



Quarterly Investment Performance Analysis

Municipality of Anchorage Trust Fund

Period Ended: September 30, 2022



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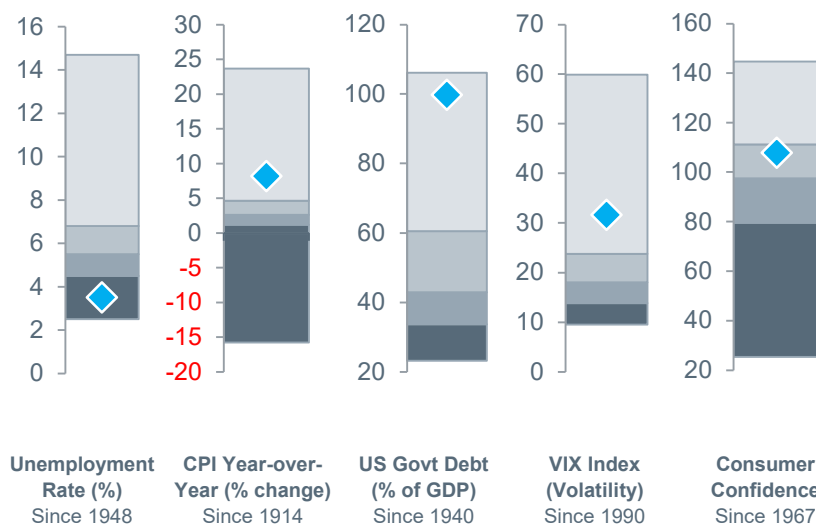
Capital Markets Review



Third Quarter Economic Environment

Investor sentiment and market movements continued to be driven by persistently high inflation levels and a corresponding tightening of monetary policy by most global central banks. Strong consumer demand, combined with supply chain disruptions and energy supply constraints caused by the war in Ukraine, exacerbated the difficulties for policymakers aiming to respond to inflation in an effective yet balanced manner. In its interim September 2022 economic outlook, OECD forecasted that headline inflation among G20 countries would finish 2022 above 8%—and only moderate to 6.6% in 2023. The OECD’s inflation forecasts remain elevated compared to historical levels despite actions by global central banks, including the FOMC. In September, the FOMC increased the federal funds rate to a range of 3.00%-3.25%, which represented a third consecutive 0.75 percentage point hike. Global GDP growth forecasts continued to moderate during the quarter. The OECD forecasted real global GDP growth of 3.0% in 2022 and 2.2% in 2023, representing sharp declines from its December 2021 forecasts of 4.5% and 3.2%, respectively. Overall, economic and inflation forecasts are being impacted by multiple factors. In particular, the ongoing war in Ukraine could lead to sudden shifts in conditions, as global economic impacts could follow modifications to sanctions regimes, changes to external military support, pending NATO membership applications, or extreme energy supply shortages in Europe.

Key Economic Indicators



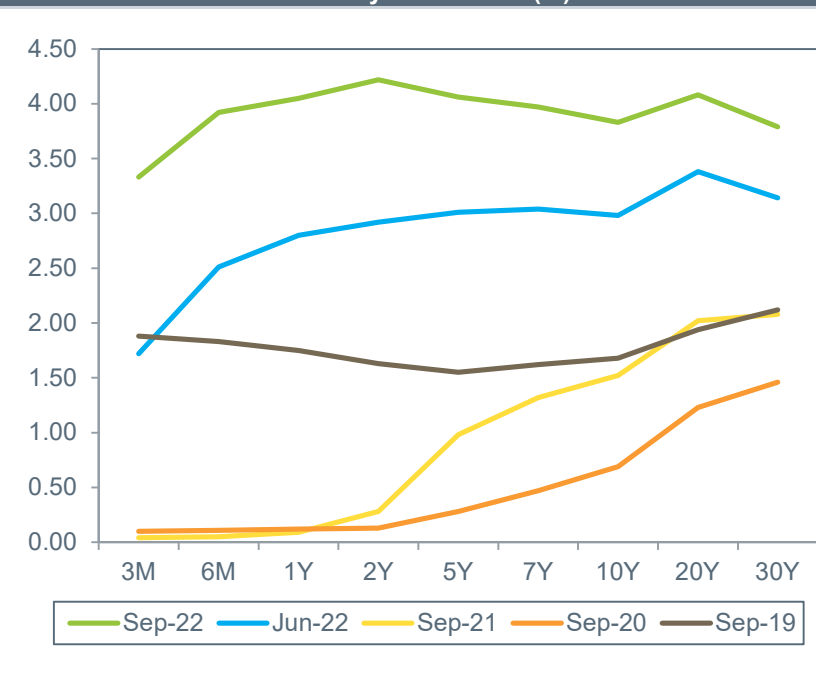
Economic Indicators

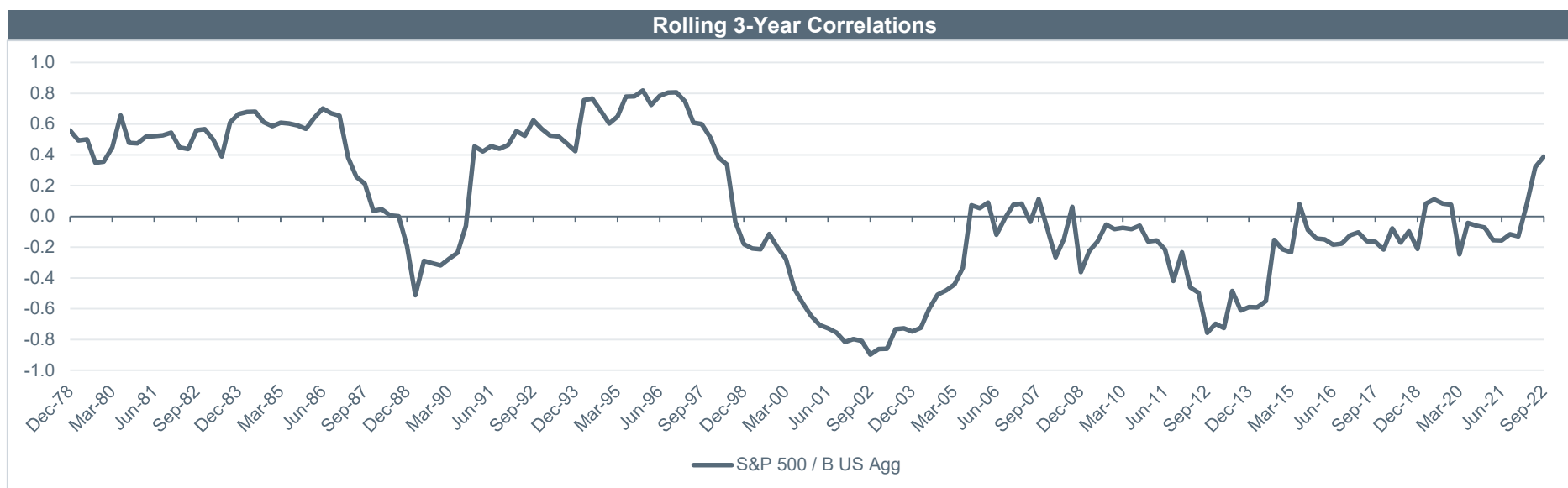
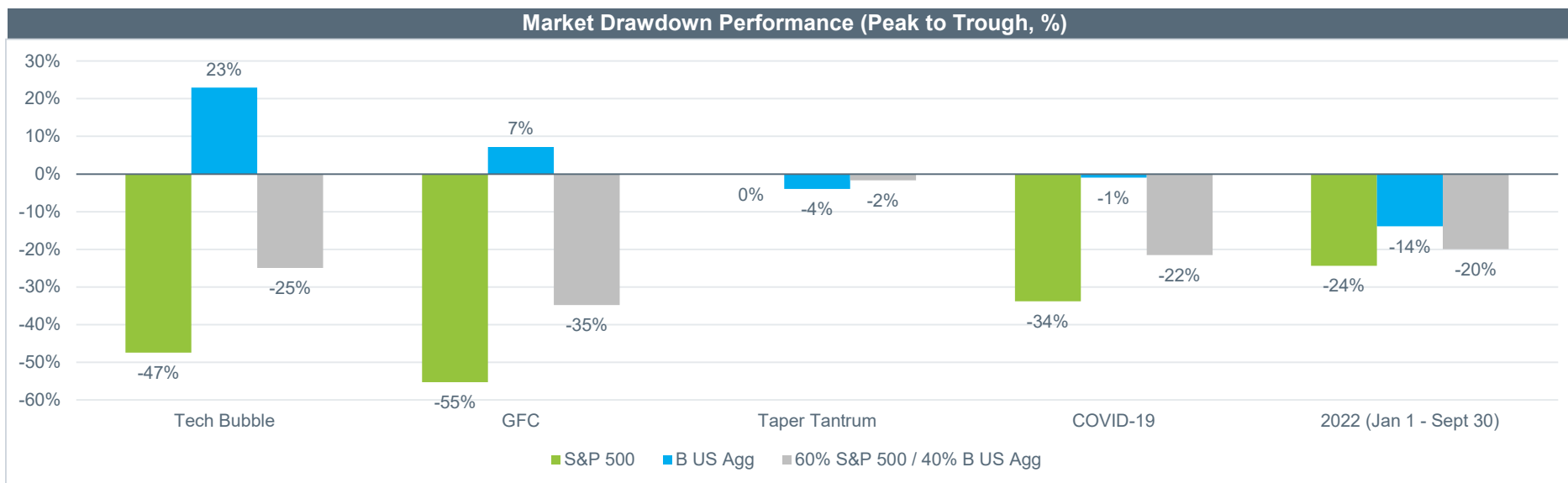
	Sep-22	Jun-22	Sep-21	Sep-19	20 Yr
Federal Funds Rate (%)	3.08 ▲	1.58	0.06	1.90	1.27
Breakeven Infl. - 5 Yr (%)	2.16 ▼	2.62	2.53	1.35	1.91
Breakeven Infl. - 10 Yr (%)	2.15 ▼	2.34	2.38	1.52	2.07
CPI YoY (Headline) (%)	8.2 ▼	9.1	5.4	1.7	2.4
Unemployment Rate (%)	3.5 ▼	3.6	4.7	3.5	6.0
Real GDP YoY (%)	1.8 =	1.8	5.0	2.3	2.0
PMI - Manufacturing	50.9 ▼	53.0	60.5	48.1	53.7
USD Total Wtd Idx	127.64 ▲	121.05	114.67	117.95	103.22
WTI Crude Oil per Barrel (\$)	79.5 ▼	105.8	75.0	54.1	67.2
Gold Spot per Oz (\$)	1,661 ▼	1,807	1,757	1,472	1,143

Market Performance (%)

	QTD	CYTD	1 Yr	5 Yr	10 Yr
S&P 500 (Cap Wtd)	-4.88	-23.87	-15.47	9.24	11.70
Russell 2000	-2.19	-25.10	-23.50	3.55	8.55
MSCI EAFE (Net)	-9.36	-27.09	-25.13	-0.84	3.67
MSCI EAFE SC (Net)	-9.83	-32.11	-32.06	-1.79	5.28
MSCI Emg Mkts (Net)	-11.57	-27.16	-28.11	-1.81	1.05
Bloomberg US Agg Bond	-4.75	-14.61	-14.60	-0.27	0.89
ICE BofAML 3 Mo US T-Bill	0.46	0.61	0.62	1.15	0.68
NCREIF ODCE (Gross)	0.52	13.08	22.09	10.24	10.92
FTSE NAREIT Eq REIT (TR)	-9.94	-28.13	-16.41	2.93	6.26
HFRI FOF Comp	-0.41	-6.97	-6.57	3.06	3.46
Bloomberg Cmdty (TR)	-4.11	13.57	11.80	6.96	-2.14

Treasury Yield Curve (%)





Source: FactSet

Drawdown performance shown is cumulative. 2022 drawdown returns use a start (peak) date of January 1, 2022 and will differ slightly from CYTD returns.

Correlation is calculated using quarterly periodicity.



Third Quarter Review

Broad Market

US equity markets continued elevated volatility in Q3. Following three consecutive calendar years with returns above 20.0%, the Russell 3000 Index has declined -24.6% year-to-date. Consumer discretionary and energy sectors provided investors with positive returns, while all other sectors were negative.

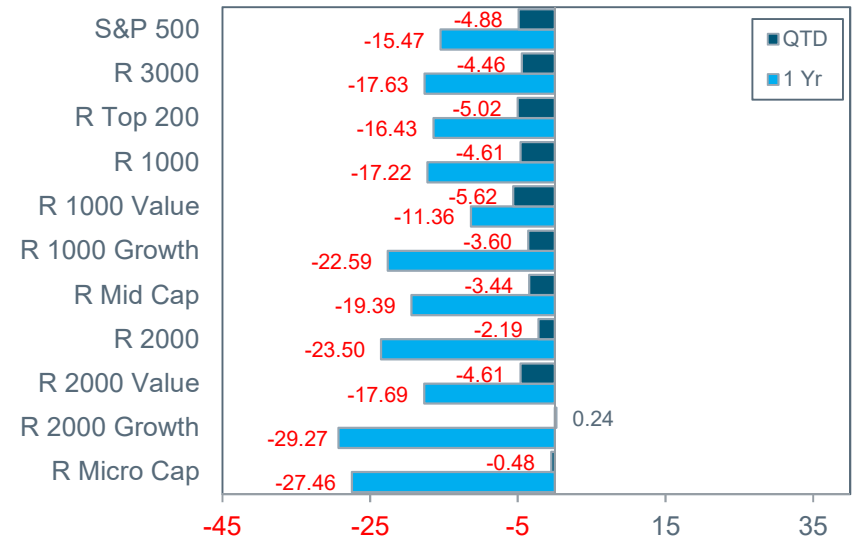
Market Cap

Large-cap stocks fell most sharply, followed by mid-cap stocks. The only exception was small-cap growth stocks, which had slightly positive returns. Overall, in a reversal of the style trend during the first half of the year, growth stocks outperformed value stocks during the quarter.

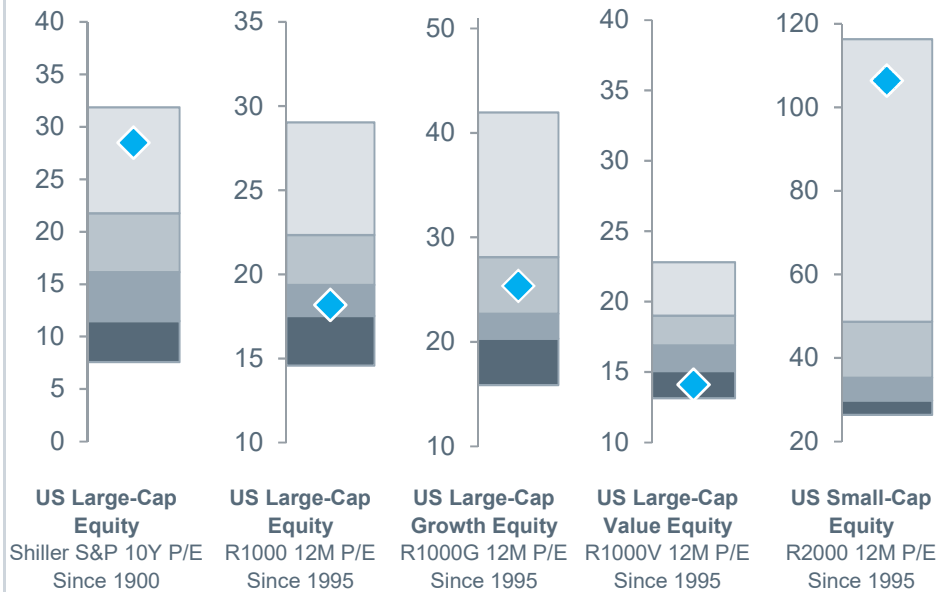
Style and Sector

Value-oriented managers had a higher success rate than core or growth managers, on average. Mid - and small-cap manager success rates versus their respective benchmarks have been higher than large-cap managers, especially among value-oriented managers.

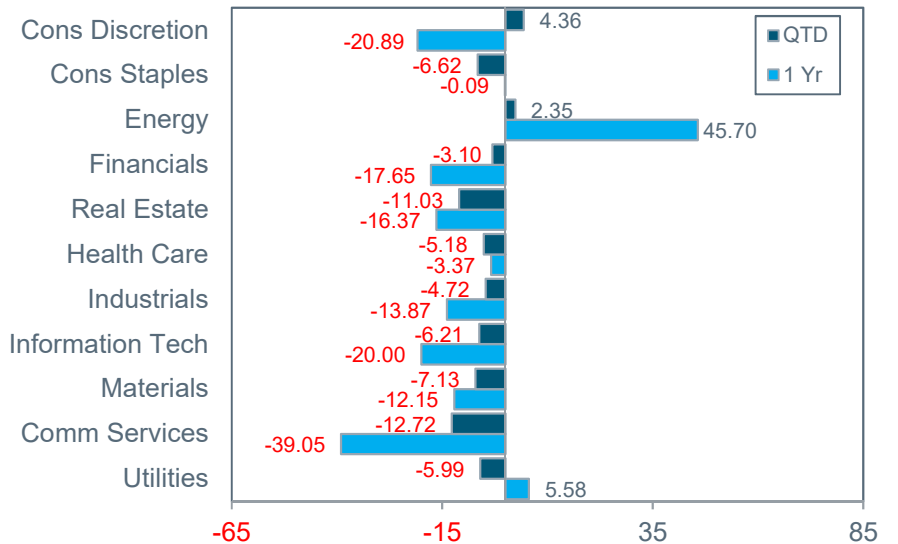
Style and Capitalization Market Performance (%)



Valuations



S&P 500 Index Sector Performance (%)



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.



Third Quarter Review

Developed Markets

Developed international stocks significantly lagged domestic stocks during Q3. Developed international growth stocks outperformed value stocks, and small-cap stocks marginally trailed large-cap stocks. European stocks slightly trailed other developed regions, although the returns of individual European countries continued to vary widely. Countries with the closest energy ties to Russia, such as Germany, faced significant sentiment headwinds. Japan, which has been largely unaffected by energy supply disruptions, was a relative bright spot among the largest developed international countries.

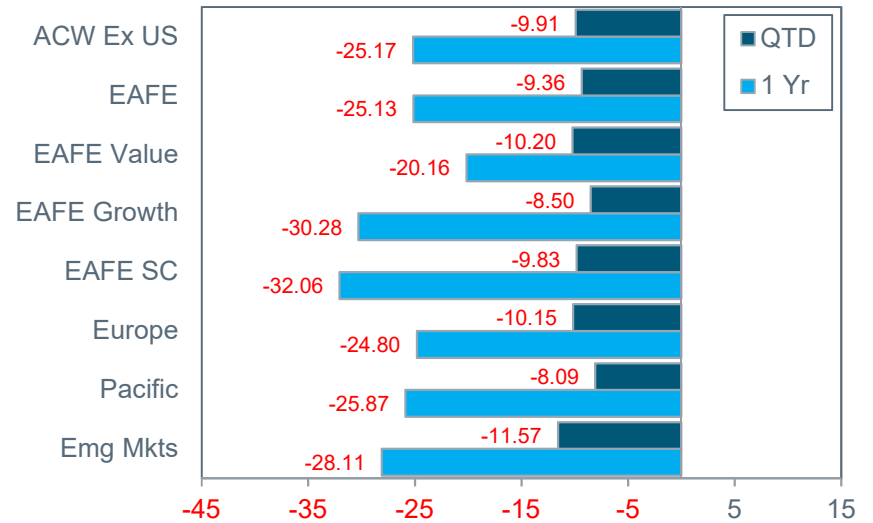
Emerging Markets

Emerging markets underperformed developed international markets in Q3 with the MSCI EM Index returning -11.57%. Nearly all emerging market countries experienced negative returns.

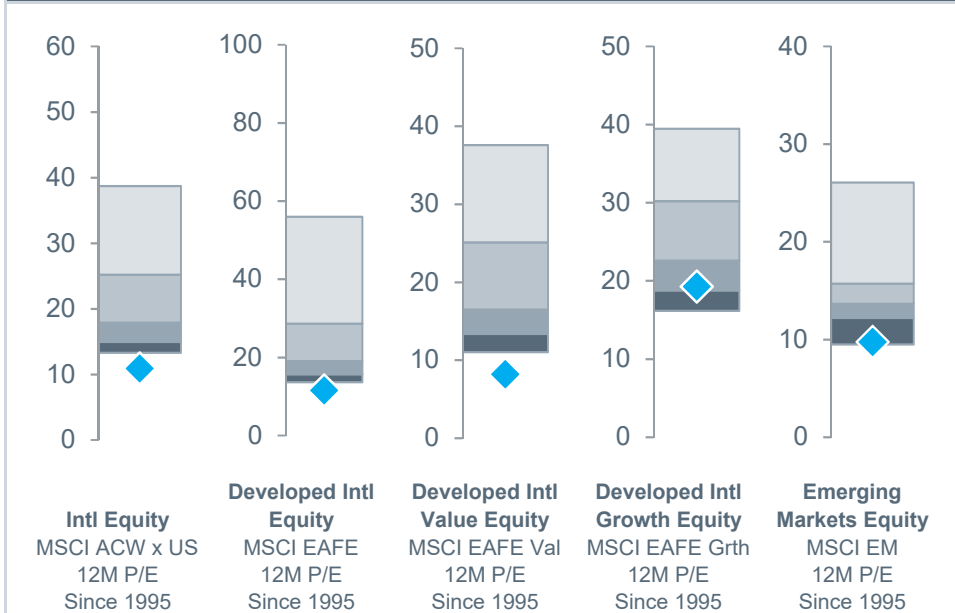
Market Cap & Style

In international markets, growth stocks outperformed value, while large-cap stocks trailed small by a wide margin.

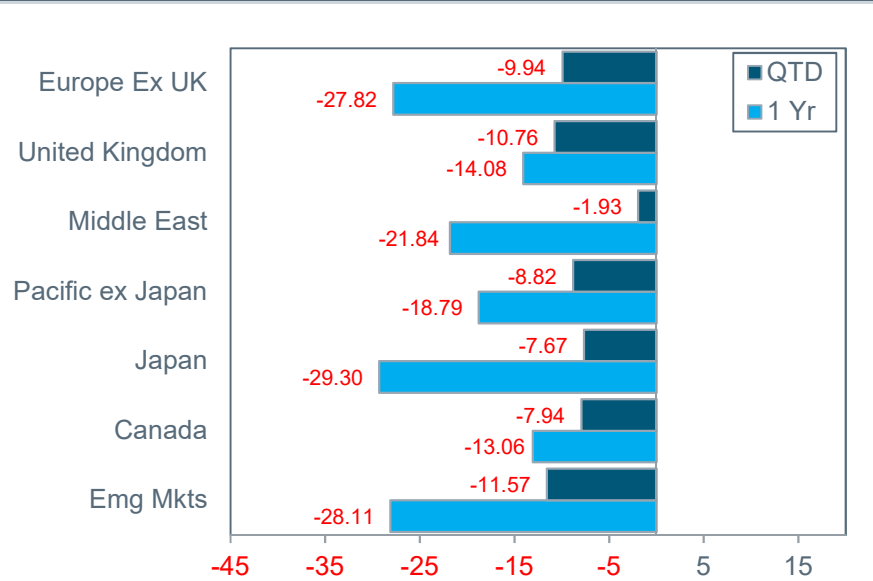
MSCI Style and Capitalization Market Performance (%)



Valuations



MSCI Region Performance (%)



Valuation data courtesy of Bloomberg Professional Service.

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

All returns are shown net of foreign taxes on dividends.



Third Quarter Review

Broad Market

In Q3, the 10-year US Treasury yields rose 85 basis points from 2.98% to 3.83%. The Federal Reserve hiked the Federal Funds rate by 75 basis points twice during the quarter, as the FOMC continued to repond to inflationary pressures. The Bloomberg US Aggregate Bond Index ended Q3 with a return of -4.8%.

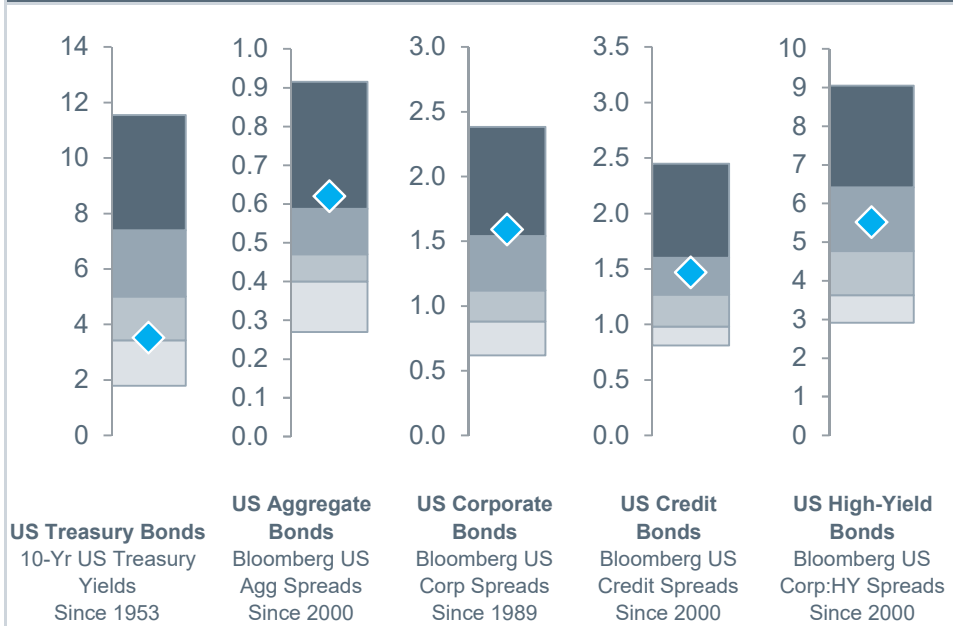
Credit Market

Investment grade underperformed both high yield and bank loans, which have relatively less interest rate sensitivity.

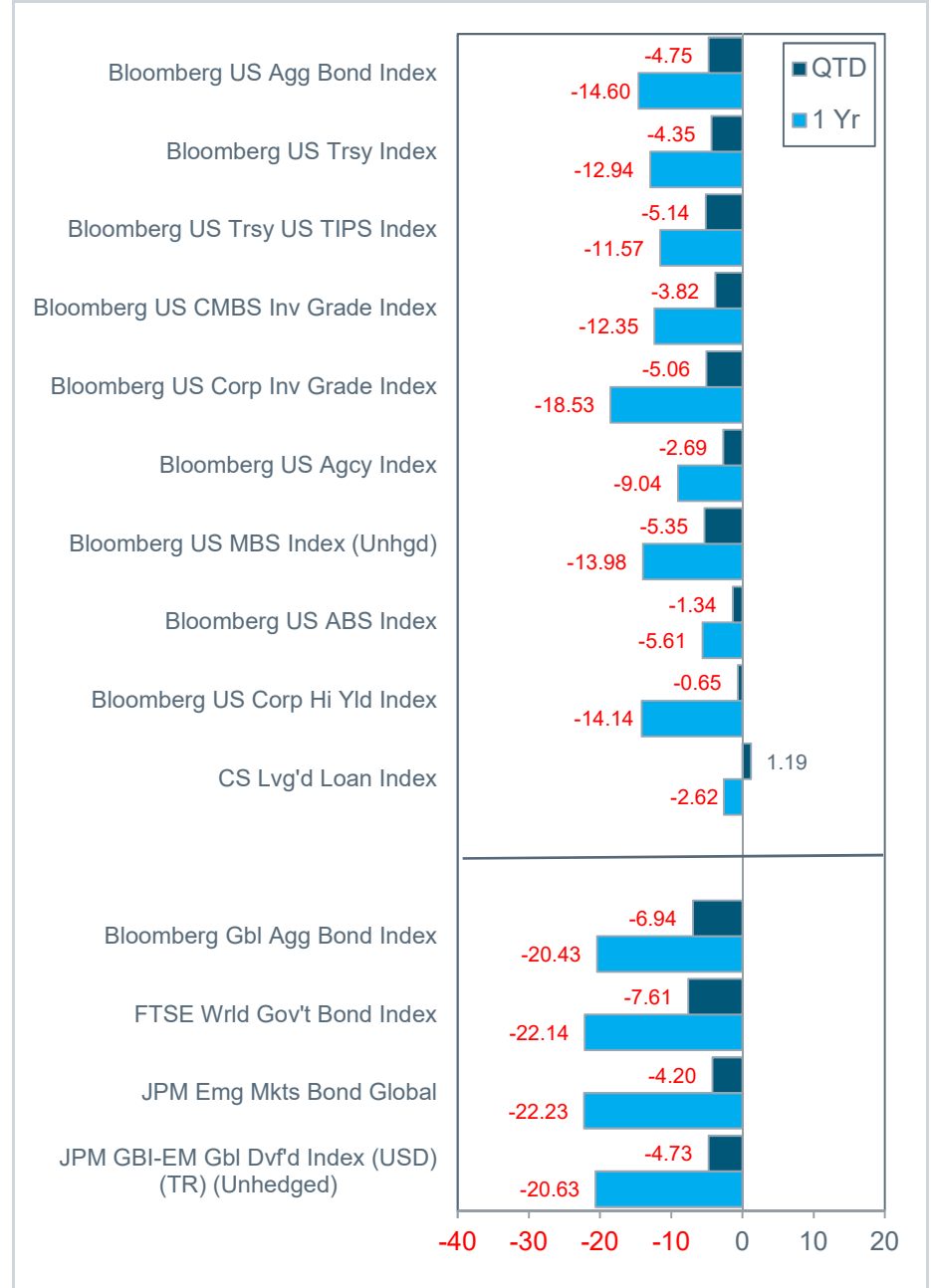
Emerging Market Debt

Emerging market debt continues to experience headwinds from the ongoing Russia-Ukraine war and US Dollar strength. Hard currency emerging market bonds declined -4.6%, while foreign developed market debt declined -10.0%, as measured by the JPM EMBI Global Diversified Index and the FTSE Non-US WGBI (Unhedged) Index, respectively.

Valuations



Fixed Income Performance (%)



Valuation data courtesy of Bloomberg Professional Service. Valuations shown represent the 5th through 95th percentiles to minimize the effect of outliers.



Third Quarter Review - Absolute Return

General Market - Hedge Funds

Dispersion continued to be the theme across hedge fund strategies during Q3. Consistent with the first six months of the year, Macro and Trend Following strategies produced positive results, taking advantage of continued upward trends in global interest rates and the US dollar. The HFRI Macro Index returned 1.7% in Q3, while the SG Trend Index rose 5.1%. For the year, Trend Followers are now up 35.6%, massively outperforming the rest of the hedge fund industry.

General Market - Global Tactical Asset Allocation (GTAA)

Global Tactical Asset Allocation (GTAA) strategies that RVK follows closely posted losses for the second consecutive quarter. Given US dollar strength and a relatively strong quarter for US equity compared to other risk asset classes, nearly all active managers providing broader diversification underperformed a US-centric blend of 60% equity and 40% fixed income. The top-performing long-biased GTAA strategies were those that have been including meaningful market neutral, idiosyncratic relative valuation exposures.

Third Quarter Review - Real Assets

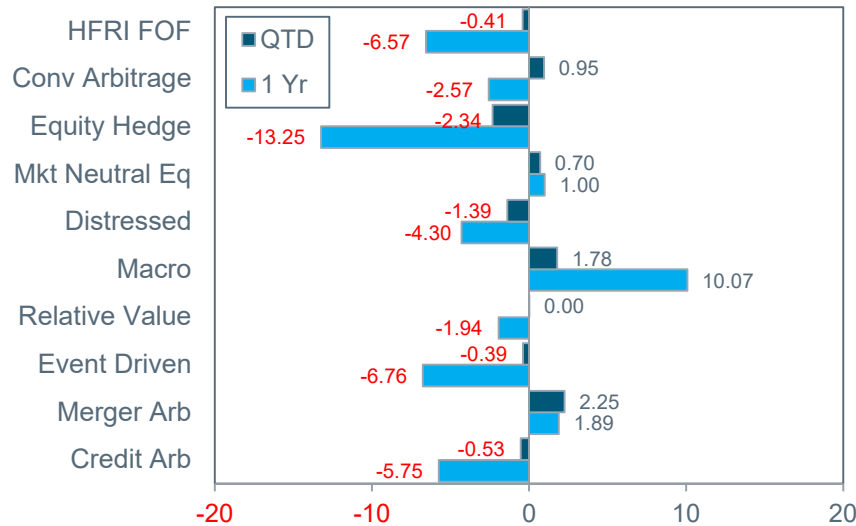
General Market - Diversified Inflation Strategies (DIS)

Despite headwinds that have affected nearly all asset classes, Diversified Inflation Strategies (DIS) tracked closely by RVK have outperformed a US-centric blend of 60% equity and 40% fixed income for the quarter and year. After responding positively to record inflationary pressures in Q1, DIS again posted losses for the second consecutive quarter ranging from the negative mid-single digits to negative low double digits.

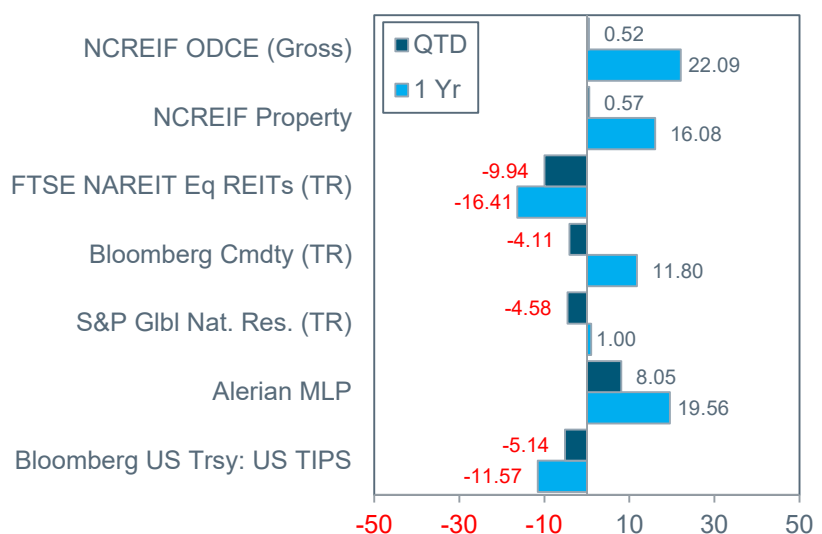
General Market - Real Estate

Core private real estate generated a positive 0.5% return in Q3 (on a preliminary and gross of fee basis), as reported by the NFI-ODCE Index, with a return contribution of 0.8% from income and -0.3% from price appreciation. The income return continues to trend at the lower end of historical levels while price appreciation turned negative. Investors of publicly traded real estate significantly underperformed their private market counterparts. Publicly traded real estate delivered a return of -11.2% in Q3, as measured by FTSE/NAREIT All REITs Index.

HFRI Hedge Fund Performance (%)



Real Asset Performance (%)



Annual Asset Class Performance

As of September 30, 2022

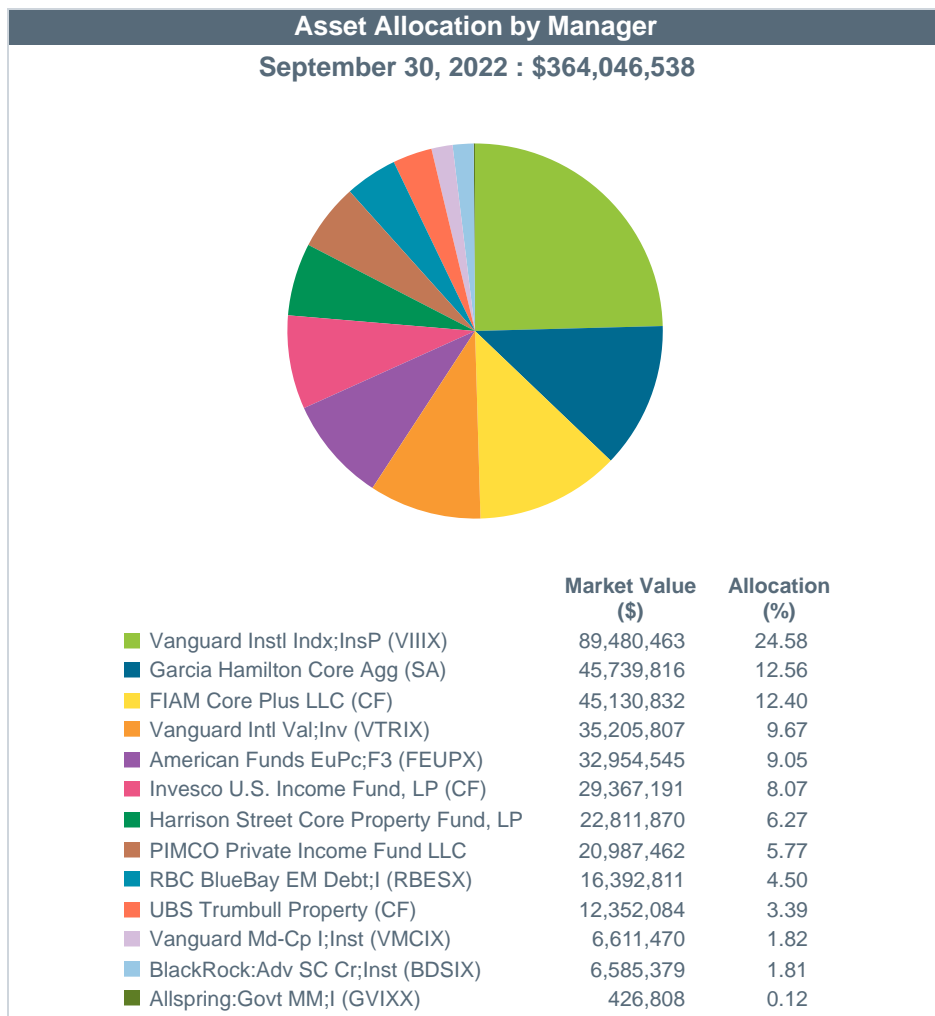
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	YTD
Best	8.44	78.51	27.94	22.49	20.00	38.82	30.14	15.02	21.31	37.28	8.35	31.49	19.96	43.24	13.57
	5.24	58.21	26.85	15.99	18.23	32.39	19.31	9.59	17.13	33.01	1.87	26.00	18.40	28.71	13.08
	2.06	46.78	22.04	13.56	18.06	29.30	13.69	3.20	11.96	25.03	0.01	25.53	18.31	27.11	0.61
	-2.35	31.78	18.88	8.29	17.32	22.78	12.50	1.38	11.77	21.83	-1.26	24.96	16.12	22.17	-6.97
	-10.01	28.01	16.83	7.84	16.35	13.94	5.97	0.55	11.19	14.65	-2.08	22.01	12.34	14.82	-13.61
	-21.37	27.17	16.36	4.98	16.00	8.96	4.89	0.05	8.77	10.71	-4.02	19.59	10.99	11.26	-14.61
	-26.16	26.46	15.12	2.11	15.81	7.44	3.64	-0.27	8.52	7.77	-4.38	18.42	10.88	10.10	-14.74
	-33.79	18.91	15.06	0.10	10.94	2.47	3.37	-0.81	6.67	7.62	-4.62	14.32	7.82	6.17	-23.87
	-35.65	11.47	10.16	-4.18	8.78	0.07	2.45	-1.44	4.68	7.50	-4.68	8.72	7.51	5.96	-25.10
	-37.00	11.41	7.75	-5.72	6.98	-2.02	0.04	-3.30	2.65	5.23	-11.01	8.43	7.11	5.28	-27.09
	-37.74	5.93	6.54	-12.14	4.79	-2.60	-2.19	-4.41	2.18	3.54	-11.25	8.39	1.19	0.05	-27.16
	-43.38	1.92	6.31	-13.32	4.21	-8.61	-4.90	-4.47	1.00	3.01	-13.73	7.69	0.67	-1.55	-28.13
	-47.01	0.21	5.70	-15.94	0.11	-8.83	-4.95	-14.92	0.51	1.70	-14.57	5.34	-3.12	-2.52	-28.94
Worst	-53.33	-29.76	0.13	-18.42	-1.06	-9.52	-17.01	-24.66	0.33	0.86	-17.89	2.28	-8.00	-2.54	-32.11
	S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Net) - Int'l Dev.	MSCI EAFE SC (Net) - Int'l SC	MSCI EM (Net) - Int'l Emg Mkts	Bloombrg US Agg Bond - FI	Bloombrg US Corp Hi Yield - FI	Bloombrg US Trsy US TIPS - FI	Bloombrg US Gov Credit Lng - FI	NCREIF ODCE (Gross) - Real Estate	FTSE NAREIT Eq REITs Index (TR)	HFRI FOF Comp Index - ARS	Bloombrg Comdty (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.



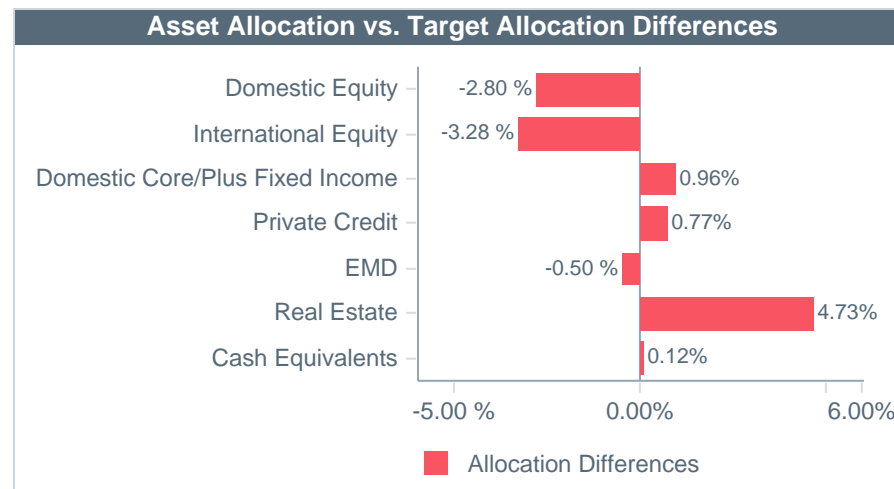
Total Portfolio





Asset Allocation vs. Target Allocation

	Market Value (\$)	Allocation (%)	Target (%)	Min (%)	Max (%)
Total Fund	364,046,538	100.00	100.00	-	-
Domestic Equity	102,677,312	28.20	31.00	26.00	36.00
International Equity	68,160,351	18.72	22.00	18.00	26.00
Domestic Core/Plus Fixed Income	90,870,648	24.96	24.00	21.00	27.00
Private Credit	20,987,462	5.77	5.00	2.00	8.00
EMD	16,392,811	4.50	5.00	0.00	8.00
Real Estate	64,531,146	17.73	13.00	10.00	16.00
Cash Equivalents	426,808	0.12	0.00	0.00	15.00



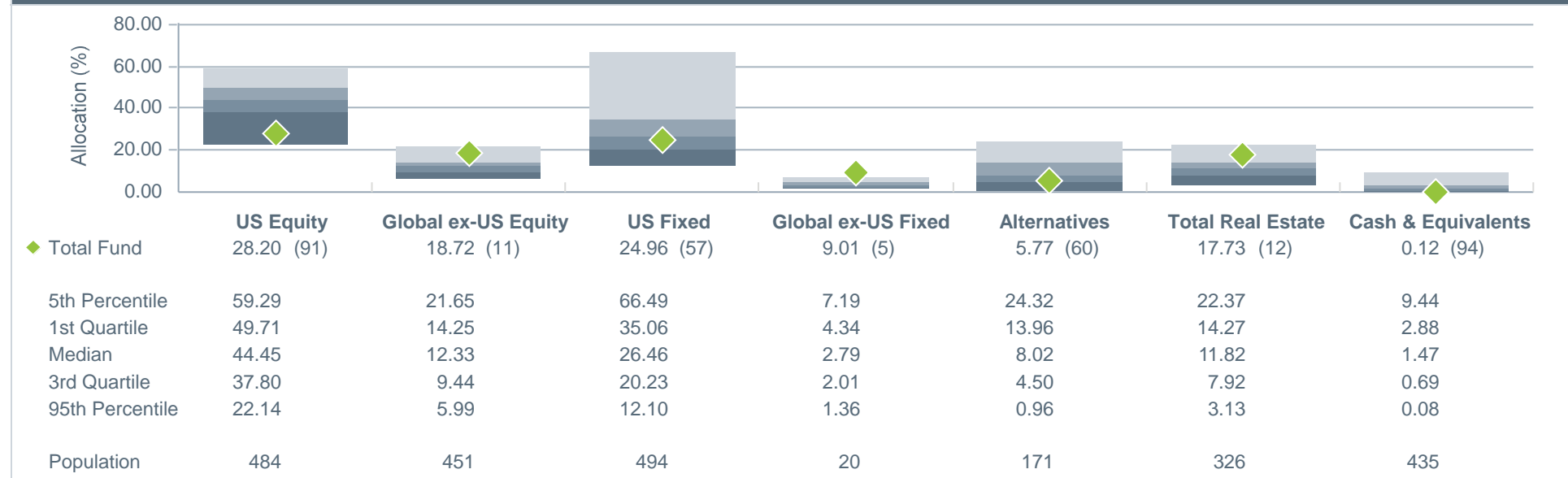
Schedule of Investable Assets

Periods Ending	Beginning Market Value (\$)	Net Cash Flow (\$)	Gain/Loss (\$)	Ending Market Value (\$)	% Return
CYTD	447,901,104	-12,622,312	-71,232,253	364,046,538	-16.31

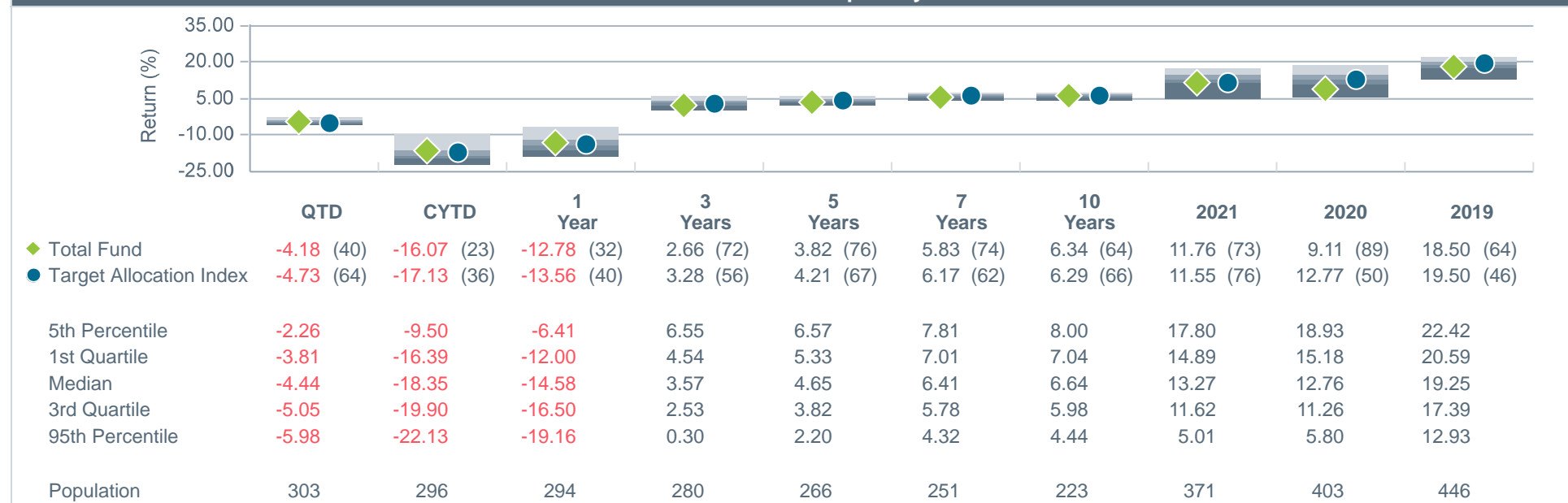
Allocations shown may not sum up to 100% exactly due to rounding. Performance shown is net of fees.



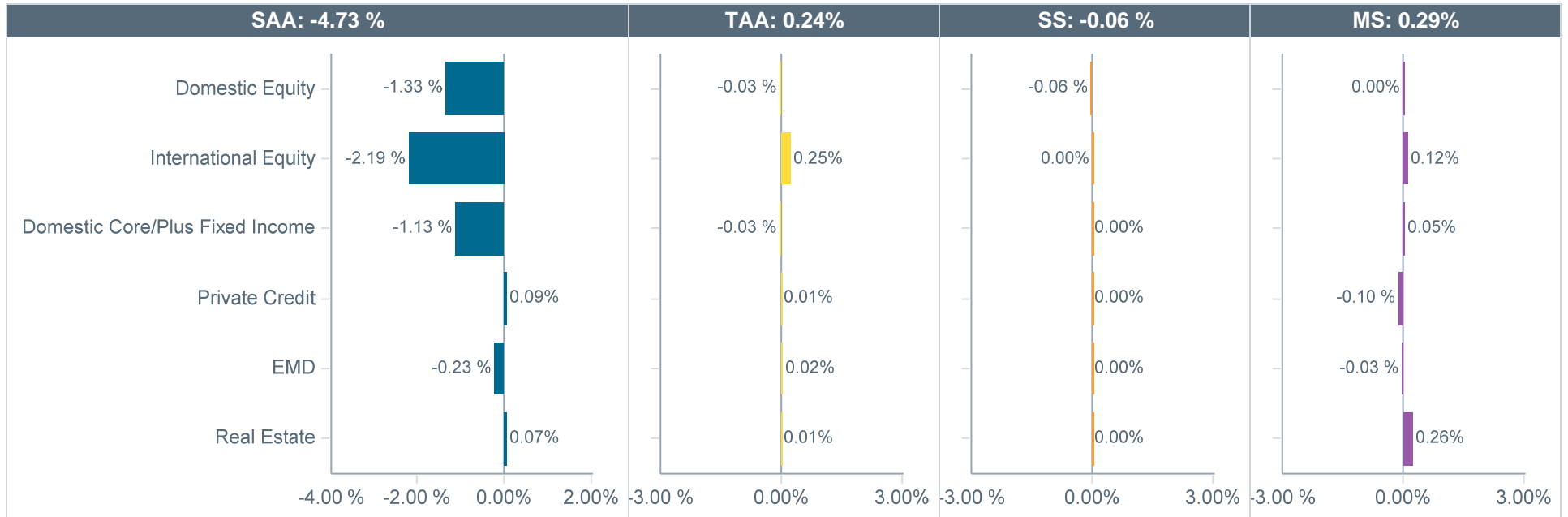
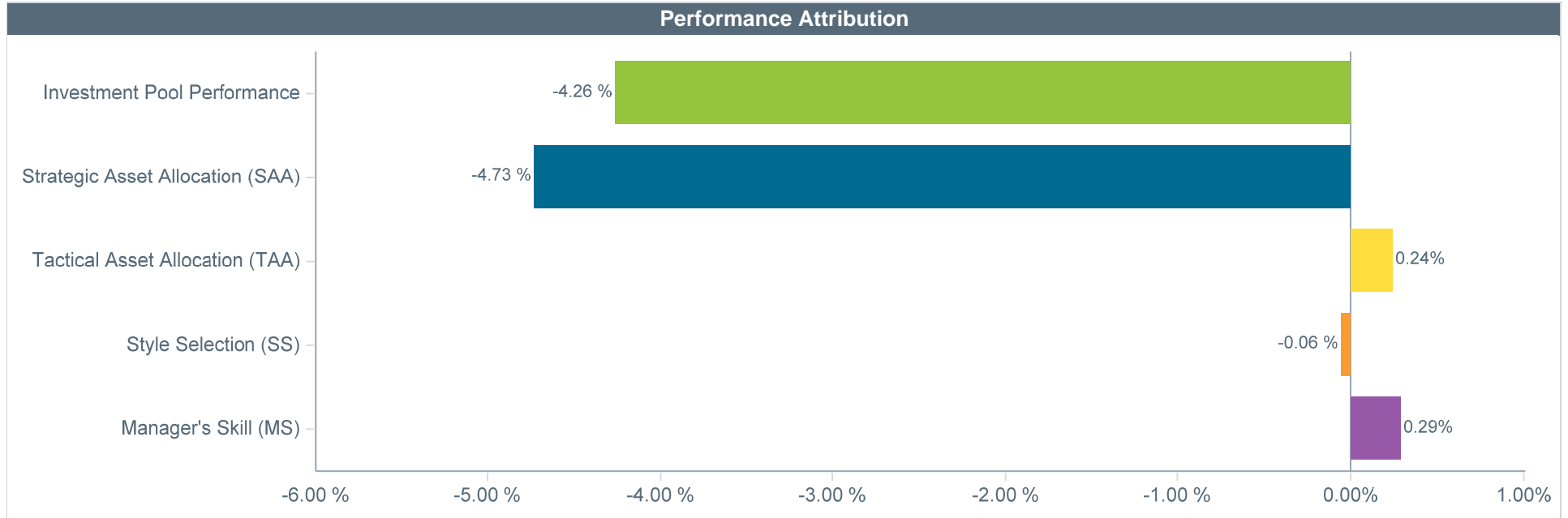
Total Fund Asset Allocation



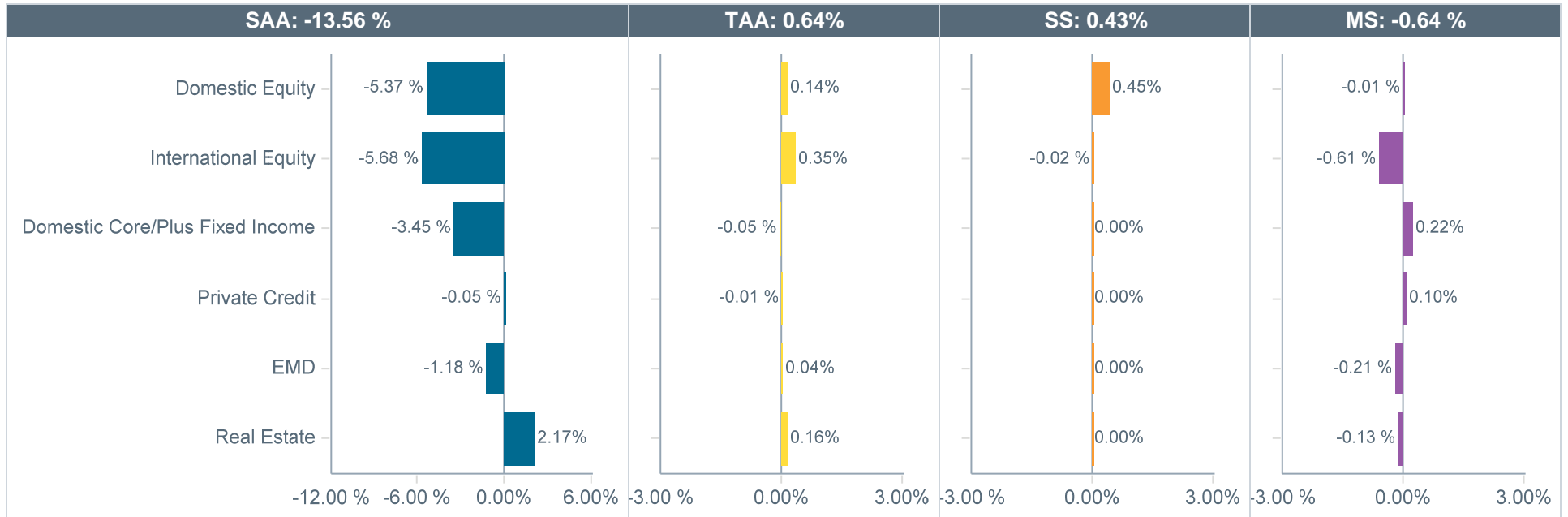
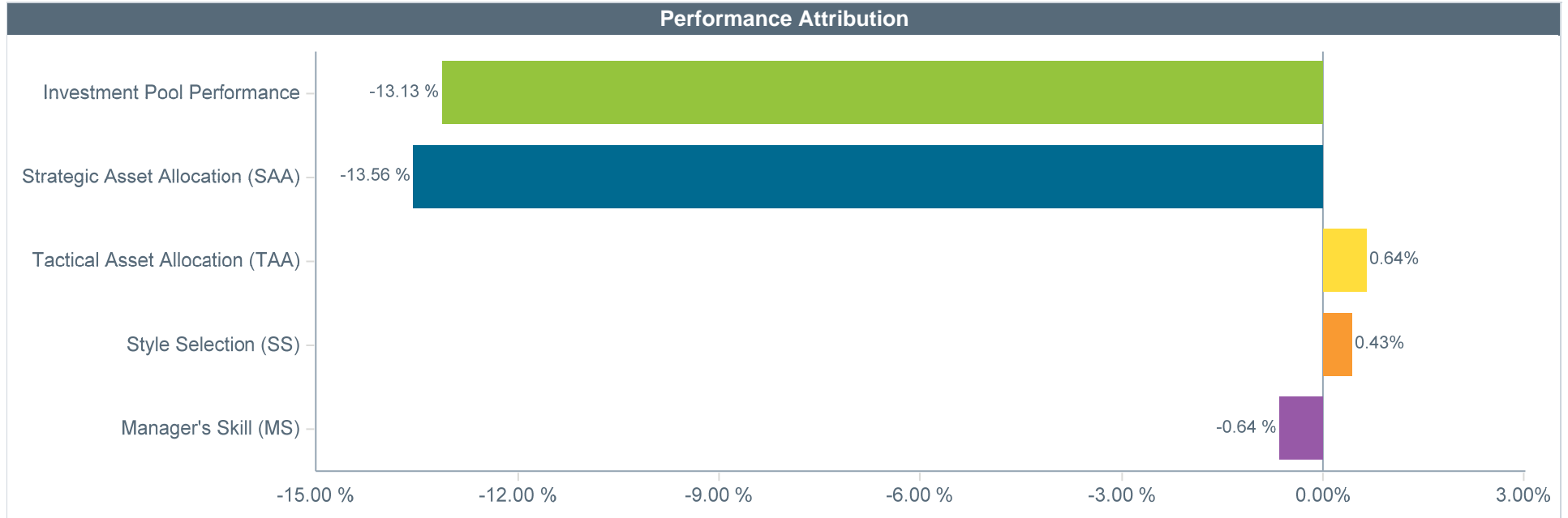
Total Fund Peer Group Analysis



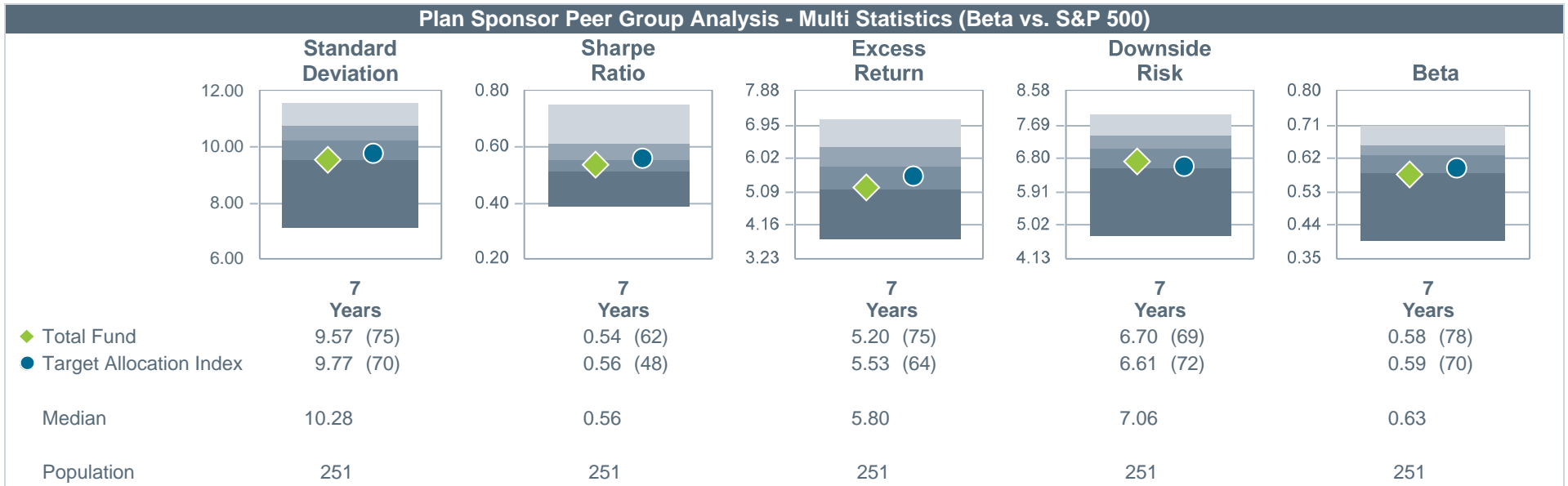
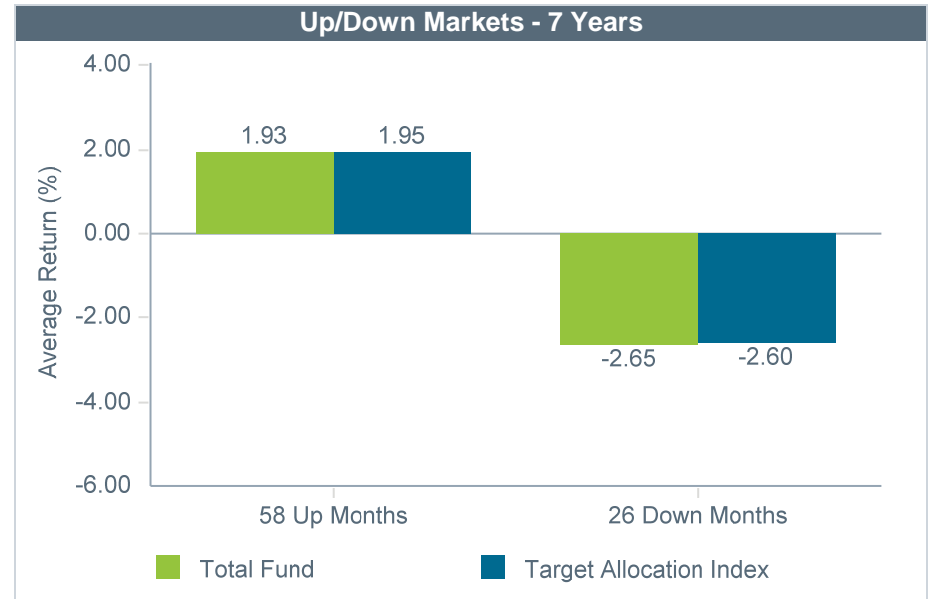
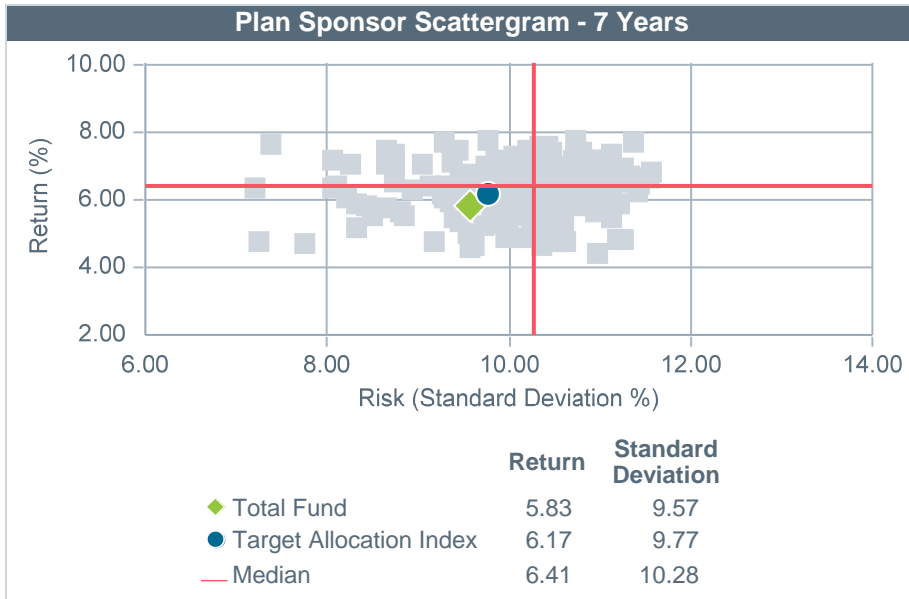
Parentheses contain percentile ranks. Performance shown is gross of fees. Composite performance prior to 01/2016 consists of gross performance for separate accounts and commingled fund investments, and net performance for mutual fund investments. Calculation is based on monthly periodicity.



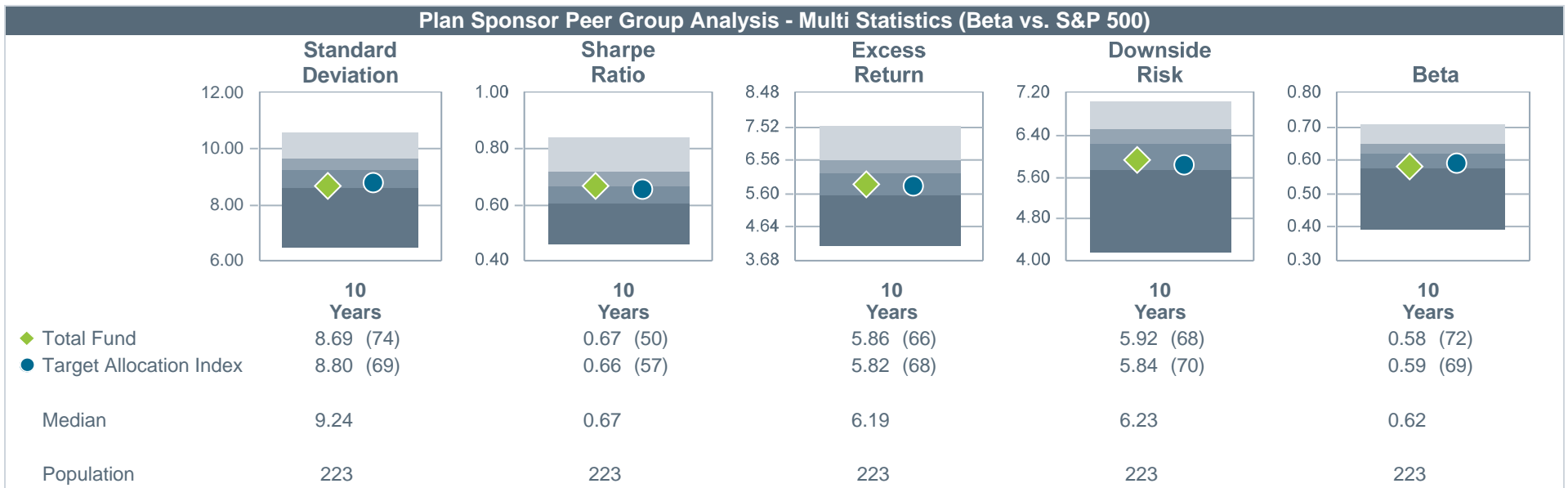
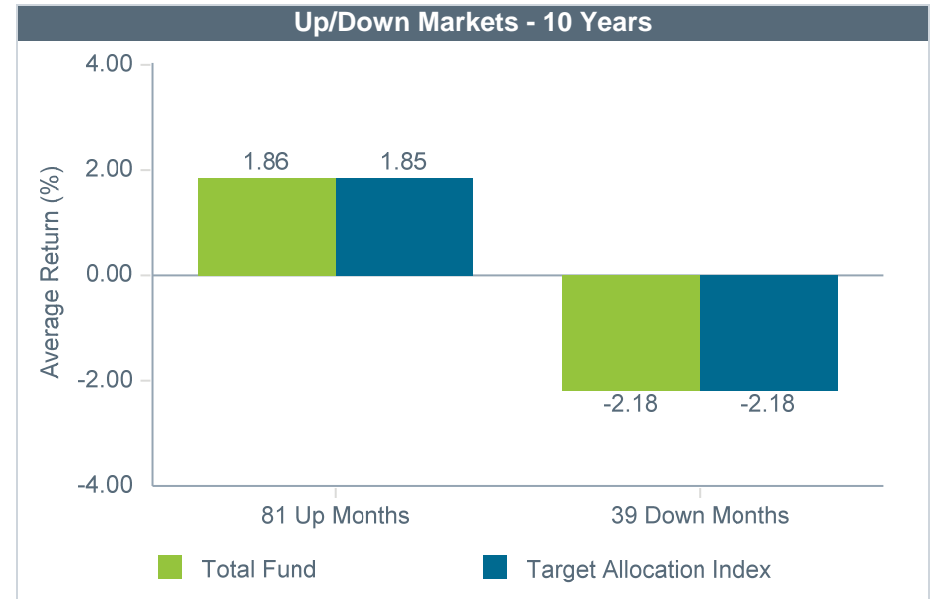
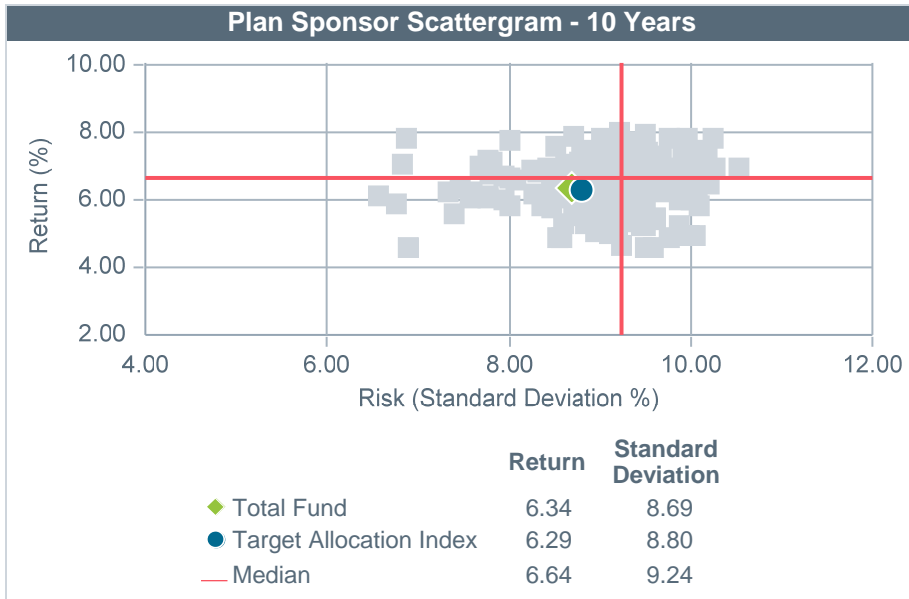
Performance shown is net of fees. Calculation is based on monthly periodicity. See Glossary for additional information regarding the Total Fund Attribution - IDP calculation.



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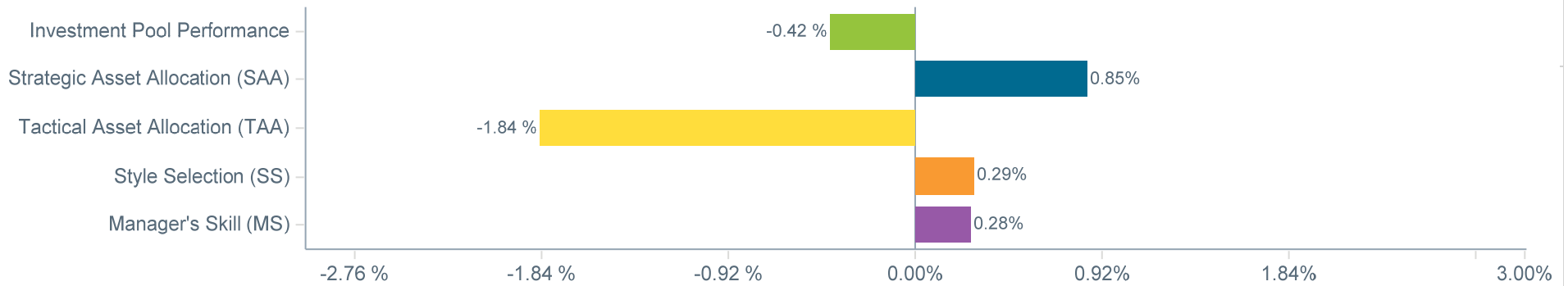
Municipality of Anchorage Trust Fund
ML&P Cash Proceeds Impact on Performance

As of September 30, 2022

Comparative Performance

	MTD	QTD	CYTD	1 Year	Since 10/01/20	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	Since Incep.	Inception Date
Total Fund	-5.67	-4.27	-16.31	-13.11	-0.42	2.31	3.46	5.44	5.98	11.37	8.75	18.08	5.24	10/01/1999
Target Allocation Index (Trust)	-6.49	-4.73	-17.13	-13.56	0.85	3.28	4.21	6.17	6.29	11.55	12.77	19.50	5.16	
Difference	0.82	0.46	0.82	0.45	-1.27	-0.97	-0.75	-0.73	-0.31	-0.18	-4.02	-1.42	0.08	
Target Allocation Index (Wtd Cash) (Trust)	-6.49	-4.73	-17.13	-13.56	-0.73	2.20	3.55	-	-	11.55	9.26	19.50	-	
Difference	0.82	0.46	0.82	0.45	0.31	0.11	-0.09	-	-	-0.18	-0.51	-1.42	-	
Consumer Price Index+4.5%	0.58	1.28	10.03	13.07	11.59	9.67	8.43	7.85	7.13	11.85	5.92	6.89	7.12	
Difference	-6.25	-5.55	-26.34	-26.18	-12.01	-7.36	-4.97	-2.41	-1.15	-0.48	2.83	11.19	-1.88	
Total Fund Ex-Cash	-5.68	-4.26	-16.33	-13.13	1.16	3.40	4.12	-	-	11.55	12.11	18.08	5.73	01/01/2016
Target Allocation Index (Trust)	-6.49	-4.73	-17.13	-13.56	0.85	3.28	4.21	6.17	6.29	11.55	12.77	19.50	5.92	
Difference	0.81	0.47	0.80	0.43	0.31	0.12	-0.09	-	-	0.00	-0.66	-1.42	-0.19	

Performance Attribution - Since 10/01/2020

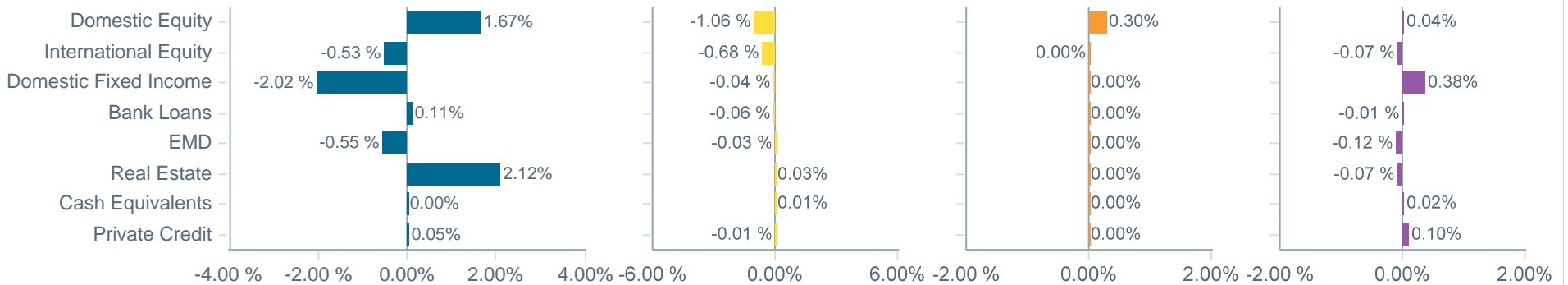


SAA: 0.85%

TAA: -1.84%

SS: 0.29%

MS: 0.28%



Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions. The Target Allocation Index (Weighted Cash) (Trust) consists of a 37% allocation to cash during 11/2020 and a 12% allocation to cash during 12/2020. Remaining allocations were adjusted on a pro rata basis to fill the remaining stated targets.



Municipality of Anchorage Trust Fund
Comparative Performance

As of September 30, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	Since Incep.	Inception Date
Total Fund	-4.27	-16.31	-13.11	2.31	3.46	5.44	5.98	11.37	8.75	18.08	-4.49	5.24	10/01/1999
Target Allocation Index (Trust)	-4.73	-17.13	-13.56	3.28	4.21	6.17	6.29	11.55	12.77	19.50	-4.93	5.16	
Difference	0.46	0.82	0.45	-0.97	-0.75	-0.73	-0.31	-0.18	-4.02	-1.42	0.44	0.08	
Consumer Price Index+4.5%	1.28	10.03	13.07	9.67	8.43	7.85	7.13	11.85	5.92	6.89	6.50	7.12	
Difference	-5.55	-26.34	-26.18	-7.36	-4.97	-2.41	-1.15	-0.48	2.83	11.19	-10.99	-1.88	
Domestic Equity	-4.68	-24.08	-16.31	7.41	8.60	10.52	11.13	27.79	17.14	31.54	-4.88	6.56	10/01/1999
Russell 3000 Index	-4.46	-24.62	-17.63	7.70	8.62	10.90	11.39	25.66	20.89	31.02	-5.24	6.85	
Difference	-0.22	0.54	1.32	-0.29	-0.02	-0.38	-0.26	2.13	-3.75	0.52	0.36	-0.29	
Domestic Large Cap Equity	-4.89	-23.88	-15.50	7.77	9.00	10.96	11.52	28.85	17.02	31.55	-4.42	6.58	10/01/1999
Russell 1000 Index	-4.61	-24.59	-17.22	7.95	9.00	11.15	11.60	26.45	20.96	31.43	-4.78	6.80	
Difference	-0.28	0.71	1.72	-0.18	0.00	-0.19	-0.08	2.40	-3.94	0.12	0.36	-0.22	
Vanguard Instl Indx;InsP (VMIIX)	-4.89	-23.88	-15.49	8.15	9.22	11.38	11.68	28.69	18.40	31.46	-4.42	6.58	10/01/1999
S&P 500 Index (Cap Wtd)	-4.88	-23.87	-15.47	8.16	9.24	11.40	11.70	28.71	18.40	31.49	-4.38	6.57	
Difference	-0.01	-0.01	-0.02	-0.01	-0.02	-0.02	-0.02	-0.02	0.00	-0.03	-0.04	0.01	
IM U.S. Large Cap Core Equity (MF) Median	-5.16	-24.48	-17.11	7.23	8.43	10.39	10.78	26.95	18.39	30.64	-5.45	6.14	
Rank	42	40	31	24	27	15	16	26	50	37	32	33	
Domestic Mid Cap Equity	-4.14	-25.43	-19.53	5.02	6.38	8.51	10.32	24.65	16.61	31.09	-9.23	8.02	07/01/2006
Vanguard Spl Mid Cap Index	-4.14	-25.42	-19.47	5.48	6.66	8.71	10.48	24.52	18.24	31.09	-9.22	8.13	
Difference	0.00	-0.01	-0.06	-0.46	-0.28	-0.20	-0.16	0.13	-1.63	0.00	-0.01	-0.11	
Vanguard Md-Cp I;Inst (VMCIX)	-4.14	-25.42	-19.48	5.48	6.65	8.69	10.45	24.53	18.23	31.03	-9.23	8.10	07/01/2006
Vanguard Spl Mid Cap Index	-4.14	-25.42	-19.47	5.48	6.66	8.71	10.48	24.52	18.24	31.09	-9.22	8.13	
Difference	0.00	0.00	-0.01	0.00	-0.01	-0.02	-0.03	0.01	-0.01	-0.06	-0.01	-0.03	
IM U.S. Mid Cap Core Equity (MF) Median	-4.32	-20.76	-14.07	4.68	5.27	7.43	8.80	25.73	8.44	28.59	-11.64	6.81	
Rank	43	93	91	37	19	19	13	60	15	27	22	14	
Domestic Small Cap Equity	-2.31	-25.46	-23.59	4.11	4.54	6.39	6.57	15.69	17.88	32.15	-8.83	5.20	01/01/2000
Small Cap Custom Index	-2.19	-25.10	-23.50	4.29	3.55	6.52	8.38	14.82	19.96	25.53	-11.01	7.05	
Difference	-0.12	-0.36	-0.09	-0.18	0.99	-0.13	-1.81	0.87	-2.08	6.62	2.18	-1.85	
BlackRock:Adv SC Cr;Inst (BDSIX)	-2.31	-25.46	-23.59	4.30	4.64	-	-	14.67	19.57	32.12	-8.83	6.04	12/01/2016
Russell 2000 Index	-2.19	-25.10	-23.50	4.29	3.55	7.51	8.55	14.82	19.96	25.53	-11.01	5.39	
Difference	-0.12	-0.36	-0.09	0.01	1.09	-	-	-0.15	-0.39	6.59	2.18	0.65	
IM U.S. Small Cap Core Equity (MF) Median	-4.48	-23.02	-18.44	4.60	3.57	6.98	8.28	25.12	9.89	23.94	-12.71	4.85	
Rank	19	81	90	55	26	-	-	91	14	3	13	26	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions.



Municipality of Anchorage Trust Fund
Comparative Performance

As of September 30, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	Since Incep.	Inception Date
International Equity	-9.30	-27.92	-27.64	-1.37	-1.48	2.39	3.26	5.82	15.22	19.36	-14.87	4.36	10/01/1999
MSCI ACW Ex US Index (USD) (Net)	-9.91	-26.50	-25.17	-1.52	-0.81	3.29	3.01	7.82	10.65	21.51	-14.20	3.48	
Difference	0.61	-1.42	-2.47	0.15	-0.67	-0.90	0.25	-2.00	4.57	-2.15	-0.67	0.88	
Vanguard Intl Val;Inv (VTRIX)	-9.27	-23.69	-22.20	-	-	-	-	7.97	-	-	-	3.80	06/01/2020
MSCI ACW Ex US Val Index (USD) (Net)	-10.44	-21.00	-20.02	-2.15	-2.12	2.24	1.87	10.46	-0.77	15.72	-13.97	4.87	
Difference	1.17	-2.69	-2.18	-	-	-	-	-2.49	-	-	-	-1.07	
IM ACWI Ex US Value (MF) Median	-12.12	-24.63	-23.18	-2.24	-2.73	1.06	1.36	10.01	3.69	17.82	-16.03	3.11	
Rank	4	35	28	-	-	-	-	73	-	-	-	23	
American Funds EuPc;F3 (FEUPX)	-9.34	-32.10	-32.86	-1.25	-0.24	3.72	4.47	2.85	25.24	27.42	-14.91	5.02	10/01/1999
MSCI ACW Ex US Grth Index (USD) (Net)	-9.37	-31.84	-30.22	-1.38	0.18	4.09	3.95	5.09	22.20	27.34	-14.43	-	
Difference	0.03	-0.26	-2.64	0.13	-0.42	-0.37	0.52	-2.24	3.04	0.08	-0.48	-	
IM ACWI Ex US Growth (MF) Median	-9.49	-34.76	-33.41	-1.27	-0.09	3.52	3.87	7.93	22.75	27.84	-14.32	4.35	
Rank	39	33	35	50	54	45	34	77	36	59	57	15	
Domestic Fixed Income	-3.81	-11.48	-11.18	-1.70	0.72	1.86	1.77	-0.07	6.90	8.75	0.11	4.53	10/01/1999
Bloomberg US Agg Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.54	0.89	-1.55	7.51	8.72	0.01	3.90	
Difference	0.94	3.13	3.42	1.56	0.99	1.32	0.88	1.48	-0.61	0.03	0.10	0.63	
Domestic Core/Plus Fixed Income	-4.56	-13.80	-13.65	-2.59	0.22	-	-	-0.87	7.80	8.89	0.17	1.67	01/01/2016
Bloomberg US Agg Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.54	0.89	-1.55	7.51	8.72	0.01	0.65	
Difference	0.19	0.81	0.95	0.67	0.49	-	-	0.68	0.29	0.17	0.16	1.02	
FIAM Core Plus LLC (CF)	-3.77	-14.30	-13.95	-2.20	0.51	1.74	1.80	0.68	7.52	10.49	-0.54	3.76	10/01/2007
Bloomberg US Agg Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.54	0.89	-1.55	7.51	8.72	0.01	2.74	
Difference	0.98	0.31	0.65	1.06	0.78	1.20	0.91	2.23	0.01	1.77	-0.55	1.02	
IM U.S. Broad Market Core+ Fixed Income (MF) Median	-4.43	-15.30	-15.42	-2.91	-0.20	0.83	1.11	-0.94	8.59	9.32	-0.95	3.06	
Rank	13	20	12	23	16	11	15	8	72	21	34	11	
Garcia Hamilton Core Agg (SA)	-5.33	-13.29	-13.35	-2.89	-	-	-	-2.40	8.34	7.31	-	-0.03	02/01/2018
Bloomberg US Agg Bond Index	-4.75	-14.61	-14.60	-3.26	-0.27	0.54	0.89	-1.55	7.51	8.72	0.01	-0.13	
Difference	-0.58	1.32	1.25	0.37	-	-	-	-0.85	0.83	-1.41	-	0.10	
IM U.S. Broad Market Core Fixed Income (MF) Median	-4.67	-15.17	-15.29	-3.22	-0.33	0.58	0.90	-1.33	8.15	8.76	-0.62	-0.23	
Rank	90	8	7	28	-	-	-	95	44	88	-	32	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions.

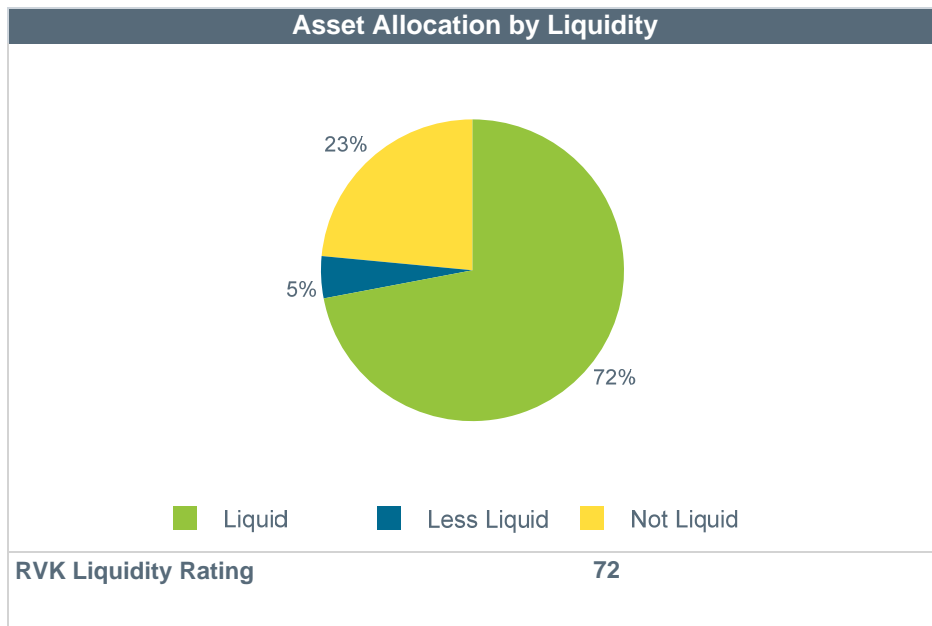
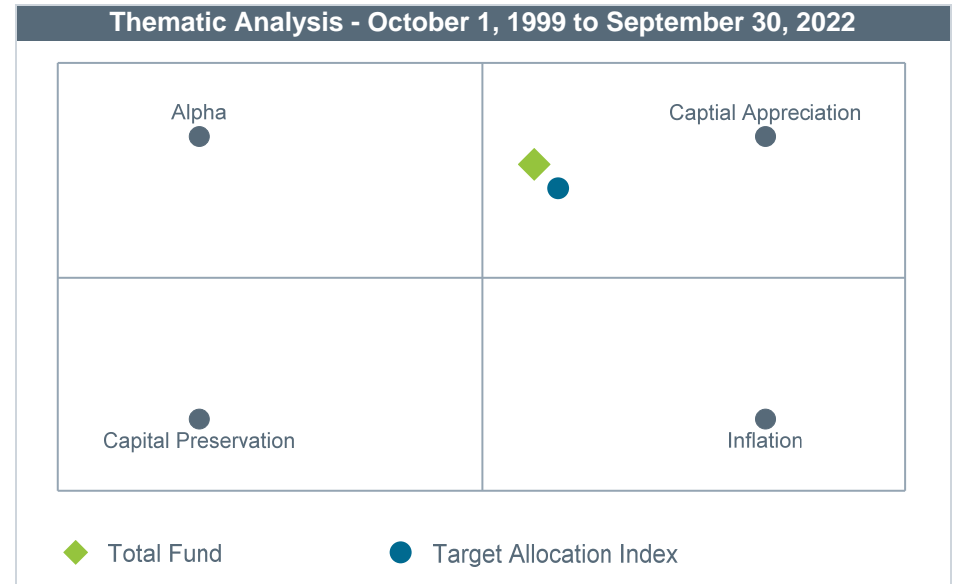
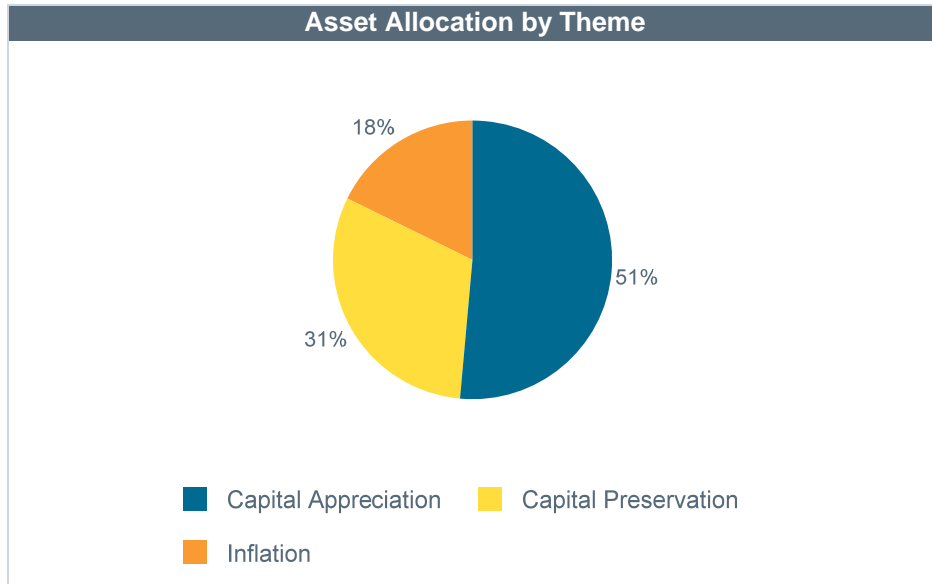


Municipality of Anchorage Trust Fund
Comparative Performance

As of September 30, 2022

	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	Since Incep.	Inception Date
Private Credit	-0.43	0.16	1.36	-	-	-	-	-	-	-	-	3.72	06/01/2021
CS Lvg'd Loan Index+2%	1.69	-1.87	-0.68	4.16	5.06	5.74	5.77	7.51	4.83	10.34	3.16	1.14	
Difference	-2.12	2.03	2.04	-	-	-	-	-	-	-	-	2.58	
PIMCO Private Income Fund LLC	-0.43	0.16	1.36	-	-	-	-	-	-	-	-	3.72	06/01/2021
CS Lvg'd Loan Index+2%	1.69	-1.87	-0.68	4.16	5.06	5.74	5.77	7.51	4.83	10.34	3.16	1.14	
Difference	-2.12	2.03	2.04	-	-	-	-	-	-	-	-	2.58	
Emerging Markets Debt	-5.14	-25.05	-27.12	-9.26	-	-	-	-6.44	4.04	12.57	-	-4.29	07/01/2018
EMD Blended Index	-4.57	-22.64	-23.22	-6.96	-	-	-	-2.83	4.56	13.59	-	-2.44	
Difference	-0.57	-2.41	-3.90	-2.30	-	-	-	-3.61	-0.52	-1.02	-	-1.85	
RBC BlueBay EM Debt;I (RBESX)	-5.14	-22.81	-23.27	-6.42	-	-	-	-2.76	7.01	15.38	-	-1.56	07/01/2018
JPM Emg Mkts Bond Gbl Dvf'd Index (TR)	-4.57	-23.95	-24.28	-7.15	-2.62	0.90	1.08	-1.80	5.26	15.04	-4.26	-2.11	
Difference	-0.57	1.14	1.01	0.73	-	-	-	-0.96	1.75	0.34	-	0.55	
IM Emerging Markets Debt (MF) Median	-4.31	-22.11	-22.95	-6.11	-2.81	0.86	0.00	-2.97	5.74	13.63	-5.92	-2.13	
Rank	81	66	58	58	-	-	-	47	29	16	-	36	
Real Estate	1.85	13.79	18.83	8.46	6.08	6.03	7.23	17.92	-4.78	-2.92	6.04	4.76	10/01/2007
NCREIF ODCE Index (AWA) (Net)	0.31	12.36	20.96	11.38	9.26	8.87	9.91	21.02	0.34	4.39	7.36	5.78	
Difference	1.54	1.43	-2.13	-2.92	-3.18	-2.84	-2.68	-3.10	-5.12	-7.31	-1.32	-1.02	
UBS Trumbull Property (CF)	-0.19	11.03	16.41	6.82	5.12	5.35	6.75	15.48	-4.78	-2.92	6.04	4.45	10/01/2007
NCREIF ODCE Index (AWA) (Net)	0.31	12.36	20.96	11.38	9.26	8.87	9.91	21.02	0.34	4.39	7.36	5.78	
Difference	-0.50	-1.33	-4.55	-4.56	-4.14	-3.52	-3.16	-5.54	-5.12	-7.31	-1.32	-1.33	
Invesco U.S. Income Fund, LP (CF)	2.58	17.47	24.21	-	-	-	-	25.00	-	-	-	24.55	01/01/2021
NCREIF ODCE Index (AWA) (Net)	0.31	12.36	20.96	11.38	9.26	8.87	9.91	21.02	0.34	4.39	7.36	19.19	
Difference	2.27	5.11	3.25	-	-	-	-	3.98	-	-	-	5.36	
Harrison Street Core Property Fund, LP	2.04	10.92	13.77	-	-	-	-	-	-	-	-	12.96	04/01/2021
NCREIF ODCE Index (AWA) (Net)	0.31	12.36	20.96	11.38	9.26	8.87	9.91	21.02	0.34	4.39	7.36	21.21	
Difference	1.73	-1.44	-7.19	-	-	-	-	-	-	-	-	-8.25	

Performance shown is net of fees. Performance is annualized for periods greater than one year. Please see the Addendum for custom index definitions.



Correlation Matrix - 10 Years

	A	B	C	D
A	1.00			
B	0.56	1.00		
C	-0.15	-0.03	1.00	
D	0.48	0.77	0.10	1.00

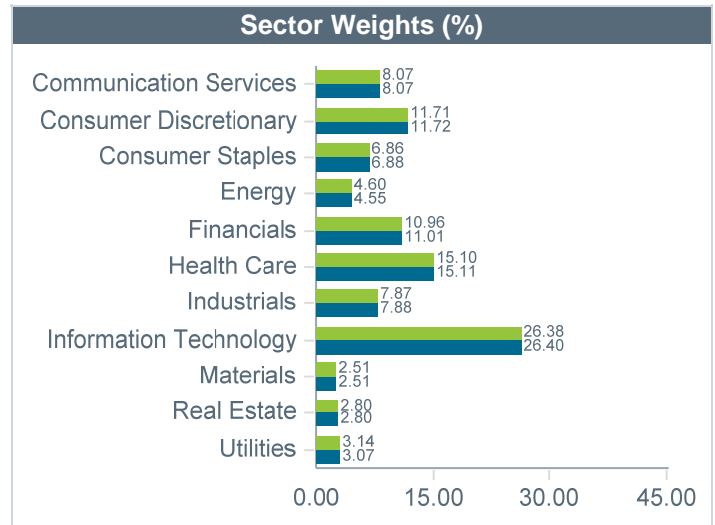
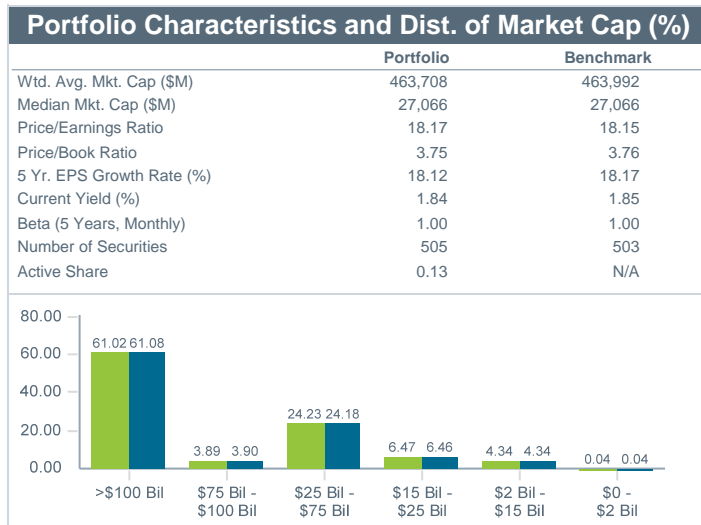
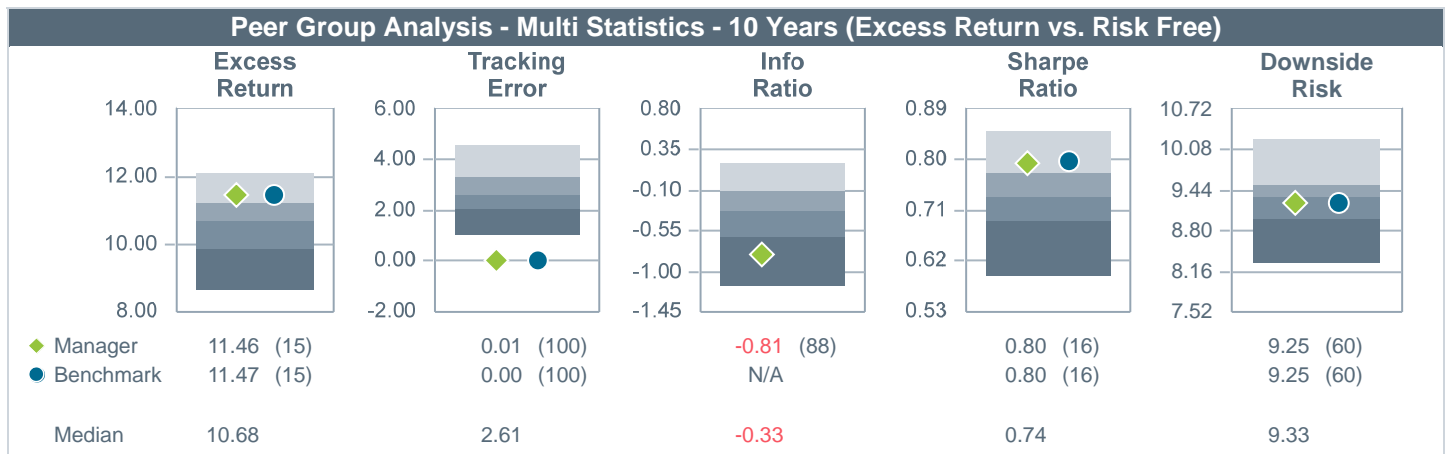
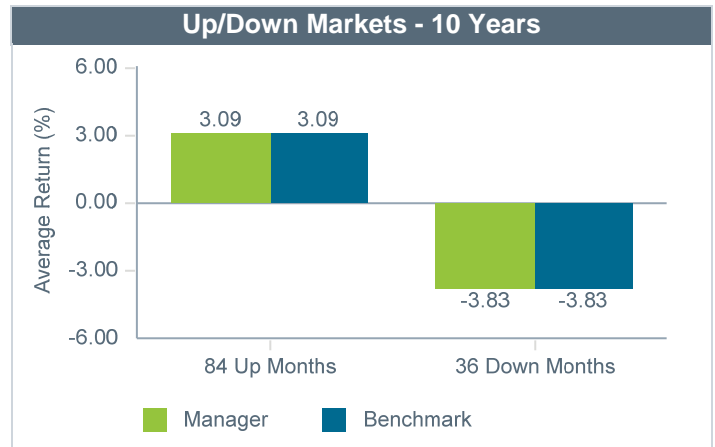
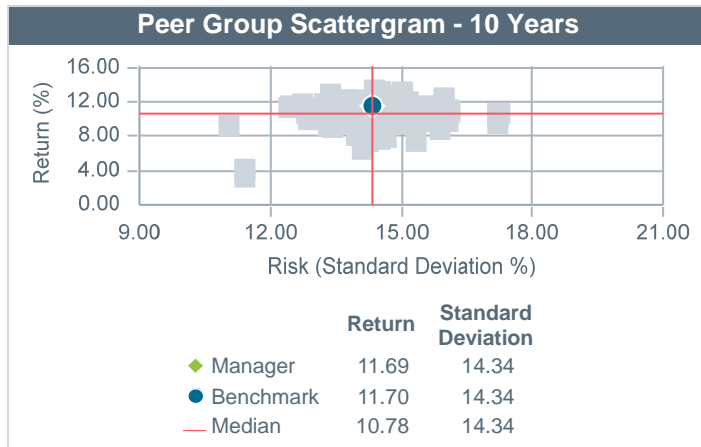
A = HFRI EH: Equity Market Neutral Index (Alpha)
 B = MSCI ACW Index (USD) (Gross) (Capital Appreciation)
 C = Bloomberg US Gov't Bond Index (Capital Preservation)
 D = Real Return Custom Index (Inflation)

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding liquidity, thematic and custom index descriptions.

Investment Manager Profiles



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-4.89	-15.49	8.15	9.23	11.39	11.69	28.69	18.41	31.48	-4.41	21.82
Benchmark	-4.88	-15.47	8.16	9.24	11.40	11.70	28.71	18.40	31.49	-4.38	21.83
Difference	-0.01	-0.02	-0.01	-0.01	-0.01	-0.01	-0.02	0.01	-0.01	-0.03	-0.01
Peer Group Median	-5.16	-17.11	7.23	8.43	10.39	10.78	26.95	18.39	30.64	-5.45	21.45
Rank	42	31	24	26	15	15	26	50	36	32	45
Population	652	619	544	496	442	389	605	584	582	579	558

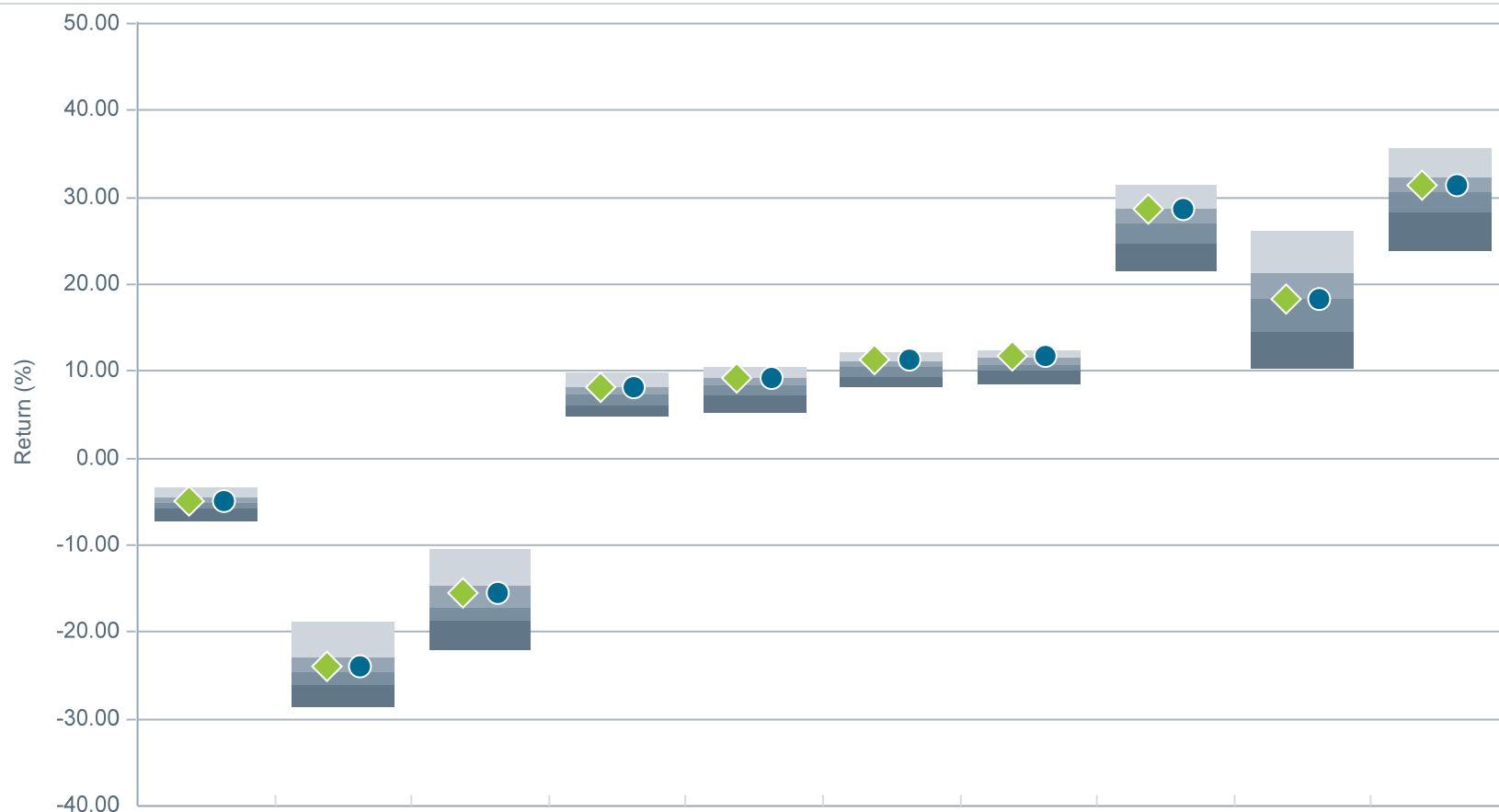


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Municipality of Anchorage Trust Fund
IM U.S. Large Cap Core Equity (MF)
Peer Group Analysis

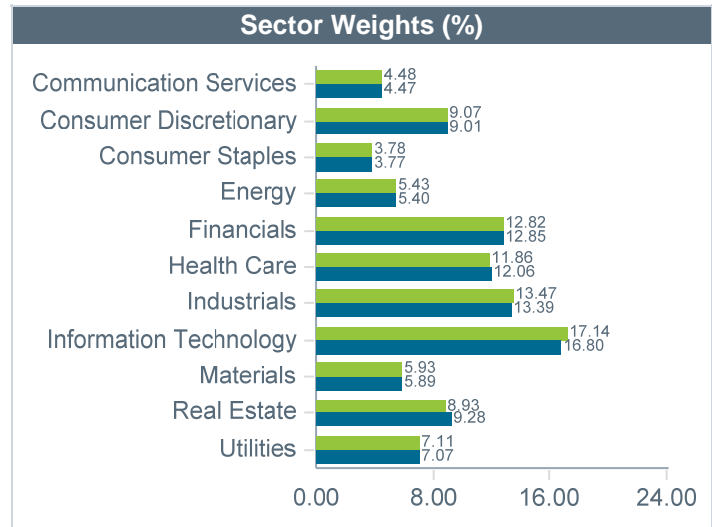
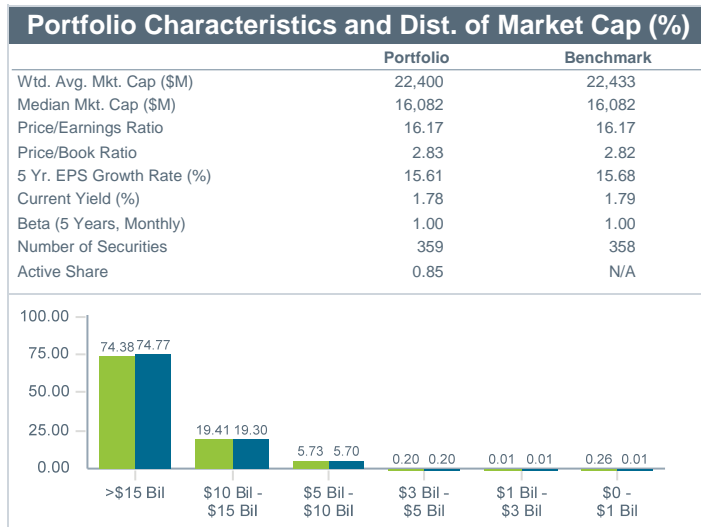
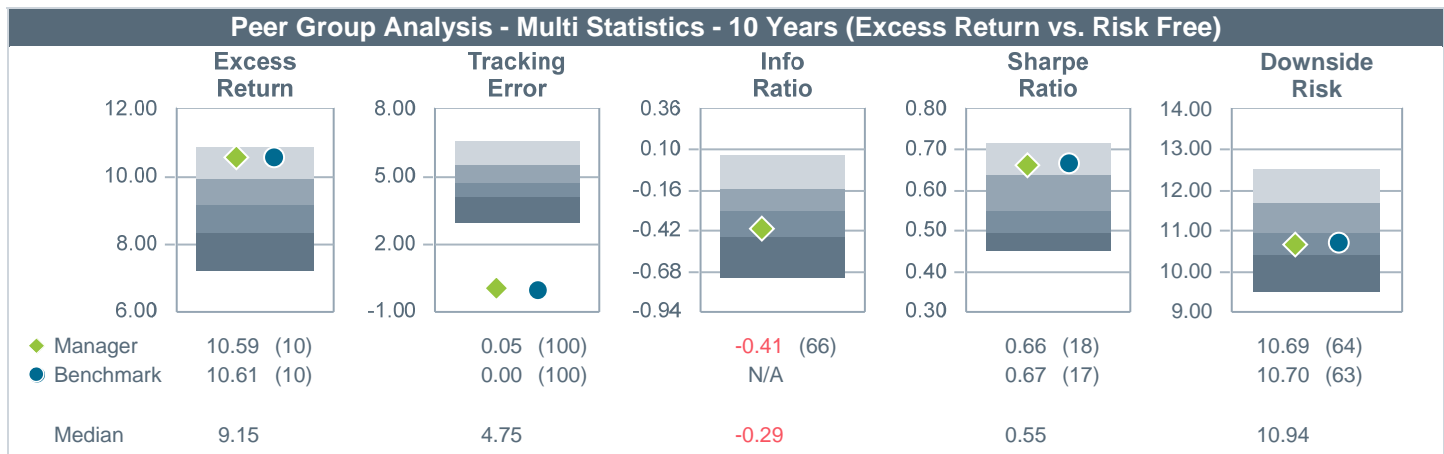
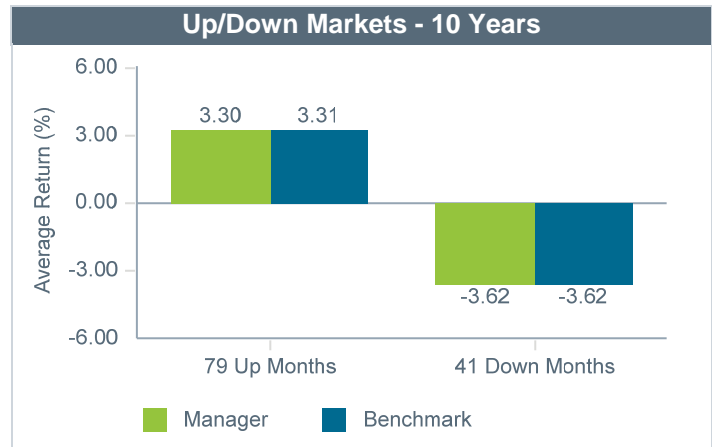
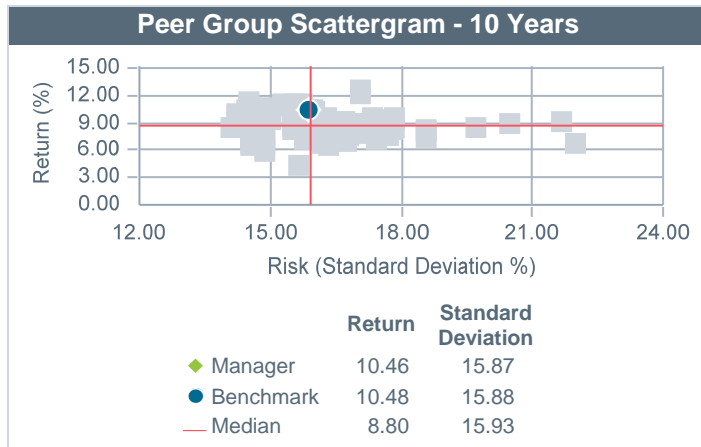
As of September 30, 2022



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ Vanguard Instl Indx;InsP (VIII X)	-4.89 (42)	-23.88 (40)	-15.49 (31)	8.15 (24)	9.23 (26)	11.39 (15)	11.69 (15)	28.69 (26)	18.41 (50)	31.48 (36)
● S&P 500 Index (Cap Wtd)	-4.88 (42)	-23.87 (40)	-15.47 (31)	8.16 (24)	9.24 (26)	11.40 (15)	11.70 (15)	28.71 (25)	18.40 (50)	31.49 (36)
5th Percentile	-3.39	-18.95	-10.51	9.88	10.40	12.11	12.36	31.43	26.04	35.57
1st Quartile	-4.49	-22.94	-14.61	8.07	9.28	11.06	11.45	28.69	21.30	32.23
Median	-5.16	-24.48	-17.11	7.23	8.43	10.39	10.78	26.95	18.39	30.64
3rd Quartile	-5.74	-26.08	-18.58	6.11	7.40	9.49	10.01	24.70	14.61	28.25
95th Percentile	-7.28	-28.51	-22.01	4.70	5.31	8.13	8.62	21.56	10.32	23.76
Population	652	637	619	544	496	442	389	605	584	582

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-4.14	-19.48	5.49	6.66	8.70	10.46	24.53	18.26	31.04	-9.24	19.29
Benchmark	-4.14	-19.47	5.48	6.66	8.71	10.48	24.52	18.24	31.09	-9.22	19.30
Difference	0.00	-0.01	0.01	0.00	-0.01	-0.02	0.01	0.02	-0.05	-0.02	-0.01
Peer Group Median	-4.32	-14.07	4.68	5.27	7.43	8.80	25.73	8.44	28.59	-11.64	14.94
Rank	43	91	36	19	19	13	60	14	27	22	19
Population	248	239	229	208	172	133	239	246	261	276	276

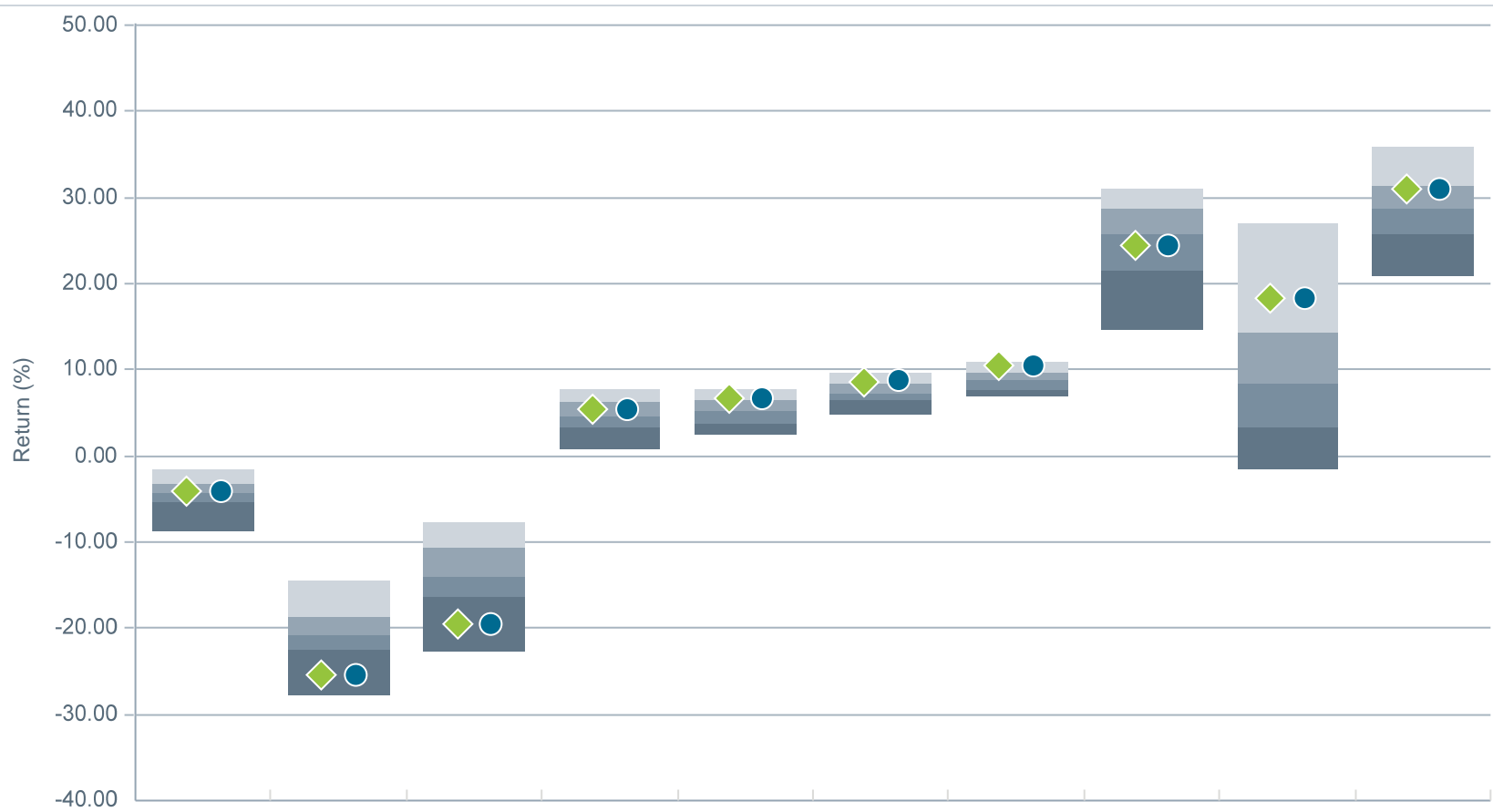


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Benchmark consists of S&P Mid Cap 400 Index (Cap Wtd) through 05/16/03; MSCI US Mid Cap 450 Index through 01/30/13; and CRSP US Mid Cap Index thereafter.



Municipality of Anchorage Trust Fund
IM U.S. Mid Cap Core Equity (MF)
Peer Group Analysis

As of September 30, 2022

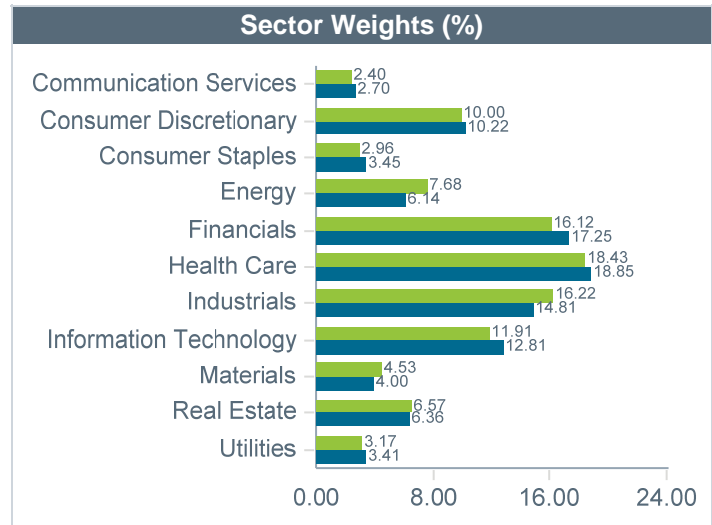
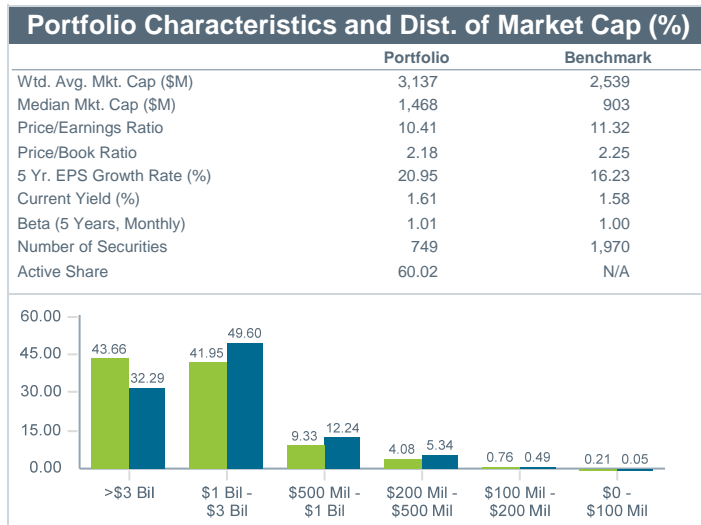
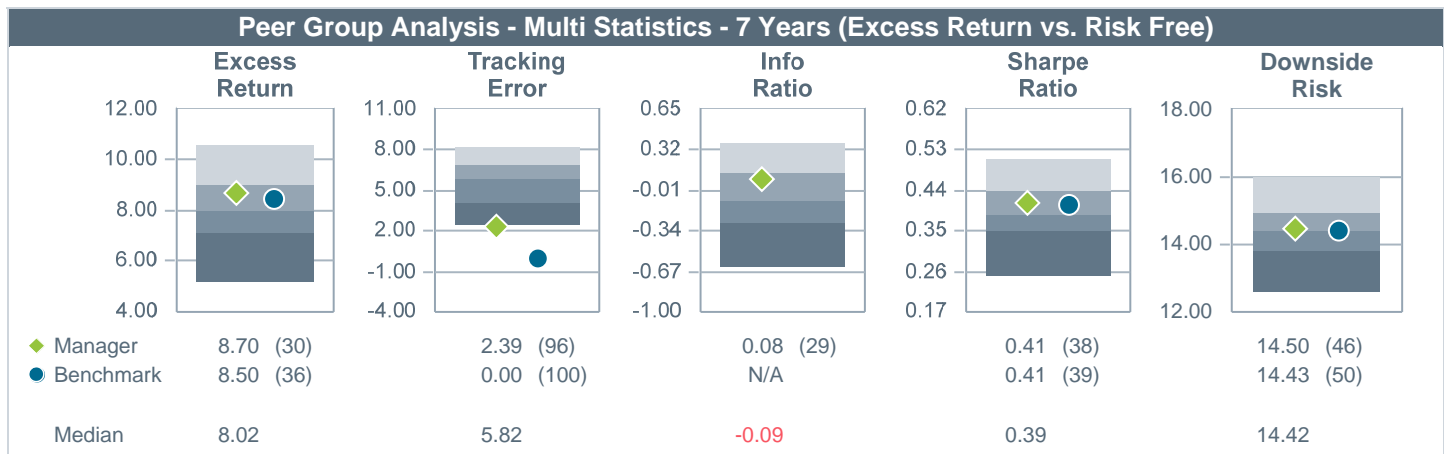
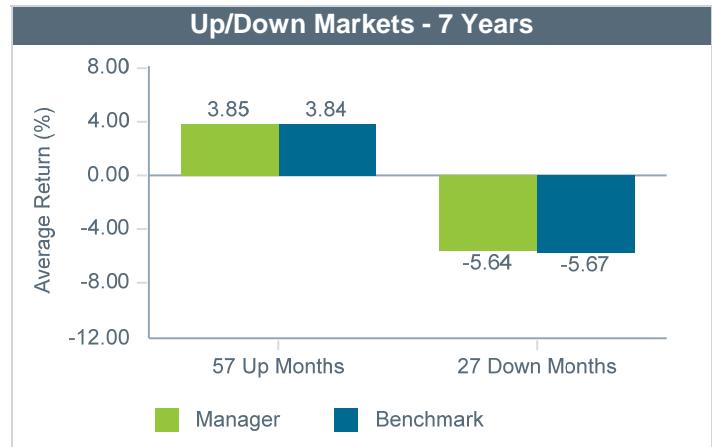
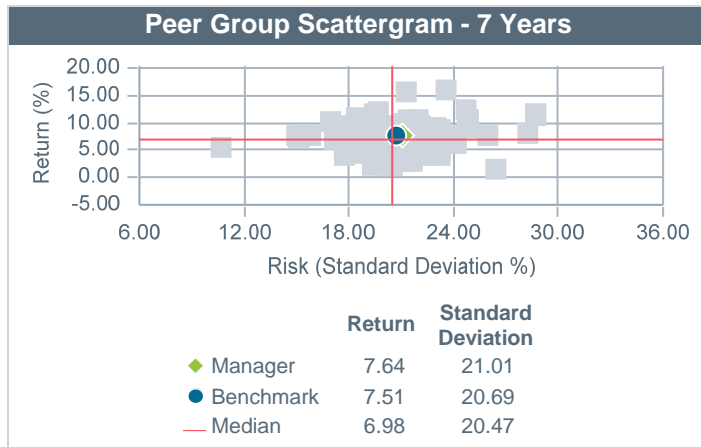


	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ Vanguard Md-Cp I;Inst (VMCIX)	-4.14 (43)	-25.42 (93)	-19.48 (91)	5.49 (36)	6.66 (19)	8.70 (19)	10.46 (13)	24.53 (60)	18.26 (14)	31.04 (27)
● Vanguard Spl Mid Cap Index	-4.14 (43)	-25.42 (93)	-19.47 (91)	5.48 (36)	6.66 (19)	8.71 (19)	10.48 (12)	24.52 (60)	18.24 (15)	31.09 (27)
5th Percentile	-1.62	-14.54	-7.76	7.83	7.77	9.62	10.86	31.03	27.01	35.93
1st Quartile	-3.25	-18.69	-10.53	6.30	6.39	8.40	9.67	28.72	14.20	31.35
Median	-4.32	-20.76	-14.07	4.68	5.27	7.43	8.80	25.73	8.44	28.59
3rd Quartile	-5.35	-22.47	-16.30	3.40	3.74	6.53	7.78	21.53	3.24	25.60
95th Percentile	-8.73	-27.81	-22.72	0.82	2.50	4.73	6.80	14.80	-1.62	20.76
Population	248	241	239	229	208	172	133	239	246	261

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



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-2.31	-23.59	4.30	4.64	7.64	N/A	14.67	19.57	32.12	-8.83	10.79
Benchmark	-2.19	-23.50	4.29	3.55	7.51	8.55	14.82	19.96	25.53	-11.01	14.65
Difference	-0.12	-0.09	0.01	1.09	0.13	N/A	-0.15	-0.39	6.59	2.18	-3.86
Peer Group Median	-4.48	-18.44	4.60	3.57	6.98	8.28	25.12	9.89	23.94	-12.71	12.09
Rank	19	90	55	26	32	N/A	91	14	3	13	62
Population	690	683	655	612	515	414	701	720	740	775	773

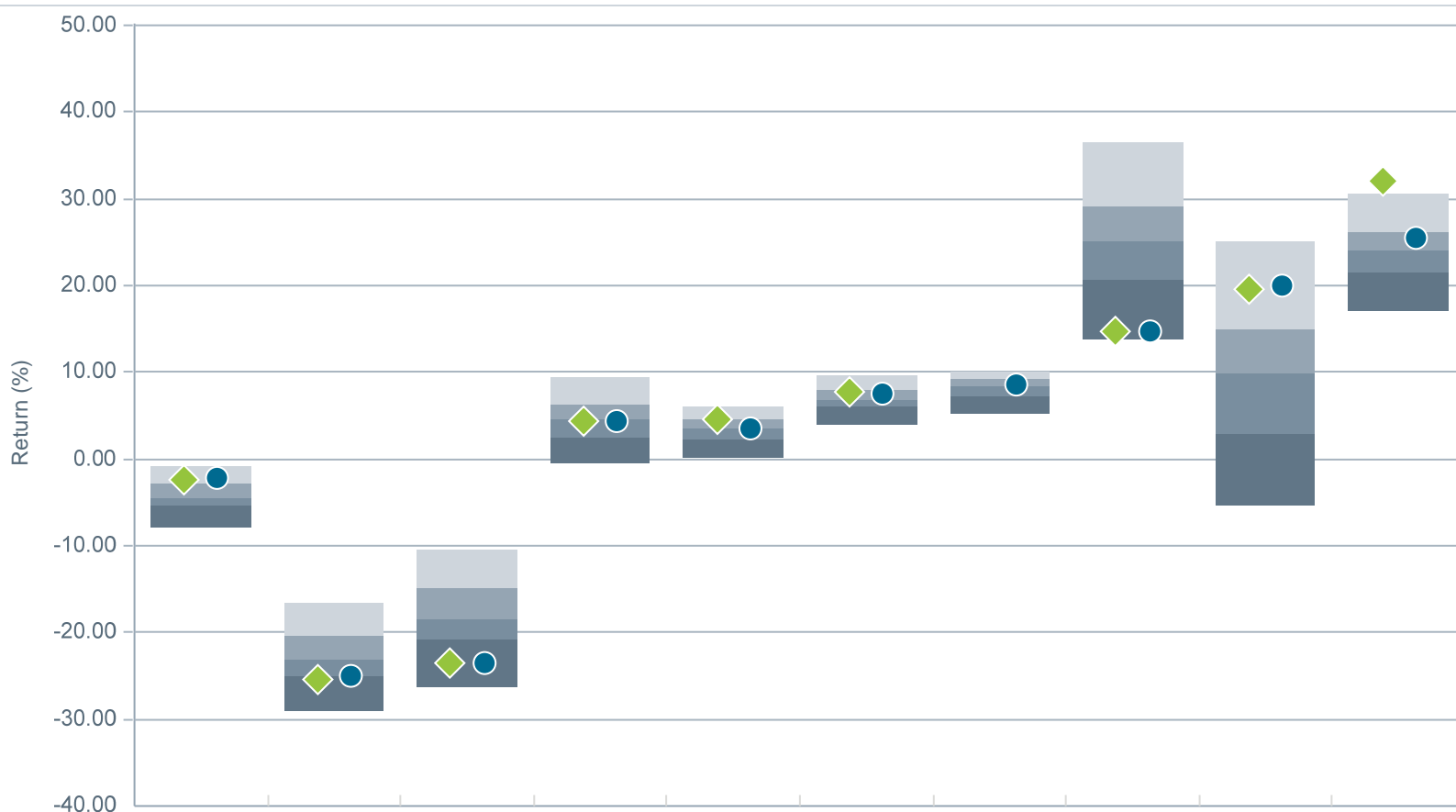


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Municipality of Anchorage Trust Fund
IM U.S. Small Cap Core Equity (MF)
Peer Group Analysis

As of September 30, 2022

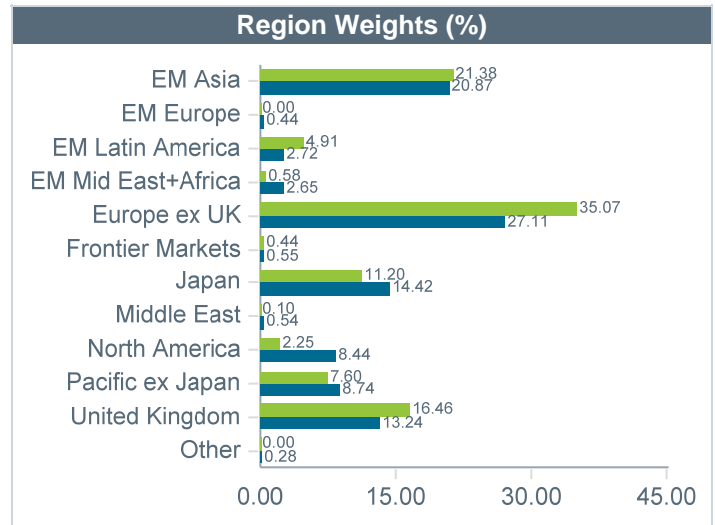
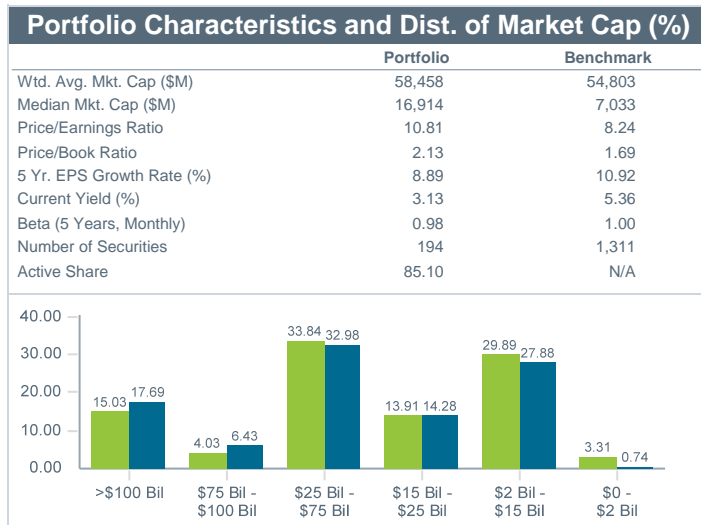
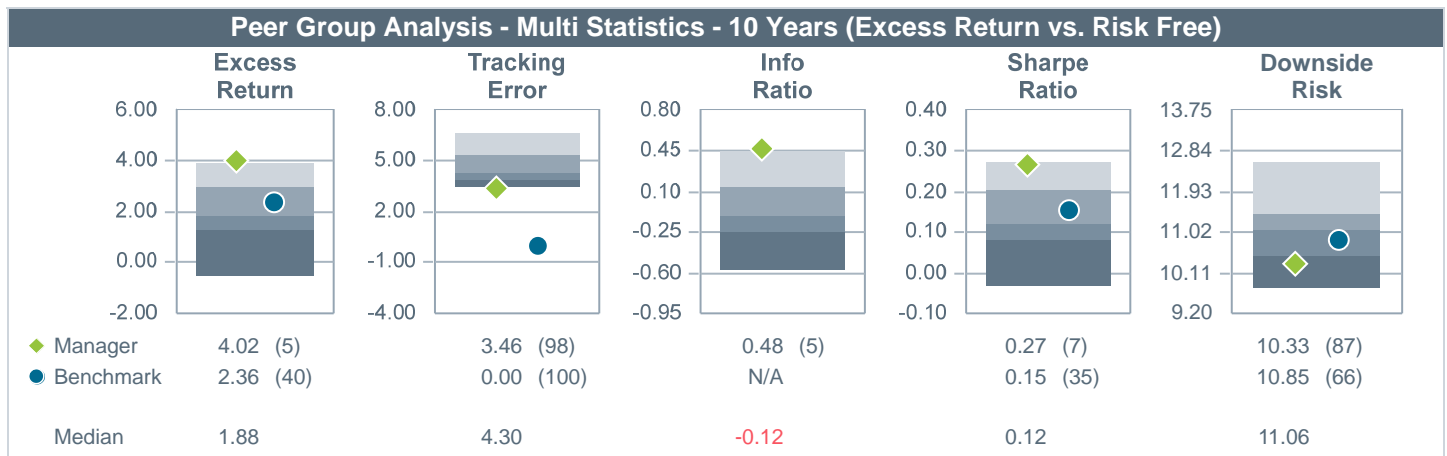
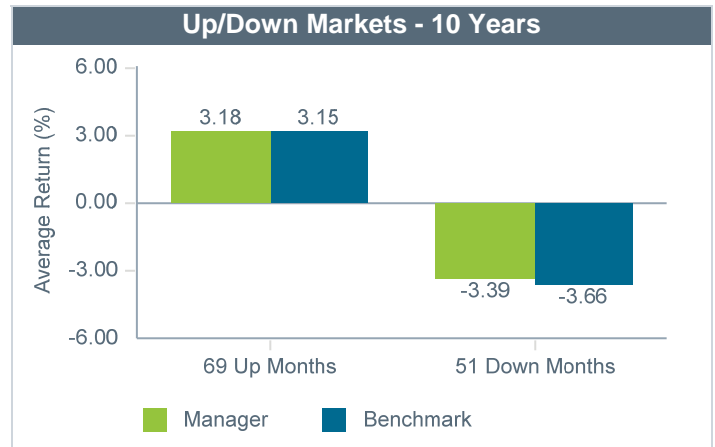
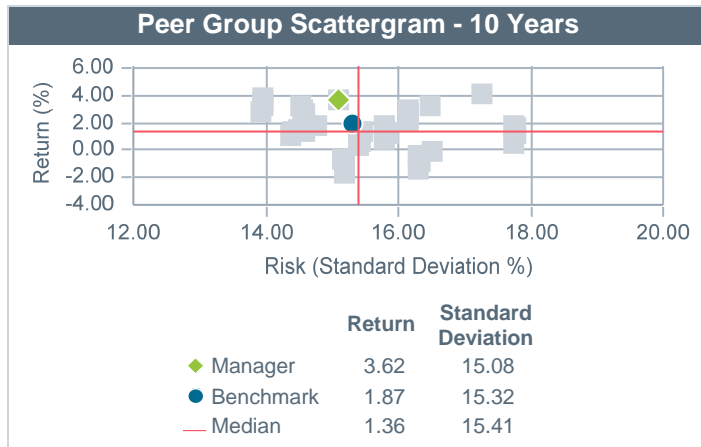


	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ BlackRock:Adv SC Cr;Inst (BDSIX)	-2.31 (19)	-25.46 (81)	-23.59 (90)	4.30 (55)	4.64 (26)	7.64 (32)	N/A	14.67 (91)	19.57 (14)	32.12 (3)
● Russell 2000 Index	-2.19 (17)	-25.10 (77)	-23.50 (89)	4.29 (56)	3.55 (51)	7.51 (37)	8.55 (43)	14.82 (89)	19.96 (12)	25.53 (33)
5th Percentile	-0.86	-16.62	-10.47	9.42	6.10	9.70	10.11	36.50	24.98	30.47
1st Quartile	-2.73	-20.33	-14.78	6.36	4.67	8.05	9.24	29.16	14.88	26.22
Median	-4.48	-23.02	-18.44	4.60	3.57	6.98	8.28	25.12	9.89	23.94
3rd Quartile	-5.41	-25.07	-20.80	2.56	2.26	6.07	7.30	20.73	2.79	21.56
95th Percentile	-7.96	-28.91	-26.27	-0.53	0.07	3.98	5.30	13.94	-5.33	17.14
Population	690	687	683	655	612	515	414	701	720	740

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



Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-9.27	-22.20	-0.78	-0.62	3.42	3.62	7.97	8.99	20.39	-14.52	27.96
Benchmark	-10.44	-20.02	-2.15	-2.12	2.24	1.87	10.46	-0.77	15.72	-13.97	22.66
Difference	1.17	-2.18	1.37	1.50	1.18	1.75	-2.49	9.76	4.67	-0.55	5.30
Peer Group Median	-12.12	-23.18	-2.24	-2.73	1.06	1.36	10.01	3.69	17.82	-16.03	22.88
Rank	4	28	9	4	6	5	73	20	26	8	15
Population	62	62	62	62	57	44	62	67	68	68	72

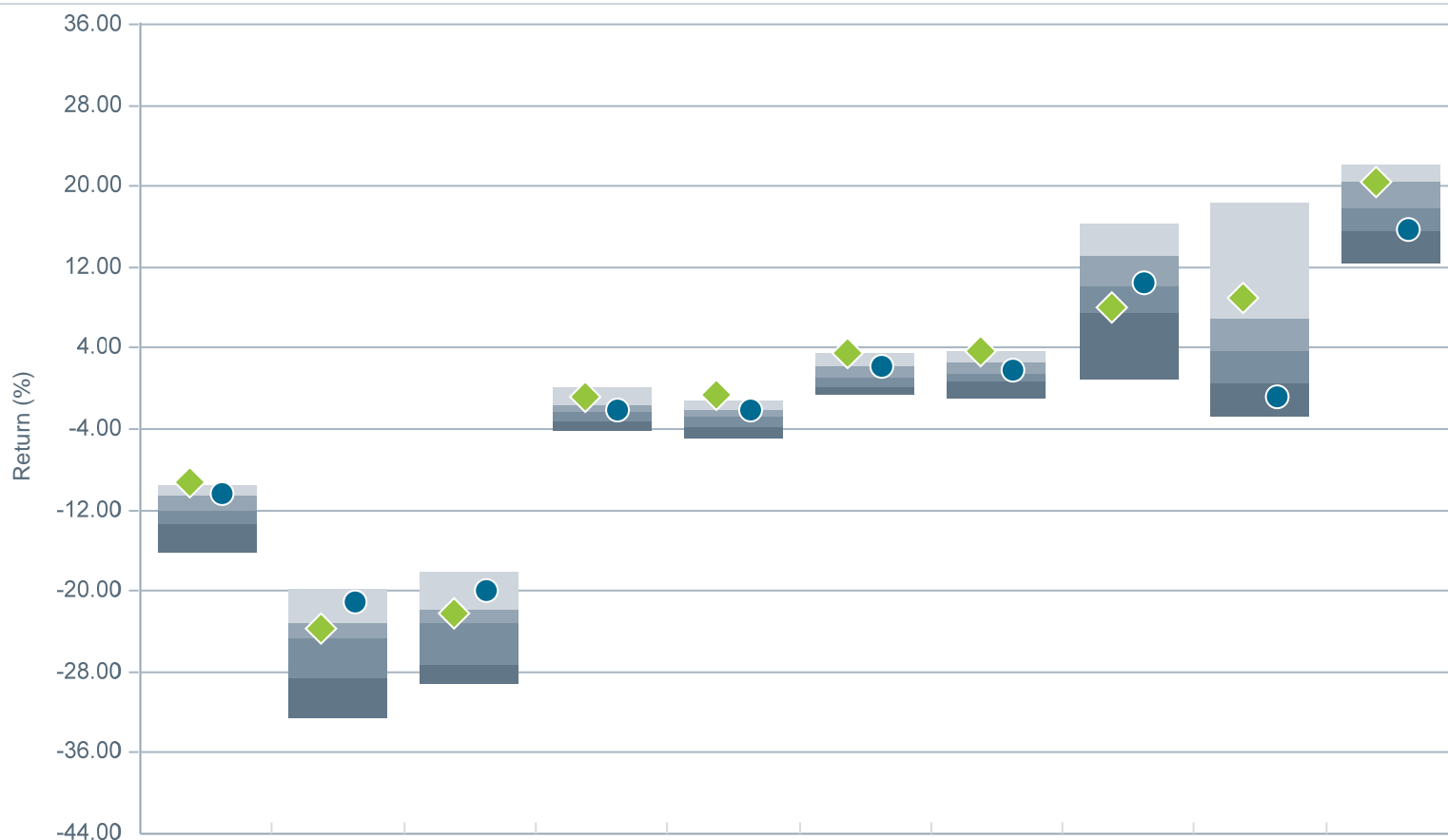


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Municipality of Anchorage Trust Fund
IM ACWI Ex US Value (MF)
Peer Group Analysis

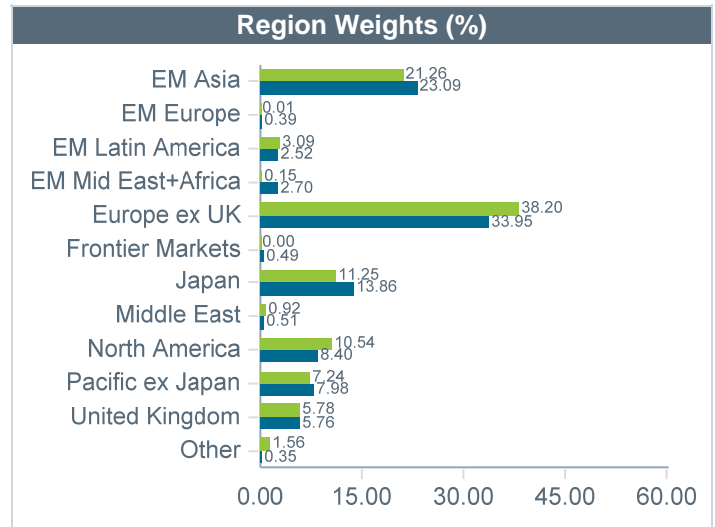
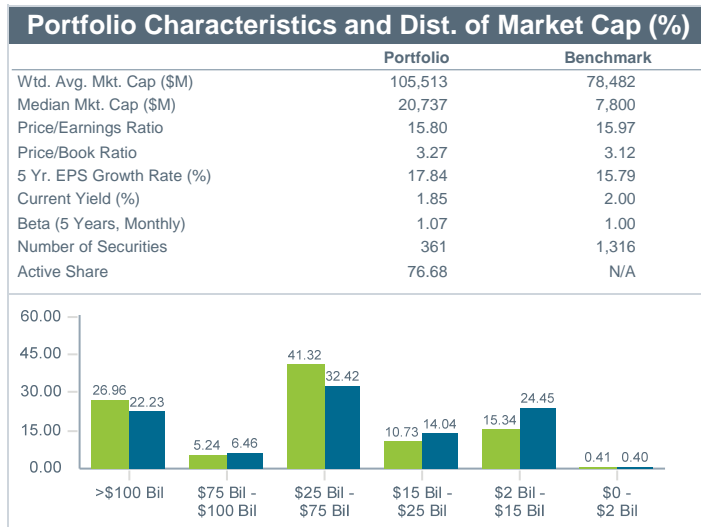
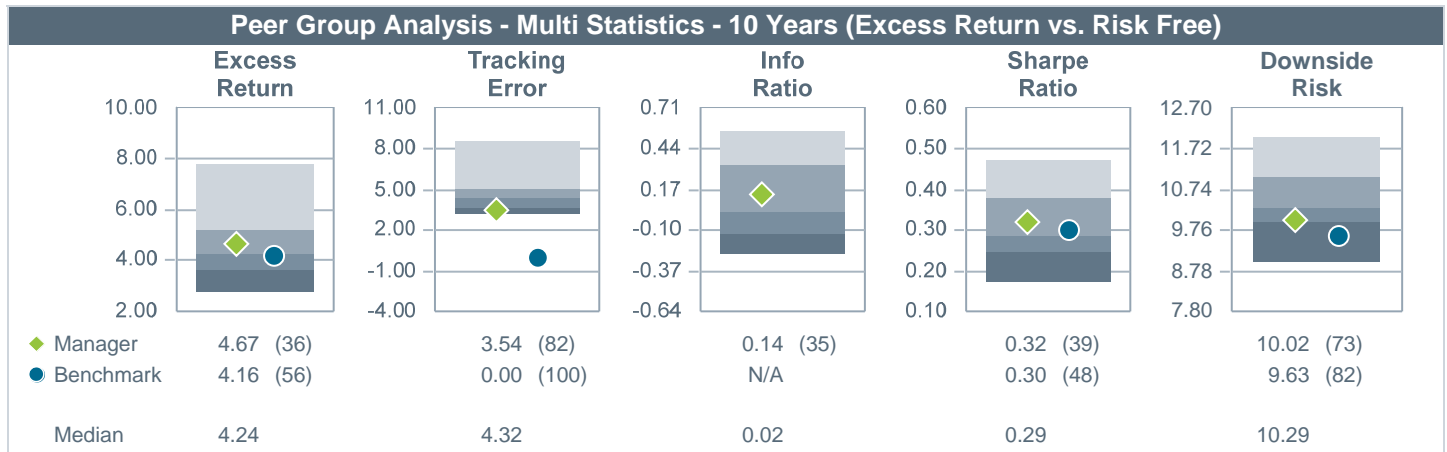
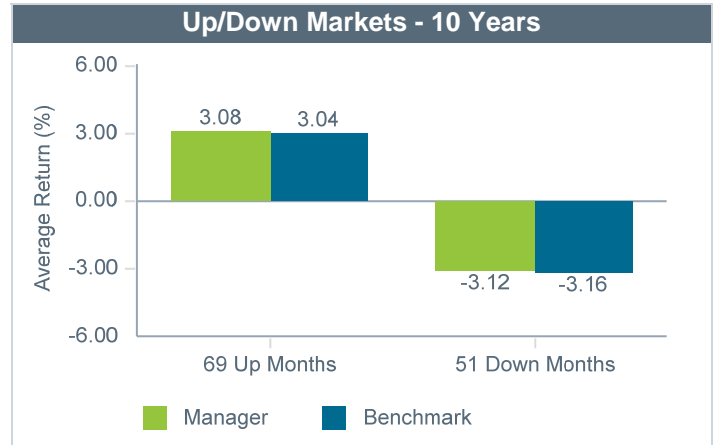
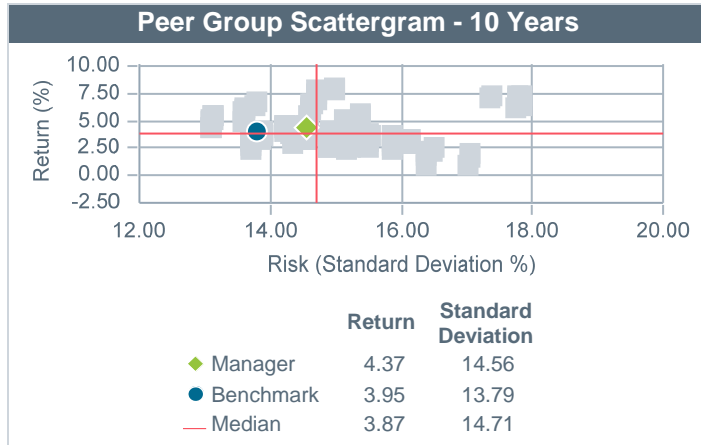
As of September 30, 2022



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ Vanguard Intl Val;Inv (VTRIX)	-9.27 (4)	-23.69 (35)	-22.20 (28)	-0.78 (9)	-0.62 (4)	3.42 (6)	3.62 (5)	7.97 (73)	8.99 (20)	20.39 (26)
● MSCI ACW Ex US Val Index (USD) (Net)	-10.44 (20)	-21.00 (6)	-20.02 (9)	-2.15 (48)	-2.12 (22)	2.24 (25)	1.87 (35)	10.46 (43)	-0.77 (87)	15.72 (74)
5th Percentile	-9.73	-19.75	-18.17	0.20	-1.21	3.48	3.61	16.31	18.29	22.13
1st Quartile	-10.55	-23.23	-21.87	-1.51	-2.19	2.24	2.63	13.01	6.91	20.47
Median	-12.12	-24.63	-23.18	-2.24	-2.73	1.06	1.36	10.01	3.69	17.82
3rd Quartile	-13.44	-28.66	-27.34	-3.25	-3.75	0.22	0.65	7.51	0.41	15.51
95th Percentile	-16.18	-32.63	-29.09	-4.13	-4.93	-0.69	-0.96	0.90	-2.75	12.38
Population	62	62	62	62	62	57	44	62	67	68

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

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-9.34	-32.86	-1.25	-0.23	3.68	4.37	2.85	25.24	27.42	-14.91	31.13
Benchmark	-9.37	-30.22	-1.38	0.18	4.09	3.95	5.09	22.20	27.34	-14.43	32.01
Difference	0.03	-2.64	0.13	-0.41	-0.41	0.42	-2.24	3.04	0.08	-0.48	-0.88
Peer Group Median	-9.49	-33.41	-1.27	-0.09	3.52	3.87	7.93	22.75	27.84	-14.32	32.37
Rank	39	35	50	54	46	38	77	36	59	57	64
Population	170	170	170	170	148	117	170	170	172	176	188

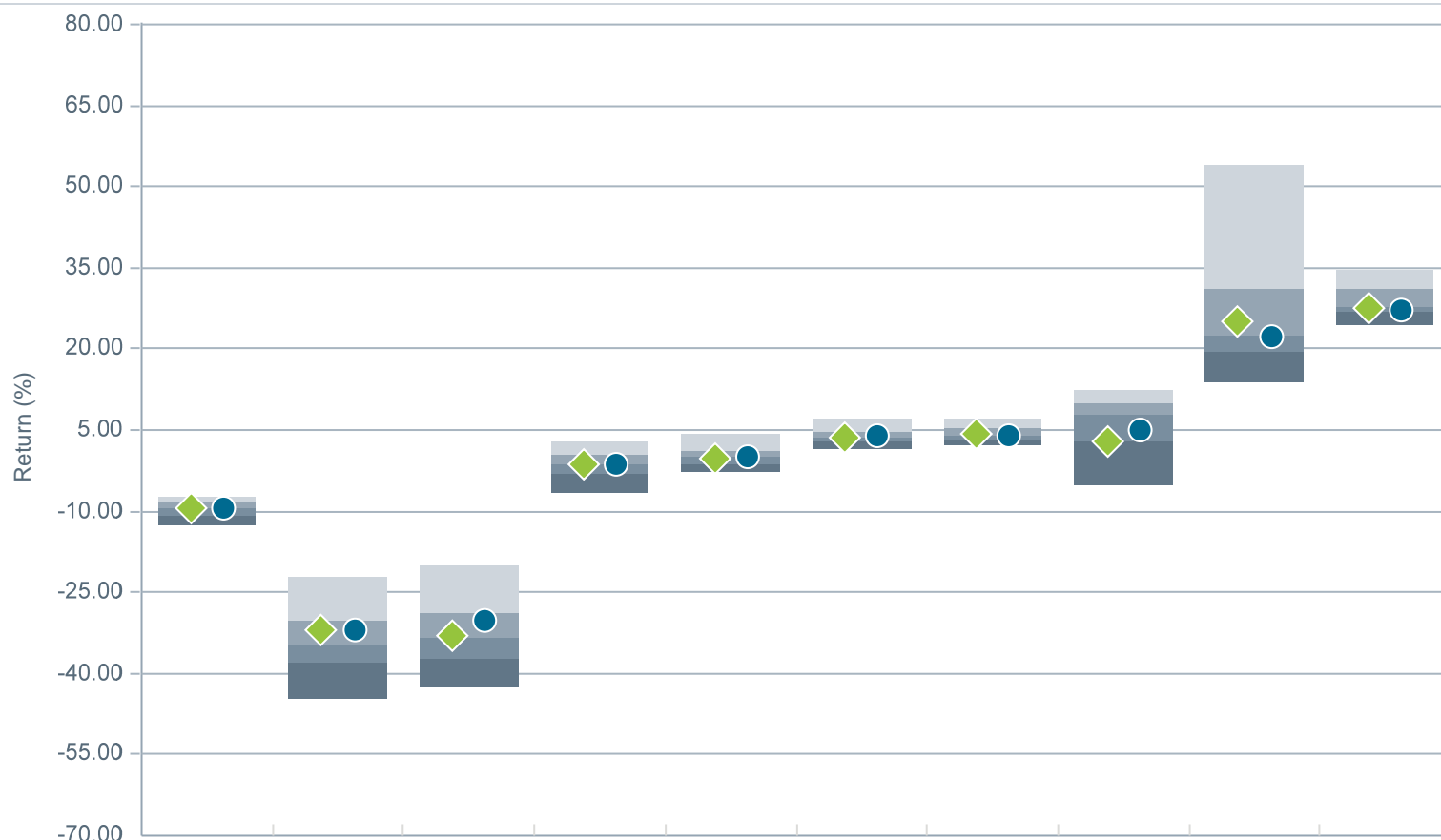


Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Municipality of Anchorage Trust Fund
IM ACWI Ex US Growth (MF)
Peer Group Analysis

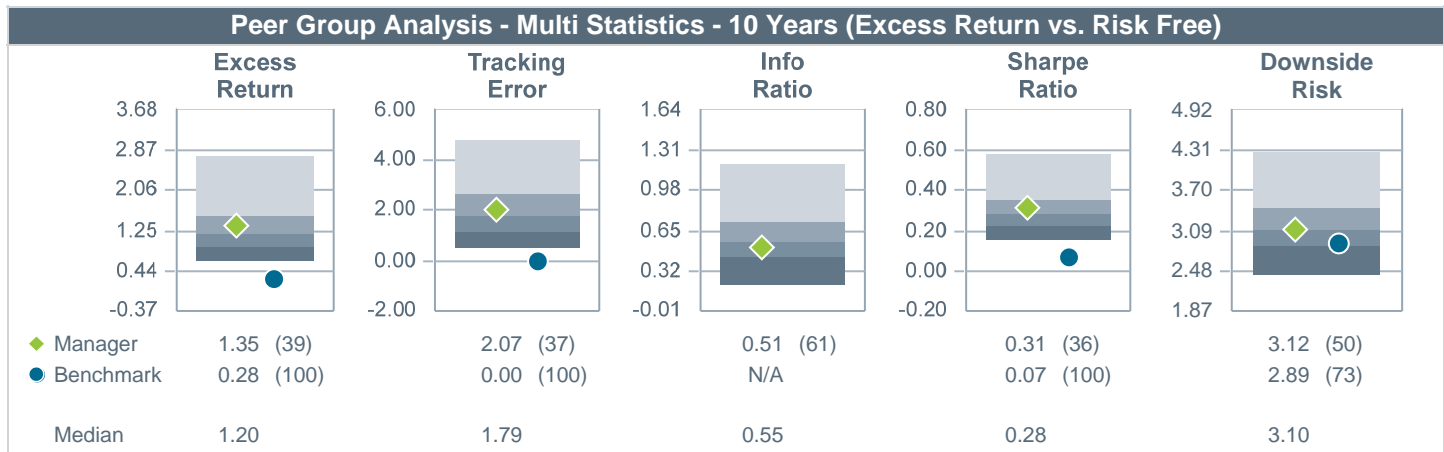
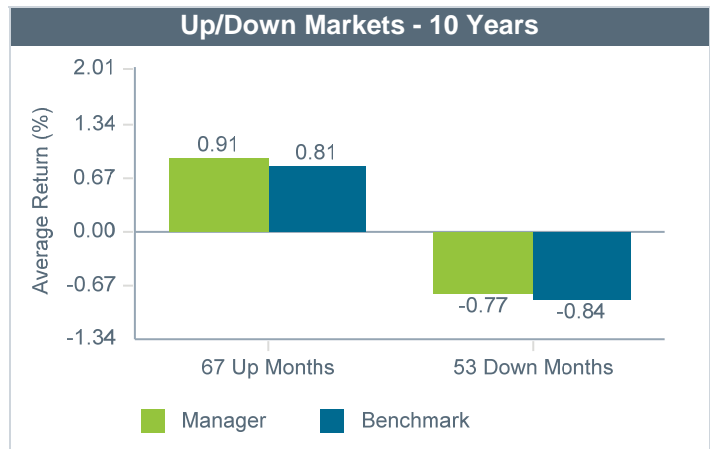
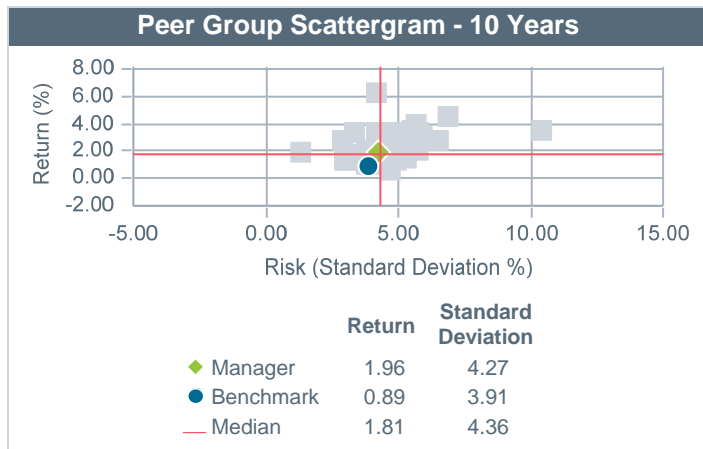
As of September 30, 2022



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ American Funds EuPc;F3 (FEUPX)	-9.34 (39)	-32.10 (33)	-32.86 (35)	-1.25 (50)	-0.23 (54)	3.68 (46)	4.37 (38)	2.85 (77)	25.24 (36)	27.42 (59)
● MSCI ACW Ex US Grth Index (USD) (Net)	-9.37 (40)	-31.84 (32)	-30.22 (29)	-1.38 (53)	0.18 (48)	4.09 (36)	3.95 (50)	5.09 (64)	22.20 (58)	27.34 (63)
5th Percentile	-7.29	-22.20	-20.17	2.95	4.45	7.14	7.28	12.48	54.09	34.74
1st Quartile	-8.42	-30.18	-28.80	0.44	1.18	4.76	5.18	10.08	31.08	31.14
Median	-9.49	-34.76	-33.41	-1.27	-0.09	3.52	3.87	7.93	22.75	27.84
3rd Quartile	-10.70	-38.09	-37.38	-2.94	-1.34	2.74	3.31	3.01	19.32	26.86
95th Percentile	-12.53	-44.67	-42.54	-6.79	-2.80	1.46	2.16	-5.19	13.77	24.32
Population	170	170	170	170	170	148	117	170	170	172

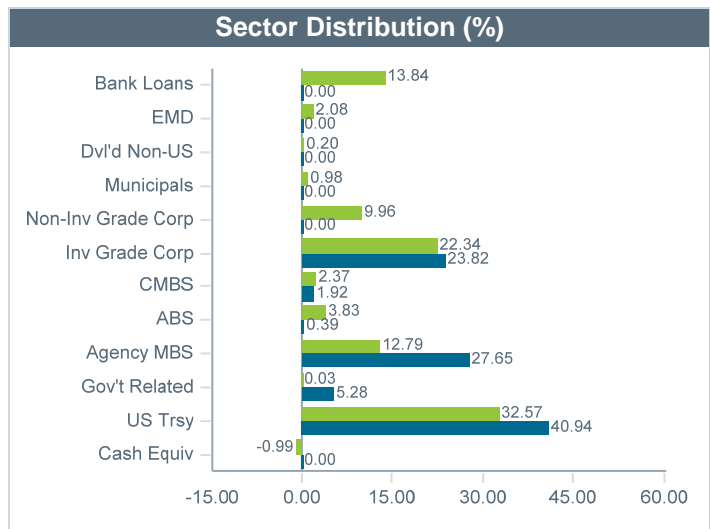
Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-3.71	-13.73	-1.98	0.75	1.97	1.96	0.90	7.80	10.71	-0.23	5.00
Benchmark	-4.75	-14.60	-3.26	-0.27	0.54	0.89	-1.55	7.51	8.72	0.01	3.54
Difference	1.04	0.87	1.28	1.02	1.43	1.07	2.45	0.29	1.99	-0.24	1.46
Peer Group Median	-4.32	-14.66	-2.34	0.51	1.54	1.81	-0.25	8.98	9.90	-0.24	4.78
Rank	24	22	35	32	27	38	21	82	28	49	43
Population	131	129	128	124	121	118	153	162	166	173	178



Portfolio Characteristics

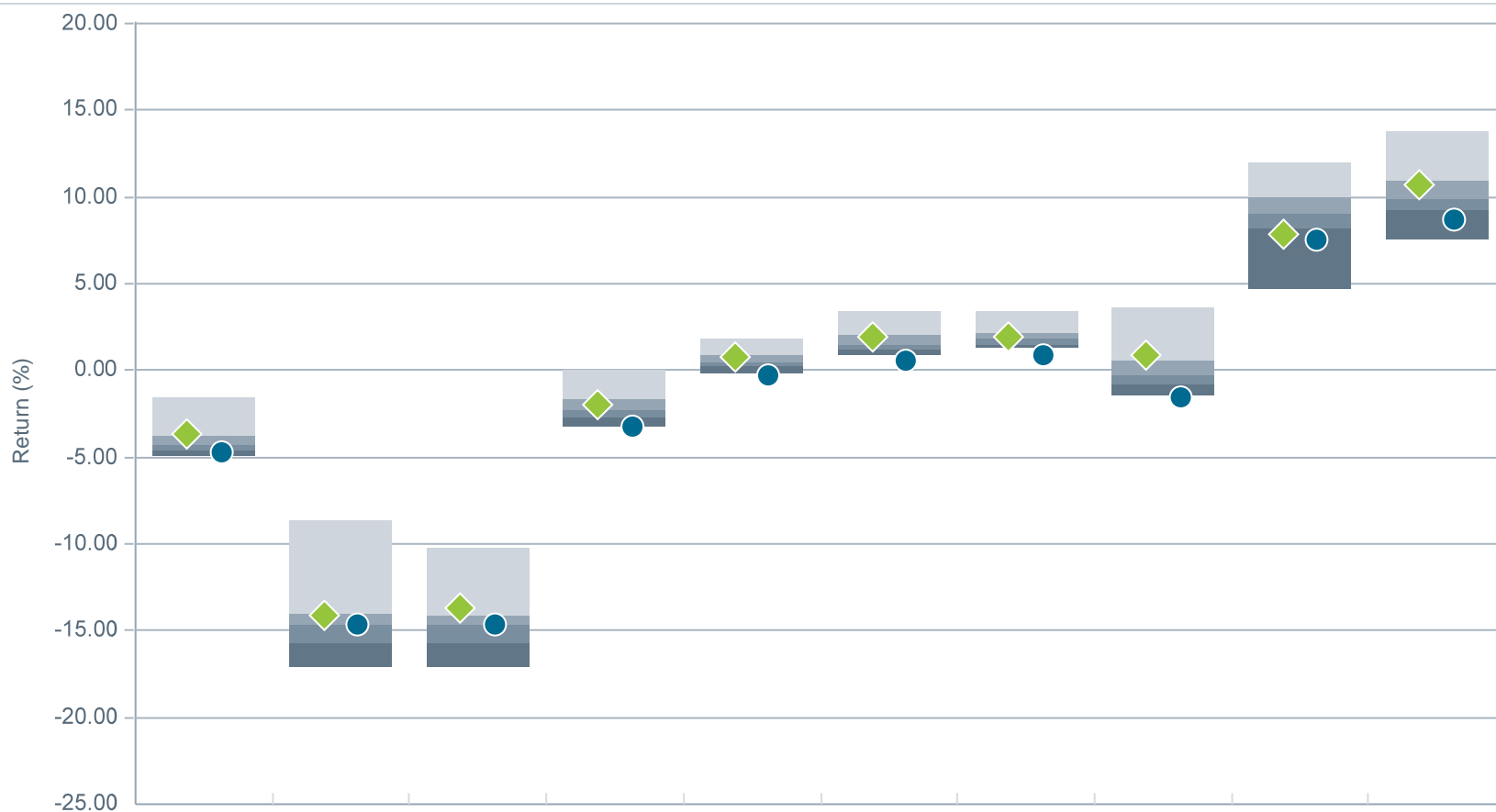
	Portfolio	Benchmark
Effective Duration	6.10	6.20
Spread Duration	6.74	N/A
Avg. Maturity	10.76	8.52
Avg. Quality	A1	Aa1/Aa2
Yield To Maturity (%)	N/A	4.75
Coupon Rate (%)	3.57	2.58
Current Yield (%)	4.16	N/A
Holdings Count	2,618	12,641



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

Municipality of Anchorage Trust Fund
IM U.S. Broad Market Core+ Fixed Income (SA+CF)
Peer Group Analysis

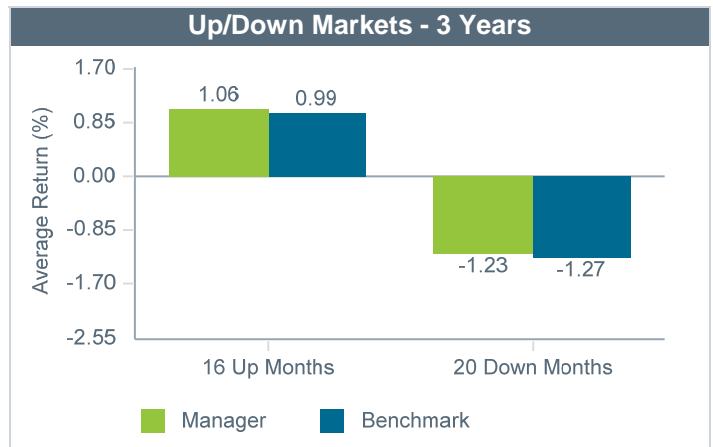
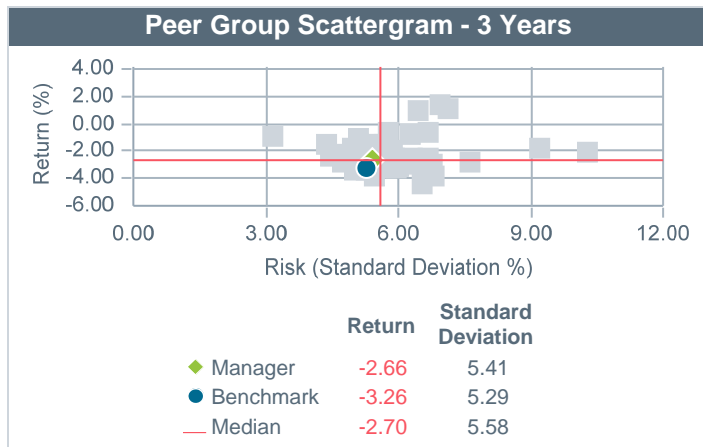
As of September 30, 2022



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ FIAM Core Plus LLC (CF)	-3.71 (24)	-14.13 (27)	-13.73 (22)	-1.98 (35)	0.75 (32)	1.97 (27)	1.96 (38)	0.90 (21)	7.80 (82)	10.71 (28)
● Bloomberg US Agg Bond Index	-4.75 (90)	-14.61 (50)	-14.60 (48)	-3.26 (95)	-0.27 (97)	0.54 (100)	0.89 (100)	-1.55 (99)	7.51 (85)	8.72 (89)
5th Percentile	-1.55	-8.58	-10.22	0.02	1.81	3.41	3.38	3.66	11.97	13.73
1st Quartile	-3.78	-14.05	-14.07	-1.67	0.87	2.00	2.14	0.61	9.91	10.94
Median	-4.32	-14.67	-14.66	-2.34	0.51	1.54	1.81	-0.25	8.98	9.90
3rd Quartile	-4.60	-15.66	-15.66	-2.70	0.20	1.19	1.53	-0.77	8.18	9.18
95th Percentile	-4.98	-17.07	-17.11	-3.27	-0.14	0.85	1.25	-1.40	4.71	7.52
Population	131	131	129	128	124	121	118	153	162	166

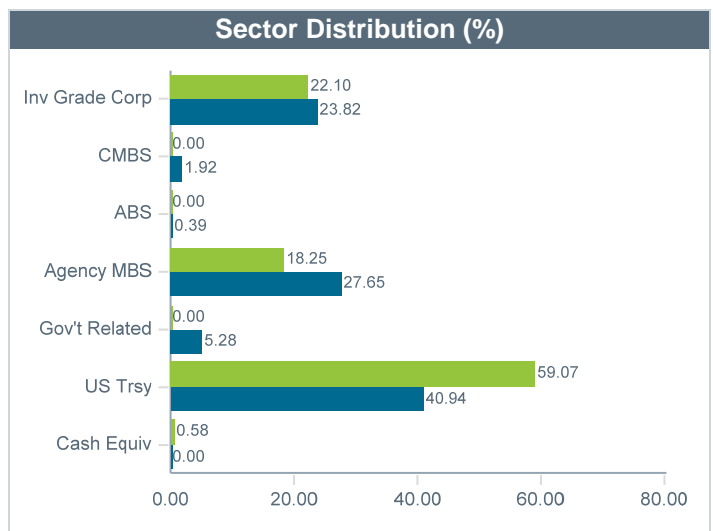
Performance shown is gross of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.26	-13.13	-2.66	N/A	N/A	N/A	-2.18	8.65	7.51	N/A	N/A
Benchmark	-4.75	-14.60	-3.26	-0.27	0.54	0.89	-1.55	7.51	8.72	0.01	3.54
Difference	-0.51	1.47	0.60	N/A	N/A	N/A	-0.63	1.14	-1.21	N/A	N/A
Peer Group Median	-4.55	-14.48	-2.70	0.18	1.07	1.37	-1.23	8.51	9.19	0.06	4.01
Rank	98	10	44	N/A	N/A	N/A	100	45	95	N/A	N/A
Population	123	123	123	119	117	111	145	154	156	162	167



Portfolio Characteristics

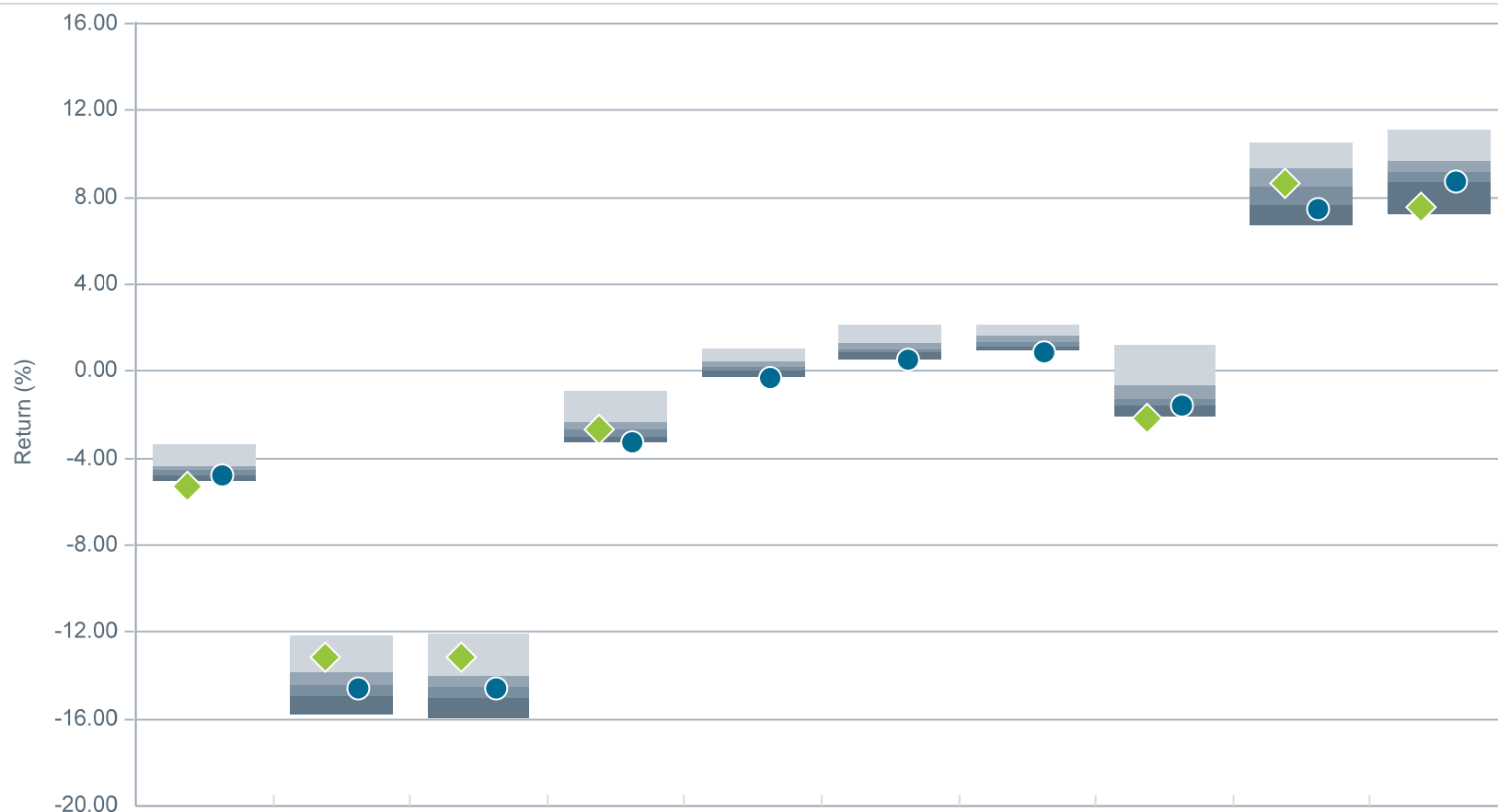
	Portfolio	Benchmark
Effective Duration	7.22	6.20
Spread Duration	2.01	N/A
Avg. Maturity	8.95	8.52
Avg. Quality	Aa1	Aa1/Aa2
Yield To Maturity (%)	4.69	4.75
Coupon Rate (%)	2.71	2.58
Current Yield (%)	3.03	N/A
Holdings Count	28	12,641



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

Municipality of Anchorage Trust Fund
IM U.S. Broad Market Core Fixed Income (SA+CF)
Peer Group Analysis

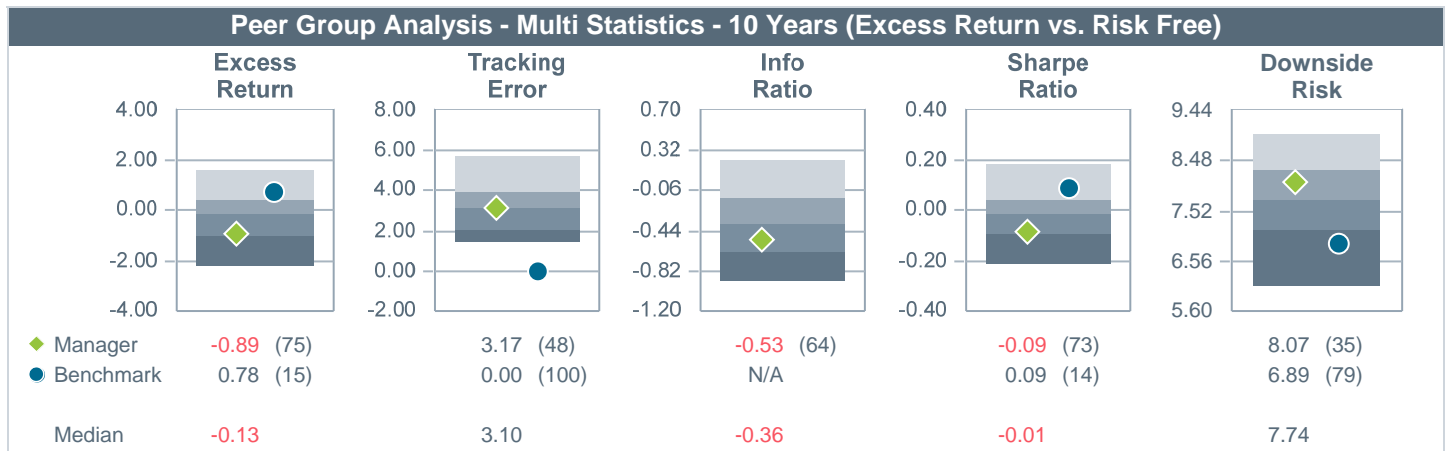
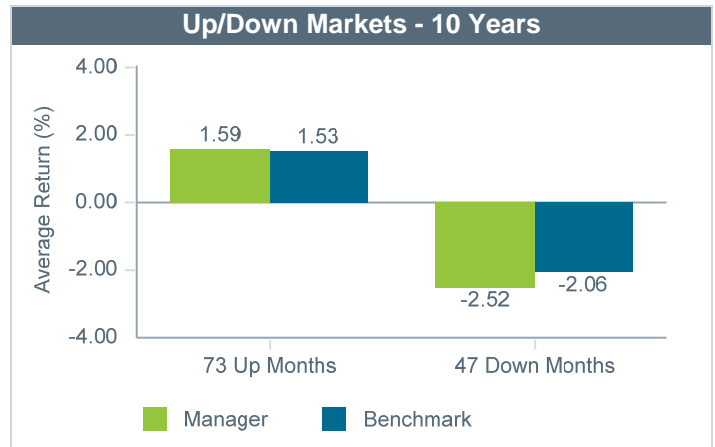
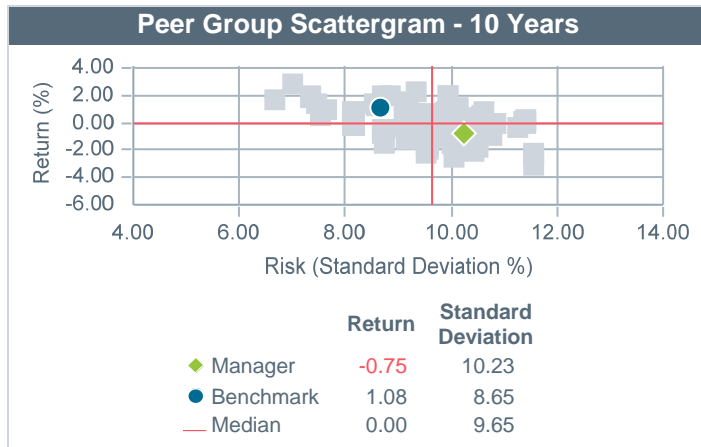
As of September 30, 2022



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ Garcia Hamilton Core Agg (SA)	-5.26 (98)	-13.12 (12)	-13.13 (10)	-2.66 (44)	N/A	N/A	N/A	-2.18 (100)	8.65 (45)	7.51 (95)
● Bloomberg US Agg Bond Index	-4.75 (76)	-14.61 (63)	-14.60 (61)	-3.26 (94)	-0.27 (97)	0.54 (97)	0.89 (99)	-1.55 (69)	7.51 (86)	8.72 (78)
5th Percentile	-3.38	-12.12	-12.07	-0.90	1.08	2.11	2.17	1.22	10.53	11.07
1st Quartile	-4.37	-13.80	-13.96	-2.35	0.47	1.30	1.62	-0.62	9.29	9.67
Median	-4.55	-14.43	-14.48	-2.70	0.18	1.07	1.37	-1.23	8.51	9.19
3rd Quartile	-4.75	-14.95	-15.05	-3.03	0.00	0.85	1.16	-1.59	7.67	8.74
95th Percentile	-5.08	-15.80	-15.91	-3.28	-0.26	0.57	0.92	-2.06	6.74	7.24
Population	123	123	123	123	119	117	111	145	154	156

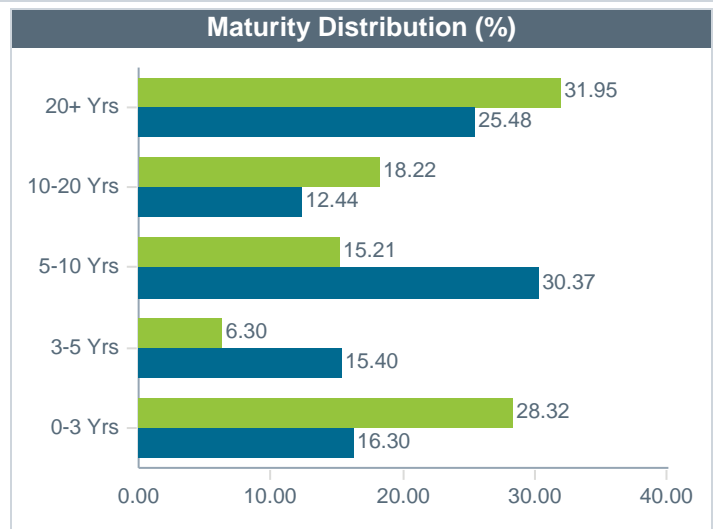
Performance shown is gross of fees and client specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

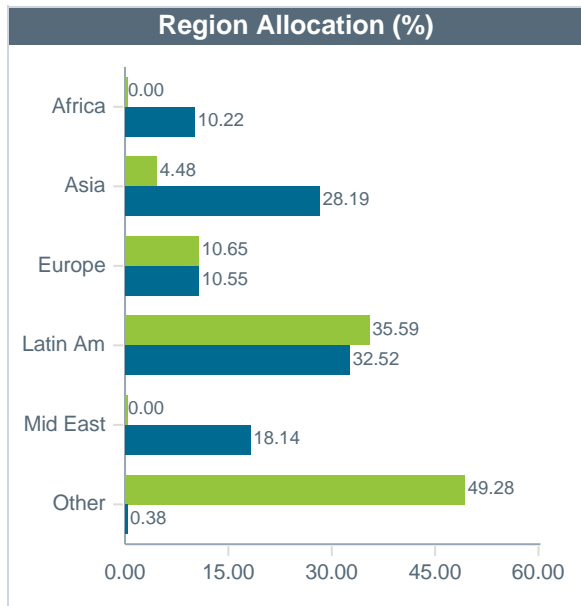
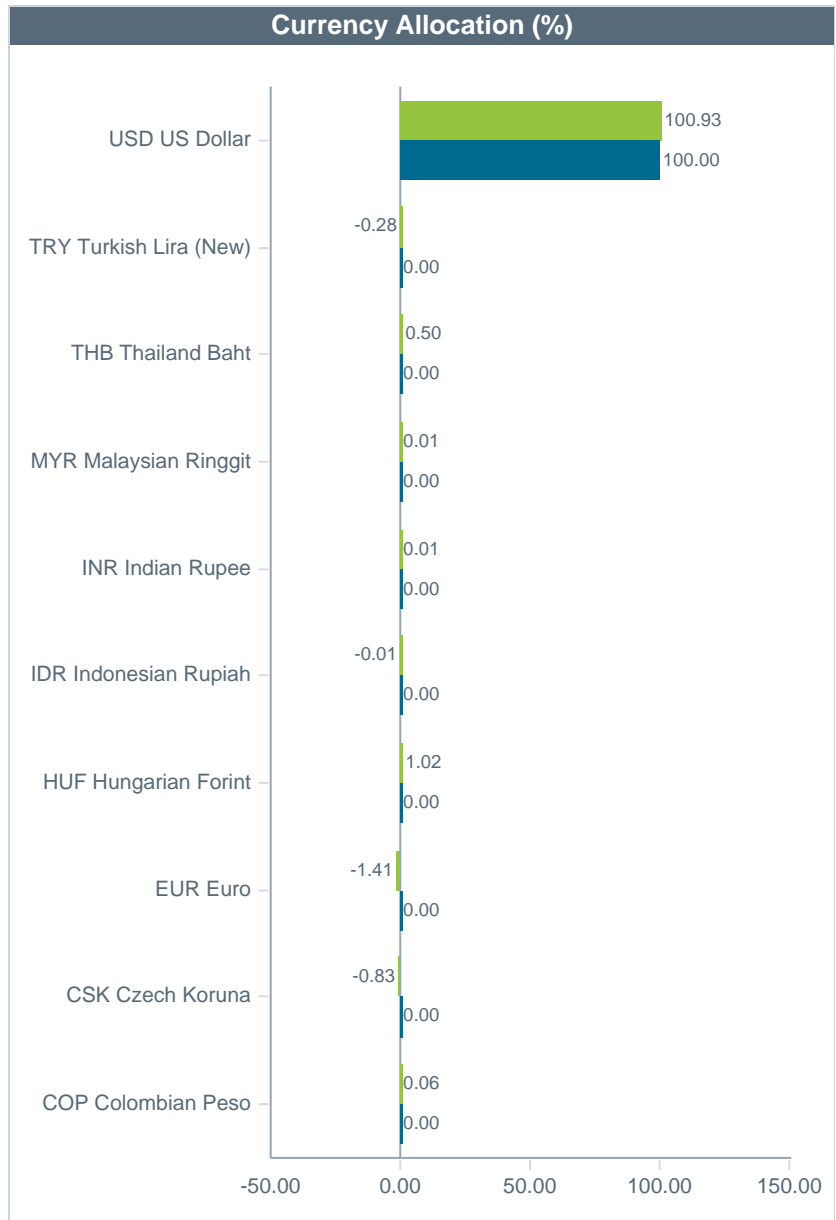
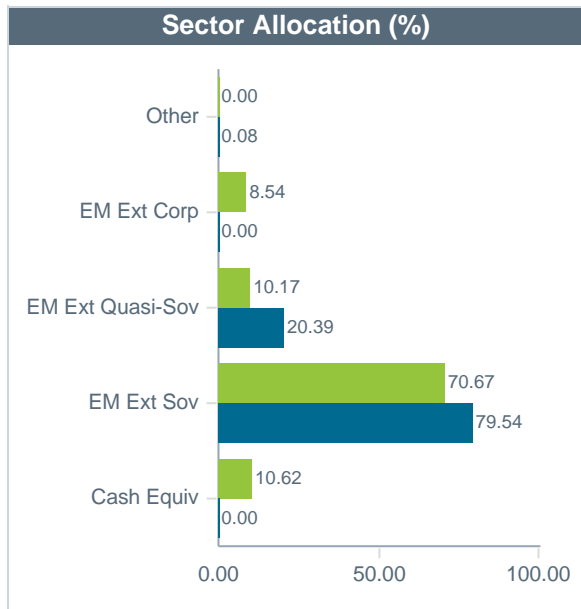
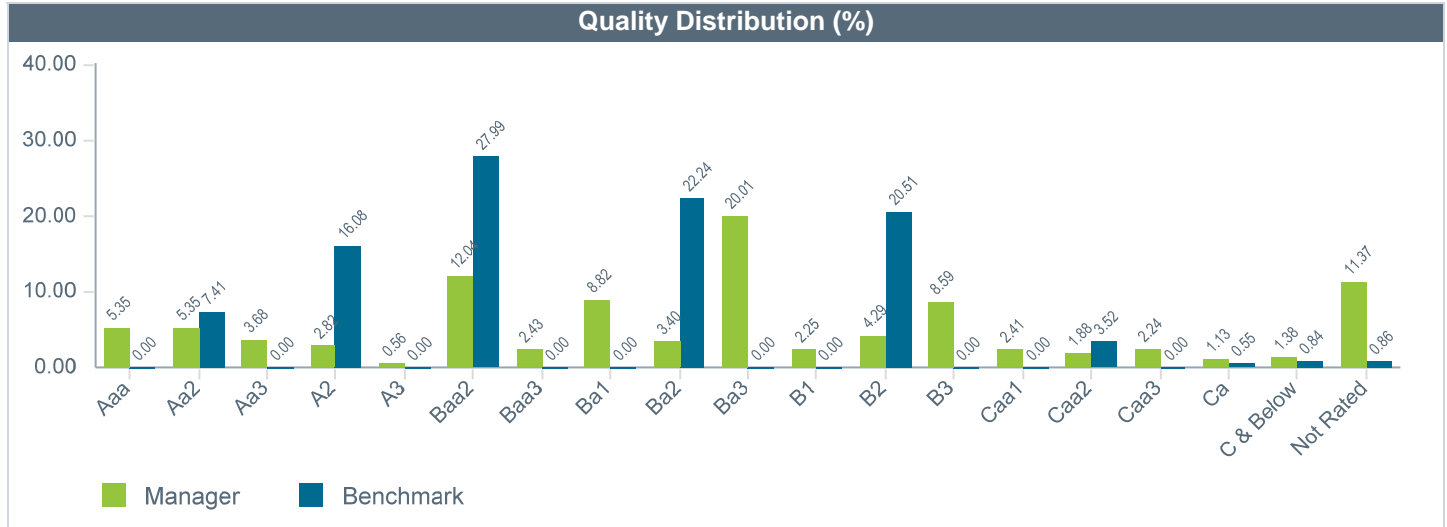
Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	-5.14	-23.27	-6.42	-2.44	0.90	-0.75	-2.76	7.01	15.38	-5.06	12.78
Benchmark	-4.57	-24.28	-7.15	-2.62	0.90	1.08	-1.80	5.26	15.04	-4.26	10.26
Difference	-0.57	1.01	0.73	0.18	0.00	-1.83	-0.96	1.75	0.34	-0.80	2.52
Peer Group Median	-4.31	-22.95	-6.11	-2.81	0.86	0.00	-2.97	5.74	13.63	-5.92	10.54
Rank	81	58	58	40	49	75	47	29	16	37	22
Population	261	256	235	213	168	101	264	263	273	273	262



Portfolio Characteristics (%)

	Portfolio	Benchmark
Effective Duration	6.40	6.52
Spread Duration	5.89	6.54
Avg. Maturity	13.47	12.12
Avg. Quality	Baa1	Ba1
Yield To Maturity (%)	10.07	23.68
Coupon Rate (%)	3.99	4.97
Current Yield (%)	5.51	6.34
Holdings Count	131	932

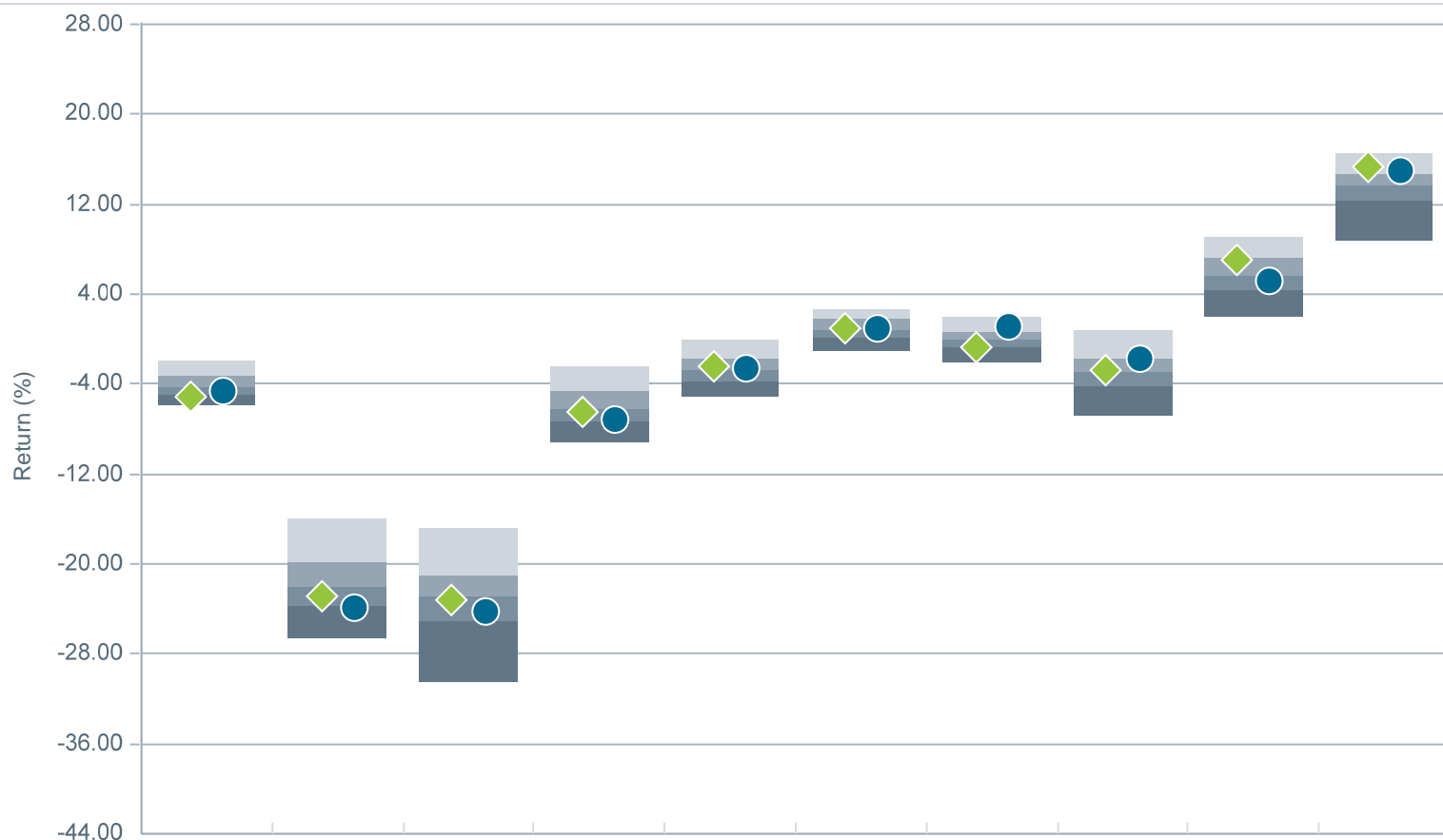




Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks. Benchmark Sector allocation to "Other" consists of sovereigns. Manager Region allocation to "Other" consists of Africa/Middle East, North America, cash, and derivatives. Benchmark Region allocation to "Other" consists of cash.

Municipality of Anchorage Trust Fund
IM Emerging Markets Debt (MF)
Peer Group Analysis

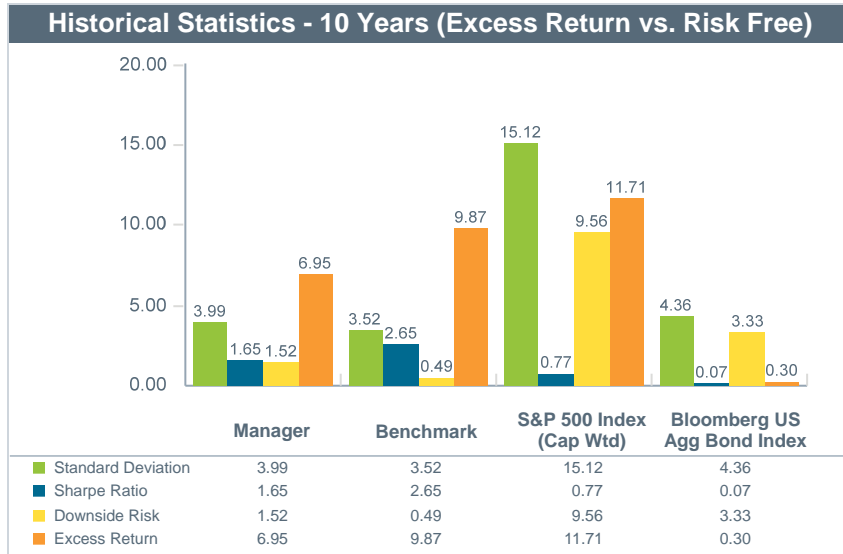
As of September 30, 2022



	QTD	CYTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019
◆ RBC BlueBay EM Debt;I (RBESX)	-5.14 (81)	-22.81 (66)	-23.27 (58)	-6.42 (58)	-2.44 (40)	0.90 (49)	-0.75 (75)	-2.76 (47)	7.01 (29)	15.38 (16)
● JPM Emg Mkts Bond Gbl Dv'd Index (TR)	-4.57 (62)	-23.95 (77)	-24.28 (69)	-7.15 (73)	-2.62 (45)	0.90 (49)	1.08 (14)	-1.80 (26)	5.26 (55)	15.04 (21)
5th Percentile	-1.91	-15.99	-16.79	-2.45	-0.13	2.64	1.97	0.80	9.15	16.50
1st Quartile	-3.27	-19.88	-20.95	-4.63	-1.73	1.74	0.62	-1.79	7.23	14.72
Median	-4.31	-22.11	-22.95	-6.11	-2.81	0.86	0.00	-2.97	5.74	13.63
3rd Quartile	-4.91	-23.75	-25.09	-7.28	-3.82	0.07	-0.77	-4.17	4.27	12.26
95th Percentile	-5.76	-26.60	-30.44	-9.17	-5.12	-1.07	-2.03	-6.81	2.06	8.77
Population	261	256	256	235	213	168	101	264	263	273

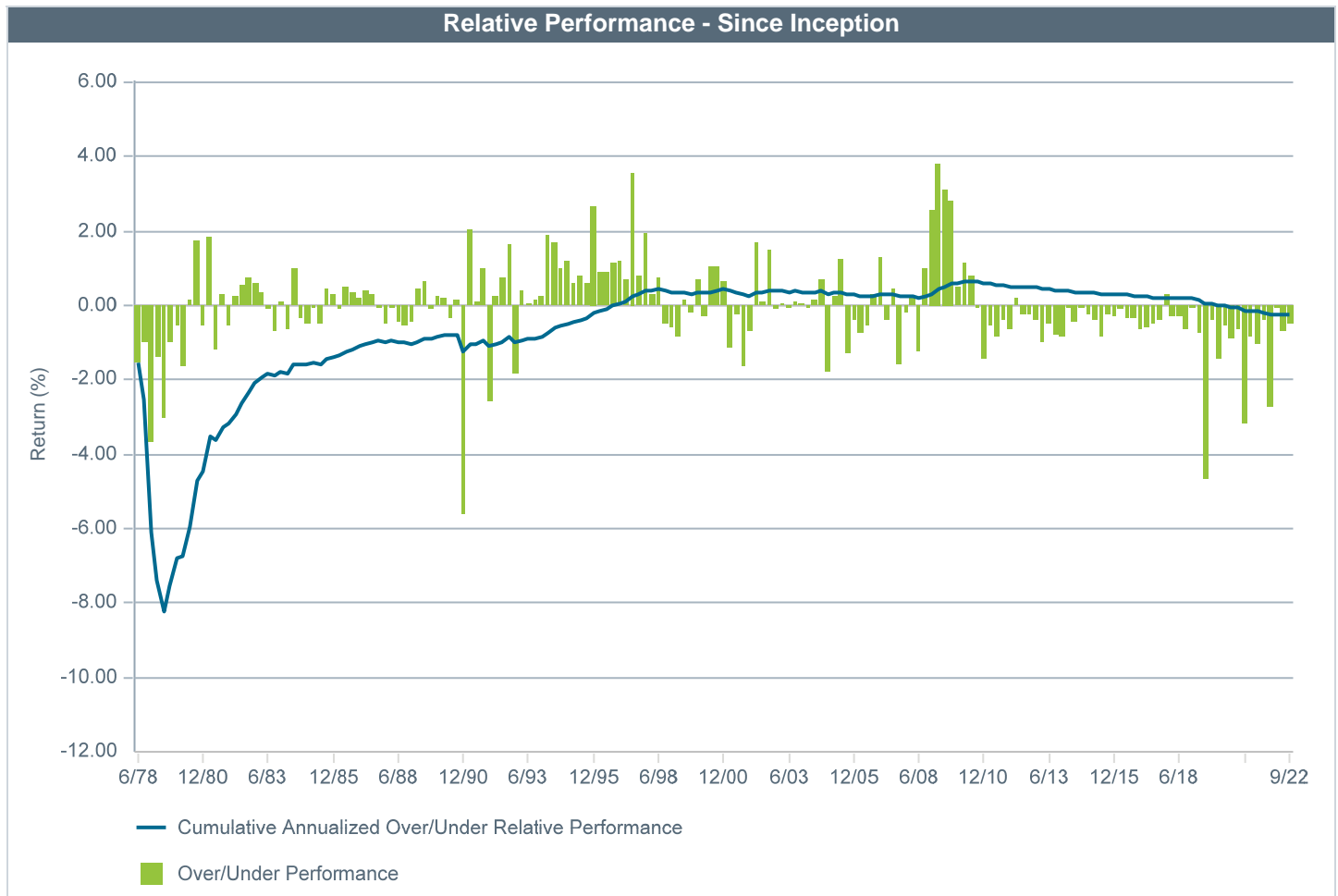
Performance shown is net of fees and product specific. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.

Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	0.02	17.37	7.64	5.97	6.29	7.77	16.24	-4.04	-2.10	6.99	6.30
Benchmark	0.52	22.09	12.37	10.24	9.85	10.92	22.17	1.19	5.34	8.35	7.62
Difference	-0.50	-4.72	-4.73	-4.27	-3.56	-3.15	-5.93	-5.23	-7.44	-1.36	-1.32



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.89
S&P 500 Index (Cap Wtd)	-0.30
Russell 2000 Index	-0.39
MSCI EAFE Index (USD) (Net)	-0.33
MSCI Emg Mkts Index (USD) (Net)	-0.42
Bloomberg US Agg Bond Index	-0.41
Bloomberg US Trsy US TIPS Index	-0.33
Wilshire US REIT Index	-0.05
HFRI FOF Comp Index	-0.40
Bloomberg Comdty Index (TR)	0.07
ICE BofAML 3 Mo US T-Bill Index	-0.46
Cons Price Index (Unadjusted)	0.32



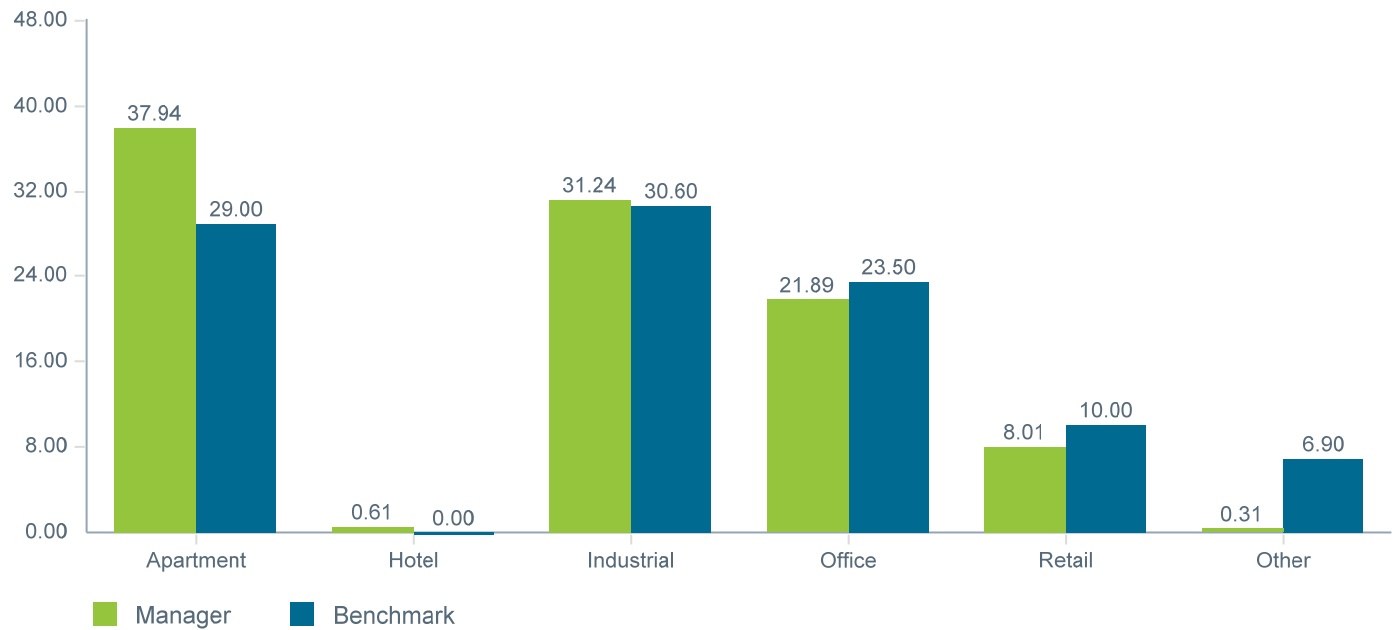
Investment Strategy

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.

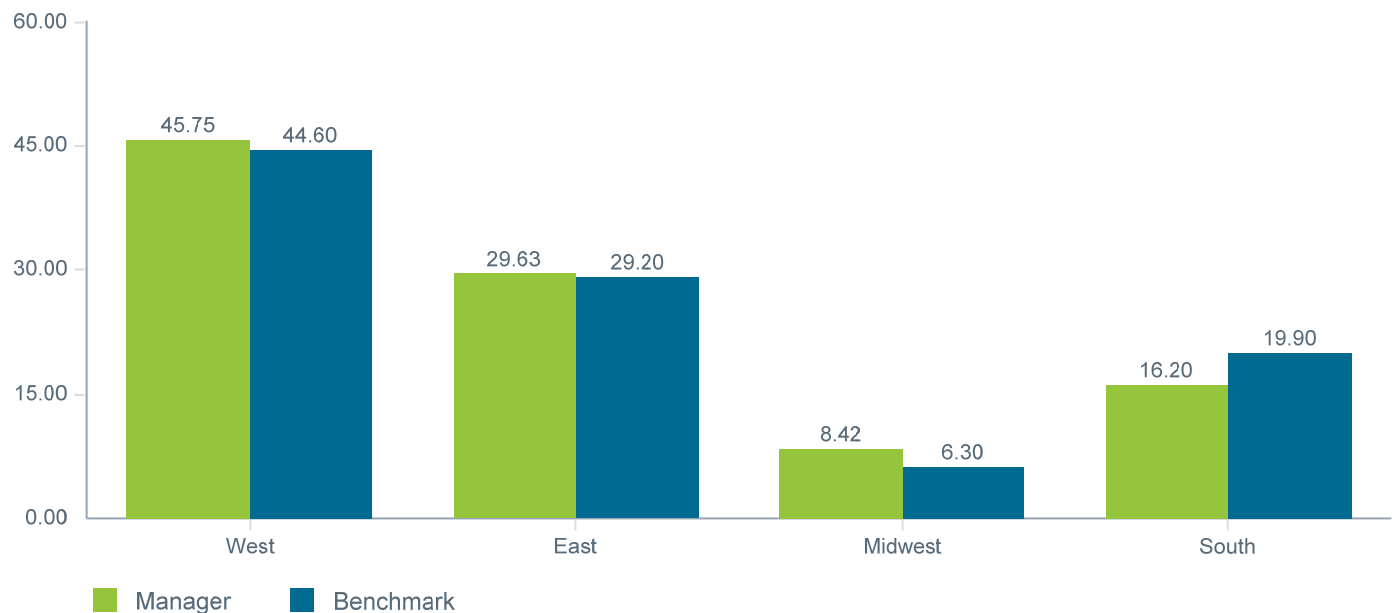
Investment Profile

Fund Inception	1978
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	18,420
Fund Leverage %	18.60
Portfolio Occupancy %	92.30
Cash Reserve %	2.60
Number of Investments	155
Number of Limited Partners	439

Property Type Allocation (%)



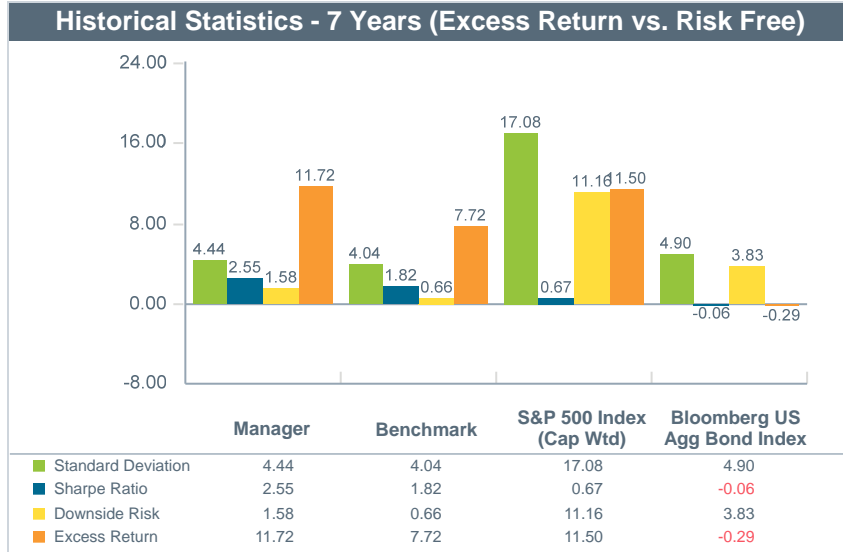
Geographic Allocation (%)



Performance shown is gross 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. Manager allocation to "Other" consists of self-storage. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

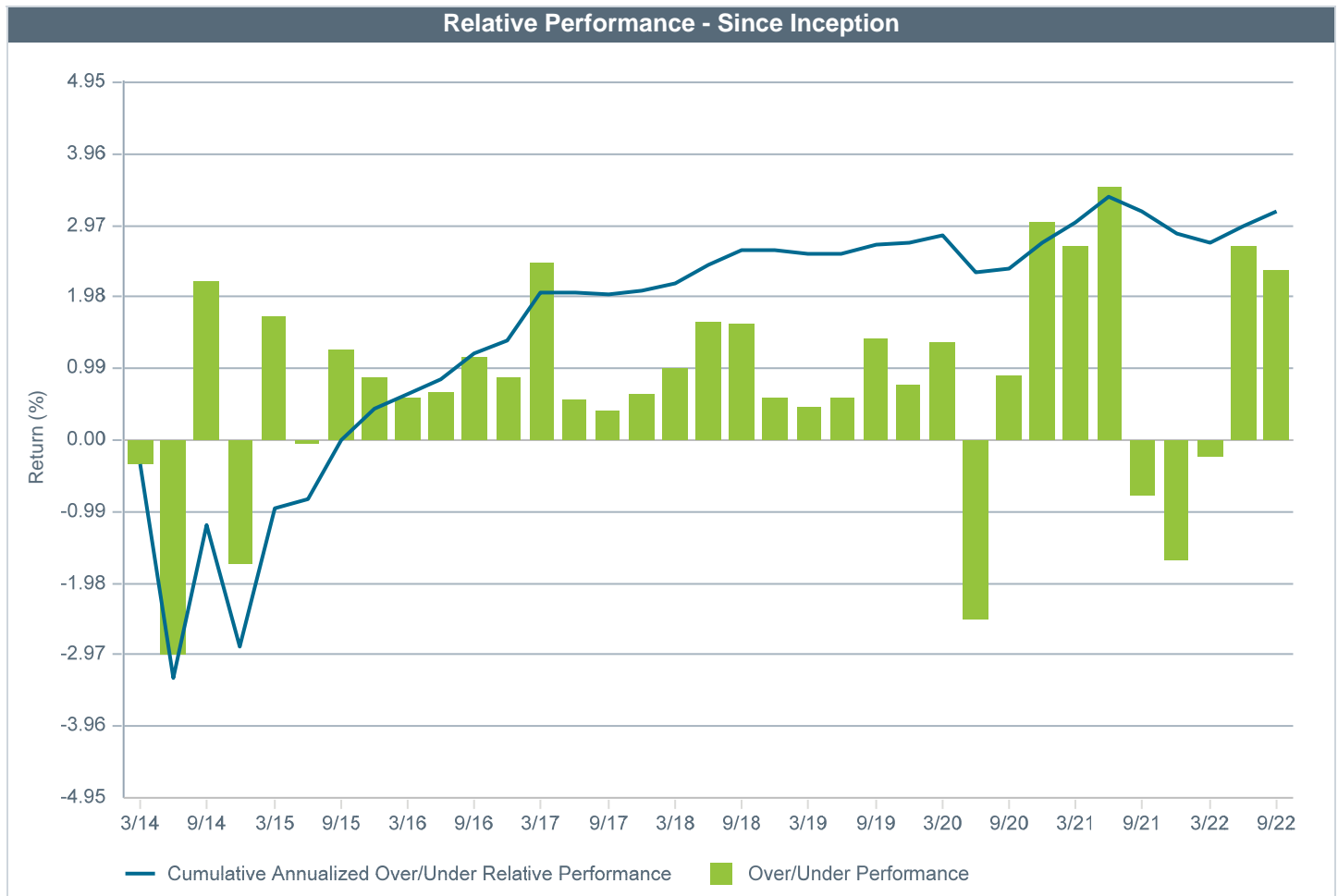


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.67	24.73	15.86	13.65	13.18	N/A	25.50	3.07	7.78	12.61	11.05
Benchmark	0.31	20.96	11.38	9.26	8.87	9.91	21.02	0.34	4.39	7.36	6.66
Difference	2.36	3.77	4.48	4.39	4.31	N/A	4.48	2.73	3.39	5.25	4.39



Actual Correlation - 7 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Net)	0.81
S&P 500 Index (Cap Wtd)	-0.32
Russell 2000 Index	-0.30
MSCI EAFE Index (USD) (Net)	-0.28
MSCI Emg Mkts Index (USD) (Net)	-0.36
Bloomberg US Agg Bond Index	-0.52
Bloomberg US Trsy US TIPS Index	-0.42
Wilshire US REIT Index	-0.06
HFRI FOF Comp Index	-0.31
Bloomberg Cmdb Index (TR)	0.20
ICE BofAML 3 Mo US T-Bill Index	-0.32
Cons Price Index (Unadjusted)	0.65



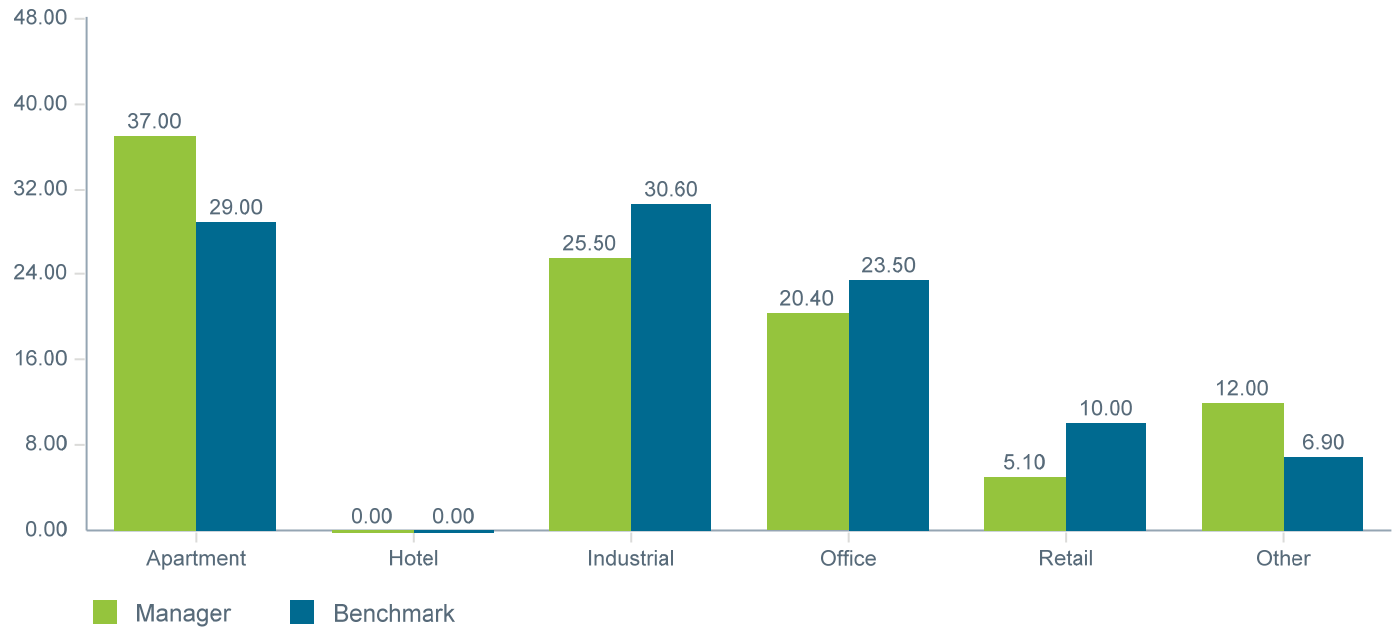
Investment Strategy

The Fund pursues a diversified core-plus real estate strategy with the objective of generating consistent, predictable performance while avoiding capital loss. The Fund targets multi-family, retail, industrial and office assets that have in-place, high relative income that are located in well-known primary and secondary markets. The Fund's investment return objective is to exceed the NFI-ODCE income return by 200 basis points and to equal or exceed the NFI-ODCE total return on a three and five-year rolling basis with a target leverage range of 40% to 45%.

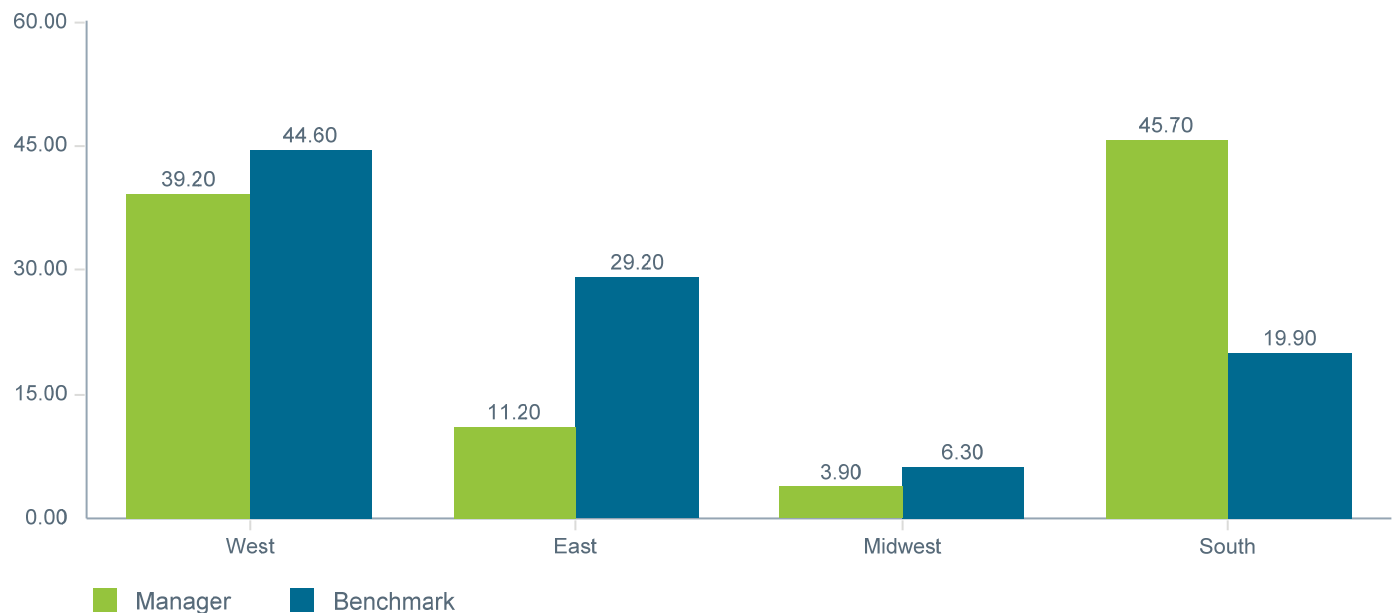
Investment Profile

Fund Inception	2013
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	4,677
Fund Leverage %	41.00
Portfolio Occupancy %	95.10
Cash Reserve %	1.10
Number of Investments	42
Number of Limited Partners	31

Property Type Allocation (%)



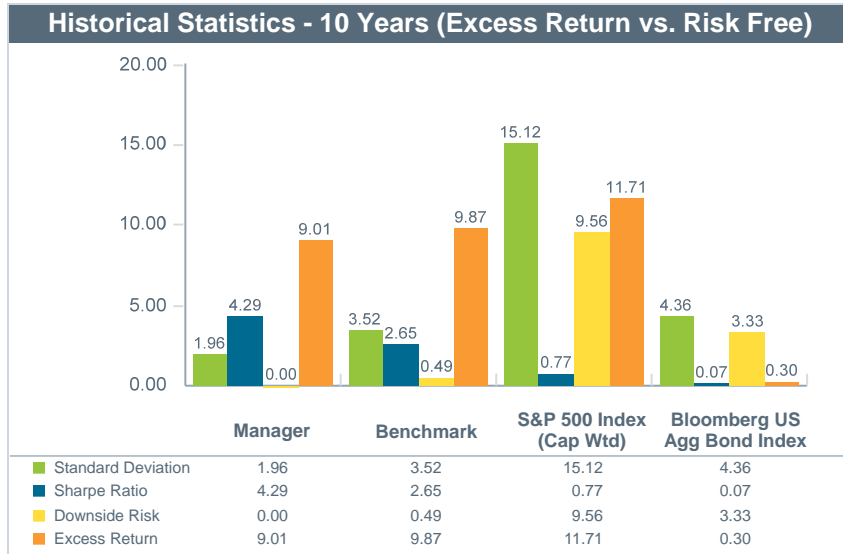
Geographic Allocation (%)



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. Manager allocation to "Other" consists of self-storage and Medical Office. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.

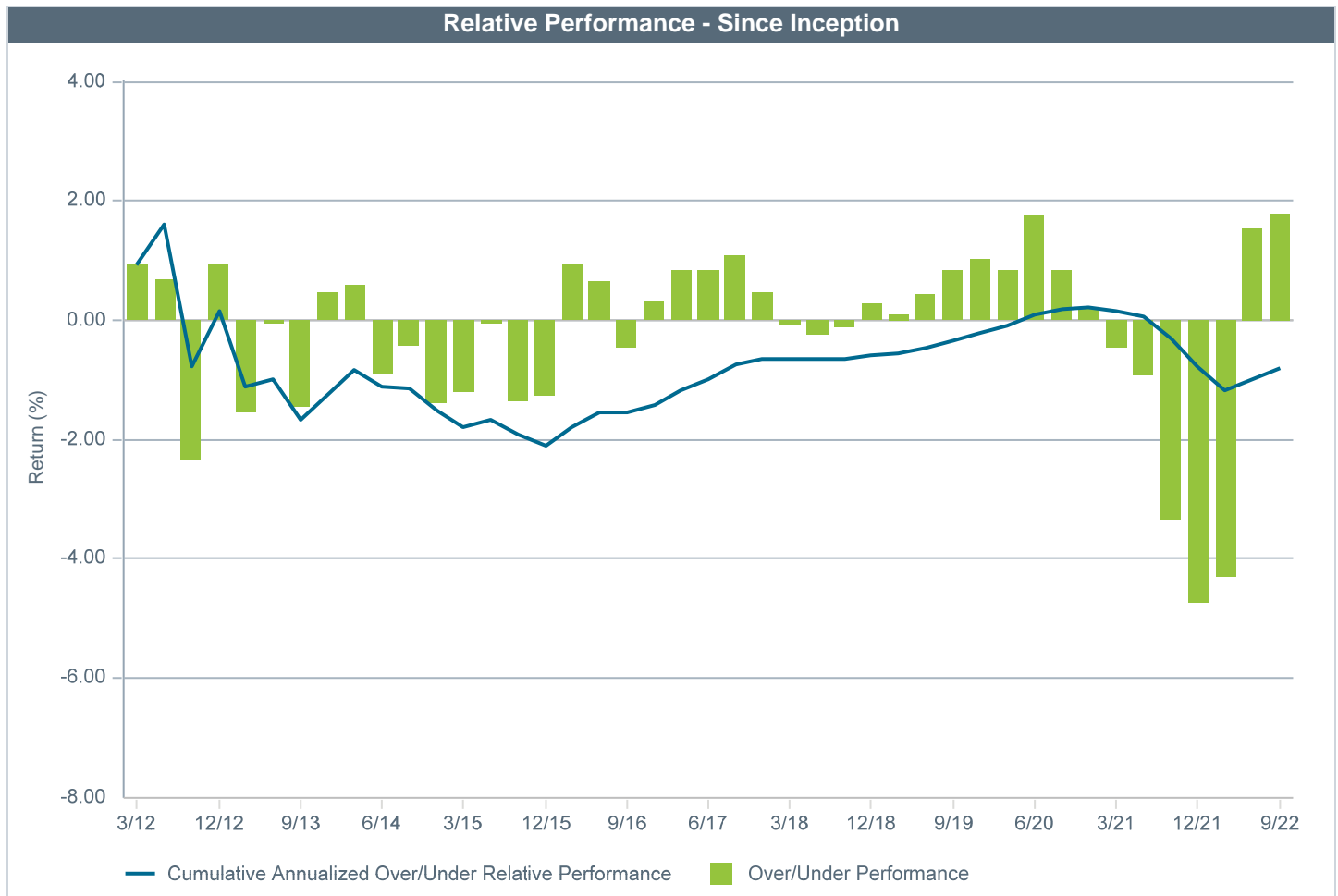


Performance											
	QTD	1 Year	3 Years	5 Years	7 Years	10 Years	2021	2020	2019	2018	2017
Manager	2.34	15.10	10.12	9.28	9.61	10.03	10.94	4.91	7.87	8.18	11.11
Benchmark	0.52	22.09	12.37	10.24	9.85	10.92	22.17	1.19	5.34	8.35	7.62
Difference	1.82	-6.99	-2.25	-0.96	-0.24	-0.89	-11.23	3.72	2.53	-0.17	3.49



Actual Correlation - 10 Years

	Actual Correlation
NCREIF ODCE Index (AWA) (Gross)	0.52
S&P 500 Index (Cap Wtd)	-0.45
Russell 2000 Index	-0.43
MSCI EAFE Index (USD) (Net)	-0.36
MSCI Emg Mkts Index (USD) (Net)	-0.30
Bloomberg US Agg Bond Index	-0.42
Bloomberg US Trsy US TIPS Index	-0.50
Wilshire US REIT Index	-0.38
HFRI FOF Comp Index	-0.38
Bloomberg Cmdty Index (TR)	-0.03
ICE BofAML 3 Mo US T-Bill Index	-0.23
Cons Price Index (Unadjusted)	0.33
NCREIF ODCE Index (AWA) (Gross)	0.52



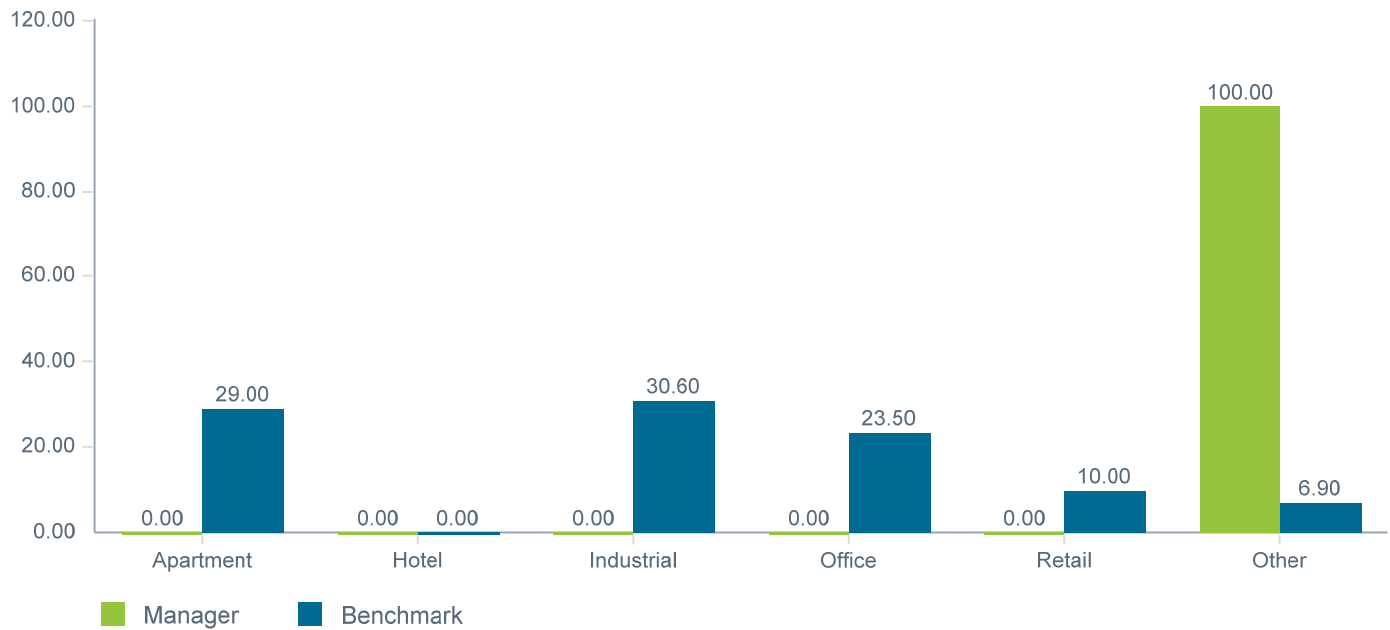
Investment Strategy

The Fund's strategy is on primarily stabilized income-producing investments in niche sectors; Education, Health, and Storage. Within these sectors the fund invests in student housing, seniors housing, medical office buildings, life science buildings, and self-storage. The majority of the return from the Fund is expected to be realized from current income, with a modest portion of the return to be derived from asset appreciation. Harrison Street believes that the primary property types it targets will provide better risk/return profiles than properties in traditional core portfolios across all economic cycles.

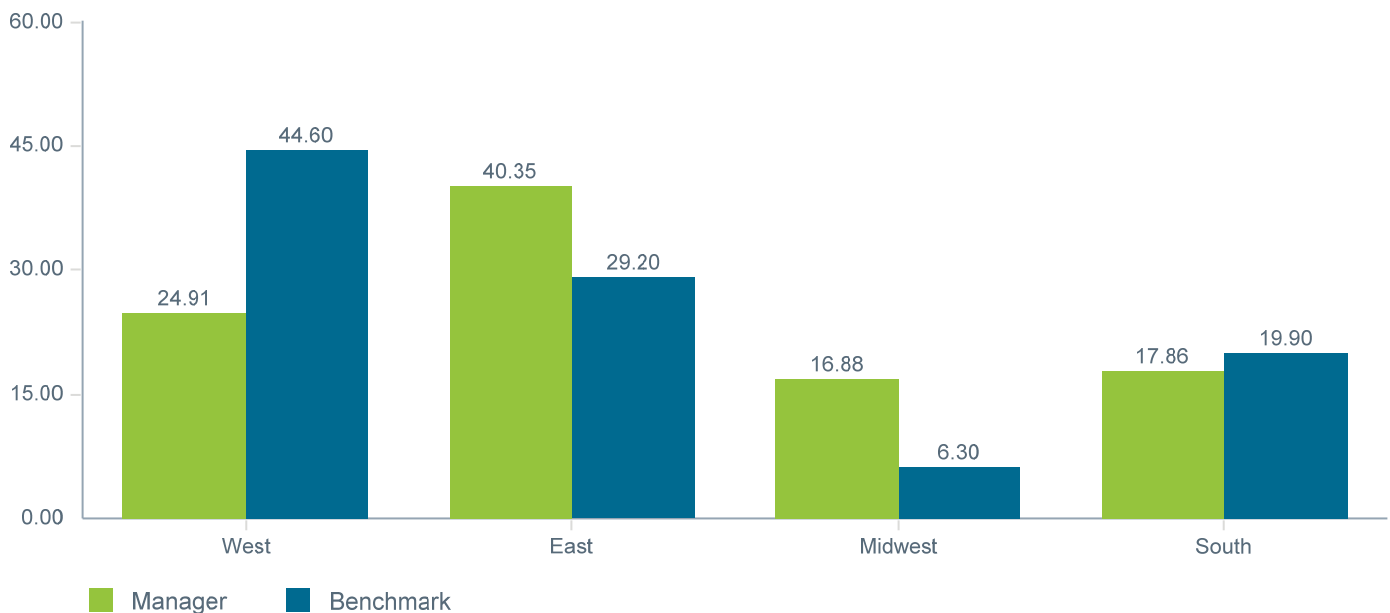
Investment Profile

Fund Inception	2011
Legal Structure	LP
Fund Structure	Open-End
Gross Real Estate Assets (\$M)	13,464
Fund Leverage %	23.78
Portfolio Occupancy %	89.30
Cash Reserve %	1.08
Number of Investments	387
Number of Limited Partners	231

Property Type Allocation (%)



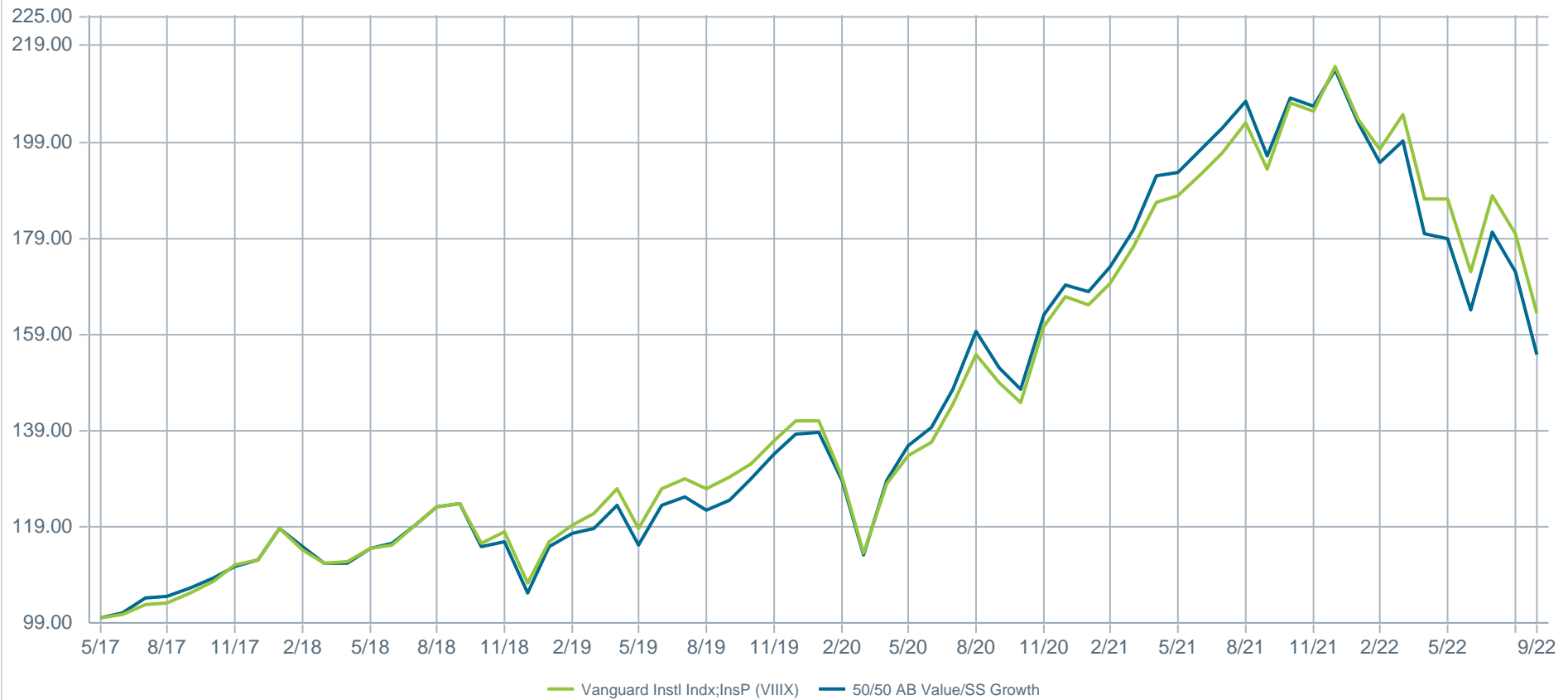
Geographic Allocation (%)



Performance shown is gross 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. Manager allocation to "Other" consists of education, healthcare, senior housing, and storage real estate. Benchmark allocation to "Other" consists of entertainment (theaters, golf courses, bowling alleys), healthcare (hospitals, clinics), manufactured homes, parking lots, self-storage units, senior living, and undeveloped land.



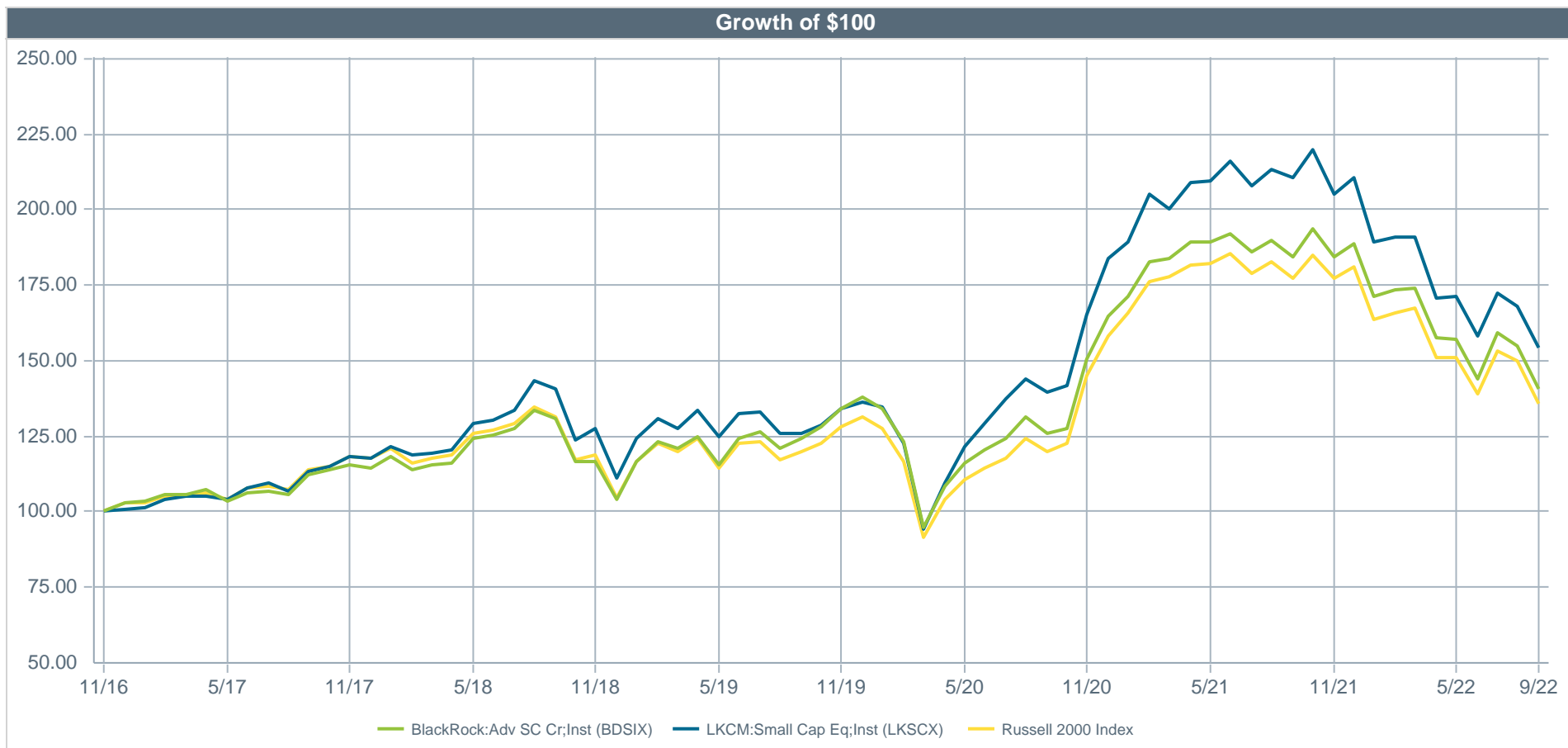
Growth of \$100



Comparative Performance

	Jun-2017 To Sep-2022	1 Year	3 Years	5 Years	10 Years
Vanguard Instl Indx;InsP (VIII)	9.65	-15.49	8.15	9.23	11.69
S&P 500 Index (Cap Wtd)	9.66	-15.47	8.16	9.24	11.70
Difference	-0.01	-0.02	-0.01	-0.01	-0.01
50/50 AB Value/SS Growth	8.53	-21.07	7.54	7.83	10.96
S&P 500 Index (Cap Wtd)	9.66	-15.47	8.16	9.24	11.70
Difference	-1.13	-5.60	-0.62	-1.41	-0.74

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity.



Comparative Performance

	Dec-2016 To Sep-2022	1 Year	3 Years	5 Years	10 Years
BlackRock:Adv SC Cr;Inst (BDSIX)	6.03	-23.59	4.30	4.64	N/A
Russell 2000 Index	5.39	-23.50	4.29	3.55	8.55
Difference	0.64	-0.09	0.01	1.09	N/A
LKCM:Small Cap Eq;Inst (LKSCX)	7.70	-26.74	6.92	6.35	7.37
Russell 2500 Grth Index	8.42	-29.39	4.76	6.30	10.30
Difference	-0.72	2.65	2.16	0.05	-2.93

Performance shown is net of fees and product specific. Calculation is based on monthly periodicity.

Addendum & Glossary



**Municipality of Anchorage Trust Fund
Fee Addendum**

As of September 30, 2022

	Fee Schedule	Market Value As of 09/30/2022 (\$)	Estimated Annual Fee (\$)	Estimated Annual Fee (%)
Total Fund		364,046,538	1,668,640	0.46
Vanguard Instl Indx;InsP (VFIIX)	0.02 % of Assets	89,480,463	17,896	0.02
Vanguard Md-Cp I;Inst (VMCIX)	0.04 % of Assets	6,611,470	2,645	0.04
BlackRock:Adv SC Cr;Inst (BDSIX)	0.50 % of Assets	6,585,379	32,927	0.50
Vanguard Intl Val;Inv (VTRIX)	0.36 % of Assets	35,205,807	126,741	0.36
American Funds EuPc;F3 (FEUPX)	0.46 % of Assets	32,954,545	151,591	0.46
FIAM Core Plus LLC (CF)	0.25 % of First \$50 M 0.22 % of Next \$50 M 0.20 % of Next \$100 M 0.17 % Thereafter	45,130,832	112,827	0.25
Garcia Hamilton Core Agg (SA)	0.25 % of Assets	45,739,816	114,350	0.25
PIMCO Private Income Fund LLC	1.25 % of Assets	20,987,462	262,343	1.25
RBC BlueBay EM Debt;I (RBESX)	0.79 % of Assets	16,392,811	129,503	0.79
UBS Trumbull Property (CF)	0.83 % of Assets	12,352,084	102,221	0.83
Harrison Street Core Property Fund, LP	1.15 % of First \$25 M 1.05 % of Next \$25 M 0.95 % of Next \$25 M 0.90 % of Next \$25 M 0.85 % Thereafter	22,811,870	262,337	1.15
Invesco U.S. Income Fund, LP (CF)	1.20 % of First \$50 M 1.10 % of Next \$50 M 1.00 % of Next \$100 M 0.85 % of Next \$300 M 0.80 % Thereafter	29,367,191	352,406	1.20
Allspring:Govt MM;I (GVIXX)	0.20 % of Assets	426,808	854	0.20

Mutual fund fees are sourced from Morningstar and/or the investment manager.

UBS Trumbull Property (CF) - 0.955% on first \$10M, 0.825% on next \$15M, 0.805% on next \$25M, 0.79% on next \$50M, 0.67% on next \$150M, 0.60% on next \$150M, 0.56% on next \$200M and 0.52% thereafter. An incentive fee, up to 0.25%, is calculated quarterly based on trailing 12-month performance. The incentive fee has been suspended from 04/2018 until 03/2024.

*The fee schedule shown for UBS Trumbull Property (CF) is based on the effective rates as of the most recently available quarter end data for the combined assets of Anchorage Police & Fire Retirement System and Municipality of Anchorage, and includes incentive fees.

Performance Related Comments

- Performance shown is net of fees, unless otherwise noted.
- Inception dates shown reflect the first full month of client specific performance.
- RVK began monitoring the assets of the Municipality of Anchorage as of 01/01/2016. Prior historical data was provided by the previous investment consultant.
- Performance for Vanguard Instl Indx;InsP (VIIIIX) prior to 11/2020 consists of the returns from the previous share class Vanguard Instl Indx;Inst (VINIX).
- Performance for Vanguard Md-Cp I;Inst (VMCIX) prior to 11/2020 consists of the returns from the previous share class Vanguard Md-Cp I;Adm (VIMAX).

Manager Transition Comments

- The cash account was transitioned to WellsFargo:Govt MM;I (GVIXX) during 09/2019.
- During 12/2019, RBC BlueBay EM Debt;I (RBESX) switched to the JPM Emg Mkts Bond Gbl Dvf'd Index (TR) benchmark.
- TIF:Internatl Equity;Prm (TFEQX) was liquidated beginning in 05/2020 and Vanguard Intl Val;Inv (VTRIX) was funded by the proceeds.
- During 11/2020, assets invested in Vanguard Instl Indx;Inst (VINIX) were transferred via share class exchange to Vanguard Instl Indx;InsP (VIIIIX).
- During 11/2020, assets invested in Vanguard Md-Cp I;Adm (VIMAX) were transferred via share class exchange to Vanguard Md-Cp I;Inst (VMCIX).
- During 01/2021, the Invesco U.S. Income Fund, LP (CF) was funded via capital call.
- During 04/2021, Harrison Street Core Property Fund, LP was funded via capital call.
- During 05/2021, PIMCO Private Income Fund Onshore Feeder LLC was funded via capital call.
- During 06/2021, Western Asset Floating Rate High Income (CF) was liquidated from the total fund.
- During 05/2022, Ashmore:EM Tot Rtn;Inst (EMKIX) was liquidated and proceeds were used to purchase RBC BlueBay EM Debt;I (RBESX).

Custom Index Comments

- The Target Allocation Index is calculated monthly and consists of 31% Russell 3000 Index, 22% MSCI ACW Ex US Index (USD) (Net), 24% Bloomberg US Agg Bond Index, 5% Credit Suisse Leveraged Loan Index +2%, 5% EMD Blended Index, and 13% NCREIF ODCE Index (AWA) (Net). The Target Allocation Index and its current targets are effective as of 06/2021.
- The Target Allocation Index (Weighted Cash) (Trust) consists of a 37% allocation to cash during 11/2020 and a 12% allocation to cash during 12/2020. Remaining allocations were adjusted on a pro rata basis to fill the remaining stated targets.
- The Vanguard Spl Mid Cap Index consists of the S&P Mid Cap 400 Index (Cap Wtd) through 05/16/2003; MSCI US Mid Cap 450 Index through 01/30/2013; and CRSP US Mid Cap Index thereafter.
- The Small Cap Custom Index consists of the Russell 2000 Index through 06/2006, the Russell 2000 Growth Index through 11/2016, and the Russell 2000 Index thereafter.
- The EMD Blended Index is calculated monthly using beginning of month investment weights applied to each corresponding primary benchmark return.
- The Ashmore:EMs Tot Rtn Custom Index consists of 50% JPM Emg Mkts Bond Gbl Dvf'd Index, 25% JPM GBI-EM Gbl Dvf'd Index, and 25% JPM Emg Local Mkts+ Index (USD).

Miscellaneous Comments

- In 12/2021, due to the sale of Wells Fargo Asset Management (WFAM) by Wells Fargo & Company to GTCR LLC and Reverence Capital Partners, L.P., the WellsFargo:Govt MM;I (GVIXX) name has been changed to reflect the new company name of Allspring:Govt MM;I (GVIXX).

Glossary

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:

<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>	<u>S&P</u>	<u>Moody's</u>	<u>Explanation</u>
Higher Credit Quality – Investment Grade			Lower Credit Quality – 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	B	B2	
A	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
			C	Ca	
			D	C	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, 3rd quartile, and 4th quartile). The median observation is where the 2nd quartile and 3rd 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 "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 neutral category, while the balance of 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.



Glossary

- 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

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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 $\geq 10\%$ 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 - Due to disclosure guidelines set by each investment manager, portfolio characteristics 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.

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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.

<u>Asset Class</u>	<u>RVK Liquidity Rating</u>	<u>Asset Class</u>	<u>RVK Liquidity Rating</u>
<u>Liquid Investments</u>		<u>Less Liquid Investments</u>	
T-Bills and Treasuries	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	<u>Not Liquid Investments</u>	
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 Funds of Funds	5
US SMid Cap Equity	85		
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.

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:

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

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.



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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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