0.47% \$4,682,317
Real Assets Investments	2.67% \$2,420,000
Private Credit Investments	1.01% \$607,375
Private Equity Investments	0.63% \$5,458,887
Total Fund	0.58% \$19,827,338

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

² Source: Marquette Associates Investment Management Fee Study.

Total Fund Composite

Portfolio Allocation
Month Ending September 30, 2024

	Asset Class	Ending MV (\$)	Net Cash Flow (\$)	% of Portfolio	Policy (%)
Total Fund Composite		3,435,874,402	6,135,639	100.0	100.0
Total Fund Composite Ex Alternatives		2,419,628,575	13,967,581	70.4	78.0
Core Investments		1,425,254,912	30,098,926	41.5	44.5
Core Public Equity Composite		760,305,018	-607,998	22.1	21.5
Core Domestic Equity Composite		431,694,314	-421,677	12.6	11.5
JP Morgan 130-30	Large-Cap Core	277,472,764	-368,983	8.1	-
INTECH Investment Management	Large-Cap Core	87,859,329	-14,464	2.6	-
DFA US Small Cap Trust	Small-Cap Core	66,362,221	-38,230	1.9	-
Core International Equity Composite		308,292,179	-181,406	9.0	10.0
Mondrian Investment Partners Fund	Non-U.S. Large-Cap Value	174,256,005	-181,406	5.1	5.0
Baillie Gifford International Choice Fund	Non-U.S. Large-Cap Growth	134,036,174	-	3.9	5.0
Core Global Equity Composite		20,318,525	-4,915	0.6	0.0
SSgA MSCI ACWI	Global Core Equity	20,318,525	-4,915	0.6	0.0
Core Fixed Income Composite		253,120,959	-98,953	7.4	9.5
Dodge & Cox	Core Fixed Income	253,120,959	-98,953	7.4	9.5
Core Real Estate Composite		162,006,449	-409,729	4.7	8.0
JP Morgan Strategic Property Fund	Core Real Estate	129,983,238	-	3.8	-
Principal Enhanced Property Fund	Core Real Estate	32,023,212	-409,729	0.9	-

Total Fund Composite

Portfolio Allocation
Month Ending September 30, 2024

	Asset Class	Ending MV (\$)	Net Cash Flow (\$)	% of Portfolio	Policy (%)
Core Infrastructure Composite		107,791,248	-204,917	3.1	3.0
IFM Global Infrastructure Fund	Global Infrastructure	107,791,248	-204,917	3.1	3.0
Absolute Return Composite		74,112,179	-50	2.2	2.5
MFPRSI Absolute Return		74,112,179	-50	2.2	2.5
Cash Composite		67,919,058	31,420,572	2.0	0.0
Cash	Cash & Equivalents	49,790,587	31,249,860	1.4	0.0
DROP CDs	CD	18,083,149	170,711	0.5	0.0
Strategic Investments		994,373,664	-16,131,345	28.9	33.5
Grantham, Mayo, Van Otterloo & Co	Strategic Allocation	245,772,919	-8,131,345	7.2	8.4
JP Morgan Global Portfolio	Strategic Allocation	279,912,869	-	8.1	8.4
BlackRock Global	Strategic Allocation	234,974,163	-	6.8	8.4
Schroders Div Growth Port	Strategic Allocation	233,713,713	-8,000,000	6.8	8.4

Total Fund Composite

Portfolio Allocation
Month Ending September 30, 2024

	Asset Class	Ending MV (\$)	Net Cash Flow (\$)	% of Portfolio	Policy (%)
Illiquid Investments		1,016,245,826	-7,831,942	29.6	22.0
Private Real Assets Composite		90,560,351	1,330,280	2.6	2.0
Contrarian Real Estate III	Distressed Real Estate	11,462,767	2,068,842	0.3	-
Equus X	Value-Added Real Estate	7,572,577	-	0.2	-
Long Wharf Real Estate Partners V	Value-Added Real Estate	11,914,204	-45,255	0.3	-
InfraRed Active Real Estate IV	Opportunistic Real Estate	15,888,700	-	0.5	-
Equus XI	Value-Added Real Estate	18,162,618	-603,443	0.5	-
Contrarian Real Estate IV	Distressed Real Estate	25,559,485	-89,864	0.7	-
Private Credit Composite		60,149,945	-	1.8	2.0
Golub Capital Partners XII	Private Debt	22,500,000	-	0.7	-
Golub Capital Partners Rollover Fund 2	Private Debt	8,750,000	-	0.3	-
Bain Capital GDL 2021	Direct Lending	28,899,945	-	0.8	-
Private Equity Composite		865,535,531	-9,162,222	25.2	18.0
Top Tier Venture Velocity Fund 2	Venture Private Equity	49,129,960	-2,075,589	1.4	-
Top Tier Venture Velocity Fund 3	Venture Private Equity	17,841,197	-62,500	0.5	-
Top Tier Venture Velocity Fund 4	Venture Private Equity	20,531,264	2,381,019	0.6	-
Top Tier Venture Velocity Prime	Venture Private Equity	5,771,791	-298,969	0.2	-
Industry Ventures Partnership Holdings VI	Venture Private Equity	23,848,042	5,647	0.7	-

Total Fund Composite

Portfolio Allocation
Month Ending September 30, 2024

	Asset Class	Ending MV (\$)	Net Cash Flow (\$)	% of Portfolio	Policy (%)
Adams Street Composite		163,722,040	1,075,760	4.8	-
Adams Street US 2003	Divers. Private Equity	462,693	-	0.0	-
Adams Street Non-US 2003	Divers. Private Equity	883,561	-	0.0	-
Adams Street US 2006	Divers. Private Equity	481,095	-194	0.0	-
Adams Street Non-US 2006	Divers. Private Equity	152,670	-20	0.0	-
Adams Street Direct 2006	Venture Private Equity	150,166	-69,525	0.0	-
Adams Street 2014 Global	Divers. Private Equity	19,693,825	-887,258	0.6	-
Adams Street Coinvest III	Private Equity Co-Investment	15,979,525	-956,830	0.5	-
Adams Street US Small Buyout	LBO Private Equity	46,238,803	-937,835	1.3	-
Adams Street Cyclone	LBO Private Equity	79,679,702	3,927,422	2.3	-
HarbourVest Composite		30,918,198	-800,556	0.9	-
HarbourVest Partners Venture Fund VII	Venture Private Equity	267,839	-	0.0	-
HarbourVest Partners Buyout Fund VIII	LBO Private Equity	139,468	-	0.0	-
HarbourVest Partners Venture Fund VIII	Venture Private Equity	1,365,803	-638	0.0	-
HarbourVest Partners Venture Fund IX	Venture Private Equity	20,013,217	-783,142	0.6	-
HarbourVest Partners European VI	LBO Private Equity	5,637,985	-16,776	0.2	-
HarbourVest Dover Street VIII	Secondary PE FoF	3,493,886	-	0.1	-

Total Fund Composite

Portfolio Allocation
Month Ending September 30, 2024

	Asset Class	Ending MV (\$)	Net Cash Flow (\$)	% of Portfolio	Policy (%)
Neuberger Berman Composite		41,760,775	-718,058	1.2	-
Neuberger Berman Crossroads 2010 - Special Situations	Mezz./Special Sit. PE FoF	5,974,863	-10,038	0.2	-
Neuberger Berman Crossroads XX - Special Situations	Mezz./Special Sit. PE FoF	35,785,912	-708,020	1.0	-
Siguler Guff Composite		512,012,263	-8,668,975	14.9	-
Siguler Guff DOF III	Distressed Private Equity	4,146,345	38,217	0.1	-
Siguler Guff BRIC II	Divers. Private Equity	1,251,464	-6,086	0.0	-
Siguler Guff Hawkeye Opportunities Fund	Private Equity Co-Investment	506,614,455	-8,701,106	14.7	-

*Core Investments Composite: All accounts final as of 9/30/2024.

*Private Real Assets Composite: Contrarian, Equus, and Long Wharf final as of 9/30/2024. All others as of 6/30/2024; carried over and adjusted for cash flows.

*Private Credit Composite: All funds as of 6/30/2024; carried over and adjusted for cash flows.

*Private Equity Composite: All funds are final as of 6/30/2024; carried over and adjusted for cash flows.

**The Private Equity Composite includes the Siguler Guff Hawkeye - 2023-2 Series value, which is a Private Credit investment. In July 2024, the Siguler Guff Hawkeye Fund issued the initial capital call for the Siguler Guff Hawkeye - 2023-2 Series. This is a Private Credit investment and reflected in the Private Credit money-weighted performance pages. The custodian reports the aggregate Hawkeye Fund value (including the private credit series), so the Private Credit Composite will be understated by the Hawkeye 2023-2 Series market value.

Total Fund Composite

Calendar Performance (Net of Fees)
As of September 30, 2024

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)
Total Fund Composite	8.8	-8.3	18.5	13.4	15.1	-2.5	14.1	7.6	0.0
Total Fund Benchmark	16.3	-15.9	12.0	13.3	20.0	-5.1	14.5	5.7	-0.1
InvMetrics Public DB \$1B-\$5B Net Rank	84	20	6	22	84	17	72	48	27
Total Fund Composite Ex Alternatives	11.7	-13.0	11.9	14.1	17.9	-7.4	15.8	7.4	-4.5
Core Investments	9.6	-12.5	12.6	14.3	18.2	-7.3	15.3	9.0	-6.1
Core Investments Benchmark	9.3	-15.8	11.9	14.2	22.0	-7.3	18.9	7.6	-1.7
Core Public Equity Composite	21.2	-20.2	16.9	21.4	25.1	-11.5	18.5	9.5	-6.9
Core Public Equity Benchmark	20.7	-17.5	16.5	15.7	26.2	-9.7	24.2	8.6	-2.6
All Public DB Plans-Total Equity Rank	44	78	65	4	77	88	97	31	100
Core Domestic Equity Composite	26.3	-18.0	27.6	24.2	29.3	-7.8	20.1	12.6	0.0
Russell 3000 Index	26.0	-19.2	25.7	20.9	31.0	-5.2	21.1	12.7	0.5
All Public DB Plans-US Equity Rank	12	40	14	10	71	82	67	48	52
Core International Equity Composite	15.1	-22.1	5.1	17.2	25.5	-14.5	26.7	2.9	-2.5
MSCI AC World ex USA (Net)	15.6	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7
All Public DB Plans-Intl Equity Rank	78	88	77	19	19	51	73	64	39
Core Global Equity Composite	21.8	-18.4	18.2	16.6	26.7	-10.2	24.3	8.7	-1.9
MSCI AC World Index (Net)	22.2	-18.4	18.5	16.3	26.6	-9.4	24.0	7.9	-2.4
All Public DB Plans-Global Equity Rank	20	57	27	32	28	42	64	31	40
Core Fixed Income Composite	8.1	-10.8	-0.8	10.6	9.9	-1.3	6.5	5.8	-4.0
Core Fixed Income Benchmark	6.2	-13.2	-3.4	6.3	10.6	-1.9	7.3	5.8	-4.3
All Public DB Plans-Fixed Income Rank	31	40	76	13	25	66	37	66	98

Total Fund Composite

Calendar Performance (Net of Fees)
As of September 30, 2024

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)
Core Real Estate Composite	-14.2	4.4	21.2	0.6	4.2	7.7	6.9	8.7	15.5
NFI-ODCE	-12.7	6.5	21.1	0.3	4.4	7.4	6.7	7.8	14.0
All Public DB Plans-Private Real Estate Rank	80	87	52	50	74	56	78	32	25
Core Infrastructure Composite	8.7	8.2	-	-	-	-	-	-	-
CPI +4%	7.5	10.7	11.3	5.4	6.4	6.0	6.2	6.2	4.8
Absolute Return Composite	-4.6	-	-	-	-	-	-	-	-
BTOP50 Unlevered Index	0.3	9.3	5.9	3.1	4.7	-2.2	-	-	-
Strategic Investments	14.6	-13.6	11.1	13.8	17.7	-7.4	16.3	5.5	-2.5
Strategic Investments Benchmark	17.0	-16.2	11.9	14.2	22.0	-7.3	18.9	7.6	-1.7

Total Fund Composite

Calendar Performance (Net of Fees)
As of September 30, 2024

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)
Total Fund Composite	8.8	-8.3	18.5	13.4	15.1	-2.5	14.1	7.6	0.0
Total Fund Benchmark	16.3	-15.9	12.0	13.3	20.0	-5.1	14.5	5.7	-0.1
InvMetrics Public DB \$1B-\$5B Net Rank	84	20	6	22	84	17	72	48	27
Total Fund Composite Ex Alternatives	11.7	-13.0	11.9	14.1	17.9	-7.4	15.8	7.4	-4.5
Core Investments	9.6	-12.5	12.6	14.3	18.2	-7.3	15.3	9.0	-6.1
Core Investments Benchmark	9.3	-15.8	11.9	14.2	22.0	-7.3	18.9	7.6	-1.7
Core Public Equity Composite	21.2	-20.2	16.9	21.4	25.1	-11.5	18.5	9.5	-6.9
Core Public Equity Benchmark	20.7	-17.5	16.5	15.7	26.2	-9.7	24.2	8.6	-2.6
All Public DB Plans-Total Equity Rank	44	78	65	4	77	88	97	31	100
Core Domestic Equity Composite	26.3	-18.0	27.6	24.2	29.3	-7.8	20.1	12.6	0.0
Russell 3000 Index	26.0	-19.2	25.7	20.9	31.0	-5.2	21.1	12.7	0.5
All Public DB Plans-US Equity Rank	12	40	14	10	71	82	67	48	52
JP Morgan 130-30	30.1	-18.1	29.6	26.9	30.4	-6.8	22.1	10.2	-0.1
S&P 500 Index	26.3	-18.1	28.7	18.4	31.5	-4.4	21.8	12.0	1.4
eV US Large Cap Equity Rank	25	63	20	24	41	62	41	50	52
INTECH Investment Management	24.2	-20.9	21.2	25.0	32.2	-7.2	22.9	8.9	2.2
Russell 1000 Index	26.5	-19.1	26.5	21.0	31.4	-4.8	21.7	12.1	0.9
eV US Large Cap Core Equity Rank	40	85	89	10	23	74	33	61	29
DFA US Small Cap Trust	17.7	-13.2	28.1	11.5	21.6	-12.3	11.9	24.4	-2.6
Russell 2000 Index	16.9	-20.4	14.8	20.0	25.5	-11.0	14.6	21.3	-4.4
eV US Small Cap Equity Rank	43	32	33	59	73	57	65	29	43

Total Fund Composite

Calendar Performance (Net of Fees)
As of September 30, 2024

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)
Core International Equity Composite	15.1	-22.1	5.1	17.2	25.5	-14.5	26.7	2.9	-2.5
MSCI AC World ex USA (Net)	15.6	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7
All Public DB Plans-Intl Equity Rank	78	88	77	19	19	51	73	64	39
Mondrian Investment Partners Fund	19.7	-12.2	6.9	-0.1	18.8	-12.4	22.7	4.8	-6.1
MSCI AC World ex USA (Net)	15.6	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7
eV ACWI ex-US Large Cap Value Eq Rank	28	78	95	72	64	17	74	58	54
Baillie Gifford International Choice Fund	10.3	-31.6	3.2	33.6	32.7	-16.6	31.2	0.9	1.6
MSCI AC World ex USA (Net)	15.6	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7
eV ACWI ex-US Large Cap Growth Eq Rank	91	89	77	14	17	75	68	35	42
Core Global Equity Composite	21.8	-18.4	18.2	16.6	26.7	-10.2	24.3	8.7	-1.9
MSCI AC World Index (Net)	22.2	-18.4	18.5	16.3	26.6	-9.4	24.0	7.9	-2.4
All Public DB Plans-Global Equity Rank	20	57	27	32	28	42	64	31	40
SSgA MSCI ACWI	21.8	-18.4	18.2	16.6	26.7	-10.2	24.3	8.8	-1.9
MSCI AC World Index (Net)	22.2	-18.4	18.5	16.3	26.6	-9.4	24.0	7.9	-2.4
MSCI AC World IMI Index (Net)	21.6	-18.4	18.2	16.3	26.4	-10.1	23.9	8.4	-2.2
eV Global Core Equity Rank	39	54	60	45	50	57	45	24	73
Core Fixed Income Composite	8.1	-10.8	-0.8	10.6	9.9	-1.3	6.5	5.8	-4.0
Core Fixed Income Benchmark	6.2	-13.2	-3.4	6.3	10.6	-1.9	7.3	5.8	-4.3
All Public DB Plans-Fixed Income Rank	31	40	76	13	25	66	37	66	98
Dodge & Cox	8.1	-10.8	-0.8	10.6	9.9	-0.5	4.8	5.9	-0.1
Blmbg. U.S. Universal Index	6.2	-13.0	-1.1	7.6	9.3	-0.3	4.1	3.9	0.4
Blmbg. U.S. Aggregate Index	5.5	-13.0	-1.5	7.5	8.7	0.0	3.5	2.6	0.5
eV US Core Fixed Inc Rank	2	13	23	2	11	68	7	2	86

Total Fund Composite

Calendar Performance (Net of Fees)
As of September 30, 2024

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)
Core Real Estate Composite	-14.2	4.4	21.2	0.6	4.2	7.7	6.9	8.7	15.5
NFI-ODCE	-12.7	6.5	21.1	0.3	4.4	7.4	6.7	7.8	14.0
All Public DB Plans-Private Real Estate Rank	80	87	52	50	74	56	78	32	25
JP Morgan Strategic Property Fund	-15.0	3.9	20.0	0.6	3.5	7.2	6.3	7.4	14.2
NFI-ODCE	-12.7	6.5	21.1	0.3	4.4	7.4	6.7	7.8	14.0
Principal Enhanced Property Fund	-10.7	6.3	25.9	0.7	6.8	9.5	9.3	13.8	20.3
NFI-ODCE	-12.7	6.5	21.1	0.3	4.4	7.4	6.7	7.8	14.0
Core Infrastructure Composite	8.7	8.2	-	-	-	-	-	-	-
CPI +4%	7.5	10.7	11.3	5.4	6.4	6.0	6.2	6.2	4.8
IFM Global Infrastructure Fund	8.7	8.2	-	-	-	-	-	-	-
CPI +4%	7.5	10.7	11.3	5.4	6.4	6.0	6.2	6.2	4.8
Absolute Return Composite	-4.6	-	-	-	-	-	-	-	-
BTOP50 Unlevered Index	0.3	9.3	5.9	3.1	4.7	-2.2	-	-	-
MFPRSI Absolute Return	-4.6	-	-	-	-	-	-	-	-
BTOP50 Unlevered Index	0.3	9.3	5.9	3.1	4.7	-2.2	-	-	-

Total Fund Composite

Calendar Performance (Net of Fees)
As of September 30, 2024

	2023 (%)	2022 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)
Strategic Investments	14.6	-13.6	11.1	13.8	17.7	-7.4	16.3	5.5	-2.5
Strategic Investments Benchmark	17.0	-16.2	11.9	14.2	22.0	-7.3	18.9	7.6	-1.7
Grantham, Mayo, Van Otterloo & Co	16.8	-9.8	9.0	6.3	17.6	-7.5	17.1	5.5	-4.8
GMO Benchmark	17.3	-14.7	12.8	13.3	20.4	-6.4	17.4	6.1	-1.4
eV Global TAA Rank	15	23	47	74	35	54	41	39	65
JP Morgan Global Portfolio	16.9	-15.2	16.9	16.1	22.1	-8.4	19.9	7.0	-0.9
JP Morgan Benchmark	18.1	-15.9	10.9	13.9	20.9	-6.8	17.7	6.9	-1.5
eV Global TAA Rank	14	62	8	16	11	59	20	26	25
BlackRock Global	13.0	-15.5	7.5	20.8	18.3	-7.2	-	-	-
Total Fund Benchmark	16.3	-15.9	12.0	13.3	20.0	-5.1	14.5	5.7	-0.1
eV Global TAA Rank	36	63	58	5	28	50	-	-	-
Schroders Div Growth Port	11.2	-13.1	10.1	12.9	12.0	-6.5	11.4	4.1	-1.1
Total Fund Benchmark	16.3	-15.9	12.0	13.3	20.0	-5.1	14.5	5.7	-0.1
eV Global TAA Rank	52	43	43	34	71	42	74	55	27

Total Fund Composite

Fee Schedule
As of September 30, 2024

Asset Class	Investment Manager	Fee Schedule	Est. Annual Fee ¹	Expense Ratio	Industry Median ²
Core Fixed Income	Dodge & Cox	0.40% on the first \$10 million 0.30% on the next \$25 million 0.20% on the next \$25 million 0.15% on the next \$65 million 0.12% on the next \$575 million 0.10% on the Balance	\$416,245	0.16%	0.22%
Large-Cap Core	INTECH Investment Management	0.375% on the first \$50 million 0.350% on the next \$50 million 0.300% on the next \$100 million 0.250% on the Balance	\$320,008	0.36%	0.43%
Large-Cap Core	JP Morgan 130-30	0.70% on the first \$25 million 0.60% on the Balance	\$1,689,837	0.61%	0.40%
Small-Cap Core	DFA US Small Cap Trust	0.35% on the Balance	\$232,268	0.35%	0.75%
Global Core Equity	SSgA MSCI ACWI	0.10% on the first \$50 million 0.08% on the next \$50 million 0.07% on the Balance	\$20,319	0.10%	0.71%
Non-U.S. Large-Cap Growth	Baillie Gifford International Choice Fund	0.58% on the Balance	\$777,410	0.58%	0.65%
Non-U.S. Large-Cap Value	Mondrian Investment Partners Fund	0.770% on the first \$20 million 0.595% on the next \$30 million 0.440% on the next \$50 million 0.330% on the Balance	\$797,545	0.46%	0.60%
Strategic Allocation	BlackRock Global	0.55% on the first \$200 million 0.50% on the Balance	\$1,274,871	0.54%	0.66%
Strategic Allocation	Grantham, Mayo, Van Otterloo & Co	0.65% on the Balance 15% Performance fee based on annual return in excess of the benchmark	\$1,597,524	0.65%	0.57%
Strategic Allocation	JP Morgan Global Portfolio	0.25% on the Balance Discount applied to annualized revenues: \$3 million equates 15% discount \$4 million equates 20% discount \$5 million equates 25% discount 20% Performance Fee over 3 year annualized excess return over benchmark 10% discount applied to annualized management fee over \$1 million	\$699,782	0.25%	0.35%
Strategic Allocation	Schroders Div Growth Port	0.475% on the first \$500 million 0.425% on the next \$500 million 0.400% on the next \$500 million 0.375% on the Balance	\$1,110,140	0.48%	0.66%

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

² Source: Marquette Associates Investment Management Fee Study.

Total Fund Composite

Fee Schedule
As of September 30, 2024

Asset Class	Investment Manager	Fee Schedule	Est. Annual Fee ¹	Expense Ratio	Industry Median ²
Core Real Estate	JP Morgan Strategic Property Fund	0.92% on the first \$100 million 0.85% on the next \$250 million 0.75% on the Balance	\$1,174,858	0.90%	1.00%
Core Real Estate	Principal Enhanced Property Fund	1.50% on the first \$1 million 1.40% on the next \$4 million 1.30% on the next \$5 million 1.20% on the next \$40 million 1.10% on the next \$50 million 1.00% on the next \$50 million 0.85% on the Balance	\$400,279	1.25%	1.00%
Global Infrastructure	IFM Global Infrastructure Fund	0.77% on the Balance	\$829,993	0.77%	1.07%
Distressed Real Estate	Contrarian Real Estate III	1.00% of commitments 1.00% of unreturned invested capital after 9% Preferred Return	\$500,000	4.36%	6.98%
Distressed Real Estate	Contrarian Real Estate IV	1.50% on Capital Commitment 9% Preferred Return	\$450,000	1.76%	1.88%
Value-Added Real Estate	Equus X	1.20% on Committed Capital	\$360,000	4.75%	5.94%
Value-Added Real Estate	Equus XI	1.50% on Committed Capital	\$450,000	2.48%	2.48%
Opportunistic Real Estate	InfraRed Active Real Estate IV	1.50% on Committed Capital	\$285,000	1.79%	1.91%
Value-Added Real Estate	Long Wharf Real Estate Partners V	1.5% on committed capital during Commitment Period 1.5% of LP's capital called less capital called for disposed investments	\$375,000	3.15%	3.15%
Private Debt	Golub Capital Partners XII	1.25% on the Balance	\$281,250	1.25%	1.50%
Private Debt	Golub Capital Partners Rollover Fund 2	1.25% on the Balance	\$109,375	1.25%	1.50%
Direct Lending	Bain Capital GDL 2021	0.75% on the Balance	\$216,750	0.75%	1.50%

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

² Source: Marquette Associates Investment Management Fee Study.

Total Fund Composite

Fee Schedule
As of September 30, 2024

Asset Class	Investment Manager	Fee Schedule	Est. Annual Fee ¹	Expense Ratio	Industry Median ²
LBO Private Equity	Adams Street US Small Buyout	0.60% on \$30 million commitment 5% Carried Interest on Primaries 10% Carried Interest on co-investments & Secondaries 7% Hurdle Rate	\$180,000	0.39%	0.65%
Divers. Private Equity	Adams Street 2014 Global	0.69% on the first \$25 million 0.62% on the next \$25 million 0.52% on the next \$50 million 0.34% on the next \$50 million 0.28% on the Balance	\$135,887	0.69%	0.60%
Private Equity Co-Investment	Adams Street Coinvest III	0.63% on committed capital 10% carried interest 7% preferred return	\$126,000	0.79%	1.38%
LBO Private Equity	Adams Street Cyclone	0.20% on Committed Capital 10% Carried Interest on co-investments 10% Carried Interest on secondaries 7% Hurdle Rate	\$260,000	0.33%	3.26%
Secondary PE FoF	HarbourVest Dover Street VIII	1.25% on Committed Capital	\$750,000	21.47%	12.88%
Venture Private Equity	HarbourVest Partners Venture Fund IX	1.00% on Committed Capital	\$200,000	1.00%	2.25%
LBO Private Equity	HarbourVest Partners European VI	1.15% on Committed Capital	\$161,000	2.86%	4.97%
Mezz./Special Sit. PE FoF	Neuberger Berman Crossroads 2010 - Special Situations	0.75% on Committed Capital	\$375,000	6.28%	12.55%
Mezz./Special Sit. PE FoF	Neuberger Berman Crossroads XX - Special Situations	0.40% on Committed Capital	\$240,000	0.67%	2.51%

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

² Source: Marquette Associates Investment Management Fee Study.

Total Fund Composite

Fee Schedule
As of September 30, 2024

Asset Class	Investment Manager	Fee Schedule	Est. Annual Fee ¹	Expense Ratio	Industry Median ²
Divers. Private Equity	Siguler Guff BRIC II	0.93% on Committed Capital Plus 5% carried interest after 8% preferred return	\$186,000	14.86%	9.59%
Distressed Private Equity	Siguler Guff DOF III	0.85% on Committed Capital Plus 5% carried interest after 8% preferred return	\$467,500	11.27%	19.90%
Private Equity Co-Investment	Siguler Guff Hawkeye Opportunities Fund	1.00% on the first \$10 million 0.85% on the next \$40 million 0.50% on the Balance	\$765,000	0.15%	0.14%
Venture Private Equity	Top Tier Venture Velocity Fund 2	1.00% on Committed Capital 10% carried interest over a 6% preferred return	\$500,000	1.02%	2.29%
Venture Private Equity	Top Tier Venture Velocity Fund 3	1.25% on Committed Capital 15% carried interest over a 6% preferred return	\$312,500	1.75%	3.15%
Venture Private Equity	Top Tier Venture Velocity Fund 4	1.00% on Committed Capital 15% carried interest over a 6% preferred return	\$300,000	1.46%	3.29%
Venture Private Equity	Top Tier Venture Velocity Prime	1.00% on Committed Capital 10% and increases to 15% after 2x distributed	\$150,000	2.60%	5.85%
Venture Private Equity	Industry Ventures Partnership Holdings VI	1.00% on Committed Capital	\$350,000	1.47%	1.47%
Total Investment Management Fees			\$19,827,338	0.58%	0.80%
Investment Consultant	Marquette Associates, Inc.	Annual fee of \$298,700	\$298,700	0.01%	N/A
Custodian	Principal	\$147,000 Annual Flat Fee	\$147,000	0.00%	
Total Fund	Total Fund		\$20,273,038	0.59%	

¹ Expense Ratio & Estimated Annual Fee are Based on Market Value at Quarter End.

² Source: Marquette Associates Investment Management Fee Study.

Investment Manager Evaluation Terminology

The following terminology has been developed by Marquette Associates to facilitate efficient communication among the Investment Manager, Investment Consultant, and the Plan Sponsor. Each term signifies a particular status with the Fund and any conditions that may require improvement. In each case, communication is made only after consultation with the Trustees and/or the Investment Committee of the Plan.

In Compliance – Marquette has not been notified of any issues or changes to the investment manager that would materially impede upon its ability to execute the investment strategy or adhere to any applicable investment guidelines.

Alert – The investment manager has experienced a problem in performance (usually relative to a benchmark), a change in investment characteristics, an alteration in management style, ownership, or key investment professionals, and/or any other irregularities that may impede upon its ability to execute the investment strategy or adhere to any applicable investment guidelines.

On Notice – The investment manager has experienced continued concern with one or more Alert issues. Failure to improve upon stated issues within a certain time frame may justify termination.

Termination – The investment manager has been terminated and transition plans are in place.

Total Fund Composite

Custom Benchmarks
As of September 30, 2024

Total Fund Benchmark	
Current Weight	%
MSCI World (Net)	60.00
Bloomberg U.S. Aggregate	40.00

Core Public Equity Benchmark	
Current Weight	%
Russell 3000 Index	50.00
MSCI AC World ex USA (Net)	50.00

JP Morgan Benchmark	
Current Weight	%
MSCI AC World (Net)	75.00
Bloomberg U.S. Universal	25.00

BTOP50 Unlevered Index	
Current Weight	
Calculated using the following formula: (BTOP50 Levered - 30 Day T-bill ¹ *70%) x 0.6 + 30 Day T-bill*70%	
¹ IA SBBI US 30 Day T-bill	

Core Investments Benchmark	
Current Weight	%
Russell 3000 Index	25.84
MSCI AC World ex USA (Net)	22.47
Bloomberg U.S. Universal Index	21.35
NFI-ODCE	17.98
CPI+4%	6.74
BTOP50 Unlevered	5.62

Core Fixed Income Benchmark	
Current Weight	%
Bloomberg U.S. Universal Index	100.00

GMO Benchmark	
Current Weight	%
MSCI AC World Index (Net)	71.43
FTSE 3 Month T-Bill	14.28
Bloomberg U.S. Aggregate	14.29

Strategic Investments Benchmark	
Current Weight	%
Russell 3000 Index	37.50
MSCI AC World ex USA (Net)	37.50
Bloomberg U.S. Universal Index	25.00

DISCLOSURE

Marquette Associates, Inc. ("Marquette") has prepared this document for the exclusive use by the client or third party for which it was prepared. The information herein was obtained from various sources, including but not limited to third party investment managers, the client's custodian(s) accounting statements, commercially available databases, and other economic and financial market data sources.

The sources of information used in this document are believed to be reliable. Marquette has not independently verified all of the information in this document and its accuracy cannot be guaranteed. Marquette accepts no liability for any direct or consequential losses arising from its use. The information provided herein is as of the date appearing in this material only and is subject to change without prior notice. Thus, all such information is subject to independent verification and we urge clients to compare the information set forth in this statement with the statements you receive directly from the custodian in order to ensure accuracy of all account information. Past performance does not guarantee future results and investing involves risk of loss. No graph, chart, or formula can, in and of itself, be used to determine which securities or investments to buy or sell.

Forward-looking statements, including without limitation any statement or prediction about a future event contained in this presentation, are based on a variety of estimates and assumptions by Marquette, including, but not limited to, estimates of future operating results, the value of assets and market conditions. These estimates and assumptions, including the risk assessments and projections referenced, are inherently uncertain and are subject to numerous business, industry, market, regulatory, geo-political, competitive, and financial risks that are outside of Marquette's control. There can be no assurance that the assumptions made in connection with any forward-looking statement will prove accurate, and actual results may differ materially.

The inclusion of any forward-looking statement herein should not be regarded as an indication that Marquette considers forward-looking statements to be a reliable prediction of future events. The views contained herein are those of Marquette and should not be taken as financial advice or a recommendation to buy or sell any security. Any forecasts, figures, opinions or investment techniques and strategies described are intended for informational purposes only. They are based on certain assumptions and current market conditions, and although accurate at the time of writing, are subject to change without prior notice. Opinions, estimates, projections, and comments on financial market trends constitute our judgment and are subject to change without notice. Marquette expressly disclaims all liability in respect to actions taken based on any or all of the information included or referenced in this document. **The information is being provided based on the understanding that each recipient has sufficient knowledge and experience to evaluate the merits and risks of investing.**

Marquette is an independent investment adviser registered under the Investment Advisers Act of 1940, as amended. Registration does not imply a certain level of skill or training. More information about Marquette including our investment strategies, fees and objectives can be found in our ADV Part 2, which is available upon request.