

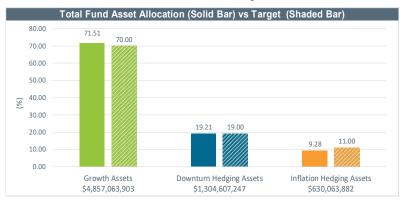
Quarterly Performance Report

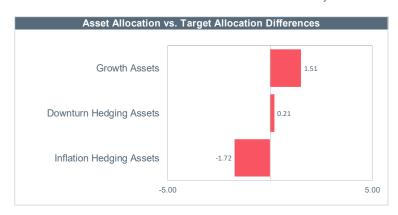
Vermont Pension Investment Commission

December 31, 2024

Vermont Pension Investment Commission Total Fund Dashboard Summary

As of December 31, 2024





Schedule of Investable Assets										
				Ending Market	%					
Period Ending	Beginning Market Value	+ Net Cash Flow +	Gain/Loss	= Value	Return					
Quarter	6,870,328,567	-65,118,295	-13,475,240	6,791,735,032	-0.20					

			Total F	und Perfo	rmance					
									Since	
	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Incep.	Incep. Date
Total Fund	-0.20	9.79	9.79	2.67	6.91	6.78	7.21	11.67	6.18	7/1/2005
Target Allocation Index	-0.88	8.91	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference	0.68	0.88	0.88	-0.29	-0.11	0.05	0.35	-0.45	-0.09	
Thematic Target Allocation Index	-1.36	12.19	12.19	3.82	-	-	-	16.87	-	
Difference	1.16	-2.40	-2.40	-1.14	-	-	-	-5.20	-	

		Per	formance	by Alloc	ation Buc	ket				
									Since	
	QTD	CYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Incep.	Incep. Date
Growth Assets	0.32	13.31	13.31	4.47	-	-	-	15.76	10.51	9/1/2020
MSCI ACW IM Index (USD) (Net)	-1.24	16.37	16.37	4.90	9.67	9.00	9.16	21.58	10.31	
Difference	1.56	-3.06	-3.06	-0.44	-	-	-	-5.83	0.19	
Downturn Hedging Assets	-2.97	1.39	1.39	-2.29	-	-	-	5.58	-1.79	9/1/2020
Bloomberg US Agg Bond Index	-3.06	1.25	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference	0.10	0.14	0.14	0.12	-	-	-	0.05	0.09	
Inflation Hedging Assets	1.66	1.41	1.41	-1.05	-	-	-	-5.96	0.79	9/1/2020
Consumer Price Index+2.5%	0.72	5.46	5.46	6.82	6.80	5.58	5.13	5.94	7.20	
Difference	0.94	-4.05	-4.05	-7.88	-	-	-	-11.89	-6.41	





Performance is shown net of fees. Allocations may not sum up to 100% exactly due to rounding.



Capital Markets Review As of December 31, 2024

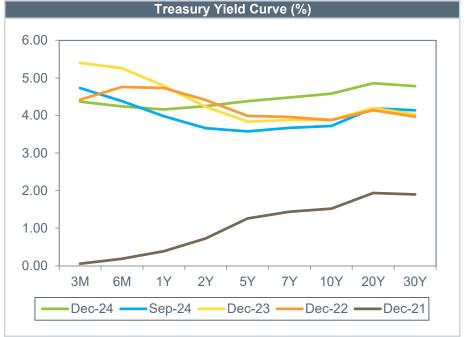
Fourth Quarter Economic Environment

Despite multiple risks to economic growth—including persistent pockets of inflation, ongoing wars, and the prospect of renewed trade disruptions—risk assets delivered robust returns in 2024. For the calendar year, the MSCI All Country World Investable Market Index generated returns of 16.9%, primarily due to the returns of the US stock market and many of its largest companies. However, during Q4, investor sentiment for Chinese and other non-US securities weakened due to the trade measures expected from the second Trump administration, which caused global stock markets to experience a minor retracement. Credit spreads within debt markets continued to tighten throughout the year, leading to attractive returns for noninvestment grade, leveraged loan, securitized, and hard currency emerging markets debt. In December, the Organisation for Economic Co-operation and Development (OECD) Economic Outlook report forecasted global GDP growth of 3.2% for 2024, with a slight increase to 3.3% in 2025 and 2026. The year-over-year Headline Consumer Price Index change was 2.9% according to the December reading, representing a decline from 3.4% at the end of 2023. The Federal Open Markets Committee (FOMC) continued its trend of reducing the Federal Funds Rate with a 0.25% cut in December, following a 0.25% cut in November and 0.50% cut in September. The range for the Federal Funds Rate is now 4.25%–4.50%, down from its recent peak range of 5.25%–5.50%.

Ke	y Economic Ind	licators	
16 7 30 7	120]	70 7	160 7
14 - 25 -	400	60	140 -
12 - 20 - 15 -	100 -	50 -	120 -
10 - 10 -	80 -	40 -	100 -
8 - 5 0	60 -	30 -	80 -
-5 -	40	20	60 -
210 -	40 -	10 -	40 -
0 -20	20	0	20
Unemployment Rate (%) Year (% chang Since 1948 Since 1914		VIX Index (Volatility) Since 1990	Consumer Confidence Since 1967

Economic Indicators	Dec-24		Sep-24	Dec-23	Dec-21	20 Yr
Federal Funds Rate (%)	4.33	▼	4.83	5.33	0.07	1.68
Breakeven Infl 5 Yr (%)	2.37		2.06	2.14	2.91	1.93
Breakeven Infl 10 Yr (%)	2.33		2.16	2.17	2.59	2.09
CPI YoY (Headline) (%)	2.9		2.4	3.4	7.0	2.6
Unemployment Rate (%)	4.1	_	4.1	3.7	3.9	5.8
Real GDP YoY (%)	2.5	\blacksquare	2.7	3.1	5.4	2.0
PMI - Manufacturing	49.2		47.2	47.4	58.8	52.9
USD Total Wtd Idx	129.49	\blacktriangle	121.53	118.77	115.37	104.49
WTI Crude Oil per Barrel (\$)	71.6		68.2	71.7	75.2	71.9
Gold Spot per Oz (\$)	2,612	▼	2,636	2,068	1,829	1,335

Gold Spot per Oz (\$)	2,612 ▼	2,636	2,068	1,829	1,335
Market Performance (%)	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	2.41	25.02	25.02	14.53	13.10
Russell 2000	0.33	11.54	11.54	7.40	7.82
MSCI EAFE (Net)	-8.11	3.82	3.82	4.73	5.20
MSCI EAFE SC (Net)	-8.36	1.82	1.82	2.30	5.52
MSCI Emg Mkts (Net)	-8.01	7.50	7.50	1.70	3.64
Bloomberg US Agg Bond	-3.06	1.25	1.25	-0.33	1.35
ICE BofAML 3 Mo US T-Bill	1.17	5.25	5.25	2.46	1.77
NCREIF ODCE (Gross)	1.16	-1.43	-1.43	2.87	5.88
FTSE NAREIT Eq REIT (TR)	-6.21	8.73	8.73	4.27	5.73
HFRI FOF Comp	2.30	9.40	9.40	5.28	3.81
Bloomberg Cmdty (TR)	-0.45	5.38	5.38	6.77	1.28





2024: Year in Review As of December 31, 2024





Source: Federal Reserve Bank of St. Louis and FactSet. Treasury Yield Dates: Beginning: January 2, High: April 25, Low: September 16, End: December 31.



US Equity Review As of December 31, 2024

Fourth Quarter Review

Broad Market

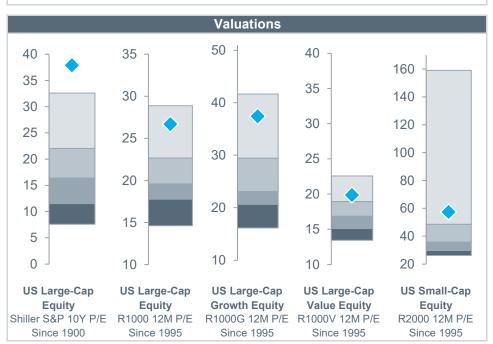
US equities began on a strong note in Q4, supported by easing monetary policy and optimism related to anticipated policies from the incoming administration. This positive momentum lasted through much of the quarter but was disrupted after the December FOMC meeting. During the meeting, guidance was provided that interest rates could remain higher than expected, triggering a sharp market correction. US markets still ended Q4 in positive territory, with the Russell 3000 Index gaining 2.6% in Q4 and 23.8% for the year.

Market Cap

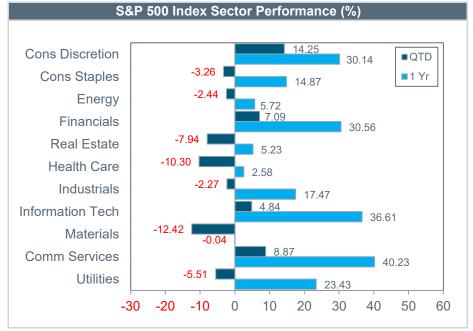
The Russell 1000 Growth Index gained 7.1%, while the Russell 2000 Value Index declined by -1.1%. Gains were concentrated in a few sectors, with only 4 of the 11 GICS sectors posting positive results.

Style and Sector

Active managers faced headwinds during the quarter, with median core and growth managers underperforming across size spectrums. Value managers fared the best, with median large-cap and small-cap value managers generating incremental excess returns.







Valuation data courtesy of Bloomberg Professional Service and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.



Non-US Equity Review

As of December 31, 2024

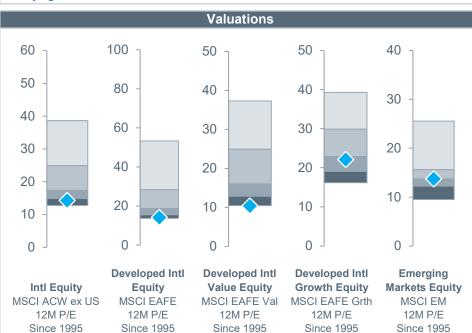
Fourth Quarter Review

Developed Markets

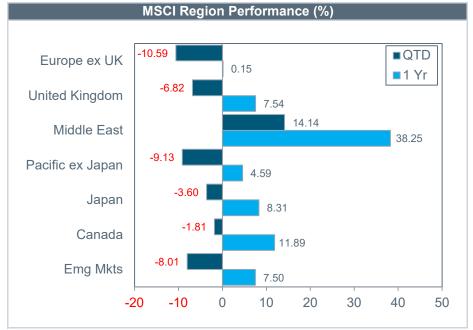
Developed international markets posted significant negative results in Q4, with the MSCI EAFE Index generating returns of -8.1% in Q4. International value stocks continued to outperform growth stocks during the quarter—outperforming by a wide margin for the year. Small-cap slightly underperformed large-cap stocks for Q4 and all of 2024. Most country returns finished the quarter in negative territory. Israel was a standout, with double-digit positive returns, while Singapore, Taiwan,and Austria posted more modest gains. European securities continue to struggle due to subdued investor sentiment and lackluster economic forecasts.

Emerging Markets

Emerging market slightly outperformed developed international markets for Q4. For 2024, emerging markets outperformed with the MSCI Emerging Markets Indexes returning 7.5% compared to 3.8% for the MSCI EAFE Index. Within emerging markets, growth stocks outperformed value stocks in Q4 and the year. Small-cap stocks outperformed large-cap stocks in Q4. China continues to dominate headlines. In Q4, returns for Chinese securities turned negative as investors worried about the impact of tariffs from the incoming Trump administration. Investors also became more skeptical of Chinese government stimulus efforts, which were previously buoying the market.









P/E metrics shown represent the 5th through 95th percentiles to minimize the effect of outliers.





Fixed Income Review As of December 31, 2024

Fourth Quarter Review

Broad Market

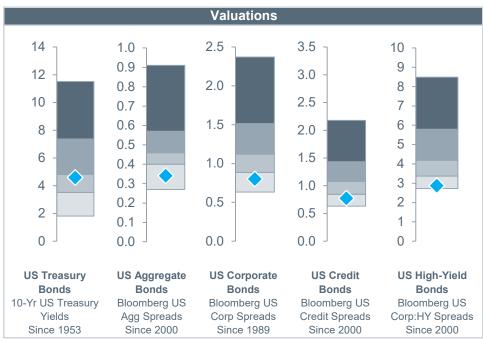
Treasury yields rose across most maturities in 2024, with a sharp increase in Q4, while the 2-year Treasury yield remained stable. The results of the US election boosted expectations for economic growth, inflation, and deficits, contributing to an increase in the premium for longer-dated debt. In 2024, investor focus was on the Treasury yield curve and spreads between key maturities commonly used as recession indicators. The inversion between the 2- and 10-year Treasuries ended in Q3 while the inversion between the 3-month and 10-year Treasuries ended in Q4. The Bloomberg US Aggregate Bond Index declined by -3.1% in Q4 but finished the year with a 1.3% gain.

Credit Market

Risk assets showed resilience, with lower-rated bonds outperforming. The Bloomberg US Corporate Investment Grade Index posted -3.0% for Q4 and 2.1% for the year, while the Bloomberg US Corporate High Yield Index returned 0.2% in Q4 and 8.2% for the year.

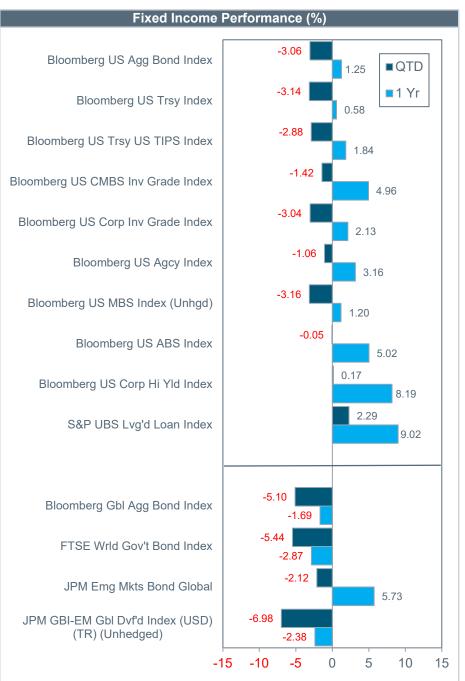
Emerging Market Debt

Emerging market debt had mixed results. The JPMorgan EMBI Global Diversified Index, tracking hard currency bonds, fell -1.9% in Q4 but gained 6.5% for the year. In contrast, local currency bonds struggled due to a strong US dollar, with the JPMorgan GBI-EM Global Diversified Index returning -7.0% in Q4 and -2.4% for the year.





Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.





Alternatives Review As of December 31, 2024

Fourth Quarter Review - Absolute Return

General Market - Hedge Funds

Hedge funds finished the year strongly, with the HFR Composite Index returning 2.5% in Q4, resulting in a total return of 9.2% for 2024. All major strategy indices posted positive results during the quarter. Positive performance primarily came during November, as the US presidential election served as a positive catalyst for various strategies. The top performing strategy index in Q4 was Credit Arbitrage, with a return of 2.9%. Credit Arbitrage managers continued to find opportunities as volatility remained elevated due to the disparity of inflation expectations between policy makers and the bond market.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely posted negative returns in Q4 to close a challenging year for long-biased active managers, as all underperformed a US-centric blend of 60% equity and 40% fixed income (60/40 blend) in Q4 and 2024. In Q4, the top performing long-biased GTAA strategies featured a higher allocation to US banks, high yield credit, and mega-cap companies that were less sensitive to interest rates. Underperforming peers tended to hold larger exposures to emerging markets and long duration government bonds.

HFRI Hedge Fund Performance (%) 2.43 HFRI FOF ■ QTD 9.53 1.73 Conv Arbitrage ■1 Yr 11.23 1.44 **Equity Hedge** 11.97 2.82 Mkt Neutral Eq 10.93 2.49 Distressed 11.10 0.82 Macro 5.65 1.94 Relative Value 8.72 1.59 **Event Driven** 9.27 1.58 Merger Arb 5.42 2.94 Credit Arb 10.33 -5 5 20 0 10 15

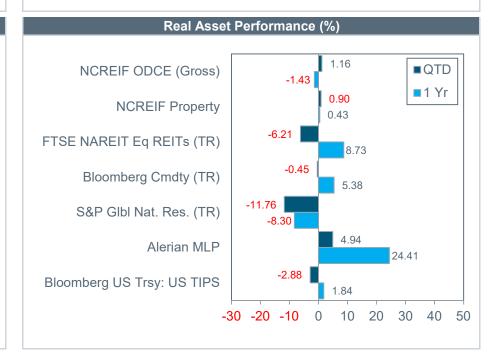
Fourth Quarter Review - Real Assets

General Market - Diversified Inflation Strategies (DIS)

Diversified Inflation Strategies (DIS) closely monitored by RVK reported positive performance for the first three quarters of the year. However, this positive trend reversed in Q4 as rate-sensitive sectors faced pressure following the December FOMC meeting. DIS managers ended the year with negative absolute performance, underperforming a 60/40 blend in Q4 and for the year.

General Market - Real Estate

Core private real estate generated a 1.2% total return in Q4 (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with the total return comprised of 1.0% from income and 0.1% from price appreciation. Income returns were generally flat for quarter-over-quarter and remained slightly elevated compared to recent years. This is the first quarter of positive overall price appreciation returns after nine consecutive quarters of negative returns. Investors of publicly traded real estate significantly underperformed their private market counterparts. Publicly traded real estate securities delivered a total return of -8.2% in Q4, as measured by FTSE/NAREIT All REITs Index, finishing 2024 with a 4.9% return.





Annual Asset Class Performance As of December 31, 2024

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	CYTD
Best	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	19.96	43.24	16.09	26.29	25.02
1	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	18.40	28.71	7.47	18.24	11.54
	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	18.31	27.11	1.46	16.93	9.79
	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	16.12	22.17	-5.31	13.73	9.10
	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	13.16	14.82	-11.19	13.45	8.73
	16.36	4.98	16.00	8.96	4.89	0.05	9.29	13.96	-3.33	19.59	12.34	14.06	-11.72	13.16	8.19
	15.12	2.11	15.81	7.99	4.04	-0.27	8.77	10.71	-4.02	18.42	10.99	11.26	-11.85	11.67	7.50
	15.06	1.81	12.69	7.44	3.64	-0.81	8.52	7.77	-4.38	17.15	10.88	10.10	-13.01	9.83	5.38
	14.44	0.10	10.94	2.47	3.37	-1.44	6.67	7.62	-4.62	14.32	7.82	6.17	-14.45	7.13	5.25
	10.16	-4.18	8.78	0.07	2.45	-2.20	4.68	7.50	-4.68	8.72	7.51	5.96	-18.11	6.07	3.82
	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	7.11	5.28	-20.09	5.53	1.84
	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	1.19	0.05	-20.44	5.02	1.82
	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.79	7.69	0.67	-1.55	-21.39	3.90	1.25
	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.57	5.34	-3.12	-2.52	-24.37	-7.91	-1.43
Worst	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-8.00	-2.54	-27.09	-12.02	-4.15
Total Fui Net (Al Plans)		ge US Sm	nall (Net) -	E EAFE	SC (Net)		ombrg US	oombrg Blo Corp U Yield - US	S Trsy	US Gov	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombrg Cmdty (TR) - Commod.	ICE BofAML 3 Mo T-Bill - Cash Equiv

NCREIF ODCE (Gross) performance is reported quarterly; performance is shown N/A in interim-quarter months.



Combined Plans

Manager Research Updates

Each quarter RVK sends a short questionnaire to each of the VPIC's investment managers which serves as the basis for providing VPIC and Staff with updates on the Funds' investment managers; critical and non-critical updates from the quarter are included below. In addition, RVK's Manager Research team keeps the VPIC RVK Consulting Team and VPIC Staff informed of any organizational or investment related developments (should any arise) intraquarter.

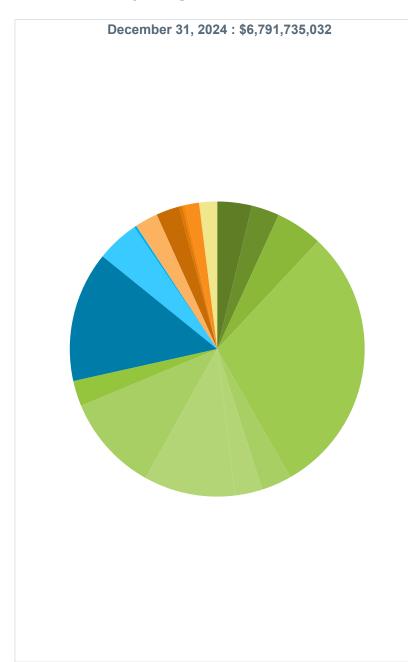
Manager Research Updates: Critical

There were no critical manager updates during the quarter.

Manager Research Updates: Non-Critical

There were no non-critical manager updates during this quarter.





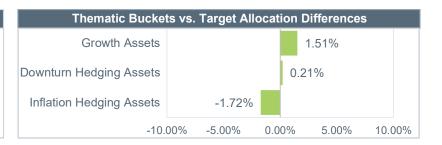
	Market Value (\$)	Allocation (%)
■ Blackrock S&P 500 (Eql Wtd) (SA)	257,662,376	3.79
■ Champlain US Mid Cap Core (SA)	206,867,136	3.05
SSgA Russell 2000 Growth (Ex Tobacco) (SA)	27,059	0.00
Acadian International All Cap (SA)	773,518	0.01
■ Acadian ACWI Ex-US Fund (CF)	348,414,929	5.13
■ Mondrian International Equity (SA)	873,321	0.01
■ BlackRock MSCI ACW IMI (SA)	2,020,087,207	29.74
■ Blackrock MSCI World LCTR (SA)	224,808,087	3.31
Artisan Global Opportunities (CF)	204,504,202	3.01
■ PIMCO Liquidation (SA)	327,731	0.00
■ Wellington Opportunistic EMD (CF)	109,396	0.00
■ PIMCO Unconstrained (SA)	46,384	0.00
Private Debt	680,426,672	10.02
Private Equity	722,753,573	10.64
■ Non-Core Real Estate	189,382,313	2.79
■ BlackRock US Agg (SA)	971,593,526	14.31
■ PIMCO Core (SA)	316,307,704	4.66
■ Vermont Cash (SA)	16,705,645	0.25
■ BlackRock TIPS (SA)	172,399,803	2.54
■ UBS Trumbull Properties (CF)	172,456,041	2.54
■ Hammes HIGH Fund (CF)	25,208,414	0.37
■ Blue Owl Real Estate VI LP	18,966,916	0.28
Farmland	106,528,483	1.57
Private Infrastructure	134,500,037	1.98
■ Real Estate Cash (CF)	4,187	0.00
■ BlackRock Transition	373	0.00

Allocations shown may not sum up to 100% exactly due to rounding. Market values for SSgA Russell 2000 Growth (SA), PIMCO Unconstrained (SA), Mondrian International Equity (SA), Acadian International All Cap (SA), and Wellington Opportunistic EMD (CF) represent residual assets after liquidation. During 12/2024, Copenhagen Infrastructure V LP was funded.

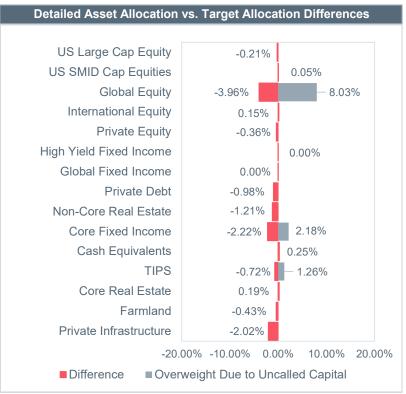


Vermont Pension Investment Commission Total Fund Asset Allocation vs.Target Allocation

Thematic	Buckets vs. Target	Allocation	
	Market Value (\$)	Allocation (%)	Target (%)
Growth Assets	4,857,063,903	71.51	70.00
Downturn Hedging Assets	1,304,607,247	19.21	19.00
Inflation Hedging Assets	630,063,882	9.28	11.00
Total Fund	6,791,735,032	100.00	100.00



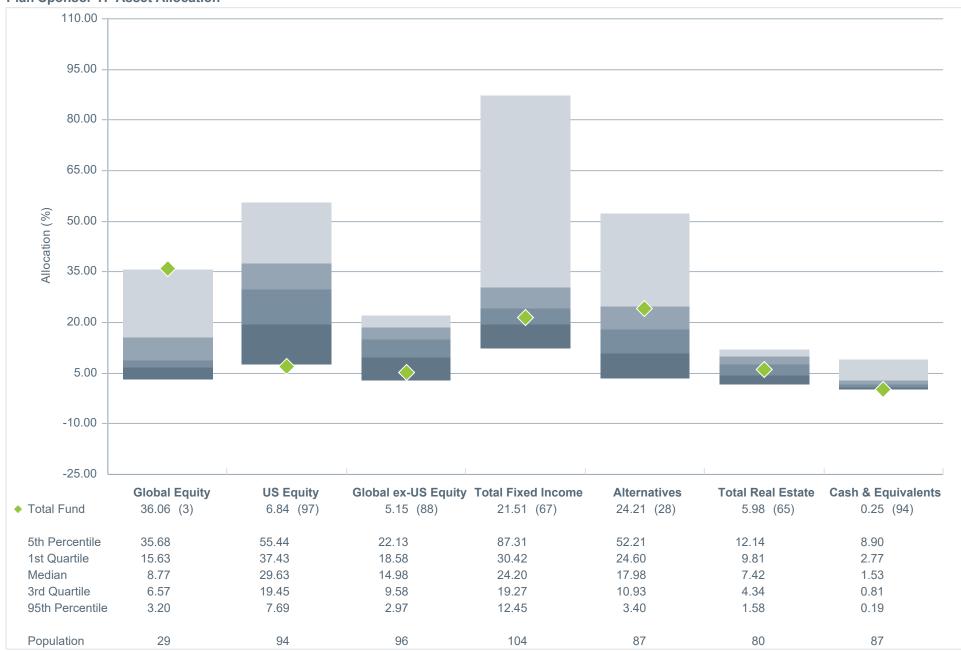
Detailed Asse	t Allocation vs. Tar	get Allocation	
	Market Value (\$)	Allocation (%)	Target (%)
US Large Cap Equity	257,662,376	3.79	4.00
US SMID Cap Equities	206,894,194	3.05	3.00
Global Equity	2,449,399,495	36.06	32.00
International Equity	350,061,768	5.15	5.00
Private Equity	722,753,573	10.64	11.00
High Yield Fixed Income	327,731	0.00	0.00
Global Fixed Income	155,780	0.00	0.00
Private Debt	680,426,672	10.02	11.00
Non-Core Real Estate	189,382,313	2.79	4.00
Core Fixed Income	1,287,901,229	18.96	19.00
Cash Equivalents	16,706,018	0.25	0.00
TIPS	172,399,803	2.54	2.00
Core Real Estate	216,635,559	3.19	3.00
Farmland	106,528,483	1.57	2.00
Private Infrastructure	134,500,037	1.98	4.00
Total Fund	6,791,735,032	100.00	100.00



Allocations shown may not sum up to 100% exactly due to rounding. Please note, the "Detailed Asset Allocation vs. Target Allocation Differences" table reflects the Commission's decision to allocate uncalled / uncommitted capital in line with long-term thematic allocations: 70% to Growth Assets (Blackrock MSCI ACW IMI Fund), 19% to Downturn Hedging Assets (Blackrock US Aggregate Fund), and of 11% to Inflation Hedging Assets (Blackrock TIPS Fund).



Vermont Pension Investment Commission All Public Plans (\$1B to \$10B) (Custom PG) Plan Sponsor TF Asset Allocation



Parentheses contain percentile ranks. Total Fixed Income includes TIPS.

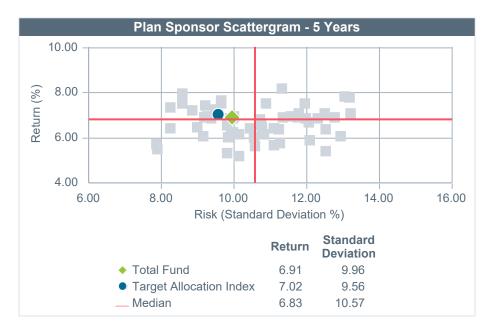


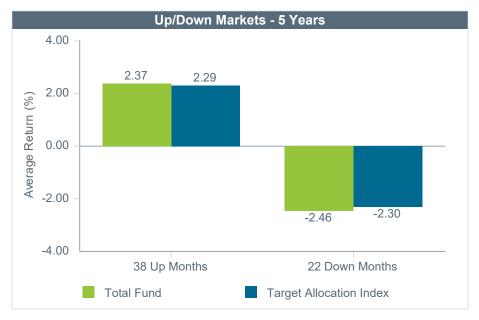
Vermont Pension Investment Commission All Public Plans (\$1B to \$10B) (Custom PG) Plan Sponsor Peer Group Analysis

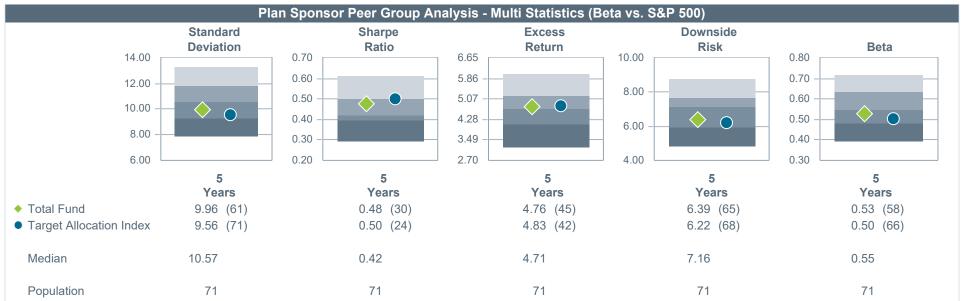


Performance shown is net of fees. Parentheses contain percentile ranks.



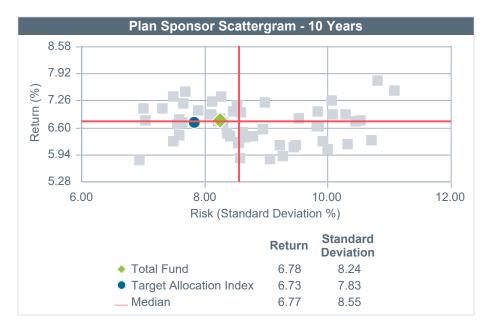


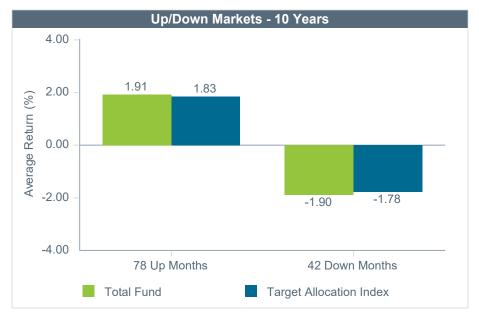


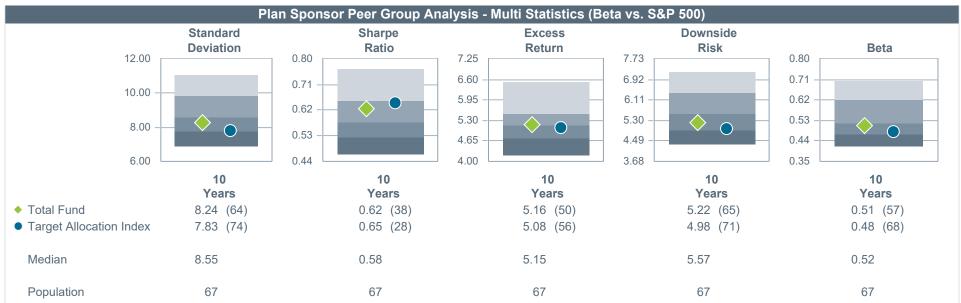


Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.









Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



	Allocatio	n					Perfor	mance (%)				
	Market Value (\$)	Actual (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	6,791,735,032	100.00	-0.20	4.34	9.79	2.67	6.91	6.78	7.21	11.67	6.18	07/01/2005
Target Allocation Index			-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference			0.68	0.50	0.88	-0.29	-0.11	0.05	0.35	-0.45	-0.09	
Actual Allocation Index			-1.24	3.93	9.14	2.45	6.28	6.34	6.63	12.28	6.06	
Difference			1.04	0.40	0.65	0.22	0.63	0.44	0.59	-0.61	0.12	
Thematic Target Allocation Index			-1.36	4.44	12.19	3.82	-	-	-	16.87	-	
Difference			1.16	-0.10	-2.40	-1.14	-	-	-	-5.20	-	
Growth Assets	4,857,063,903	71.51	0.32	5.13	13.31	4.47	-	-	-	15.76	10.51	09/01/2020
MSCI ACW IM Index (USD) (Net)			-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.31	
Difference			1.56	-0.39	-3.06	-0.44	-	-	-	-5.83	0.19	
Downturn Hedging Assets	1,304,607,247	19.21	-2.97	1.92	1.39	-2.29	-	-	-	5.58	-1.79	09/01/2020
Bloomberg US Agg Bond Index			-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference			0.10	-0.05	0.14	0.12	-	-	-	0.05	0.09	
Inflation Hedging Assets	630,063,882	9.28	1.66	3.28	1.41	-1.05	-	-	-	-5.96	0.79	09/01/2020
Consumer Price Index+2.5%			0.72	1.70	5.46	6.83	6.80	5.58	5.13	5.94	7.20	
Difference			0.94	1.57	-4.05	-7.88	-	-	-	-11.89	-6.41	



	AII	ocation							mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	6,791,735,032	100.00	100.00	-0.20	4.34	9.79	2.67	6.91	6.78	7.21	11.67	6.18	07/01/2005
Target Allocation Index				-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference				0.68	0.50	0.88	-0.29	-0.11	0.05	0.35	-0.45	-0.09	
Actual Allocation Index				-1.24	3.93	9.14	2.45	6.28	6.34	6.63	12.28	6.06	
Difference				1.04	0.40	0.65	0.22	0.63	0.44	0.59	-0.61	0.12	
All Public Plans (\$1B to \$10B)				-0.87	3.93	8.87	2.60	6.83	6.77	7.54	11.30	6.46	
Rank				15	25	27	46	40	47	70	41	73	
Domestic Equity	464,556,571	6.84	7.00	0.34	8.43	12.04	2.09	9.68	9.91	-	14.38	11.38	01/01/2011
Russell 3000 Index				2.63	9.03	23.81	8.01	13.86	12.55	13.56	25.96	13.33	
Difference				-2.29	-0.60	-11.76	-5.92	-4.19	-2.64	-	-11.58	-1.95	
US Large Cap Equity	257,662,376	3.79	4.00	-1.90	7.44	12.71	4.40	10.70	10.25	12.13	13.85	9.56	07/01/2005
S&P 500 Index (Cap Wtd)				2.41	8.44	25.02	8.94	14.53	13.10	13.88	26.29	10.68	
Difference				-4.31	-1.00	-12.31	-4.54	-3.82	-2.86	-1.75	-12.43	-1.12	
Blackrock S&P 500 (Eql Wtd) (SA)	257,662,376	3.79	-	-1.90	7.44	12.71	4.32	10.68	-	-	13.85	11.29	07/01/2019
S&P 500 Index (Eq Wtd)				-1.87	7.55	13.01	4.45	10.76	10.26	12.60	13.87	11.36	
Difference				-0.03	-0.11	-0.30	-0.13	-0.08	-	-	-0.02	-0.07	
IM U.S. Large Cap Equity (SA+CF) Median				2.03	7.74	22.37	7.70	13.12	12.10	13.20	24.36	13.81	
Rank				80	55	84	87	71	-	-	76	73	
US SMID Cap Equities	206,894,194	3.05	3.00	3.35	9.52	10.84	-1.04	8.15	9.57	11.87	14.95	9.09	07/01/2005
Russell 2500 Index				0.62	9.42	11.99	2.39	8.77	8.85	11.30	17.42	8.95	
Difference				2.73	0.10	-1.15	-3.44	-0.62	0.73	0.57	-2.48	0.14	
Champlain US Mid Cap Core (SA)	206,867,136	3.05	-	3.35	9.38	10.70	-1.09	8.12	10.40	12.25	14.94	12.49	10/01/2009
Custom SMID Cap Equity Index				0.49	9.83	13.51	2.57	8.98	8.89	11.30	17.15	11.47	
Difference				2.86	-0.44	-2.81	-3.66	-0.86	1.51	0.96	-2.20	1.02	
IM U.S. SMID Cap Equity (SA+CF) Median				0.11	7.82	12.10	2.20	9.52	9.28	11.46	16.48	11.64	
Rank				15	34	59	81	71	23	24	61	23	
Global Equity	2,449,399,495	36.06	32.00	-1.20	5.34	16.77	4.56	10.12	-	-	22.25	7.35	02/01/2018
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	8.07	
Difference				0.03	-0.18	0.40	-0.35	0.45	-	-	0.67	-0.72	
BlackRock MSCI ACW IMI (SA)	2,020,087,207	29.74	-	-1.19	5.50	16.54	5.21	10.05	-	-	22.05	10.82	07/01/2019
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.45	
Difference				0.04	-0.02	0.17	0.30	0.38	-	-	0.47	0.38	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	9.35	
Rank				32	27	30	34	33	-	-	37	32	



	All	ocation						Perfor	mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Blackrock MSCI World LCTR (SA)	224,808,087	3.31	-	-0.97	5.87	17.89	5.09	-	-	-	22.14	5.74	09/01/2021
MSCI Wrld Index (USD) (Net)				-0.16	6.20	18.67	6.34	11.17	9.95	10.03	23.79	6.72	
Difference				-0.82	-0.33	-0.78	-1.25	-	-	-	-1.65	-0.98	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	3.40	
Rank				29	23	24	34	-	-	-	36	30	
Artisan Global Opportunities (CF)	204,504,202	3.01	-	-1.56	2.40	15.18	-0.27	9.74	-	-	23.53	10.35	07/01/2018
MSCI ACW Index (USD) (Net)				-0.99	5.56	17.49	5.44	10.06	9.23	9.21	22.20	10.02	
Difference				-0.57	-3.16	-2.30	-5.70	-0.33	-	-	1.33	0.33	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	8.70	
Rank				36	65	35	84	36	-	-	28	31	
International Equity	350,061,768	5.15	5.00	-2.78	3.47	13.34	3.48	5.87	5.97	5.38	16.90	5.10	07/01/2005
Custom MSCI ACW Ex US Composite Index (USD) (Net)				-7.60	-0.15	5.53	1.01	4.43	5.25	5.41	15.62	5.14	
Difference				4.81	3.62	7.81	2.47	1.45	0.71	-0.03	1.29	-0.04	
Acadian ACWI Ex-US Fund (CF)	348,414,929	5.13	-	-2.71	3.55	13.63	4.19	8.07	8.27	7.86	17.09	6.26	11/01/2005
Custom MSCI ACW Ex US Index (USD) (Net)				-7.60	-0.15	5.53	0.07	3.84	4.96	5.21	15.62	4.69	
Difference				4.89	3.70	8.09	4.12	4.22	3.31	2.65	1.47	1.58	
IM All ACWI Ex US (SA+CF) Median				-7.26	0.13	5.97	0.79	4.37	5.45	5.76	16.29	5.36	
Rank				6	10	6	15	6	8	4	43	26	
Acadian International All Cap (SA)	773,518	0.01	-	-	-	-	-	-	-	-	-	-	11/01/2005
MSCI EAFE IM Index (USD) (Net)				-8.15	-1.06	3.55	0.92	4.37	5.23	5.39	17.51	4.82	
Difference				-	-	-	-	-	-	-	-	-	
IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.18	
Rank				-	-	-	-	-	-	-	-	-	
Mondrian International Equity (SA)	873,321	0.01	-	-	-	-	-	-	-	-	-	-	07/01/2005
MSCI EAFE Index (USD) (Net)				-8.11	-1.44	3.82	1.65	4.73	5.20	5.24	18.24	5.00	
Difference				-	-	-	-	-	-	-	-	-	
IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.44	
Rank				-	-	-	-	-	-	-	-	-	
Fixed Income	1,288,384,741	18.97	19.00	-3.01	1.93	1.61	-2.19	-0.12	1.99	-	6.42	2.79	01/01/2011
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	2.08	
Difference				0.05	-0.05	0.36	0.22	0.21	0.64	-	0.89	0.71	
Core Fixed Income	1,287,901,229	18.96	19.00	-3.01	2.00	1.45	-2.25	-	-	-	5.72	-1.76	09/01/2020
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference				0.05	0.03	0.20	0.16	-	-	-	0.19	0.13	



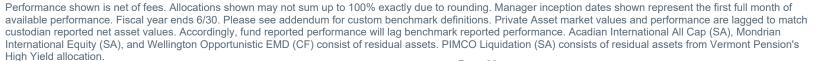
	All	ocation						Perfor	mance (%	(o)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
BlackRock US Agg (SA)	971,593,526	14.31	-	-3.05	1.95	1.32	-2.37	-0.31	-	-	5.66	0.31	06/01/2019
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	0.37	
Difference				0.01	-0.02	0.07	0.04	0.01	-	-	0.13	-0.05	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	0.63	
Rank				59	68	75	66	79	-	-	55	86	
PIMCO Core (SA)	316,307,704	4.66	-	-2.89	2.16	1.85	-1.88	-	-	-	5.90	-1.40	09/01/2020
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference				0.18	0.19	0.60	0.53	-	-	-	0.37	0.49	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	-1.63	
Rank				28	26	41	17	-	-	-	44	30	
Emerging Markets Debt	109,396	0.00	0.00	-	-	-	-	-	-	-	-	-	09/01/2020
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	-0.07	
Difference				-	-	-	-	-	-	-	-	-	
Wellington Opportunistic EMD (CF)	109,396	0.00	-	-	-	-	-	-	-	-	-	-	12/01/2009
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	4.45	
Difference				-	-	-	-	-	-	-	-	-	
IM Emerging Markets Debt (SA+CF) Median				-2.01	3.55	6.08	0.29	0.68	2.85	4.07	11.86	4.08	
Rank				-	-	-	-	-	-	-	-	-	
High Yield Fixed Income	327,731	0.00	0.00	-	-	-	-	-	-	-	-	-	06/01/2006
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	6.60	
Difference				-	-	-	-	-	-	-	-	-	
PIMCO Liquidation (SA)	327,731	0.00	-	-	-	-	-	-	-	-	-	-	08/01/2018
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	4.90	
Difference				-	-	-	-	-	-	-	-	-	
IM U.S. High Yield Bonds (SA+CF) Median				0.21	4.62	7.58	2.77	3.82	4.69	5.98	12.12	4.46	
Rank				-	-	-	-	-	-	-	-	-	
Private Debt	680,426,672	10.02	11.00	5.66	4.86	10.61	9.05	9.31	-	-	9.93	8.35	01/01/2018
S&P UBS Lvg'd Loan Index+2% (Spliced)				2.79	5.42	11.20	8.97	7.49	5.95	5.83	15.30	6.61	
Difference				2.87	-0.56	-0.59	0.08	1.82	-	-	-5.37	1.74	
Private Equity	722,753,573	10.64	11.00	2.11	3.41	7.83	6.98	18.12	17.71	-	4.82	17.53	01/01/2013
Cambridge US Prvt Eq Index				0.00	2.40	6.23	4.34	14.49	13.48	14.28	9.04	13.95	
Difference				2.11	1.01	1.60	2.64	3.63	4.23	_	-4.22	3.58	



	AII	ocation						Perfor	mance (%	o)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Non-Core Real Estate	189,382,313	2.79	4.00	1.27	3.55	5.32	7.89	7.66	8.93	-	1.91	9.17	09/01/2014
NCREIF ODCE Index+2% (Spliced)				1.46	1.99	-0.31	-1.20	3.87	6.04	8.03	-10.96	6.41	
Difference				-0.19	1.57	5.63	9.09	3.79	2.89	-	12.87	2.76	
Inflation Hedging Assets (Spliced)	630,063,882	9.28	11.00	1.66	3.28	1.41	-1.05	0.05	3.30	-	-5.96	6.44	01/01/2011
CPI+2.5% (Spliced)				0.72	1.70	5.46	6.83	6.15	7.19	8.82	5.94	8.52	
Difference				0.94	1.57	-4.05	-7.88	-6.10	-3.89	-	-11.89	-2.08	
TIPS	172,399,803	2.54	2.00	-2.91	1.07	2.02	-2.23	-	-	-	3.92	0.07	09/01/2020
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	0.01	
Difference				-0.03	-0.05	0.18	0.06	-	-	-	0.02	0.06	
BlackRock TIPS (SA)	172,399,803	2.54	-	-2.91	1.07	2.02	-2.29	1.84	2.21	2.80	3.92	2.66	12/01/2009
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	2.69	
Difference				-0.03	-0.05	0.18	0.00	-0.03	-0.03	-0.06	0.02	-0.04	
IM U.S. TIPS (SA+CF) Median				-2.91	1.10	1.87	-2.32	1.82	2.22	2.80	3.80	2.63	
Rank				54	57	36	48	48	60	49	36	47	
Core Real Estate	216,635,559	3.19	3.00	-0.16	-0.87	-6.68	-2.85	-0.63	2.56	-	-16.07	5.91	01/01/2011
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	6.99	
Difference				-1.12	-1.85	-4.41	0.29	-2.62	-2.38	-	-3.34	-1.07	
UBS Trumbull Properties (CF)	172,456,041	2.54	-	-0.18	-1.23	-7.02	-2.97	-0.70	2.32	5.27	-16.11	4.12	07/01/2005
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	5.18	
Difference				-1.14	-2.22	-4.75	0.17	-2.69	-2.63	-2.25	-3.38	-1.07	
Hammes HIGH Fund (CF)	25,208,414	0.37	-	1.76	2.59	2.05	-	-	-	-	-	2.05	01/01/2024
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27	
Difference				0.80	1.61	4.32	-	-	-	-	-	4.32	
Blue Owl Real Estate VI LP	18,966,916	0.28	-	-2.99	-0.06	-	-	-	-	-	-	-14.23	02/01/2024
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27	
Difference				-3.95	-1.05	-	-	-	-	-	-	-11.96	
Farmland	106,528,483	1.57	2.00	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33	
Difference				2.12	2.41	1.85	-2.67	-	-	-	-3.20	-2.94	
Nuveen Global Agriculture (CF)	106,528,483	1.57	-	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33	
Difference				2.12	2.41	1.85	-2.67	_	_	_	-3.20	-2.94	

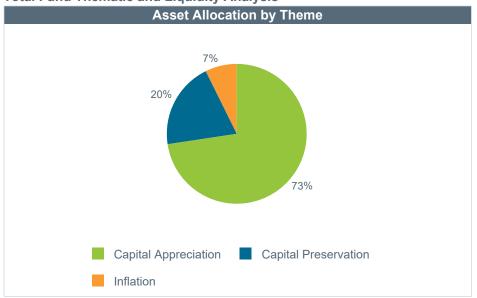


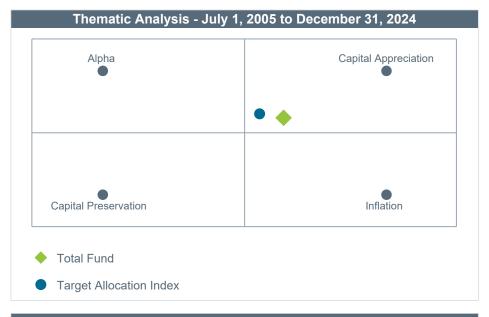
	All	ocation						Perfor	mance (%)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Private Infrastructure	134,500,037	1.98	4.00	12.48	16.62	16.96	-	-	-	-	-	11.01	07/01/2023
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.35	
Difference				11.64	14.67	10.98	-	-	-	-	-	5.66	
IFM Global Infrastructure Fund (CF)	106,242,879	1.56	-	2.49	6.38	-	-	-	-	-	-	6.24	02/01/2024
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.14	
Difference				1.65	4.43	-	-	-	-	-	-	1.10	
IFM Net Zero Infrastructure Fund (CF)	15,919,744	0.23	-	0.01	3.00	-	-	-	-	-	-	6.13	03/01/2024
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	4.24	
Difference				-0.83	1.05	-	-	-	-	-	-	1.89	
Copenhagen Infrastructure V LP	12,337,414	0.18	-	-	-	-	-	-	-	-	-	-	01/01/2025
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	-	
Difference				-	-	-	-	-	-	-	-	-	
Cash Equivalents	16,706,018	0.25	0.00	1.14	2.40	4.95	4.08	2.50	1.35	0.94	4.89	1.59	07/01/2005
ICE BofAML 3 Mo US T-Bill Index				1.17	2.55	5.25	3.89	2.46	1.77	1.20	5.02	1.63	
Difference				-0.03	-0.15	-0.30	0.19	0.03	-0.41	-0.27	-0.13	-0.04	

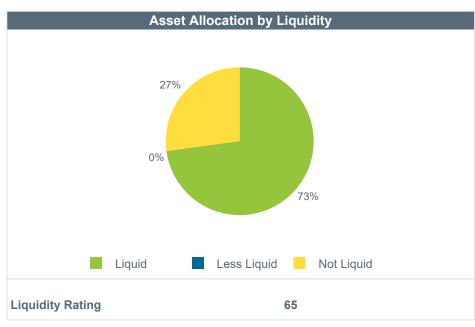




Vermont Pension Investment Commission Total Fund Thematic and Liquidity Analysis





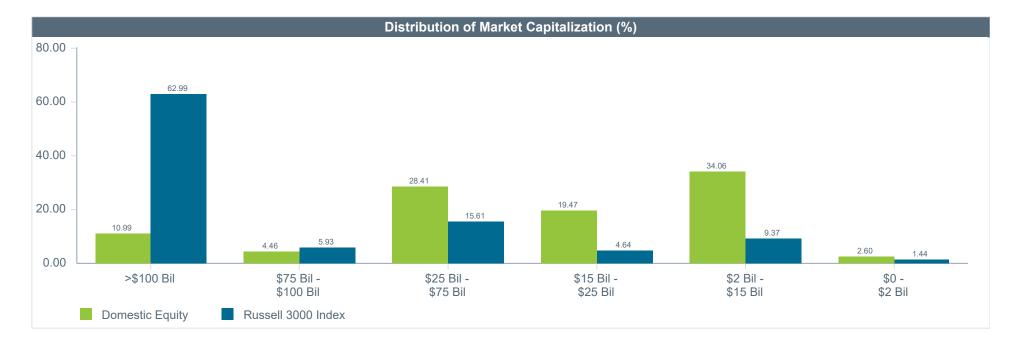


	Correlation Matrix - 10 Years										
Α	В	С	D								
A 1.00											
B 0.46	1.00										
C -0.14	0.15	1.00									
D 0.42	0.81	0.22	1.00								
A = B = C = D =	HFRI EH: Equity Market N MSCI ACW Index (USD) (I Bloomberg US Govt Bond Real Return Custom Index	Gross) (Capital Appred Index (Capital Preserv									

Vermont Pension Investment Commission Domestic Equity vs. Russell 3000 Index Portfolio Characteristics

		uity Holdings		_
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Pure Storage Inc	1.03	0.03	1.00	22.27
Cullen/Frost Bankers Inc	1.00	0.01	0.99	20.83
Penumbra Inc	0.99	0.02	0.97	22.22
Nutanix Inc	0.85	0.03	0.82	3.26
Confluent Inc	0.83	0.01	0.82	37.19
e I f Beauty Inc	0.80	0.01	0.79	15.15
Everest Group Ltd	0.78	0.03	0.75	-7.02
MSA Safety Inc	0.69	0.01	0.68	-6.25
Freshpet Inc	0.68	0.01	0.67	8.29
Repligen Corp	0.67	0.01	0.66	-3.28
% of Portfolio	8.32	0.17	8.15	

Portfolio Characteristics							
	Portfolio	Benchmark					
Wtd. Avg. Mkt. Cap (\$M)	66,429	951,638					
Median Mkt. Cap (\$M)	28,743	2,248					
Price/Earnings Ratio	23.28	26.20					
Price/Book Ratio	3.46	4.71					
5 Yr. EPS Growth Rate (%)	11.88	20.08					
Current Yield (%)	1.37	1.29					
Beta (5 Years, Monthly)	1.03	1.00					
Number of Securities	594	2,973					





Vermont Pension Investment Commission Global Equity vs. MSCI ACW IM Index (USD) (Net) Portfolio Characteristics

	Top Ten I	Equity Holdings		
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	4.42	4.38	0.04	7.60
NVIDIA Corporation	3.58	3.79	-0.21	10.59
Microsoft Corp	3.16	3.43	-0.27	-1.85
Amazon.com Inc	2.50	2.39	0.11	17.74
Alphabet Inc	1.39	1.28	0.11	14.27
Meta Platforms Inc	1.39	1.47	-0.08	2.36
Tesla Inc	1.26	1.34	-0.08	54.36
Broadcom Inc	1.10	1.18	-0.08	34.74
Alphabet Inc	1.04	1.10	-0.06	14.04
Netflix Inc	0.87	0.44	0.43	25.67
% of Portfolio	20.71	20.80	-0.09	

Portfo	lio Characteristics	
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	653,025	661,594
Median Mkt. Cap (\$M)	2,403	2,397
Price/Earnings Ratio	22.59	21.58
Price/Book Ratio	3.91	3.72
5 Yr. EPS Growth Rate (%)	17.42	17.58
Current Yield (%)	1.76	1.88
Beta (5 Years, Monthly)	0.99	1.00
Number of Securities	8,718	8,640



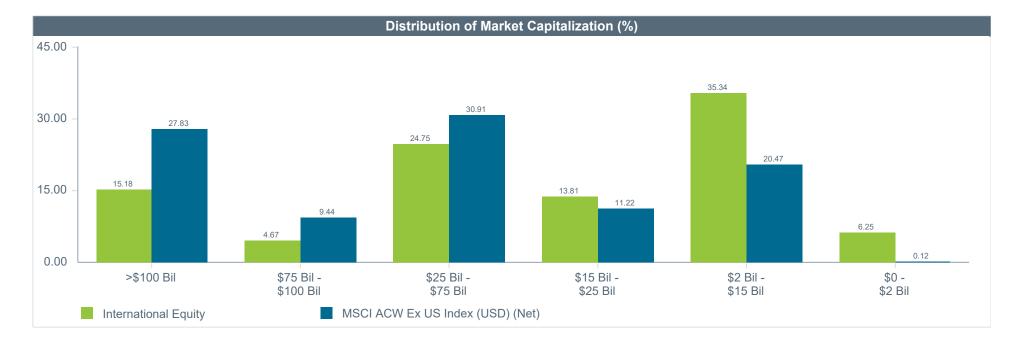
Alphabet Inc. is shown twice in the Top Ten Equity Holdings, but represents two different share classes: GOOGL (Class A) and GOOG (Class C)



Vermont Pension Investment Commission International Equity vs. MSCI ACW Ex US Index (USD) (Net) Portfolio Characteristics

Top Ten Equity Holdings										
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)						
Taiwan Semiconductor Mfg	2.99	3.12	-0.13	8.84						
Roche Holding AG	2.87	0.77	2.10	-12.11						
China Construction Bank Corp	2.53	0.31	2.22	10.20						
ABB Ltd	2.42	0.33	2.09	-6.77						
Wolters Kluwer NV	2.39	0.15	2.24	-1.64						
Recruit Holdings Co Ltd	1.83	0.38	1.45	16.53						
Aristocrat Leisure Ltd	1.66	0.09	1.57	4.76						
Mediatek Incorporation	1.65	0.25	1.40	16.25						
Telefonaktiebolaget LM Ericsson (publ)	1.50	0.09	1.41	8.18						
Logitech International SA, Apples	1.42	0.05	1.37	-7.56						
% of Portfolio	21.26	5.54	15.72							

1 010.0	lio Characteristics	
	Portfolio	Benchmark
Vtd. Avg. Mkt. Cap (\$M)	68,110	107,606
Median Mkt. Cap (\$M)	1,105	9,818
Price/Earnings Ratio	12.99	15.83
Price/Book Ratio	3.00	2.53
5 Yr. EPS Growth Rate (%)	16.21	12.03
Current Yield (%)	3.14	2.98
Beta (5 Years, Monthly)	1.01	1.00
Number of Securities	1,004	2,058





Vermont Pension Investment Commission Total Equity Country/Region Allocation

	Total Equity	MSCI ACW IM Index (USD) (Net)		Total Equity	MSCI ACW IM Index (USD) (Net)
Canada	2.59	2.86	Brazil	0.42	0.39
United States	61.00	63.39	Chile	0.03	0.05
Americas	63.60	66.25	Colombia	0.01	0.01
Australia	1.80	1.64	Mexico	0.11	0.18
Hong Kong	0.63	0.59	Peru	0.03	0.02
Japan	5.03	5.42	Americas	0.60	0.65
New Zealand	0.05	0.07	China	2.94	2.30
Singapore	0.59	0.45	India	1.91	2.25
Asia Pacific	8.10	8.17	Indonesia	0.18	0.16
Austria	0.16	0.07	Korea	0.87	0.95
Belgium	0.19	0.18	Malaysia	0.16	0.18
Denmark	0.75	0.60	Philippines	0.04	0.06
Finland	0.23	0.22	Taiwan	2.70	2.06
France	1.71	2.00	Thailand	0.25	0.17
Germany	1.98	1.93	Asia Pacific	9.04	8.13
Ireland	1.09	1.04	Czech Republic	0.02	0.01
Israel	0.55	0.29	Egypt	0.00	0.01
Italy	0.54	0.57	Greece	0.03	0.05
Netherlands	1.52	1.15	Hungary	0.05	0.02
Norway	0.10	0.16	Kuwait	0.06	0.08
Portugal	0.04	0.04	Poland	0.16	0.09
Spain	0.64	0.54	Qatar	0.06	0.08
Sweden	0.80	0.75	Saudi Arabia	0.37	0.26
Switzerland	2.68	2.18	South Africa	0.47	0.36
United Kingdom	3.84	3.48	Turkey	0.06	0.09
EMEA	16.82	15.19	United Arab Emirates	0.15	0.13
Developed Markets	88.51	89.61	EMEA	1.44	1.20
			Emerging Markets	11.08	9.97



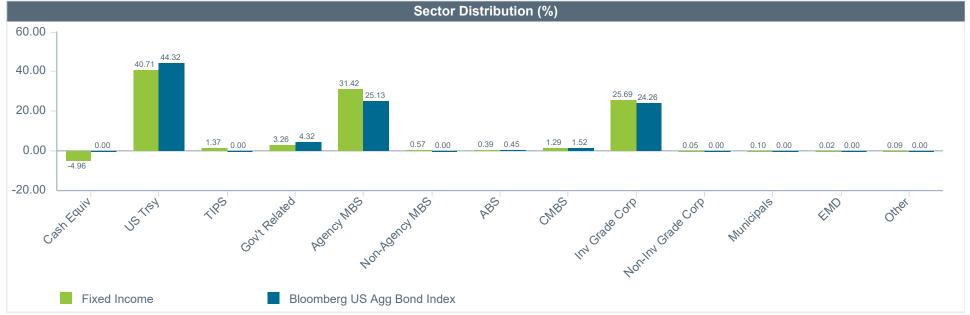
Vermont Pension Investment Commission Total Equity Country/Region Allocation

, ,		
	Total Equity	MSCI ACW IM Index (USD) (Net)
Argentina	0.06	0.09
Kazakhstan	0.00	0.00
Oman	0.07	0.10
Frontier Markets	0.13	0.20
Other	0.28	0.22
Total	100.00	100.00



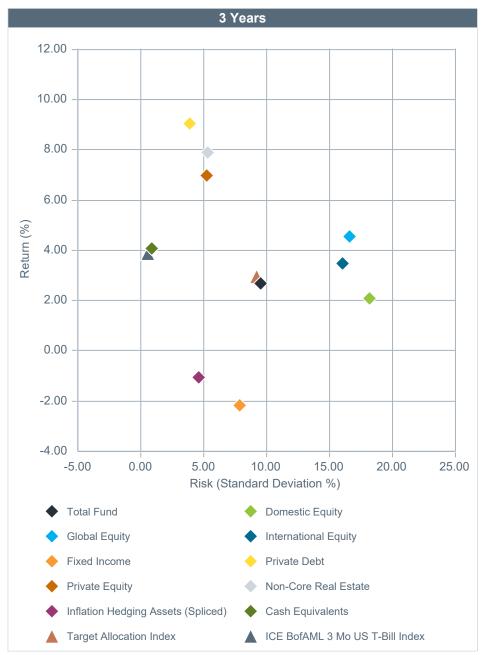
Vermont Pension Investment Commission Fixed Income vs. Bloomberg US Agg Bond Index Portfolio Characteristics

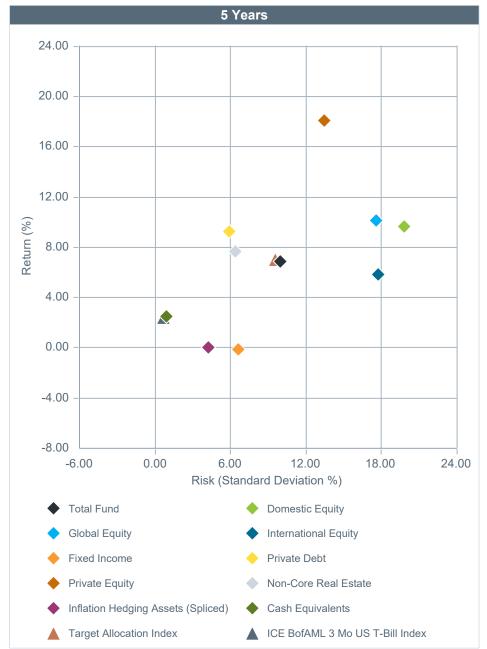
	Portfolio Characteristics						
	Portfolio	Benchmark					
Effective Duration	6.16	6.08					
Convexity	0.42	0.56					
Avg. Maturity	8.40	8.35					
Avg. Quality	Aa2/Aa3	Aa2/Aa3					
Yield To Maturity (%)	5.03	4.91					
Coupon Rate (%)	3.58	3.42					



Allocation to other consists of Euros/Yankees, common stock, cash, cash equivalents, currency forwards, and EM CDX. Portfolio characteristics for Blackrock US Agg (SA) is proxied using benchmark statistics. PIMCO Unconstrained and Wellington Opportunistic EMD (CF) is excluded from calculations due to fund liquidation.

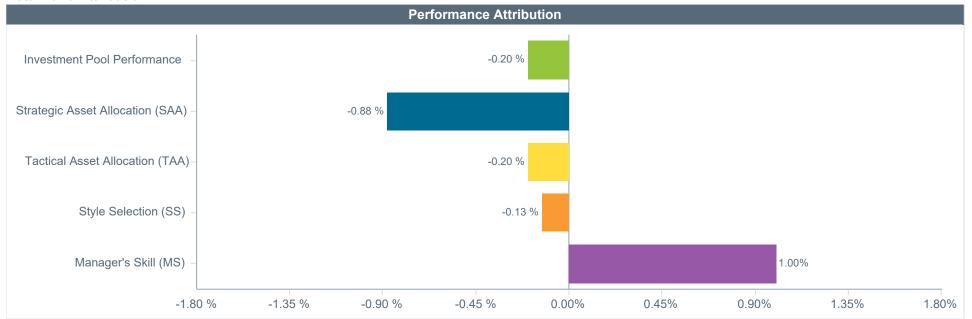


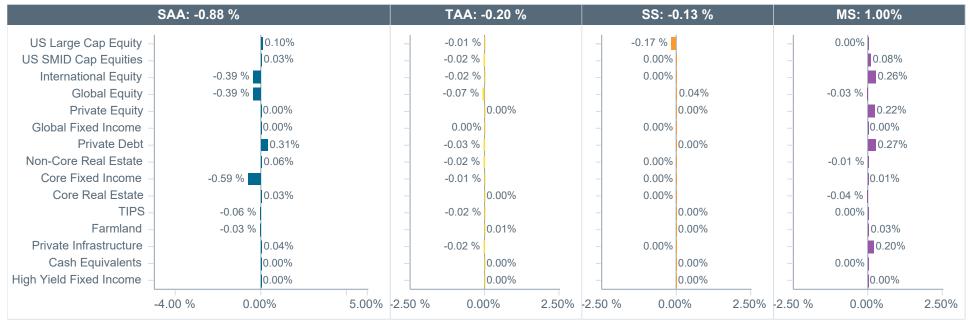




Performance shown is net of fees. Calculation is based on monthly periodicity. Funds or composites with less history than the specified time period will not appear in the chart.

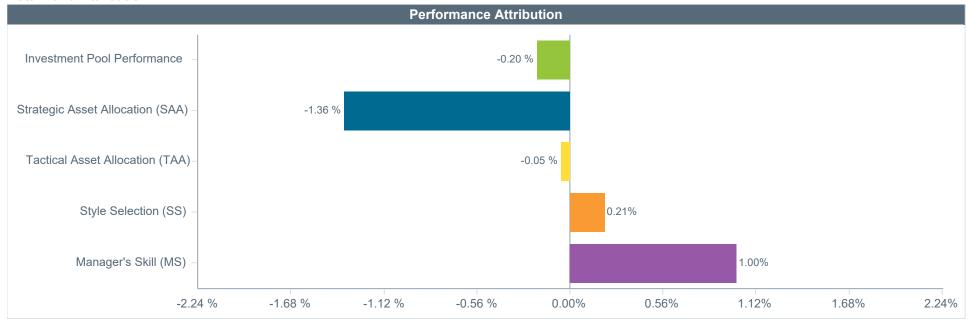


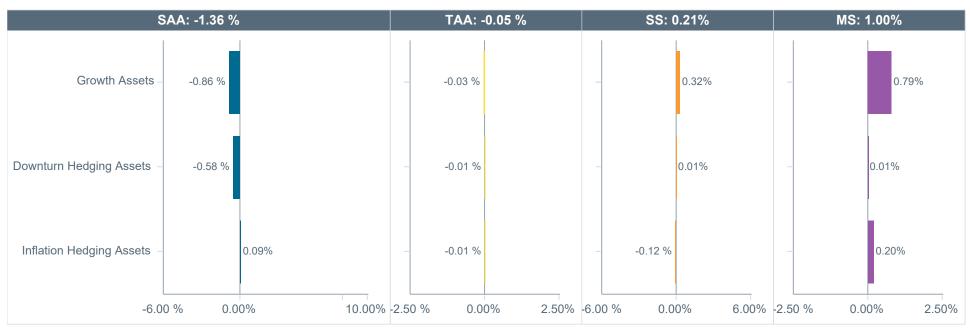




Performance shown is net of fees. Calculation is based on monthly. Private Asset market values, performance and benchmarks are valued quarterly and shown as of most recently available quarter end, adjusted for subsequent cash flows. RVK cautions that the interpretation of time-weighted data on non-marketable investments, such as Private Equity, is imperfect at best and can potentially be misleading. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.







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Special Insert: Time-Weighted Return (TWR) and Internal Rate of Return (IRR)

Methodologies and Differences

Time Weighted Return (TWR)

TWR is the return produced over time by a fund independent of contributions or withdrawals.

It isolates the fund's return attributed the manager's actions, excluding the impact of cash flow timing.

It is suited for **liquid investments** because the fund managers do not control investor cash inflows and outflows.

Internal Rate of Return (IRR)

IRR is the discount rate that equates the cost of an investment with the net cash flows associated with that investment.

It accounts for the timing and magnitude of fund cash inflows and outflows.

It is suited for **illiquid investments** because general partners typically exercise control over the size and timing of cash inflows and outflows.

1 - TWR calculations equally weight each period, while IRR calculations give more weight to periods where more capital is invested.

- For a TWR calculation, negative and positive periods are weighted by the measurement period (e.g., a monthly return) without consideration of cash flows to calculate a total return.
- For an IRR calculation, negative cash flows from smaller sized investment will have a smaller effect on the total return. Conversely, a negative cash flow early in the investment period will have a meaningful impact on the total return.

2 – TWR calculations include each valuation period while IRR calculations ignore intra-period valuations.

- For example, when calculating the IRR from 12/31/2013 to 12/31/2014, IRR ignores the market values shown at 3/31/2014, 6/30/2014, and 9/30/2014. TWR incorporates these market values into the calculation. IRR calculations depend on cash flows to produce a return while TWR does not and depends on discrete calculation periods using beginning / ending valuation regardless of cash flows.
- This causes investments with volatile valuations (i.e. private equity early on in a fund's life) to have more negative performance when evaluated using a TWR.
- 3 Therefore, TWR and IRR calculations can be significantly different for the same investment over a given measurement period.



Special Insert: Time IRR vs TWR Calculations

Example

Withdrawal Example - TWR vs IRR

Date	Reported Value	Cash Flow	MV after CF	Days	Day Weights	Weighted Cash Flow	Monthly TWR
12/31/2022	\$290,000						
1/31/2023	\$293,000			31	0.66		1.03%
2/15/2023	\$298,000	-\$25,000	\$273,000	46	0.49	(\$12,222)	1.71%
2/28/2023	\$260,000			59	0.34		-4.76%
3/31/2023	\$267,000			90	-		2.69%

- The IRR return 0.72% is higher than the TWR 0.50% because the \$25,000 withdrawal out of the portfolio is made **prior to a period** of relatively **bad performance.**
- Decision was assumed to be made by the client thus the manager will not receive credit for the decision in the TWR calculation.
- When a large withdrawal is made prior to a period of relatively good (bad) performance, the IRR will understate (overstate) a portfolios performance, relative to TWR.

Time Weighted Return: **0.50%**Internal Rate of Return: **0.72%**

<u>Contribution Example – TWR vs IRR</u>

Date	Reported Value	Cash Flow	MV after CF	Days	Day Weights	Weighted Cash Flow	Monthly TWR
12/31/2022	\$290,000						
1/31/2023	\$293,000			31	0.66		1.03%
2/15/2023	\$298,000	+\$25,000	\$323,000	46	0.49	\$12,222	1.71%
2/28/2023	\$307,619			59	0.34		-4.76%
3/31/2023	\$315,901			90	-		2.69%

• The IRR return 0.30% is lower than the TWR 0.50% because the \$25,000 contribution into the portfolio is made **prior to a period** of relatively **bad performance**.

- In this case the manager is assumed to have no role in the cash flow decision thus they will not be impacted by the bad timing of the cash flow.
- When a large contribution is made prior to a period of relatively good (bad) performance, the IRR will overstate (understate) a portfolios performance, relative to TWR.

Time Weighted Return: **0.50%** Internal Rate of Return: **0.30%**



General Comments

- Through this reporting period, Vermont Pension Investment Commission has committed a total of \$2,166,153,724 to 49 non-marketable alternative investments.
- The average age of active investments (based upon vintage year and weighted by commitment) was 4.68 years.
- A total of \$1,577,776,769 has been called or otherwise contributed to date.
- Distributions have totaled \$607,796,624 since plan inception.
- The residual estimated value of interests in these partnerships/investments is \$1,593,129,078.
- Since inception net performance for the investments are as follows:
 - O Annualized since-inception estimated Internal Rate of Return (IRR) of 14.00%.
 - Were an investment into the benchmark index (MSCI ACW IM Index (USD) (Net)) ("Index IRR") made with the identical cash-flow pattern, the resulting return would be equal to 11.76% indicating roughly 223 basis points of annualized out-performance.
 - O For every \$1 paid into the portfolio, \$1.39 has been returned as a distribution or is held in residual value (multiple on invested capital = 1.39x).



Private Credit - Direct Lending

- Private Credit Direct Lending funds account for 21.63% of commitments, 22.66% of contributed funds, 23.64% of distributed funds, and 19.14% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 9.84%
 - MSCI ACW IM Index (USD) (Net) IRR of 11.05%
 - A multiple on invested capital of 1.25x.

Private Credit - Distressed/Special Situations

- Private Credit Distressed/Special Situations funds account for 4.62% of commitments, 5.51% of contributed funds, 0.81% of distributed funds, and 6.80% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 11.80%
 - O MSCI ACW IM Index (USD) (Net) IRR of 14.09%
 - A multiple on invested capital of 1.30x.

Private Credit - Opportunistic Credit

- Private Credit Opportunistic Credit funds account for 2.31% of commitments, 0.16% of contributed funds, 0.00% of distributed funds, and 0.22% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR Not Material
 - MSCI ACW IM Index (USD) (Net) IRR Not Material
 - A multiple on invested capital of 1.37x.

Private Credit - Specialty Finance

- Private Credit Specialty Finance funds account for 10.85% of commitments, 14.32% of contributed funds, 5.64% of distributed funds, and 14.98% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 9.90%
 - MSCI ACW IM Index (USD) (Net) IRR of 13.35%
 - A multiple on invested capital of 1.21x.



Private Equity - Buyout

- Private Equity Buyout funds account for 14.17% of commitments, 15.41% of contributed funds, 18.37% of distributed funds, and 17.08% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - O Annualized since-inception IRR of 19.02%
 - O MSCI ACW IM Index (USD) (Net) IRR of 12.26%
 - A multiple on invested capital of 1.58x.

Private Equity - Co-Investment

- Private Equity Co-Investment funds account for 3.92% of commitments, 2.31% of contributed funds, 1.79% of distributed funds, and 3.05% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 19.03%
 - O MSCI ACW IM Index (USD) (Net) IRR of 13.51%
 - A multiple on invested capital of 1.63x.

Private Equity - Fund of Funds

- Private Equity Fund of Funds funds account for 4.34% of commitments, 3.36% of contributed funds, 3.48% of distributed funds, and 3.89% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 15.12%
 - O MSCI ACW IM Index (USD) (Net) IRR of 10.80%
 - A multiple on invested capital of 1.57x.

Private Equity - Growth Equity

- Private Equity Growth Equity funds account for 0.32% of commitments, 0.21% of contributed funds, 0.00% of distributed funds, and 0.21% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 0.00%
 - O MSCI ACW IM Index (USD) (Net) IRR of 21.13%
 - A multiple on invested capital of 1.00x.



Private Equity - Natural Resources

- Private Equity Natural Resources funds account for 1.38% of commitments, 1.30% of contributed funds, 0.43% of distributed funds, and 1.14% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 0.59%
 - O MSCI ACW IM Index (USD) (Net) IRR of 11.65%
 - A multiple on invested capital of 1.01x.

Private Equity - Non-US Private Equity

- Private Equity Non-US Private Equity funds account for 4.39% of commitments, 2.98% of contributed funds, 3.02% of distributed funds, and 3.25% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 16.27%
 - MSCI ACW IM Index (USD) (Net) IRR of 12.86%
 - A multiple on invested capital of 1.49x.

Private Equity - Secondaries

- Private Equity Secondaries funds account for 12.23% of commitments, 11.44% of contributed funds, 19.35% of distributed funds, and 10.07% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 20.78%
 - MSCI ACW IM Index (USD) (Net) IRR of 11.41%
 - A multiple on invested capital of 1.54x.

Private Equity - Venture

- Private Equity Venture funds account for 4.11% of commitments, 4.62% of contributed funds, 7.84% of distributed funds, and 6.39% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 20.64%
 - O MSCI ACW IM Index (USD) (Net) IRR of 11.23%
 - A multiple on invested capital of 2.05x.



Real Estate - Core Plus

- Real Estate Core Plus funds account for 1.41% of commitments, 1.59% of contributed funds, 0.12% of distributed funds, and 1.58% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - O Annualized since-inception IRR Not Material
 - o MSCI ACW IM Index (USD) (Net) IRR Not Material
 - O A multiple on invested capital of 1.04x.

Real Estate - Opportunistic

- Real Estate Opportunistic funds account for 7.16% of commitments, 9.97% of contributed funds, 12.19% of distributed funds, and 8.75% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 8.27%
 - MSCI ACW IM Index (USD) (Net) IRR of 10.42%
 - O A multiple on invested capital of 1.36x.

Real Estate - Value Added

- Real Estate Value Added funds account for 7.16% of commitments, 4.15% of contributed funds, 3.31% of distributed funds, and 3.46% of reported residual value.
- Pooled portfolio since inception performance is as follows:
 - Annualized since-inception IRR of 10.70%
 - O MSCI ACW IM Index (USD) (Net) IRR of 15.63%
 - O A multiple on invested capital of 1.15x.



Vermont Pension Investment Commission Alternative Investment Private Equity Fund Performance Listing

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
HarbourVest Partners IX - Buyout LP	2011	Private Equity - Buyout	24,000,000	21,167,188	35,337,220	10,389,127	17.20	2nd	9.43	2.16
HarbourVest Partners IX - Credit Opportunities LP	2011	Private Equity - Fund of Funds	4,000,000	3,550,265	4,481,060	1,265,108	11.67	2nd	10.09	1.62
HarbourVest Partners IX - Venture LP	2011	Private Equity - Venture	12,000,000	11,437,671	24,794,998	12,013,929	20.60	1st	9.13	3.22
Dover Street VIII LP (HarbourVest)	2012	Private Equity - Secondaries	25,000,000	23,000,000	37,303,810	1,481,308	19.21	2nd	8.62	1.69
HarbourVest International Private Equity Partners VII Partnership LP	2014	Private Equity - Non-US Private Equity	15,000,000	13,837,500	15,488,899	13,926,891	16.60	2nd	10.34	2.13
HarbourVest Partners X - Buyout LP	2015	Private Equity - Buyout	45,500,000	39,246,537	32,405,384	39,980,500	20.01	1st	11.19	1.84
HarbourVest Partners X - Venture LP	2015	Private Equity - Venture	19,500,000	18,672,922	14,154,713	32,743,831	22.31	1st	10.82	2.51
Dover Street IX LP (HarbourVest)	2016	Private Equity - Secondaries	40,000,000	36,400,000	39,225,384	22,129,229	19.08	2nd	10.90	1.69
Dover Street X LP (HarbourVest)	2018	Private Equity - Secondaries	100,000,000	79,000,000	29,381,936	91,302,469	21.75	2nd	10.82	1.53
HarbourVest International Private Equity Partners VIII Partnership LP	2018	Private Equity - Fund of Funds	60,000,000	49,500,000	16,695,143	60,466,241	15.63	3rd	10.91	1.56
HarbourVest Partners XI - Buyout LP	2018	Private Equity - Buyout	75,000,000	61,650,000	18,049,654	79,448,912	21.37	1st	13.34	1.58
HarbourVest Partners XI - Micro Buyout LP	2018	Private Equity - Buyout	12,500,000	11,412,500	4,049,935	14,792,688	26.73	1st	14.87	1.65
HarbourVest Partners Co-Investment V	LP 2019	Private Equity - Co- Investment	25,000,000	19,375,000	10,761,732	28,515,042	19.97	2nd	11.96	2.03
HarbourVest Partners XI - Venture LP	2019	Private Equity - Venture	37,500,000	34,875,000	8,547,946	48,062,689	18.77	2nd	12.74	1.62
Pontifax Global Food and Agriculture Technology II LP	2019	Private Equity - Natural Resources	30,000,000	20,506,823	2,633,142	18,128,223	0.59	4th	11.65	1.01
Siguler Guff Small Buyout Opportunities Fund IV LP	2019	Private Equity - Buyout	50,000,000	45,872,074	16,910,585	52,839,286	18.17	2nd	12.60	1.52
HarbourVest HIPEP IX LP	2020	Private Equity - Non-US Private Equity	80,000,000	33,200,000	2,858,790	37,784,026	15.27	N/A	18.36	1.22
NB Strategic Co-Investment Partners IV LP	2020	Private Equity - Buyout	25,000,000	24,243,244	2,308,120	31,504,197	16.87	2nd	12.33	1.39

Certain valuations (marked with a **) are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the MSCI ACW IM Index (USD) (Net) assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



Vermont Pension Investment Commission Alternative Investment Private Equity Fund Performance Listing

Fund Name	/intage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
Accel-KKR Growth Capital Partners IV L	P 2021	Private Equity - Growth Equity	7,000,000	3,299,780	0	3,299,780	0.00	N/A	21.13	1.00
HarbourVest Partners Co-Investment VI LP	2021	Private Equity - Co- Investment	20,000,000	17,013,829	115,405	20,037,177	13.72	N/A	20.44	1.18
NB Secondary Opportunities V LP	2021	Private Equity - Secondaries	70,000,000	33,848,084	10,275,136	36,095,565	35.23	N/A	20.61	1.37
CA Secondaries Aggregation Vehicle LP	2022	Private Equity - Secondaries	10,000,000	4,505,198	1,141,812	4,232,311	21.25	1st	22.84	1.19
Dunes Point Capital III	2022	Private Equity - Buyout	25,000,000	14,260,864	0	15,444,927	N/M	N/A	N/M	1.08
HarbourVest Partners XII - Venture LP	2022	Private Equity - Venture	20,000,000	7,950,000	170,286	8,973,866	14.09	1st	24.17	1.15
Siguler Guff Small Buyout Opportunities Fund V LP	2022	Private Equity - Buyout	50,000,000	25,250,000	2,584,110	27,633,960	19.40	2nd	22.02	1.20
Dover Street XI LP (HarbourVest)	2023	Private Equity - Secondaries	20,000,000	3,800,000	307,771	5,153,871	50.10	N/A	22.29	1.44
HarbourVest HIPEP X LP	2023	Private Equity - Fund of Funds	30,000,000	0	0	253,705	N/M	N/A	N/M	
NB Strategic Co-Investment Partners V LP	2023	Private Equity - Co- Investment	20,000,000	0	0	-137,114	N/M	N/A	N/M	
HarbourVest Partners Co-Investment VII LP	2024	Private Equity - Co- Investment	20,000,000	0	0	155,052	N/M	N/A	N/M	
			972,000,000	656,874,479	329,982,971	717,916,796	18.91		11.89	1.60

Certain valuations (marked with a **) are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the MSCI ACW IM Index (USD) (Net) assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



Vermont Pension Investment Commission Alternative Investment Real Estate Fund Performance Listing

Fund Name	Vintage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
Siguler Guff Distressed Real Estate Opportunities Fund II LP	2013	Real Estate - Opportunistic	40,000,000	35,272,308	35,365,749	13,596,469	6.45	4th	6.57	1.39
Siguler Guff DREOF II Co-Investment Fund LP	2016	Real Estate - Opportunistic	15,000,000	13,113,146	8,601,852	6,398,229	2.86	4th	4.50	1.14
Blue Vista Real Estate Partners V	2018	Real Estate - Value Added	35,000,000	35,000,000	19,309,783	28,218,321	16.10	1st	1.16	1.36
Brookfield Strategic Real Estate Partner	rs 2019	Real Estate - Opportunistic	100,000,000	108,968,924	30,102,647	119,455,499	10.79	3rd	1.35	1.37
Hammes Partners IV LP	2021	Real Estate - Value Added	20,000,000	2,913,804	199,555	2,242,952	-64.50	4th	-8.13	0.84
AG Realty Value XI LP	2022	Real Estate - Value Added	50,000,000	16,564,928	250,347	15,355,161	-6.97	N/A	-7.18	0.94
Blue Owl Real Estate Fund VI	2023	Real Estate - Value Added	50,000,000	11,045,664	356,768	9,274,267	N/M	N/A	N/M	0.87
Hammes Income & Growth Healthcare Fund LP	2023	Real Estate - Core Plus	30,518,834	25,012,952	741,627	25,208,414	N/M	N/A	N/M	1.04
			340,518,834	247,891,725	94,928,330	219,749,312	8.48		3.13	1.27

Certain valuations (marked with a '*') are preliminary estimates of valuation as of the date of reporting and reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Index IRR represents the dollar-weighted returns calculated using the NCREIF ODCE Index (AWA) (Net) assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Fund IRR is the annualized since-inception net internal rate for the indicated fund or composite. Fund Multiple is the since inception sum of distributions and valuation divided by paid in capital. Quartile data is based on information provided by Preqin.



Vermont Pension Investment Commission Alternative Investment Private Credit Fund Performance Listing

Fund Name	/intage	Asset Class	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Fund IRR (%)	Quartile	Index IRR (%)	Fund Multiple
Benefit Street Partners Senior Secured Opportunities Fund	2016	Private Credit - Direct Lending	70,000,000	70,000,000	72,631,875	18,029,124	6.45	4th	4.87	1.30
(Arcmont) Direct Lending Fund III (USD-ISLP	L) 2018	Private Credit - Direct Lending	70,000,000	62,542,093	32,168,789	59,513,993	13.34	2nd	5.94	1.47
Benefit Street Partners Senior Secured Opportunities Fund II (Levered US)	2019	Private Credit - Direct Lending	75,000,000	71,888,625	21,048,169	69,362,726	11.74	2nd	7.30	1.26
AG Direct Lending Fund IV LP	2020	Private Credit - Direct Lending	50,000,000	47,449,533	13,244,514	50,905,254	11.63	2nd	6.69	1.35
Ares Pathfinder LP	2020	Private Credit - Specialty Finance	65,000,000	56,009,160	7,590,475	62,719,655	11.51	N/A	7.50	1.26
Kennedy Lewis Capital Partners Master (Offshore) LP	II 2020	Private Credit - Distressed/Special Situations	50,000,000	50,639,781	3,949,473	65,888,474	11.10	3rd	6.71	1.38
Ares Pathfinder Core LP	2021	Private Credit - Specialty Finance	170,000,000	170,000,000	26,699,822	175,979,265	9.32	N/A	8.61	1.19
KLCP Domestic III LP	2021	Private Credit - Distressed/Special Situations	50,000,000	36,294,704	951,446	42,516,008	14.51	1st	10.71	1.20
AG Direct Lending Evergreen Fund LP	2022	Private Credit - Direct Lending	53,634,890	46,687,480	3,634,890	48,208,352	9.38	3rd	10.38	1.11
Comvest Credit Partners Evergreen LP	2023	Private Credit - Direct Lending	75,000,000	11,481,403	542,210	11,196,150	N/M	N/A	N/M	1.02
KKR US Direct Lending SCSp	2023	Private Credit - Direct Lending	75,000,000	47,493,210	423,660	47,690,326	N/M	N/A	N/M	1.01
Pantheon Private Debt PCO III USD Feeder (Delaware) LP	2024	Private Credit - Opportunistic Credit	50,000,000	2,524,576	0	3,453,644	N/M	N/A	N/M	1.37
			853,634,890	673,010,565	182,885,323	655,462,970	10.16		6.96	1.25

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Vermont Pension Investment Commission Alternative Investment Private Equity Vintage Year Composite

Average Commitment-weighted Active Investment Age (in years): 5.43

Vintage Year	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Vintage Year IRR (%)	Index IRR (%)	Vintage Year Multiple	Cumulative Multiple
2011	40,000,000	36,155,124	64,613,278	23,668,164	18.26	9.68	2.44	2.44
2012	25,000,000	23,000,000	37,303,810	1,481,308	19.21	8.62	1.69	2.15
2014	15,000,000	13,837,500	15,488,899	13,926,891	16.60	10.34	2.13	2.14
2015	65,000,000	57,919,459	46,560,097	72,724,331	21.00	11.03	2.06	2.11
2016	40,000,000	36,400,000	39,225,384	22,129,229	19.08	10.90	1.69	2.01
2018	247,500,000	201,562,500	68,176,668	246,010,310	19.81	11.78	1.56	1.77
2019	142,500,000	120,628,897	38,853,405	147,545,240	16.91	12.36	1.55	1.71
2020	105,000,000	57,443,244	5,166,910	69,288,223	16.16	15.10	1.30	1.67
2021	97,000,000	54,161,693	10,390,541	59,432,522	24.80	20.59	1.29	1.63
2022	105,000,000	51,966,062	3,896,208	56,285,064	16.89	23.99	1.16	1.60
2023	70,000,000	3,800,000	307,771	5,270,462	53.62	22.29	1.47	1.60
2024	20,000,000	0	0	155,052	N/M	N/M		1.60
TOTAL	972,000,000	656,874,479	329,982,971	717,916,796	18.91	11.89		1.60

Index IRR represents the dollar-weighted returns calculated using the MSCI ACW IM Index (USD) (Net) assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Vintage Year IRR is the annualized since-inception net internal rate for the indicated fund or composite. This report may contain valuations for investments that are preliminary estimates of valuation as of the date of reporting which reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Vintage Year Multiple is the since inception sum of distributions and valuation divided by paid in capital. Cumulative Multiple is the since inception sum of distributions and valuation divided by paid in capital for all investments through the indicated vintage year.

Vermont Pension Investment Commission Alternative Investment Real Estate Vintage Year Composite

Average Commitment-weighted Active Investment Age (in years): 4.57

Vintage Year	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Vintage Year IRR (%)	Index IRR (%)	Vintage Year Multiple	Cumulative Multiple
2013	40,000,000	35,272,308	35,365,749	13,596,469	6.45	8.40	1.39	1.39
2016	15,000,000	13,113,146	8,601,852	6,398,229	2.86	6.31	1.14	1.32
2018	35,000,000	35,000,000	19,309,783	28,218,321	16.10	-0.73	1.36	1.34
2019	100,000,000	108,968,924	30,102,647	119,455,499	10.79	2.79	1.37	1.36
2021	20,000,000	2,913,804	199,555	2,242,952	-64.50	N/M	0.84	1.35
2022	50,000,000	16,564,928	250,347	15,355,161	-6.97	N/M	0.94	1.32
2023	80,518,834	36,058,616	1,098,395	34,482,681	N/M	N/M	0.99	1.27
TOTAL	340,518,834	247,891,725	94,928,330	219,749,312	8.48	-3.42		1.27

Index IRR represents the dollar-weighted returns calculated using the NCREIF ODCE Index (AWA)(Net) assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Vintage Year IRR is the annualized since-inception net internal rate for the indicated fund or composite. This report may contain valuations for investments that are preliminary estimates of valuation as of the date of reporting which reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Vintage Year Multiple is the since inception sum of distributions and valuation divided by paid in capital. Cumulative Multiple is the since inception sum of distributions and valuation divided by paid in capital for all investments through the indicated vintage year.

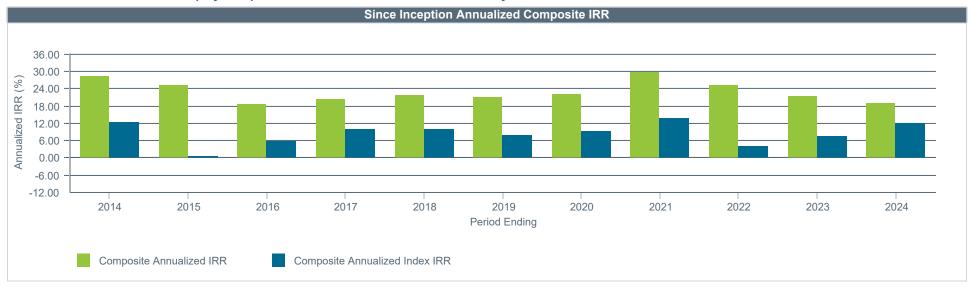
Vermont Pension Investment Commission Alternative Investment Private Credit Vintage Year Composite

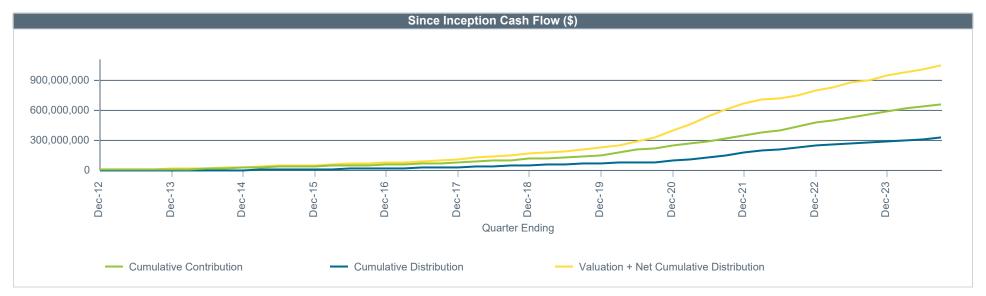
Average Commitment-weighted Active Investment Age (in years): 3.80

Vintage Year	Commitment (\$)	Paid In Capital (\$)	Distributions (\$)	Valuation (\$)	Vintage Year IRR (%)	Index IRR (%)	Vintage Year Multiple	Cumulative Multiple
2016	70,000,000	70,000,000	72,631,875	18,029,124	6.45	4.87	1.30	1.30
2018	70,000,000	62,542,093	32,168,789	59,513,993	13.34	5.94	1.47	1.38
2019	75,000,000	71,888,625	21,048,169	69,362,726	11.74	7.30	1.26	1.33
2020	165,000,000	154,098,474	24,784,462	179,513,383	11.39	6.93	1.33	1.33
2021	220,000,000	206,294,704	27,651,268	218,495,273	9.95	8.85	1.19	1.28
2022	53,634,890	46,687,480	3,634,890	48,208,352	9.38	10.38	1.11	1.27
2023	150,000,000	58,974,613	965,870	58,886,476	N/M	N/M	1.01	1.25
2024	50,000,000	2,524,576	0	3,453,644	N/M	N/M	1.37	1.25
TOTAL	853,634,890	673,010,565	182,885,323	655,462,970	10.16	6.96		1.25

Index IRR represents the dollar-weighted returns calculated using the S&P UBS Leveraged Loan Index assuming an index investment with the same cash flow timing. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated. Applicable IRRs are marked with 'N/M' for not material. Vintage Year IRR is the annualized since-inception net internal rate for the indicated fund or composite. This report may contain valuations for investments that are preliminary estimates of valuation as of the date of reporting which reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. Vintage Year Multiple is the since inception sum of distributions and valuation divided by paid in capital. Cumulative Multiple is the since inception sum of distributions and valuation divided by paid in capital for all investments through the indicated vintage year.

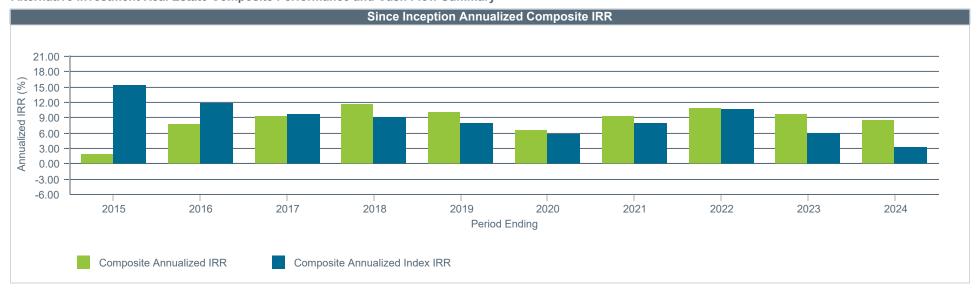


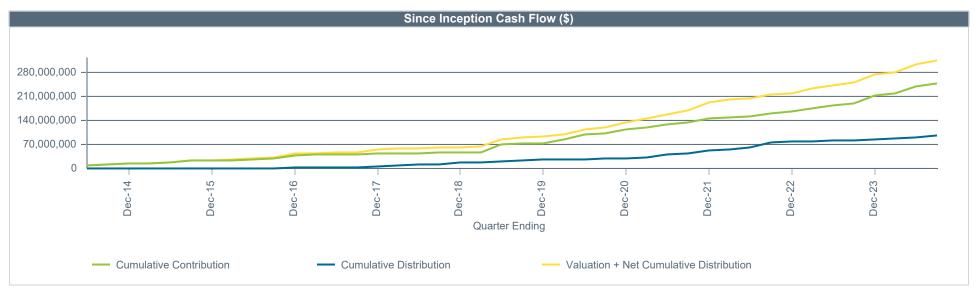




Index IRR represents the dollar-weighted returns calculated using the MSCI ACW IM Index (USD) (Net) assuming an index investment with the same cash flow timing. This report may contain valuations for investments that are preliminary estimates of valuation as of the date of reporting which reflect the estimated impact of subsequent net cash contributions/distributions. These figures may be used in calculations contained in this report. IRRs are shown only for investments with one year or more of cash flows and for which an accurate IRR could be calculated.

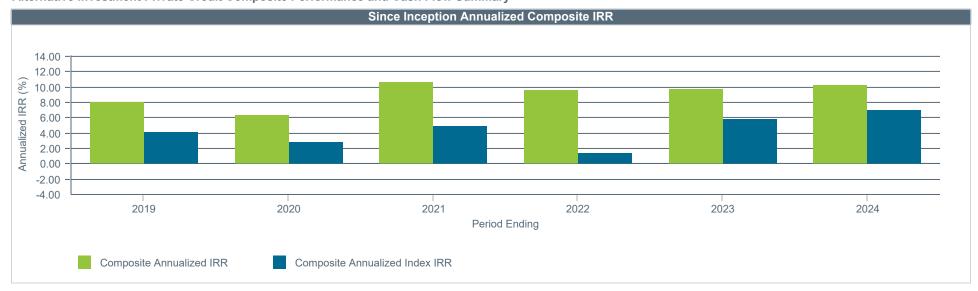


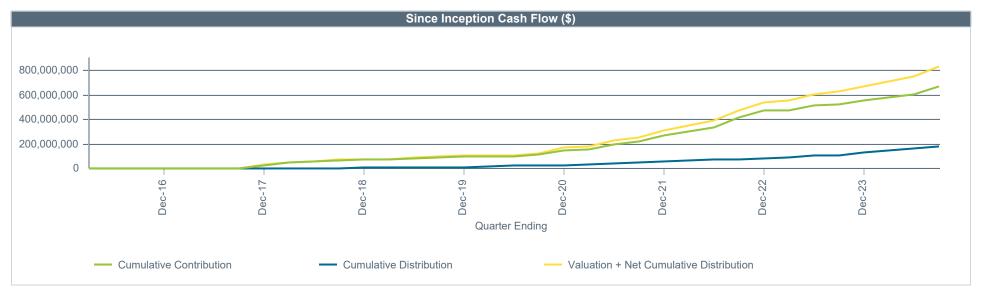




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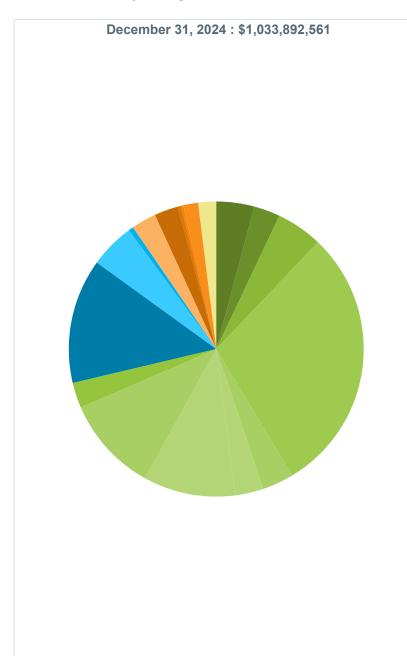




Fund Expense Ratios are intuitively ranked (i.e., a lower expense ratio yields a better percentile rank than a higher expense ratio). The fee peer groups consist of only institutional share classes.



VMERS



	Market Value (\$)	Allocation (%)
■ Blackrock S&P 500 (Eql Wtd) (SA)	43,054,580	4.16
■ Champlain US Mid Cap Core (SA)	29,806,278	2.88
SSgA Russell 2000 Growth (Ex Tobacco) (SA)	6,329	0.00
Acadian International All Cap (SA)	105,097	0.01
■ Acadian ACWI Ex-US Fund (CF)	52,231,345	5.05
■ Mondrian International Equity (SA)	138,438	0.01
■ BlackRock MSCI ACW IMI (SA)	302,441,152	29.25
■ Blackrock MSCI World LCTR (SA)	35,818,598	3.46
Artisan Global Opportunities (CF)	32,033,361	3.10
■ PIMCO Liquidation (SA)	61,766	0.01
■ Wellington Opportunistic EMD (CF)	15,993	0.00
■ PIMCO Unconstrained (SA)	13,456	0.00
Private Debt	104,247,072	10.08
Private Equity	108,605,933	10.50
■ Non-Core Real Estate	28,693,063	2.78
■ BlackRock US Agg (SA)	141,169,746	13.65
■ PIMCO Core (SA)	51,099,626	4.94
■ Vermont Cash (SA)	5,540,865	0.54
■ BlackRock TIPS (SA)	28,251,925	2.73
■ UBS Trumbull Properties (CF)	26,793,514	2.59
■ Hammes HIGH Fund (CF)	3,802,464	0.37
■ Blue Owl Real Estate VI LP	2,890,961	0.28
■ Farmland	16,706,312	1.62
Private Infrastructure	20,364,037	1.97
Real Estate Cash (CF)	651	0.00

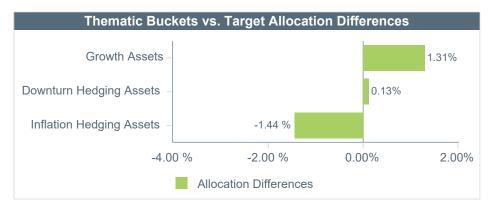
Allocations shown may not sum up to 100% exactly due to rounding. Market values for SSgA Russell 2000 Growth (SA), PIMCO Unconstrained (SA), Mondrian International Equity (SA), Acadian International All Cap (SA), and Wellington Opportunistic EMD (CF) represent residual assets after liquidation. During 12/2024, Copenhagen Infrastructure V LP was funded.



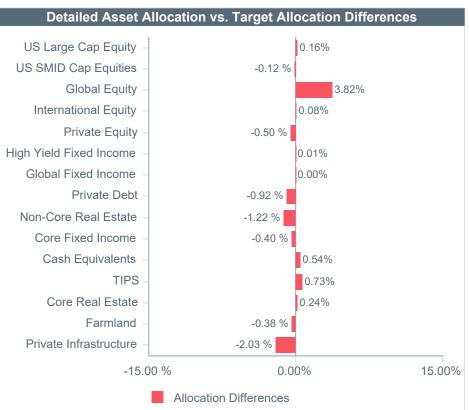
Vermont Municipal Employees' Retirement System Total Fund

Asset Allocation vs. Target Allocation

Thematic Buckets vs. Target Allocation										
	Market Value (\$)	Allocation (%)	Target (%)							
Growth Assets	737,272,461	71.31	70.00							
Downturn Hedging Assets	197,810,237	19.13	19.00							
Inflation Hedging Assets	98,809,863	9.56	11.00							
Total Fund	1,033,892,561	100.00	100.00							

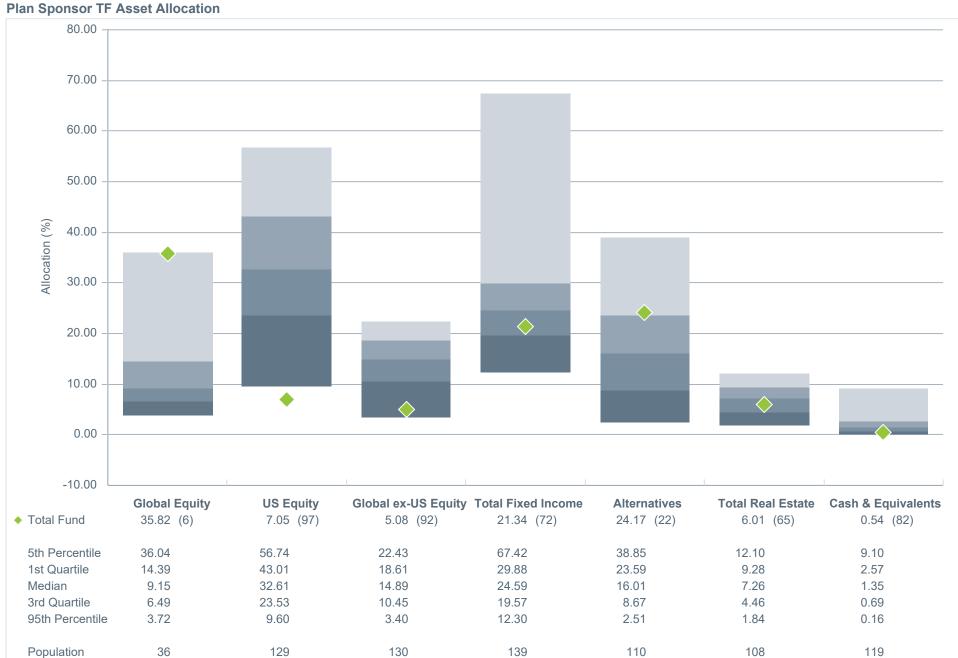


Detailed Asse	et Allocation vs. Ta	rget Allocation	
	Market Value (\$)	Allocation (%)	Target (%)
US Large Cap Equity	43,054,580	4.16	4.00
US SMID Cap Equities	29,812,607	2.88	3.00
Global Equity	370,293,111	35.82	32.00
International Equity	52,474,879	5.08	5.00
Private Equity	108,605,933	10.50	11.00
High Yield Fixed Income	61,766	0.01	0.00
Global Fixed Income	29,449	0.00	0.00
Private Debt	104,247,072	10.08	11.00
Non-Core Real Estate	28,693,063	2.78	4.00
Core Fixed Income	192,269,372	18.60	19.00
Cash Equivalents	5,540,865	0.54	0.00
TIPS	28,251,925	2.73	2.00
Core Real Estate	33,487,590	3.24	3.00
Farmland	16,706,312	1.62	2.00
Private Infrastructure	20,364,037	1.97	4.00
Total Fund	1,033,892,561	100.00	100.00









Parentheses contain percentile ranks. Total Fixed Income includes TIPS.



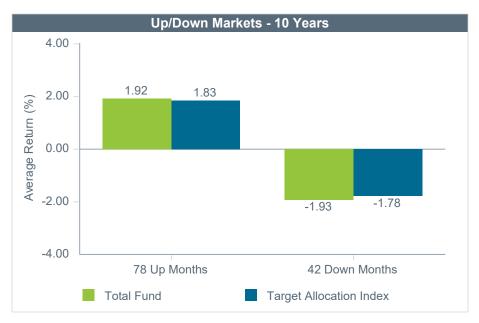
Vermont Municipal Employees' Retirement System All Public Plans (\$500M to \$5B) (Custom PG) Plan Sponsor Peer Group Analysis

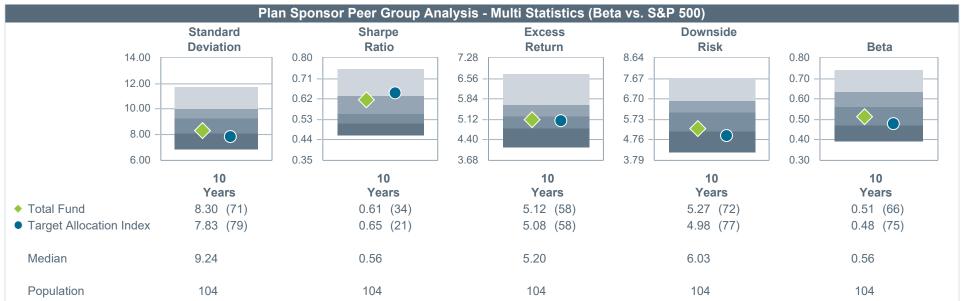


Performance shown is net of fees. Parentheses contain percentile ranks.





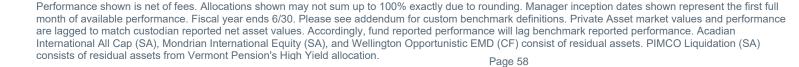




Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



	Allocatio	on					Perfori	mance (%)				
	Market Value (\$)	Actual (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	1,033,892,561	100.00	-0.19	4.33	9.81	2.64	6.88	6.73	7.21	11.68	6.27	07/01/2005
Target Allocation Index			-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference			0.68	0.49	0.89	-0.33	-0.14	0.00	0.34	-0.43	0.00	
Actual Allocation Index			-1.23	3.93	9.16	2.33	6.29	6.30	6.60	12.25	6.03	
Difference			1.04	0.40	0.65	0.30	0.60	0.43	0.61	-0.57	0.23	
Thematic Target Allocation Index			-1.36	4.44	12.19	3.82	-	-	-	16.87	-	
Difference			1.16	-0.11	-2.39	-1.18	-	-	-	-5.18	-	
Growth Assets	737,272,461	71.31	0.33	5.13	13.36	4.43	-	-	-	15.84	10.50	09/01/2020
MSCI ACW IM Index (USD) (Net)			-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.31	
Difference			1.56	-0.39	-3.01	-0.47	-	-	-	-5.74	0.19	
Downturn Hedging Assets	197,810,237	19.13	-2.92	2.04	1.50	-2.26	-	-	-	5.52	-1.77	09/01/2020
Bloomberg US Agg Bond Index			-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference			0.14	0.06	0.25	0.15	-	-	-	-0.01	0.12	
Inflation Hedging Assets	98,809,863	9.56	1.54	3.12	1.29	-1.23	-	-	-	-6.09	0.66	09/01/2020
Consumer Price Index+2.5%			0.72	1.70	5.46	6.83	6.80	5.58	5.13	5.94	7.20	
Difference			0.82	1.42	-4.17	-8.05	-	-	-	-12.02	-6.54	





	All	ocation						Perfor	mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	1,033,892,561	100.00	100.00	-0.19	4.33	9.81	2.64	6.88	6.73	7.21	11.68	6.27	07/01/2005
Target Allocation Index				-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference				0.68	0.49	0.89	-0.33	-0.14	0.00	0.34	-0.43	0.00	
Actual Allocation Index				-1.23	3.93	9.16	2.33	6.29	6.30	6.60	12.25	6.03	
Difference				1.04	0.40	0.65	0.30	0.60	0.43	0.61	-0.57	0.23	
All Public Plans (\$500M to \$5B)				-0.92	3.99	9.16	2.38	6.69	6.80	7.61	11.66	6.50	
Rank				12	31	41	40	40	56	74	49	66	
Domestic Equity	72,867,187	7.05	7.00	0.18	8.29	11.96	2.13	9.71	9.93	-	14.33	11.39	01/01/2011
Russell 3000 Index				2.63	9.03	23.81	8.01	13.86	12.55	13.56	25.96	13.33	
Difference				-2.45	-0.74	-11.84	-5.88	-4.15	-2.62	-	-11.62	-1.94	
US Large Cap Equity	43,054,580	4.16	4.00	-1.90	7.43	12.71	4.40	10.70	10.25	12.13	13.85	9.82	07/01/2005
S&P 500 Index (Cap Wtd)				2.41	8.44	25.02	8.94	14.53	13.10	13.88	26.29	10.68	
Difference				-4.31	-1.01	-12.31	-4.54	-3.82	-2.85	-1.75	-12.44	-0.86	
Blackrock S&P 500 (Eql Wtd) (SA)	43,054,580	4.16	-	-1.90	7.43	12.71	4.34	10.66	-	-	13.85	11.27	07/01/2019
S&P 500 Index (Eq Wtd)				-1.87	7.55	13.01	4.45	10.76	10.26	12.60	13.87	11.36	
Difference				-0.03	-0.12	-0.30	-0.11	-0.09	-	-	-0.03	-0.09	
IM U.S. Large Cap Equity (SA+CF) Median				2.03	7.74	22.37	7.70	13.12	12.10	13.20	24.36	13.81	
Rank				81	55	84	86	71	-	-	76	73	
US SMID Cap Equities	29,812,607	2.88	3.00	3.35	9.52	10.84	-1.04	8.15	9.55	11.88	14.98	9.20	07/01/2005
Russell 2500 Index				0.62	9.42	11.99	2.39	8.77	8.85	11.30	17.42	8.95	
Difference				2.73	0.10	-1.16	-3.43	-0.61	0.70	0.58	-2.45	0.25	
Champlain US Mid Cap Core (SA)	29,806,278	2.88	-	3.35	9.52	10.85	-1.04	8.15	10.41	12.25	14.97	12.48	10/01/2009
Custom SMID Cap Equity Index				0.49	9.83	13.51	2.57	8.98	8.89	11.30	17.15	11.47	
Difference				2.86	-0.30	-2.67	-3.61	-0.83	1.53	0.95	-2.18	1.02	
IM U.S. SMID Cap Equity (SA+CF) Median				0.11	7.82	12.10	2.20	9.52	9.28	11.46	16.48	11.64	
Rank				15	33	59	81	71	23	24	61	23	
Global Equity	370,293,111	35.82	32.00	-1.20	5.33	16.76	4.56	10.21		-	22.25	7.41	02/01/2018
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	8.07	
Difference				0.03	-0.19	0.39	-0.35	0.53	-	-	0.67	-0.66	
BlackRock MSCI ACW IMI (SA)	302,441,152	29.25	-	-1.19	5.77	16.84	5.28	10.08	-	-	22.04	10.85	07/01/2019
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.45	
Difference				0.04	0.25	0.47	0.37	0.41	-	-	0.46	0.40	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	9.35	
Rank				32	24	29	33	33	-	-	37	32	



	Allocation				Performance (%)								
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inceptior Date
Blackrock MSCI World LCTR (SA)	35,818,598	3.46	-	-0.97	5.87	17.90	5.11	-	-	-	22.13	5.76	09/01/202
MSCI Wrld Index (USD) (Net)				-0.16	6.20	18.67	6.34	11.17	9.95	10.03	23.79	6.72	
Difference				-0.82	-0.33	-0.77	-1.23	-	-	-	-1.65	-0.96	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	3.40	
Rank				29	23	24	34	-	-	-	36	29	
Artisan Global Opportunities (CF)	32,033,361	3.10	-	-1.56	2.40	15.18	-0.32	10.32	-	-	23.53	10.80	07/01/201
MSCI ACW Index (USD) (Net)				-0.99	5.56	17.49	5.44	10.06	9.23	9.21	22.20	10.02	
Difference				-0.57	-3.16	-2.30	-5.75	0.26	-	-	1.33	0.78	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	8.70	
Rank				36	65	35	84	31	-	-	28	24	
International Equity	52,474,879	5.08	5.00	-2.78	3.48	13.34	3.56	5.95	6.02	-	16.91	5.40	01/01/201
Custom MSCI ACW Ex US Composite Index (USD) (Net)				-7.60	-0.15	5.53	1.01	4.43	5.25	5.41	15.62	5.13	
Difference				4.82	3.63	7.81	2.55	1.52	0.76	-	1.29	0.26	
Acadian ACWI Ex-US Fund (CF)	52,231,345	5.05	-	-2.71	3.55	13.63	4.19	8.07	8.27	7.86	17.09	6.26	11/01/200
Custom MSCI ACW Ex US Index (USD) (Net)				-7.60	-0.15	5.53	0.07	3.84	4.96	5.21	15.62	4.69	
Difference				4.89	3.70	8.09	4.12	4.22	3.31	2.65	1.47	1.58	
IM All ACWI Ex US (SA+CF) Median				-7.26	0.13	5.97	0.79	4.37	5.45	5.76	16.29	5.36	
Rank				6	10	6	15	6	8	4	43	26	
Acadian International All Cap (SA)	105,097	0.01	-	-	-	-	-	-	-	-	-	-	11/01/200
MSCI EAFE IM Index (USD) (Net)				-8.15	-1.06	3.55	0.92	4.37	5.23	5.39	17.51	4.82	
Difference				-	-	-	-	-	-	-	-	-	
IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.18	
Rank				-	-	-	-	-	-	-	-	-	
Mondrian International Equity (SA)	138,438	0.01	-	-	-	-	-	-	-	-	-	-	07/01/200
MSCI EAFE Index (USD) (Net)				-8.11	-1.44	3.82	1.65	4.73	5.20	5.24	18.24	5.00	
Difference				-	-	-	-	-	-	-	-	-	
IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.44	
Rank				-	-	-	-	-	-	-	-	-	
Fixed Income	192,360,587	18.61	19.00	-3.01	1.93	1.60	-2.17	-0.11	1.98	-	6.44	2.79	01/01/201
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	2.08	
Difference				0.05	-0.05	0.35	0.24	0.21	0.63	-	0.91	0.71	
Core Fixed Income	192,269,372	18.60	19.00	-3.01	2.00	1.44	-2.25	-	-	-	5.72	-1.76	09/01/202
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference				0.05	0.02	0.19	0.16	-	-	-	0.20	0.13	



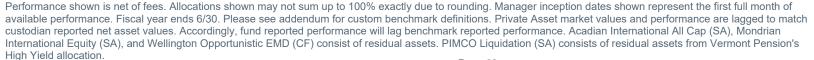
	All	ocation						Perfor	mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
BlackRock US Agg (SA)	141,169,746	13.65	-	-3.05	1.95	1.32	-2.37	-0.31	-	-	5.67	0.32	06/01/2019
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	0.37	
Difference				0.01	-0.03	0.07	0.03	0.02	-	-	0.14	-0.05	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	0.63	
Rank				59	68	76	66	79	-	-	54	86	
PIMCO Core (SA)	51,099,626	4.94	-	-2.89	2.14	1.83	-1.88	-	-	-	5.90	-1.40	09/01/2020
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference				0.18	0.16	0.58	0.53	-	-	-	0.37	0.48	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	-1.63	
Rank				28	27	41	17	-	-	-	44	30	
Emerging Markets Debt	15,993	0.00	0.00	-	-	-	-	-	-	-	-	-	09/01/2020
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	-0.07	
Difference				-	-	-	-	-	-	-	-	-	
Wellington Opportunistic EMD (CF)	15,993	0.00	-	-	-	-	-	-	-	-	-	-	12/01/2009
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	4.45	
Difference				-	-	-	-	-	-	-	-	-	
IM Emerging Markets Debt (SA+CF) Median				-2.01	3.55	6.08	0.29	0.68	2.85	4.07	11.86	4.08	
Rank				-	-	-	-	-	-	-	-	-	
High Yield Fixed Income	61,766	0.01	0.00	-	-	-	-	-	-	-	-	-	06/01/2006
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	6.60	
Difference				-	-	-	-	-	-	-	-	-	
PIMCO Liquidation (SA)	61,766	0.01	-	-	-	-	-	-	-	-	-	-	08/01/2018
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	4.90	
Difference				-	-	-	-	-	-	-	-	-	
IM U.S. High Yield Bonds (SA+CF) Median				0.21	4.62	7.58	2.77	3.82	4.69	5.98	12.12	4.46	
Rank				-	-	-	-	-	-	-	-	-	
Private Debt	104,247,072	10.08	11.00	5.65	4.85	10.62	9.06	9.36	-	-	9.93	8.39	01/01/2018
S&P UBS Lvg'd Loan Index+2% (Spliced)				2.79	5.42	11.20	8.97	7.49	5.95	5.83	15.30	6.61	
Difference				2.86	-0.57	-0.59	0.09	1.87	-	-	-5.37	1.77	
Private Equity	108,605,933	10.50	11.00	2.15	3.50	8.01	7.32	18.30	17.32	-	4.99	18.04	01/01/2013
Cambridge US Prvt Eq Index				0.00	2.40	6.23	4.34	14.49	13.48	14.28	9.04	13.95	
Difference				2.15	1.10	1.78	2.98	3.81	3.84	_	-4.05	4.09	



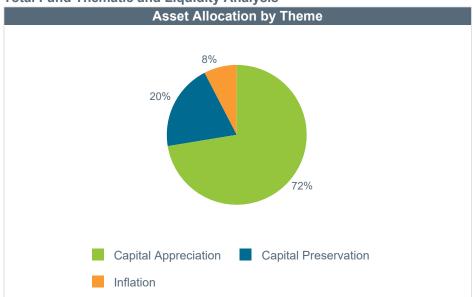
	All	Allocation			Performance (%)								
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Non-Core Real Estate	28,693,063	2.78	4.00	1.30	3.61	5.55	8.17	7.86	8.89	-	2.13	9.14	09/01/2014
NCREIF ODCE Index+2% (Spliced)				1.46	1.99	-0.31	-1.20	3.87	6.04	8.03	-10.96	6.41	
Difference				-0.16	1.62	5.86	9.37	3.99	2.85	-	13.09	2.72	
Inflation Hedging Assets (Spliced)	98,809,863	9.56	11.00	1.54	3.12	1.28	-1.20	-0.04	3.09	-	-6.05	6.27	01/01/2011
CPI+2.5% (Spliced)				0.72	1.70	5.46	6.83	6.15	7.19	8.82	5.94	8.52	
Difference				0.82	1.42	-4.18	-8.03	-6.19	-4.10	-	-11.98	-2.25	
TIPS	28,251,925	2.73	2.00	-2.91	1.07	2.02	-2.23	-	-	-	3.92	0.07	09/01/2020
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	0.01	
Difference				-0.03	-0.05	0.18	0.06	-	-	-	0.02	0.06	
BlackRock TIPS (SA)	28,251,925	2.73	-	-2.91	1.07	2.02	-2.23	1.91	2.24	2.83	3.92	2.68	12/01/2009
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	2.69	
Difference				-0.03	-0.05	0.18	0.06	0.05	0.00	-0.03	0.02	-0.01	
IM U.S. TIPS (SA+CF) Median				-2.91	1.10	1.87	-2.32	1.82	2.22	2.80	3.80	2.63	
Rank				54	56	36	44	39	42	45	36	41	
Core Real Estate	33,487,590	3.24	3.00	-0.16	-0.88	-6.69	-2.85	-0.63	2.30	-	-16.07	5.71	01/01/2011
NCREIF ODCE Index (AWA) (Net)	•			0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	6.99	
Difference				-1.12	-1.86	-4.42	0.29	-2.62	-2.64	-	-3.34	-1.27	
UBS Trumbull Properties (CF)	26,793,514	2.59	-	-0.18	-1.23	-7.02	-2.97	-0.70	1.99	5.03	-16.10	3.93	07/01/2005
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	5.18	
Difference				-1.14	-2.22	-4.76	0.17	-2.69	-2.96	-2.49	-3.37	-1.25	
Hammes HIGH Fund (CF)	3,802,464	0.37	-	1.76	2.59	2.05	-	-	-	-	-	2.05	01/01/2024
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27	
Difference				0.80	1.61	4.32	-	-	-	-	-	4.32	
Blue Owl Real Estate VI LP	2,890,961	0.28	-	-2.99	-0.06	-	-	-	-	-	-	-14.23	02/01/2024
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27	
Difference				-3.95	-1.05	-	-	-	-	-	-	-11.96	
Farmland	16,706,312	1.62	2.00	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33	
Difference				2.12	2.41	1.85	-2.67	-	-	-	-3.20	-2.94	
Nuveen Global Agriculture (CF)	16,706,312	1.62	-	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33	
Difference				2.12	2.41	1.85	-2.67	_	_	_	-3.20	-2.94	

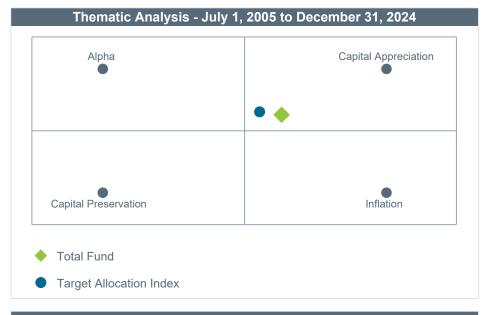


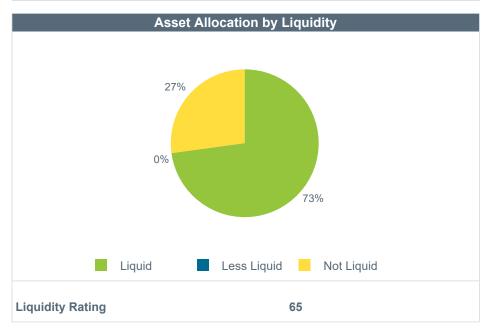
	All	ocation						Perfor	mance (%)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Private Infrastructure	20,364,037	1.97	4.00	12.49	16.64	16.98	-	-	-	-	-	11.02	07/01/2023
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.35	
Difference				11.66	14.69	11.00	-	-	-	-	-	5.67	
IFM Global Infrastructure Fund (CF)	16,070,098	1.55	-	2.49	6.38	-	-	-	-	-	-	6.24	02/01/2024
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.14	
Difference				1.65	4.43	-	-	-	-	-	-	1.10	
IFM Net Zero Infrastructure Fund (CF)	2,422,687	0.23	-	0.01	3.00	-	-	-	-	-	-	6.13	03/01/2024
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	4.24	
Difference				-0.83	1.05	-	-	-	-	-	-	1.89	
Copenhagen Infrastructure V LP	1,871,252	0.18	-	-	-	-	-	-	-	-	-	-	01/01/2025
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	-	
Difference				-	-	-	-	-	-	-	-	-	
Cash Equivalents	5,540,865	0.54	0.00	1.15	2.45	5.01	3.89	2.38	1.27	-	4.57	0.93	01/01/2011
ICE BofAML 3 Mo US T-Bill Index				1.17	2.55	5.25	3.89	2.46	1.77	1.20	5.02	1.28	
Difference				-0.02	-0.11	-0.25	0.00	-0.09	-0.49	-	-0.44	-0.36	



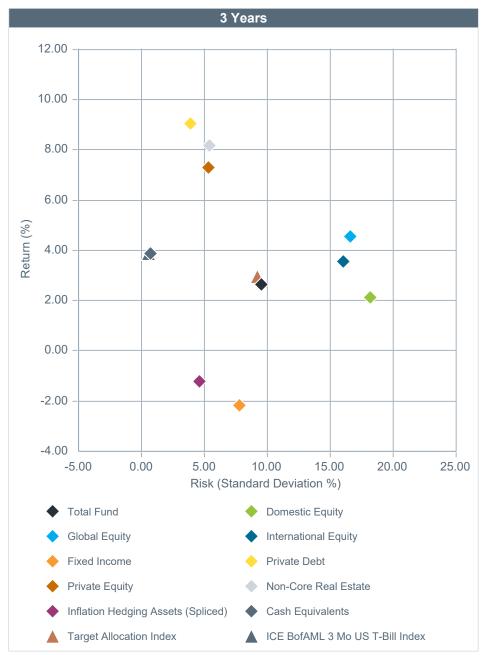


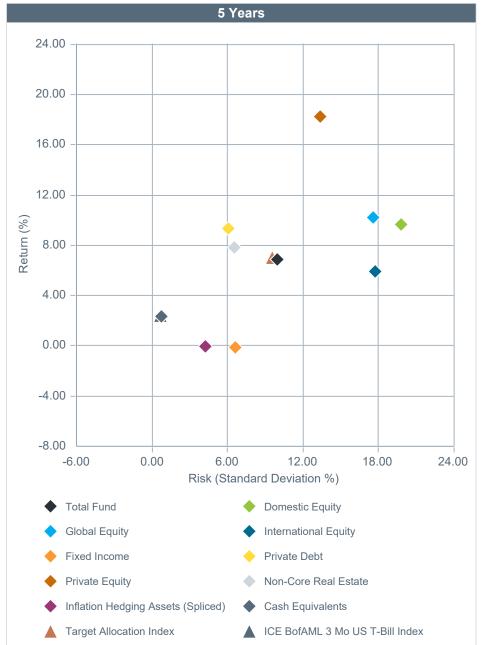






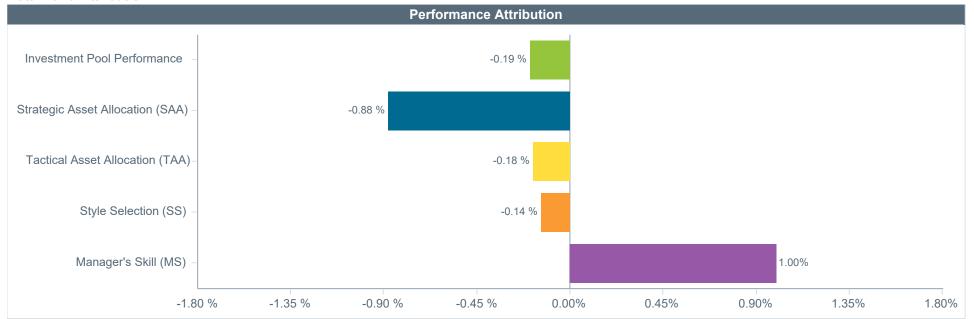
Correlation Matrix - 10 Years										
	Α	В	С	D						
Α	1.00									
В	0.46	1.00								
С	-0.14	0.15	1.00							
D	0.42	0.81	0.22	1.00						
A B C D	= = = =	HFRI EH: Equity Market N MSCI ACW Index (USD) (Bloomberg US Govt Bond Real Return Custom Index	Gross) (Capital Apprec Index (Capital Preserv	iation) ation)						

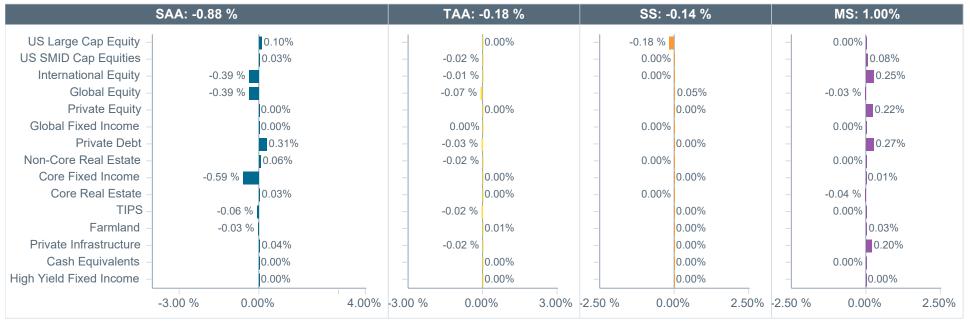




Performance shown is net of fees. Calculation is based on monthly periodicity. Funds or composites with less history than the specified time period will not appear in the chart.



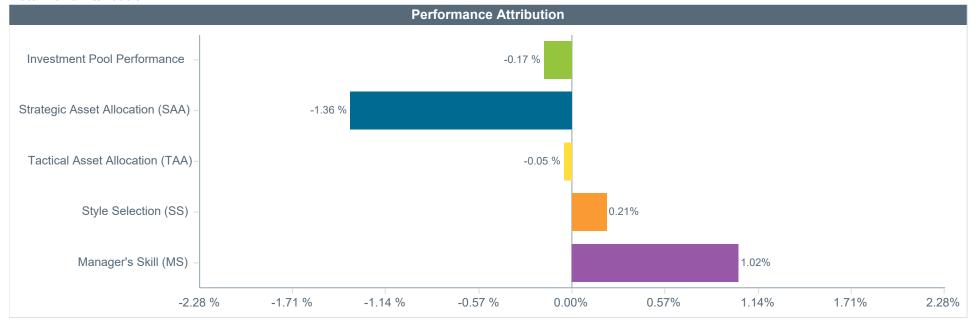


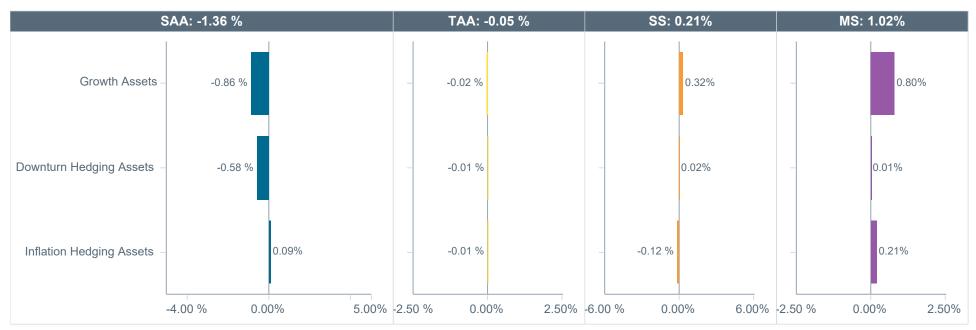


Performance shown is net of fees. Calculation is based on monthly. Private Asset market values, performance and benchmarks are valued quarterly and shown as of most recently available quarter end, adjusted for subsequent cash flows. RVK cautions that the interpretation of time-weighted data on non-marketable investments, such as Private Equity, is imperfect at best and can potentially be misleading. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.



Vermont Municipal Employees' Retirement System Total Fund Attribution - IDP

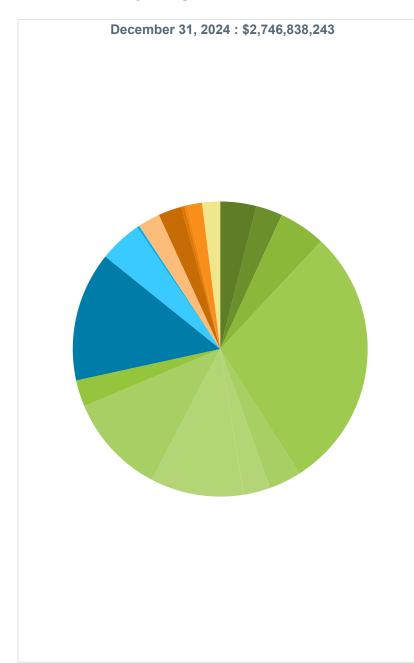




Performance shown is gross of fees. Calculation is based on monthly. Private Asset market values, performance and benchmarks are valued quarterly and shown as of most recently available quarter end, adjusted for subsequent cash flows. RVK cautions that the interpretation of time-weighted data on non-marketable investments, such as Private Equity, is imperfect at best and can potentially be misleading. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.



VSERS



	Market Value (\$)	Allocation (%)
■ Blackrock S&P 500 (Eql Wtd) (SA)	108,441,197	3.95
■ Champlain US Mid Cap Core (SA)	80,044,369	2.91
SSgA Russell 2000 Growth (Ex Tobacco) (SA)	10,269	0.00
Acadian International All Cap (SA)	294,760	0.01
Acadian ACWI Ex-US Fund (CF)	140,266,067	5.11
■ Mondrian International Equity (SA)	363,048	0.01
BlackRock MSCI ACW IMI (SA)	795,741,329	28.97
Blackrock MSCI World LCTR (SA)	97,263,513	3.54
Artisan Global Opportunities (CF)	81,643,029	2.97
PIMCO Liquidation (SA)	162,837	0.01
Wellington Opportunistic EMD (CF)	44,547	0.00
PIMCO Unconstrained (SA)	26,391	0.00
Private Debt	280,545,556	10.21
Private Equity	301,752,432	10.99
Non-Core Real Estate	79,531,434	2.90
■ BlackRock US Agg (SA)	389,964,261	14.20
PIMCO Core (SA)	128,989,472	4.70
Vermont Cash (SA)	6,788,951	0.25
BlackRock TIPS (SA)	67,415,521	2.45
■ UBS Trumbull Properties (CF)	70,028,574	2.55
Hammes HIGH Fund (CF)	10,195,556	0.37
Blue Owl Real Estate VI LP	7,738,572	0.28
Farmland	45,026,585	1.64
Private Infrastructure	54,558,270	1.99
Real Estate Cash (CF)	1,700	0.00

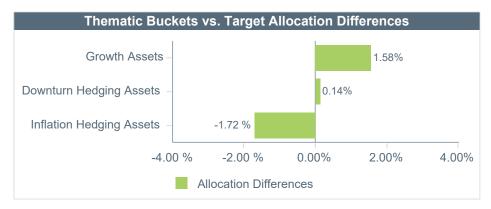
Allocations shown may not sum up to 100% exactly due to rounding. Market values for SSgA Russell 2000 Growth (SA), PIMCO Unconstrained (SA), Mondrian International Equity (SA), Acadian International All Cap (SA), and Wellington Opportunistic EMD (CF) represent residual assets after liquidation. During 12/2024, Copenhagen Infrastructure V LP was funded.



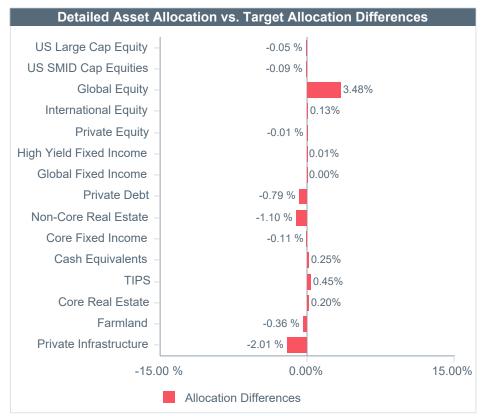
Vermont State Employees' Retirement System Total Fund

Asset Allocation vs. Target Allocation

Thematic Buckets vs. Target Allocation									
	Market Value (\$)	Allocation (%)	Target (%)						
Growth Assets	1,966,130,779	71.58	70.00						
Downturn Hedging Assets	525,742,684	19.14	19.00						
Inflation Hedging Assets	254,964,779	9.28	11.00						
Total Fund	2,746,838,243	100.00	100.00						



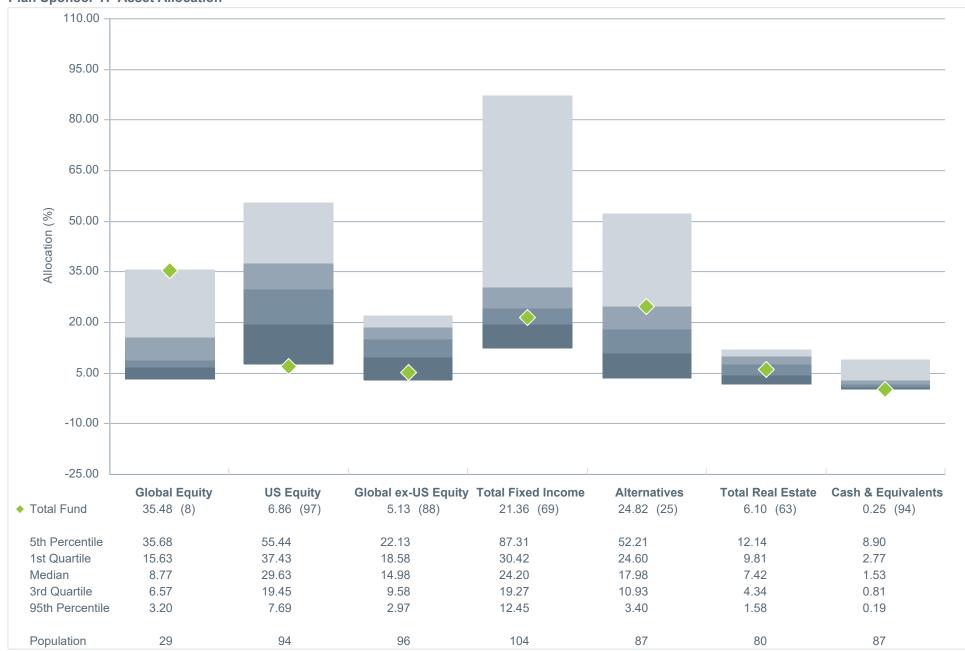
Detailed Asset Allocation vs. Target Allocation										
	Market Value (\$)	Allocation (%)	Target (%)							
US Large Cap Equity	108,441,197	3.95	4.00							
US SMID Cap Equities	80,054,639	2.91	3.00							
Global Equity	974,647,871	35.48	32.00							
International Equity	140,923,875	5.13	5.00							
Private Equity	301,752,432	10.99	11.00							
High Yield Fixed Income	162,837	0.01	0.00							
Global Fixed Income	70,938	0.00	0.00							
Private Debt	280,545,556	10.21	11.00							
Non-Core Real Estate	79,531,434	2.90	4.00							
Core Fixed Income	518,953,733	18.89	19.00							
Cash Equivalents	6,788,951	0.25	0.00							
TIPS	67,415,521	2.45	2.00							
Core Real Estate	87,964,403	3.20	3.00							
Farmland	45,026,585	1.64	2.00							
Private Infrastructure	54,558,270	1.99	4.00							
Total Fund	2,746,838,243	100.00	100.00							







Vermont State Employees' Retirement System All Public Plans (\$1B to \$10B; Median) (Custom PG) Plan Sponsor TF Asset Allocation



Parentheses contain percentile ranks. Total Fixed Income includes TIPS.



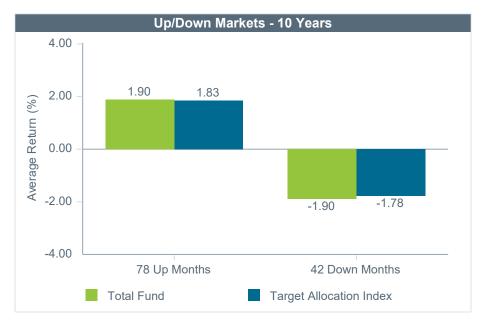
Vermont State Employees' Retirement System All Public Plans (\$1B to \$10B) (Custom PG) Plan Sponsor Peer Group Analysis

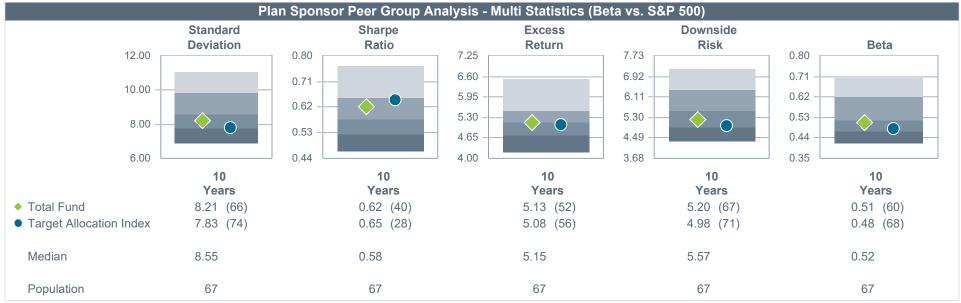


Performance shown is net of fees. Parentheses contain percentile ranks.





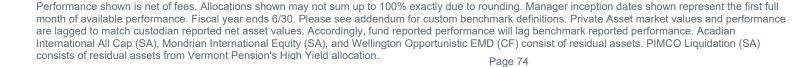




Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



	Allocatio	n					Perfori	mance (%))			
	Market Value (\$)	Actual (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	2,746,838,243	100.00	-0.17	4.32	9.76	2.67	6.89	6.75	7.20	11.66	6.20	07/01/2005
Target Allocation Index			-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference			0.70	0.48	0.84	-0.29	-0.14	0.02	0.34	-0.46	-0.06	
Actual Allocation Index			-1.22	3.92	9.10	2.45	6.36	6.31	6.59	12.26	6.00	
Difference			1.05	0.40	0.65	0.22	0.53	0.44	0.61	-0.60	0.20	
Thematic Target Allocation Index			-1.36	4.44	12.19	3.82	-	-	-	16.87	-	
Difference			1.18	-0.12	-2.44	-1.15	-	-	-	-5.21	-	
Growth Assets	1,966,130,779	71.58	0.36	5.11	13.25	4.44	-	-	-	15.69	10.49	09/01/2020
MSCI ACW IM Index (USD) (Net)			-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.31	
Difference			1.59	-0.41	-3.12	-0.46	-	-	-	-5.89	0.17	
Downturn Hedging Assets	525,742,684	19.14	-2.98	2.01	1.47	-2.26	-	-	-	5.56	-1.77	09/01/2020
Bloomberg US Agg Bond Index			-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference			0.09	0.03	0.22	0.14	-	-	-	0.03	0.12	
Inflation Hedging Assets	254,964,779	9.28	1.68	3.30	1.53	-1.03		-	-	-5.75	0.53	09/01/2020
Consumer Price Index+2.5%			0.72	1.70	5.46	6.83	6.80	5.58	5.13	5.94	7.20	<u> </u>
Difference			0.97	1.59	-3.93	-7.85	-	-	-	-11.68	-6.67	





	All	ocation						Perfor	mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	2,746,838,243	100.00	100.00	-0.17	4.32	9.76	2.67	6.89	6.75	7.20	11.66	6.20	07/01/2005
Target Allocation Index				-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference				0.70	0.48	0.84	-0.29	-0.14	0.02	0.34	-0.46	-0.06	
Actual Allocation Index				-1.22	3.92	9.10	2.45	6.36	6.31	6.59	12.26	6.00	
Difference				1.05	0.40	0.65	0.22	0.53	0.44	0.61	-0.60	0.20	
All Public Plans (\$1B to \$10B)				-0.87	3.93	8.87	2.60	6.83	6.77	7.54	11.30	6.46	
Rank				13	27	29	47	43	52	74	42	70	
Domestic Equity	188,495,836	6.86	7.00	0.21	8.30	11.94	2.10	9.66	9.87	-	14.33	11.37	01/01/2011
Russell 3000 Index				2.63	9.03	23.81	8.01	13.86	12.55	13.56	25.96	13.33	
Difference				-2.42	-0.73	-11.87	-5.90	-4.20	-2.68	-	-11.62	-1.96	
US Large Cap Equity	108,441,197	3.95	4.00	-1.89	7.44	12.72	4.40	10.70	10.25	12.13	13.85	9.66	07/01/2005
S&P 500 Index (Cap Wtd)				2.41	8.44	25.02	8.94	14.53	13.10	13.88	26.29	10.68	
Difference				-4.30	-1.00	-12.30	-4.54	-3.83	-2.86	-1.75	-12.44	-1.02	
Blackrock S&P 500 (Eql Wtd) (SA)	108,441,197	3.95	-	-1.89	7.44	12.72	4.34	10.66	-	-	13.85	11.27	07/01/2019
S&P 500 Index (Eq Wtd)				-1.87	7.55	13.01	4.45	10.76	10.26	12.60	13.87	11.36	
Difference				-0.03	-0.11	-0.29	-0.11	-0.10	-	-	-0.03	-0.09	
IM U.S. Large Cap Equity (SA+CF) Median				2.03	7.74	22.37	7.70	13.12	12.10	13.20	24.36	13.81	
Rank				80	55	84	86	71	-	-	76	73	
US SMID Cap Equities	80,054,639	2.91	3.00	3.35	9.52	10.84	-1.05	8.15	9.52	11.85	14.97	9.20	07/01/2005
Russell 2500 Index				0.62	9.42	11.99	2.39	8.77	8.85	11.30	17.42	8.95	
Difference				2.73	0.10	-1.16	-3.44	-0.62	0.67	0.55	-2.46	0.25	
Champlain US Mid Cap Core (SA)	80,044,369	2.91	-	3.35	9.52	10.85	-1.04	8.15	10.41	12.24	14.96	12.48	10/01/2009
Custom SMID Cap Equity Index				0.49	9.83	13.51	2.57	8.98	8.89	11.30	17.15	11.47	
Difference				2.86	-0.30	-2.67	-3.61	-0.83	1.52	0.94	-2.18	1.01	
IM U.S. SMID Cap Equity (SA+CF) Median				0.11	7.82	12.10	2.20	9.52	9.28	11.46	16.48	11.64	
Rank				15	33	59	81	71	23	24	61	23	
Global Equity	974,647,871	35.48	32.00	-1.20	5.34	16.77	4.55	10.13	-	-	22.24	7.36	02/01/2018
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	8.07	
Difference				0.04	-0.18	0.40	-0.35	0.46	-	-	0.66	-0.71	
BlackRock MSCI ACW IMI (SA)	795,741,329	28.97	-	-1.19	5.77	16.84	5.27	10.07	-	-	22.04	10.84	07/01/2019
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.45	
Difference				0.04	0.25	0.47	0.36	0.40	-	-	0.46	0.40	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	9.35	
Rank				32	24	29	33	33	-	-	37	32	



	All	ocation						Perfor	mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Blackrock MSCI World LCTR (SA)	97,263,513	3.54	-	-0.97	5.87	17.90	5.10	-	-	-	22.13	5.75	09/01/2021
MSCI Wrld Index (USD) (Net)				-0.16	6.20	18.67	6.34	11.17	9.95	10.03	23.79	6.72	
Difference				-0.82	-0.33	-0.77	-1.24	-	-	-	-1.65	-0.97	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	3.40	
Rank				29	23	24	34	-	-	-	36	30	
Artisan Global Opportunities (CF)	81,643,029	2.97	-	-1.56	2.40	15.18	-0.31	9.71	-	-	23.53	10.33	07/01/2018
MSCI ACW Index (USD) (Net)				-0.99	5.56	17.49	5.44	10.06	9.23	9.21	22.20	10.02	
Difference				-0.57	-3.16	-2.30	-5.75	-0.36	-	-	1.33	0.31	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	8.70	
Rank				36	65	35	84	37	-	-	28	32	
International Equity	140,923,875	5.13	5.00	-2.78	3.47	13.34	3.51	5.86	5.97	-	16.91	5.34	01/01/2011
Custom MSCI ACW Ex US Composite Index (USD) (Net)				-7.60	-0.15	5.53	1.01	4.43	5.25	5.41	15.62	5.13	
Difference				4.82	3.62	7.81	2.50	1.44	0.72	-	1.29	0.21	
Acadian ACWI Ex-US Fund (CF)	140,266,067	5.11	-	-2.71	3.55	13.63	4.19	8.07	8.27	7.86	17.09	6.26	11/01/2005
Custom MSCI ACW Ex US Index (USD) (Net)				-7.60	-0.15	5.53	0.07	3.84	4.96	5.21	15.62	4.69	
Difference				4.89	3.70	8.09	4.12	4.22	3.31	2.65	1.47	1.58	
IM All ACWI Ex US (SA+CF) Median				-7.26	0.13	5.97	0.79	4.37	5.45	5.76	16.29	5.36	
Rank				6	10	6	15	6	8	4	43	26	
Acadian International All Cap (SA)	294,760	0.01	-	-	-	-	-	-	-	-	-	-	11/01/2005
MSCI EAFE IM Index (USD) (Net)				-8.15	-1.06	3.55	0.92	4.37	5.23	5.39	17.51	4.82	
Difference				-	-	-	-	-	-	-	-	-	
IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.18	
Rank				-	-	-	-	-	-	-	-	-	
Mondrian International Equity (SA)	363,048	0.01	-	-	-	-	-	-	-	-	-	-	07/01/2005
MSCI EAFE Index (USD) (Net)				-8.11	-1.44	3.82	1.65	4.73	5.20	5.24	18.24	5.00	
Difference				-	-	-	-	-	-	-	-	-	
IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.44	
Rank				-	-	-	-	-	-	-	-	-	
Fixed Income	519,187,508	18.90	19.00	-3.01	1.92	1.61	-2.17	-0.11	1.99	-	6.47	2.79	01/01/2011
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	2.08	
Difference				0.05	-0.05	0.36	0.24	0.21	0.64	-	0.94	0.71	
Core Fixed Income	518,953,733	18.89	19.00	-3.01	2.00	1.44	-2.25	-	-	-	5.72	-1.76	09/01/2020
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference				0.05	0.02	0.19	0.16	-	-	-	0.20	0.13	



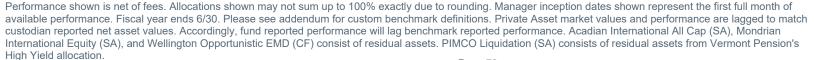
	All	ocation		Performance (%)									
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
BlackRock US Agg (SA)	389,964,261	14.20	-	-3.05	1.95	1.32	-2.37	-0.31	-	-	5.67	0.32	06/01/2019
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	0.37	
Difference				0.01	-0.03	0.07	0.04	0.02	-	-	0.14	-0.05	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	0.63	
Rank				59	68	75	66	79	-	-	54	85	
PIMCO Core (SA)	128,989,472	4.70	-	-2.89	2.15	1.84	-1.87	-	-	-	5.90	-1.40	09/01/2020
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference				0.18	0.18	0.59	0.54	-	-	-	0.37	0.49	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	-1.63	
Rank				28	26	41	17	-	-	-	44	30	
Emerging Markets Debt	44,547	0.00	0.00	-	-	-	-	-	-	-	-	-	09/01/2020
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	-0.07	
Difference				-	-	-	-	-	-	-	-	-	
Wellington Opportunistic EMD (CF)	44,547	0.00	-	-	-	-	-	-	-	-	-	-	12/01/2009
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	4.45	
Difference				-	-	-	-	-	-	-	-	-	
IM Emerging Markets Debt (SA+CF) Median				-2.01	3.55	6.08	0.29	0.68	2.85	4.07	11.86	4.08	
Rank				-	-	-	-	-	-	-	-	-	
High Yield Fixed Income	162,837	0.01	0.00	-	-	-	-	-	-	-	-	-	06/01/2006
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	6.60	
Difference				-	-	-	-	-	-	-	-	-	
PIMCO Liquidation (SA)	162,837	0.01	-	-	-	-	-	-	-	-	-	-	08/01/2018
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	4.90	
Difference				-	-	-	-	-	-	-	-	-	
IM U.S. High Yield Bonds (SA+CF) Median				0.21	4.62	7.58	2.77	3.82	4.69	5.98	12.12	4.46	
Rank				-	-	-	-	-	-	-	-	-	
Private Debt	280,545,556	10.21	11.00	5.64	4.87	10.62	9.07	9.31	-	-	9.95	8.35	01/01/2018
S&P UBS Lvg'd Loan Index+2% (Spliced)				2.79	5.42	11.20	8.97	7.49	5.95	5.83	15.30	6.61	
Difference				2.85	-0.55	-0.58	0.10	1.82	-	-	-5.35	1.74	
Private Equity	301,752,432	10.99	11.00	2.11	3.40	7.82	6.94	18.09	17.55	-	4.81	17.69	01/01/2013
Cambridge US Prvt Eq Index				0.00	2.40	6.23	4.34	14.49	13.48	14.28	9.04	13.95	
				2.11	1.00	1.59	2.60				-4.23	3.74	



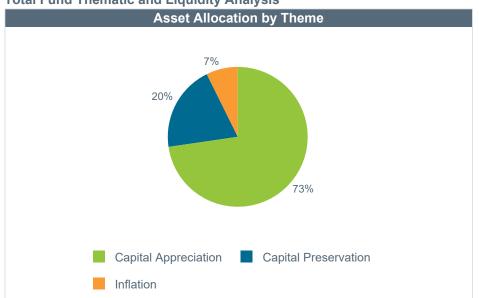
	All	ocation		Performance (%)									
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Non-Core Real Estate	79,531,434	2.90	4.00	1.28	3.57	5.33	7.90	7.65	8.84	-	1.95	9.09	09/01/2014
NCREIF ODCE Index+2% (Spliced)				1.46	1.99	-0.31	-1.20	3.87	6.04	8.03	-10.96	6.41	
Difference				-0.18	1.58	5.64	9.09	3.78	2.80	-	12.91	2.67	
Inflation Hedging Assets (Spliced)	254,964,779	9.28	11.00	1.68	3.30	1.53	-1.03	-0.18	3.24	-	-5.75	6.38	01/01/2011
CPI+2.5% (Spliced)				0.72	1.70	5.46	6.83	6.15	7.19	8.82	5.94	8.52	
Difference				0.97	1.59	-3.93	-7.85	-6.32	-3.96	-	-11.68	-2.13	
TIPS	67,415,521	2.45	2.00	-2.91	1.07	2.01	-2.24	-	-	-	3.92	0.07	09/01/2020
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	0.01	
Difference				-0.03	-0.06	0.18	0.06	-	-	-	0.02	0.06	
BlackRock TIPS (SA)	67,415,521	2.45	-	-2.91	1.07	2.01	-2.24	1.91	2.24	2.82	3.92	2.68	12/01/2009
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	2.69	
Difference				-0.03	-0.06	0.18	0.06	0.04	0.00	-0.04	0.02	-0.02	
IM U.S. TIPS (SA+CF) Median				-2.91	1.10	1.87	-2.32	1.82	2.22	2.80	3.80	2.63	
Rank				54	57	36	44	39	42	46	36	44	
Core Real Estate	87,964,403	3.20	3.00	-0.16	-0.87	-6.68	-2.85	-1.18	2.35	-	-16.07	5.75	01/01/2011
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	6.99	
Difference				-1.12	-1.85	-4.41	0.29	-3.17	-2.60	-	-3.34	-1.24	
UBS Trumbull Properties (CF)	70,028,574	2.55	-	-0.18	-1.23	-7.02	-2.97	-1.25	2.05	5.08	-16.11	3.97	07/01/2005
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	5.18	
Difference				-1.14	-2.22	-4.76	0.16	-3.24	-2.90	-2.44	-3.38	-1.22	
Hammes HIGH Fund (CF)	10,195,556	0.37	-	1.76	2.59	2.05	-	-	-	-	-	2.05	01/01/2024
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27	
Difference				0.80	1.61	4.32	-	-	-	-	-	4.32	
Blue Owl Real Estate VI LP	7,738,572	0.28	-	-2.99	-0.06	-	-	-	-	-	-	-14.23	02/01/2024
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27	
Difference				-3.95	-1.05	-	-	-	-	-	-	-11.96	
Farmland	45,026,585	1.64	2.00	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33	
Difference				2.12	2.41	1.85	-2.67	-	-	-	-3.20	-2.94	
Nuveen Global Agriculture (CF)	45,026,585	1.64	-	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33	
Difference				2.12	2.41	1.85	-2.67	_	_	_	-3.20	-2.94	

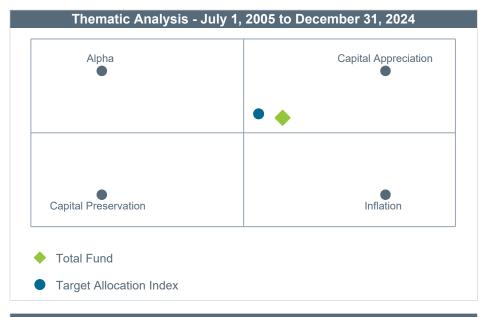


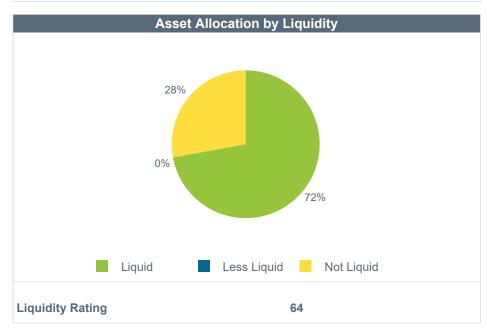
	All	Allocation				Performance (%)								
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date	
Private Infrastructure	54,558,270	1.99	4.00	12.40	16.54	16.88	-	-	-	-	-	10.96	07/01/2023	
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.35		
Difference				11.56	14.59	10.90	-	-	-	-	-	5.61		
IFM Global Infrastructure Fund (CF)	43,088,791	1.57	-	2.49	6.38	-	-	-	-	-	-	6.24	02/01/2024	
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.14		
Difference				1.65	4.43	-	-	-	-	-	-	1.10		
IFM Net Zero Infrastructure Fund (CF)	6,498,159	0.24	-	0.01	3.00	-	-	-	-	-	-	6.13	03/01/2024	
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	4.24		
Difference				-0.83	1.05	-	-	-	-	-	-	1.89		
Copenhagen Infrastructure V LP	4,971,320	0.18	-	-	-	-	-	-	-	-	-	-	01/01/2025	
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	-		
Difference				-	-	-	-	-	-	-	-	-		
Cash Equivalents	6,788,951	0.25	0.00	1.15	2.45	5.00	4.24	2.59	1.39	-	5.15	1.01	01/01/2011	
ICE BofAML 3 Mo US T-Bill Index				1.17	2.55	5.25	3.89	2.46	1.77	1.20	5.02	1.28		
Difference				-0.02	-0.11	-0.26	0.34	0.12	-0.38	-	0.13	-0.28		



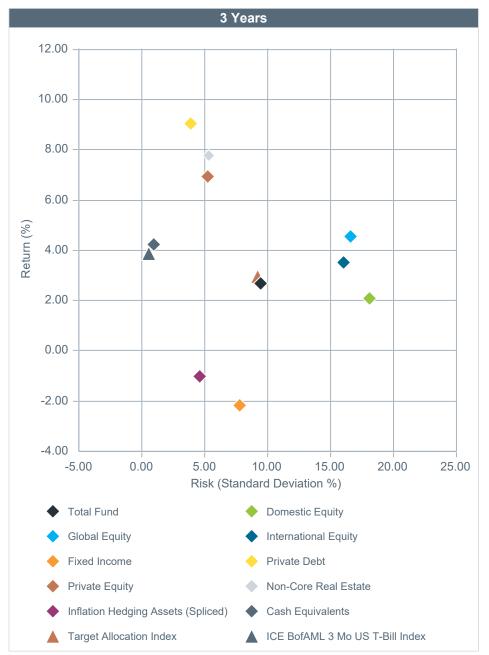


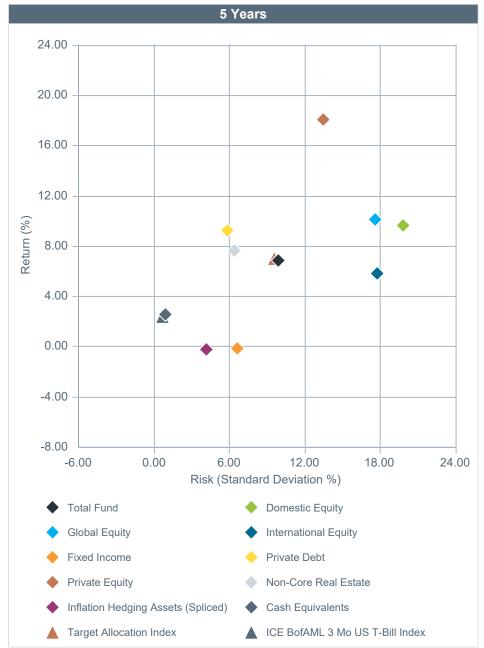






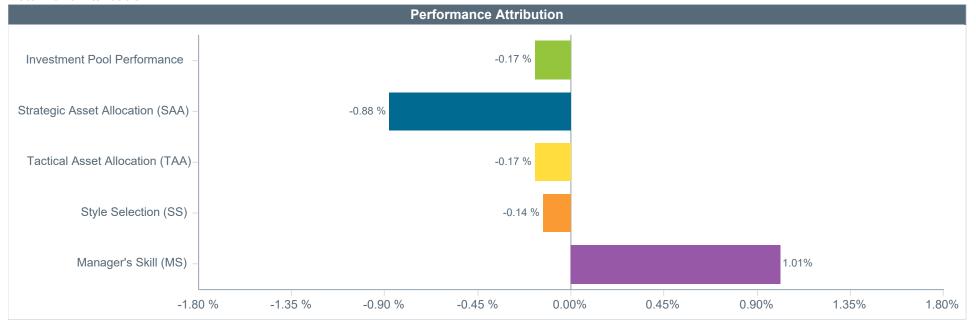
		Correlation Mat	rix - 10 Years	
	Α	В	С	D
Α	1.00			
В	0.46	1.00		
С	-0.14	0.15	1.00	
D	0.42	0.81	0.22	1.00
A B C D	= = = = = = = = = = = = = = = = = = = =	HFRI EH: Equity Market N MSCI ACW Index (USD) (Bloomberg US Govt Bond Real Return Custom Index	Gross) (Capital Appre Index (Capital Preser	

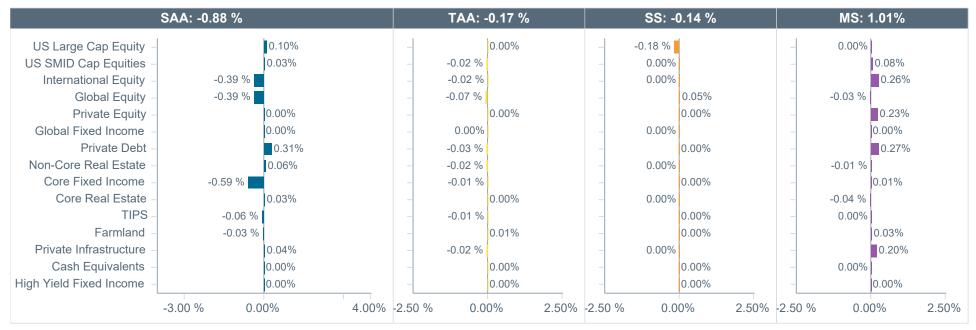




Performance shown is net of fees. Calculation is based on monthly periodicity. Funds or composites with less history than the specified time period will not appear in the chart.



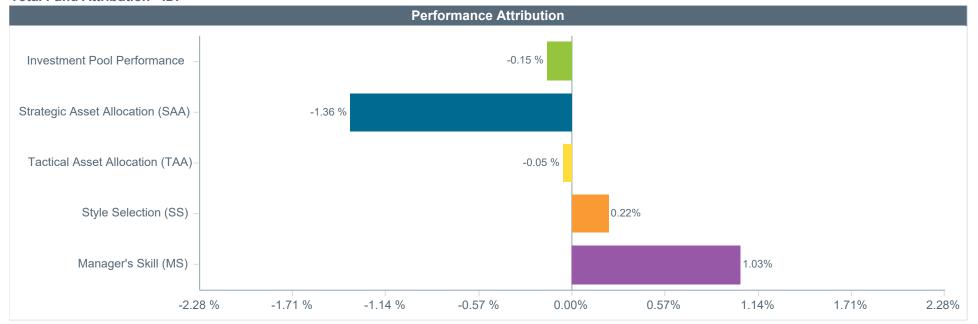


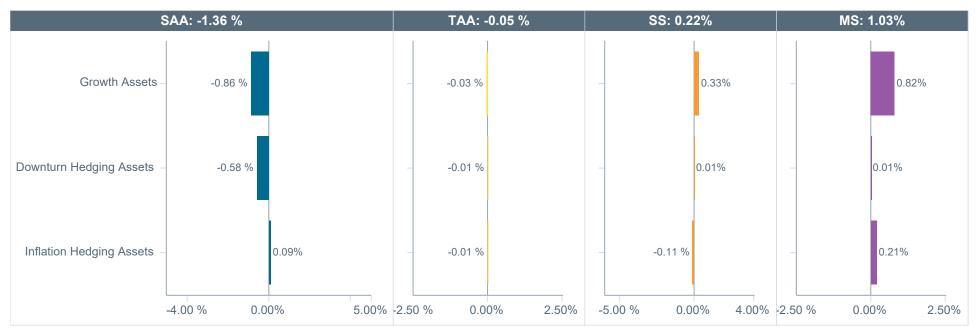


Performance shown is net of fees. Calculation is based on monthly. Private Asset market values, performance and benchmarks are valued quarterly and shown as of most recently available quarter end, adjusted for subsequent cash flows. RVK cautions that the interpretation of time-weighted data on non-marketable investments, such as Private Equity, is imperfect at best and can potentially be misleading. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.



Vermont State Employees' Retirement System Total Fund Attribution - IDP

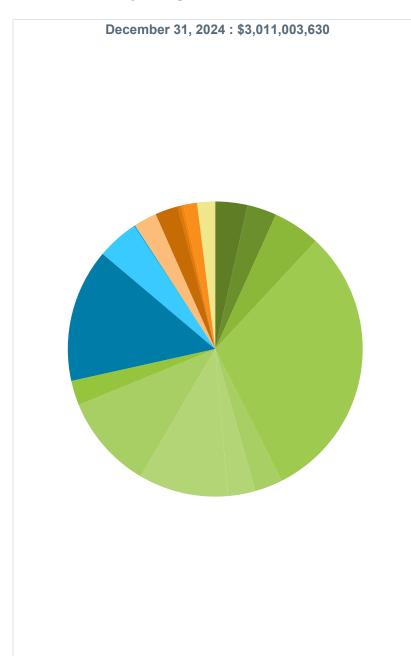




Performance shown is gross of fees. Calculation is based on monthly. Private Asset market values, performance and benchmarks are valued quarterly and shown as of most recently available quarter end, adjusted for subsequent cash flows. RVK cautions that the interpretation of time-weighted data on non-marketable investments, such as Private Equity, is imperfect at best and can potentially be misleading. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.



VSTRS



	Market Value (\$)	Allocation (%)
■ Blackrock S&P 500 (Eql Wtd) (SA)	106,166,599	3.53
■ Champlain US Mid Cap Core (SA)	97,016,488	3.22
SSgA Russell 2000 Growth (Ex Tobacco) (SA)	10,461	0.00
■ Acadian International All Cap (SA)	373,662	0.01
Acadian ACWI Ex-US Fund (CF)	155,917,517	5.18
■ Mondrian International Equity (SA)	371,835	0.01
■ BlackRock MSCI ACW IMI (SA)	921,904,726	30.62
Blackrock MSCI World LCTR (SA)	91,725,976	3.05
Artisan Global Opportunities (CF)	90,827,811	3.02
PIMCO Liquidation (SA)	103,128	0.00
Wellington Opportunistic EMD (CF)	48,857	0.00
PIMCO Unconstrained (SA)	6,537	0.00
Private Debt	295,634,044	9.82
Private Equity	312,395,207	10.38
Non-Core Real Estate	81,157,816	2.70
BlackRock US Agg (SA)	440,459,518	14.63
PIMCO Core (SA)	136,218,606	4.52
Vermont Cash (SA)	4,375,230	0.15
BlackRock TIPS (SA)	76,732,358	2.55
UBS Trumbull Properties (CF)	75,633,953	2.51
Hammes HIGH Fund (CF)	11,210,393	0.37
Blue Owl Real Estate VI LP	8,337,383	0.28
Farmland	44,795,586	1.49
Private Infrastructure	59,577,729	1.98
Real Estate Cash (CF)	1,836	0.00
■ BlackRock Transition	373	0.00

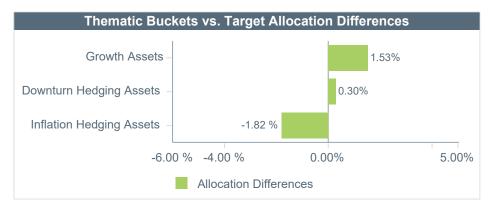
Allocations shown may not sum up to 100% exactly due to rounding. Market values for SSgA Russell 2000 Growth (SA), PIMCO Unconstrained (SA), Mondrian International Equity (SA), Acadian International All Cap (SA), and Wellington Opportunistic EMD (CF) represent residual assets after liquidation. During 12/2024, Copenhagen Infrastructure V LP was funded.



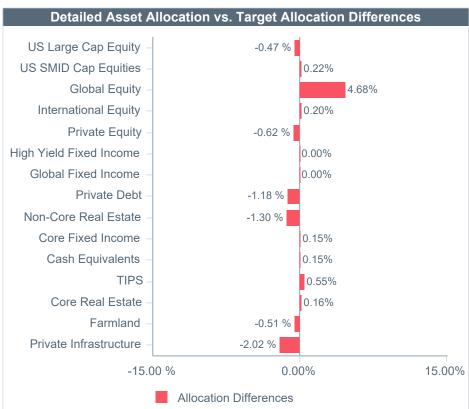
Vermont State Teachers' Retirement System Total Fund

Asset Allocation vs. Target Allocation

Thematic	Buckets vs. Target	Allocation Tar (%) (9 663 71.53 70 727 19.30 19 240 9.18 1			
	Market Value (\$)		Target (%)		
Growth Assets	2,153,660,663	71.53	70.00		
Downturn Hedging Assets	581,053,727	19.30	19.00		
Inflation Hedging Assets	276,289,240	9.18	11.00		
Total Fund	3,011,003,630	100.00	100.00		



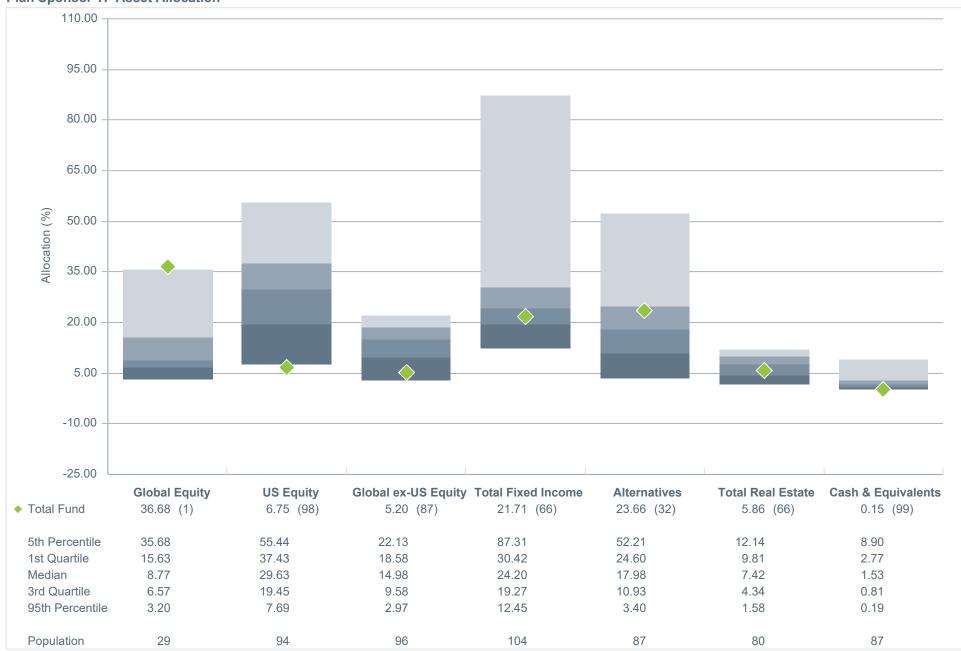
Detailed Ass	et Allocation vs. Ta	rget Allocation	
	Market Value (\$)	Allocation (%)	Target (%)
US Large Cap Equity	106,166,599	3.53	4.00
US SMID Cap Equities	97,026,949	3.22	3.00
Global Equity	1,104,458,513	36.68	32.00
International Equity	156,663,014	5.20	5.00
Private Equity	312,395,207	10.38	11.00
High Yield Fixed Income	103,128	0.00	0.00
Global Fixed Income	55,393	0.00	0.00
Private Debt	295,634,044	9.82	11.00
Non-Core Real Estate	81,157,816	2.70	4.00
Core Fixed Income	576,678,124	19.15	19.00
Cash Equivalents	4,375,603	0.15	0.00
TIPS	76,732,358	2.55	2.00
Core Real Estate	95,183,566	3.16	3.00
Farmland	44,795,586	1.49	2.00
Private Infrastructure	59,577,729	1.98	4.00
Total Fund	3,011,003,630	100.00	100.00



Allocations shown may not sum up to 100% exactly due to rounding.



Vermont State Teachers' Retirement System All Public Plans (\$1B to \$10B) (Custom PG) Plan Sponsor TF Asset Allocation



Parentheses contain percentile ranks. Total Fixed Income includes TIPS.



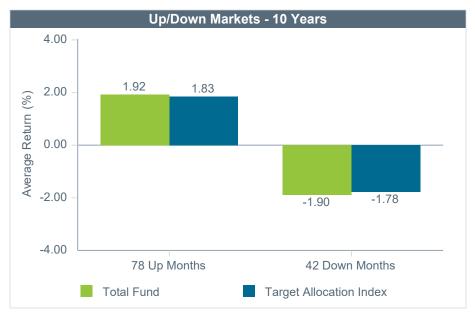
Vermont State Teachers' Retirement System All Public Plans (\$1B to \$10B) (Custom PG) Plan Sponsor Peer Group Analysis

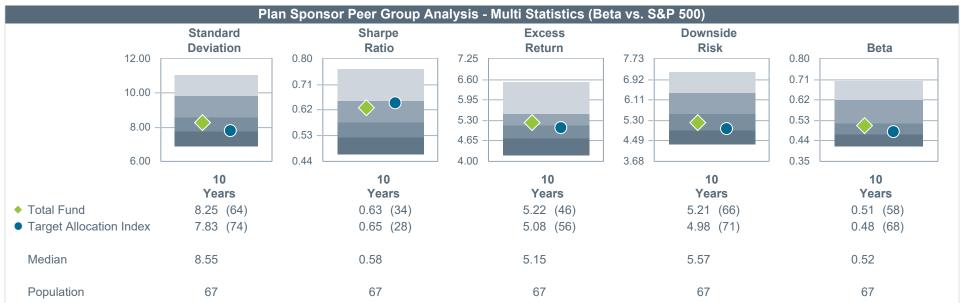


Performance shown is net of fees. Parentheses contain percentile ranks.









Performance shown is net of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



	Allocatio	n					Perfori	mance (%)				
	Market Value (\$)	Actual (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	3,011,003,630	100.00	-0.22	4.35	9.82	2.69	6.96	6.84	7.23	11.66	6.15	07/01/2005
Target Allocation Index			-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference			0.65	0.51	0.90	-0.28	-0.06	0.11	0.36	-0.46	-0.12	
Actual Allocation Index			-1.25	3.95	9.18	2.49	6.44	6.34	6.59	12.30	5.93	
Difference			1.03	0.40	0.64	0.20	0.52	0.49	0.64	-0.64	0.22	
Thematic Target Allocation Index			-1.36	4.44	12.19	3.82	-	-	-	16.87	-	
Difference			1.13	-0.09	-2.38	-1.13	-	-	-	-5.21	-	
Growth Assets	2,153,660,663	71.53	0.29	5.15	13.35	4.50	-	-	-	15.76	10.55	09/01/2020
MSCI ACW IM Index (USD) (Net)			-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.31	
Difference			1.52	-0.37	-3.02	-0.41	-	-	-	-5.83	0.24	
Downturn Hedging Assets	581,053,727	19.30	-2.97	1.83	1.29	-2.32	-	-	-	5.62	-1.83	09/01/2020
Bloomberg US Agg Bond Index			-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference			0.09	-0.15	0.04	0.08	-	-	-	0.09	0.06	
Inflation Hedging Assets	276,289,240	9.18	1.68	3.31	1.33	-1.02		-	-	-6.14	1.07	09/01/2020
Consumer Price Index+2.5%			0.72	1.70	5.46	6.83	6.80	5.58	5.13	5.94	7.20	
Difference			0.96	1.61	-4.13	-7.85	-	-	-	-12.08	-6.13	



	All	ocation						Perfor	mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Total Fund	3,011,003,630	100.00	100.00	-0.22	4.35	9.82	2.69	6.96	6.84	7.23	11.66	6.15	07/01/2005
Target Allocation Index				-0.88	3.84	8.91	2.96	7.02	6.73	6.87	12.11	6.27	
Difference				0.65	0.51	0.90	-0.28	-0.06	0.11	0.36	-0.46	-0.12	
Actual Allocation Index				-1.25	3.95	9.18	2.49	6.44	6.34	6.59	12.30	5.93	
Difference				1.03	0.40	0.64	0.20	0.52	0.49	0.64	-0.64	0.22	
All Public Plans (\$1B to \$10B)				-0.87	3.93	8.87	2.60	6.83	6.77	7.54	11.30	6.46	
Rank				16	24	25	44	33	43	69	41	76	
Domestic Equity	203,193,548	6.75	7.00	0.52	8.60	12.17	2.05	9.68	9.94	-	14.43	11.39	01/01/2011
Russell 3000 Index				2.63	9.03	23.81	8.01	13.86	12.55	13.56	25.96	13.33	
Difference				-2.11	-0.43	-11.64	-5.95	-4.18	-2.61	-	-11.53	-1.94	
US Large Cap Equity	106,166,599	3.53	4.00	-1.90	7.45	12.70	4.40	10.70	10.25	12.12	13.86	9.55	07/01/2005
S&P 500 Index (Cap Wtd)				2.41	8.44	25.02	8.94	14.53	13.10	13.88	26.29	10.68	
Difference				-4.31	-0.99	-12.32	-4.54	-3.83	-2.85	-1.76	-12.43	-1.13	
Blackrock S&P 500 (Eql Wtd) (SA)	106,166,599	3.53	-	-1.90	7.45	12.70	4.34	10.66	-	-	13.86	11.27	07/01/2019
S&P 500 Index (Eq Wtd)				-1.87	7.55	13.01	4.45	10.76	10.26	12.60	13.87	11.36	
Difference				-0.03	-0.10	-0.31	-0.11	-0.10	-	-	-0.01	-0.09	
IM U.S. Large Cap Equity (SA+CF) Median				2.03	7.74	22.37	7.70	13.12	12.10	13.20	24.36	13.81	
Rank				80	55	84	86	71	-	-	76	73	
US SMID Cap Equities	97,026,949	3.22	3.00	3.35	9.52	10.84	-1.05	8.14	9.65	11.91	14.91	9.10	07/01/2005
Russell 2500 Index				0.62	9.42	11.99	2.39	8.77	8.85	11.30	17.42	8.95	
Difference				2.73	0.10	-1.16	-3.45	-0.63	0.80	0.62	-2.51	0.15	
Champlain US Mid Cap Core (SA)	97,016,488	3.22	-	3.35	9.52	10.84	-1.05	8.14	10.39	12.23	14.91	12.47	10/01/2009
Custom SMID Cap Equity Index				0.49	9.83	13.51	2.57	8.98	8.89	11.30	17.15	11.47	
Difference				2.86	-0.31	-2.67	-3.62	-0.84	1.51	0.93	-2.24	1.00	
IM U.S. SMID Cap Equity (SA+CF) Median				0.11	7.82	12.10	2.20	9.52	9.28	11.46	16.48	11.64	
Rank				15	33	59	81	71	23	25	62	23	
Global Equity	1,104,458,513	36.68	32.00	-1.21	5.34	16.78	4.57	10.12	-	-	22.27	7.35	02/01/2018
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	8.07	
Difference				0.03	-0.18	0.40	-0.34	0.45	-	-	0.68	-0.72	
BlackRock MSCI ACW IMI (SA)	921,904,726	30.62	-	-1.19	5.78	16.85	5.28	10.08	-	-	22.06	10.85	07/01/2019
MSCI ACW IM Index (USD) (Net)				-1.24	5.52	16.37	4.90	9.67	9.00	9.16	21.58	10.45	
Difference				0.04	0.26	0.48	0.37	0.40	-	-	0.48	0.40	
IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	9.35	
Rank				32	24	29	33	33	-	-	37	32	



Value (s)		All	ocation						Perfor	mance (%	6)			
MSCI Mid Index (USD) (Net)					QTD	FYTD		-	_			2023		Inception Date
Difference -0.02	Blackrock MSCI World LCTR (SA)	91,725,976	3.05	-	-0.97	5.86	17.89	5.12	-	-	-	22.14	5.77	09/01/2021
Martick 1908	MSCI Wrld Index (USD) (Net)				-0.16	6.20	18.67	6.34	11.17	9.95	10.03	23.79	6.72	
Rank Most Active Index (USD) (Net) 90,827,811 3.02 - 1.56 2.40 15.18 - 0.30 9.72 - 2.5.33 10.34 07/01/2018 MSCI ACW Most (USD) (Net) - 2.5.33 10.34 07/01/2018 MSCI ACW Most (USD) (Net) - 2.5.35 10.34 07/01/2018 MSCI ACW Most (USD) (Net) - 2.5.35 10.34 07/01/2018 MSCI ACW Most (USD) (Net) - 2.5.35 10.34 07/01/2018 MSCI ACW Most (USD) (Net) - 2.5.35 10.34 07/01/2018 MSCI ACW Most (USD) (Net) - 2.5.35 10.34 0.32 0.32 0.34 0.34 0.32 0.32 0.32 0.32 0.32 0.32 0.32 0.32	Difference				-0.82	-0.33	-0.78	-1.22	-	-	-	-1.64	-0.95	
Artisan Global Opportunities (CF) 99,827,811 3.021.56 2.40 15.18 -0.99 5.56 17.49 5.44 10.00 9.23 9.21 2.20 10.02 Difference 1-0.99 5.56 17.49 11.78 3.02 11.78	IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	3.40	
MSCI ACW Index (USD) (Net) MSCI ACW Index (USD) (Net) MSCI AFE [M Index (USD) (Net) MSCI AFE [M Index (USD) (Net) MSCI AFE Index (USD) (Ne	Rank				29	23	24	34	-	-	-	36	29	
Difference	Artisan Global Opportunities (CF)	90,827,811	3.02	-	-1.56	2.40	15.18	-0.30	9.72	-	-	23.53	10.34	07/01/2018
M Clobal Equity (SA+CF) Median 156,663,014 5.00 5.	MSCI ACW Index (USD) (Net)				-0.99	5.56	17.49	5.44	10.06	9.23	9.21	22.20	10.02	
Rank	Difference				-0.57	-3.16	-2.30	-5.73	-0.34	-	-	1.33	0.32	
International Equity	IM Global Equity (SA+CF) Median				-3.10	3.75	11.78	3.32	8.40	8.52	9.20	19.42	8.70	
Custorm MSCI ACW Ex US Composite Index (USD) (Net) Difference	Rank				36	65	35	84	37	-	-	28	32	
Difference 4.81 3.61 7.80 2.41 1.43 0.69 - 1.28 0.15		156,663,014	5.20	5.00	-2.79	3.47	13.34	3.42	5.86	5.95	-	16.90	5.29	01/01/2011
Acadian ACWI Ex-US Fund (CF) 155,917,517 5.18 - 2.71 3.55 13.63 4.19 8.07 8.27 7.86 17.09 6.26 11/01/2008 Custom MSCI ACW Ex US Index (USD) (Net) -7.60 -0.15 5.53 0.07 3.84 4.96 5.21 13.62 4.89 Difference 4.89 3.70 8.09 4.12 4.22 3.31 2.65 1.47 1.58 Fixed Income 576,878,124 19.15 19.00 -3.06 1.98 1.25 -2.71 3.55 13.63 4.19 8.07 8.07 3.84 4.96 5.27 7.86 17.09 6.26 11/01/2008 11/01/2008 1.55 0.07 3.84 4.96 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.21 13.62 4.89 5.30 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 11/01/2008 6.26 1.47 1.58 6.29 6.30 6.20 1.47 1.58 6.20 1.47 1.59 1.48 1.49 1.48 1.50 1.5	Custom MSCI ACW Ex US Composite Index (USD) (Net)				-7.60	-0.15	5.53	1.01	4.43	5.25	5.41	15.62	5.13	
Custom MSCI ACW Ex US Index (USD) (Net)	Difference				4.81	3.61	7.80	2.41	1.43	0.69	-	1.28	0.15	
Difference 4.89 3.70 8.09 4.12 4.22 3.31 2.65 1.47 1.58 IM All ACWI Ex US (SA+CF) Median 7-7.26 0.13 5.97 0.79 4.37 5.45 5.76 16.29 5.36 Rank 6 10 6 15 6 8 4 43 26 Acadian International All Cap (SA) 373,662 0.01	Acadian ACWI Ex-US Fund (CF)	155,917,517	5.18	-	-2.71	3.55	13.63	4.19	8.07	8.27	7.86	17.09	6.26	11/01/2005
MAII ACWI Ex US (SA+CF) Median Rank Ra	Custom MSCI ACW Ex US Index (USD) (Net)				-7.60	-0.15	5.53	0.07	3.84	4.96	5.21	15.62	4.69	
Rank Acadian International All Cap (SA) 373,662 0.01 -8.15 -1.06 3.55 0.92 4.37 5.23 5.39 17.51 4.82 Difference -8.15 -1.06 3.55 0.92 4.37 5.23 5.39 17.51 4.82 Difference -8.15 -7.82 -8.15 -8.16 Acadian International Equity (SA) MILEAFE (SA+CF) Median Rank -8.15 -8.11 -	Difference				4.89	3.70	8.09	4.12	4.22	3.31	2.65	1.47	1.58	
Acadian International All Cap (SA) MSCI EAFE IM Index (USD) (Net) Self-rence Self-rence	IM All ACWI Ex US (SA+CF) Median				-7.26	0.13	5.97	0.79	4.37	5.45	5.76	16.29	5.36	
MSCI EAFE IM Index (USD) (Net) Difference -8.15 -1.06 3.55 0.92 4.37 5.23 5.39 17.51 4.82 Difference	Rank				6	10	6	15	6	8	4	43	26	
Difference	Acadian International All Cap (SA)	373,662	0.01	-	-	-	-	-	-	-	-	-	-	11/01/2005
IM All EAFE (SA+CF) Median Rank -7.82 -0.54 4.52 1.20 4.89 5.34 6.02 17.83 5.18 Rank -7.82 -0.54 4.52 1.20 4.89 5.34 6.02 17.83 5.18 Mondrian International Equity (SA) 371,835 0.01	MSCI EAFE IM Index (USD) (Net)				-8.15	-1.06	3.55	0.92	4.37	5.23	5.39	17.51	4.82	
Mondrian International Equity (SA) 371,835 0.01 - <td>Difference</td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td></td>	Difference				-	-	-	-	-	-	-	-	-	
Mondrian International Equity (SA) 371,835 0.01 - <td>IM All EAFE (SA+CF) Median</td> <td></td> <td></td> <td></td> <td>-7.82</td> <td>-0.54</td> <td>4.52</td> <td>1.20</td> <td>4.89</td> <td>5.34</td> <td>6.02</td> <td>17.83</td> <td>5.18</td> <td></td>	IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.18	
MSCI EAFE Index (USD) (Net) Difference	Rank				-	-	-	-	-	-	-	-	-	
Difference		371,835	0.01	-	-	-	-	-	-	-	-	-	-	07/01/2005
IM All EAFE (SA+CF) Median -7.82 -0.54 4.52 1.20 4.89 5.34 6.02 17.83 5.44 Rank	MSCI EAFE Index (USD) (Net)				-8.11	-1.44	3.82	1.65	4.73	5.20	5.24	18.24	5.00	
Fixed Income 576,836,645 19.16 19.00 -3.01 1.93 1.62 -2.19 -0.12 2.00 - 6.44 2.80 01/01/2011 Bloomberg US Agg Bond Index -3.06 1.98 1.25 -2.41 -0.33 1.35 2.37 5.53 2.08 Difference 0.05 -0.04 0.37 0.22 0.21 0.66 - 0.91 0.72 Core Fixed Income 576,678,124 19.15 19.00 -3.01 2.01 1.45 -2.25 - - - 5.72 -1.76 09/01/2020 Bloomberg US Agg Bond Index -3.06 1.98 1.25 -2.41 -0.33 1.35 2.37 5.53 -1.89	Difference				-	-	-	-	-	-	-	-	-	
Fixed Income 576,836,645 19.16 19.00 -3.01 1.93 1.62 -2.19 -0.12 2.00 - 6.44 2.80 01/01/2011 Bloomberg US Agg Bond Index -3.06 1.98 1.25 -2.41 -0.33 1.35 2.37 5.53 2.08 Difference 0.05 -0.04 0.37 0.22 0.21 0.66 - 0.91 0.72 Core Fixed Income 576,678,124 19.15 19.00 -3.01 2.01 1.45 -2.25 - - - 5.72 -1.76 09/01/2020 Bloomberg US Agg Bond Index -3.06 1.98 1.25 -2.41 -0.33 1.35 2.37 5.53 -1.89	IM All EAFE (SA+CF) Median				-7.82	-0.54	4.52	1.20	4.89	5.34	6.02	17.83	5.44	
Bloomberg US Agg Bond Index Difference Diffe	Rank				-	-	-	-	-	-	-	-	-	
Difference 0.05 -0.04 0.37 0.22 0.21 0.66 - 0.91 0.72 Core Fixed Income 576,678,124 19.15 19.00 -3.01 2.01 1.45 -2.25 - - - 5.72 -1.76 09/01/2020 Bloomberg US Agg Bond Index -3.06 1.98 1.25 -2.41 -0.33 1.35 2.37 5.53 -1.89		576,836,645	19.16	19.00		1.93					-	6.44		01/01/2011
Core Fixed Income 576,678,124 19.15 19.00 -3.01 2.01 1.45 -2.25 - - - 5.72 -1.76 09/01/2020 Bloomberg US Agg Bond Index -3.06 1.98 1.25 -2.41 -0.33 1.35 2.37 5.53 -1.89	Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	2.08	
Bloomberg US Agg Bond Index -3.06 1.98 1.25 -2.41 -0.33 1.35 2.37 5.53 -1.89	Difference				0.05	-0.04	0.37	0.22	0.21	0.66	-	0.91	0.72	
	Core Fixed Income	576,678,124	19.15	19.00	-3.01	2.01	1.45	-2.25	-	-	-	5.72		09/01/2020
Difference 0.05 0.03 0.20 0.16 0.19 0.13	Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
	Difference				0.05	0.03	0.20	0.16	-	-	-	0.19	0.13	



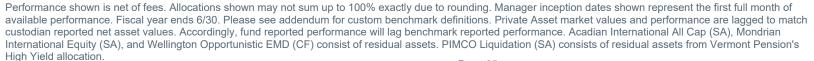
	All	ocation						Perfor	mance (%	6)			
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
BlackRock US Agg (SA)	440,459,518	14.63	-	-3.05	1.95	1.32	-2.37	-0.31	-	-	5.65	0.32	06/01/2019
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	0.37	
Difference				0.01	-0.02	0.07	0.03	0.02	-	-	0.13	-0.05	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	0.63	
Rank				59	68	75	66	79	-	-	55	85	
PIMCO Core (SA)	136,218,606	4.52	-	-2.89	2.18	1.87	-1.86	-	-	-	5.90	-1.39	09/01/2020
Bloomberg US Agg Bond Index				-3.06	1.98	1.25	-2.41	-0.33	1.35	2.37	5.53	-1.89	
Difference				0.18	0.20	0.62	0.55	-	-	-	0.37	0.50	
IM U.S. Broad Mkt Core FI (SA+CF)				-3.04	2.02	1.61	-2.26	-0.04	1.57	2.69	5.79	-1.63	
Rank				28	22	38	17	-	-	-	44	29	
Emerging Markets Debt	48,857	0.00	0.00	-	-	-	-	-	-	-	-	-	09/01/2020
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	-0.07	
Difference				-	-	-	-	-	-	-	-	-	
Wellington Opportunistic EMD (CF)	48,857	0.00	-	-	-	-	-	-	-	-	-	-	12/01/2009
JPM Emg Mkts Bond Gbl Index (USD)				-2.12	3.82	5.73	-0.82	0.35	3.08	4.46	10.45	4.45	
Difference				-	-	-	-	-	-	-	-	-	
IM Emerging Markets Debt (SA+CF) Median				-2.01	3.55	6.08	0.29	0.68	2.85	4.07	11.86	4.08	
Rank				-	-	-	-	-	-	-	-	-	
High Yield Fixed Income	103,128	0.00	0.00	-	-	-	-	-	-	-	-	-	05/01/2006
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	6.57	
Difference				-	-	-	-	-	-	-	-	-	
PIMCO Liquidation (SA)	103,128	0.00	-	-	-	-	-	-	-	-	-	-	08/01/2018
Bloomberg US Corp Hi Yld Index				0.17	5.47	8.19	2.92	4.21	5.17	6.44	13.45	4.90	
Difference				-	-	-	-	-	-	-	-	-	
IM U.S. High Yield Bonds (SA+CF) Median				0.21	4.62	7.58	2.77	3.82	4.69	5.98	12.12	4.46	
Rank				-	-	-	-	-	-	-	-	-	
Private Debt	295,634,044	9.82	11.00	5.69	4.85	10.61	9.04	9.29	-	-	9.91	8.34	01/01/2018
S&P UBS Lvg'd Loan Index+2% (Spliced)				2.79	5.42	11.20	8.97	7.49	5.95	5.83	15.30	6.61	
Difference				2.90	-0.58	-0.60	0.06	1.81	-	-	-5.39	1.72	
Private Equity	312,395,207	10.38	11.00	2.10	3.38	7.78	6.90	18.09	17.97	-	4.77	17.11	01/01/2013
Cambridge US Prvt Eq Index				0.00	2.40	6.23	4.34	14.49	13.48	14.28	9.04	13.95	
Difference				2.10	0.98	1.55	2.56	3.60	4.49	_	-4.28	3.16	



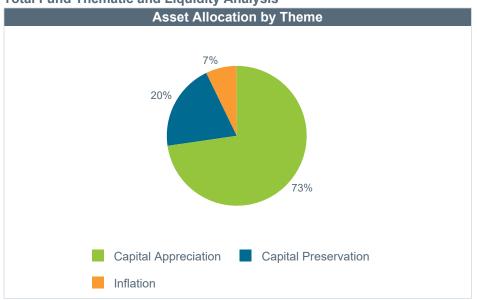
	All	ocation		Performance (%)						b)				
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date	
Non-Core Real Estate	81,157,816	2.70	4.00	1.26	3.52	5.22	7.79	7.58	9.01	-	1.80	9.25	09/01/2014	
NCREIF ODCE Index+2% (Spliced)				1.46	1.99	-0.31	-1.20	3.87	6.04	8.03	-10.96	6.41		
Difference				-0.20	1.53	5.53	8.99	3.71	2.97	-	12.76	2.84		
Inflation Hedging Assets (Spliced)	276,289,240	9.18	11.00	1.68	3.31	1.33	-1.02	0.29	3.45	-	-6.14	6.55	01/01/2011	
CPI+2.5% (Spliced)				0.72	1.70	5.46	6.83	6.15	7.19	8.82	5.94	8.52		
Difference				0.96	1.61	-4.13	-7.85	-5.85	-3.75	-	-12.08	-1.97		
TIPS	76,732,358	2.55	2.00	-2.91	1.08	2.03	-2.23	-	-	-	3.92	0.08	09/01/2020	
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	0.01		
Difference				-0.03	-0.05	0.19	0.06	-	-	-	0.02	0.06		
BlackRock TIPS (SA)	76,732,358	2.55	-	-2.91	1.08	2.03	-2.23	1.91	2.24	2.82	3.92	2.68	12/01/2009	
Bloomberg US Trsy US TIPS Index				-2.88	1.12	1.84	-2.30	1.87	2.24	2.86	3.90	2.69		
Difference				-0.03	-0.05	0.19	0.06	0.05	0.00	-0.04	0.02	-0.02		
IM U.S. TIPS (SA+CF) Median				-2.91	1.10	1.87	-2.32	1.82	2.22	2.80	3.80	2.63		
Rank				54	56	36	44	39	42	45	36	43		
Core Real Estate	95,183,566	3.16	3.00	-0.16	-0.86	-6.67	-2.85	-0.11	2.86	-	-16.07	6.14	01/01/2011	
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	6.99		
Difference				-1.12	-1.85	-4.40	0.29	- 2.10	-2.08	-	-3.34	-0.85		
UBS Trumbull Properties (CF)	75,633,953	2.51	-	-0.18	-1.23	-7.02	-2.97	-0.19	2.67	5.52	-16.11	4.31	07/01/2005	
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	5.18		
Difference				-1.14	-2.22	-4.76	0.16	- 2.18	-2.27	-2.00	-3.38	-0.88		
Hammes HIGH Fund (CF)	11,210,393	0.37	-	1.76	2.59	2.05	-	-	-	-	-	2.05	01/01/2024	
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27		
Difference				0.80	1.61	4.32	-	-	-	-	-	4.32		
Blue Owl Real Estate VI LP	8,337,383	0.28	-	-2.99	-0.06	-	-	-	-	-	-	-14.23	02/01/2024	
NCREIF ODCE Index (AWA) (Net)				0.96	0.98	-2.27	-3.14	1.99	4.94	7.52	-12.73	-2.27		
Difference				-3.95	-1.05	-	-	-	-	-	-	-11.96		
Farmland	44,795,586	1.49	2.00	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020	
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33		
Difference				2.12	2.41	1.85	-2.67	-	-	-	-3.20	-2.94		
Nuveen Global Agriculture (CF)	44,795,586	1.49	-	0.80	0.86	0.82	1.71	-	-	-	1.76	2.39	08/01/2020	
NCREIF Farmland Index (TR)				-1.32	-1.55	-1.03	4.38	4.80	5.90	8.90	4.96	5.33		
Difference				2.12	2.41	1.85	-2.67				-3.20	-2.94		

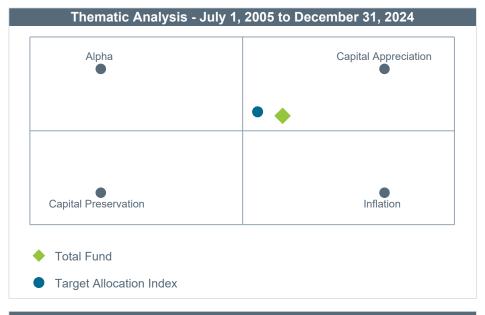


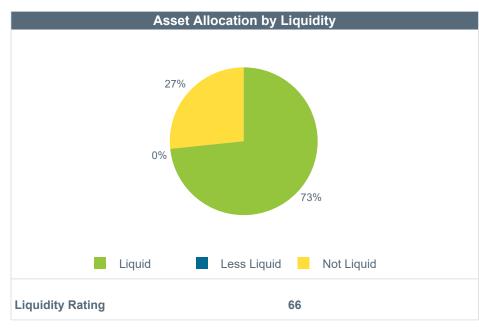
	All	Allocation				Performance (%)							
	Market Value (\$)	Actual (%)	Policy (%)	QTD	FYTD	1 Year	3 Years	5 Years	10 Years	15 Years	2023	Since Incep.	Inception Date
Private Infrastructure	59,577,729	1.98	4.00	12.54	16.69	17.02	-	-	-	-	-	11.05	07/01/2023
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.35	
Difference				11.70	14.74	11.05	-	-	-	-	-	5.70	
IFM Global Infrastructure Fund (CF)	47,083,991	1.56	-	2.49	6.38	-	-	-	-	-	-	6.24	02/01/2024
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	5.14	
Difference				1.65	4.43	-	-	-	-	-	-	1.10	
IFM Net Zero Infrastructure Fund (CF)	6,998,897	0.23	-	0.01	3.00	-	-	-	-	-	-	6.13	03/01/2024
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	4.24	
Difference				-0.83	1.05	-	-	-	-	-	-	1.89	
Copenhagen Infrastructure V LP	5,494,842	0.18	-	-	-	-	-	-	-	-	-	-	01/01/2025
Consumer Price Index+3%				0.84	1.95	5.97	7.35	7.32	6.09	5.64	6.45	-	
Difference				-	-	-	-	-	-	-	-	-	
Cash Equivalents	4,375,603	0.15	0.00	1.14	2.39	4.94	4.03	2.47	1.35	-	4.65	0.98	01/01/2011
ICE BofAML 3 Mo US T-Bill Index				1.17	2.55	5.25	3.89	2.46	1.77	1.20	5.02	1.28	
Difference				-0.03	-0.16	-0.31	0.14	0.00	-0.42	-	-0.36	-0.30	



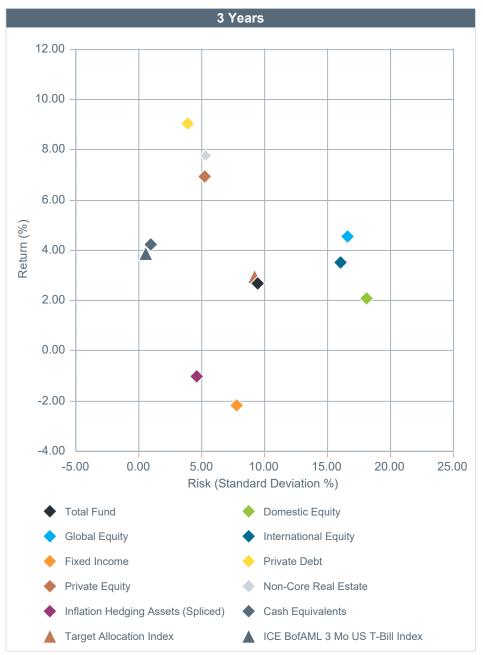


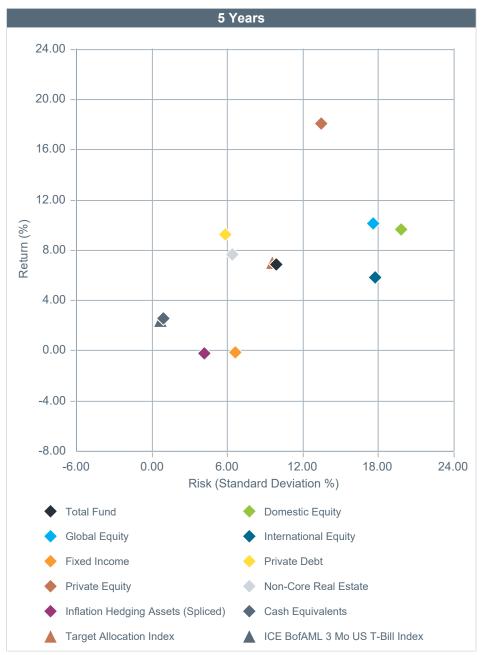






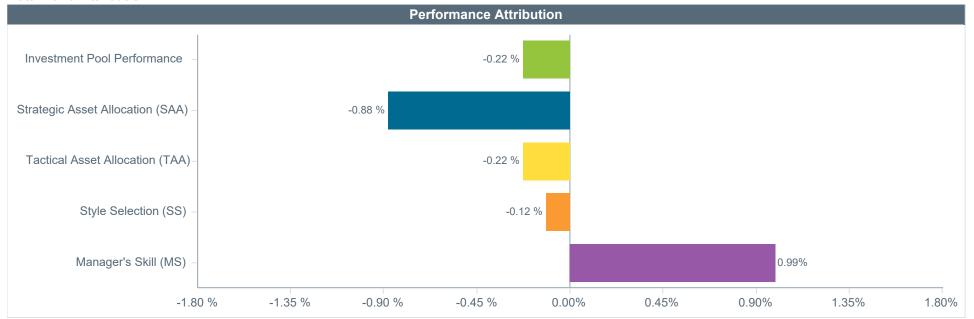
		Correlation Mat	rix - 10 Years	
	Α	В	С	D
Α	1.00			
В	0.46	1.00		
С	-0.14	0.15	1.00	
D	0.42	0.81	0.22	1.00
A B C D	= = = = = = = = = = = = = = = = = = = =	HFRI EH: Equity Market N MSCI ACW Index (USD) (I Bloomberg US Govt Bond Real Return Custom Index	Gross) (Capital Appred Index (Capital Preser	ciation) vation)

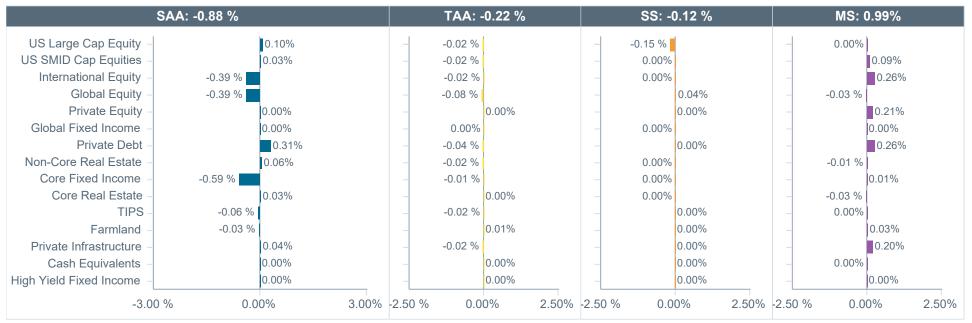




Performance shown is net of fees. Calculation is based on monthly periodicity. Funds or composites with less history than the specified time period will not appear in the chart.

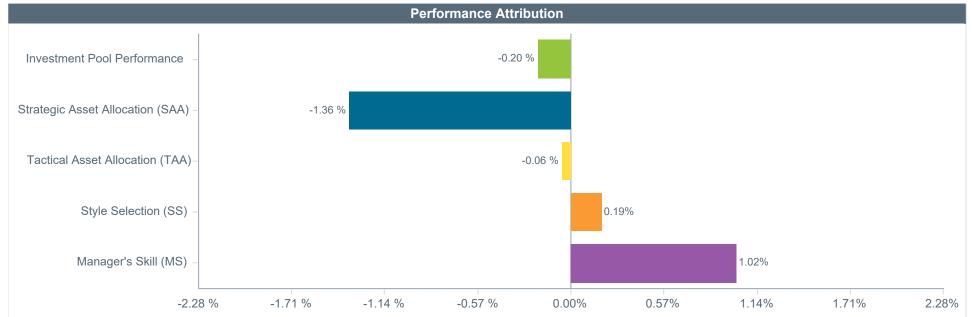


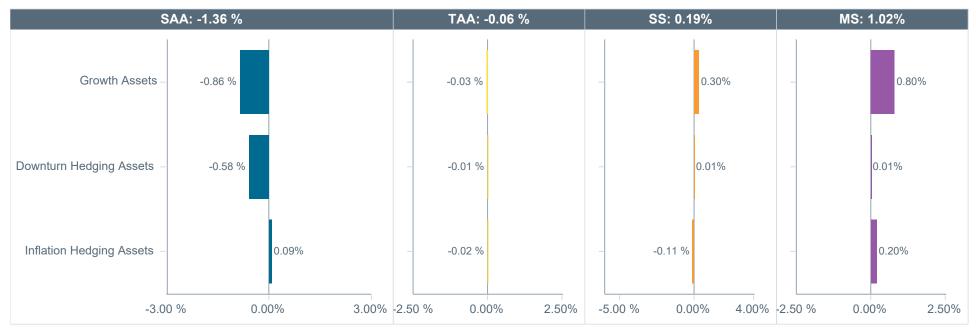




Performance shown is net of fees. Calculation is based on monthly. Private Asset market values, performance and benchmarks are valued quarterly and shown as of most recently available quarter end, adjusted for subsequent cash flows. RVK cautions that the interpretation of time-weighted data on non-marketable investments, such as Private Equity, is imperfect at best and can potentially be misleading. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.







Performance shown is gross of fees. Calculation is based on monthly. Private Asset market values, performance and benchmarks are valued quarterly and shown as of most recently available quarter end, adjusted for subsequent cash flows. RVK cautions that the interpretation of time-weighted data on non-marketable investments, such as Private Equity, is imperfect at best and can potentially be misleading. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.



Investment Manager Profiles

Manager: Blackrock S&P 500 (Eql Wtd) (SA)

Benchmark: S&P 500 Index (Eq Wtd)

Peer Group: IM U.S. Large Cap Equity (SA+CF)

	Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019		
Manager	-1.90	12.71	4.32	10.68	N/A	N/A	13.85	-11.52	29.44	13.03	N/A		
Benchmark	-1.87	13.01	4.45	10.76	10.33	10.26	13.87	-11.45	29.63	12.83	29.24		
Difference	-0.03	-0.30	-0.13	-0.08	N/A	N/A	-0.02	-0.08	-0.19	0.20	N/A		
Peer Group Median	2.03	22.37	7.70	13.12	12.58	12.10	24.36	-17.59	26.53	16.96	29.74		
Rank	80	84	87	71	N/A	N/A	76	34	21	60	N/A		
Population	764	761	720	690	654	588	818	845	856	869	905		







Portfolio Characteristic	cs and Dist. of	Market Cap (%)
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	106,832	106,030
Median Mkt. Cap (\$M)	37,064	37,134
Price/Earnings Ratio	20.64	20.57
Price/Book Ratio	3.10	3.10
5 Yr. EPS Growth Rate (%)	11.76	11.87
Current Yield (%)	1.92	1.92
Beta (5 Years, Monthly)	1.00	1.00
Number of Securities	500	503
Active Share	1.17	N/A
60.00 — 45.00 —	38.57 38.40	
30.00		
19.02 19.01	20.45	
15.00 — 7.35 7.53		14.60 14.64
0.00		
>\$100 Bil \$75 Bil - \$100 Bil	T	Bil - \$2 Bil - 5 Bil \$15 Bil

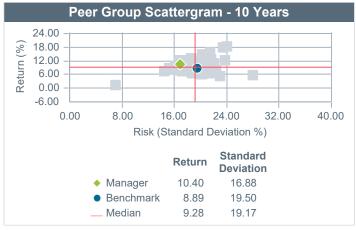


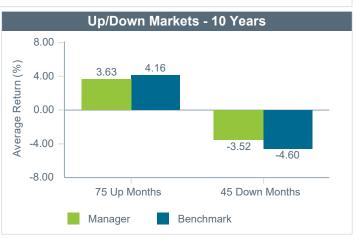
Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Manager: Champlain US Mid Cap Core (SA)
Benchmark: Custom SMID Cap Equity Index
Peer Group: IM U.S. SMID Cap Equity (SA+CF)

	Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019		
Manager	3.35	10.70	-1.09	8.12	9.52	10.40	14.94	-23.95	19.93	27.32	27.29		
Benchmark	0.49	13.51	2.57	8.98	8.26	8.89	17.15	-18.85	18.74	19.99	26.65		
Difference	2.86	-2.81	-3.66	-0.86	1.26	1.51	-2.20	-5.10	1.19	7.33	0.65		
Peer Group Median	0.11	12.10	2.20	9.52	9.14	9.28	16.48	-17.60	22.40	16.53	28.21		
Rank	15	59	81	71	42	23	61	73	60	33	58		
Population	181	181	177	166	150	123	197	203	206	212	207		







Portfolio Character	istics ar	nd Dist.	of Mark	et Cap (%)
		Portfolio		Benchmark
Wtd. Avg. Mkt. Cap (\$M)		14,460		15,972
Median Mkt. Cap (\$M)		8,031		1,867
Price/Earnings Ratio		29.20		19.69
Price/Book Ratio		4.06		2.76
5 Yr. EPS Growth Rate (%)		12.09		12.37
Current Yield (%)		0.66		1.47
Beta (5 Years, Monthly)		0.83		1.00
Number of Securities		133		2,774
Active Share		92.11		N/A
80.00-				
60.00			59.09 49.44	
40.00 —			49.44	
20.00-	23.15	18.23		15.11
0.00 0.66 0.65 0.75 0.36		11.29		5.94
>\$100 Bil \$75 Bil - \$100 Bil	\$25 Bil - \$75 Bil	\$15 Bil - \$25 Bil	\$2 Bil - \$15 Bil	\$0 - \$2 Bil



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. The Custom SMID Cap Equity Index currently consists of 50% Russell Midcap Index and 50% Russell 2000 index. From 08/2020 through 12/2020 it consisted of 50% Russell 2500 index and 50% Russell 2000 index. Prior data was provided by the previous consultant.



Manager: BlackRock MSCI ACW IMI (SA)
Benchmark: MSCI ACW IM Index (USD) (Net)
Peer Group: IM Global Equity (SA+CF)

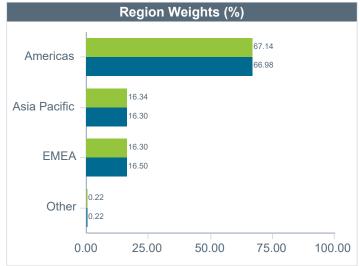
	Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019		
Manager	-1.19	16.54	5.21	10.05	N/A	N/A	22.05	-18.14	18.73	16.77	N/A		
Benchmark	-1.24	16.37	4.90	9.67	8.78	9.00	21.58	-18.40	18.22	16.25	26.35		
Difference	0.04	0.17	0.30	0.38	N/A	N/A	0.47	0.27	0.50	0.52	N/A		
Peer Group Median	-3.10	11.78	3.32	8.40	8.10	8.52	19.42	-17.32	18.15	15.31	26.51		
Rank	32	30	34	33	N/A	N/A	37	53	46	45	N/A		
Population	494	491	459	421	379	316	534	537	536	542	546		







acteri	istics an	d Dist.	of Marke	et Cap (%)
		Portfolio		Benchmark	
		662,999		661,594	
		2,401		2,397	
		21.60		21.58	
		3.73		3.72	
)		17.63		17.58	
		1.88		1.88	
		1.00		1.00	
		8,713		8,640	
		0.90		N/A	
	19.40 19.47		45.07.45.05		
F 6.67			15.07 15.05		
5 0.07		0.34 6.36		2.94 2.89	
75 Bil - 100 Bil	\$25 Bil - \$75 Bil	\$15 Bil - \$25 Bil	\$2 Bil - \$15 Bil	\$0 - \$2 Bil	
	65 6.67 75 Bil -	19.40 19.47 15 6.67 75 Bil - \$25 Bil -	Portfolio 662,999 2,401 21.60 3.73 17.63 1.88 1.00 8,713 0.90	Portfolio 662,999 2,401 21.60 3.73 17.63 1.88 1.00 8,713 0.90 19.40 19.47 6.34 6.36 15.07 15.05 75 Bil - \$25 Bil - \$15 Bil - \$2 Bil -	662,999 661,594 2,401 2,397 21.60 21.58 3.73 3.72 17.63 17.58 1.88 1.88 1.00 1.00 8,713 8,640 0.90 N/A 19.40 19.47 6.34 6.36 2.94 2.89 75 Bil - \$25 Bil - \$15 Bil - \$2 Bil - \$0 -



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Manager: Blackrock MSCI World LCTR (SA)
Benchmark: MSCI Wrld Index (USD) (Net)
Peer Group: IM Global Equity (SA+CF)

	Performance												
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019		
Manager	-0.97	17.89	5.09	N/A	N/A	N/A	22.14	-19.40	N/A	N/A	N/A		
Benchmark	-0.16	18.67	6.34	11.17	10.24	9.95	23.79	-18.14	21.82	15.90	27.67		
Difference	-0.82	-0.78	-1.25	N/A	N/A	N/A	-1.65	-1.26	N/A	N/A	N/A		
Peer Group Median	-3.10	11.78	3.32	8.40	8.10	8.52	19.42	-17.32	18.15	15.31	26.51		
Rank	29	24	34	N/A	N/A	N/A	36	60	N/A	N/A	N/A		
Population	494	491	459	421	379	316	534	537	536	542	546		







			Portfolio		Benchmark
Vtd. Avg. Mkt. Cap (\$I	M)		795,160		804,045
Median Mkt. Cap (\$M)			41,699		21,028
Price/Earnings Ratio			23.45		23.67
Price/Book Ratio			4.22		4.09
Yr. EPS Growth Rate	€ (%)		18.10		18.17
Current Yield (%)			1.77		1.76
Beta (3 Years, Monthly	/)		1.00		1.00
Number of Securities			405		1,395
Active Share			42.21		N/A
80.00 – 60.00 – 59.58 58.39 40.00 –					
20.00		21.06 22.06			
0.00	5.06 7.63		8.18 6.47	6.11 5.45	0.01 0.00
>\$100 Bil	\$75 Bil - \$100 Bil	\$25 Bil - \$75 Bil	\$15 Bil - \$25 Bil	\$2 Bil - \$15 Bil	\$0 - \$2 Bil

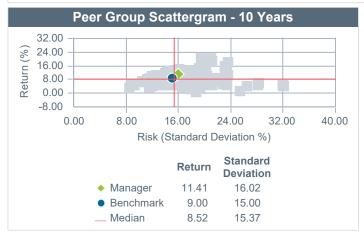


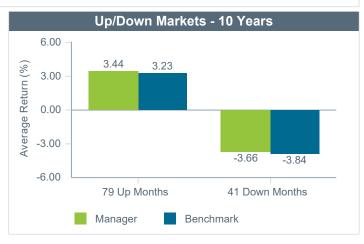
Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Manager: Artisan Global Opportunities (CF)
Benchmark: MSCI ACW IM Index (USD) (Net)
Peer Group: IM Global Equity (SA+CF)

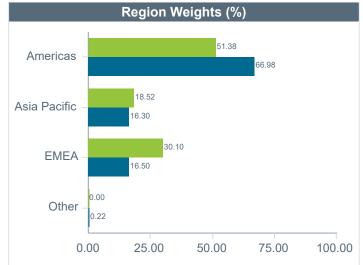
				P	erformar	псе					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	-1.59	15.29	-0.23	9.72	10.20	11.41	23.41	-30.20	14.10	40.32	35.89
Benchmark	-1.24	16.37	4.90	9.67	8.78	9.00	21.58	-18.40	18.22	16.25	26.35
Difference	-0.35	-1.08	-5.13	0.05	1.41	2.41	1.83	-11.80	-4.12	24.07	9.53
Peer Group Median	-3.10	11.78	3.32	8.40	8.10	8.52	19.42	-17.32	18.15	15.31	26.51
Rank	36	35	84	37	25	13	29	91	76	11	8
Population	494	491	459	421	379	316	534	537	536	542	546







Vtd. Avg. Mkt. Cap (\$M) 399,940 661,594 Median Mkt. Cap (\$M) 93,121 2,397 Artice/Earnings Ratio 39.83 21.58 Artice/Book Ratio 6.09 3.72 Yr. EPS Growth Rate (%) 14.32 17.58 Aurrent Yield (%) 0.65 1.88 Aurent Yield (%) 0.96 1.00 Aumber of Securities 47 8,640 Auctive Share 88.51 N/A				Portfolio	1	Benchmark
Price/Earnings Ratio 39.83 21.58 Price/Book Ratio 6.09 3.72 Yr. EPS Growth Rate (%) 14.32 17.58 Current Yield (%) 0.65 1.88 Price (5 Years, Monthly) 0.96 1.00 Price (S Years, Monthly) 0.96 1.	Vtd. Avg. Mkt. Cap (\$M)			399,940		661,594
Arrice/Book Ratio 6.09 3.72 Yr. EPS Growth Rate (%) 14.32 17.58 Current Yield (%) 0.65 1.88 Leta (5 Years, Monthly) 0.96 1.00 Lumber of Securities 47 8,640 Loctive Share 88.51 N/A 80.00 60.00 55.11 49.56 40.00 27.42 20.00 11.53 6.67 5.94 6.36 0.00 289	Median Mkt. Cap (\$M)			93,121		2,397
Yr. EPS Growth Rate (%) 14.32 17.58 current Yield (%) 0.65 1.88 leta (5 Years, Monthly) 0.96 1.00 lumber of Securities 47 8,640 active Share 88.51 N/A	rice/Earnings Ratio			39.83		21.58
Current Yield (%) 0.65 1.88 deta (5 Years, Monthly) 0.96 1.00 lumber of Securities 47 8,640 active Share 88.51 N/A 80.00 60.00 55.11 49.56 40.00 27.42 19.47 15.05 5.94 6.36 0.00 15.05 1.88 1.88 1.80 1.80 1.80 1.80 1.80 1.80	rice/Book Ratio			6.09		3.72
leta (5 Years, Monthly) Jumber of Securities 47 8,640 N/A 80.00 60.00 55.11 49.56 40.00 27.42 11.53 6.67	Yr. EPS Growth Rate (%)		14.32		17.58
lumber of Securities 47 8,640 N/A 80.00 - 60.00 - 55.11 49.56 40.00 - 27.42 11.53 6.67 5.94 6.36 0.00 15.05 2.89	Current Yield (%)			0.65		1.88
80.00 - 60.00 - 55.11 49.56 40.00 - 27.42 20.00 - 11.53 6.67	Seta (5 Years, Monthly)			0.96		1.00
80.00 – 60.00 – 55.11 49.56 40.00 – 27.42 20.00 – 11.53 6.67 19.47 15.05 15.94 6.36 200 2.89	lumber of Securities			47		8,640
60.00 - 55.11 49.56 40.00 - 27.42 20.00 - 11.53 6.67 15.94 6.36 200 2.89	active Share			88.51		N/A
	60.00 – 55.11 40.00 – 20.00 –	11.53 6.67		5.94 6.36		0.00 2.89
	>\$100 Bil	\$75 Bil - \$100 Bil	\$25 Bil - \$75 Bil	\$15 Bil - \$25 Bil	\$2 Bil - \$15 Bil	\$0 - \$2 Bil



Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Manager: Acadian ACW Ex US Equity (CF)
Benchmark: MSCI ACW Ex US Index (USD) (Net)

Peer Group: IM All ACWI Ex US (SA+CF)

				P	erformar	псе					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	-2.56	13.98	3.92	8.12	6.58	8.88	17.55	-16.23	14.99	14.46	20.84
Benchmark	-7.60	5.53	0.82	4.10	3.53	4.80	15.62	-16.00	7.82	10.65	21.51
Difference	5.03	8.45	3.10	4.01	3.05	4.08	1.93	-0.22	7.17	3.81	-0.67
Peer Group Median	-7.18	6.02	1.28	5.05	4.82	6.15	17.13	-16.92	9.74	14.84	25.13
Rank	6	8	24	11	15	11	46	47	10	52	73
Population	133	133	133	132	132	130	140	150	155	167	173







			Portfolio		Benchmark
Wtd. Avg. Mkt. Cap (\$!	M)		68,110		107,606
Median Mkt. Cap (\$M)			1,105		9,818
Price/Earnings Ratio			12.99		15.83
Price/Book Ratio			3.00		2.53
5 Yr. EPS Growth Rate	€ (%)		16.21		12.03
Current Yield (%)			3.14		2.98
Beta (5 Years, Monthly	['])		0.95		1.00
Number of Securities			1,004		2,058
Active Share			82.44		N/A
45.00 – 27.83 15.00 – 15.18 0.00	9.44	30.91	13.81	35.34 20.47	6.25
>\$100 Bil	\$75 Bil - \$100 Bil	\$25 Bil - \$75 Bil	\$15 Bil - \$25 Bil	\$2 Bil - \$15 Bil	\$0 - \$2 Bil



Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Manager: BlackRock US Agg (SA)

Benchmark: Bloomberg US Agg Bond Index

Peer Group: IM U.S. Broad Market Core Fixed Income (SA+CF)

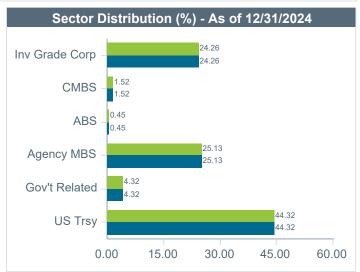
				P	erformar	nce					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	-3.05	1.32	-2.37	-0.31	N/A	N/A	5.66	-13.08	-1.62	7.54	N/A
Benchmark	-3.06	1.25	-2.41	-0.33	0.97	1.35	5.53	-13.01	-1.55	7.51	8.72
Difference	0.01	0.07	0.04	0.01	N/A	N/A	0.13	-0.07	-0.07	0.03	N/A
Peer Group Median	-3.04	1.61	-2.26	-0.04	1.21	1.57	5.79	-13.13	-1.47	8.03	8.82
Rank	59	75	66	79	N/A	N/A	55	46	60	67	N/A
Population	117	117	111	106	102	95	127	131	131	134	137







Effective Duration 6.08 Spread Duration N/A Avg. Maturity 8.35 Avg. Quality Aa2/Aa3	6.08 N/A 8.35
Avg. Maturity 8.35 Avg. Quality Aa2/Aa3	
Avg. Quality Aa2/Aa3	8.35
V: -1-1 T - M - t:t (0/)	Aa2/Aa3
Yield To Maturity (%) 4.91	4.91
Coupon Rate (%) 3.42	3.42
Current Yield (%) N/A	N/A
Holdings Count 13,630	13,630



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Portfolio characteristics are proxied using benchmark statistics.



Manager: PIMCO Core (SA)

Benchmark: Bloomberg US Agg Bond Index

Peer Group: IM U.S. Broad Market Core Fixed Income (SA+CF)

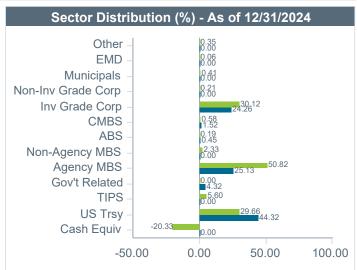
				P	Performar	псе					
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	-2.89	1.85	-1.88	N/A	N/A	N/A	5.90	-12.41	-1.68	N/A	N/A
Benchmark	-3.06	1.25	-2.41	-0.33	0.97	1.35	5.53	-13.01	-1.55	7.51	8.72
Difference	0.18	0.60	0.53	N/A	N/A	N/A	0.37	0.60	-0.14	N/A	N/A
Peer Group Median	-3.04	1.61	-2.26	-0.04	1.21	1.57	5.79	-13.13	-1.47	8.03	8.82
Rank	28	41	17	N/A	N/A	N/A	44	17	70	N/A	N/A
Population	117	117	111	106	102	95	127	131	131	134	137







Portfolio Characte	eristics (%) - As o	of 12/31/2024
	Portfolio	Benchmark
Effective Duration	6.42	6.08
Spread Duration	6.45	N/A
Avg. Maturity	8.58	8.35
Avg. Quality	Aa2	Aa2/Aa3
Yield To Maturity (%)	5.41	4.91
Coupon Rate (%)	4.05	3.42
Current Yield (%)	N/A	N/A
Holdings Count	337	13,630



Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Allocation to "other" consists of Euro/Yankees.

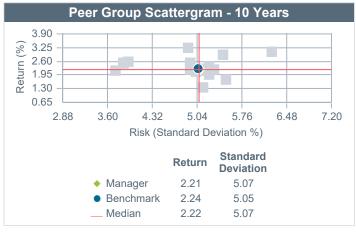


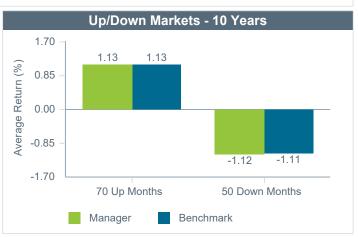
Manager: Blackrock TIPS (SA)

Benchmark: Bloomberg US Trsy US TIPS Index

Peer Group: IM U.S. TIPS (SA+CF)

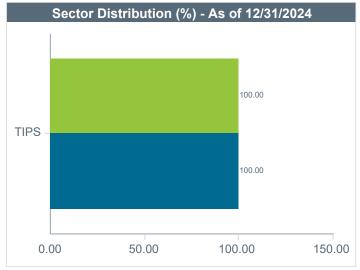
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	-2.91	2.02	-2.29	1.84	2.27	2.21	3.92	-12.01	5.81	10.97	8.33
Benchmark	-2.88	1.84	-2.30	1.87	2.32	2.24	3.90	-11.85	5.96	10.99	8.43
Difference	-0.03	0.18	0.00	-0.03	-0.05	-0.03	0.02	-0.16	-0.15	-0.02	-0.10
Peer Group Median	-2.91	1.87	-2.32	1.82	2.29	2.22	3.80	-11.92	5.64	10.61	8.32
Rank	54	36	48	48	56	60	36	64	37	35	49
Population	28	28	26	24	23	20	31	30	29	29	30







Spread Duration 4.11 4.1 Avg. Maturity 7.07 7.0 Avg. Quality Aa1 Aa Yield To Maturity (%) 4.59 4.5		Portfolio	Benchmark
Avg. Maturity 7.07 7.0 Avg. Quality Aa1 Aa /ield To Maturity (%) 4.59 4.5	ctive Duration	4.11	4.11
Avg. Quality Aa1 Aa Yield To Maturity (%) 4.59 4.5	ead Duration	4.11	4.11
Yield To Maturity (%) 4.59 4.5	. Maturity	7.07	7.07
	. Quality	Aa1	Aa1
Coupon Rate (%) 1.01 1.0	d To Maturity (%)	4.59	4.59
	pon Rate (%)	1.01	1.01
Current Yield (%) N/A N/	rent Yield (%)	N/A	N/A
Holdings Count 48 4	dings Count	48	48



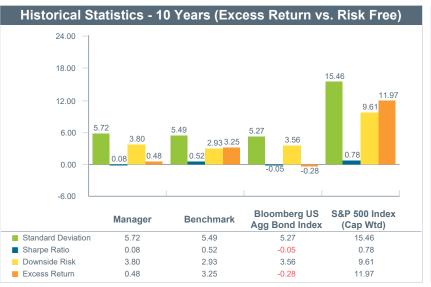
Performance shown is net of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Portfolio characteristics are proxied using benchmark statistics.



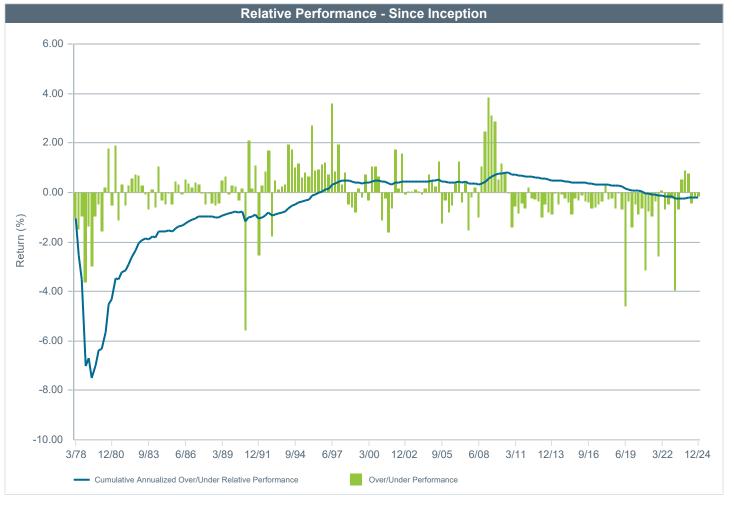
Manager: UBS Trumbull Property LP

Benchmark: NCREIF ODCE Index (AWA) (Net)

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2023	2022	2021	2020	2019
Manager	0.80	-2.29	-4.64	-0.95	-0.25	2.09	-15.61	5.16	15.42	-4.74	-2.87
Benchmark	0.96	-2.27	-3.14	1.99	3.08	4.94	-12.73	6.55	21.02	0.34	4.39
Difference	-0.16	-0.02	-1.50	-2.94	-3.33	-2.85	-2.88	-1.39	-5.60	-5.09	-7.26



Actual Correlation - 10	Years
	Actual Correlation
NCREIF ODCE Index (AWA) (Net)	0.93
S&P 500 Index (Cap Wtd)	-0.38
Russell 2000 Index	-0.35
MSCI EAFE Index (USD) (Net)	-0.44
MSCI Emg Mkts Index (USD) (Net)	-0.39
Bloomberg US Agg Bond Index	-0.42
Bloomberg US Trsy US TIPS Index	-0.33
Wilshire US REIT Index	-0.14
HFRI FOF Comp Index	-0.36
Bloomberg Cmdty Index (TR)	0.17
ICE BofAML 3 Mo US T-Bill Index	-0.63
Cons Price Index (Unadjusted)	0.28
NCREIF Property Index	0.91
NCREIF ODCE Index (AWA) (Gross)	0.92





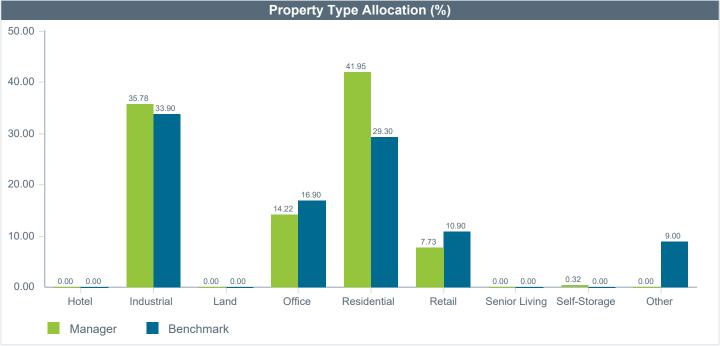
Manager: UBS Trumbull Property LP

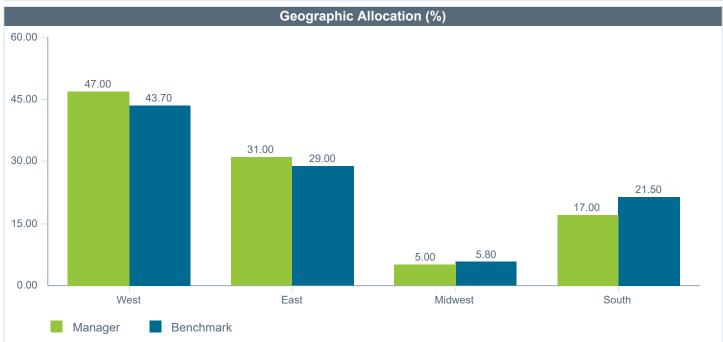
Benchmark: NCREIF ODCE Index (AWA) (Net)

Investment Strategy

The Fund pursues a diversified core real estate strategy that seeks to produce attractive risk-adjusted returns by focusing on selective acquisitions, diversification, active portfolio management, and asset management. The Fund invests in well-leased, stabilized assets in major US metropolitan markets and receives the majority of its return from the income component. Diversification for the Fund is consistently pursued on many levels, including geographic region, property type, and economic sector. The Fund has historically maintained a leverage ratio significantly lower than the NCREIF ODCE Index and invests 5-15% of its gross assets in value-added type real estate investment opportunities.

Investment Profile	
Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (mm) \$	13,223
Fund Leverage %	23.17
Portfolio Occupancy %	92.10
Cash Reserve %	4.13
Number of Investments	115
Number of Limited Partners	429





Performance shown is net of fees and product specific. Calculation is based on quarterly periodicity. Investment profile data shown is provided by the investment manager and is as of the most recently available quarter end. Allocation data shown is based on NAV. Allocation to "Other" consists of entertainment, parking, data center, and operating land.



Addendum & Glossary

Vermont Pension Investment Commission Fee Schedule

	Fee Schedule	Market Value As of 12/31/2024 (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Blackrock S&P 500 (Eql Wtd) (SA)	0.020 % of Assets	257,662,376	51,532	0.020
Champlain US Mid Cap Core (SA)	0.850 % of First \$50 M 0.750 % of Next \$50 M 0.650 % Thereafter	206,867,136	1,494,636	0.723
BlackRock MSCI ACW IMI (SA)	0.025 % of Assets	2,020,087,207	505,022	0.025
Blackrock MSCI World LCTR (SA)	0.060 % of First \$100 M 0.050 % Thereafter	224,808,087	122,404	0.054
Artisan Global Opportunities (CF)	0.750 % of Assets	204,504,202	1,533,782	0.750
Acadian International All Cap (SA)	0.700 % of First \$25 M 0.600 % of Next \$25 M 0.500 % of Next \$25 M 0.300 % Thereafter	773,518	5,415	0.700
Acadian ACWI Ex-US Fund (CF)	0.700 % of First \$25 M 0.600 % of Next \$25 M 0.500 % of Next \$25 M 0.300 % Thereafter	348,414,929	1,270,245	0.365
Mondrian International Equity (SA)	0.500 % of First \$50 M 0.350 % of Next \$50 M 0.300 % Thereafter	873,321	4,367	0.500
Wellington Opportunistic EMD (CF)	0.550 % of Assets	109,396	602	0.550
PIMCO Liquidation (SA)	0.300 % of Assets	327,731	983	0.300
BlackRock US Agg (SA)	0.030 % of Assets	971,593,526	291,478	0.030
PIMCO Core (SA)	0.190 % of Assets	316,307,704	600,985	0.190
BlackRock TIPS (SA)	0.025 % of Assets	172,399,803	43,100	0.025
UBS Trumbull Properties (CF)	0.955 % of First \$10 M 0.825 % of Next \$15 M 0.805 % of Next \$25 M 0.790 % of Next \$50 M 0.670 % of Next \$150 M 0.600 % of Next \$150 M 0.560 % of Next \$200 M 0.520 % Thereafter	172,456,041	1,300,955	0.754
Hammes HIGH Fund (CF)	0.900 % of Assets	25,208,414	226,876	0.900
Total Fund		6,791,735,032	9,043,760	0.133



Vermont Pension Investment Commission

As of December 31, 2024

Addendum

Performance Related Comments

- RVK began monitoring the plan's assets as of 9/2020. Prior data was provided by the previous consultant.
- Performance shown is net of fees and client specific.
- Inception dates shown represent the first full month of available performance.
- Fiscal year ends 6/30.
- Private Asset market values and performance are lagged to match custodian reported net asset values. Accordingly, fund reported performance will lag benchmark reported
 performance.
- Composite and respective index inception dates for the thematic allocations to Growth Assets, Downturn Hedging Assets, and inflation Hedging Assets, begin as of 09/01/2020.
- PIMCO Liquidation (SA) consists of residual assets from Vermont Pension's High Yield allocation.
- During 12/2020, the Real Assets composite consisting of Core Real Estate, Non-Core Real Estate, and Private Infrastructure/Land was replaced by the Inflation Hedging Assets composite consisting of TIPS, Core Real Estate, and Private Infrastructure/Land. A new Non-Core Real Estate composite was created.
- Inflation Hedging Assets (Spliced) consists of the Real Return composite prior to 08/31/2020 and the Inflation Hedging Assets Composite thereafter.
- During 06/2021, the inception dates for Blackrock S&P 500, Artisan Global Opportunities and Wellington EMD were adjusted to reflect the first full month of performance.
- In an effort to preserve manager history, from 10/2005 through 08/2022 the Acadian Int'l All Cap (SA) returns have been backfilled into the Acadian ACWI Ex-US Fund (CF) manager return history.

Decisions Made by the Commission Over the Last 18 Months

Manager Additions

• Angelo Gordon Direct Lending, Harbourvest Dover X, Harbourvest XI Funds, Neuberger Berman, Benefit Street Partners II, Kennedy Lewis Capital II, Ares Pathfinder Fund I, Blackrock MSCI World LCTR (SA), Harbourvest HIPEP IX, Ares Pathfinder Core, Neuberger Berman V., Accel-KKR GCP IV LP, HCF VI, Acadian ACWI Ex-US, HarbourVest XII Venture, Cambridge Secondaries, Angelo Gordon Realty Value XI, HarbourVest Dover XI, Hammes Partners IV LP, Dunes Point Capital III LP, Hammes HIGH Fund (CF), Blue Owl Real Estate VI LP, IFM Global Infrastructure Fund (CF), IFM Net Zero Infrastructure Fund (CF), KKR Direct Lending Evergreen LP, Comvest Direct Lending Evergreen LP, Pantheon Opportunistic Credit III LP, and Copenhagen Infrastructure V LP.

Manager Liquidations

• SGA International Small Cap (CF), Pinnacle Natural Resources, Blackrock Transition Account, Acadian International All Cap (SA), Mondrian International Equity (SA) and Wellington Opportunistic EMD (CF).

Policy Changes

- During 01/2021, the board approved an updated target allocation index and fund level benchmarks. Benchmark changes were reflected starting 01/2021.
- During 06/2021, the board approved updated target allocations. Benchmark changes were reflected starting 07/2021.
- During 06/2022, the board approved updated target allocations. Benchmark changes were reflected starting 07/2022.
- During 06/2023, the board approved updated target allocations. Benchmark changes were reflected starting 07/2023.
- During 06/2024, the board approved updated target allocations. Benchmark changes were reflected starting 07/2024, which includes updating the Global Equity weight from 30% to 32% and International Equity weight from 7% to 5% to capture the transition of the terminated Mondrian investment assets (IE) to the MSCI ACW IM Index (Net) (GE).

Historical Transition Comments

- SGA International Small Cap (CF) was liquidated during 09/2020. Remaining market value represents residual assets.
- Angelo Gordon Direct Lending IV was funded during 09/2020.
- Wellington Small Cap Value (SA), SSgA Russell 2000 Growth (SA), Pinnacle Natural Resources (CF) and PIMCO Unconstrained (SA) were liquidated prior to 09/2020.
 Remaining market values represent residual assets.
- The Wellington Small Cap Value (SA) liquidation was completed during 03/2021.
- Ares Pathfinder Fund I was funded during 04/2021.
- During 06/2021, Blackrock Transition was liquidated.
- During 08/2021, Blackrock MSCI World LCTR (SA) was funded.
- The Pinnacle Natural Resources (CF) liquidation was completed during 09/2021.



Vermont Pension Investment Commission Addendum

Historical Transition Comments (Cont'd)

- Ares Pathfinder Core was funded during 10/2021.
- During 12/2021, Harbourvest HIPEP IX was funded.
- During 03/2022, Neuberger Berman Secondary Investment V was funded.
- During 06/2022, Accel-KKR GCP IV, LP was funded.
- During 07/2022, HCF VI was funded.
- During 08/2022, Acadian ACWI Ex-US Fund (CF), Angelo Gordon Direct Lending Fund V, Kennedy Lewis CP ILL CNTRL, and Siguler Guff SBOF V were funded, Acadian International All Cap (SA) was liquidated, and Mondrian International Equity (SA) allocation was reduced.
- During 09/2022, HarbvourVest XII Venture was funded.
- During 12/2022, Mondrian International Equity (SA) was liquidated with assets being transferred to BlackRock MSCI ACW IMI (SA). Cambridge Secondaries was funded and BlackRock Transition was funded to move assets to BlackRock MSCI ACW IMI (SA).
- During 03/2023, Angelo Gordon Realty XI was funded.
- During 06/2023, HarbourVest Dover XI was funded.
- During 08/2023, BlackRock Transition was liquidated.
- During 09/2023, Hammes Partners IV LP was funded.
- During 11/2023, Dunes Point Capital III LP was funded.
- During 12/2023, Hammes HIGH Fund (CF) was funded.
- During 01/2024, Blue Owl Real Estate VI LP and IFM Global Infrastructure Fund (CF) were funded.
- During 02/2024, IFM Net Zero Infrastructure Fund (CF) was funded.
- During 04/2024, KKR Direct Lending Evergreen LP was funded.
- During 08/2024, Comvest Direct Lending Evergreen LP and Pantheon Opportunistic Credit III LP was funded, Wellington Opportunistic EMD (CF) was liquidated with the remaining market value representing residual assets.
- During 12/2024. Copenhagen Infrastructure V LP was funded.

Benchmark Comments

 As of 7/1/2024, the target allocation Index consists of 4% S&P 500 Index (Cap Wtd), 3% Russell 2500 Index, 32% MSCI ACW IM Index (USD) (Net), 5% MSCI ACW Ex US Index (USD) (Net), 19% Bloomberg US Aggregate Bond Index, 4% NCREIF ODCE Index (AWA) (Net)+2%, 11% S&P UBS Leveraged Loan Index + 2%, 11% Cambridge US PE Index, 2% NCREIF Farmland Index, 4% Consumer Priced Index (All Urban Consumers)+3%, 2% Bloomberg US TIPS Index and 3% NCREIF ODCE Index (AWA) (Net). From 7/2023 through 6/2024 the Index consists of 4% S&P 500 Index (Cap Wtd), 3% Russell 2500 Index, 30% MSCI ACW IM Index (USD) (Net), 7% MSCI ACW Ex US Index (USD) (Net), 19% Bloomberg US Aggregate Bond Index, 4% NCREIF ODCE Index (AWA) (Net)+2%, 2% JP Morgan Emerging Mkts Bond Gbl Index, 10% S&P UBS Leveraged Loan Index + 2%, 10% Cambridge US PE Index, 2% NCREIF Farmland Index, 3% Consumer Priced Index (All Urban Consumers)+3%, 2% Bloomberg US TIPS Index, and 4% NCREIF ODCE Index (AWA) (Net). From 1/2023 through 6/2023 the index consisted of 4% S&P 500 Index (Cap Wtd), 3% Russell 2500 Index, 29% MSCI ACW IM Index (USD) (Net), 7% MSCI ACW Ex US Index (USD) (Net), 19% Bloomberg US Aggregate Bond Index, 4% NCREIF ODCE Index (AWA) (Net)+2%, 4% JP Morgan Emerging Mkts Bond Gbl Index, 10% S&P UBS Leveraged Loan Index + 2%, 10% Cambridge US PE Index, 2% NCREIF Farmland Index, 2% Consumer Priced Index (All Urban Consumers)+3%, 3% Bloomberg US TIPS Index and 3% NCREIF ODCE Index (AWA) (Net). From 7/2022 through 12/2022 the index consisted of 4% S&P 500 Index (Cap Wtd). 3% Russell 2500 Index. 7% MSCI EAFE Index, 29% MSCI ACW IM Index (USD) (Net), 19% Bloomberg US Aggregate Bond Index, 4% NCREIF ODCE Index (AWA) (Net)+2%, 4% JP Morgan Emerging Mkts Bond Gbl Index, 10% S&P UBS Leveraged Loan Index + 2%, 10% Cambridge US PE Index, 2% NCREIF Farmland Index, 2% Consumer Priced Index (All Urban Consumers)+3%, 3% Bloomberg US TIPS Index and 3% NCREIF ODCE Index (AWA) (Net). From 07/2021 through 06/2022 the index consisted of 4% S&P 500 Index (Cap Wtd), 3% Russell 2500 Index, 7% MSCI EAFE Index, 29% MSCI ACW IM Index (USD) (Net), 19% Bloomberg US Aggregate Bond Index, 4% NCREIF ODCE Index (AWA) (Net) +2%, 4% JP Morgan Emerging Mkts Bond Gbl Index, 10% S&P UBS Leveraged Loan Index + 2%, 10% Cambridge US PE Index, 3% NCREIF Farmland Index, 3% Bloomberg US TIPS Index and 4% NCREIF ODCE Index (AWA) (Net). From 01/2021 through 06/2021 the index consisted of 4% S&P 500 Index (Cap Wtd), 3% Russell 2500 Index, 5% MSCI EAFE Index, 29% MSCI ACW IM Index (USD) (Net), 2% MSCI EAFE Small Cap Index, 20% Bloomberg US Aggregate Bond Index, 3% NCREIF ODCE Index (AWA) (Net) +2%, 4% JP Morgan Emerging Mkts Bond Gbl Index, 10% S&P UBS Leveraged Loan Index + 2%, 10% Cambridge US PE Index and 10% CPI+ 2.5%.



Vermont Pension Investment Commission Addendum

Benchmark Comments (Cont'd)

- From 08/31/2020 through 12/31/2020, the index consisted of 4% S&P 500 Index (Cap Wtd), 3% Russell 2500 Index, 5% MSCI EAFE Index, 29% MSCI ACW IM Index (USD) (Net), 2% MSCI EAFE Small Cap Index, 20% Bloomberg US Aggregate Bond Index, 3% Bloomberg US Treasury US TIPS Index (TR), 4% JP Morgan Emerging Mkts Bond Gbl Index, 10% S&P/LSTA Leveraged Loan Index (TR), 10% Cambridge US PE Index and 10% NCREIF Property Index. Prior data was provided by the previous consultant.
- The Actual Allocation Indices are calculated monthly using beginning of month investment weights applied to each corresponding benchmark return.
- The Custom SMID Cap Equity Index currently consists of 50% Russell Midcap Index and 50% Russell 2000 index. From 08/2020 through 12/2020 it consisted of 50% Russell 2500 index and 50% Russell 2000 index. Prior data was provided by the previous consultant.
- The CPI+2.5% (Spliced) consists of the NCREIF Property Index prior to 08/31/2020 and the Consumer Price Index+2.5% thereafter
- S&P UBS Lvg'd Loan Index+2% (Spliced) consists of the S&P/LSTA Loan Index prior to 12/31/2020 and the S&P UBS Leveraged Loan Index+2% thereafter.
- NCREIF ODCE Index+2% (Spliced) consists of the NCREIF Property Index prior to 12/31/2020 and the NCREIF ODCE Index (Net)+2% thereafter.
- In an effort to preserve benchmark history, from 11/2005 through 08/2022 the MSCI EAFE IM Index (USD) (Net) benchmark returns have been backfilled into the MSCI ACW Ex US Index (USD) (Net) return history. The benchmark name has been updated to the Custom MSCI ACW Ex US Index (USD) (Net) in the report to reflect this change.
- The Thematic Target Allocation Index currently consists of 70% MSCI ACW IM Index (USD) (Net), 19% Bloomberg US Aggregate Bond Index, and 11% Consumer Price Index+2.5%. From 08/2021 through 06/2023 it consisted of 71% MSCI ACW IM Index (USD) (Net), 19% Bloomberg US Aggregate Bond Index, and 10% Consumer Price Index+2.5%. From 09/2020 through 07/2021 it consisted of 70% MSCI ACW IM Index (USD) (Net), 20% Bloomberg US Aggregate Bond Index, and 10% Consumer Price Index+2.5%.
- In an effort to preserve benchmark history, from 07/2005 through 12/2022 the MSCI EAFE IM Index (USD) (Net) benchmark returns have been backfilled into the MSCI ACW Ex US Index (USD) (Net) return history. The benchmark name has been updated to the Custom MSCI ACW Ex US Composite Index (USD) (Net) in the report to reflect this change.



Active Return - The difference between the investment manager/composite performance relative to the performance of an appropriate market benchmark

Active Share - Measures the degree to which the holdings of a fund differ from the holdings of the benchmark. Active share is calculated by taking the sum of the absolute value of the differences of the weight of each holding in the fund versus the weight of each holding in the benchmark and dividing by two

Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond quality ratings are reported using the investment managers' and the index providers' preferred rating agency. *Average Quality for managers unable to provide this statistic is instead provided by Morningstar; if unavailable on Morningstar, it has been estimated using a credit quality distribution provided by the manager.* There are two primary rating agencies in the US. *Moody's* assigns ratings on a system that employs up to four symbols (consisting of letters and numbers), such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. *Standard & Poor's (S&P)* employs a system that uses + and - along with letters, such as AAA, AA+, etc. The two rating agencies' systems are summarized below:

S&P	Moody's	Explanation	S&P	Moody's	Explanation
Higher Cr	edit Quality – I	nvestment Grade	Lower Cr	edit Quality – E	Below Investment Grade
AAA	Aaa	Prime/Highest credit quality	BB+	Ba1	Speculative/Low credit quality
AA+	Aa1	High credit quality	BB	Ba2	
AA	Aa2		BB-	Ba3	
AA-	Aa3		B+	B1	Highly speculative
A+	A1	Upper-medium credit quality	В	B2	
Α	A2		B-	B3	
A-	A3		CCC+	Caa1	Substantial credit/default risk
BBB+	Baa1	Lower-medium credit quality	CCC	Caa2	Extremely speculative
BBB	Baa2		CCC-	Caa3	
BBB-	Baa3		CC	Ca	Vulnerable to default
			С	Ca	
			D	С	In default

Benchmark Effect - The difference between the blended return of each respective managers' benchmark within a composite and the composite's benchmark return.

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Box Plots - A graphical representation of the distribution of observations. From top to bottom, the four boxes represent the spread between the maximum value and the minimum value in each quartile. A quartile represents the values that divide the observations into four quarters (i.e., 1st quartile, 2nd quartile, 3nd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3nd quartile meet.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent quarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector as defined by S&P Capital IQ data. Attribution to "Other" is the result of securities based in industries that do not fit into any GICS classification.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S&P Capital IQ data, and thus may differ from the classification of the investment manager and/or index provider. Attribution to "EMEA" represents securities based in Europe, the Middle East, and Africa. Attribution to "Other" is the result of securities based in countries/regions that do not fit into any MSCI classification.

Style - Stocks are classified into the following style boxes: large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S&P Capital IQ. Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio; names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, and names that make up the subsequent 1/3 of the total market capitalization are assigned to the names are assigned to the value category. Stocks are unclassified when there is not enough data to determine a size and style metric.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.



Capital Markets Review -

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.

Federal Funds Rate - The interest rate at which a depository institution lends funds maintained at the Federal Reserve to another depository institution overnight. It is one of the most influential interest rates in the US economy, since it affects monetary and financial conditions, which in turn have a bearing on key aspects of the broad economy including employment, growth and inflation.

Option-Adjusted Spread - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.

Purchasing Managers Index (PMI) - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.

Real Gross Domestic Product (Real GDP) - An inflation-adjusted measure that reflects the value of all goods and services produced by an economy in a given year.

Unemployment Rate - The percentage of the total labor force that is unemployed but actively seeking employment.

US Dollar Total Weighted Index - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.

VIX - Measures the implied volatility of S&P 500 Index options by looking at the market's expectation of the S&P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."

Cash Flow Effect - The composite's active return minus the sum of each managers' active return minus the benchmark effect.

Consistency - The percentage of quarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product's performance.

Convexity - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.

Correlation - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation; that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.

Coupon Rate - The percentage rate of interest paid on a bond or fixed income security; it is typically paid twice per year.

Current Yield - The annual income of a security divided by the security's current price.

Down Market Capture - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product's performance.

Downside Risk - A measure similar to standard deviation that focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative returns for the selected periodicity. The higher the factor, the riskier the product.

Earnings Per Share - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.

Effective Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield.

Excess Return vs. Market - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.

Excess Return vs. Risk Free - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.

Excess Risk - A measure of the standard deviation of a portfolio's performance relative to the risk-free return.

Expense Ratios - Morningstar is the source for mutual fund expense ratios.

Gain/Loss - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.

Indices - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used, or distributed without the index provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, accuracy, suitability, and/or completeness.

Information Ratio - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.



Liability Driven Investing (LDI) - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. RVK is not an actuarial firm, and does not have actuarial expertise.

Estimated Funded Status - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded.

Estimated PV of Liabilities - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.

Duration of Liabilities - The sensitivity of the value of a Plan's liabilities to changes in interest rates, as calculated by the Plan's actuary.

Duration of Assets - The dollar-weighted average duration of all the individual Plan assets.

Estimated Plan Hedge Ratio - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Modified Duration - The approximate percentage change in a bond's price for a 100 basis point change in yield, assuming the bonds' expected cash flows do not change.

Mutual Fund Performance - Whenever possible, manager performance is extended for any share class that does not have 10 years of history. Using Morningstar's methodology, a single ticker within the same fund family (often the oldest share class) is chosen to append historical performance.

Net Cash Flow - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.

Peer Groups -

Plan Sponsor Peer Groups - RVK utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client performance compiled from consultant and custodian data. The Plan Sponsor Peer Group database includes performance and other quantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans.

Investment Manager Peer Groups - RVK utilizes Investment Metrics' Peer Groups for investment manager peer comparison and ranking. The Investment Metrics Peer Group database includes performance and other quantitative data for over 840 investment management firms and 29,000 investments products, across more than 160 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund's performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund's peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund's ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical Value 100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - RVK calculates performance for investment managers and composites using different methodologies.

Investment Managers - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. RVK defines a "large cash flow" as a net aggregate cash flow of ≥10% of the beginning-period portfolio market value or any cash flow that causes RVK calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

Composites - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted total rate of return that considers the timing of external cash flows; however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics & Distribution (%) - Due to disclosure guidelines set by each investment manager, portfolio characteristics and distribution percentages shown are as of the most recent date available.

Price to Earnings Ratio - The ratio valuing a company's current share price relative to its trailing 12-month per-share earnings (EPS).

Private Equity Quartile Ranks - Private Equity quartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund's annualized, since inception internal rate of return (IRR). Three Private Equity peer groups are available via Thomson Reuters: Buyout, Venture, and All Private Equity. Ranks are available quarterly, at a one-quarter lag.

R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-Squared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Return - Compounded rate of return for the period.

% Return - The time-weighted rate of return of a portfolio for a given period.

Risk Free Benchmark - ICE BofAML 3 Mo US T-Bill Index unless specified otherwise.



RVK Liquidity Rating - A qualitative method for determining the relative amount of liquidity in a portfolio. The characteristics considered when determining relative liquidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating.

Asset Class	RVK Liquidity Rating	Asset Class	RVK Liquidity Rating
<u>Liquid Investments</u>		Less Liquid Investments	
T-Bills and Treasurys	100	Fixed Income Plus Sector	50
Cash Equivalents	98	Stable Value (Plan Sponsor Directed)	50
TIPS	95	Hedge Funds of Funds	35
US Large Cap Equity	95		
Diversified Real Return	93		
Stable Value (Participant Directed)	91		
Global Equity	90	Not Liquid Investments	
Non-US Large Cap Equity	90	Core Real Estate	25
Global Tactical Asset Allocation	88	Core Plus Real Estate	15
MLPs	85	Non-Core Real Estate	5
US Mid Cap Equity	85	Private Equity	5
US SMid Cap Equity	85	Private Credit	5
US Small Cap Equity	85		
REITs	85		
Non-US Small Cap Equity	85		
Emerging Markets Equity	85		
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sector Allocation - Negative fixed income sector allocation reflects manager's use of derivatives, short selling, or interest rate swaps. An allocation to "Other" is the result of securities that do not fit into RVK's standardized classification, such as Catastrophe, CLOs, Common Stock, Convertibles, CRTs, Derivatives, Direct Loans, Emerging Markets Local Corporates, ETFs, FX Forwards, Infrastructure Debt, Reverse Repo, Swaps, Trade Finance, Unsecured Bonds, and Other Assets.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - The approximate percentage change in a bond's price for a 100 basis point change in its spread over a Treasury of the same maturity.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Thematic Classification - Represents dedicated manager allocations; as such, thematic allocations are approximations. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

Alpha Absolute Return Strategies Currency Overlay	Capital Appreciation Public Equity Private Equity Preferred Securities High Yield Convertible Fixed Income TALF Funds Distressed Debt Emerging Market Fixed Income	Capital Preservation Core Fixed Income CMBS Fixed Income Asset Backed Fixed Income Domestic Core Plus Fixed Income Mortgage Backed Fixed Income International Developed Fixed Income Cash Equivalents Stable Value	Inflation TIPS Bank Loans Core Real Estate Real Return Inflation Hedges REITs Commodities
	Emerging Market Fixed Income Value Added Real Estate Opportunistic Real Estate	Stable Value	

Time Period Abbreviations - QTD - Quarter-to-Date. CYTD - Calendar Year-to-Date. FYTD - Fiscal Year-to-Date. YOY - Year Over Year.

Total Fund Attribution – The Investment Decision Process (IDP) model provides an approach to evaluating investment performance that applies to all asset classes and investment styles. The IDP model is based on a top-down hierarchy framework of investment decisions, with each decision contributing to the overall profit or loss. The IDP approach starts from the strategic asset allocation and follows the flow of the investments down to the manager's skill.

Strategic Asset Allocation (SAA) – The percentage return gained or lost from the long-term strategic asset allocation decision, the most significant determinant of long-term performance. SAA is the product of the target asset allocation multiplied by the corresponding benchmark returns.

Tactical Asset Allocation (TAA) – The percentage return gained or lost from not having been precisely allocated at the target asset allocation mix, whether by deviations that are tactical in nature or a by-product of moving towards the target mix. TAA is the product of the actual asset allocation multiplied by the broad asset class benchmarks, less the SAA.

Style Selection (SS) – The percentage return gained or lost from intentional style biases within each asset class (e.g. value rather than core or overweight to emerging markets relative to benchmark). SS is the product of the actual manager allocation within each asset class multiplied by their specific benchmark, less TAA.

Manager's Skill (MS) – The percentage return gained or lost from manager value added relative to their specific benchmark. MS is the product of the actual manager allocation multiplied by their achieved excess return.



Total Fund Beta - Total Fund Beta is calculated using the S&P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S&P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.

Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., ICE BofAML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolio's return over the benchmark during the up market period. The higher the value of the up market capture the better the product's performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return. The 30-Day SEC Yield is similar to the Yield to Maturity and is reported for mutual funds.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.





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